



Public Works & Transportation Committee

Anderson Room, City Hall 6911 No. 3 Road Wednesday, January 18, 2012 4:00 p.m.

Pg. # ITEM

MINUTES

PWT-5 Motion to adopt the minutes of the meeting of the Public Works & Transportation Committee held on Wednesday, December 14, 2011.

NEXT COMMITTEE MEETING DATE

Wednesday, February 22, 2012 (tentative date) at 4:00 p.m. in the Anderson Room

ENGINEERING AND PUBLIC WORKS DEPARTMENT

 PWT-11
 1.
 2012 PAVING PROGRAM (File Ref. No. 10-6340-20-P.12201) (REDMS No. 3435271)

TO VIEW eREPORT CLICK HERE

See Page **PWT-11** of the Public Works & Transportation agenda for full hardcopy report

Designated Speaker: Jim Young

STAFF RECOMMENDATION

That the staff report regarding the 2012 Paving Program be received for information.

Pg. # ITEM

PWT-19 2. **FUEL PURCHASES AGREEMENT – BC PETROLEUM PRODUCTS BUYING GROUP**

(File Ref. No. 10-6000-01/2011) (REDMS No. 3424005)

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See Page PWT-19 of the Public Works & Transportation agenda for full hardcopy report

Designated Speaker: Suzanne Bycraft

STAFF RECOMMENDATION

That the City participate in the BC Petroleum Products Buying Group fuel purchases contract with Chevron Canada Ltd., commencing December 14, 2011 for a three-year period, with the option to renew for two additional one year periods, to a maximum of five years.

PWT-23 3. ADVANCE CAPITAL BUDGET APPROVAL – 2012 LULU WEST WATERWORKS AREA (WILLIAMS ROAD) (File Ref. No. 10-6050-01) (REDMS No. 3438433)

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See Page PWT-23 of the Public Works & Transportation agenda for full hardcopy report

Designated Speaker: Milton Chan

STAFF RECOMMENDATION

That 2012 Capital Project Submission 4719 (Lulu West Waterworks Area) as detailed in Attachment 1 of the staff report dated January 5, 2012 from the Director, Engineering be approved for expenditure and commencement of work.

PLANNING AND DEVELOPMENT DEPARTMENT

PWT-31 4. RICHMOND COMMUNITY CYCLING COMMITTEE – PROPOSED 2012 INITIATIVES

(File Ref. No. 01-0100-20-RCYC1/2012) (REDMS No. 3414787)

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See Page PWT-31 of the Public Works & Transportation agenda for full hardcopy report

Designated Speaker: Joan Caravan

Pg. # ITEM

STAFF RECOMMENDATION

- (1) That the proposed 2012 initiatives of the Richmond Community Cycling Committee regarding cycling-related engineering and education activities, as described in the report from the Director, Transportation, be endorsed; and
- (2) That a copy of the report from the Director, Transportation entitled "Richmond Community Cycling Committee - Proposed 2012 Initiatives" be provided to the Council School Board Liaison Committee for information.

PWT-39 5. TRAFFIC SAFETY ADVISORY COMMITTEE – PROPOSED 2012 INITIATIVES

(File Ref. No. 01-0100-20-TSAD1-01) (REDMS No. 3410268)

TO VIEW eREPORT CLICK HERE

See Page **PWT-39** of the Public Works & Transportation agenda for full hardcopy report

Designated Speaker: Joan Caravan

STAFF RECOMMENDATION

- (1) That the proposed 2012 initiatives for the Traffic Safety Advisory Committee, as outlined in the report from the Director, Transportation, be endorsed; and
- (2) That a copy of the above report be forwarded to the Richmond Council-School Board Liaison Committee for information.

6. MANAGER'S REPORT

ADJOURNMENT



Minutes

Public Works & Transportation Committee

Date:	Wednesday, December 14, 2011
Place:	Anderson Room Richmond City Hall
Present:	Councillor Linda Barnes, Chair Councillor Chak Au, Vice-Chair Councillor Linda McPhail Councillor Harold Steves Mayor Malcolm Brodie
Absent:	Councillor Derek Dang
Call to Order:	The Chair called the meeting to order at 4:12 p.m.

MINUTES

It was moved and seconded That the minutes of the meeting of the Public Works & Transportation Committee held on Wednesday, November 23, 2011, be adopted as circulated.

CARRIED

NEXT COMMITTEE MEETING DATE

Wednesday, January 18, 2012 (tentative date) at 4:00 p.m. in the Anderson Room

ENGINEERING AND PUBLIC WORKS DEPARTMENT

 WILLIAMS ROAD DRAINAGE PUMP STATION (File Ref. No. 10-6340-20-P.11301) (REDMS No. 3417598) With the aid of artist renderings, Jim Young, Manager, Engineering Design and Construction, reviewed the proposed layout of the Williams Road drainage pump station upgrade. Also, Mr. Young distributed a revised Attachment 1 to the staff report dated November 25, 2011 (attached to and forming part of these Minutes as Schedule 1).

Mr. Young provided background information and highlighted the following information:

- the proposed pump station layout has been designed to keep as low a profile as possible in order to preserve view corridors;
- the proposed pump station wall that faces Williams Road would be relatively prominent and present an opportunity for beatification; and
- the proposed pump station is also incorporated into the highly utilized west dike trail system, as such the maintenance access roads are visualized to be appealing and complimentary to the existing trails.

Also, Mr. Young advised that the current elevation of the dike is approximately 3.3 metres geodetic, while the proposed upgrade would raise the elevation to 4.7 metres geodetic, which is consistent with the City's Long Term Flood Management Strategy. It was noted that the upgrades would not negatively impact accessibility.

In reply to queries from Committee, Mr. Young advised the following:

- it is anticipated that the entire proposed upgrade be completed by September 2012;
- it is important to upgrade drainage pump stations as these systems prevent the City from flooding and many of them are old and pose risk to the City;
- the City has 39 drainage pump stations in total, all of which are included in a comprehensive report that includes assessments for each of their conditions and prioritizes them accordingly for future upgrades; and
- feedback from residents who reside adjacent to the pump station has been positive.

Discussion ensued regarding the extent of the proposed drainage pump station upgrade. Mr. Young advised that much of the costs associated with the proposed upgrade are related to core engineering services, and that all other costs are marginal.

Staff was requested to provide a memorandum detailing the order of magnitude of a lesser pump station upgrade prior to the next Council meeting.

In reply to queries from Committee, Mr. Young stated that (i) staff have applied for grants for the proposed Williams Road drainage pump station upgrade; and (ii) designs for drainage pump station upgrades are site specific. It was moved and seconded

That the concept for the Williams Road Drainage Pump Station be endorsed.

CARRIED

2. MANAGER'S REPORT

(i) Snow Removal

Tom Stewart, Director, Public Works Operations, advised that in the event of significant snow fall, the City is well prepared for snow removal.

