

Attachment 10 Engineering Servicing Memo



Memorandum

Date: January 19, 2024

To: Wendee Lang, Development Planner

From: Christian Medurecan, Engineering Technologist

File: PRJ-010735 Reference No: DRF00323

Subject: OFF-SITE WORKS AND SERVICES REQUIREMENTS FOR 145 – 209 E. COLUMBIA STREET – REZ00240

We are responding to the application as referenced above which was resubmitted for review on March 23, 2023 for the proposed Mixed-Use Development.

Please be advised that staff have completed a review of the project and identified the following details that will need to be addressed as part of the application:

- 1. The applicant shall, at a minimum, be aware of, or familiarize themselves with the following documents and plans:
 - Subdivision and Development Control Bylaw
 - Tree Protection and Regulation Bylaw
 - Erosion and Sediment Control Bylaw
 - Zoning Bylaw
 - Master Transportation Plan (MTP)
 - Active Transportation Network Plan (ATNP)
 - Official Community Plan (OCP)
- 2. The applicant shall address all Transportation items identified in the Transportation Memorandum date December 1, 2023.
- 3. On-site storm sewer water management will be required to limit the post development flow to pre-development flow. The on-site works shall be designed in accordance with the City's Integrated Storm Water Management Plan.
- 4. All site drainage works shall be designed and constructed in accordance with the City's Erosion and Sediment Control Bylaw 7754, 2016. The Developer shall retain a qualified professional to ensure that the design and implementation of the erosion and sediment controls meet the requirements outlined in the Bylaw.
- 5. All existing trees are to be protected in accordance with the City's Tree protection and Regulation Bylaw No. 7799, 2016 and any trees identified for removal will need to have a permit approved and in place prior to removal.

- 6. Provision of any road dedications and statutory rights of way that may be required along all frontages to meet the capacity, functionality and design objectives for all modes of travel of the City including access to the proposed development. At a minimum, the City will be requiring, but not necessarily limited to the following:
 - Dedication along the Lane frontage (approximately 0.70m wide)
- 7. At the time of Demolition Permit issuance, the applicant will be required to make a payment of a flat fee in the amount of **\$6,170.00** plus GST for capping at the main, by the City, of all existing sewer and water service connection not for reuse.

OFF-SITE WORKS AND SERVICES

8. Under the City of New Westminster Subdivision and Development Control Bylaw No. 7142, 2007 and amendments thereto, the Developer for the above noted property is required to enter into a Works and Services Agreement with the City addressing all off-site servicing requirements. The off-site services will be identified during the detailed development review and will be required prior to issuance of a building permit. These works could include but may not be limited to the following generally described servicing:

ROADWORKS

The subject site is bounded by E Columbia Street to the east, Alberta Street to the north, Strand Avenue to the south and a Lane to the west. According to the City's Master Transportation Plan (MTP), E Columbia Street is classified as a City collector road / Great Street, Alberta Street and Strand Avenue as local roads and the Lane as a laneway.

EAST COLUMBIA STREET – GREAT STREET

- 8.1. Reconstruction of the E Columbia Street frontage complete with new sidewalk, curb and gutter, trees, hard surface landscaping (including drainage and irrigation), street furniture, traffic calming, street lighting, bicycle lanes and underground electrical and telecommunication servicing. Improvements to the frontage and public realm/sidewalk on E Columbia Street must align with the Great Streets Policy 4A of the MTP. E Columbia Street shall be reconstructed up to road centerline based on the following minimums:
 - Mill and overlay requirements shall be based on a post construction assessment of the existing road surface
 - 2.0m wide unobstructed sidewalk
 - 1.2m wide hardscaped boulevard with trees
 - 1.5m wide bicycle lane
 - 0.7m wide separation between the bike and parking lane

- 2.4m wide parking lane
- 3.0m wide left turn lane onto Alberta Street
- 3.5m wide southbound travel
- Left turn restrictions onto Strand Avenue

ALBERTA STREET

- 8.2. Reconstruction of the Alberta Street frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street lighting, underground electrical and telecommunication servicing. Alberta Street shall be reconstructed in its entirety based on the following minimums:
 - Mill and overlay requirements shall be based on a post construction assessment of the existing road surface
 - 1.8m wide unobstructed sidewalk
 - 6.0m wide pavement width
 - Curb bulges on both sides of Alberta Street creating a 3.2m wide 'pinch-point' with speed bump/table just west of the subject property frontage
 - Parking restrictions on both sides of Alberta Street from the 'pinch-point' to E Columbia Street
 - Speed hump at the midway point of Alberta Street between Richmond Street and E Columbia Street

Note: A full design of Alberta Street will be required. The City's final decision on construction will be based on the certified cost estimate provided by the Developer's Engineer of Record reflecting the incremental cost of time and materials to construct the north half (excluding the north bump-out). The Developer will be reimbursed for the north half upon completion of the works.

