

Attachment 11 Engineering Servicing Memorandum



Memorandum

To: Janet Zazubek, Planner

Date: October 13, 2021

File: PRJ-009692

From: Roger Chang, Engineering Technologist

Subject: WORKS AND SERVICES REQUIREMENTS FOR 1324 NANAIMO STREET - HER00791

We are responding to your updated application as referenced above dated October 5, 2021 for the proposed two-lot subdivision, one lot with heritage house facing Nanaimo Street and another lot with a single detached dwelling and detached garage.

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

- 1. The applicant is required to submit a subdivision application and follow the subdivision processes. For more information on the requirements, see our webpage at https://www.newwestcity.ca/subdivision-process#subdivision-process.
- 2. The applicant shall, at a minimum, familiarize themselves with the following documents and plans:
 - Subdivision and Development Control Bylaw
 - Tree Protection and Regulations Bylaw
 - Erosion and Sediment Control Bylaw
 - Master Transportation Plan
- 3. The properties shall be addressed as follows:

<u>Lot</u>	<u>Address</u>
Lot 1	1324 Nanaimo Street
Lot 2	607 Fourteenth Street

- 4. Onsite storm sewer water management will be required to limit the post development flow to predevelopment flow. The onsite 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 Regulations 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 easement, dedications and statutory rights of way that may be required 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:
 - 7.1. A 3.0m x 3.0m statutory right-of-way corner truncation will be required at the corner of Lane and Fourteen Street.
 - 7.2. A 0.56m dedication along the lane frontage for the City's future 6.0m wide lane.
 - 7.3. A 1.5m statutory right-of-way along the lane frontage to allow proper vehicle maneuvering.
- 8. Discuss all onsite service details with Development Services, Building Division at 604-527-4580 (Plumbing Permit). The on-site sanitary and stormwater systems, perimeter drainage and roof leaders, will need to be fully separated.
- 9. All construction to be in accordance with the most current MMCD (Platinum Edition), City of New Westminster Subdivision and Development Control Bylaw No. 7142, 2007, Design Criteria and Supplementary Specifications unless specified elsewhere.

OFF-SITE WORKS AND SERVICES

10. 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 also required to enter into a Works and Services Agreement with the City addressing 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 lane to the south, Fourteenth Street to the west and Nanaimo Street to the north. According to the City's Office Community Plan, both Fourteenth Street and Nanaimo Street are designated as local roads.

Fourteenth Street

- 10.1. Reconstruction of Fourteenth Street frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street furniture, street lighting signage, underground electrical and telecommunication servicing. Fourteenth Street shall be shall be reconstructed up to road centerline 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 boulevard complete with street lighting, trees and irrigation.
 - 1.5m sidewalk clear of obstructions.
 - 4.5m wide driveway letdown for lot 1 vehicular access.

Nanaimo Street

- 10.2. Reconstruction of Nanaimo Street frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street furniture, street lighting signage, underground electrical and telecommunication servicing. Nanaimo Street shall be shall be reconstructed up to road centerline 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 boulevard complete with street lighting, trees and irrigation.
 - 1.5m sidewalk clear of obstructions.

Lane

- 10.3. Reconstruction up to centerline of the lane complete with new pavement, roll over curb and gutter (north side), and drainage from storm water runoff collection for the development's frontage.
- 10.4. The letdown to access the lane on Nanaimo Street shall be fully reconstructed (6.0m).

Vehicular Site Access

10.5. Lot 1 driveway access will remain at the existing location on Fourteenth Street, and Lot 2 shall take access from the lane.

UNDERGROUND UTILITIES

Sanitary

10.6. Provision of an adequate single sanitary sewer service connection for each lot 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.

Storm

10.7. Provision of an adequate single storm sewer service connection for each lot 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.

Water

10.8. Provision of an adequate single water service connection for each lot 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 water demands must be upgraded at the developer's expense.

Electrical, Telecommunication and Gas

- 10.9. 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 Electrical Operations Department at (604) 527-4533 for electrical servicing details. Contact Telus and Shaw directly for telecommunication servicing details.
- 10.10. 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. Please contact Phil Kotyk, Fiber Network Operations Manager at (604) 527-4641 for City communication servicing details.
- 10.11. All costs associated with the design and construction of gas servicing for the development. Please contact Fortis BC directly for servicing details.
- 10.12. All third party utility construction drawings shall include the Civil Design Drawings base plan and must be submitted to the City's Engineering Services for review and approval. The developer's consulting engineering 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 issuance of the Works and Services Agreement.

STREET LIGHTING

10.13. Roadway lighting for all street frontages shall be provided and 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

- 10.14. 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, 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) 527-4625.
- 10.15. Boulevard trees will be selected, purchased, installed, and maintained by the Parks Department.
- 11. 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
- Street trees, landscaping
- Topographical and lot grading plans
- Erosion and sediment control plans
- Electrical power supply and distribution facilities
- Telecommunication facilities
- Gas facilities
- 12. Under the Works and Services Agreement with the City the developer must address the following requirements:
 - 12.1. 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.
 - 12.2. The developer will be required to post a security deposit for 120% of the estimated construction cost of the offsite 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.
- 13. The following payments and deposits shall be paid at the time of execution of the Works and Services Agreement:
 - 13.1. Payment to cover the cost of preparing the Works and Services Agreement, currently **\$1,910.00** plus tax.
 - 13.2. Payment of **four percent** (4%) of the estimated construction costs to cover engineering and administrative costs incurred by the City.
 - 13.3. Under the Works and Services Agreement the developer will be required to pay a deposit **\$5,000.00** to cover any charges for emergency works and signage.
 - 13.4. Payment of a flat fee in the amount of **\$588.00** per tree for Parks Department to select, purchase, install, and maintain the trees.
 - 13.5. Signing of a latecomer waiver clause.
- 14. The following charges shall be paid at the time of execution of Subdivision Approval:

- 14.1. Payment of applicable Greater Vancouver Sewerage & Drainage District (GVS&DD) in accordance with Bylaw 187, 1996 and amendments for each additional lot created.
 (\$5,428.00 per Dwelling Unit)
- 14.2. Payment of the New Westminster Development Cost Charges in accordance with Bylaw 7311, 2009 and amendments for each lot created. (**\$4.23 per square foot**)
- 14.3. Payment of applicable Regional Transportation Development Cost Charges in accordance with Bylaw No. 124-2018 for each additional lot created. (**\$2,975.00 per Dwelling Unit**)
- 14.4. Payment of the New Westminster School Site Acquisition charge for each additional lot created. (**\$900.00 per Dwelling Unit**)
- 15. Certificate that all taxes assessed on the subdivided land have been paid and where local improvement taxes, rates or assessments are payable by installments, that all installments owing at the date of the certificate have been paid.
- 16. Submission of any easement or statutory right-of-way documents required by the City in relation to the property.

Should you have any further questions, please contact the undersigned at 604-527-4633 or rchang@newwestcity.ca.

Regards,

for the second s

Roger Chang, AScT 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, Transportation Planner
 - F. Jin, Transportation Technologist
 - E. Mashig, Manager, Park Horticulture & Open Space Planning
 - S. Martel, Senior Arborist
 - M. Rutishauser, Acting Manager, Electrical Engineering Design & Planning