(ii) Onni Development in Steveston

John Irving, Director, Engineering, provided background information and advised that the cracks along the Steveston boardwalk are being monitored daily. He stated that the situation is stable and staff are working with Onni personnel to find an ultimate solution and to repair the dike.

In reply to queries from Committee, Mr. Irving stated that a geotechnical report is required to identify the extent of the damage to the dike and to provide a technical solution to repair or upgrade the dike. Mr. Irving commented that the City has the final say on whatever technical solution is brought forth from the geotechnical report. Also, Mr. Irving commented on Onni's position regarding the damage.

(iii) Delta Hotel Request

Victor Wei, Director, Transportation, spoke of a request from the Delta Hotel regarding the current bus exchange situation adjacent to the hotel. Mr. Wei noted that the hotel wishes to (i) increase its visibility, (ii) provide easier access in and out of the hotel, and (iii) improve transit service for its clients. He noted that staff would initiate discussion with the Vancouver Airport Authority as this area is within their jurisdiction.

Discussion ensued regarding the bus exchange at south end of the Arthur Laing Bridge, and it was noted that future discussions related to the bus exchange should also acknowledge the lack of proper public transportation for Burkeville residents.

(iv) No. 1 Road and Moncton Street Intersection

Mr. Wei spoke of the opening of the upgraded No. 1 Road and Moncton Street intersection.

Robert Gonzalez, General Manager, Engineering and Public Works, advised that staff are aware of the narrow sidewalk abutting the intersection and intend to address this concern by widening the sidewalk. Discussion ensued regarding the No. 1 Road and Moncton Street intersection upgrades and it was noted that this intersection received many upgrades, such as the installation of a traffic light. Also, it was noted that signage explaining all the various upgrades may be helpful, in particular for those utilizing the pedestrian scramble crossing.

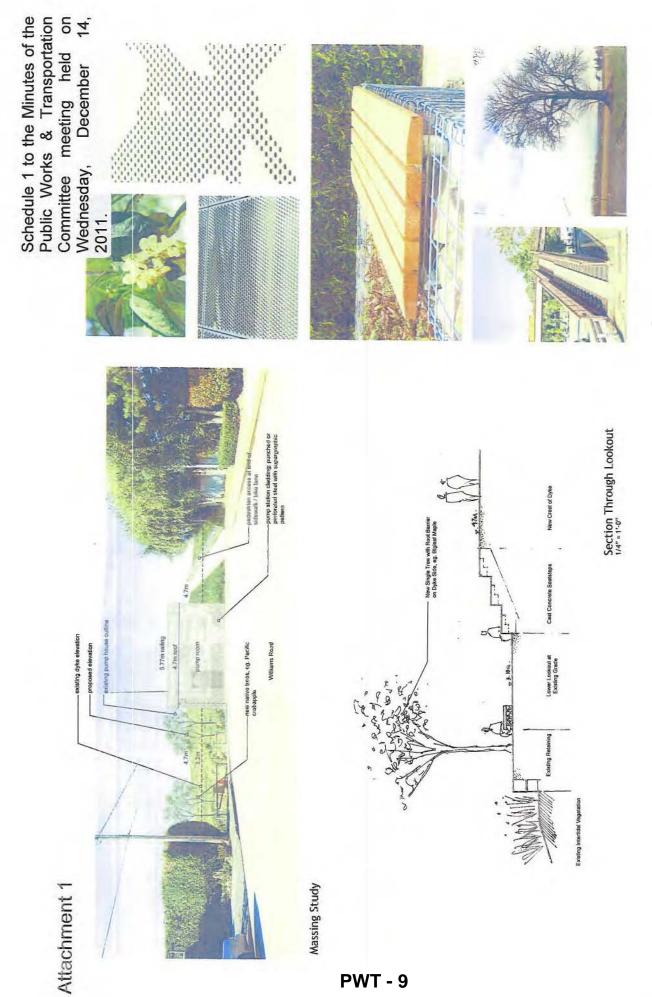
ADJOURNMENT

It was moved and seconded That the meeting adjourn (4:45 p.m.).

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Public Works & Transportation Committee of the Council of the City of Richmond held on Wednesday, December 14, 2011.

Councillor Linda Barnes Chair Hanieh Floujeh Committee Clerk



landscape concept plan williams road pump station richmond bc







City of Richmond

Report to Committee

То:	Public Works and Transportation Committee	Date:	January 4, 2012
From:	John Irving, P.Eng. MPA Director, Engineering	File:	10-6340-20-P.12201/Vol 01
Re:	2012 Paving Program		

Staff Recommendation

That the staff report regarding the 2012 Paving Program be received for information.

John Irving, P.Eng., MPA Director, Engineering 604-276-4140

FOR ORIGINATING DEPARTMENT USE ONLY				
ROUTED TO: Purchasing Roads and Dykes Budgets			CONCURRENCE OF GENERAL MANAGER	
REVIEWED BY TAG	YES	NO	REVIEWED BY CAO	

Staff Report

Origin

In past years, staff have presented the annual paving program to the Public Works & Transportation committee for information.

Background

The paving program is required to maintain our road network to current operating levels as well as reduce the need for costly repairs. Staff have developed a prioritized list of locations which are included in 2012 Paving Program.

Analysis

Scope of work includes milling and the paving of roads in priority order as identified by the City's Pavement Management System (PMS) and staff. The PMS software takes into account items such as the age, structure, and current condition of the road. Pavement deflection data was gathered in 2009 for select roads (major roads, mrn roads, recently resurfaced segments, and sections with substantial surface cracking) and is being used in the current PMS model.

Paving is tentatively scheduled to commence in April 2012 and will continue until approximately the end of October 2012 subject to weather or uncontrollable delays. Residents and businesses impacted by construction will receive hand delivered letters in advance of construction, road advisories will be advertised in local newspapers and the schedule will be posted on the City's website.

Included in Attachment 1 is a list of the proposed paving sites and the respective justification which are included in the 2012 Paving Program tender. This year's paving program will also shift focus from curb repair to sidewalk repair.

Early tendering of the annual paving contract and the competitive liquid asphalt prices has resulted in the City receiving highly competitive rates. This tender result will allow the City to expand the program through additional paving locations (Attachment 2). As with past years, it is possible that identified paving locations cannot be completed due to conflict with development projects that are not known at this time. Should the seasonal paving restrictions permit, any new development related paving locations would be replaced with the next priority paving locations.

Discussion

Staff tendered this contract early in December 2011 and received five competitive bids, with the low tender by Imperial Paving Limited coming in under the City's budget. This can be attributed to the competitive liquid asphalt rates and the ability of the low bidder to secure materials and

equipment before other municipalities given the City was first in the lower Fraser Valley to issue a Tender. There was also strong contractor interest in working with the City as evidenced by the number of bids received.

