



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: March 4, 2016

From: Mike Redpath,
Senior Manager, Parks

John Irving, P.Eng. MPA
Director, Engineering

File: 10-6060-01/2016-Vol
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Re: **Steveston Dredging Update**

Staff Recommendation

1. That funding for a 33% share of Steveston Harbour Phase II dredging costs plus \$66,467, for a total of up to \$516,500, be approved;
2. That funding for a 33% share, up to \$60,000, of No. 1 Road Strip dredging costs, be approved;
3. That \$400,000 in funding for complimentary dredging from the east edge of the Imperial Landings floats to the east edge of Britannia's Shipyards floats, be approved; and
4. That the Chief Administrative Officer and General Manager, Engineering and Public Works, be authorized to execute agreements with the appropriate parties to facilitate the dredging work.

Mike Redpath
Senior Manager, Parks
(604-247-4942)
Att. 2

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

REPORT CONCURRENCE		
ROUTED TO: Finance Department	CONCURRENCE <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: DW	APPROVED BY CAO

Staff Report

Origin

In October 2012, Council approved, subject to matching funding, up to \$2M in funding from the Utility Provision for the dredging of Steveston Harbour.

On January 26, 2016, the Steveston Harbour Authority (SHA) sent a letter (Attachment 1) to Dave Semple, General Manager, Interagency Programs & Steveston Waterfront Major Initiatives. The letter notified the City that the SHA Board has passed a resolution to contribute up to \$550,000 to complete Phase II dredging in Steveston Harbour and requested matching funding from the City. The letter also requests that the City pass a resolution to contribute 33% of the funds required to complete the dredging of the No. 1 Road Strip, up to a maximum contribution of \$60,000.

Staff have identified a need to dredge 45,000 cubic meters of material from the Imperial Landing waterfront. This dredging is in addition to the Phase II dredging. This report updates Council on Steveston Harbour Dredging and makes recommendations for funding the planned dredging.

Findings of Fact

Fraser River dredging was initially assigned as a federal responsibility by the British North America Act. Maintenance dredging on the river began in the 1880s and Public Works and Government Services Canada (PWGSC) started regular maintenance dredging in 1901. In 1982, the responsibility for maintenance dredging was passed from PWGSC to the Canadian Coast Guard (CCG). The CCG continued maintenance dredging until the 1998 Canada Marine Act transferred responsibility for dredging to commercial users and the commercial ports.

Subsequent to implementation of the 1998 Canada Marine Act, the Fraser River Port Authority chose to conduct maintenance dredging in the main channel of the Fraser River and received a one-time compensation of \$14.5 million from the Federal Government. The Vancouver Fraser Port Authority Historical Review of Lower Fraser River report (EBA, April 2013) indicates that “the settlement does not obligate the Port to dredge, although they continue to do so. Secondary channels are not included in this framework unless the cost of dredging is fully recovered.”

Local Channel Dredging and Ladner Steveston Local Channel Dredging Contribution Agreement

The CCG dredged secondary channels that had significant commercial vessel utilization until the 1998 Canada Marine Act was implemented. There has not been any federal government funding for the secondary channels since 1998.

In 2008, the Fraser River Port Authority, the North Fraser Port Authority and the Vancouver Port Authority combined to become the Fraser River Port Authority which is known as Port Metro Vancouver (PMV). PMV launched the Local Channel Dredging Contribution Program in 2009. This program allocates \$7 million over 10 years for long-term community-based dredging plans. PMV has limited contributions to \$500,000 per local channel over a 10-year period.

In 2013, the Province, PMV, the Corporation of Delta and the City of Richmond entered into the Ladner Steveston Local Channel Dredging Contribution Agreement to provide one-time cost sharing and immediate dredging in Ladner and Steveston under PMV's management.

Dredging of the western end of Steveston Harbour (Attachment 2) was completed in early 2014 at a cost of approximately \$1 million. The east end of the harbour still requires dredging. There is further Provincial and City funding available under the contribution agreement; however, PMV has exhausted its dredging funding for Steveston Harbour.

Analysis

Phase II Dredging

Funding dredging in Steveston Harbour has been an ongoing issue since the Federal Government downloaded responsibility for dredging as part of the 1998 Canada Marine Act. There is currently an opportunity to cost share Phase II dredging with the SHA, which has approved up to \$550,000 of funding for this purpose. An estimated 150,000 cubic meters of sediment removal is required in the eastern half of Cannery Channel in Phase II (Attachment 2). The estimated cost of the dredging is \$1.35M.

