

Appendix G

Engineering Servicing Memo

Memorandum

To: Amanda Mackaay, Development Planner

Date: November 2, 2022

From: Christian Medurecan, Engineering Technologist

File: PRJ-010020

Reference: DRF00233

Subject: OFF-SITE WORKS AND SERVICES REQUIREMENTS FOR 501 FOURTH AVENUE – DP000910, HER00830, OCP00036, LSE00123.

We are responding to the application as referenced above dated July 12, 2022 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 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. The applicant shall address all Transportation items identified in the Transportation Memorandum dated November 1, 2022.
3. Modeling of the Sanitary, Storm and Water 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 **\$7,899.15**.
4. Completion of the Land Sale of the Lane separating 501 Fourth Avenue and 408 Fifth Street.
5. Consolidation of the lands, 501 Fourth Avenue, 408 Fifth Street and the Lane separating the two properties to form on (1) single parcel of land.
6. Provision of encroachment agreements for the monument, fenced play space, canopy above sidewalk and church stairs.

7. 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.
8. 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.
9. 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.
10. 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:
 - Statutory Right of Way along the Lane frontage (approximately 0.5m wide)

OFF-SITE WORKS AND SERVICES

11. 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 Fifth Street to the east, Fourth Avenue to the south and a Lane to the west. According to the City's Mater Transportation Plan (MTP), Fourth Avenue and Fifth Street are classified as local roads.

FIFTH STREET

- 11.1. Reconstruction of the Fifth Street frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street lighting, underground electrical and telecommunication servicing. Fifth 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

- 2.0m wide unobstructed sidewalk
- Front and back landscaped boulevards
- Provision of a pedestrian refuge area on the north side of the intersection pedestrian crossing

FOURTH AVENUE

11.2. Reconstruction of the Fourth Avenue frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street lighting, underground electrical and telecommunication servicing. Fourth Avenue 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
- 2.0m wide unobstructed sidewalk
- 2.0m wide landscaped front boulevard

LANE

11.3. Reconstruction of the Lane in its entirety complete with rollover curb and gutter and underground electrical and telecommunication servicing. The Lane shall be reconstructed 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
- 5.0m wide pavement width with rollover curb and gutter on both sides

VEHICLE SITE ACCESS AND CIRCULATION

11.4. All proposed vehicular access for the development shall be from the Lane.

UNDERGROUND UTILITIES

WATER

11.5. 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. Existing infrastructure which is undersized or not capable of handling the post development flows shall be upgraded at the developer's expense.

SANITARY

- 11.6. Provision of an adequate single sanitary 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. Existing infrastructure which is undersized or not capable of handling the pose development flows shall be upgraded at the developer's expense.

STORM

- 11.7. Provision of an adequate single 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. 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

- 11.8. 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.
- 11.9. 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.
- 11.10. All costs associated with the design and construction of gas servicing for the development. Please contact Fortis BC directly for servicing details.
- 11.11. 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

- 11.12. 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

- 11.13. 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.
12. 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
13. Under the Works and Services Agreement with the City, the developer must address the following requirements:
- 13.1. 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;

- 13.2. 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;
14. The following payments and deposits shall be paid at the time of execution of the Works and Services Agreement:
 - 14.1. Payment to cover the cost of preparing the Works and Services Agreement, currently **\$1,960.00** plus tax;
 - 14.2. Payment of **four percent (4%)** of the estimated construction costs to cover the engineering and administrative costs incurred by the City;
 - 14.3. 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.
 - 14.4. 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.
 - 14.5. Signing of a latecomer waiver clause.
 15. Submission of any easements or right of way documents required by the City in relation to the proposed development.
 16. The following charges shall be paid at the time of Building Permit issuance:
 - 16.1. Payment of applicable Greater Vancouver Sewerage & Drainage District (GVS&DD) Development Cost Charges in accordance with Bylaw 187, 1996 and amendments.
 - 16.2. Payment of applicable New Westminster Development Cost Charges in accordance with Bylaw 7311, 2009 and amendments.
 - 16.3. Payment of applicable School Site Acquisition charges in accordance with School District #40 Capital Bylaw No. 2008-1.
 - 16.4. 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
 - K. Agyare-Manu, Senior Manager Engineering Services
 - C. Dobrescu, Utilities and Special Projects Engineer
 - G. Otieno, Infrastructure Engineer
 - M. Anderson, Manager, Transportation
 - G. Hermanson, Transportation Planner
 - E. Mashig, Manager, Horticulture and Parks and Open Space Planning
 - M. Rutishauser, Acting Manager, Elec. Engineering, Design & Planning, Electric Utility
 - P. Kotyk, Fiber Networks Operations Manager
 - S. Trachta, Manager, Inspections, Development Services – Building & Plumbing