Using the City's Pavement Management System, and given the low bid by Imperial, staff have included additional locations to the program as a result of the budget savings. See Attachment 2 for a list of the additional paving sites. See the attached map for all proposed paving sites (Attachment 3).

The 2012 Paving Program included an amendment to the City's standard tendering practices that reflects upon the City's environmental initiatives. All bidders are encouraged to employ sustainable methodologies, practices and materials that would assist in reducing the harmful emissions, in direct alignment with the City's sustainability goals.

Financial Impact

The 2012 Paving Program is funded from the City's maintenance operating budget and the Greater Vancouver Transportation Authority for the City's Major Road Network (MRN). Capital Funding will also be provided to complete those locations impacted by the respective capital projects. The breakdown is as follows.

Available Funding	Amount (\$) *
City Operating Budget	2,458,600
2012 MRN Budget	915,500
Miscellaneous Other City Funding	90,000
Total Available Funding	3,464,100
Estimated Expenditures	1
2012 Paving Tender - Appendix A	2,569,251
Additional Paving Locations - Appendix B	890,000
Total Estimated Expenditures	3,459,251
Estimated Funding Remaining	4,849

* All amounts are proposed for the 2012 Capital and Operating Budgets and have not been approved by Council at the time of writing this report.

The paving contract is largely funded through the 2012 Operating Budget and is structured to allow the work to be adjusted without penalty to reflect any changes in the 2012 Operating Budget that are ultimately approved by Council. As with other 2012 City operating expenses, expenses related to this paving contract are expected to be incurred starting in early 2012.

Conclusion

The 2012 Paving Program is scheduled to commence in April and the contract is in the process of being awarded.

Jim V. Young, P. Eng. Manager, Engineering D&C (604-247-4610)

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Wasim Memon, C.E.T. Supervisor – Inspections (604-247-4189)

ATTACHMENT 1

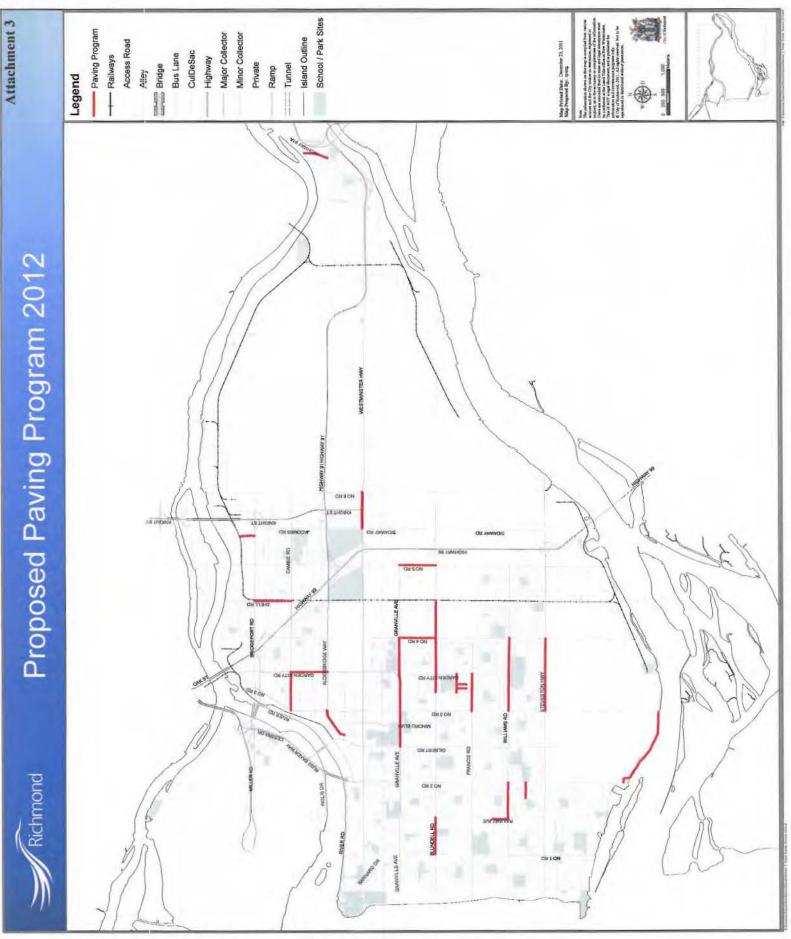
2012 PAVING PROGRAM - PROPOSED LOCATIONS

LOCATION	FAULTS
8000 Block Steveston Highway	- MRN Treatment
13000 Westminster Highway	- MRN Treatment
13000 Westminster Highway	- MRN Treatment
Knight Street Bridge - City's portion	 MRN Treatment
5000 Block Williams Road	- Utility cuts, pavement cracking
8000 Block Granville Avenue - East Bound Lanes	- Utility cuts, pavement cracking
4000 Block Blundell Road	- Utility cuts, pavement cracking
9000 Block Williams Road	- Utility cuts, pavement cracking
8000 Block Williams Road	- Utility cuts, pavement cracking
7000 Block Alderbridge Way	- Utility cuts, pavement cracking
7000 Block No.4 Road	- Utility cuts, pavement cracking
8000 Block Blundell Road	- Utility cuts, pavement cracking
9000 Block Francis Road	- Utility cuts, pavement cracking
10000 Block Blundell Road	- Utility cuts, pavement cracking
8000 Block Bowcock Road	- Utility cuts, pavement cracking
8000 Block Scotchbrook Road	- Utility cuts, pavement cracking
8000 Block Wheeler Road	- Utility cuts, pavement cracking
4000 Block Smith Road	- Utility cuts, pavement cracking
9000 Block Geal Road	- Utility cuts, pavement cracking
5000 Block Wallace Road	- Utility cuts, pavement cracking

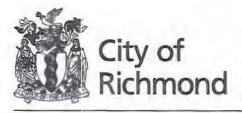
ATTACHMENT 2

2012 PAVING PROGRAM - ADDITIONAL LOCATIONS

LOCATION	FAULTS		
2000 Block Sweeden Way	- Utility cuts, pavement cracking		
4000 Block Garden City Road - south bound lanes	- Utility cuts, pavement cracking		
7000 Block No.5 Road	- Utility cuts, pavement cracking		
South Dyke (No.2 Road to No.3 Road)	- Utility cuts, pavement cracking		
8000 Block Cambie Road	- Utility cuts, pavement cracking		
9000 Block Granville Avenue	- Utility cuts, pavement cracking		
9000 Block Blundell Road	- Utility cuts, pavement cracking		
3000 Block Shell Road	- Utility cuts, pavement cracking		
7000 Block Granville Avenue - east bound lanes	- Utility cuts, pavement cracking		



PWT - 17



Re:	Fuel Purchases Agreement - BC Petroleum Pi	roducts Buyir	ng Group
From:	Tom Stewart, AScT. Director, Public Works Operations	File:	10-6000-01/2011-Vol 01
To:	Public Works & Transportation Committee	Date:	December 19, 2011

Staff Recommendation

That the City participate in the BC Petroleum Products Buying Group fuel purchases contract with Chevron Canada Ltd., commencing December 14, 2011 for a three-year period, with the option to renew for two additional one year periods, to a maximum of five years.