The SHA has requested that the City fund 33% (\$450,000) of Phase II dredging, which is in alignment with the Ladner Steveston Local Channel Dredging Contribution Agreement where the City agrees to pay 33% of the dredging costs.

The SHA notes that there are two previous dredging activities that were performed in Steveston Harbour:

- 2009 Steveston Harbour Entrance dredging at a total cost of \$125,000; and
- Interim Funding (between Phase I and Phase II dredging) at a total cost of \$74,599 for dumping fees, soundings and other dredging related activities.

The SHA requests that the City fund 33% of these activities (\$66,467) and that this sum be applied to Phase II dredging, beyond the requested 33% City share.

Staff recommend that the City fund a 33% share of the Phase II dredging as well as contribute \$66,467 in lieu of financial participation in the two previous activities, for a total contribution not to exceed \$516,500.

Dredging Water Lot South of No. 1 Road

While the Department of Fisheries and Oceans – Small Craft Harbours (DFO-SCH) dredges the water lot adjacent to the No. 1 Road pier, additional dredging of the No. 1 Road Strip is required to access the water lot. The No. 1 Road pier is utilized by commercial fishing vessels, whale watching boats and other vessels year round and is considered by the SHA to be critical infrastructure. Dredging of the No. 1 Road Strip is estimated to cost \$180,000 and the SHA requests that the City fund 33% (\$60,000) of this dredging. This dredging should take place coincidentally with the Phase II dredging to take advantage of efficiencies that can be achieved.

Staff recommend that the City fund 33% of the cost of dredging the No. 1 Road strip, up to \$60,000.

Imperial Landing to Britannia Shipyards Water Lot Dredging

In 2014, during the first phase of the Steveston Channel dredging operations, Imperial Landing's waterfront was included as a "compliment" dredging site to accommodate special events such as the annual Ships to Shore and Maritime Festival. The dredge area included the waterfront directly in front of Imperial Landing's 600-foot long floating docks.

Staff recommend that dredging of the waterfront from the east edge of the Imperial Landing floats to the east edge of the Britannia Shipyards floats be performed concurrently with Phase II dredging to take advantage of efficiencies that can be achieved. This specific area in Steveston is outside of the navigable Cannery Channel and is not included in the Ladner Steveston Local Channel Dredging Contribution Agreement. The City's existing 600 feet of floating dock frontage at Britannia will accommodate a larger variety of vessels seeking moorage with deeper drafts and will increase the opportunities for visitations at major special events.

It is estimated that the Imperial Landing dredging will require the removal of up to 45,000 cubic meters from the surrounding areas at a cost of up to \$400,000 (Attachment 2).

Agreement

The existing Ladner Steveston Local Channel Dredging Contribution Agreement does not include terms that specifically include financial contributions from the SHA. It is anticipated that the existing agreement can be updated to include the SHA. If a new agreement is required, it will have similar terms to the existing agreement with respect to the management of the dredging project and the City's financial participation.

Financial Impact

In October 2012, Council approved funding up to \$2M for dredging, subject to matching funding. In October 2013, Council approved expenditures up to \$616,317 for Richmond's share of Phase I Dredging and complimentary dredging operations at Imperial Landing. Of the original \$2M of Council approved funding, \$1.47M remains and is available to fund up to \$980,000 of dredging as recommended in this report.

Conclusion


The Federal Government transferred responsibility for dredging to commercial users and the commercial ports through the 1998 Canada Marine Act. In 2013, the Province, PMV, the Corporation of Delta and the City of Richmond entered into the Ladner Steveston Local Channel Dredging Contribution Agreement to provide one-time cost sharing and immediate dredging in Ladner and Steveston under PMV's management. Phase I of dredging in Steveston Harbour was completed in 2014, depleting PMV funding for the harbour. The SHA has recently committed \$550,000 for the dredging of Steveston Harbour and has requested the City contribute up to \$516,500 toward Phase II dredging and \$60,000 toward dredging the No. 1 Road Strip. Staff recommend that the City fund these contributions and perform an additional \$400,000 of

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complimentary dredging from the east edge of the Imperial Landing floats to the east edge of the Britannia Shipyards floats coincident with Phase II dredging to take advantage of efficiencies that can be achieved.

