

**City of Chilliwack**

**Bylaw No. 3980**

**A bylaw to amend “Subdivision and Land Development Bylaw 2004, No. 3055”**

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The Council of the City of Chilliwack in open meeting assembled, enacts as follows:

1. This Bylaw may be cited as **“Subdivision and Land Development Bylaw Amendment Bylaw 2014, No. 3980”**.
2. “Subdivision and Land Development Bylaw 2004, No. 3055” is hereby amended by renaming said Bylaw to **“Land Development Bylaw 2014, No. 3055”**.
3. Said Bylaw is further amended in the preamble of the bylaw by deleting the words “Subdivision and” and substituting with the words “Development of lands” after the words “to regulate the” and before the words “Development of”.
4. Said Bylaw is further amended by deleting the words “Subdivision and Land Development Bylaw 2004, No. 3055” wherever they may appear throughout the Bylaw and substituting with the words “Land Development Bylaw 2014, No. 3055”.
5. Said Bylaw is further amended by deleting the words “Municipal Development Department” wherever they may appear throughout the Bylaw and substituting with the words “Development and Regulatory Enforcement Services Department”.
6. Said Bylaw is further amended by deleting the words “Development Engineer” wherever they may appear throughout the Bylaw and substituting with the words “Manager of Land Development”.
7. Said Bylaw is further amended in Section 3, INTERPRETATION, as follows:
  - By inserting the following new interpretations in the appropriate alphabetical order:
    - “AWWA” means American Water Works Association;
    - “Chief Building Official” means the person designated in, or appointed to that position by the City and any person named by Council to act in place of the Chief Building Official;
    - “Coordinating Registered Professional” means the Principal Professional Engineer engaged and designated by the Owner/developer who shall coordinate the design work and field reviews of all registered professionals required for the project in order to ascertain that the design will substantially comply with the requirements of this document and all other applicable enactments;

“Local/Minor Local Road” means a Highway with an existing or proposed right of way width of 15 to 20 metres that is part of a major system within the City, servicing local needs. Local roads are designated in the City of Chilliwack Transportation Plan, as amended from time to time;

“Maintenance Deposit” means the reduced value of a Security Deposit, separate cash or an irrevocable and automatically renewable Letter of Credit to be deposited with the City for the duration of the maintenance period, according to the standards set out or referred to in Schedule “A”, attached hereto and forming part of this Bylaw, as a guarantee for the stability and sufficiency of the Works and Services completed by the developer;

“Manager of Land Development” means the person appointed by Council as the Manager of Land Development or designate;

“Major Arterial Road” means a Highway with an existing or proposed right of way width of 30 metres that is part of a major system within the City, servicing through traffic needs. Major arterial roads are designated in the City of Chilliwack Transportation Plan, as amended from time to time;

“Major/Minor Collector Road” means a Highway with an existing or proposed right of way width of 20 metres that is part of a major system within the City, servicing local and through traffic needs. Major/minor collector roads are designated in the City of Chilliwack Transportation Plan, as amended from time to time;

“MCC” means Motor Controller Center;

“Minor Arterial Road” means a Highway with an existing or proposed right of way width of 25 metres that is part of a major system within the City, servicing through traffic needs. Minor arterial roads are designated in the City of Chilliwack Transportation Plan, as amended from time to time;

“Minimum Basement Elevation (MBE)” means the lowest level at which a habitable floor on a lot may be constructed;

“Parcel” means any lot, block or other area in which land is held or developed, or into which land is subdivided, but does not include a Highway;

“PLC” means Programmable Logic Controller

“TAC” means Transportation Association of Canada

- By deleting the interpretations “Arterial Road” and “Collector Road” in their entirety.
- In the interpretation for “contractor” by inserting the words “land development” after the words “Subdivision Development,” and before the words “and/or on municipal property”.