Tom Stewart, AScT. Director, Public Works Operations (604-233-3301)

	FOR ORIGIN	ATING DEPARTM	ENT USE ONLY
ROUTED TO: Purchasing			CONCURRENCE OF GENERAL MANAGER
REVIEWED BY TAG	YES V	NO	REVIEWED BY CAO

Staff Report

Origin

The City has participated as a consortium member of the BC Petroleum Products Buying Group (BCPPBG) for a number of years. The BCPPBG is made up of approximately 65 agencies, including local, regional, municipal government and school board member organizations, which in total purchase approximately 37,000,000 litres of product annually. Members are located in six geographic regions including the Lower Mainland, Kamloops, Vancouver Island, Prince George, Terrace and Port Hardy. The City of Vancouver is the lead agency for the most recent BCPPBG tendering process.

This report presents information regarding the fuel purchases consortium process and recommends that the City participate in the BCPPBG contract.

Analysis

Background

The City of Richmond maintains a fuel station at the City Works Yard for fuelling all City vehicles and equipment with gasoline or diesel fuels. There are also fuel tanks located at several fire hall stations for fuelling fire vehicles and fire apparatus. Fuelling services at the Works Yard are also made available to the Richmond RCMP and Richmond School Board on a cost-recovery basis. Richmond Fire Rescue has recently begun using the Works yard fuelling site for fuelling some of their units due to the decommissioning of their fuel tanks at No. 1 Hall as a result of renovations at that site.

The City uses approximately one million litres of fuel annually, including gasoline and bio-diesel for City vehicles and equipment (not including Richmond Fire Rescue). Additionally, approximately 300,000 litres of fuel is purchased to support fuelling services at the Works Yard for the Richmond RCMP and School Board.

BCPPBG Fuel Purchases Contract

The current agreement for fuel purchases is with Chevron Canada Ltd., and expired on December 13, 2011. In preparation, the lead agency for the BCPPBG issued a request for proposals on September 1, 2011 with a closing date of September 27, 2011. There were two respondents to the proposal call – Parkland Fuel Corporation and Chevron Canada Ltd.

Agency members participated in reviewing the proposal document prior to issuance, and providing rankings on submission factors such as total cost of product; technical capabilities; levels of service; quality, safety, environmental and social responsibility. Chevron met the key requirements and provided overall best value based on the following costing model:

- · Weekly rack price
- Less discount (e.g. off rack, plus early payment, volume discount)
- Plus bridging fee

-3-

Under the terms of this contract, the bridging fee will be fixed for one year and is subject to inflationary increases, such as CPI, with a maximum cap established for any increases or decreases in inflation.

The City of Vancouver (lead agency) followed their standard procurement methods in this tender process, and City of Richmond Purchasing staff agree with the methodology applied.

Chevron Canada Ltd. has been the City's supplier under the BCPPBG for the last number of years and has provided a good level of service, with timely deliveries, including after hours and weekends. Staff are confident that we can expect this level of service to continue under the new contract entered into between Chevron and the BCPPBG.

Financial Impact

Annual costs for fuel vary based on commodity pricing factors. Fuel costs in 2010 were approximately \$1,023,400 for City Operations and \$153,800 for Richmond Fire Rescue, or a total of \$1,177,200. The 2011 expenditures are approximately \$1,316,600 million for City operations (approximately \$250,000 over budget allocations) and \$145,100 for Richmond Fire Rescue. The over-expenditure is due in part to increased fuel consumption, but is principally a result of fuel price increases in 2011 (approximately 17% higher).

The 2011 City operations fuel budget is \$1,069,800 and \$150,000 for Richmond Fire Rescue.

Under the conditions of the new contract, an estimated 1% savings in the bridging fee is expected, subject to inflationary factors. Overall fuel costs will vary, based on commodity pricing. The 2012 budget request for City operations fuel usage is \$1,239,300.

Conclusion

Participation in the BCPPBG consortium for fuel purchases is recommended due to the economies of scale and level of representation offered through a large-scale buying group. The consortium has entered into a contract with Chevron Canada Ltd., who has provided a good level of service for the last number of years. The City has the opportunity to meet its fuel requirements by participating in this collective buying consortium. In light of the contract preceding the date of this report, the City has been able to meet its fuel purchase requirements under the new BCPPBG contract pending Council approval.

Suzanne Bycraft Manager, Fleet & Environmental Programs (604-233-3338)



То:	Public Works and Transportation Committee	Date:	January 5, 2012
From:	John Irving, P.Eng. MPA Director, Engineering	File:	10-6050-01/2011-Vol 01
Re:	Advance Capital Budget Approval 2012 Lulu West Waterworks Area (Williams Road)		

Staff Recommendation

That 2012 Capital Project Submission 4719 (Lulu West Waterworks Area) as detailed in Attachment 1 be approved for expenditure and commencement of work.

John Irving, P.Eng. MPA Director, Engineering (604-276-4140)

Att.1

	FOR ORIGIN	ATING DEPARTMI	ENT USE ONLY
ROUTED TO: Budgets Water Services			CONCURRENCE OF GENERAL MANAGER
REVIEWED BY TAG	YES V	NO	

Staff Report

Origin

Subsection 165(1) of The Community Charter requires the City to adopt a Five Year Financial Plan ("5YFP") Bylaw (which includes operating, utility and capital expenditures) before May 15th of each year. The bylaw is required to identify all expenditures for the current year (i.e. 2012) and provide estimates for the remainder of the five-year program. The 2012 5YFP Bylaw provides the City with the authority to proceed with spending to the limits outlined in the bylaw.

The 2012 Capital Budget (the "budget") is one of the key inputs in preparing the 5YFP (2012 – 2016) and is also one of the City's most important tools in achieving the goals of the Long Term Financial Management Strategy (LTFMS), while providing for the current and future infrastructure needs of the community. Under the City's LTFMS, the City is committed to financial planning that maintains and enhances existing levels of service to the community, while limiting the impact on property taxes.

As part of the budget process, the Assessor Team evaluated the capital submissions from all City departments and utilized a ranking system within the Capital Planning Model to determine which submissions would be recommended for inclusion in the budget.

The capital submission for the 2012 Lulu West Waterworks Area has been recommended by the Assessor Team.

The purpose of this report is to obtain Council approval to commence construction of this project in a timely manner.

Analysis

Watermain Replacement Capital Submissions

The waterworks capital program is developed based on a number of criteria including:

- the City's long range infrastructure replacement strategy,
- watermain break history,
- 2041 Official Community Plan (OCP) Water Modelling Study, and
- the proposed road paving program.

The main goals of the program are to replace ageing infrastructure prior to failure and to improve fire protection by locally increasing the system supply capacity.

