

Attachment 7

Engineering Servicing Memo

Memorandum

To: Amanda Mackaay, Planner

Date: May 26, 2022

From: Christian Medurecan, Engineering Technologist

File: PRJ-008376

Reference: DRF00275

Subject: OFF-SITE WORKS AND SERVICES REQUIREMENTS FOR 114 & 118 SPRICE STREET –
REZ00220, DVP00697, DP000932

We are responding to the application as referenced above dated November 9, 2021 for the proposed 10 Lot Subdivision 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 this 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
 - Street and Traffic Bylaw
 - Master Transportation Plan (MTP)
 - Official Community Plan (OCP)
2. Modeling of the sanitary main systems is required to confirm if the available capacity is sufficient for the proposed development. In order to complete a detailed review of the project, your engineering consultant will need to submit a completed 'Utilities Modeling Analysis Application Form' and pay a modeling fee in the amount of **\$2,787.75**
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. The property is located within a designated floodplain area and no areas suitable for habitation may be constructed with the bottom of a wooden floor system or top of concrete pad elevation lower than 3.53 meters Geodetic Survey of Canada Datum the "Flood Construction Level" (FCL). Prior to building permit approval you will need to obtain a soil deposit permit and complete placement of fill to address the FCL. We will require a letter from a qualified Profession Geotechnical Engineer certifying that the fill placement has been completed and the lots can be safely used of the intended use. There may be additional requirements identified at the time of development permit and building permit application stages and you should discuss any plans for new construction with the Development Services Department.
7. A Geotechnical Engineering Report is required from a qualified Geotechnical Engineer to satisfy potential differential settlement problems for all new roadworks, sidewalks, underground utilities and other required off-site servicing improvements. The report shall also address any anticipated short and long term settlement and potential differential settlement issues. At the completion of the site preparation your Geotechnical Engineer will be required to certify the off-site works and services can be built within the tolerances outlined in the Master Municipal Specifications and the Subdivision and Development Control Bylaw for the designated life of the infrastructure.
8. 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:
 - 6.0m wide dedication towards a north/south Lane
 - 3.0m wide dedication towards one-half of an east/west Lane
 - 3.0m x 3.m corner truncation where the east/west Lane meets Howes Street
 - 3.0m x 3.0m corner truncation where the east/west Lane meets Spruce Street
 - 3.0m x 3.0m corner truncation on both sides of the north/south Lane where it meets the east/west Lane
9. At the time of Demolition Permit issuance, the applicant will be required to make a payment of a flat fee in the amount of **\$5,850.00 (*per ex. lot*)** plus GST for capping at the main, by the City, of all existing sewer and water service connection not for reuse.

Provided you are successful in obtaining Council's approval, the Engineering Department requirements under the Subdivision and Development Control Bylaw include but are not necessarily limited to the following:

10. Submission of an application for subdivision for the additional Lot accompanied by a BC Land surveyor's Proposed Subdivision and Topographic Survey Plan. The Subdivision

Application Form can be found on the City's website under 'Subdivision Process' or at the Engineering Front Counter at City Hall.

11. Provision of a No-Build Covenant on Lot One. This covenant shall remain in place until the south half of the east/west Lane has been constructed as part of future developments.
12. Provision of a 3.0m wide Statutory Right of Way for Public Access over Lot One to accommodate the temporary 3.0m wide north half of the Lane.
13. Payment of a **\$100,000.00 (\$10,000.00 each)** deposit towards the estimated cost of installation, by the City, of ten (10) new 19mm water service connections, five (5) on Howes Street and five (5) on Spruce Street, complete with Brooks boxes and meter setters at property line to service the proposed new Lots.
14. Payment of a **\$150,000.00 (\$15,000.00 each)** deposit towards the estimated cost of installation, by the City, of ten (10) new 150mm sanitary sewer service connections in the North/South Lane, completed with inspection chambers at property line to service Lots 1 – 10.
15. Payment of a **\$125,000.00 (\$25,000.00 each)** deposit towards the estimated cost of installation, by the City, of five (5) new 200mm storm sewer service connection on Howes Street, complete with inspection chambers at property line to service Lots 1 – 5.

OFF-SITE WORKS AND SERVICES

16. 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 Howes Street to the west and Spruce Street to the east. According to the City's Master Transportation Plan (MTP), Howes Street and Spruce Street are classified as Local Roads.