- By deleting the interpretations for “Development Director” in its entirety.
- In the interpretation for “Engineering Director” by deleting the word “/Operations” after the word “Engineering” and before the words “or designate”.
- By deleting the interpretation for “Project Engineer” in its entirety and substituting with a new interpretation as follows:

“Project Engineer” means the Principal Professional Engineer engaged and designated by the Owner/Developer who shall be responsible to coordinate the design, supervision, preparation of drawings, specifications, record drawing submissions and estimates for the construction of works within a development and/or within City property;

- In the interpretation for “Security Deposit” by inserting the words “and automatically renewable” after the words “or an irrevocable” and before the words “Letter of Credit”.
  - In the interpretation for “Storm Water Management Plan” by deleting the words “the Subdivision” and substituting with the words “a Development” after the words “within or through”.
8. Said Bylaw is further amended in Section 8, APPLICATION FOR SUBDIVISION OR DEVELOPMENT, by adding the words “Subdivision Application Form, attached hereto and forming part of this Bylaw” after the words “Form (F-14)” and before the words “The application”; and further, by deleting the words “is to” and substituting with the word “shall” after the words “application form” and before the words “be signed by the Owner”.
  9. Said Bylaw is further amended in Section 11, ON-SITE SERVICES REQUIRED IN CONNECTION WITH BUILDING PERMIT, by deleting the figure “(7)” and substituting with the figure “(6)” after the figures “938” and before the words “of the *Local Government Act*”.
  10. Said Bylaw is further amended in DRAINAGE SYSTEM, Section 22, by deleting the words “site being subdivided” and substituting with the words “lands being developed,” after the words “servicing of the” and before the words “according to Chilliwack’s”; and further, by deleting the word “Manual” after the words “Design Criteria” and before the words “for Surface Water Management”.
  11. Said Bylaw is further amended in DRAINAGE SYSTEM, Section 23, by inserting the word “provides” after the words “plan proposed” and before the words “a Drainage System” and deleting the words “site being subdivided” and substituting with the words “lands being developed” after the words “drainage for the”
  12. Said Bylaw is hereby further amended in DRAINAGE SYSTEM, Section 24, by deleting the words “site being subdivided” and substituting with the words “lands being developed” after the words “system on the” and before the words “is provided”.
  13. Said Bylaw is further amended in WATER DISTRIBUTION SYSTEM, Section 28, by deleting Subsection (4) in its entirety.

- 14.** Said Bylaw is further amended in SEWAGE COLLECTION AND DISPOSAL SYSTEM by deleting Section 30 in its entirety and substituting with the following:

“Where an approval is required under the *Health Act*, all private on-site sewage disposal facilities required by a Subdivision or building permit shall be designed and certified by a qualified professional and registered in accordance with the requirements of the Ministry of Health.”

- 15.** Said Bylaw is further amended in APPLICABLE STANDARDS, Section 31 (2), by deleting the words “standards generally accepted as good engineering practice” and substituting with the words “Master Municipal Construction Documents (MMCD); or,” after the words “as per”.

- 16.** Said Bylaw is further amended in APPLICABLE STANDARDS, Section 31, by adding the following new Section:

“(3) where this Bylaw or the MMCD does not set out an applicable standard as per standards generally accepted as good engineering practice.”

- 17.** Said Bylaw is further amended in COMPLETION OF WORKS AND SERVICES, by deleting Sections 32 and 33 in their entirety and substituting with the following and renumbering the existing Sections accordingly.

“32. Prior to the Approving Officer approving the Subdivision or the Chief Building Official issuing a building permit and the commencement of the installation of any Works and Services, the Owner of the land being subdivided or developed in which Works and Services are required to be installed shall:

- (1) deposit with the City a Security Deposit, by way of cash or an irrevocable and automatically renewable Letter of Credit, as per the City’s Policy Directive No. C-17 – Letters of Credit, in the amount of 125% of the estimated construction cost, as estimated by the Project Engineer, for the Works and Services required under this Bylaw; and,
- (2) enter into a Servicing Agreement with the City to fully construct all such Works and Services by a specified date to the standards set out or referred to in Schedule “A”, attached hereto and forming part of this Bylaw, or forfeit to the City the Security Deposit. The standard format of the Servicing Agreement is contained in Schedule “B”, attached hereto and forming part of this Bylaw.”

- 18.** Said Bylaw is further amended in COMPLETION OF WORKS AND SERVICES, Section 34, by deleting the words “and 33” after the word “Sections 32” before the words “a Security Deposit” and adding the words “and the standards set out or referred to in Schedule “A”, attached hereto and forming part of this Bylaw” after the words “Servicing Agreement”.

- 19.** Said Bylaw is further amended in COMPLETION OF WORKS AND SERVICES, Section 35, by adding the words “and services” after the words “of the works” and before the words “required under”.