For the 2012 budget, capital submissions totalling \$7,406,757 were entered into the Capital Planning Model for watermain replacement in various locations (see Table 1).

4715 – Lulu East Waterworks Area	\$ 1,635,867
4716 – Siea Island Waterworks Area	\$ 670,832
4718 – Lulu North Waterworks Area	\$ 3,476,810
4719 – Lulu West Waterworks Area	\$ 1,623,247
Total	\$ 7,406,757
Capital Funding from Water Utility Reserve (Approved as the basis for establishing the 2012 utility rates)	\$ 7,550,000
Remaining funding	\$143,243

Table 1 – 2012 Watermain Replacement Capital Submissions

The 2012 Lulu West Waterworks Area project and the three other water capital projects listed above are all fully funded from the Water Utility Reserve. This funding level was approved at the Special Council Meeting of Dec. 12, 2011 as the basis for establishing the 2012 utility rates.

Project Dellivery

In order to deliver the 2012 Capital Program in a timely manner, design work on selected 2012 projects was completed in 2011 under the 2011 Infrastructure Advanced Design program. One of the projects that has been designed is the 2012 Lulu West Waterworks Area (Capital Submission 4719). This project consists of the replacement of approximately 1640 metres of watermain along Williams Road between No. 3 Road and No. 4 Road, as described in Attachment 1 (Capital Project Submission 4719).

This portion of watermain was included in the program due to its age and considerable recent break history compared to other watermains in the Capital Program. If the watermains are not replaced, potential future watermain breaks could lead to road failure, reduced water quality, extended disruption of service and inconvenience to customers, possible contamination and increased emergency repair costs. In addition there is a potential for increased GVWD costs as the City's portion is based on water consumption (including leaks and breakages).

Due to the urgency of this project and to take advantage of the competitive bidding environment and subsequent low tender pricing, it was publicly tendered in 2011 with award subject to budget approval. The lowest bid received was \$1,104,550 plus taxes. Additional costs will be incurred for service tie-ins by the City, inspection and contract administration. The award period has been extended to February 15, 2012 to allow for Council approval of this project. If this deadline is not met, the tender may need to be cancelled, and the project will be re-tendered once the 2012 Capital Program is approved. This will lead to significant delays and considerable consequences as described in the previous paragraph, as well as potential increased tender pricing due to inflation.

Financial Impact

Capital Submission 4719 – Lulu West Waterworks has been recommended by the Assessor Team for inclusion in the 2012 budget. The value of this submission is \$1,623,247.50 with an OBI of \$570.36. The funding source for this project is the water utility reserve and this amount is within the annual funding availability limits and was approved at the Special Council Meeting of Dec. 12, 2011 as the basis for establishing the 2012 utility rates. This project does not displace or compete with any other non-water capital projects.

This project will also be included in the 5 Year Financial Plan (2012-2016) Bylaw.

Conclusion

The Williams Road watermain has been identified as being in need of replacement. Breakage of this watermain would result in costly repairs and inconvenience to the public. Advance approval of Capital Submission 4719 (Lulu West Waterworks Area) will mitigate these risks for this area.

Milton Chan, P.Eng. Senior Project Engineer (604-276-4377)

Attachment 1



City of Richmond Capital Project Submission

Submission ID: 4719

Date Wednesday, 22 June 2011 Submitted by Elena Paller Project Year 2012 Recommended Yes

Project Number

Project Name	Lulu West Waterworks Area
Project Location	See Scope

Estimated cost \$1,623,247.50

Purpose (As it relates to strategic vision)

This project will: •replace ageing infrastructure at the end of its service life; •improve fire protection.

This project is required to minimize operating cost due to watermain breaks.

This project meets strategic City goals:

Serving the Customer – by minimizing customer's disruptions due to watermain breaks and providing long term maintenance of service.

Financial Management –Waterworks infrastructure replacement reduces the potential for unplanned maintenance that is unpredictable and costly and maximizes long-term local government financial health by replacing watermains in accordance with the City's long range infrastructure replacement strategy.

Scope of Work

This project includes 720 meters of 200mm diameter watermain construction and 840 meters of 300mm diameter watermain to replace the existing infrastructure.

The waterworks capital program is developed based on the City's long range infrastructure replacement strategy, watermain break history, 2041 OCP Water Modelling Study and the proposed road paving program.

The program replaces ageing infrastructure prior to failure and improves fire protection.

Please refer to document #3154073 for specific locations, cost estimates and detailed scope of work.

Sustainability

Sustainable Resource Use – The watermain replacement program promotes reduced per capita water consumption through the installation of mandatory water meters. The reduced water consumption will defer the need for future capacity upgrades and, therefore, defer the need for future capital expenditure.

Thursday, 5 January 2012 12:02:09 PM

Inclusive, Safe & Accessible Community – The watermain replacement program is required to maintain reliable delivery of water to the community which is essential for individual and community health and well-being. Waterworks infrastructure provides fire protection for safety of the public and their properties.

Vibrant Community – Waterworks infrastructure supports recreational opportunities for the residents by providing water to the swimming pools, ice rinks, drinking fountains and water parks. Waterworks infrastructure supports beautification of the community by providing water for irrigation of both public and private landscapes.

Leadership in Municipal Practices – Waterworks infrastructure replacement program maximizes long-term local government financial health by replacing watermains in accordance with the City's long range infrastructure replacement strategy.

Thursday, 5 January 2012 12:02:09 PM

Roads	\$0.00
Storm Sewer	\$0.00
Waterworks	\$1,623,247.50
Sanitary Sewer	\$0.00
Building Construction	\$0.00
Land Acquisition	\$0.00
Park Development	\$0.00
Vehicle Purchases	\$0.00
Local Improvements/Nics	\$0.00
Computer cost	\$0.00
TOTAL	\$1,623,247,50

Impact of Capital Project on Operating Budget \$570.36

OBI Document Number

Comments

Consequences of not proceeding with the project

If watermains are not replaced, the potential watermain breaks could lead to road failure, reduced water quality, extended disruption of service and inconvenience to customers, possible source of contamination and increasing emergency repair cost. In addition there is a potential for increased GVWD costs as the City's portion is based on water consumption (including leaks and breakages).

GM Approval Signature

Thursday, 5 January 2012 12:02:10 PM



Report to Committee

Re:	RICHMOND COMMUNITY CYCLING COMMIT INITIATIVES	TEE - PRO	DPOSED 2012
From:	Victor Wei, P. Eng. Director, Transportation	File:	01-0100-20- RCYC1/2011-Vol01
To:	Public Works and Transportation Committee	Date:	December 23, 2011

Staff Recommendation

- That the proposed 2012 initiatives of the Richmond Community Cycling Committee regarding cycling-related engineering and education activities, as described in the report from the Director, Transportation, be endorsed.
- That a copy of the report from the Director, Transportation entitled "Richmond Community Cycling Committee - Proposed 2012 Initiatives" be provided to the Council School Board Liaison Committee for information.

