



To: Development Permit Panel **Date:** July 19, 2006
From: Joyce Chang **File:** 10-6525-07-01/2006-Vol 01
Project Manager, Major Projects Team
Re: **Canada Line – Aberdeen, Lansdowne and Richmond–Brighthouse Stations**
Memo to Development Permit Panel for July 26, 2006

Origin:

The design of the Canada Line Aberdeen, Lansdowne and Richmond - Brighthouse Stations are scheduled for presentation to the Richmond Development Permit Panel on July 26, 2006.

Background:

The City of Richmond, Canada Line Rapid Transit Inc. (CLCO), and TransLink executed the Richmond Access Agreement (RAA) on November 30, 2004. The RAA grants TransLink access to City streets and lands on which the Canada Line rapid transit system will operate. The RAA is similar to the access agreements with other jurisdictions including the City of Vancouver and the Vancouver International Airport Authority regarding the Canada Line. The RAA exempts the Canada Line project from rezoning, development permit and building permit approvals for all transit related infrastructure and fixed facilities within the City of Richmond.

The Design Advisory Process (DAP) identified within the RAA is the process by which the City of Richmond will provide advice to the Canada Line project on the design of fixed facilities, primarily transit stations. The DAP identifies an 8 step process with a 16 week timetable that involves 2 public open houses, 1 presentation to the Richmond Advisory Design Panel (ADP) and 1 presentation to the Richmond Development Permit Panel (DPP) by Canada Line representatives (CLCO). Richmond cannot require the Canada Line project to comply with the City's preferences regarding the design of fixed facilities for the rapid transit project but Richmond assumes that Canada Line project will act in good faith and attempt to address Richmond suggestions and requests. The final step in the DAP is a Design Report prepared by the proponent (ITBC) which will include 30 to 35% design drawings and a response to the Development Permit Panel advice.

Summary:

In general, the design information provided by CLCO, InTransitBC and TransLink regarding the proposed Canada Line Aberdeen, Lansdowne and Richmond - Brighthouse Stations does not provide the equivalent level of design development or detailed design information that is normally provided by other applicants as part of the normal development review process in the City of Richmond. CLCO's intent for requesting early commentary by the Richmond Advisory Design Panel and the Development Permit Panel was to facilitate incorporation of advice during design development noting that the completion date for the project is fixed – November 30, 2009. Given the above qualification, Richmond staff have addressed four (4) specific questions from the Development Permit Panel regarding the Aberdeen, Lansdowne and Richmond - Brighthouse Stations.

1. How do the Aberdeen, Lansdowne and Richmond - Brighthouse Station designs comply with the Vision adopted by Council for the line at the Council workshop of April 2005?

a) Issue: Transit-Oriented Development (TOD) Direction:

Aberdeen Station – CLCO has now acquired 4020 No. 3 Road to locate the Aberdeen Station and there is a significant amount of residual land not required for the station. CLCO continues to negotiate with developer(s) regarding the redevelopment of residual land surrounding the Aberdeen Station. Richmond is not involved in these negotiations. CLCO indicates that one proponent is interested to develop a mixed-use project with a retail podium and an office tower including strong integration with the transit station. However, no drawings are yet available to describe this potential project.

Lansdowne Station – This is a stand-alone station and CLCO has made no mention of a request from a development interest for a direct connection with this station at present.

Richmond – Brighthouse Station – CLCO continues to negotiate with developer(s) regarding high-rise office development over the bus loop and an alternate scheme that includes the construction of a 'bus mall' between Buswell Street and No. 3 Road. There are no proponent drawings available to describe these alternative development scenarios at this time.

b) Issue: Achievement of Richmond's Best and Final Offer (BAFO) Design Guidelines:

Comments: Richmond's BAFO design guidelines identified a series of preferences regarding the design of the Canada Line stations on No. 3 Road. The following Richmond BAFO preferences are followed by a description of how CLCO/InTransitBC have responded.