**20.** Said Bylaw is further amended in Schedule “A”, Section 1.1, INTRODUCTION, by inserting the words “in force from time to time” after the words “No. 3005” and before the words “and identifies the design”.

**21.** Said Bylaw is further amended in Schedule “A”, Section 1.6.1 RESPONSIBILITY, as follows:

- By inserting the following after the first paragraph:

“1.6.1.2

The Developer shall appoint a coordinated Registered Professional for the duration of the project up to and including final acceptance by the City. The Coordinating Registered Professional, or duly authorized representative, shall be responsible for the coordination of all aspects and submission of the project including supervision of design, preparation of drawings and specifications, construction inspection and quality testing, construction cost estimates of the works, the Record Drawing submission and completion certification. The Coordinating Registered Professional shall complete and submit “Form F-15 - Confirmation of Commitment by the Owner and Coordinating Registered Professional” of this Schedule and forming part of this Bylaw prior to commencement of the works.”

- By deleting the last 2 paragraphs and substituting with the following:

“1.6.1.3

No work may start on City lands, road allowances or statutory rights of way without written permission from the Manager of Land Development in the form of a permit as outlined in “Form F-1 - Permission to Construct” of this Schedule and forming part of this Bylaw.

1.6.1.4

The Developer, the Coordinating Registered Professional, the Project Engineer and the General Contractor may be required to attend a pre-construction meeting at the discretion of the Manager of Land Development prior to the start on construction of the required works.”

**22.** Said Bylaw is further amended in Schedule “A”, Section 1.5.4, VARIATION OF WORKS AT DEVELOPER’S/CONTRACTOR’S REQUEST, by inserting the word “significant” after the word “Any” and before the words “variation to the works”.

**23.** Said Bylaw is further amended in Schedule “A”, by deleting Section 1.6.14, TRAFFIC CONTROL, BARRIERS AND LIGHTS in its entirety and substituting with the following:

“1.6.14.1

The developer/contractor must apply for a Highway Works Application and Permit, as per the City’s Highway and Traffic Bylaw, in force from time to time, 7 days prior to any planned traffic lane closure, road closure, sidewalk closure or any other disruption to vehicle or pedestrian traffic. The developer/contractor must comply with all conditions that may be applied to the permit.”

1.6.14.2

The developer/contractor must, at their own expense, as per the Ministry of Transportation and Infrastructure “Traffic Control Manual for Work on Roadways”:

- (1) Responsibly provide, erect and maintain all required signs, barriers, fences or other proper protection, and must provide, keep and maintain all operating lights with amber globes or provide Traffic Control persons as may be necessary in order to ensure safety to the public, as well as to those engaged about the premises or works;
- (2) Keep any roadway open for travel for the use of the public for such width as the Highway Works Application and Permit allows;
- (3) Provide any signs or notices, to be placed at a distance from obstruction to serve sufficient warning to the travelling public, and maintain such signs in good order in conspicuous places wherever any roadway, sidewalk or thoroughfare is torn up or dangerous and so long as it remains unsafe or unfinished.

1.6.14.3

All vehicular or pedestrian traffic warning, control or barrier devices shall be subject to the acceptance of, or conditions of, the Manager of Land Development.”

- 24.** Said Bylaw is further amended in Schedule “A”, by deleting Section 1.6.15, NOTICE OF RELEASE, in its entirety and substituting with the following:

“On completion of works on private property, or City property, or City rights of way, the developer/contractor shall submit to the Manager of Land Development a “Form F-13 - Notice of Release” for each property Owner affected, verifying that the clean-up has been performed and completed to the property Owner’s acceptance, and that the property Owner has no further claim upon the developer/contractor or the City as a result of such works. All such releases shall be retained by the Manager of Land Development as part of the City’s records.”

- 25.** Said Bylaw is further amended in Schedule “A”, Section 1.6.17, MAINTENANCE PERIOD AND GUARANTEE, as follows:

- In the first paragraph by inserting the words “pump stations, reservoirs, major structures,” after the words “two year period for” and before the words “landscaping and screening”; and further, by deleting the words “Engineer’s Certificate of Substantial Completion (Form F-3)” and substituting with the words “Manager of Land Development’s issued “Form F-3 - Certificate of Substantial Completion” after the words “date shown on the”.