6

Victor Wei, P. Eng. Director, Transportation (604-276-4131)

	FOR ORIGINATING	DEPART	MENT USE ONLY		
ROUTED TO: CONCURRENCE Parks Planning, Design & Construction Y IN IN Community Recreation N IN		ND	the bores		GER
REVIEWED BY TAG	YES/	NO	REVIEWED BY CAO	THES STER	NO

Staff Report

Origin

The Richmond Community Cycling Committee (RCCC) was formed in 1993 to allow staff to work in partnership with the community to promote commuter and recreational cycling in Richmond. The Committee provides input and feedback on cycling infrastructure projects and undertakes various cycling education and awareness activities to promote cycling as a healthy and sustainable mode of travel. This report reviews the Committee's 2011 activities and achievements and proposes a number of initiatives for 2012 that support the Committee's mandate of encouraging more people to cycle more often in Richmond.

Analysis

1. 2011 Activities and Achievements

The RCCC undertook and participated in a number of activities in 2011 that contributed to enhanced cycling safety and increased education and awareness of cycling in Richmond.

1.1 Expansion and Improvement of Cycling Network

The City continued to add to the local cycling network in 2011, which now comprises nearly 60 km of bike routes, with the support of funding grants from external agencies including TransLink and the BC Ministry of Transportation & Infrastructure. The Committee provided feedback on the design and construction of the following facilities.

- <u>Minoru Blvd Bike Route</u>: installation of bike lanes and signage on Minoru Boulevard between Granville Avenue and Alderbridge Way.
- <u>Lynas Lane Bike Route</u>: installation of sharrows and signage to this existing route between River Road and Granville Ave.
- <u>Crabapple Ridge Bikeway</u>: substantial completion of construction (i.e., upgrade of off-street pathways) of this first neighbourhood bike route that connects Terra Nova to Steveston via local roads and pathways west of No. 1 Road.
- <u>Continuity of Bike Lanes</u>: implemented pavement markings and signage to allow through cyclists to travel in the rightturn lane rather than merging with vehicle traffic in the adjacent through lane at intersections where the bike lane is dropped prior to the intersection in order to provide a rightturn only lane. The City has received a number of positive comments from cyclists as a result of this improvement.

 <u>Neighbourhood Bikeways</u>: the Committee focused on the design and development of the second such route – the Parkside Bikeway that will follow Ash Street and ultimately



Minoru Blvd Bike Lanes



Granville Ave at No. 3 Road

connect South Arm to Westminster Hwy through the McLennan neighbourhood and uses a

combination of local roads with lower traffic volumes and off-street connecting pathways to connect local destinations such as schools and neighbourhood centres as well as link up to the city's existing on-street cycling network (at Williams Road in the south and Westminster Hwy in the north).

- <u>Cycling Network Improvement Program</u>: continued installation of the overlay of bike stencils on loop detectors along designated bike routes so that cyclists know where to position themselves in order to trigger a change in the traffic signal.
- <u>Development Applications and Road Improvement Projects</u>: the Committee provided input on proposed cycling facility improvements associated with new developments and road improvement projects including the No. 1 Road and Moncton Street improvements and associated improvements in the Steveston Village area.
- 1.2 Education and Promotion

The Committee participated in the following activities to promote cycling in Richmond and increase members' knowledge of regional cycling topics that could benefit Richmond.

Bike to Work Week (May and . November 2011): the Committee worked with organizers of this region-wide annual initiative to successfully stage these events in Richmond. During the May event, bike commuter stations at City Hall, Thompson Community Centre, Canada Line Bridge, and **Richmond-Brighouse Station** recorded a total of 345 cyclists during a 2-hour period. During the November event, 169 cyclists were recorded at bike commuter stations at Thompson

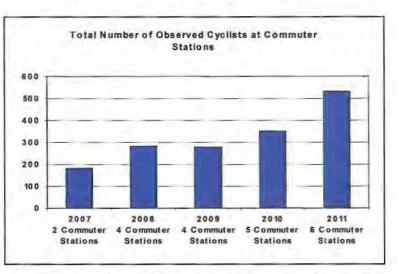


Figure 1: Cyclists Recorded at Commuter Stations

Community Centre and the Canada Line Bridge during a 2-hour period. As shown in Figure 1, the number of cyclists observed on city streets during the 2-hour period of the events (i.e., stopping at the commuter station or passing by) continues to grow. Similarly, as shown in Table 1 below, the trend in statistics for registered participants at Richmond workplaces shows a continued increase in not only the total number of participants but also the number of kilornetres ridden.

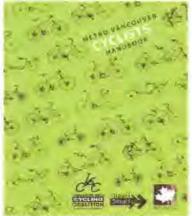
Obsettenting	Year				Avg Annual	
atistic	2007	2008	2009	2010	2011	Change
# Participants who Logged Trip on Website	203	415	354	314	337	21%
# of Richmond Workplace Teams	42	66	71	105	76	21%
Tonnes GHGs not Emitted (estimate)	2.1	8.0	3.8	3.0	5.6	73%
# Kms Ridden	9,980	26,895	19,350	24,831	26,121	44%
# Trips by Bike	955	2,348	1,002	1,925	1,883	45%

Table 1: Annual Bike 1	o Work Week Statistics (for Richmond Workplaces
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<u>11th Annual "Island City, by Bike" Tour (June 12, 2011)</u>: each year in June, as part of regional Bike Month activities and the City's Environment Week events, the Committee and the City jointly stage a guided tour for the community of some of the city's cycling routes. The 11th annual "Island City, by Bike" tour was based at South Arm Community Centre and featured short (6.5-km) and long (22-km) rides. Activities included a bike and helmet safety check prior to the ride plus a barbecue lunch and raffle prize draw at the finish. Local businesses donated goods and services to the raffle draw and the event attracted 90 cyclists of all ages and cycling ability.

- 4 -

- <u>VACC Cyclists Handbook</u>: the Committee provided input on the content of cycling handbook produced by the Vancouver Area Cycling Coalition that is targeted to novice cyclists and newcomers to Canada. Electronic copies are available through the City's website and the City also obtained hard copies of the handbook in five different languages that reflect the community's diverse cultures (i.e., English, simplified Chinese, Punjabi, Tagalog, and Korean) for distribution to local community groups.
- <u>UBC "Cycling in Cities" Research</u>: the Committee welcomed Professor Meghan Winters of SFU who is part of the "Cycling in Cities" research team based at UBC that is investigating what factors encourage or discourage the use of bicycles for



VACC Cyclists Handbook

transportation and which types of transportation infrastructure are associated with increased or decreased risks of injuries to cyclists. Professor Winters presented the results of the newest research: the creation of bikeability maps for the Greater Vancouver area. These maps depict the bikeability of a city (or neighbourhoods within a city) based on five factors: topography, destination density, connectivity of the road network, bike route separation between bikes and vehicles, and bike route density. Compared to other cities in the region, Richmond averages a "medium" bikeability. The city scores high on topography but low on bike route separation (as do all municipalities). Destination density is higher only in the City Centre and Steveston areas and connectivity is generally good outside the ALR areas but bike route density could be improved. Staff notes that increasing destination density across the city is in line with a goal of the OCP (2041) Update to densify and introduce more mixed uses and improved pedestrian and cycling links around neighbourhood centres.

