

Agenda

Public Works and Transportation Committee

Council Chambers, City Hall 6911 No. 3 Road Tuesday, November 16, 2021 4:00 p.m.

Pg. # ITEM

MINUTES

PWT-5 Motion to adopt the minutes of the meeting of the Public Works and Transportation Committee held on October 19, 2021.

NEXT COMMITTEE MEETING DATE

December 14, 2021, (tentative date) at 4:00 p.m. in the Council Chambers

PLANNING AND DEVELOPMENT DIVISION

1. BARNES DRIVE AND FLURY DRIVE - TRAFFIC CALMING UPDATE

(File Ref. No. 10-6450-09-01) (REDMS No. 6752296)

PWT-13

See Page **PWT-13** for full report

Designated Speaker: Fred Lin

STAFF RECOMMENDATION

- (1) That Option 3 to establish a 30 km/h speed limit on Barnes Drive and Flury Drive as described in the staff report titled "Barnes Drive and Flury Drive – Traffic Calming Update" dated October 12, 2021, from the Director, Transportation, be endorsed; and
- (2) That should Option 3 be endorsed, Traffic Bylaw No. 5870, Amendment Bylaw No. 10301,to revise the posted speed limit on Barnes Drive and Flury Drive to 30 km/h, be introduced and given first, second and third reading.
- 2. TRANSLINK 2022 COST-SHARE FUNDING APPLICATIONS (File Ref. No. 01-0154-04) (REDMS No. 6755808)

PWT-19

See Page PWT-19 for full report

Designated Speaker: Fred Lin

STAFF RECOMMENDATION

That as described in the report titled "TransLink 2022 Cost-Share Funding Applications" dated October 10, 2021 from the Director, Transportation:

- (a) the submission of road, pedestrian, bicycle, and transit facility improvement projects as part of the TransLink 2022 cost-share programs be endorsed and the information be considered in the 2022 Capital Budget process; and
- (b) the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the successful funding agreements.

ENGINEERING AND PUBLIC WORKS DIVISION

 AWARD OF CONTRACT 6691Q - SUPPLY AND DELIVERY OF ONE
 (1) SEWER VACUUM COMBO UNIT ON A CITY PROVIDED CAB AND CHASSIS
 (File Ref. No. 10-6370-01) (REDMS No. 6764224)

PWT-34

See Page PWT-34 for full report

Designated Speaker: Kristina Nishi

STAFF RECOMMENDATION

That the acquisition of a hydro excavator be approved in the total amount of \$760,000 as outlined in the staff report titled, "Award of Contract 6691Q - Supply and Delivery of One (1) Sewer Vacuum Combo Unit on a City Provided Cab and Chassis", dated October 13, 2021, from the Interim Director, Public Works Operations as follows:

- (1) That Contract 6691Q Supply and Delivery of One (1) Sewer Vacuum Combo Unit on a City Provided Cab and Chassis be awarded to Vimar Equipment Ltd. in the total tendered amount of \$473,852.00 excluding outfitting, contingency and taxes; and
- (2) That the supply of one (1) cab and chassis be awarded to Peterbilt Pacific Ltd. in the amount of \$210,462.00 excluding outfitting, contingency and taxes in accordance with the standardization method approved by Council and as outlined in the staff report titled, "Standardization of City's Single and Tandem Axle Vehicle Fleet", dated April 3, 2017.

4. AWARD OF CONTRACT 6437F - SUPPLY OF DRAINAGE PUMPS, PARTS AND SERVICES (File Ref. No. 10-6050-01) (REDMS No. 6760871)

PWT-38

See Page PWT-38 for full report

Designated Speaker: Ben Dias

STAFF RECOMMENDATION

- (1) That Contract 6437F Supply of Drainage Pumps, Parts and Services be awarded to KSB Pumps Inc. on an "as and when required" basis for a term of five years with a maximum contract value not to exceed \$2.51 million, plus applicable taxes.
- (2) That the Chief Administrative Officer and the General Manager, Engineering and Public Works be authorized to negotiate and execute on behalf of the City, the contract identified above and as outlined in the staff report titled, "Award of Contract 6437F – Supply of Drainage Pumps, Parts, and Services" dated October 7, 2021, from the Interim Director, Public Works Operations.

Pg. #	ITEM
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5. CHANGE ORDER APPROVAL – CONTRACT 6715P – TRAFFIC CONTROL SERVICES

(File Ref. No. 10-6000-01) (REDMS No. 6740009)

PWT-42

See Page **PWT-42** for full report

Designated Speaker: Ben Dias

STAFF RECOMMENDATION

- (1) That staff be authorized to issue a change order to increase the value of the current contract between the City of Richmond and Ansan Traffic Group, Lanesafe Traffic Control, and Traffic Pro Services as detailed in the staff report titled "Change Order Approval – Contract 6715P – Traffic Control Services", dated October 13, 2021 from the Interim Director, Public Works Operations, by \$906,110, bringing the new contract value to \$2.4 million over the maximum available term of three years; and
- (2) That the Chief Administration Officer and the General Manager, Engineering and Public Works be authorized to execute a contract amendment with Ansan Traffic Group, Lanesafe Traffic Control and Traffic Pro Services, to reflect the increase in predicted usage of services over the three year term.
- 6. UPDATE ON 2021/2022 SNOW AND ICE RESPONSE PREPARATIONS

(File Ref. No. 10-6000-00) (REDMS No. 6765794)

PWT-46

See Page **PWT-46** for full report

Designated Speaker: Larry Ford

STAFF RECOMMENDATION

That the staff report titled "Update on 2021/2022 Snow and Ice Response Preparations", dated October 14, 2021, from the Interim Director, Public Works Operations, be received for information.

7. MANAGER'S REPORT

ADJOURNMENT



Minutes

Public Works and Transportation Committee

Date:	Tuesday, October 19, 2021
Place:	Council Chambers Richmond City Hall
Present:	Councillor Chak Au, Chair Councillor Alexa Loo Councillor Andy Hobbs Councillor Linda McPhail (by teleconference) Councillor Michael Wolfe (by teleconference)
Also Present:	Councillor Carol Day Councillor Bill McNulty
Call to Order:	The Chair called the meeting to order at 4:00 p.m.

MINUTES

It was moved and seconded That the minutes of the meeting of the Public Works and Transportation Committee held on September 21, 2021, be adopted as circulated.

CARRIED

NEXT COMMITTEE MEETING DATE

November 16, 2021, (tentative date) at 4:00 p.m. in the Council Chambers

AGENDA ADDITIONS AND DELETIONS

It was moved and seconded

- (1) That Garden City Lands Update be added to the agenda in Item 7;
- (2) That Sani-Dump Facilities be added to the agenda in Item 7; and;
- (3) That Small Gas-Powered Engines be added to the agenda in Item 7.

CARRIED

DELEGATIONS

1. Mr. van den Hemel, Director of Communications for KABU-Ride Inc, (KABU) noted (i) the Passenger Transportation Board (PTB) completed its review of KABU and does not support cancelling KABU's license, (ii) the August 31, 2021 letter informing of the PTB's decision was provided to staff, (iii) KABU has lived up to its commitment to operate in a legal and ethical manner, (iv) KABU's decision to unplug its app on September 16, 2019 resulted in illegal ride-hailing operators, who are not properly insured or licensed, providing more than 1,000 illegal trips daily in Richmond and the Lower Mainland, putting young international students at risk; (v) off-shore illegal ride-hailing operators do not contribute to the community or the economy, and (vi) suggestion that a communications campaign be undertaken to raise public awareness about the dangers of illegal ride-hailing platforms.

In reply to queries from the Committee, Mr. van den Hemel advised (i) the City and school district can collaborate on an information campaign about the dangers of illegal ride-hailing companies and enforcement, (ii) prior to September 16, 2021, KABU provided approximately 3,000 rides daily in Richmond, Vancouver, Burnaby and Coquitlam, (iii) KABU is able to provide service to children five years of age or older, (iv) KABU requires criminal record checks and vehicle inspections and provides employees with training and commercial insurance, (v) international students are unable to use Uber or Lyft due to age restrictions, and (vi) barriers to the RCMP taking enforcement action against illegal ride-hailing operators providing service to international students.

In reply to queries from the Committee, staff advised that the PTB is responsible for enforcement actions and business license staff, along with the RCMP, continue to participate in joint operations.

Discussion ensued with regard to (i) suggestion to involve the Ministry of Education in the information campaign, (ii) concern that international students are both users and operators for KABU, and (iii) suggestion to advise other school districts and private schools about the safety issue.

As a result of the discussion, the following **referral motion** was introduced: It was moved and seconded

THAT the presentation from KABU-Ride Inc. be shared with the School Board Liaison Committee and the Community Safety Committee for further discussions.

CARRIED

PLANNING AND DEVELOPMENT DIVISION

1. CYCLING NETWORK PLAN UPDATE – PROPOSED PHASE 2 ENGAGEMENT

(File Ref. No. 02-0775-50-6708) (REDMS No. 6737359)

Staff led the review of a presentation titled, "Cycling Network Plan" and highlighted (i) Phase 1 engagement is complete and there was a high level of participation in the study, (ii) areas of need identified were safety, protection of cross ways, connectivity and a cycling tournament, (iii) projects identified in Phase 1 engagement will be prioritized through the Phase 2 engagement which will commence in November 2021, and (vi) the final report is expected in spring 2022.

