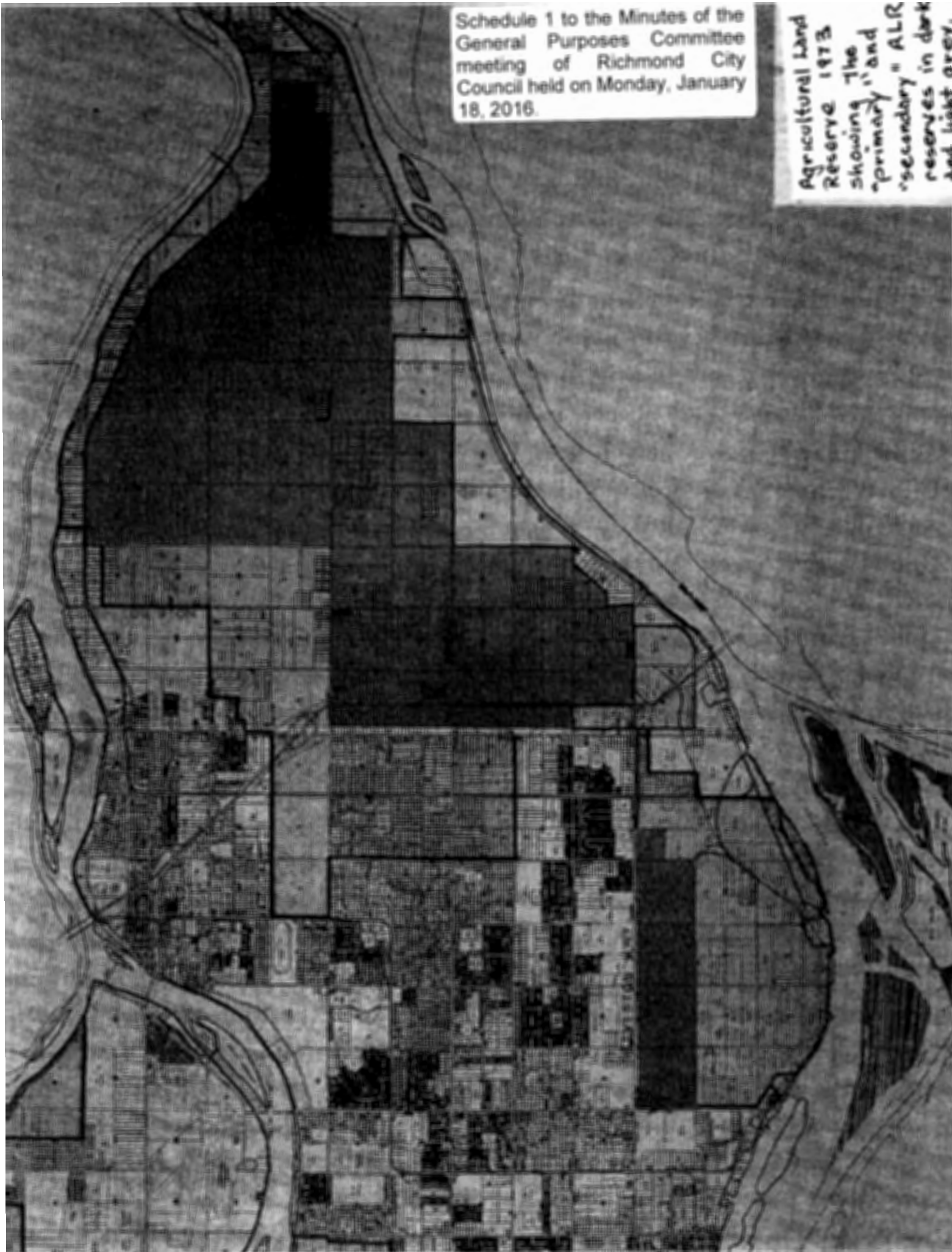


Schedule 1 to the Minutes of the
General Purposes Committee
meeting of Richmond City
Council held on Monday, January
18, 2016.

Agricultural Land
Reserve 1973
showing the
"primary" and
"secondary" ALR
reserves in dark
and light grey.



July 2014
Prepared by The Richmond Chamber of Commerce.

An important constraint affecting the maximum draft for vessels using the Lower Fraser River is the George Massey Tunnel.¹⁷⁴ The tunnel is a key link enabling traffic on Highway 99 to cross the South Arm of the Fraser River near where it empties into the Strait of Georgia.