- <u>TransLink Regional Cycling Strategy</u>: the Committee welcomed Kamala Rao of TransLink who presented the agency's recently approved *Regional Cycling Strategy* that has two simple goals of (1) more people make more trips by cycling (measured by mode share), and (2) cycling is safer (measured by cyclist collisions per 100,000 trips and the percentage of women cycling). Eight focus areas (e.g., cycling network, bike-transit integration, education, etc) contain 19 strategies to support achievement of the goals. TransLink is currently developing a funding and implementation plan to support the strategy.
- 1.3 Other Cycling-Related Initiatives

The Committee provided input on the following City initiatives with cycling-related elements:

 <u>Official Community Plan (2041) Update</u>: review of and feedback on the draft cycling policies to be included in the Mobility & Access section of the OCP update include the conceptual long-term cycling network; and <u>Memorial Bike Rack</u>: in recognition of the passing of a founding member of the Committee in July 2011, the Committee worked with staff to develop a bike rack that will feature a memorial plaque. The bike rack would replace one of the existing bike racks located around the perimeter of the north plaza of City Hall.

2. Initiatives for 2012

In addition to providing input on the planning, design and implementation of major capital cycling infrastructure projects, the Committee proposes to undertake various cycling education and awareness activities and participate in cycling-related initiatives with other City departments and external agencies.

2.1 Cycling Network Expansion & Improvement Projects

The Committee will provide input at the earliest conceptual stage on the prioritisation, planning, design, and implementation of the following projects that expand and/or improve the cycling network:

- <u>Planned Cycling Network Expansion</u>: detailed design of intersection improvements at Garden City Road and Granville Avenue and determination of appropriate engineering measures to support Phase 1 of the Parkside Bikeway;
- <u>Railway Avenue Corridor Trail System</u>: design of this major north-south pedestrian and cycling greenway that will connect Steveston with the Middle Arm Greenway;
- <u>Planned Park, Road and Development Projects</u>: review of additional projects that impact existing cycling facilities or would incorporate new cycling infrastructure as part of the overall project;
- <u>Cycling Network Improvement Projects</u>: work with staff to identify other localised improvements to existing cycling facilities such as additional lighting, pavement markings and signage; and
- <u>Promotion of Completed Routes</u>: develop new and/or enhanced promotional campaigns to
 raise the awareness of new cycling facilities both locally and regionally, such as news
 releases, regular City notices in local newspapers and wide distribution of cycling maps.
- 2.2 Education and Encouragement Initiatives

The Committee will encourage and promote safe cycling as a sustainable travel mode that also has significant health benefits via the following activities:

- <u>12th Annual "Island City, by Bike" Tour</u>: assist in the planning, promotion and staging of the twelfth annual bike tour of Richmond during Bike Month in June 2012, which is set for Sunday, June 10th at the Terra Nova Rural Park. Both the short and long routes will utilize the Crabapple Ridge Bikeway to raise community awareness of this new neighbourhood bike route.
- <u>Bike to Work Week</u>: assist in the planning, promotion and staging of this region-wide event during May and November 2012, which includes the provision of bike commuter stations throughout the city;

- <u>Richmond 2012 Bike & Trails Map</u>: provide input into the update of the 2010 edition of the Richmond cycling map that will incorporate recent improvements to the local cycling network including the Crabapple Ridge Bikeway, and be integrated with the City's trails map to create a single comprehensive cycling and trails map that features safety tips as well as suggested scenic routes. The new map will be distributed to community centres, libraries and other civic facilities as well as handed out at various City events.
- <u>Streetwise Cycling Workshops</u>: work with the Vancouver Area Cycling Coalition and a variety of Community Associations to host and promote a number of safe cycling education courses at various community centres throughout Richmond.



 <u>City Page and City Website</u>: provide education and awareness notices for both cyclists and motorists in the City Page of the *Richmond Review* (e.g., to complement the planned installation of bike stencils placed on loop detectors at various intersections throughout the city to indicate where cyclists should align their bicycles in order to trigger a change in the traffic signal) and continue to update, revise and enhance cycling-related information on the City's website and Facebook site.

2.3 City Initiatives with Cycling-Related Components

The Committee will provide input on the following City initiatives that have cycling-related elements:

 Official Community Plan (2041) Update: the Committee will provide direct input to City staff on the finalization of the cycling-related policies within the Mobility & Access section of the OCP including any revisions/additions to the On-Street Cycling Network Plan in areas outside the City Centre, particularly with respect to the development of a finer grid of neighbourhood cycling links that safely and conveniently connect residents to their local service centre to encourage cycling rather than driving for short trips (i.e., those less than three kilometres).

Financial Impact

There is no financial impact to the City.

Cycling infrastructure projects are presented separately for Council approval as part of the annual Major Capital Works Program process. The various education and awareness initiatives can be undertaken within existing divisional work programs and will not require additional resources. Staff will report to Council for specific approval should the implementation of any initiatives have funding implications to the City. Staff attendance at Committee meetings, which occur outside regular office hours, result in some overtime cost to the City. This overtime cost can be absorbed in the divisional operating budget provided the current service level is maintained.

Conclusion

The Richmond Community Cycling Committee continues to be an effective community forum for enhancing the city's cycling environment and promoting safe cycling in Richmond. The Committee's proposed 2012 initiatives would continue efforts to further encourage greater and safer cycling in Richmond, which in turn will support progress towards meeting the City's target for the reduction of greenhouse gas emissions as well as the sustainability goals of the City's Official Community Plan (2041) Update. Upon Council endorsement of these initiatives, staff will forward a copy of this report to the Council-School Board Liaison Committee for its information.

Joan Caravan Transportation Planner (604-276-4035) (on behalf of the Richmond Community Cycling Committee)

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Report to Committee

	1-Vol 01
From: Victor Wei, P. Eng. File: 01-	
	0-20-TSAD1-
To: Public Works and Transportation Committee Date: Dec	nber 23, 2011

Staff Recommendation

- 1. That the proposed 2012 initiatives for the Traffic Safety Advisory Committee, as outlined in the report from the Director, Transportation, be endorsed.
- 2. That a copy of the above report be forwarded to the Richmond Council-School Board Liaison Committee for information.