In reply to queries from the Committee, staff advised (i) any implementation of provincial government regulations, such as mandatory bicycle passing distances, will be included in Phase 3 of the project, (ii) signage for cyclists and vehicle road sharing is the responsibility of construction sites, (iii) data related to families are amalgamated into the general population data, (iv) the connectivity of Shell Road was identified as a potential project, and (v) education and training will be targeted in the next phase of the project.

Discussion ensued with regard to (i) suggestion that Phase 2 engagement include discussion on signage improvements in construction areas where road sharing is required, and (ii) direct staff to forward a copy of the report to appropriate bodies and stakeholders.

It was moved and seconded

That the proposed Phase 2 engagement activities to support the update of the Cycling Network Plan, as described in the report titled "Cycling Network Plan Update - Proposed Phase 2 Engagement," dated September 2, 2021 from the Director, Transportation, be endorsed for implementation.

CARRIED

2. **RECOMMENDATION TO AWARD CONTRACT 7256P - TRAFFIC** SIGNAL SYSTEM MAINTENANCE, **UPGRADING** AND **INSTALLATION**

(File Ref. No. 02-0775-50-7256) (REDMS No. 6738753)

In reply to queries from the Committee, staff advised (i) a tendering process will be undertaken when the three-year term of the current contract expires, and (ii) city staff does not have the expertise or equipment to fulfill the requirements of the contract.

It was moved and seconded

- (1)That Contract 7256P – "Traffic Signal System Maintenance, Upgrading and Installation" for an initial three-year term estimated at \$6,878,728.86 excluding contingency and taxes, with an option to renew for one further two-year term for a maximum of five years, be awarded to Cobra Electric Services Limited. Staff request to award the contract for \$6,878,728.86 and issue change orders up to an additional \$687,873.00 excluding taxes, for a maximum value of\$7,566,601.86 to Cobra Electric Services Limited;
- That staff be authorized to extend the contract for the final two years (2)of the five-year contract; and
- That the Chief Administrative Officer and General Manager, (3) Planning and Development, be authorized to execute the above contract.

CARRIED

ENGINEERING AND PUBLIC WORKS DIVISION

3. **CHANGE ORDER APPROVAL – CONTRACT 6509P – MATTRESS** AND UPHOLSTERED FURNITURE RECYCLING SERVICES

(File Ref. No. 10-6370-04-01) (REDMS No. 6702698)

In reply to queries from the Committee, staff advised (i) factors that led to the increase in the number of items being dropped off at the recycling depot, (ii) revenue received from the large item pick up program is credited to the cost of the recycling depot, (iii) estimated cost savings of \$50,000 are achieved by keeping items out of landfill, (v) factors that led to the selection of the successful proponent, and (vi) the vender provides a per unit cost for furniture and mattresses.

It was moved and seconded

- (1) That staff be authorized to issue a change order to increase the value of the current contract between the City of Richmond and Canadian Mattress Recycling Inc. as detailed in the staff report titled "Change Order Approval – Contract 6509P – Mattress and Upholstered Furniture Recycling Services" dated September 9, 2021, from the Interim Director, Public Works Operation, by \$1,270,815, bringing the new contract value to \$2.3 million over the maximum available term of five years; and
- (2) That the Chief Administration Officer and the General Manager, Engineering and Public Works be authorized to execute a contract amendment with Canadian Mattress Recycling Inc. to reflect the increase in predicted usage of services over the five-year term.

CARRIED

4. PESTICIDE REDUCTION AND INVASIVE SPECIES MANAGEMENT – 2021 UPDATE

(File Ref. No. 10-6160-07-01) (REDMS No. 6742142)

In reply to queries from the Committee, staff advised (i) the initiative has been presented to the Union of BC Municipalities (UBCM) on several occasions and no provincial action has been taken, and (ii) eight priority species are identified in the action plan.

Discussion ensued with regard to (i) suggestion to provide funding to collect additional data on invasive species, and (ii) a new position or budget item could address the invasive species concerns.

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

It was moved and seconded

THAT staff be directed to include an additional staff resource for the Pesticide Reduction and Invasive Species Management Initiative in the upcoming budgetary process.

CARRIED Opposed: Cllrs. Loo McPhail It was moved and seconded

- (1) That key achievements related to the City's Enhancement Pesticide Management Program and Invasive Species Action Plan, as outlined in the staff report titled "Pesticide Reduction and Invasive Species Management – 2021 Update" dated September 22, 2021, from the Director of Sustainability and District Energy be received for information; and
- (2) That staff be directed to write letters to the federal Minister of Environment and Climate Change and the provincial Ministry of Environment, requesting that a review of the existing policies that allow for the importation and sale of invasive species be conducted.

CARRIED

5. GRANT FUNDED FLOOD PROTECTION PROGRAM UPDATE AND 2021 SUBMISSIONS TO THE DISASTER MITIGATION AND ADAPTATION FUND

(File Ref. No. 10-6060-01) (REDMS No. 6749947)

In reply to queries from the Committee, staff advised (i) environmental scans of the area would be required to determine habitat compensation and mitigation, (ii) opportunities to maintain the existing habitat to the furthest extent possible will be considered, regardless of whether federal funding is provided, and (iii) planned consultation with the Steveston Harbour Authority and other stakeholders.

It was moved and seconded

(1) That the submissions of the dike improvement and drainage pump station upgrade projects and the commitment to the funding over the project term to the Disaster Mitigation and Adaptation Fund (DMAF), as outlined in the staff report titled "Grant Funded Flood Protection Program Update and 2021 Submissions to the Disaster Mitigation and Adaptation Fund," dated September 21, 2021 from the Director, Engineering be endorsed;

- (2) That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to negotiate, modify and execute the funding agreements with the Government of Canada for the above-mentioned projects should they be approved for funding.
- (3) That, should the above mentioned projects be approved for funding by the Government of Canada, the Consolidated 5 Year Financial Plan (2022-2026) be updated accordingly; and
- (4) That the construction of the No. 2 Road South Drainage Pump Station project be removed from the work scope of the 2016 Flood Protection Program capital project.

CARRIED

7. MANAGER'S REPORT

(i) Garden City Lands Update

In reply to queries from the Committee, staff advised that the need to protect the area of stagnant moss in the Garden City Lands could be referred to the Parks, Recreation and Cultural Services Committee.

(*ii*) Sani-Dump Facilities

In reply to queries from the Committee, staff advised that consideration has been given to creating sani-dump facilities for recreational vehicles and it has been determined that it is not feasible.

Discussion ensued with regard to the need to have sani-dump facilities in Richmond.

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

It was moved and seconded

THAT staff be advised to report on three potential sani-dump sites for the committee to consider and report back.

DEFEATED Opposed: Cllrs. Au Day Loo McPhail

(ii) Small Gas-Powered Engines

Discussion ensued on California's ban of small gas-powered engines that will take effect in 2024.

(iv) Rainfall Received

Staff advised that the City of Richmond experienced a rainfall event which lasted for six hours on October 16, 2021. No significant issues were reported, and the drainage system performed well and water levels around Richmond remained low.

(v) Traffic Calming on Fundy Drive

The traffic calming project was substantially completed before school opened in September 2021 and positive feedback has been received from residents.

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (5:27 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 Tuesday, October 19, 2021.

Councillor Chak Au Chair Debbie Reimer Recording Secretary



To:	Public Works and Transportation Committee	Date:	October 12, 2021
From:	Lloyd Bie, P.Eng. Director, Transportation	File:	10-6450-09-01/2021- Vol 01
Re:	Barnes Drive and Flury Drive - Traffic Calming L	Ipdate	

Staff Recommendation

- 1. That Option 3 to establish a 30 km/h speed limit on Barnes Drive and Flury Drive as described in the staff report titled "Barnes Drive and Flury Drive Traffic Calming Update" dated October 12, 2021, from the Director, Transportation, be endorsed; and
- 2. That should Option 3 be endorsed, Traffic Bylaw No. 5870, Amendment Bylaw No. 10301, to revise the posted speed limit on Barnes Drive and Flury Drive to 30 km/h, be introduced and given first, second and third reading.

Mel 12.

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

REPORT CONCURRENCE						
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER				
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SENIOR STAFF REPORT REVIEW	INITIALS:	APPROved BY CAO				

Staff Report

Origin

In April 2021, staff received a petition from eight residents of Barnes Drive and Flury Drive requesting traffic calming measures to address perceived concerns of speeding motorists. This report provides the outcome of staff's review of the request and engagement with the neighbourhood.

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

1.4 Foster a safe, caring and resilient environment.

Analysis

Review of Traffic Calming Request

Barnes Drive and Flury Drive are local streets that form an internal subdivision ring road in the east Cambie area. The ring road is only accessible by vehicle from Bath Road, which connects westward to No. 5 Road south of Bridgeport Road (Figure 1). The default speed limit for both streets is 50 km/h; warning signs advising of a 30 km/h speed limit through the curved section of the roadway at the northeast corner are in place. A total of 52 addresses are located on the streets, which have a relatively narrow pavement width, no pedestrian facilities and on-street parking generally permitted on the shoulders.