HOWES STREET

- 16.1. Construction of the Howes Street frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street lighting,

underground electrical and telecommunication servicing. Howes Street shall be constructed up to road centerline 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
- 1.8m wide unobstructed sidewalk
- 2.0m wide boulevard
- 8.5m wide total pavement width

SPRICE STREET

- 16.2. Reconstruction of the Sprice Street frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street lighting, underground electrical and telecommunication servicing. Sprice Street shall be reconstructed up to road centerline 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
- 1.8m wide unobstructed sidewalk
- 2.0m wide boulevard
- 4.25m wide pavement width up to centerline

NORTH/SOUTH LANE

- 16.3. Construction of a full width (6.0m wide) North/South Lane, complete with rollover curb and gutter, 5.0m wide pavement width and full road structure.

EAST/WEST LANE

- 16.4. Construction of a half width (3.0m wide) East/West Lane, complete with rollover curb and gutter along the development frontage, Lane letdowns with level sidewalk crossings at each end and 2.5m wide pavement width and full road structure.

TEMPORARY EAST/WEST LANE THROUGH LOT 1

- 16.5. Construction of a 3.0m wide temporary East/West Lane, complete with extruded asphalt curb along the north edge, south edge abutting the back of curb of the Ultimate East/West Lane and full road structure

VEHICULAR SITE ACCESS

- 16.6. All proposed vehicular access shall be from the North/South Lane via the East/West Lane.

GARBAGE AND RECYCLING

- 16.7. Garbage and recycling collection shall occur from Howes Street and Spruce Street until the full width of the east/west Lane is constructed as part of future developments.

UNDERGROUND UTILITIES

SANITARY

- 16.8. Size and location to be determined by the developer's consulting engineer and approved by the City. Existing infrastructure which is undersized or not capable of handling the post development flows shall be upgraded at the developer's expense.

ELECTRICAL, TELECOMMUNICATION AND GAS

- 16.9. 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.
- 16.10. 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) 524-4641.
- 16.11. All costs associated with the design and construction of gas servicing for the development. Please contact Fortis BC directly for servicing details.
- 16.12. 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

- 16.13. 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

- 16.14. The boulevards shall be prepared for Boulevard 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. If adequate soil volume is not achievable, provisions shall be made for soil cell technology or any other approved method to achieve the specified soil volume. For further information, please contact Sylvain Martel, Senior Arborist at (604) 527-4625 or smartel@newwestcity.ca.
17. The preparation of detailed design drawings by a qualified Professional Engineer for the off-site 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
18. Under the Works and Services Agreement with the City, the developer must address the following requirements:
- 18.1. 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;

- 18.2. 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;
19. The following payments and deposits shall be paid at the time of execution of the Works and Services Agreement:
 - 19.1. Payment to cover the cost of preparing the Works and Services Agreement, currently **\$1,960.00** plus tax;
 - 19.2. Payment of **four percent (4%)** of the estimated construction costs to cover the engineering and administrative costs incurred by the City;
 - 19.3. 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.
 - 19.4. Payment of a deposit (**\$650.00 plus Tax per Tree**) towards the cost to the City for selecting, purchasing, installing, establishing and maintaining Boulevard Trees.
 - 19.5. Payment of **Five Percent (5%)** of the market value of the land in lieu of dedication of land to the City as Park Land in accordance with Section 941 of the Local Government Act.
 - 19.6. Signing of a latecomer waiver clause.
20. Submission of any easements or right of way documents required by the City in relation to the proposed development.
21. The following charges shall be paid at the time of Building Permit issuance:
 - 21.1. Payment of applicable Greater Vancouver Sewerage & Drainage District (GVS&DD) Development Cost Charges in accordance with Bylaw 187, 1996 and amendments.

21.2. Payment of applicable New Westminster Development Cost Charges in accordance with Bylaw 7311, 2009 and amendments.

21.3. Payment of applicable School Site Acquisition charges in accordance with School District #40 Capital Bylaw No. 2008-1.

21.4. Payment of applicable Regional Transportation Development Cost Charges in accordance with Bylaw No. 124-2018.

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

Thank you,



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

cc L. Leblanc, Director of Engineering Services
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