- By deleting the second paragraph in its entirety and substituting with the following:

“1.6.17.2

Notwithstanding the existing maintenance period, the maintenance period will be extended for one additional year from the date of any major repair commencing from the date of the completion of the major repair.”

- 26.** Said Bylaw is further amended in Schedule “A”, by deleting Subsection 1.7.1, **SERVICING AGREEMENTS**, in its entirety and substituting with the following

“1.7.1.1

Prior to the Approving Officer approving the Subdivision or the Chief Building Official issuing the building permit, and prior to the commencement of the construction and installation of any Works and Services, the Developer shall enter into a Servicing Agreement with the City. The purpose of the Agreement is to ensure the completion of all Works and Services required for the development and to protect the City against claims, including liability, for matters arising from the construction, installation and inspection of the required Works and Services. The Servicing Agreement makes provision for the Security Deposit Indemnity Clause, insurance requirements, maintenance periods, Maintenance Deposits and administration fees. The standard Servicing Agreement is attached hereto as Schedule “B” and forming part of this Bylaw.

1.7.1.2

Servicing Agreements may be obtained from the Development and Regulatory Enforcement Services Department. Servicing Agreements must be signed, sealed, and returned to the Manager of Land Development along with the following:

- (1) A Security Deposit in the form of cash or an irrevocable, and automatically renewable Letter of Credit, in accordance with the City’s Policy Directive No. C-17 – Letters of Credit. The deposit amount will be 125% of the Project Engineer’s certified estimated construction cost for the works to be constructed. Letters of Credit must identify the project to which they apply.
- (2) “Form F-11 - Insurance Certification” as per the requirements of the Servicing Agreement.
- (3) A copy of the letter to the Workers’ Compensation Board of BC providing notification of the proposed works.
- (4) Three complete sets of drawings, signed and sealed, which must be identical to the drawings accepted for construction.
- (5) A non-refundable administration fee based upon the Project Engineer’s certified estimated construction cost for the works to be constructed, as per the requirements of the Servicing Agreement.”

**27.** Said Bylaw is further amended in Schedule “A”, Section 1.7.2, SECURITY DEPOSIT, by deleting the words “Approving Officer” and substituting with the words “Manager of Land Development” after the words “submitted to the” and before the words “to ensure”; and further, by deleting the words “(See 1.7.1)” and substituting with the words “as per Section 1.7.1.1 of this Schedule” after the words “Servicing Agreement”.

**28.** Said Bylaw is further amended in Schedule “A”, by deleting Section 1.7.3, INDEMNITY CLAUSE, in its entirety and substituting with the following:

“1.7.3.1

The Developer shall release within the Servicing Agreement, and does hereby indemnify and save harmless from and against:

- (1) all costs, expenses, damages, claims, demands, actions, suits, and liabilities by whomever brought or made and however arising, directly or indirectly, from the construction or installation of the works and any injury or damage thereby caused to person or property (including death);
- (2) all expenses and costs that may be incurred by reason of the construction and installation of the works, resulting in damage to any property owned, in whole or in part, by the City or that the City is obliged by law, directly or indirectly, in any way or to any degree to construct, repair or maintain;
- (3) all expenses and costs by reason of:
  - (a) liens for non-payment of labour and material, federal or provincial taxes, or Workers’ Compensation assessments; and,
  - (b) the presence of encroachments owing to mistakes in surveying or construction.
- (4) Workers’ Compensation assessments and Employment Insurance payments required to be paid by the City as a result of the City’s election to complete the construction and installation of the works.
- (5) except to the extent that such actions, proceedings, costs, damages, expenses, claims and demands, as set out in Sections 1.7.3.1(1) to 1.7.3.1(4), inclusive from the exclusive negligence of the City.

1.7.3.2

The indemnity shall terminate upon completion of the maintenance period or completion of all deficiencies, whichever is later.”

**29.** Said Bylaw is further amended in Schedule “A”, Section 1.7.4, PUBLIC LIABILITY AND PROPERTY DAMAGE, as follows:

- In the first paragraph by deleting the words “the following insurance” after the words “to the City” and before the words “with limits”; and further, by deleting the words “respective items following” and substituting with the words “the following items:” after the words “those shown in”.