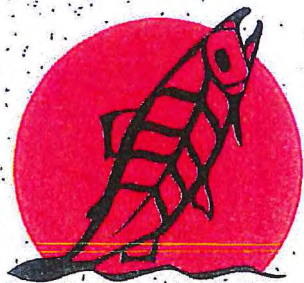
Fon



Lloyd Bie, P.Eng.
Manager, Engineering Planning
604-276-4075

LB:lb

- Att. 1: SHA letter dated January 26, 2016
2: Steveston Harbour Dredging Phase I and Phase II Works



January 26, 2016

STEVESTON HARBOUR AUTHORITY

12740 Trites Road, Richmond, B.C. V7E 3R8 604-272-5539 Fax 604-271-6142

Dave Semple
City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1

Dear Dave,

Re: **Dredging of Steveston Cannery Channel – Phase II**
And Re: **Dredging South of No. 1 Road Waterlot**

We are writing this letter to address certain matters relating to the dredging of Steveston Harbour.

1. Dredging of Cannery Channel (2009-2014)

(a) Dredging of Entrance in 2009

As you are aware, Steveston Cannery Channel (the "Channel") is one of 14 local channels eligible for funding under Port Metro Vancouver's ("PMV") Local Channel Dredging Program (the "PMV Local Program"). The PMV Local Program provides that each local channel may receive up to \$500,000 in funding for dredging. In 2009, PMV provided \$125,000 in funding to dredge the entrance of Steveston Harbour, in an area that comprises a portion of the Channel. As this dredging activity preceded the 2014 Phase I dredging of the Channel, no matching funds were provided by the City of Richmond or the Province of BC.

(b) Dredging of Western Half of Channel in 2014 (Phase I)

In 2014, pursuant to the terms of a contribution agreement between the City of Richmond, PMV and the Province of BC, 142,000 m³ of sediment was removed from the western half of the Channel. We note that the City of Richmond agreed to contribute matching funds (33%) towards Phase I. The actual contribution breakdown was as follows:

- Port Metro Vancouver: \$375,000
- Province of BC: \$375,000
- City of Richmond: \$336,317

TOTAL: \$1,086,317

We have been advised by Chris Hall that subsequent to the completion of dredging in Phase II, the Province of BC contributed an additional \$74,599 for post-dredging expenses, as no matching funds were available.

See the enclosed memo from PMV dated October 2015. A post-dredging map of the Channel is also enclosed.

(c) Dredging of Eastern Half of the Channel (Phase II)

As you are aware, approximately 150,000m³ of sediment needs to be removed from the eastern half of the Channel in Phase II. The estimated total cost for Phase II is \$1.35 million. PMV will be sounding the Channel to confirm the depths and extent of Phase II after the freshet this spring.

Up until this week, we have funding commitments for Phase II as follows:

- Port Metro Vancouver: \$0
- Province of BC: \$319,000
- City of Richmond: We understand that the City will provide 33% of the total (\$450,000 based on \$1.35 million total cost). See attached letter dated May 29, 2014.
- Steveston Harbour Authority ("SHA"): \$100,000

TOTAL: \$869,000

Therefore, there has been a funding gap of approximately \$481,000 for Phase II which has prevented the project from moving forward. The SHA has been working to obtain funding from other federal departments and agencies, to no avail. The SHA board of directors is acutely aware of the crisis that sedimentation in the Channel has become, and at our board meeting this week has determined that it must step up to fill the federal funding gap.

We are pleased to advise that the SHA board of directors has unanimously passed a resolution to contribute up to \$550,000 to complete Phase II this year. Councillor Steves, the City's representative on our board, was present at the meeting and supported the resolution.

As previously discussed, it is critical that we complete the dredging of the Channel at the end of 2016.

(d) Contribution from the City of Richmond for Phase II

We are writing to formally request that the City of Richmond contribute 33% of the funding required to complete Phase II in 2016, as adjusted pursuant to the matters described below. The formula and historical contributions spreadsheets for Phase I and Phase II are complex. However, it is our view that the dredging of the entrance in 2009, Phase I in 2014 and Phase II in 2016, while conducted separately, should be regarded as a single project for funding calculation purposes.

(i) 2009 Dredging of the Entrance

As mentioned above, PMV contributed \$125,000 towards dredging of the entrance of the harbour in 2009 under the PMV Local Program. While the entrance comprises a portion of the Channel, the funding for the dredging of the entrance preceded the Phase I stage of dredging and so the City's 33% contribution to Phase I did not account for PMV's previous \$125,000 contribution. We request that the City of Richmond, in calculating its 33% contribution for Phase II, deem this \$125,000 contribution to be included in the dredging of the Channel. This adjustment would result in the City of Richmond contributing an additional \$41,625 towards Phase II.