Figure 1: Barnes Drive and Flury Drive

The residents' petition requested an in-pavement speed limit marker specifying 30 km/h at the northeast corner. Staff responded to the request by reviewing traffic data and other related information to assess the actual site conditions and quantify any concerns including:

- <u>*Traffic Speed Study*</u>: Counts taken October 14-21, 2020 on Barnes Drive indicated an average speed of 26 km/h with the highest speed recorded being one motorist travelling 56 km/h.
- *Sightlines*: A site assessment confirmed that the sightlines at the four corners are adequate.

• <u>*Crash History*</u>: Within the last five years (2016-2020), the roadways recorded four vehicle incidents, none of which was speed-related.

Engagement with Neighbourhood

Online Stakeholder Meetings

Staff held two online meetings in June 2021 with the neighbourhood to present staff's technical assessment and then achieve consensus on options for a neighbourhood survey (Table 1).

Date	Attendees	Purpose	Feedback/Outcome	
June 9, 2021	13	 Present staff's technical assessment Discuss need for traffic calming measures 	 Majority of attendees indicated: no traffic calming measures needed wish to retain on-street parking did not support speed humps Some interest expressed for: 30 km/h speed limit and signage measures that are non-intrusive, aesthetically pleasing, and do not impact parking or trees 	
June 23, 2021	9	 Present revised traffic calming measures based on feedback from first meeting 	 Consensus achieved on content of neighbourhood survey comprising the following options: Do nothing option Traffic calming option with one 30 km/h advisory sign at entrance to neighbourhood that is not an enforceable regulatory sign	

Table 1: Summary	of Online Stakeho	older Meetings

Neighbourhood Survey

From late June to late July, residents were surveyed to determine the level of support for and obtain comments on the proposed traffic calming measures determined through the engagement phase. A total of 52 surveys were mailed out to each discrete address; 43 responses were received including five responses with a duplicate address. The five responses are included in the analysis as they represent a separate tenant of the house. Thus, the percent support for each option is calculated based on the number of responses for that option divided by a total of 57 units.

The results indicate that there is no majority support for any single proposed option nor any other option suggested by residents (Figure 2). However, there is notable combined support (63% of respondents or 47% of total households) for either an advisory or enforceable 30 km/h speed limit.

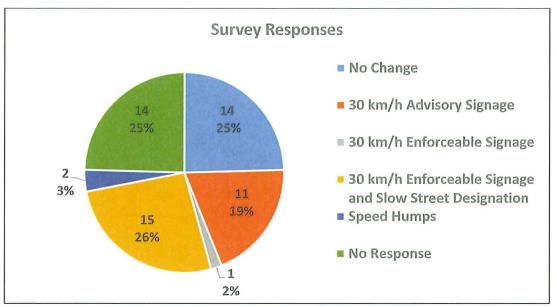


Figure 2: Survey Results for Traffic Calming Options

Traffic Calming Options

There is a demonstrated desire of a near majority of residents for a lower speed limit. Additionally, the two local streets are not through roads, have narrow lane widths, and lack pedestrian facilities, all of which support a lower speed limit. Research indicates that lower speeds reduce the frequency and severity of crashes, and also decrease the risk of a pedestrian or cyclist fatality if hit by a motorist. Based on these combined factors, staff have identified possible traffic calming options for consideration.

Option 1: Status Quo (Not Recommended)

The survey results indicate 25% support no change. As 47% of the total surveyed support either an advisory or enforceable 30 km/h speed limit, staff do not recommend a do nothing option.

Option 2: Advisory 30 km/h Speed Limit (Not Recommended)

This option would install advisory 30 km/h speed limit signage that is not enforceable by Richmond RCMP. As there is existing advisory 30 km/h signage at the northeast corner, installing additional similar non-enforceable signage along the roadways does not provide a tangible change to the current conditions nor respond to residents' desire for a change from the status quo. Therefore, staff do not recommend Option 2.

Option 3: Regulatory 30 km/h Speed Limit (Recommended)

This option would install regulatory 30 km/h speed limit signage that is enforceable by Richmond RCMP. This option is recommended by staff as it provides a material change that responds to residents' interest in a lower speed limit for the neighbourhood and better aligns with the actual operating speed on the ring road as determined by the speed survey. Establishing an enforceable 30 km/h speed limit requires Council approval to amend Traffic Bylaw No. 5870.

Option 4: Regulatory 30 km/h Speed Limit and "Slow Streets" Designation (Not Recommended)

This option is the installation of 30 km/h speed limit signage that is enforceable by Richmond RCMP plus the designation of the two streets as "slow streets." This measure was written in by 26% of survey respondents as an "other" option. While staff do support the installation of enforceable 30 km/h speed limit signage, staff do not recommend the implementation of additional measures to further define the roadways as "slow streets" as physical measures such as in-street pavement markers will further constrain the already relatively narrow roadway width and, in turn, impact the shoulder areas where residents walk and park their vehicles. A number of attendees at the online stakeholder meetings also voiced opposition to the installation of additional signage that would impact parking.

Financial Impact

The estimated cost to implement the signage associated with the recommended Option 3 is \$1,500, which can be funded by the approved 2021 Traffic Calming Program.

Conclusion

The City and residents of Barnes Drive and Flury Drive collaboratively developed traffic calming options for the neighbourhood with two online stakeholder meetings. While the survey results do not indicate a majority support for any single proposed option nor any other option suggested by residents, close to a majority of the total surveyed indicated support for either an advisory or enforceable 30 km/h speed limit.

Staff recommend an amendment to Traffic Bylaw No. 5870 to establish an enforceable 30 km/h speed limit for the streets as a tangible measure that responds to residents' desire for a change from the status quo and is anticipated to improve traffic safety and the walkability of the neighbourhood, thereby encouraging greater community wellness and social interaction.

full

Fred Lin, P.Eng., PTOE Transportation Engineer (604-247-4627)

B. Dhd'ul

Bill Dhaliwal Supervisor, Traffic Operations (604-276-4210)

JC:jc



Bylaw 10301

Traffic Bylaw No. 5870 Amendment Bylaw No. 10301

The Council of the City of Richmond enacts as follows:

- 1. **Traffic Bylaw No. 5870**, as amended, is further amended by adding a new Item 12 to Schedule B as follows:
 - 12. Barnes Drive and Flury Drive.
- 2. This Bylaw is cited as "Traffic Bylaw No. 5870, Amendment Bylaw No. 10301".

FIRST READING	 CITY OF RICHMOND
SECOND READING	 APPROVED for content by originating dept.
THIRD READING	 JC
ADOPTED	 APPROVED for legality by Solicitor LB

MAYOR

CORPORATE OFFICER



Report to Committee

То:	Public Works and Transportation Committee	Date:	October 10, 2021
From:	Lloyd Bie, P. Eng. Director, Transportation	File:	01-0154-04/2021-Vol 01
Re:	TransLink 2022 Cost-Share Funding Applica	tions	

Staff Recommendation

That as described in the report titled "TransLink 2022 Cost-Share Funding Applications" dated October 10, 2021 from the Director, Transportation:

- (a) the submission of road, pedestrian, bicycle, and transit facility improvement projects as part of the TransLink 2022 cost-share programs be endorsed and the information be considered in the 2022 Capital Budget process; and
- (b) the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the successful funding agreements.

Ad R.

Lloyd Bie, P. Eng. Director, Transportation 604-276-4131 Att. 2

REPORT CONCURRENCE						
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER				
Finance Parks Engineering	$\overline{\mathbf{v}}$	be trug				
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO				

Staff Report

Origin

Each year, municipalities are invited to submit road, bicycle and transit-related improvement projects for funding consideration from TransLink's cost-share funding programs. This staff report presents the proposed applications from the City to TransLink's 2022 cost-share programs.

This report supports Council's Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

5.4 *Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.*

This report supports Council's Strategic Plan 2018-2022 Strategy #6 Strategic and Well-Planned Growth:

Leadership in effective and sustainable growth that supports Richmond's physical and social needs.

6.3 Build on transportation and active mobility networks.

Analysis

TransLink Cost-Share Programs

TransLink provides cost-share funding to municipalities via the following programs:

- <u>Major Road Network and Bike (MRNB) Upgrade Program</u>: allocated funding for capital improvements to roads that comprise the Major Road Network (MRN) and the construction of bicycle facilities both on and off the MRN.
- <u>Bicycle Infrastructure Capital Cost-Sharing (BICCS) Program</u>: allocated and competitive funding for the construction of bicycle facilities.
- <u>Bicycle Infrastructure Capital Cost-Sharing (BICCS) Recovery Program</u>: competitive funding for the construction of bicycle facilities that can be completed within one year.
- <u>Walking Infrastructure to Transit (WITT) Program</u>: allocated and competitive funding for pedestrian facility upgrades within walking distance of frequent transit stops, stations and exchanges to promote the seamless integration of walking and cycling with transit.
- <u>Transit-Related Road Infrastructure Program (TRRIP)</u>: competitive funding for roadway infrastructure facilities required for the delivery of transit services in the region.
- <u>Bus Speed and Reliability (BSR) Program</u>: competitive funding for feasibility studies and capital projects that support improved bus speed and reliability.

• <u>MRN Structures Program</u>: competitive funding for studies and capital projects for the upgrade, rehabilitation and/or replacement of bridges, culverts and retaining walls.

Projects to Receive Funding from 2021 TransLink Cost-Share Programs

Fourteen pedestrian, cycling and road improvement projects in Richmond will collectively receive up to \$5.09 million from TransLink as part of its 2021 cost-share programs, which will support projects with a total estimated cost of \$14.4 million (Attachment 1).