- In Clause (a), by deleting the word “occurrence” after the words “an all risk” and before the word “basis”; and further, in Clause (c) by inserting the words “Form F-3” after the words “issuance of a” and before the words “Certificate of Substantial Completion”.
- By deleting the last 4 paragraphs in their entirety and substituting with the following:

“1.7.4.2

The Developer shall ensure that:

- (1) the following insurance coverage is included to protect the Owner and the City against all claims arising out of:
  - (a) death or injury to persons;
  - (b) damage to, or loss of use of any property of third persons, including real property, chattels, land, works, buildings, structures, wires, conduits, pipes, mains, shafts, sewers, tunnels, and apparatus’ in connection therewith, even when the damage or loss of use is caused by vibration, moving, shoring, underpinning, raising, rebuilding, or demolition of any building, structure, or support, or by excavation, tunnelling, or other work below the surface of the ground or water; and;
  - (c) damage to or loss of all buildings, structures, stores, equipment, and materials included in or required for the carrying out of the works.
- (2) every policy of insurance will:
  - (a) except for motor vehicle insurance, name the City as an additional insured;
  - (b) state that the policy applies to each insured in the same manner and to the same extent as if a separate policy had been issued to each insured. In all such policies, each Contractor engaged in the works shall be named as an additional insured in respect of the performance of the works; and,
  - (c) state the policy cannot be cancelled, lapsed or materially changed without at least 30 days written notice to the City, delivered to the City Clerk of the City of Chilliwack.

1.7.4.3

The Developer shall maintain the insurance policy until the works have received final acceptance by the Manager of Land Development. The Developer’s insurance policy shall save the City, its officers, agents, servants and employees harmless from liability of any nature or kind.

1.7.4.4

As a condition precedent to issuing of “Form F-1 - Permission to Construct”, the Developer shall be required to submit to the City, along with a copy of the insurance policy, an insurance certificate signed by a licensed insurance agent certifying the following:

“I hereby certify that the attached insurance policy provides insurance coverage as required by Servicing Agreement No. \_\_\_\_\_ between the City of Chilliwack and (the Developer), and that the attached Insurance Policy No. \_\_\_\_\_ is valid for the period of the Servicing Agreement.”

No works may commence or continue on the works if this provision has not been satisfied.”

- 30.** Said Bylaw is further amended in Schedule “A”, by deleting Section 1.8.1, INSPECTION OF THE WORK, in its entirety and substituting with the following:

“1.8.1.1

The Project Engineer shall submit daily inspection reports to the Manager of Land Development on a weekly basis, complete with a cover sheet summarizing each report.

1.8.1.2

All inspection reports submitted to the City shall include:

- (1) the date, time, and weather conditions of the inspection;
- (2) the civic address of the development;
- (3) the City assigned folder number for the development; and,
- (4) the name and signature of the Inspector and/or the Project Engineer.

1.8.1.3

The Project Engineer shall submit a “Form F-2 - Certificate of Inspection” to the Manager of Land Development, as per Section 1.8.3.1, certifying that the works have been constructed as per the approved design and meet the specifications and restrictions of this Bylaw.

1.8.1.4

All or any part of the works and all workshops or other places where material for the works is being prepared or stored may be inspected by the Manager of Land Development when and as often as the Manager of Land Development shall deem it necessary, and the Developer/Contractor shall afford the Manager of Land Development every facility and access requested by the Manager of Land Development and shall give the Development Engineer any and all information requested.

1.8.1.5

The Developer/Contractor shall also supply representative samples of materials as and when requested by the Manager of Land Development. Furthermore, the Developer/Contractor shall provide available competent labour required by the Manager of Land Development on site in connection with survey, measurements, inspections and testing of the works. No payment shall be made for the cost to the Developer/Contractor of any labour, material, work, or delay occasioned by this requirement.

1.8.1.6

The Developer/Contractor shall, at the request of the Manager of Land Development and within such time as the Manager of Land Development shall designate, open for inspection any part or parts of the work that have been covered up. If the work uncovered is found to be acceptable to the Manager of Land Development, the expense of the opening shall be paid by the City.

1.8.1.7

Inspections by the Manager of Land Development are limited to ensuring that the works are in compliance with this Schedule and that the finished product will generally conform with the intent of the accepted plans and in a condition acceptable to the City. They do not constitute supervision or coordination of the works and neither are they intended to serve in place of proper inspection by the Project Engineer of the works.

