

Attachment 7
Engineering Servicing
Memo

Memorandum

Date: May 27, 2022

To: Emilie K Adin, Director, Climate Action, Planning and Development

From: Christian Medurecan, Engineering Technologist

File: PRJ-007694

Reference No: DRF00140

Subject: OFF-SITE WORKS AND SERVICES (REVISED) REQUIREMENTS FOR 616 / 640 SIXTH STREET – DPU00065/REZ00147

We are responding to the application as referenced above which was resubmitted for review on April 1, 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 the application:

1. **Prior to First and Second Reading, the applicant shall address all onsite transportation matters which could have impacts to the adjacent road network(s) (i.e. Parking maneuvering aisles, Service vehicles into loading areas, Solid waste and recycling areas, etc.)**
2. 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)
 - Trail and Greenway Master Plan
 - Official Community Plan (OCP)
3. Consolidation of the lands, 616 and 640 Sixth Street to create one (1) single parcel.
4. 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.
5. 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.

6. 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.
7. 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 Princess Street frontage for 'Public Access' (approximately 1.57m wide)
 - Statutory right of way along the Seventh Avenue frontage for 'Public Access' (approximately 0.88m wide)
 - Statutory right of way over the Plaza Area for 'Public Access and Gathering'
 - 3.0m x 3.0m truncation at the corner of Seventh Avenue and Sixth Street
 - 3.0m x 3.0m truncation at the corner of Princess Street and Sixth Street
8. 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** 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

9. 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 Seventh Avenue to the north, Sixth Street to the east and Princess Street to the south. According to the City's Mater Transportation Plan (MTP), Sixth Street is classified as a collector road / great street, Seventh Avenue as a local road / rotary crosstown greenway and Princess Street as local Road.

SEVENTH AVENUE / ROTARY CROSS-TOWN GREENWAY

- 9.1. Reconstruction of the Seventh Avenue frontage complete with new sidewalk, curb and gutter, trees, hard surface landscaping (including drainage and irrigation), street furniture, traffic calming, street lighting, underground electrical and telecommunication servicing. Seventh Avenue 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
- 2.3m wide unobstructed sidewalk on the north side
- 2.0m wide landscaped boulevard with trees on the north side
- 2.0m wide bicycle lane on the north side
- 0.6m wide separation between the bike and travel lane on the north side
- 3.0m wide travel lanes in each direction
- 2.4m wide loading bay on the south side
- 0.9m wide landscaped boulevard on the south side
- 2.0m wide bicycle lane on the south side
- 2.5m wide sidewalk on the south side

The above mentioned works on Seventh Avenue / Rotary Cross-Town Greenway will be designed and constructed by the City. The developer will be required to reimburse the City for this work.

PRINCESS STREET

- 9.2. Reconstruction of the Princess Street frontage complete with new sidewalk, curb and gutter, trees, hard surface landscaping (including drainage and irrigation), street lighting, underground electrical and telecommunication servicing. Princess 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
 - 2.0m wide unobstructed sidewalk
 - 1.2m wide hard surface boulevard with tree pits

SIXTH STREET

- 9.3. Reconstruction of the Sixth Street frontage complete with new sidewalk, curb and gutter, trees, hard surface landscaping (including drainage and irrigation), street furniture, street lighting, underground electrical and telecommunication servicing. Improvements to the frontage and public realm/sidewalk on Sixth Street must align with the Great Streets Policy 4A of the MTP. Sixth 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 of the existing road which is to be upgraded. If the test results are proven satisfactory, the minimum requirement shall be a mill and overlay

- 3.0m wide unobstructed sidewalk
- 2.0m wide hard surface boulevard with tree pits
- 2.5m wide curbside flex lane
- 3.5m wide travel lanes

VEHICULAR SITE ACCESS

- 9.4. All proposed vehicular access for the development shall be from Princess Street
- 9.5. All pick-up / drop-off and loading / unloading functions for both the commercial and residential components shall occur on-site
- 9.6. All access requirements shall meet City Bylaw specifications

LOADING AND WASTE MANAGEMENT

- 9.7. Garbage and recycling operations functions shall occur on-site. Staging of containers on Princess Street or the sidewalk is not permitted.
- 9.8. Loading and servicing operations shall not impact Princess Street or the reliance on Seventh Avenue or Sixth Street for staging.

TRANSIT STOP

- 9.9. Upgrading of the existing transit stop on Sixth 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

- 9.10. Upgrading of the existing 150mm water main along Princess Street to a 250mm water main to accommodate the additional fire and domestic demands introduced by this development.

- 9.11. 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

- 9.12. Upgrading of the existing 200mm combined vitrified clay sewer main to 250mm along Eighth Street between Seventh Avenue and Princess Street to accommodate the additional capacity that will be introduced into the system by this development.
- 9.13. 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

- 9.14. 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

- 9.15. 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.
- 9.16. The installation of a Vista Switch will be required as part of this development. The Vista Switch shall be installed, by Electrical Operations, within the dedicated roadway along the Seventh Avenue frontage. The exact location shall be determined at the detailed design review stage of the Off-Site Work and Service.
- 9.17. 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.
- 9.18. All costs associated with the design and construction of gas servicing for the development. Please contact Fortis BC directly for servicing details.
- 9.19. 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

- 9.20. 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

- 9.21. The boulevards shall be prepared for 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. 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.
10. 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

11. Under the Works and Services Agreement with the City, the developer must address the following requirements:

- 11.1. 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;
 - 11.2. 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;
12. The following payments and deposits shall be paid at the time of execution of the Works and Services Agreement:
- 12.1. Payment to cover the cost of preparing the Works and Services Agreement, currently **\$1,960.00** plus tax;
 - 12.2. Payment of **four percent (4%)** of the estimated construction costs to cover the engineering and administrative costs incurred by the City;
 - 12.3. 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.
 - 12.4. Payment of a fee (**\$650.00 plus Tax per Tree**) towards the cost to the City for selecting, purchasing, installing, establishing and maintaining Street Trees.
 - 12.5. Signing of a latecomer waiver clause.
13. Submission of any easement s or right of way documents required by the City in relation to the proposed development.
14. The following charges shall be paid at the time of Building Permit issuance:
- 14.1. Payment of applicable Greater Vancouver Sewerage & Drainage District (GVS&DD) Development Cost Charges in accordance with Bylaw 187, 1996 and amendments.
 - 14.2. Payment of applicable New Westminster Development Cost Charges in accordance with Bylaw 7311, 2009 and amendments.
 - 14.3. Payment of applicable School Site Acquisition charges in accordance with School District #40 Capital Bylaw No. 2008-1.

14.4. 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
 E. Wat, Manager, Infrastructure Planning
 C. Dobrescu, Utilities and Special Projects Engineer
 G. Otieno, Infrastructure Engineer
 M. Anderson, Acting Manager, Transportation
 E. Tiffany, Senior 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
 M. Watson, Acting Supervisor of Development Planning