(ii) Interim Funding between Phase I and Phase II

Chris Hall has advised that \$74,599 was spent on the Channel in the period beginning after dredging was completed in 2014. These funds were spent on dumping fees, soundings and other matters relating to the project. Because no matching funds were available from the City of Richmond or PMV during this time, the entire \$74,599 was provided by the Province of BC.

As these expenses were directly related to the dredging of the Channel, we request that the City of Richmond, in calculating its 33% contribution for Phase II, also deem this \$74,599 contribution to be included in the dredging of the Channel. This adjustment would result in the City of Richmond contributing an additional \$24,841.47 towards Phase II.

(iii) Summary of Request for City to Contribute to Phase II

While it is clear that the final numbers will depend on the soundings being conducted by PMV and further meetings with Chris Hall and the steering committee, we request that City Council will resolve to pass a resolution to commit to funding Phase II as follows:

- the City of Richmond will contribute an amount equal to 33% of the funds required to complete the dredging of the Channel in Phase II; plus
- \$41,625, being 33% of the funds provided by PMV to dredge the entrance to the harbour in 2009; plus

- \$24,841.47, being 33% of the funds provided by the Province of BC since Phase I was completed.

Please note that this proposal was discussed with Councillor Steves at our board meeting on January 20th.

We understand from Chris Hall that there are several months of work to do before dredging can commence this fall, including soundings, permit applications and committee meetings to determine specific dredging needs. Therefore, it is critical that City Council pass a resolution to contribute as noted above in order to move the process along as expeditiously as possible.

2. Dredging of Waterlot South of No. 1 Road

We refer to you the enclosed map showing the extreme siltation of the strip of waterlot between the Channel and the waterlot at the No. 1 Road pier (the "No. 1 Road Strip"). The No. 1 Road Strip is near the City's outfall at the end of No. 1 Road and has not been dredged in approximately 20 years. As with the Channel, no level of government has been willing to assume jurisdiction over the No. 1 Road Strip, although DFO-SCH dredges the actual waterlot adjacent to the No. 1 Road pier, and will continue to do so.

As you are aware, the No. 1 Road pier is a critical piece of infrastructure that is frequently used by large commercial fishing vessels, whale watching boats and other vessels, on a year-round basis. It is of no value to have the actual waterlot and Channel dredged if there is a wall of mud between them, as exists now.

The SHA is working with PMV and DFO-SCH to determine the historical soundings of the No. 1 Road Strip, the specific area in the No. 1 Road Strip that needs to be dredged in order to provide access to the No. 1 Road pier and the contamination (if any) of the sediment. We expect to have sample results of the sediment on the periphery of the No. 1 Road Strip shortly. However, it is clear that: (a) a portion of the No. 1 Road Strip needs to be dredged; and (b) it will save tens of thousands of dollars in mobilization expenses to dredge the No. 1 Road Strip if it is dredged concurrently with Phase II.

Our estimate is that in order to dredge the No. 1 Road Strip to sufficient levels, it would cost \$180,000.

We are currently in discussions with our local MLA to have the Province of BC provide up to \$60,000 to fund the dredging of the No. 1 Road Strip. The SHA would be willing to match this \$60,000 contribution if the City of Richmond does as well.

Therefore, we are requesting that City Council will resolve to pass a resolution to contribute 33% of the funds required to complete the dredging of the No. 1 Road Strip, up to a maximum of contribution of \$60,000.

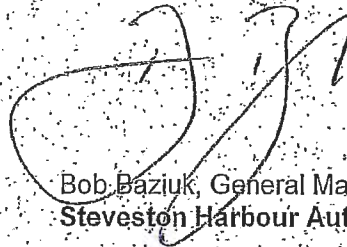
It is in the best interests of the City of Richmond, the SHA, the Province of BC and all harbour users to complete the dredging of the harbour in 2016 in a comprehensive manner so that the harbour will be usable for years to come.

Please contact Bob Baziuk should you have any questions and concerns.

