



Attachment #12
Engineering Servicing Memo

Memorandum

To: Mike Watson, Senior Planner

Date: January 30, 2023

From: Hardeep Maghera, Senior Engineering Technologist

File: PRJ-007593

Ref: DRF00127

Subject: OFF-SITE WORKS AND SERVICES REQUIREMENTS FOR 810 AGNES STREET – REZ00155
/ SDP00216.

We are responding to the application as referenced above for the multi-family development at 810 Agnes Street.

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
 - Master Transportation Plan
2. Onsite storm sewer water management will be required to limit the post development flow to pre-development flow. The on-site works shall be designed to incorporate green infrastructure in accordance with the City's Integrated Storm Water Management Plan.
3. 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.
4. 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.
5. Payment of a flat fee in the amount of \$5,500.00 plus GST for capping at the main, by the City, of all existing sewer and water service connections not for reuse.
6. Dedication of a 3 m x 3 m corner truncations at both Agnes Street and Blackie Street, as well as Blackie Street and Victoria. We are willing to consider a SROW at the corner of Blackie Street and Victoria Street to ensure adequate sight-lines are maintained, rather than dedications.

OFF-SITE WORKS AND SERVICES

7. 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:

ROAD WORKS

The subject site is bounded by Agnes Street to the north, Blackie Street to the east and Victoria Street to the south. To the west of the property is a City owned property with an existing dog park which is to be developed into a park. According to the City's Master Transportation Plan (MTP), Agnes Street and Victoria Street are classified as a local roads.

Agnes Street

- 7.1. Reconstruction of the Agnes Street frontage up to the centre of the right of way to a local road standard complete with new pavement, pavement structure, curb and gutter, concrete sidewalks, street lighting, boulevard trees, drainage and irrigation with 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.
 - Minimum 2.5m wide sidewalk clear of obstructions, separated from the curb with a 2.0m boulevard, street lighting, boulevard trees, drainage and irrigation.
 - A bump out is required along the entire frontage of the proposed park and designed to accommodate pedestrian crossing. A pedestrian letdown is required to line up with the main exit of the proposed park and a bump out complete with pedestrian letdown is require on the opposing side of Agnes Street.

Blackie Street

- 7.2. Reconstruction of the Blackie Street frontage up to road centre to a local road standard complete with new pavement, pavement structure, curb and gutter, sidewalks, street lighting, boulevard trees, drainage and irrigation with 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.

- Minimum 2.0m wide sidewalk clear of obstructions with a 2.0m boulevard complete with trees.

Victoria Street

- 7.3. Reconstruction of the full width of the existing road structure shall be carried out and designed generally in accordance with the plans submitted by HAPA on September 25, 2018 pending further review and approval of materials and plantings, civil review, coordination with the development at 823 Carnarvon Street to the satisfaction of the City. Reconstruction shall include at a minimum 6.0m wide lane complete with new pavement, pavement structure, sidewalk, curb and gutter, street lighting, boulevard trees, drainage and irrigation with 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.
 - Minimum 1.8m wide sidewalk clear of obstructions (2.0m preferred) with a boulevard complete with trees.

UNDERGROUND UTILITIES

Water

- 7.4. Pipe ET2083 will need to be upgraded from 150 mm to 200 mm (total length = 102.5 m). See attached Utility Modeling Results.
- 7.5. 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.

Sanitary

- 7.6. 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.

Storm

- 7.7. Separate the existing combined sewer on Victoria Street (between Blackie Street and the lane) by installing a new storm sewer (90m length) and connecting to the existing storm sewer in the lane. See attached Utility Modeling Results.

- 7.8. Construction of adequately sized storm sewer on Victoria Street to Carnarvon Street to service the development complete with single service connection with either a manhole or an inspection chamber at property line. . Size and location to be determined by the Developer's consulting engineer and approved by the City.

Site Entrance

- 7.9. Provision of on-site roadway lighting illuminating the site entrance to produce accurate and comfortable night-time visibility. Design of the 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).
- 7.10. All vehicle access shall be from Victoria Street and letdowns shall meet MMCD Standards.

Loading and Waste Management

- 7.11. Loading bay that is being proposed on-site is acceptable. Dimensions and location will be further evaluated through the detailed design phase.
- 7.12. Recycling and garbage collection shall be accommodated on-site. Storage of recycling or garbage bins within the City roadway are not acceptable.

Electrical and Telecommunication

- 7.13. All costs associated with the design and replacement of the existing overhead electrical and telecommunication utilities on the roadways adjacent to the site with an underground system with servicing for the development. It is recommended that any kiosks be placed in an indented SROW to avoid conflicts with the proposed sidewalks. For further information please contact Marc Rutishauser in the City Electrical Operations Department at (604) 527-4533 for electrical servicing details. Contact Telus or Shaw directly for telecommunication details.
- 7.14. 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.
- 7.15. All costs associated with the design and construction of gas servicing for the development. Please contact Fortis BC directly for servicing details.

- 7.16. 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 have been coordinated with the Civil Design Drawings. Coordination of the drawings must be completed prior to issuance of the Works and Services Agreement.

STREET LIGHTING

- 7.17. Roadway lighting for the frontages shall be provided and/or upgraded 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

- 7.18. 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, provision 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) 524-4625 or smartel@newwestcity.ca.
- 7.19. Boulevard Trees will be selected and purchased by the Parks Department. The developer shall be responsible for pick-up and or delivery of the trees as well as the installation which is to occur under City supervision.
8. 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 trees, irrigation and drainage
 - Topographical and lot grading plans
 - Erosion and sediment control plans
 - Electrical power supply and distribution facilities
 - Telecommunication servicing plans
 - Gas facilities

15. Under the Works and Services Agreement with the City, the Developer must address the following requirements:

- 15.1. 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.
- 15.2. 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.

The following payments and deposits shall be paid at the time of execution of the Works and Services Agreement:

- 15.3. Payment to cover the cost of preparing the Works and Services Agreement, currently **\$1,830.00** plus tax;
 - 15.4. Payment of **four percent** (4%) of the estimated construction costs to cover engineering and administrative costs incurred by the City;
 - 15.5. Under the Works and Services Agreement the Developer will be required to pay a **\$5,000.00** deposit to cover any charges for emergency works and signage.
16. Signing of a latecomer waiver clause.
17. Submission of any easement or right of way documents required by the City in relation to the proposed development.
18. The following charges shall be paid at the time of Building Permit Issuance:
- 18.1. Payment of applicable Greater Vancouver Sewerage & Drainage District (GVS&DD) Development Cost Charges in accordance with Bylaw 187, 1996 and amendments.
 - 18.2. Payment of applicable New Westminster Development Cost Charges in accordance with current Bylaws and amendments.

18.3. Payment of applicable Regional Transportation Development Cost Charges in accordance with current Bylaws.

Should you have any further questions or concerns please do not hesitate to contact me directly at (604) 527-4545.

Thank you,



Hardeep Maghera, A.Sc.T, BC-CESCL
Senior Engineering Technologist

cc L. Leblanc, Director of Engineering Services
K. Agyare-Manu, Senior Manager, Engineering Services
C. Dobrescu, Utilities and Special Projects Engineer
M. Anderson, Manager, Transportation
G. Hermanson, Transportation Planner
E. Mashig, Manager, Horticulture, Parks, and Open Space Planning
M. Rutishauser, Manager, Elec. Engineering, Design & Planning, Electric Utility
P. Kotyk, Fiber Networks Operations Manager
S. Trachta, Manager, Inspections, Development Services – Building & Plumbing
J. Krevs, Building Official