STRAND AVENUE

- 8.3. Reconstruction of the Strand Avenue frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street lighting, underground electrical and telecommunication servicing. Strand Avenue shall be reconstructed up to road centerline based on the following minimums:
 - Mill and overlay requirements shall be based on a post construction assessment of the existing road surface
 - 1.8m wide unobstructed sidewalk
 - Left turn restrictions onto E Columbia Street

MINER STREET & LANE

- 8.4. Reconstruction of the intersection at Miner Street and Alberta Street, as well as, the intersection of Miner Street and the Lane to accommodate truck turning movements required to access/egress the subject property. Details on the extent of the road improvements will be determined upon receipt of a viable design proposal from the Developer's Design Professional(s). Improvements may include, but are not necessarily limited to:
 - Road widening and/or reconstruction
 - Milling and paving of existing asphalt surfaces
 - Installation of new curb and gutters
 - Sidewalk and wheelchair letdown realignment
 - Hydrant relocation

LANE

- 8.5. Reconstruction of the Lane frontage complete with rollover curb and gutter. The Lane shall be reconstructed in its entirety based on the following minimums:
 - Reconstruction of the existing road structure shall be based on the analysis of a Benkelman Beam Test, or other approved method, carried out on the existing road which is to be upgraded. If the test results are proven satisfactory, the minimum requirement shall be a mill and overlay
 - Rollover curb and gutter shall be installed along the site frontage only

VEHICULAR SITE ACCESS AND LOADING

- 8.6. All pick-up / drop-off and loading / unloading functions for both the commercial and residential components shall occur on-site
- 8.7. All access requirements shall meet City Bylaw specifications

SOLID WASTE MANAGEMENT

8.8. Garbage and recycling operations functions shall be from the Lane.

TRANSIT STOP

8.9. Upgrading of the existing transit stop on E Columbia Street as per the Bus Infrastructure Design Guidelines complete with a standard transit shelter, clear boarding area, bench or additional seating and associated amenities. Relocation of the existing transit stop location will require confirmation from the Coast Mountain

Bus Company Ltd. The transit stop shall be reconstructed based on the following minimums:

- 3.2m x 12.2m bus stop
- 1.5m setback from the curb for accessibility and circulation for the shelter
- 2.0m additional clearance around the proposed bus stop to accommodate longer or multiple transit vehicles.

UNDERGROUND UTILITIES

WATER

8.10. Provision of an adequate single water service connection for the development satisfying the fire and domestic demands complete with a suitable water meter with backflow protection. Size and location to be determined by the Developer's consulting engineer and approved by the City.

SANITARY

8.11. Provision of an adequate sanitary sewer service connection for the development complete with an inspection chamber or manhole at property line. Size and location to be determined by the Developer's consulting engineer and approved by the City.

STORM

8.12. Provision of an adequate storm sewer service connection for the development complete with a manhole or inspection chamber at property line. Size and location to be determined by the Developer's consulting engineer and approved by the City.

ELECTRICAL, VISTA SWITCH, TELECOMMUNICATION AND GAS

- 8.13. All costs associated with the design and conversion of the existing overhead electrical and telecommunication utilities on the roadways adjacent to the site with an underground system for the development. Please contact Marc Rutishauser in the City's Electrical Operations Department at (604) 527-4533 for electrical and City communication servicing details. Contact Telus and Shaw directly for telecommunication servicing details.
- 8.14. The installation of a Vista Switch may be required as part of the development. Please contact March Rutishauser in the City's Electrical Operation Department at (604) 527-4533 for Vista Switch requirement details.