Victor Wei, P. Eng. Director, Transportation (604-276-4131)

F	OR ORIGINA	TING DEPAR	TMENT USE ONLY
ROUTED TO: Community Bylaws		Y 🛛 N 🗆	CONCURRENCE OF GENERAL MANAGER
Fire-Rescue	YES		REVIEWED BY CAO YES NO
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Staff Report

Origin

Council endorsed the establishment of the Traffic Safety Advisory Committee (TSAC) in 1997 to create a co-operative partnership between City staff, community groups and other agencies that seek to enhance traffic and pedestrian safety in Richmond. The Committee provides input and feedback on a wide range of traffic safety issues such as school zone concerns, neighbourhood traffic calming requests and traffic-related education initiatives. TSAC currently has representation from the following groups: Insurance Corporation of BC (ICBC), Richmond School District, Richmond RCMP, Richmond Fire-Rescue, and the City's Transportation and Community Bylaws Divisions.¹ This report summarizes the Committee's activities in 2011 and identifies proposed initiatives for 2012.

Analysis

1. Activities and Accomplishments in 2011

The Committee's major activities and accomplishments in 2011 are summarized below.

1.1 Road Safety Measures

The Committee provided input on and/or participated in the following measures aimed at improving the safety of Richmond roads for all users:

- <u>Traffic Calming</u>: potential installation of speed humps and other traffic calming measures on various roadways to address vehicle speeding concerns;
- <u>Driver Feedback Signs</u>: installation of new electronic unit on Gilbert Road south of Finn Road;
- No U-Turn Signage: review of existing "No U-Turn" signage to determine its effectiveness;
- <u>No. 3 Road Median Railings</u>: proposed installation of centre median railings on No. 3 Road to deter jaywalking by pedestrians in the vicinity of Aberdeen and Richmond-Brighouse Stations;
- <u>Illegal Passing of School Buses</u>: enforcement and education initiatives to deter motorists from illegally passing school buses when the vehicles' red lights are flashing;
- <u>Update of Scooter Brochure</u>: update of the City's "Road Safety Tips for Scooter Users" brochure to incorporate new technology and information; and
- <u>Arterial Road Crosswalks</u>: continuation of a city-wide phased program to upgrade the minimum standard of arterial road crosswalks to "special crosswalks" with internally lit overhead signs with downward lighting and pedestrian-actuated amber flashers and beacons.
- 1.2 On-going School Zone Traffic Safety Activities

The Committee contributed to enhancing school zone traffic and pedestrian safety through the following activities:

¹ The Committee has been without a representative of the Richmond District Parents Association (RDPA) since July 2009. Staff have made several requests for a new member to Richmond School District staff as well as the Council-School Board Liaison Committee. As staff recognize that a volunteer parent may find it challenging to attend TSAC meetings, staff will advise the RDPA that individual Parent Advisory Committee (PAC) members are welcome to attend TSAC meetings to discuss any school-related traffic safety issues.

- <u>Enforcement</u>: on-going enforcement of school zone traffic regulations, particularly during back to school periods such as the beginning of school terms in September; and
- <u>Parking & Access</u>: providing input on the improvement of parking and circulation layouts and identifying the requirement for and providing input on the installation of new walkways and crosswalks as well as upgrading existing crosswalks to improve pedestrian access.

1.3 Road Safety Campaigns

The Committee participated in various ICBC- and RCMP-led road safety campaigns including:

- <u>Distracted Driving</u> (February 2011): police and traffic agencies across the Lower Mainland participated in a multi-jurisdictional wide campaign targeting "distracted driving" including drivers using cell phones.
- <u>Commercial Vehicles</u> (March 2011): enforcement and vehicle inspections co-ordinated with the cities of Vancouver and Delta;
- <u>Railway Crossings</u> (April 2011): road safety at railway crossings co-ordinated with CN Rail; and
- Impaired Drivers (July-August 2011): province-wide CounterAttack road checks.

2. Proposed Initiatives for 2012

In addition to developing and providing input on corrective measures to address identified traffic safety concerns, the Committee will undertake a number of proactive initiatives to enhance traffic safety and promote traffic safety education.

2.1 Road Safety and Traffic Calming Measures

The Committee will participate in the following measures to improve the safety of all road users:

- <u>*Traffic Calming:*</u> the assessment, implementation and monitoring of road safety and traffic calming measures where warranted in local neighbourhoods, together with consultation with Richmond RCMP and Richmond Fire-Rescue prior to the implementation of any traffic calming measures;
- <u>Pedestrian & Traffic Safety</u>: continue to support and participate in on-going multi-agency efforts to increase the level of pedestrian and traffic safety, such as annual campaigns held by ICBC and Richmond RCMP;
- <u>Accessible Pedestrian Signals</u>: provide input on the implementation of accessible pedestrian signal features at signalized intersections and special crosswalks;
- <u>Overhead Illuminated Street Name Signs</u>: provide input on priority locations for the installation of overhead LED illuminated street name signs, which will improve wayfinding for all road users, particularly at night; and
- <u>Discouraging Vehicle Speeding</u>: the member agencies of the Committee will continue to jointly work on initiatives to curb vehicle speeding in the community, such as the targeted enforcement program of the Richmond RCMP.
- 2.2 School Zone Traffic Safety On-Going Programs

The Committee will continue its involvement in the on-going review and improvement of traffic and pedestrian safety in school zones through:

- improving vehicle parking and circulation layout at schools;
- · supporting the enforcement of school zone traffic violations; and
- introducing new walkways and crosswalks as well as upgraded crosswalks to improve pedestrian safety.
- 2.3 Other Programs and Initiatives

The Committee will continue to work on and/or provide input to the following programs and initiatives:

- <u>Steveston Parking Strategy</u>: provide input on possible traffic safety implications of any
 proposed parking strategies (e.g., parking in laneways);
- <u>Special Events</u>: provide comment and input from a traffic safety perspective on the development and implementation of traffic management plans to support special events; and
- <u>Richmond Parking Advisory Committee</u>: provide input to this Committee as required, as some items may have traffic safety implications (e.g., installation of crosswalks and changes to on-street parking regulations).

Financial Impact

As in previous years, staff resources required to support this Committee have been included in the proposed 2012 Operating Budget. Costs associated with the installation of traffic control devices, walkway construction and other road and traffic safety improvements are normally accommodated in the City's annual capital budget and considered as part of the annual budget review process. Some of these projects are eligible for financial contribution from external agencies (e.g., ICBC and TransLink).

Conclusion

The Traffic Safety Advisory Committee is one of the few multi-agency forums in the region dedicated to enhancing pedestrian and traffic safety within its home municipality. Since its inception in 1997, the Committee has provided input on and support of various traffic safety improvements and programs and initiated a range of successful measures encompassing engineering, education and enforcement activities. Upon Council endorsement of these initiatives, staff will forward a copy of this report to the Richmond Council/School Board Liaison Committee for its information.

Joan Caravan Transportation Planner (604-276-4035) (on behalf of the Traffic Safety Advisory Committee)