1.8.1.8

The Developer is responsible for making arrangements to ensure proper engineering and coordination of the works, processing progress payments to the contractor and for ensuring that all requirements of the City are carried to a satisfactory conclusion within the stipulated time limits.

1.8.1.9

The Developer may hire the City for video inspections of new works at least 10 business days prior to the intended inspection date. If the City is unavailable to complete a video inspection, the Developer may hire a private video inspection company, under supervision by the City, at the approval of the Manager of Land Development.”

**31.** Said Bylaw is further amended in Schedule “A”, Section 1.8.2, SECURITY DEPOSIT REDUCTIONS, as follows:

- In the first paragraph by deleting the words “to a maximum of 90% of the value of the works completed” and substituting with the words “to no less than 10% of the estimated construction costs of the works for the development”, after the words “by the City” and before the words “may be authorized”.
- In the second paragraph by inserting the word “Deposit” after the word “Security” and before the words “reductions are”.

- 32.** Said Bylaw is further amended in Schedule “A”, by deleting Sections 1.8.3, 1.8.4 and 1.8.5 in their entirety and substituting with the following and renumbering the existing Sections accordingly:

“1.8.3.1

On completion of the works, the Project Engineer shall submit to the Manager of Land Development:

- (1) a completed “Form F-2 - Certificate of Inspection”;
- (2) a completed “Form F-17 - Substantial Completion Pre-Inspection Checklist”;
- (3) one draft hardcopy set of record drawings for review as per Paragraph 2.1.9.2 of this Schedule; and,
- (4) two sets of service connection cards for each legal address within the development as per Section 2.1.8 of this Schedule.

1.8.3.2

The Manager of Land Development shall, upon acceptance and receipt of the submission required in Section 1.8.3.1, arrange a Substantial Completion Inspection of the works with the Project Engineer and any other City representatives deemed necessary, and arrange a video inspection of the works as per Section 1.8.1.9 of this Schedule.

1.8.3.3

Upon completion of a Substantial Completion Inspection, the Project Engineer shall submit to the Manager of Land Development:

- (1) a list of works to be completed or repaired, with the estimated cost of these works; and,
- (2) a complete Record Drawing submission as per Section 2.1.9.2 of this Schedule.

1.8.3.4

The Manager of Land Development, upon acceptance and receipt of the submission required in Section 1.8.3.3, shall issue a “Form F-3 - Certificate of Substantial Completion” of this Schedule, specifying the start and end dates of the maintenance period, subject to Section 1.6.17 of this Schedule whereby all monies held by the City shall be released to the Maintenance Deposit, as per Section 1.8.4 of this Schedule.

**1.8.4 MAINTENANCE DEPOSIT**

1.8.4.1

Upon the issuance of “Form F-3 - Certificate of Substantial Completion” by the Manager of Land Development, the City shall release the Security Deposit, less a Maintenance Deposit of 10% of the estimated cost of the total works or \$5,000.00, whichever is greater, plus 125% of the value of any works to be constructed or repaired during the maintenance period, as certified by the Project Engineer to insure payment of any maintenance or repair.

1.8.4.2

The Manager of Land Development shall release the Maintenance Deposit, less the cost of any repair chargeable to the developer by these specifications, at the expiry of the maintenance period, but not prior to the issuance of “Form F-4 - Certificate of Acceptance”, when so requested in writing by the developer.”

**33.** Said Bylaw is further amended in Schedule “A”, Section 1.8.6, TESTING OR CONFIRMATION OF WORKS COMPLETED, in the first paragraph by deleting the word “accepted” after the word “minimum” and before the word “standards” and in the second paragraph by adding the words “for general compliance” after the words “as-built information”.

**34.** Said Bylaw is further amended in Schedule “A”, Section 2.1.1, INTRODUCTION, as follows:

- In the first and second paragraphs of Section 2.1.1.1 by deleting the words “As Constructed” and substituting with the words “Record Drawing” wherever they may appear.
- In Section 2.1.1.2, Paragraph (1), by adding the words “in force from time to time”.
- In Section 2.1.1.2, by deleting Paragraph (2), in its entirety and substituting with the following:

“2. All applicable requirements of the City’s Bylaws, in force from time to time, including but not limited to:

- (a) Zoning Bylaw;
- (b) Highway and Traffic Bylaw;
- (c) Soil Removal and Deposit Bylaw;
- (d) Development Site Preparation Bylaw;
- (e) Tree Management (Land Development) Bylaw;
- (f) Fire Prevention and Protection Bylaw;
- (g) Sanitary Sewer System Regulation Bylaw;
- (h) Storm Sewer System Connection and Regulation Bylaw; and,
- (i) Waterworks Regulation Bylaw.