Regards,



Robert Kiesman, Board Chairman
Steveston Harbour Authority



Bob Baziuk, General Manager
Steveston Harbour Authority

Cc: Robert Gonzalez, Deputy CAO, City of Richmond
SHA Board of Directors

Enclosures



City of
Richmond

6911 No. 3 Road,
Richmond, BC V6Y 2C1
www.richmond.ca

May 29, 2014

Community Services Department
Telephone: 604-276-4009
Fax: 604-276-4132

Steveston Harbour Authority
c/o Bob Bazluk
12740 Trites Road
Richmond, BC V7E 3R8

Dear Bob:

Re: Steveston Channel Dredging

I am writing in regards to the Steveston Channel and the effort moving forward to get the channel dredged.

The City has identified that the dredging of the channel should be a combined effort and that it is imperative for Steveston in many ways. In the effort to help move forward the City of Richmond is prepared to contribute one-third of the funding. This is only in conjunction with the Federal and Provincial Government support providing the remaining two-thirds of the funding.

The City Council had a Special Council meeting on May 6, 2013 and confirmed the following resolutions:

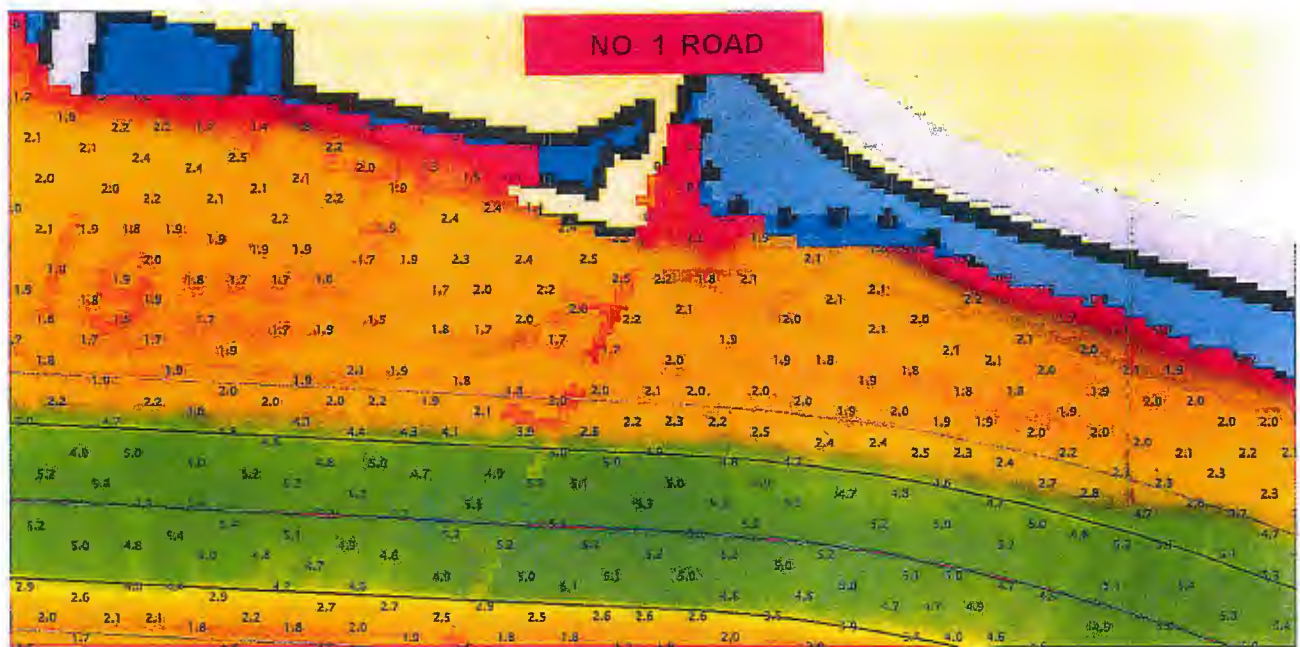
- (1) That the Ladner Steveston Local Channel Dredging Contribution Agreement as attached to the staff report titled "Ladner Steveston Local Channel Dredging Contribution Agreement 2013" from the Senior Manager, Parks and Director, Engineering dated April 10, 2013 be approved;
- (2) That the Chief Administrative Officer and the General Managers of Community Services and Engineering and Public Works be authorized to sign the Ladner Steveston Local Channel Dredging Contribution Agreement; and
- (3) That staff bring forward the finalized dredging budget and scope for consideration prior to any expenditure commitment.