- Maintain continuity in the general appearance of Richmond stations – The three stations along No. 3 Road are similar in appearance.
- Make stations visually distinct from the Airport and Vancouver segments – The No. 3 Road stations are elevated and incorporate a distinctive roof form.
- Strengthen Richmond's identity as a distinct community and contribute towards a unique image for the City – The use of a wood roof form on the No. 3 Road stations is unique to Richmond and reflects the use of wood in other major projects such as the Olympic Oval.
- Station design should aid in way finding – The extensive use of glazing on the No. 3 Road stations will aid in the identification of landmarks around stations. The detailed design of the station plazas are the responsibility of the City and can further assist in way finding.
- Create a 'family of stations' for the Canada Line Richmond segment that share a set of characteristics that are different from those in Vancouver – InTransitBC have proposed a family of stations with a hierarchy created for single versus dual platform stations.
- The stations should include, among other things, an extensive use of glass for the sides and roofs of stations and associated weather protection – InTransitBC has proposed a relatively transparent design for the No. 3 Road stations.
- Establish a consistent base building colour palette, roofline and/or building profile, signage format, wind/rain protection – The wood roof element will add distinction to the station platform and should be visible from the street. The colour scheme has not yet been addressed. The background information and rationale to verify that the roof element will provide adequate weather protection has not been provided. An integrated signage strategy with preliminary typical signs has not yet been developed.
- Incorporate features that make it quick and easy for passengers on trains to determine, both day and night, when they are on the Richmond segment of the Canada Line (i.e. extensive use of glass to allow views out of the stations) – The high degree of transparency in the No. 3 Road transit station will help orient passenger regarding the time of day and location along the transit line.

- Incorporate a bold use of colour, murals, art and materials including other features that are distinctive for Richmond and easily visible from train windows upon entering a station) – InTransitBC is developing a programme for public art at the stations as on the Millennium Line and CLCO has agreed to contributed \$2 million towards the integration of the elevated guideway with the urban fabric along the east side of No. 3 Road.
- Within Richmond's 'family of stations' provide for design variations that celebrate the special roles, characters, and opportunities of each location and unique neighbourhood (i.e. in architectural features, associated public open spaces, public art) – The Canada Line project scope split between Richmond and CLCO/InTransitBC places the responsibility for station plaza design with Richmond. The design of public spaces including station plazas will occur in the preliminary and detailed design phases regarding the restoration of No. 3 Road.

c) Issue: Connection Cost with Adjacent Development

Comment: It is the understanding of Richmond staff that if direct pedestrian connections will be made between adjacent development and any Canada Line station, that all costs associated with these additional connections to any station would be the responsibility of the relevant developer/property owner (i.e. not the City of Richmond, CLCO or InTransitBC).

d) Issue: Transit Plaza Design

Comment: The Canada Line project scope split between Richmond and CLCO/InTransitBC places the responsibility for station plaza design with Richmond. The design of public spaces including station plazas will occur in the next preliminary and detailed design phases regarding the restoration of No. 3 Road.

e) Issue: Station Location – The Lansdowne Station has been relocated.

f) Issue: Site Planning – Site planning is addressed in more detail below.

g) Issue: Construction Timing / Capstan Station – CLCO continue to negotiate provisions for the future Capstan Station with the landowner however land and timing issues are unresolved.

2. What Aberdeen, Lansdowne and Richmond - Brighouse Station design changes have already been made by CLCO and InTransitBC, as result of discussions with Richmond staff?

General Station Comments

- Straddle bents have been eliminated along No. 3 Road.
- Dual guideway has been restored between Bridgeport and Aberdeen Stations.
- The guideway alignment along No. 3 Road has been straightened.
- The guideway cross-over of No. 3 Road near the terminus station has been avoided.
- CLCO has provided \$2 million in additional funding to enhance guideway integration with fronting development along No. 3 Road.
- A cost saving measure by CLCO to construct a single guideway between Lansdowne and Richmond-Brighouse Stations has the effect of reducing the mass and visual impact of the elevated guideway structure in the heart of Richmond City Centre.
- CLCO has funded extra consulting work to investigate alternative development strategies around the Aberdeen and Richmond-Brighouse Stations to advance TOD principles.