* * * * * The above is a true and correct copy of the original.

Any deepening of the shipping channel and its ongoing dredging to the new depth would require a business case justification with respect to that depth and corresponding cost, taking into account the shipping volumes and vessels to be involved.

“--- The George Massey Tunnel poses a significant seismic risk. Designed at a time before earthquake resistance was well understood, the tunnel is vulnerable to even moderate earthquakes.” Research has shown that large earthquakes have occurred and will again occur in Southwestern British Columbia.

"--- the Corporation of Delta identifies the George Massey Tunnel as one of the worst areas for traffic accidents on Highway 99."

It is obvious that replacement of the tunnel is an urgent priority. The British Columbia Ministry of Transportation and Infrastructure has undertaken a planning process that led to a decision to proceed with a replacement.¹⁷⁵

¹⁷⁴ The quotations in this section referring to subjects prior to the decision to replace the tunnel with a bridge are extracted from a letter to Minister Mary Polak, Minister of Transportation and Infrastructure, Province of British Columbia, from The Vancouver Board of Trade, dated January 25, 2013. <http://www.boardoftrade.com/documents/George%20Massey%20Tunnel%20letter.pdf>, Accessed August 28, 2013.

¹⁷⁵ *George Massey Tunnel Replacement Project*, Ministry of Transportation and Infrastructure, <http://engage.gov.bc.ca/masseytunnel/>, Accessed August 28, 2013.

On September 20, 2013, Premier Christy Clark announced that the Massey Tunnel will be replaced with a new bridge on the existing Highway 99 corridor.¹⁷⁶ Construction of the new bridge is to begin in 2017. In the interim, engineering and technical work will proceed on the project, with development of a more detailed project scope and business case for the bridge and associated improvements in the Highway 99 corridor. The results are to be released for public discussion in the spring of 2014.¹⁷⁷

The project is subject to environmental review.¹⁷⁸

by Port Metro Vancouver ??

As noted above, with the deepening of the Panama Canal now projected for 2015, ships with drafts of over 18 metres could potentially need to serve terminals upstream of the tunnel.

However, there could be problems with the length of these ships interfering with their ability to turn around in the river. The present maximum length of a ship that can turn around in the South (main) Arm of the river in relation to the shipping channel is approximately 300 metres.¹⁷⁹

After the George Massey Tunnel is removed, the size of vessels navigating the South Arm will be determined by the width of the navigation channel. The dredged width and depth of that channel will determine the vessel limitations up to a maximum length of approximately 300 metres. While removing the tunnel will allow the passage of vessels with drafts greater than the current limit of 11.5 metres, the anticipated economic impacts will need to justify the extent of any future dredging to accommodate increased vessel sizes.¹⁸⁰

superintendence and oil port.

The major volume and cost of dredging to meet this challenge as noted earlier in this report would be the shipping channel between the tunnel and the Sand Heads where the channel ends and deeper water, of the Strait of Georgia begins.

but depth would be 18 metres all the way to FSD.

Why not a two track tunnel with hwy ??

4.3.4 South Fraser Perimeter Road – Highway 17

“Approximately 40 km long, South Fraser Perimeter Road (SFPR) is a new four-lane expressway along the south side of the Fraser River” and across the area of Delta from highway 99 to near the BC Ferries terminal and Roberts Bank deep sea shipping terminal.¹⁸¹

Completed in late 2013 at a cost of \$1.25 billion, the SFPR “— is part of Highway 17 in Metro Vancouver, which connects the Tsawwassen Ferry Terminal in southwest Delta to 176 Street (Highway 15) in North

¹⁷⁶ B.C. moves forward with bridge to replace Massey Tunnel, news release, Office of the Premier, September 20, 2013. <http://www.newsroom.gov.bc.ca/2013/09/bc-moves-forward-with-bridge-to-replace-massey-tunnel.html>.

Accessed September 20, 2013.

¹⁷⁷ B.C. moves forward with bridge to replace Massey Tunnel.

¹⁷⁸ George Massey Tunnel Replacement Project.

¹⁷⁹ Information provided by Port Metro Vancouver.

¹⁸⁰ Information provided by Port Metro Vancouver.

¹⁸¹ South Fraser Perimeter Road (Highway 17), Fraser Transportation Group. <http://www.sfprhighway17.ca/>