The City also submitted a successful application to TransLink's 2021 MRN Structures Program for the installation of new drainage culverts and associated drainage infrastructure at the Steveston Highway-Gilbert Road intersection to replace the existing ageing road cross-culvert. The estimated project cost is \$762,000 with the City responsible for 50% of the funding. The project was approved by Council as part of the City's 2021 capital program. Staff recommend that the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the agreement.

TransLink Funding Levels for 2022 Cost-Share Programs

Confirmation of funding levels for TransLink's 2022 cost-share programs will not be known until finalization of its new 10-Year Investment Plan, which is anticipated by spring 2022. TransLink is proceeding with the 2022 application process at this time, on the assumption that funding levels in 2022 will be the same as in 2021, in order to maintain the overall timeline for TransLink's evaluation and approval process, and thus timely project delivery.

Should the new 10-Year Investment Plan include 2022 funding levels different than those of 2021, municipalities will have the opportunity to revise their applications to meet the new parameters as necessary. Staff will report back with an update if this scenario occurs.

Projects Proposed for Submission to 2022 TransLink Cost-Share Programs

The following projects are proposed for submission to the 2022 TransLink cost-share programs, which collectively will fully utilize TransLink's anticipated allocated funding for Richmond. TransLink has indicated that the amount of capital cost-share funding available to Richmond for 2022 as noted below.

Major Road Network and Bike (MRNB) Upgrade Program

TransLink's assumed 2022 allocation for Richmond is \$1,852,000 (same as 2021). The City proposes to submit the following projects for consideration (Attachment 2):

• <u>Westminster Hwy-No. 2 Road Intersection Upgrade</u>: The City's network screening study of collision-prone intersections presented to Council in June 2019 ranked this intersection as #3 of the top 20. The scope includes modification of the intersection geometry, modification of the channelized island at the northwest corner, increased size of the pedestrian refuge areas, improving cycling connectivity, access management, and traffic signal operation enhancements. Council approved the project as part of the 2021 Capital Plan. This application is Year 2 of a 2-year accrual (i.e., the City also successfully applied to TransLink

in 2021 for the same project in order to achieve a minimum of 50% external funding over the two-year period).

- <u>Cambie Road-No. 4 Road Intersection Upgrade</u>: Provision of left-turn lanes on all four legs, new boulevard and/or lighting strip, upgraded traffic signals, increased size of the pedestrian refuge areas, widened crosswalks, and overhead street name signs. Council approved the project as part of the 2021 Capital Plan. This application is Year 2 of a 2-year accrual (i.e., the City also successfully applied to TransLink in 2021 for the same project in order to achieve a minimum of 50% external funding over the two-year period).
- <u>No. 2 Road Multi-Use Pathway</u>: Construction of a two-way off-street paved 3.0 m wide pathway for pedestrians and cyclists on the east side of No. 2 Road. The alignment and form of cycling facility is a logical extension of the existing multi-use pathway on the east side south of Steveston Highway and incorporates an existing 170 m length multi-use pathway on the east side at Wallace Road. Council approved the project as part of the 2021 Capital Plan. This application is Year 2 of a 2-year accrual (i.e., the City also successfully applied to TransLink in 2021 for the same project in order to achieve a minimum of 50% external funding over the two-year period).
- <u>Garden City Road Multi-Use Pathway</u>: Reconstruction and enhancement of the existing pathway on the west side between Francis Road and Williams Road due to extensive asphalt failing (e.g., root damage). The rebuilt pathway will be wider and new pedestrian lighting will be added. The project will be included in the 2022 Capital Plan for Council's consideration.
- <u>Westminster Hwy-No. 5 Road Intersection Upgrade</u>: The City's network screening study of collision-prone intersections presented to Council in June 2019 ranked this intersection as #5 of the top 20. The scope includes modification/removal of the existing island at the northwest corner, reduced curb return radius, increased size of the pedestrian refuge areas, and improved pedestrian and cycling connectivity. The project will be included in the 2022 Capital Plan for Council's consideration. This application is Year 1 of a 2-year accrual (i.e., the City will apply to TransLink in 2023 for the same project in order to achieve a minimum of 50% external funding over the two-year period).

Bicycle Infrastructure Capital Cost-Sharing (BICCS) Program

TransLink's 2022 assumed allocation for Richmond is \$894,000 (same as 2021) and the City can apply for up to \$600,000 per project from the competitive-based component. The City proposes to submit the following project for consideration for the allocated component (Attachment 2):

• <u>*River Road Multi-Use Pathway*</u>: Council approved design funding for a cycling facility on River Road between McCallan Road (northern terminus of Railway Greenway) and No. 2 Road (western terminus of Middle Arm Greenway) as part of the 2020 Capital Plan. This application is for construction of a two-way off-street paved 4.0 m wide pathway including lighting for pedestrians and cyclists on the south side of River Road that will connect the two major greenways. The project will be included in the 2022 Capital Plan for Council's consideration.

• <u>No. 2 Road Multi-Use Pathway</u>: As described above for the MRNB Program.

The City also proposes to submit the following projects for consideration for the competitive component (Attachment 2). Should the applications not be successful, both projects will be deferred and the City will re-apply in 2023.

- <u>Sexsmith Road-Brown Road Bike Route</u>: Through the development application process and City capital projects, cycling facilities have been established on various sections of Sexsmith Road and Brown Road. In addition, the upgrade of the Sexsmith Road-Bridgeport Road intersection to include a pedestrian signal has been secured. This project will fill in the remaining gaps to provide a continuous protected cycling facility along Sexsmith Road and Brown Road between the Bridgeport Canada Line Station and Transit Exchange and the recently completed Odlin Road Neighbourhood Bike Route. The project includes the upgrade of the existing special crosswalk on Cambie Road at Brown Road to a pedestrian signal. The project will be included in the 2022 Capital Plan for Council's consideration.
- <u>Westminster Hwy-No. 5 Road Intersection Upgrade</u>: As described above for the MRNB Program.

Bicycle Infrastructure Capital Cost-Sharing (BICCS) Recovery Program

For 2022, \$2.0 million is assumed available with all funding available on a competitive basis. The City proposes to submit the following project for consideration (Attachment 2):

• <u>Garden City Road (Granville Ave-Sea Island Way</u>): Installation of delineators along both sides of Garden City Road where feasible between Granville Avenue and Sea Island Way (approximate length of 2.3 km in each direction). This project will complement the recent installation of delineators on Granville Avenue (Railway Avenue to Garden City Road) and continue the addition of protection to painted bike lines along a major north-south bike route in the City Centre. The project will be included in the 2022 Capital Plan for Council's consideration.

Walking Infrastructure to Transit (WITT) Program

TransLink's 2022 assumed allocation for Richmond is \$322,000 (same as 2021). The City proposes to submit the following projects for consideration for the allocated component (Attachment 2):

- <u>Westminster Hwy-No. 2 Road Intersection Upgrade</u>: As described above for the MRNB Program.
- <u>Westminster Hwy-No. 5 Road Intersection Upgrade</u>: As described above for the MRNB Program.

Transit-Related Road Infrastructure Program (TRRIP)

For 2022, TRRIP has a total of \$1.0 million available for the entire program (same as 2021); the City's submission is for \$100,000, which is the maximum amount permitted. Projects proposed to be submitted by the City are:

• <u>Bus Stop Upgrades</u>: Continued retrofits to various existing bus stops to provide for universal accessibility (i.e., installation of a landing pad and/or connecting sidewalk for wheelchair users) and construction of connecting pathways to provide access to/from the bus stop. The exact bus stop locations for these upgrades will be determined through feedback from transit users and consultation with Richmond Centre for Disability. The project will be included in the 2022 Capital Plan for Council's consideration.

As of September 2021, Richmond has 723 active bus stops, of which 621 (85.9%) are accessible as compared to the regional average of 81.2%. Based on the experience of past years, staff anticipate that approximately 10 locations will be upgraded with the proposed project in 2022. The project scope will be reduced should the application not be successful.

Bus Speed and Reliability (BSR) Program

For 2022, the BSR Program has \$5.2 million available (compared to \$4.15 million in 2021) with all funding available on a competitive basis. The City proposes to submit the following projects for consideration (Attachment 2):

 <u>Great Canadian Way-Bridgeport Road Intersection Southbound Bus-Only Lane –</u> <u>Implementation</u>: As part of the 2019 and 2020 BSR Programs, the City examined and developed conceptual designs for a potential long-term improvement of a new southbound bus-only lane on Great Canadian Way approaching Bridgeport Road to facilitate buses accessing Highway 99 southbound. As part of the 2021 BSR Program, the functional design for a bus only lane at the intersection was completed. This application will progress the project to implementation, which will support the bus only on-ramp from Bridgeport Road to southbound Highway 99 to be completed in 2022 by the Province as part of the George Massey Crossing Program.

Requested Funding and Estimated Project Costs

The total requested funding for the above 2022 submissions to TransLink's cost-sharing programs is \$4,760,500, which will support projects with a total estimated cost of \$11.2 million (Table 1). For all projects, the City will receive from 50% to 100% of the estimated project cost. The total combined amounts of TransLink funding for 2022 and City funding do not equal the total estimated project costs due to several projects accruing TransLink funding over a two-year period.