- CLCO has provided regular updates on land negotiations with other parties however these negotiations have not been concluded.
- CLCO has funded redevelopment studies of the fronting property at 7931 Alderbridge Way (guideway/roadway pinch-point) in an attempt to replace the existing sidewalk and to provide space for a bike lane on the west side of the street. While negotiations continue, the main impediment to a land use solution in this location is the recently negotiated aircraft noise policy that precludes residential development on the subject property. Accordingly, YVR will not support a partial rezoning of this property to permit residential land use.
- Station design has allowed for retail space and has incorporated wood elements into the roof.
- TransLink has agreed to cost-share landscape improvements as part of the Major Road Network (MRN) program in the restoration of No. 3 Road.
- CLCO have negotiated provisions for the future Capstan Station with the land owner.

Aberdeen Station Comments

- CLCO has renamed the Aberdeen Station (formerly Cambie).
- CLCO continues to negotiate with developer(s) regarding the redevelopment of residual property at the Aberdeen Station in an attempt to achieve associated or integrated development adjacent to this station.

Lansdowne Station Comments

- CLCO has agreed to shift the location of the Alderbridge Station closer to Lansdowne Road in recognition of the new importance for this cross street and connections to other facilities.
- CLCO has agreed to change the name of the Lansdowne Station (formerly Alderbridge).
- CLCO is currently investigating the relocation of the large Pin Oak trees along the Lansdowne Mall frontage of No. 3 Road into the reconfigured centre medians.

Richmond – Brighthouse Station Comments

- CLCO has agreed to incorporate 'Brighthouse' in the name of the south terminus station.
- CLCO has agreed to relocate the traction power station off the No. 3 Road right-of-way.
- Reoriented the station entry to the south to better address pedestrian access from the south in recognition of shortening the Richmond segment of the Canada Line.
- CLCO/InTransitBC have agreed to reconfigure the 'base case' bus loop configuration to eliminate bus access from Saba Road through the rear lane.
- CLCO continue to negotiate with developer(s) regarding the development of an office tower over the 'base case' bus loop at this station.
- CLCO/InTransitBC/Richmond continue to negotiate an alternate, more comprehensive redevelopment scenario surrounding this station that would create a 'bus mall' connecting Buswell Street and No. 3 Road south of the station.

3. What changes are Richmond staff still seeking to improve the Aberdeen, Lansdowne and Richmond - Brighthouse Station designs that could be accommodated easily?

a) Aberdeen Station

Issue	City of Richmond Specific Requests
Site Planning	<ul style="list-style-type: none"> • Illustrate Richmond's streetscape concept plan (Option C) on the station site plan. • Indicate existing and proposed property lines and easements. • If escalators do not extend to boulevard grade provide site plan to address grade transition and include an allowance for design and construction costs.
Transportation Integration	<ul style="list-style-type: none"> • Dimension precisely the space for sidewalk and bike lane connections around the station. • Ensure adequate circulation space for the bike lane (1.5m lane + 0.5m shy distance) on the west side of the Aberdeen station. • Locate Passenger Pick-Up and Drop-Off (PPUDO) parking spaces along the south side of Cambie Road west of No. 3 Road in locations approved by Richmond Transportation staff or within any future adjacent development parking structure with agreement by property owner. • Locate any service parking on nearby cross streets in locations approved by Richmond Transportation staff or within the parking structure of any future redevelopment of the adjacent residual land. • Show how the station passenger ground connections enhance the sidewalk and adjacent development. • Specify the type, number and location of bicycle lockers on site plan.
Station Design	<ul style="list-style-type: none"> • Ensure that service and utility connections as well as any cabling will be hidden from view and not tacked to the exterior of the guideway, columns or station. • Advance the glazing design and detailing. • Reduce the amount of ancillary space on the ground plane under the station, if possible to maximize visibility through the station at grade. • Define the 'red' cladding material enclosing the ancillary space 'architectural concrete block'. Consider higher quality cladding material. • Indicate what provisions will be incorporated to all façade materials to facilitate maintenance and the removal of graffiti. CLCO indicates that 'scratchitti film' will be used on glazing and finished 'soldice block' will be used on solid walls. • Incorporate bicycle runnels (stair gutters) in the design of all stairways. • Explain the annotation 'potential future retail below station'.
Transit Integration	<ul style="list-style-type: none"> • Provide preliminary anticipated bus route plans to explain transit integration. • Identify the number and location of bus bays and stops, if any, for transit integration. • Identify the number and location of HandyDART stops. • Provide bus shelters in the vicinity of each bus stop near the Aberdeen Station.
Transit-Oriented Development	<ul style="list-style-type: none"> • Advance the redevelopment of residual land surrounding the Aberdeen Station to achieve associated or integrated development with the station to the podium level for opening day of the Canada Line. • If any of the existing retail/commercial buildings are to remain in the short term (i.e. November 2009) for the opening of the Canada Line then reconfigure the interim parking to conform with the City of Richmond design guidelines for parking lots (i.e. 1 tree for every 2 parking spaces).
Other Related	<ul style="list-style-type: none"> • Explain the CLCO/InTransitBC station maintenance program including any limits of work, frequency of litter pick-up, removal of graffiti, repairs to equipment and furnishings, etc. • Ensure that the future traction power station at the Aberdeen Station is located off the No. 3 Road right-of-way and preferably accommodated within the parking structure of any future redevelopment.

