



City of Richmond

Report to Committee

To: Public Works and Transportation Committee
From: John Irving, P.Eng. MPA
Director, Engineering
Re: 2011 Paving Program

Date: February 16, 2011
File: 10-6340-20-P.11204/Vol
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Staff Recommendation

That the staff report regarding the 2011 Paving Program be received for information.

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

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ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Purchasing	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
Roads and Dykes	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
Budgets	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
REVIEWED BY TAG	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REVIEWED BY CAO	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

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 2011 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 2011 and will continue until approximately the end of October 2011 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 web site (<http://www.richmond.ca/services/rdws/projects/Projects10.htm>).

Included in Appendix A is a list of the proposed paving sites and the respective justification which are included in the 2011 Paving Program tender.

In order to maintain our road network at its current level and minimize deterioration, the City's Pavement Management System indicates that we would require an annual budget of \$5,000,000. Given current funding levels of approximately \$3.3 million, the pace of road deterioration would be expected to exceed the rate of road rehabilitation under the current paving program. This scenario was recently experienced on No. 4 Road, between Granville to Westminster Highway which has now been paved. Further to the staff report dated June 10, 2010, staff will bring forward priority projects for road construction to be funded from previous reserves.

Early tendering of the annual paving contract and the recent decrease in 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 (Appendix B). 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 2011 and received six competitive bids, with the low tender by Imperial Paving Limited coming in under the City's budget. This can be attributed to the lower price of oil as compared to peaks in previous years as well as 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 appendix B for a list of the additional paving sites. See the attached map for all proposed paving sites (Attachment 1) with the exception of those listed in Appendix B.

The 2011 Paving Program included an amendment to the City's standard tendering practices that reflects upon the City's environmental initiatives. Appendix 6, "SUSTAINABLE PRACTICES" will work to encourage all potential bidders into employing sustainable methodologies, practices and materials that would assist in reducing the harmful emissions, in direct alignment with Council's Term Goal 4. Sustainability. Staff also included a bid item that requires the contractor to use Permeable Asphalt on a trial basis. If this initiative is successful, the need to convey and pump drainage water will be reduced, resulting in a net positive environmental impact.

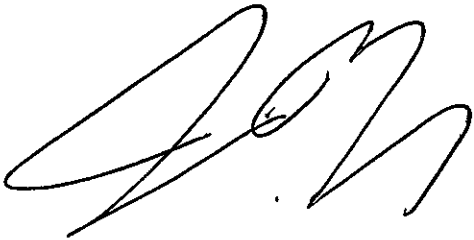
Financial Impact

The 2011 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 (\$)
Budget	2,341,500
2011 MRN Budget	871,900
Capital Project Funding	90,000
Total Available Funding	3,303,400
Estimated Expenditures	
2011 Paving Tender -- Appendix A	2,968,853
Additional Paving Locations -- Appendix B	330,000
Total Estimated Expenditures	3,298,853
Estimated Funding Remaining	4,547

Conclusion

The 2011 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)



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

APPENDIX A **2011 PAVING PROGRAM – PROPOSED LOCATIONS**

LOCATION	FAULTS
8000 Block Westminster Highway – West bound lanes	- MRN Treatment
12000 Block Bridgeport Road	- MRN Treatment
20000 Block Westminster Highway	- MRN Treatment
14000 & 15000 Block Westminster Highway	- MRN Treatment
6000 Block Steveston Highway	- MRN Treatment
3000 Block Regent Street	- Utility cuts, pavement cracking
6000 Block Pendlebury Street	- Utility cuts, pavement cracking
8000 Block Cooper Road	- Utility cuts, pavement cracking
Douglas Crescent (Burkeville)	- Utility cuts, pavement cracking
9000 Block Geal Road	- Utility cuts, pavement cracking
8000 Block Scotchbrook Road	- Utility cuts, pavement cracking
8000 Block Wheeler	- Utility cuts, pavement cracking
8000 Block Robinson Road	- Utility cuts, pavement cracking
11000 Block 3 rd Avenue	- Utility cuts, pavement cracking
6000 Block No.6 Road	- Utility cuts, pavement cracking
8000 Block Cambie Road	- Utility cuts, pavement cracking
St. Edwards Drive (Bridgeport Road to Bird Road)	- Utility cuts, pavement cracking
11000 Block No.1 Road	- Utility cuts, pavement cracking
3000 Block Moncton Street	- Utility cuts, pavement cracking
7000 Block Gilbert Road	- Utility cuts, pavement cracking
7000 Block Francis Road	- Utility cuts, pavement cracking
8000 Block Granville Road – East Bound Lanes	- Utility cuts, pavement cracking
7000 Block Garden City	- Utility cuts, pavement cracking
5000 Block Blundell Road	- Utility cuts, pavement cracking
7000 Block South Dyke Road	- Utility cuts, pavement cracking
8000 Block No.4 Road	- Utility cuts, pavement cracking
3000 Block Shell Road	- Utility cuts, pavement cracking
2000 Block No.6 Road	- Utility cuts, pavement cracking
9000 Block No.3 Road	- Utility cuts, pavement cracking
5000 Block Williams Road	- Utility cuts, pavement cracking
7000 Block Granville Avenue – East Bound Lanes	- Utility cuts, pavement cracking

APPENDIX B

2011 PAVING PROGRAM – ADDITIONAL LOCATIONS

LOCATION	FAULTS
8000 Block No.4 Road	- Utility cuts, pavement cracking
9000 Block No.3 Road	- Utility cuts, pavement cracking