Project	TransLink Funding Source		Total TransLink Funding for	Estimated City Funding &	Estimated Project
	Program	Amount	2022 ⁽¹⁾	Source ⁽²⁾	Cost
Westminster Hwy-No. 2	MRNB Allocated	\$150,000	\$300,000 (Year 1 Accrual	\$650,000	\$1,300,000
Road Intersection Upgrade (Year 2 Accrual)	WITT Allocated	\$150,000	in 2021 = \$350,000)	(2021 Capital Program)	\$1,300,000
Cambie Road-No. 4 Road Intersection Upgrade (Year 2 Accrual)	MRNB Allocated	\$425,000	\$425,000 (Year 1 Accrual in 2021 = \$425,000)	\$850,000 (2021 Capital Program)	\$1,700,000

Table 1: Projects to be Submitted to 2022 TransLink Cost-Share Programs

Project	TransLink Funding Source		Total TransLink Funding for	Estimated City Funding &	Estimated Project
	Program	Amount	2022(1)	Source ⁽²⁾	Cost
No. 2 Road (Steveston Hwy-Williams Road): multi-use path (Year 2	MRNB Allocated BICCS	\$633,500	\$727,500 (Year 1 Accrual in 2021 =	\$900,000 (2021 Capital	\$2,400,000
Accrual)	Allocated	\$94,000	\$772,500)	Program)	
Westminster Hwy-No. 5 Road Intersection	MRNB Allocated	\$143,500	\$315,500 (Year 2 Accrual	\$600,000 (2022 Top 20 Collision Prone	\$1,200,000
Upgrade (Year 1 Accrual)	WITT Allocated	\$172,500	in 2023: \$284,500)	Intersections Program)	ψ1,200,000
Garden City Road (Francis Road-Williams Road): reconstruct multi- use path	MRNB Allocated	\$500,000	\$500,000	\$500,000 (2022 Active Transportation Improvement Program)	\$1,000,000
River Road (McCallan Road-No. 2 Road): multi- use path	BICCS Allocated	\$800,000	\$800,000	\$800,000 (2022 Capital Program)	\$1,600,000
Sexsmith Road-Brown Road (Beckwith Road- Browngate Road): protected bike lanes	BICCS Competitive	\$562,500	\$562,500	\$187,500 (2022 Capital Program)	\$750,000
Garden City Road (Granville Ave-Sea Island Way): Installation of Delineators	BICCS Recovery	\$280,000	\$280,000	\$25,000 (2022 Active Transportation Improvement Program)	\$305,000
Accessibility upgrades to various existing bus stops	TRRIP	\$100,000	\$100,000	\$100,000 (2022 Transit- Related Road Infrastructure Program)	\$200,000
Great Canadian Way (Beckwith Rd-Bridgeport Road): Southbound Bus Only Lane	Bus Speed & Reliability	\$750,000	\$750,000	\$0	\$750,000
Total ⁽³⁾			\$4,760,500	\$4,612,500	\$11,205,000

(1) The amounts shown represent the maximum funding contribution to be requested from TransLink based on the City's cost estimate for the project. The actual amount invoiced to TransLink follows project completion and is based on incurred costs.

(2) The City's portion of the costs for the projects with Year 2 accrual were approved as part of the 2021 Capital Budget. The City's portions of the costs of the remaining projects will be considered during the 2022 Capital Budget process.

(3) The total combined amounts of TransLink funding for 2022 and City funding do not equal the total estimated project costs due to several projects accruing TransLink funding over a two-year period.

Should the submissions be successful, the City would enter into funding agreements with TransLink. Staff will report back should any applications not be successful or cost-share funding levels for 2022 differ from those identified in this report. The agreements are standard form agreements provided by TransLink and include an indemnity and release in favour of TransLink. Staff recommend that the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the agreements and the information be considered in the 2022 Capital Budget process.

Financial Impact

The City's portion of the costs for the projects with Year 2 accrual of TransLink funding (i.e., Westminster Hwy-No. 2 Road intersection upgrade, Cambie Road-No. 4 Road intersection upgrade, and No. 2 Road multi-use path) were approved as part of the 2021 Capital Budget. The City's portions of the costs of the remaining proposed project applications will be considered during the 2022 Capital Budget process and the associated operating budget impacts will be incorporated as part of the upcoming annual budget process. The 2022 BSR Program project costs include direct staff time, which will offset City funding.

Conclusion

A number of road, pedestrian, bicycle route, and transit improvement projects are proposed for submission to TransLink's various cost-sharing programs for 2022 that will support Council's Strategic Plan for 2018-2022 with respect to "Strategic and Well-Planned Growth" as well as the goals of a number of City plans and strategies including the Official Community Plan, the Community Energy Emissions Plan and the Community Wellness Strategy.

In addition to maximizing external funding in implementing local transportation improvements, significant benefits for those using sustainable travel modes in terms of new infrastructure that provides safety and accessibility enhancements will also be achieved should these projects be approved by TransLink and Council.

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Joan Caravan Transportation Planner (604-276-4035) JC:jc

Judt

Fred Lin, P.Eng., PTOE Senior Transportation Engineer (604-247-4627)

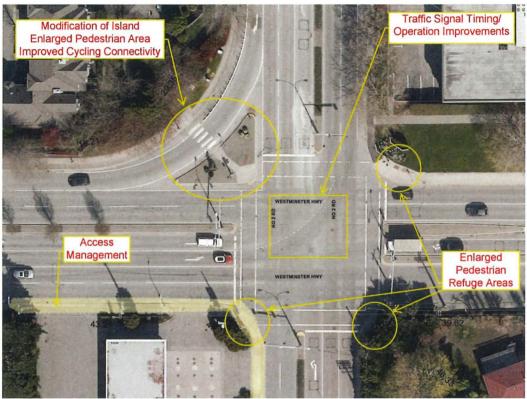
Att. 1: Projects to Receive Funding from 2021 TransLink Cost-Share Programs Att. 2: Locations of Proposed 2022 Cost-Share Projects

	TransLink Fundin	g Source	Total TransLink	Estimated	Estimated
Project	Program	Amount	Funding ⁽¹⁾	City Funding	Project Cost
Westminster Hwy-No. 2 Road Intersection Upgrades (Year 1 Accrual)	MRNB Allocated	\$28,000 \$322,000	\$350,000 (Proposed Year 2 accrual in 2022 = \$300,000)	\$650,000	\$1,300,000
Cambie Road-No. 4 Road Intersection Upgrades (Year 1 Accrual)	MRNB Allocated	\$425,000	\$425,000 (Proposed Year 2 accrual in 2022 = \$425,000)	\$850,000	\$1,700,000
Steveston Hwy (No. 2 Road-	MRNB Allocated	\$131,000	\$1,625,000		
Mortfield Gate): Phase 2 of	BICCS Allocated	\$894,000	(Year 1 accrual	\$2,400,000	\$6,000,000
multi-use path (Year 2 Accrual)	BICCS Competitive	\$600,000	in 2020 = \$1,975,000)	\$2,400,000	\$0,000,000
No. 2 Road (Steveston Hwy- Williams Road): multi-use path (Year 1 Accrual)	MRN Allocated	\$772,500	\$772,500 (Proposed Year 2 accrual in 2022 = \$727,500)	\$900,000	\$2,400,000
Browngate Road (Hazelbridge Way-No. 3 Road): cycle tracks	BICCS Competitive	\$300,000	\$300,000	\$100,000	\$400,000
Lansdowne Road (Gilbert Road- Pearson Way): multi-use path	MRN Allocated	\$150,000	\$150,000	\$150,000	\$300,000
Shell Road (Alderbridge Way- Hwy 99 Overpass): rebuild of multi-use path	MRN Allocated	\$345,500	\$345,500	\$244,500	\$590,000
Granville Avenue (Garden City Road-Railway Avenue): addition of delineators at bike lane	BICCS Recovery	\$300,000	\$300,000	\$100,000	\$400,000
Steveston Hwy-Gilbert Road: drainage upgrades	MRN Structures	\$381,000	\$381,000	\$381,000	\$762,000
Accessibility upgrades to various existing bus stops	TRRIP	\$88,750	\$88,750	\$88,750	\$177,500
No. 3 Road (Cook Road-River Road): study	Bus Speed & Reliability	\$125,000	\$125,000	\$0	\$125,000
Hot Spot Analysis: left-turns at two intersections	Bus Speed & Reliability	\$50,000	\$50,000	\$0	\$50,000
Bridgeport Road-Knight Street: northbound on-ramp access	Bus Speed & Reliability	\$125,000	\$125,000	\$0	\$125,000
Bridgeport Station Egress: functional design of bus lane	Bus Speed & Reliability	\$50,000	\$50,000	\$0	\$50,000
Total ⁽²⁾			\$5,087,750	\$5,864,250	\$14,379,500

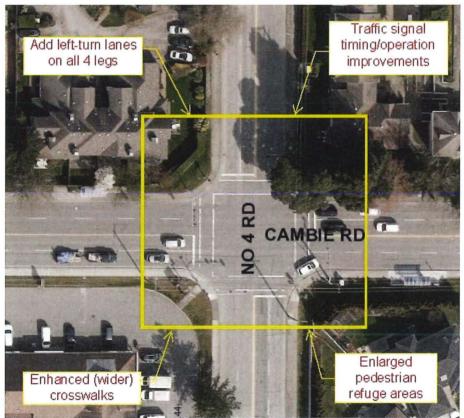
Projects to Receive Funding from 2021 TransLink Cost-Share Programs

(1) The amounts shown represent the maximum funding contribution to be requested from TransLink based on the City's cost estimate for the project. The actual amount invoiced to TransLink follows project completion and is based on incurred costs.