b) Lansdowne Station

Issue	City of Richmond Specific Requests
Site Planning	<ul style="list-style-type: none"> • Illustrate Richmond's streetscape concept plan (Option C) on the station site plan. • Indicate existing and proposed property lines. • Define property acquisition, easements and rights-of-way required for construction of the Lansdowne Station. • Provide clarification of pruning required for the large Pin Oak trees along the Lansdowne Mall frontage on No. 3 Road. • If escalators do not extend to boulevard grade provide site plan to address grade transition and include an allowance for design and construction costs. • Contribute to the cost of the station plaza design and construction.
Transportation Integration	<ul style="list-style-type: none"> • Dimension precisely the sidewalk and bike lane space around the station footprint. • Ensure adequate circulation space for the bike lane (1.5m lane + 0.5m shy distance) on the west side of the Lansdowne station. • Locate Passenger Pick-Up and Drop-Off (PPUDO) parking spaces within the Lansdowne Mall parking lot in the short term and eventually along the north side of Lansdowne Road west of No. 3 Road in locations approved by Richmond Transportation staff. • Locate any service parking within the Lansdowne Mall parking lot in the short term or within the parking structure of any future redevelopment of the adjacent residual land. • Show how the station passenger ground connection enhances the sidewalk connections to adjacent development including the future east-west greenway along Lansdowne Road and the Lansdowne Mall. • Specify the type, number and location of bicycle lockers on site plan.
Station Design	<ul style="list-style-type: none"> • Show pedestrian amenities in the station, seating, litter receptacles, signage at station platform level. • Advance the glazing design and detailing. • Ensure that service and utility connections as well as any cabling will be hidden from view and not tacked to the exterior of the guideway, columns or station. • Reduce the amount of ancillary space on the ground plane under the station, if possible to maximize visibility through the station at grade. • Define the 'green' cladding material enclosing the ancillary space. • Indicate what provisions will be incorporated to all façade materials to facilitate maintenance and the removal of graffiti. CLCO indicates that 'scratchitti film' will be used on glazing and finished 'soldice block' will be used on solid walls. • Incorporate bicycle runnels (stair gutters) in the design of all stairways. • Explain the annotation 'potential future retail below station'.
Transit Integration	<ul style="list-style-type: none"> • Provide bus route plans to explain transit integration. • Identify the number and location of bus bays and stops, if any, for transit integration, including future frequent shuttle buses to Oval and DFO land • Identify the number and location of HandyDART stops. • Provide bus shelters in the vicinity of each bus stop.
Transit-Oriented Development	<ul style="list-style-type: none"> • Consult with Lansdowne Mall representatives regarding the incorporation of retail use(s) in the station for opening day. • Ensure adequate circulation space around the station with connections to Lansdowne Mall.
Other Related	<ul style="list-style-type: none"> • Indicate with drawings and illustrations how the transition from dual to single guideway south of the Lansdowne Station will be addressed. • Acquire from the property owner of 7931 Alderbridge Way (guideway/roadway pinch-point) and provide additional land to the City along this frontage on the west side of No. 3 Road to replace the existing sidewalk and to provide space for a bike lane on the west side of the street. • Explain the CLCO/InTransitBC station maintenance program including any limits of work, frequency of litter pick-up, removal of graffiti, repairs to equipment and furnishings, etc.