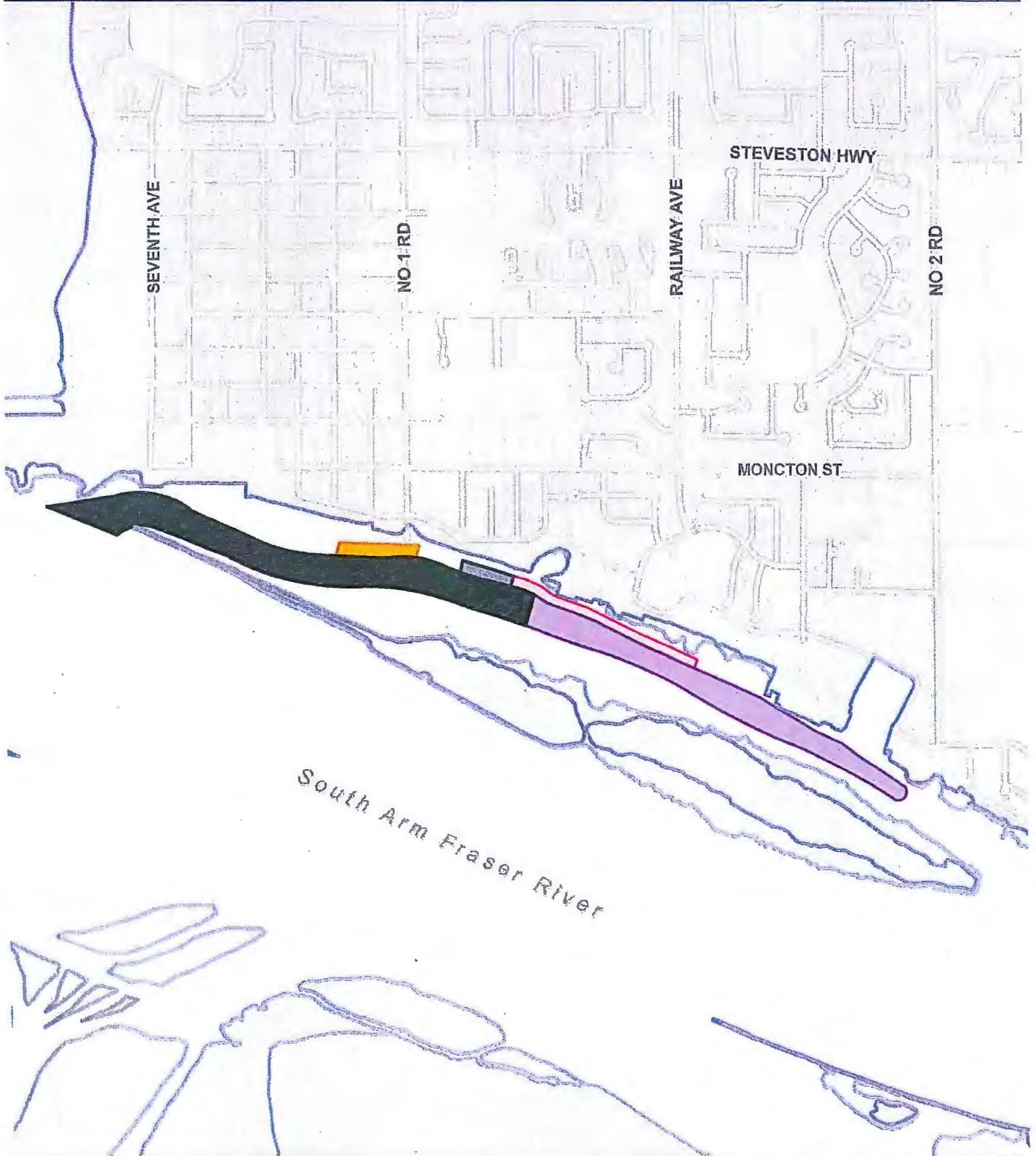
Thank you and we look forward to moving forward with the dredging.

Yours truly,

Dave Sample
General Manager, Community Services



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Legend

Completed Dredging Works

-  Steveston Harbour Dredging - Phase 1
-  Imperial Landing Dredging - Phase 1

Recommended Dredging Works

-  Steveston Harbour Dredging - Phase 2
-  Imperial Landing Dredging - Phase 2
-  No 1 Road South Strip Dredging

Note:
The information shown on this map is compiled from various sources and the City makes no warranties, expressed or implied, as to the accuracy or completeness of the information. Users are reminded that lot sizes and legal description must be confirmed at the Land Title Office in New Westminster. This is NOT a legal document, and is published for information and convenience purposes only.
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