(2) The total combined amounts of TransLink funding for 2021 and City funding do not equal the total estimated project costs due to projects accruing TransLink funding over a two-year period (either 2020-2021 or 2021-2022).



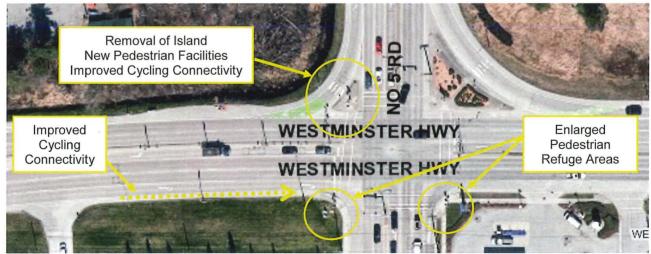
Westminster Hwy-No. 2 Road: Intersection Upgrade: Year 2 of 2-Year Accrual



Cambie Road-No. 4 Road: Intersection Upgrade: Year 2 of 2-Year Accrual



No. 2 Road (Steveston Hwy-Williams Road): Multi-Use Pathway (MUP) Year 2 of 2-Year Accrual



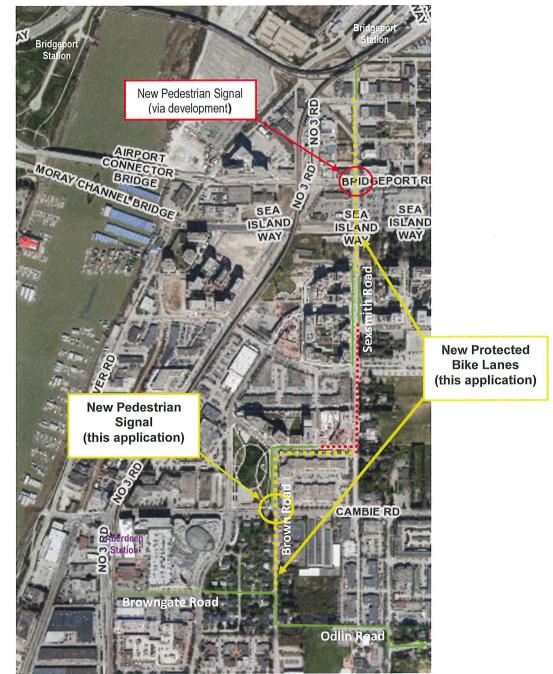
Westminster Hwy-No. 5 Road: Intersection Upgrade



Garden City Road (Francis Road-Williams Road): Reconstruction of Multi-Use Pathway:



River Road (McCallan Road-No. 2 Road): New Multi-Use Pathway



Sexsmith Road-Brown Road (Beckwith Road-Browngate Road): Protected Bike Lanes





Garden City Road (Granville Ave-Sea Island Way): Addition of Delineators between Bike Lane and Vehicle Lane



Great Canadian Way (Beckwith Road-Bridgeport Road): Southbound Bus-Only Lane



То:	Public Works and Transportation Committee	Date:	October 15, 2021	
From:	Suzanne Bycraft Interim Director, Public Works Operations	File:	10-6370-01/2021-Vol 01	
Re:	Award of Contract 6691Q - Supply and Delivery of One (1) Sewer Vacuum Combo Unit on a City Provided Cab and Chassis			

Staff Recommendation

That the acquisition of a hydro excavator be approved in the total amount of \$760,000 as outlined in the staff report titled, "Award of Contract 6691Q - Supply and Delivery of One (1) Sewer Vacuum Combo Unit on a City Provided Cab and Chassis", dated October 13, 2021, from the Interim Director, Public Works Operations as follows:

- 1. That Contract 6691Q Supply and Delivery of One (1) Sewer Vacuum Combo Unit on a City Provided Cab and Chassis be awarded to Vimar Equipment Ltd. in the total tendered amount of \$473,852.00 excluding outfitting, contingency and taxes; and
- 2. That the supply of one (1) cab and chassis be awarded to Peterbilt Pacific Ltd. in the amount of \$210,462.00 excluding outfitting, contingency and taxes in accordance with the standardization method approved by Council and as outlined in the staff report titled, "Standardization of City's Single and Tandem Axle Vehicle Fleet", dated April 3, 2017.

Suzanne Bycraft Interim Director, Public Works Operations (604-233-3338)

REPORT CONCURRENCE						
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER				
Finance Department Purchasing	\boxtimes	- Alm hung				
SENIOR STAFF REPORT REVIEW		APPROVED BY CAO				

Staff Report

Origin

Contract 6691Q (Supply and Delivery of One (1) Sewer Vacuum Combo Unit on a City Provided Cab and Chassis) was initiated to acquire a hydro excavator to replace an existing unit that has reached the end of its useful life. This is a like-for-like replacement of existing unit 1429, which is being replaced as part of standard replacement cycles due to age and condition.

The purpose of this report is to present the results of the Request for Quotations process and to seek Council approval to award contracts to both Vimar Equipment Ltd. and Peterbilt Pacific Ltd.

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

1.2 Future-proof and maintain city infrastructure to keep the community safe.

Analysis

Background

Hydro excavation equipment is used to remove fill and other materials as part of maintenance and construction work. A combination flush and vacuum-style process is used. This process reduces the need to excavate with heavy equipment, such as backhoes, thereby minimizing potential for damage to underground utilities and as part of ensuring compliance with regulatory requirements. The process is also safer and quicker. Hydro excavators are used to flush, clean and remove blockages from mainlines, inspection chambers, culverts, manholes, ditches and catch basins. They are used in construction projects to excavate for new installations, repairs and replacements (service connections, fire hydrants, valves, meter boxes, lamp standards, etc.).

Public Tendering

A competitive bid process was undertaken for the supply and delivery of the sewer vacuum combo unit (body component). A procurement document for the above noted work was prepared by staff and posted to BC Bid and bids&tenders on June 11, 2021. One quotation was received from Vimar Equipment Ltd.

Vendor	Tendered Cost	
	(plus Contingency, Outfitting and Taxes)	
Vimar Equipment Ltd.	\$473,852.00	

Review Process

The only quotation received was from Vimar Equipment Ltd. which met all the City's specifications and is therefore recommended for award. Staff's review of previous purchases of similar units indicates that the bid received under this tender process is in line with that which

would otherwise be expected. It is staff's view that if a new bid process was sought at this time, costs would be considerably higher than the bid received under Contract 6691Q due to supply chain shortages in the current market. Therefore, staff's view is that the pricing received represents best value for the City. Vimar has also provided high quality products and reliable services to the City in prior dealings.

Cab and Chassis

The sewer vacuum combo unit will be mounted on Peterbilt cab and chassis as part of the previously approved Council standardization for fleet vehicles. This method, approved at the April 24, 2017 Council meeting, establishes the Peterbilt model for all single and tandem axle vehicle replacements. This provides for economies of scale in parts, tooling, maintenance and vehicle operations and has been an effective method to date. Costs for the cab and chassis portion are \$210,462.00 excluding taxes as follows:

- Truck purchase price: \$210,372.00
- Tire levy: <u>\$ 90.00</u>
- Total \$210,462.00

Peterbilt provides a local maintenance facility for parts, repairs, product and technical support, and a warranty center.

Disposal Plan – Existing Unit:

Existing unit 1429 will be disposed of in accordance with Disposal of City Assets Policy No. 2003. Typically, this will be through consignment or auction based on estimates for best value of market conditions once the new unit is ready for commissioning.

Financial Impact

The sewer vacuum combo project requires a total project expenditure of \$760,000.00, inclusive of contingency, outfitting by City forces, taxes and levies as shown in Table 1. This total expenditure is included as part of the 2020 capital project submission "Vehicle and Equipment Reserve Purchases (Public Works and Corporate Fleet)". Total funding of \$3.32 million was approved by Council and is included in the Consolidated 5 Year Financial Plan (2020-2024).

Item	Cost	
Vimar Equipment – Sewer Vacuum Combo Unit	\$473,852.00	
Peterbilt – Cab and Chassis	\$210,462.00	
Outfitting (City Forces)	\$11,784.00	
Contingency Costs	\$16,000.00	
Taxes	\$47,902.00	
Total	\$760,000.00	

Table	e 1:	Total	Projec	t Expendi	ture

Staff recommend that Contract 6691Q Supply and Delivery of One (1) Sewer Vacuum Combo Unit on a City Provided Cab and Chassis be awarded to Vimar Equipment Ltd. in the total tendered amount of \$473,852.00, excluding outfitting, contingency and taxes. Staff also recommend that a contract for the supply of one (1) cab and chassis be awarded to Peterbilt Pacific Ltd. in the amount of \$210,462.00, excluding outfitting, contingency and taxes. The total projected expenditure is \$760,000 inclusive of ancillary costs.