c) Richmond-Brighouse Station

Issue	City of Richmond Specific Requests
Site Planning	<ul style="list-style-type: none"> • Illustrate Richmond's streetscape concept plan (Option C) on the station site plan. • Indicate existing and proposed property lines. • If escalators do not extend to boulevard grade provide site plan to address grade transition and include an allowance for design and construction costs. • Contribute to the cost of the station plaza design and construction. • Provide an update on CLCO negotiations with adjacent property owners regarding integrated/associated development.
Transportation Integration	<p>Bus Loop Option</p> <ul style="list-style-type: none"> • No bus access from Saba Road through the north-south rear lane. • Superimpose bus turning radius on the bus loop to demonstrate adequate space. • Provide traffic signal and left turn bay at intersection with No. 3 Road. • Locate any service parking on nearby cross streets in locations approved by Richmond Transportation staff or within the parking structure of any future development. • Indicate lighting for the bus loop and security provisions for the station environment. • Provide PPUDO spaces in locations approved by Richmond Transportation staff. • Dimension the space for sidewalk and bike lane connections around the station. • Demonstrate how an additional 3.0 m is accommodated along the site's eastern edge for a sidewalk along the back lane for pedestrian connection to the bus exchange and station. • Show precisely how pedestrians circulate between buses and the station entrance. • Specify the type, number and location of bicycle lockers on site plan.
Station Design	<ul style="list-style-type: none"> • Reduce the amount of ancillary space on the ground plane under the station to maximize visibility through the station at grade. • Advance the glazing design and detailing. • Ensure that service and utility connections as well as any cabling will be hidden from view and not tacked to the exterior of the guideway, columns or station. • Incorporate bicycle runnels (stair gutters) in the design of all stairways. • Indicate what provisions will be incorporated to all façade materials to facilitate maintenance and the removal of graffiti. CLCO indicates that 'scratchitti film' will be used on glazing and finished 'soldice block' will be used on solid walls defining ancillary spaces. • Explain the annotation 'potential future retail below station'.
Transit Integration	<ul style="list-style-type: none"> • Provide detailed site plans for the bus loop and bus mall options. • Identify all active / storage bus bays and stops for the transit exchange options. • Identify the number and location of HandyDART stops.
Transit-Oriented Development	<ul style="list-style-type: none"> • Provide a comprehensive TOD approach to the Richmond-Brighouse Station that would incorporate more property acquisition by CLCO and create an east-west bus mall connecting Buswell Street and No. 3 Road to the south of the transit station. • If CLCO proceeds with the 'Base Case' bus loop design then Richmond prefers that the bus loop be designed and constructed to permit the future development of a residential or office tower over top of the bus loop. Provide the concept design for a theoretical high-density development on the residual station lands to demonstrate future development potential in conjunction with the terminus station.
Other Related	<ul style="list-style-type: none"> • Ensure that the traction power station at the Richmond-Brighouse Station is located off the No. 3 Road right-of-way and preferably accommodated within the parking structure of any future development on the residual property for the station. • Explain the CLCO/InTransitBC station maintenance program including any limits of work, frequency of litter pick-up, removal of graffiti, repairs to equipment and furnishings, etc.

4. What changes are Richmond staff still seeking to the Aberdeen, Lansdowne and Richmond - Brighthouse Station designs that may be more difficult to accommodate?

a) Aberdeen Station


Issue	City of Richmond Specific Requests
Site Planning	<ul style="list-style-type: none"> Contribute to the cost of the station plaza design and construction.
Traffic & Transportation	<ul style="list-style-type: none"> Richmond prefers a station design which is fully integrated into adjacent development with retail presence to enhance passenger circulation and personal safety.
Station Design	<ul style="list-style-type: none"> Extend the escalators to the elevation of the adjacent boulevard eliminating the $\pm 0.54\text{m}$ grade change and the need for stairs and ramps to access the station from the street (i.e. lower the elevation of the ticket hall from 2.44m to 1.9m). Provide escalators in both directions (up and down) between the station platforms and the street boulevard. Provide details and budget associated with the InTransitBC public art programme at this transit station.
Transit Integration	<ul style="list-style-type: none"> Show the revised bus routes that will link with the terminus bus loop and assign the bus bays to specific bus routes.
Transit-Oriented Development	<ul style="list-style-type: none"> Ensure retail use(s) are incorporated into this transit station for opening day. Work with the Aberdeen Mall to provide convenient pedestrian connections. Develop a purpose built TOD on residual land adjacent to the transit station.
Other Related	<ul style="list-style-type: none"> Provide a station attendant during the first 5 years of operation to ensure a safer station environment during the introduction phase of the Canada Line.