- 8.15. City communication conduit shall be provided in accordance with the City's Intelligent City Design requirements as it pertains to the Fiber Optic Network and Street Lighting Design. For further information, please contact Phil Kotyk, Fiber Network Operations Manager at (604) 527-4641.
- 8.16. All costs associated with the design and construction of gas servicing for the development. Please contact Fortis BC directly for servicing details.
- 8.17. All third party utility construction drawings shall include the Civil Design Drawings base plan and must be submitted to the City's Engineering Services Division for review and approval. The Developer's consulting engineer shall ensure that the design of all third party utilities, including New Westminster Electrical, have been coordinated with the Civil Design Drawings. Coordination of the drawings must be completed prior to the issuance of the Works and Services Agreement.

STREET LIGHTING

8.18. Roadway lighting for all street frontages shall be provided for safety and to produce accurate and comfortable night time visibility using energy efficient lighting such as LED. Design of roadway lighting shall be in accordance with the City of New Westminster Design Criteria Section 6 and the MMCD (Platinum Edition) Design Guidelines Section 6.0 Roadway Lighting (for LED).

BOULEVARD TREES

- 8.19. The boulevards shall be prepared for Boulevard and Street Trees complete with a 900mm New Westminster Planting Blend or approved equal growing medium for the full width of the boulevard, including drainage and irrigation. Boulevard landscaping and irrigation shall be provided in suitable locations to the satisfaction of the Parks Department. For further information, please contact Sylvain Martel, Senior Arborist at (604) 527-4625.
- 9. The preparation of detailed design drawings by a qualified Professional Engineer for the offsite works and services to the satisfaction of the City and in accordance with the City's Design Criteria, Supplemental Specification and Detail Drawings, and Master Municipal Construction Documents. The engineering design drawings for the proposed works may include the following plans:
 - Road works
 - Storm drainage collection facilities
 - Sanitary sewer collection facilities
 - Water distribution facilities
 - Street lighting
 - Boulevard preparation for tree, irrigation and drainage

- Topographical and lot grading plans
- Erosion and sediment control plans
- Electrical power supply and distribution facilities
- Telecommunication Servicing Plans
- Gas facilities
- 10. Under the Works and Services Agreement with the City, the developer must address the following requirements:
 - 10.1. Employment and retention of a Professional Engineer to prepare and seal the design drawings; to provide a Resident Engineer for inspection of all design and construction related problems; to prepare, certify and seal "As Constructed" drawings, including landscape & irrigation drawings and to certify that all materials supplied and works performed conform to City standards as contained within the Subdivision and Development Control Bylaw and/or the Master Municipal Construction Documents;
 - 10.2. The developer will be required to post a security deposit for 120% of the estimated construction cost of the off-site servicing works including GST. The security deposit shall be in the form of an Irrevocable Letter of Credit or cash deposit. The security deposit will be reduced once the off-site works are completed to the satisfaction of the City less a 10% holdback. Upon issuance of a Certificate of Completion by the City, the 10% security deposit will be held for a two year maintenance period;
- 11. The following payments and deposits shall be paid at the time of execution of the Works and Services Agreement:
 - 11.1. Payment to cover the cost of preparing the Works and Services Agreement, currently **\$2,067.00** plus tax;
 - 11.2. Payment of **four percent (4%)** of the estimated construction costs to cover the engineering and administrative costs incurred by the City;
 - 11.3. Under the Works and Services Agreement the developer will be required to pay a deposit of **\$5,000.00** to cover any charges for emergency works and signage.
 - 11.4. Payment of a fee **(\$852.68 plus Tax per Tree)** towards the cost to the City for selecting, purchasing, installing, establishing and maintaining Street Trees.
 - 11.5. Signing of a latecomer waiver clause.
- 12. Submission of any easement s or right of way documents required by the City in relation to the proposed development.
- 13. The following charges shall be paid at the time of Building Permit issuance:

- 13.1. Payment of applicable Greater Vancouver Sewerage & Drainage District (GVS&DD) Development Cost Charges in accordance with Bylaw 187, 1996 and amendments.
- 13.2. Payment of applicable New Westminster Development Cost Charges in accordance with Bylaw 7311, 2009 and amendments.
- 13.3. Payment of applicable School Site Acquisition charges in accordance with School District #40 Capital Bylaw No. 2008-1.
- 13.4. Payment of applicable Regional Transportation Development Cost Charges in accordance with Bylaw No. 124-2018.
- 13.5. Payment of applicable Greater Vancouver Water District Development Cost Charges in accordance with Bylaw 257, 2022 and amendments.

Should you have any further questions or concerns please do not hesitate to contact me directly at 604-636-4463.

Thank you,

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Christian Medurecan, AScT, CPWI-2, BC-CESCL Engineering Technologist

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