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Kristina Nishi Acting Manager, Fleet and Environmental Programs (604-233-3301)

KN:kn



То:	Public Works and Transportation Committee	Date:	October 7, 2021
From:	Suzanne Bycraft Interim Director, Public Works Operations	File:	10-6050-01/2021-Vol 01
Re:	Award of Contract 6437F - Supply of Drainage Pumps, Parts and Services		

Staff Recommendation

- 1. That Contract 6437F Supply of Drainage Pumps, Parts and Services be awarded to KSB Pumps Inc. on an "as and when required" basis for a term of five years with a maximum contract value not to exceed \$2.51 million, plus applicable taxes.
- That the Chief Administrative Officer and the General Manager, Engineering and Public Works be authorized to negotiate and execute on behalf of the City, the contract identified above and as outlined in the staff report titled, "Award of Contract 6437F – Supply of Drainage Pumps, Parts, and Services" dated October 7, 2021, from the Interim Director, Public Works Operations.

Suzanne Bycraft Interim Director, Public Works Operations (604-233-3338)

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Finance Department Purchasing	\checkmark	- Jh hing
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO

Staff Report

Origin

The City regularly monitors and upgrades drainage pump stations throughout Richmond to maintain a robust drainage system. Staff assessed the needs of the City's drainage pump stations including the existing infrastructure and the future supply requirements. It was determined the best course of action is to standardize the pumps and parts to ensure compatibility with existing infrastructure, achieve economies of scale and reduce costs as a result of retrofitting, modifications, staff training and repair times.

KSB Pumps Inc. is the only supplier of Amacan brand pumps and parts which are critical components to the drainage network and have proven to be of excellent quality and dependability over the past 20 years in the City's drainage pump stations. The current and ongoing standardization of drainage pumps and hardware will continue to minimize costs and downtime by allowing for greater interchangeability and technical expertise when repairs are needed, and will minimize service disruptions. The Amacan brand pumps interface with existing electronic monitoring equipment, control programs, hardware and have demonstrated good value to the City in terms of increased pumping capabilities and reduced energy consumption and failures.

This report presents the results of the procurement process and recommends award of Contract 6437F – Supply of Drainage Pumps, Parts, and Services to KSB Pumps Inc.

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

1.1 Enhance safety services and strategies to meet community needs.

1.2 Future-proof and maintain city infrastructure to keep the community safe.

1.3 Ensure Richmond is prepared for emergencies, both human-made and natural disasters.

1.4 Foster a safe, caring and resilient environment.

Analysis

Procurement Process

Staff approached the market with a Notice of Intent to Contract (NOITC) with KSB Pumps Inc. in April 2019. The NOITC posting on BC Bid received no challenges from other suppliers in the industry.

Project Description

The scope for this contract is as follows:

- Pumps and parts supply for the City's drainage pump stations.
- Maintenance and repair services to pumps and parts supplied by the vendor, for which the City does not have the capacity to perform in-house.

Supply Agreement

In return for a long-term commitment, KSB Pumps Inc. is offering the following:

- A fixed 15% discount against list prices for the supply of pumps and parts for the full term of the contract.
- Pricing will be fixed for the first 24 months of this supply agreement. For the third, fourth and fifth year of the agreement, the price will be adjusted by no more than 2% per annum to reflect cost increases that the supplier may incur during the term of the agreement.
- Critical parts will be stored at KSB Pumps Inc. service centre. The City may order the parts in emergency cases which are to be delivered to site by KSB Pumps Inc.
- The City will have firsthand access to the newest generation of the drainage pumps which offers improved efficiency, smaller foot print and better performance.
- KSB Pumps Inc. agrees to provide access to their web-portal for ordering spare parts directly used by City employees or agents.

KSB Pumps Inc. will donate any used parts of pumps to local educational facilities that maintain Millwright programs such as BCIT (Burnaby, BC) and Kwantlen Polytechnic University (Surrey, BC) or other educational facilities requested by the City.

Financial Impact

Funding for the work under this contract is identified and included in various operating and capital budgets within Council-approved funding levels. The estimated value of the contract is shown in Table 1.

Estimated Costs	
First year (2021 to 2022)	\$ 444,000
Second year (2022 to 2023)	\$ 444,000
Third year (2023 to 2024)	\$ 452,880
Fourth year (2024 to 2025)	\$ 461,937
Fifth year (2025 to 2026)	\$ 471,176
Subtotal	\$ 2,273,993
10% Contingency	\$ 227,399
Total Estimated Costs	\$ 2,501,392

Table 1 - Estimated Costs

This report presents the procurement process and agreement details for Contract 6437F – Supply of Drainage Pumps, Parts and Services.

It is recommended that the contract be awarded to KSB Pumps Inc. for a five-year term and that the Chief Administrative Officer and the General Manager, Engineering and Public Works be authorized to negotiate and execute the contract.

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Ben Dias Manager, Sewerage and Drainage (604-244-1207)

BD:bd



Re:	Change Order Approval – Contract 6715P – Traffic Control Services		
From:	Suzanne Bycraft Interim Director, Public Works Operations	File:	10-6000-01/2021-Vol 01
То:	Public Works and Transportation Committee	Date:	October 18, 2021

Staff Recommendation

- That staff be authorized to issue a change order to increase the value of the current contract between the City of Richmond and Ansan Traffic Group, Lanesafe Traffic Control, and Traffic Pro Services as detailed in the staff report titled "Change Order Approval – Contract 6715P – Traffic Control Services", dated October 13, 2021 from the Interim Director, Public Works Operations, by \$906,110, bringing the new contract value to \$2.4 million over the maximum available term of three years; and
- 2. That the Chief Administration Officer and the General Manager, Engineering and Public Works be authorized to execute a contract amendment with Ansan Traffic Group, Lanesafe Traffic Control and Traffic Pro Services, to reflect the increase in predicted usage of services over the three year term.

Suzanne Bycraft Interim Director, Public Works Operations (604-233-3338)

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Finance Department Purchasing	V	- Jh hing	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO	

Staff Report

Origin

At the March 9, 2020 Council meeting, the award of contract 6715P – Traffic Control Services was approved as follows:

That Contract 6715P – Traffic Control Services be awarded for a three year term commencing April 1, 2020, to three bidders, with the intent of assigning the majority of the work to Ansan Traffic Group as the primary service provider, and with Lanesafe Traffic Control and Traffic Pro Services serving as secondary and tertiary backup service providers.

The general scope of this contract includes:

- Providing traffic control services on an "as and when required" basis for various job sites, including for work and projects in connection with all aspects of roads, utilities, boulevards and medians, as well as special events; and
- Providing all the personnel, labour, supervision, management, facilities, vehicles, tools, equipment, signs, devices, accessories, supplies, fuel, and other materials which are necessary or incidental to the appropriate and complete design and provision of the traffic control services.

The initial value of this contract over the full three year term was estimated at \$1,491,780 based on best available information on estimated service requirements at that time. The impacts of the pandemic were not contemplated when the value of Contract 6715P was estimated. Physical distancing requirements have, therefore, created a higher demand for services than that initially estimated.

This report provides further details and seeks to increase the contract value by \$906,110 for a total of \$2.4 million over the maximum three year term, or to March 31, 2023.

This report supports Council's Strategic Plan 2018-2022 Strategy # 1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

1.1 Enhance safety services and strategies to meet community needs.

1.2 Future-proof and maintain city infrastructure to keep the community safe.

1.4 Foster a safe, caring and resilient environment.

Analysis

Background

Contract 6715P – Traffic Control Services was awarded through a competitive bid process issued to the marketplace on August 29, 2019. Proponents were requested to provide pricing based on

an estimate of annual traffic control hours required (10,000 regular service hours, 500 weekday evening service hours and 500 weekend service hours). In addition, proponents were required to provide fixed pricing for the three year term. The work was awarded to all three bidders, with Ansan Traffic Group as the primary service provider and Lanesafe Traffic Control and Traffic Pro Services serving as secondary and tertiary backup service providers.

The estimated total value of work over the three year term was based on historic usages from 2017 to 2019 and predicted estimates of annual traffic management plan requirements and traffic control personnel hours. The total value of the contract over the three year term was estimated at \$1,491,780, which included a 15% general contingency. Required funding amounts are included in the annual operating and capital budgets.

Volumes

Usage for these services have exceeded original estimates primarily due to the COVID-19 pandemic. The greatest increase in services occurred at the City's Recycling Depot, which initiated traffic control from April 2020 through May 2021 to ensure physical distancing within the facility. Recycling Depot traffic control has been fully transitioned to being provided by certified City staff, which has eliminated the requirement for contracted traffic control at that facility. Other pandemic impacts include the increased use of electronic message boards (EMB) (also a component of the work under this contract) for public health messaging that traditionally would not have been a requirement. Significant infrastructure projects have also required additional traffic control and EMB's beyond that originally included when estimating the total contract value.

The revised forecast is shown in Table 1 below to reflect the increases in major arterial construction, traffic control usage and COVID-19 related expenditures. The forecast values in the "Year 1 Actuals and Revised Forecast" column include a 15% contingency.

Contract Year (Apr -Mar)	Original Forecast	Year 1 Actuals and Revised Forecast	Difference
Year 1 (Apr '20 – Mar '21)	\$491,780	\$1,027,940	\$536,160
Year 2	\$500,000	\$690,113	\$190,113
Year 3	\$500,000	\$679,837	\$179,837
Total	\$1,491,780	\$2,397,890	\$906,110

Table 1: Revised Projected Contract Value and Spend to Date

Costs were trending upwards of \$2.8 million, but by managing the traffic control using City staff at the Recycling Depot, Contract 6715P costs have been able to be better contained.