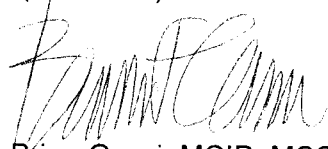
b) Lansdowne Station

Issue	City of Richmond Specific Requests
Site Planning	<ul style="list-style-type: none"> Contribute to the cost of the station plaza design and construction.
Traffic & Transportation	<ul style="list-style-type: none"> Generous space for pedestrians and cyclists to flow-through around the immediate transit station footprint.
Station Design	<ul style="list-style-type: none"> Extend the escalators to the elevation of the adjacent boulevard eliminating the $\pm 0.54\text{m}$ grade change and the need for stairs and ramps to access the station from the street (i.e. lower the elevation of the ticket hall from 2.44m to 1.9m). Provide escalators in both directions (up and down) between the station platforms and the street boulevard. Provide details and budget associated with the InTransitBC public art programme at this transit station.
Transit Integration	<ul style="list-style-type: none"> Show the revised bus routes that will link with the terminus bus loop and assign the bus bays to specific bus routes.
Transit-Oriented Development	<ul style="list-style-type: none"> Ensure purpose built retail uses are incorporated into the station design opposite to the station entry for opening day (i.e. in addition to kiosks at the station entry). Work with the Lansdowne Mall to provide convenient pedestrian connections.
Other Related	<ul style="list-style-type: none"> Provide a station attendant during the first 5 years of operation to ensure a safer station environment during the introduction phase of the Canada Line.

c) Richmond-Brighthouse Station

Issue	City of Richmond Specific Requests
Site Planning	<ul style="list-style-type: none"> Contribute to the cost of the station plaza design and construction.
Traffic & Transportation	<ul style="list-style-type: none"> Provide ample sidewalk space around the station footprint to allow relatively high volume of pedestrians and transferring passengers to circulate. Ensure convenient and safe kiss & ride spaces in close proximity of the station Strong retail presence to enhance personal safety.
Station Design	<ul style="list-style-type: none"> Extend the escalators to the elevation of the adjacent boulevard eliminating the $\pm 0.54\text{m}$ grade change and the need for stairs and ramps to access the station from the street (i.e. lower the elevation of the ticket hall from 2.44m to 1.9m). Provide details and budget associated with the InTransitBC public art programme at this transit station.
Transit Integration	<ul style="list-style-type: none"> Minor geometric modifications at the intersection of the proposed bus exchange access on No. 3 Road as part of the signalization work. Comprehensive, high quality pedestrian amenities for waiting bus passengers. Richmond prefers an east-west bus mall concept to integrate bus circulation into an open street environment
Transit-Oriented Development	<ul style="list-style-type: none"> Richmond prefers that CLCO develop and construct a larger more comprehensive transit-oriented development at the terminus station than the 'Base Case' scenario. Encompass a larger land assembly than the 'Base Case' scenario' with a higher concentration of mixed-uses (retail, commercial, office and residential) development in close proximity to the station. Provide a reconfigured bus exchange at the terminus station including an east-west bus mall connecting Buswell Street and No. 3 Road. If CLCO proceeds with the 'Base Case' scenario for the terminus station then construct a high-density mixed-use (retail, commercial and/or office) development at the Richmond-Brighthouse station on terminus station residual land for opening day of the Canada Line. At a minimum ensure retail use(s) are incorporated into this transit station for opening day.
Other Related	<ul style="list-style-type: none"> Provide a station attendant during the first 5 years of operation to ensure a safer station environment during the introduction phase of the Canada Line.


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Attachments from Canada Line regarding the Aberdeen, Lansdowne and Richmond-Brighthouse Stations