Financial Impact

Funding for traffic control services is included as part of annual operating budgets and capital projects. A 15% contingency has been included in the revised forecast.

Increased traffic control services have been necessary as the City navigated the COVID-19 pandemic and larger infrastructure projects. Costs estimates under contract 6715P – Traffic Control Services are projected to exceed original approvals. This report seeks approval for a change order to increase the value of the contract by \$960,110 to \$2.4 million excluding taxes, over the three year contract term (through March 31, 2023) to more closely reflect actual spends and updated forecasted costs.

The current tri-party vendor award arrangement continues to represent best value for these services, therefore staff recommend the change order approval as outlined in this report.

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Ben Dias Manager, Sewerage & Drainage (604-244-1207)

BD:bd



Report to Committee

То:	Public Works and Transportation Committee	Date:	October 14, 2021
From:	Suzanne Bycraft Interim Director, Public Works Operations	File:	10-6000-00/Vol 01
Re:	Update on 2021/2022 Snow and Ice Response Preparations		

Staff Recommendation

That the staff report titled "Update on 2021/2022 Snow and Ice Response Preparations", dated October 14, 2021, from the Interim Director, Public Works Operations, be received for information.

Suzanne Bycraft Interim Director, Public Works Operations (604-233-3338)

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REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Communications Parks Services	$\mathbf{\overline{M}}$	- Jhn hung-	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO	

Staff Report

Origin

Council Policy 7013 "Roadways – Ice and Snow Removal" establishes the City's activation and response priorities for treatment of specified roadways to provide safe winter driving conditions during adverse weather based on first priority (major arterials, section line roads and bus routes), second priority (major collector roads) and third priority (subdivision interior collector roads) routes.

To ensure operational readiness, Public Works Operations undertakes a number of measures to adequately prepare staff and equipment resources in order to activate the City's response. This report provides information about the City's 2021/2022 snow and ice preparations. Information is also provided concerning anticipated weather patterns, as well as a summary of the 2020/2021 winter season activities.

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

1.2 Future-proof and maintain city infrastructure to keep the community safe.

Analysis

Background

Richmond's geography often results in specific and variable weather patterns that differ considerably from other Metro Vancouver cities. Our coastal environment makes Richmond more susceptible to fog and frost and the weather across Lulu and Sea Islands can vary significantly by area and change quickly. During the winter season, staff are required to continually monitor conditions of the entire area to ensure a speedy and appropriate response, and provide safe roadways to the travelling public.

Operational Preparations

Operational preparations for the upcoming winter began in mid-September including equipment overhauls, equipment training for staff and meetings to coordinate efforts amongst departments.

The City of Richmond's salt supplies have been secured for the upcoming winter season. There are currently 1,050 metric tonnes available under contract and an additional 2,200 metric tonnes on reserve.

During an event, staff in a centralized control centre closely monitor and record equipment locations, salt distribution and route start and completion times. The automatic vehicle location system using GPS allows staff to monitor vehicle movements in order that staff can respond accurately to enquiries and claims, and to better track expenditures that can be used to forecast costs for future events.

The City has over 45 pieces of equipment available for snow response (Attachment 1). Eight vehicles are outfitted with brine tanks to perform road pre-treatment to prevent frost or ice from

forming on the asphalt roads and to respond during a snow event. The use of brine stretches the salt used for 1 kilometer of roadway with traditional salters to cover 4.3 kilometres of roadway. This has environmental benefits in helping to reduce the overall amount of salt used. Brine making/storage capacity increased last year from 69,000 litres to 115,000 litres. During a snow event, two one-tonne dump trucks with insert salters in addition to three one-tonnes with brine tanks allow treatment of the designated collector roads and roads of local significance in residential subdivisions as part of the third priority routes. This allows the tandem salters and plows to remain focussed on maintaining first and second priority routes.

Road temperature sensors at eight specific locations that are monitored 24-hours a day by the City's Public Works Dispatcher provide early indications of potential road frost or freezing conditions. Each road temperature sensor is strategically located under roadway asphalt throughout the City to provide real time information concerning road conditions. Additional information such as ambient air temperature, humidity, wind speed, rain gauge and road friction/traction are available at several locations. Effective November 1, 2021, sensor locations illustrated in Attachment 2 and public viewing of these road temperature sensors will be available through the City's website at <u>www.richmond.ca/services/rdws/weather/roadtemps.htm</u>. Information on this website will be updated for the public every 30 minutes.

Community Involvement

Public involvement within the community is vital during the winter season. The City works jointly with the public and participating community associations on the following two programs:

- Snow Angels Program: This program was introduced in 2010 and connects volunteers with elderly citizens and residents with mobility/health challenges during a snowfall event. Assistance involves shovelling snow from sidewalks and/or walkways. Information on how to enroll in the Snow Angel Program is available on the City's website and can also be obtained by calling Parks, Public Works Dispatch or City Hall. The program is activated in the event of a significant snowfall (defined as an accumulation of 3+ centimetres of snow) and is dependent on the severity of the storm and volunteer resources. The Snow Angels Program is administered by the Parks Programs department and during 2020/2021 winter season registered a record 119 volunteers to look after snow removal for Richmond residents. The program was activated during the February snow event last winter and provided snow removal services to over 40 homes across Richmond.
- **Good Neighbour Program**: This program encourages everyone to clear the walkways around their property and help others who may face challenges. This neighbour-helping-neighbour campaign simply encourages residents to watch for people in their neighbourhood that could use help removing snow from their sidewalks and driveways and offer them a helping hand.

Communications Strategy

A comprehensive communication strategy has proven to be valuable in delivering accurate, timely and relevant information to the public. The City's various departments, with the guidance

of Corporate Communications, have established communications protocols and key messaging which reinforce the snow response communications program. Participating departments include Public Works, Parks, Corporate Communications and Marketing, Customer Service, Community Bylaws, Emergency Programs and Richmond Fire-Rescue.

This cross-functional approach ensures each division's important messages are delivered in a coordinated fashion over a variety of the City's communication channels. Pre-determined and circumstantial messaging is delivered before, during and after events, particularly when extreme weather occurs. The communications strategy includes, but is not limited to, using the following channels:

- Social media the City's Twitter, Facebook and Instagram accounts. Posting the City's own messaging as well as sharing 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); and
- City's intranet for employees.

2021/2022 Weather Forecast

Richmond-specific weather forecast information is received and monitored daily. The latest long range forecast from the National Oceanic and Atmospheric Administration's (NOAA) Climate Prediction Center predicts the likelihood of a moderate to strong La Niña during the peak November to January season for the second year in a row. La Niña amplifies the polar jet stream, which drives our winter weather and can usher in colder air and more frequent storms. For British Columbia, this typically correlates to above average amounts of precipitation in the winter, increased wind storms and slightly below average to near average temperatures. The Lower Mainland will probably have at least one or two significant snow events with the cooler weather, likely to occur in the second half of the winter (January to March), although it is possible that a cold weather system could cause snow earlier than that. One significant weather variable to consider relates to models predicting a fairly large disruption of the Polar Vortex that could reach record weak values. That means there is a greater chance frigid cold will occasionally spill out of the Arctic bringing intermittent chilling effects throughout the season.

2020/2021 Winter Season Summary

During the past winter season, Richmond experienced 41 frost/ice events and one snow event with a total accumulation of 13 centimetres of snow at YVR. The City pre-treated and/or de-iced 25,860 lane kilometres, and plowed and salted 2,304 lane kilometres of first, second and third priority roads.

Financial Impact

None. Should there be a severe winter and additional funds required, staff will report back to Council accordingly.

Preparations for the 2021/2022 snow and ice season are well underway and will be completed in time for the upcoming winter.

Larry Ford Manager, Roads and Construction Services (604-244-1209)

LF:lf

Att. 1: Snow Response Equipment2: Road Temperature Sensor Locations

Number of Description Units Tandem dump trucks with insert and plough 4 attachments Tandem dump trucks with 5,600 liter brine tank 3 inserts and plough attachments 1 Flusher truck (53,000 liter brine capacity) Single-axle dump trucks with salt flinks and belly 4 plows One-tonne flat deck truck with 2,200 liter brine 1 tank insert One-tonne dump trucks with 2,200 liter brine 2 inserts 2 One-tonne dump trucks with salt inserts 6 F550S with snow plows 4 Mobile snow blowers 4 Backhoes 2 Front-end wheel loader 2 Bobcat skid steers with plow 3 Hydro excavators John Deere Ride-ons with plows 3 1 Grader 2 Kabota with plow 1 Brine production and handling system 3 Brine applicator inserts 1,050 tonnes Salt

City of Richmond – Snow Response Equipment

Attachment 2



City of Richmond – Road Temperature Sensor Locations

Road Temperature Sensors:

- No. 4 Rd and Alderbridge (Road temperature, rain gauge and road friction)
- Queens North (Road temperature, ambient air temperature, humidity, wind speed/direction and rain gauge)
- No.1 Rd and Steveston (Road temperature, ambient air temperature, humidity, wind speed/direction and rain gauge)
- No.1 Rd and Westminster (Road temperature, ambient air temperature, humidity, wind speed/direction, rain gauge and road friction)
- No. 8 Rd and River Rd ((Road temperature)
- No. 6 Road South (Road temperature, ambient air temperature, humidity)
- Oval (Road temperature)
- No. 3 Rd and Granville (Road temperature)
- O No. 6 Rd and Westminster (Pending)

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