- By adding the following:

“(3) All applicable requirements of the Hillside Development Guidelines.

(4) All applicable requirements of the City’s Policy Directive No. G-6 – Subdivision and Development Control.

(5) All applicable requirements of the Master Municipal Construction Documents, as per Section 3.1 of this Schedule.”

**35.** Said Bylaw is further amended in Schedule “A”, Section 2.1.2, SURVEY INFORMATION, as follows:

- By deleting the second paragraph and substituting with the following:

“2.1.2.2

All survey point elevations shall be relative to the North American Datum of 1983 (NAD 83) geodetic datum, and locations shall be referenced to the NAD 83 UTM Zone 10 North coordinate system.”

- In the fourth paragraph by deleting the words “which may require GSC construction elevations” and substituting with the words “requiring the NAD 83 system” after the words “property development” and before the words “the applicant/Developer”; and further, by deleting the words “GSC elevation” and substituting with the words “NAD 83 UTM Zone 10 North coordinate system and NAD 83 geodetic elevation” after the words “and have its” and before the words “determined by”.

**36.** Said Bylaw is further amended in Schedule “A” - Section 2.1.3, DRAWING SUBMISSIONS, as follows:

- By deleting the first paragraph in its entirety and substituting with the following:

“2.1.3.1

All drawings shall be prepared as per the requirements contained in Sections 2.1.3, 2.1.4, 2.1.5, 2.1.6, and 2.1.9 and all other applicable requirements of the Land Development Bylaw, in force from time to time.”

- In the second paragraph by deleting the word “Project” and substituting with the word “Professional” after the words “sealed by a” and before the words “Engineer registered”; and further, by inserting the words “the Province of” after the words “registered in” and before the words “British Columbia”.

- By deleting the fourth paragraph in its entirety and substituting with the following:

“All drawings shall be computer drawn and submitted as metric standard A1 size, unless otherwise approved by the Manager of Land Development.”

- In the existing Paragraph numbered (1), by deleting the words “1:5000 scale, and an index” and substituting with the words “no greater than 1:5000 scale, an index, and a complete drawing list” after the words “a site plan at”; and further, by deleting the reference “2.1.3(3)(f)” and substituting with the reference “Section 2.1.3.3” after the words “catchment area”.
- By inserting the following new Paragraph and renumbering the existing Paragraphs accordingly:

“(3) Erosion and Sediment Control Plan

Erosion and sediment control plans shall be at a 1:500 scale and shall clearly show all measures required to prevent on-site erosion and the transportation of mud, silt laden run-off water and other deleterious materials to adjacent properties, City roads, storm Drainage Systems, and watercourses. Reference City Standard Drawings DC-4, DC-5, DC-6, D-7 and D-8.”

- In the existing Paragraph 3 by deleting the words “made in accordance with the requirements of” and substituting with the words “as per” after the words “are to be” and before the words “Section 5”.
- In the existing Paragraph 4 by deleting the words “grades, inverts, curves, radii, valves, hydrants, bends, etc.” and substituting with the words “horizontal and vertical design elements as required for design, layout and construction of the road works, and all grades, inverts, curves, offsets, pipe material, service connections, fittings, fire hydrants, air release/vacuum valves, booster pumping facilities and all other infrastructure as required to meet City standards for water design identified in this document.” after the words “show all” and before the words “The scale”; and further, by inserting the words “Typical cross-sections, as per the standards identified in this document, are to be shown for each classification of roadway being developed as part of this project.” after the words “for profile” and before the words “The full lengths”.
- In the existing Paragraph 5 by deleting the words “manholes, catch basins, etc.” and substituting with the words “offsets, pipe material, service connections, manholes, catch basins and all other infrastructure as required to meet City standards identified in this document.” after the words “grades, inverts,” and before the words “The scale”; and further, by adding the following words “Directions of flow are to be identified on plan views. Culverts greater than 30 m in length shall be considered a storm main and located within a City right of way.” after the words “on the profile”.
- In the existing Paragraph 6 by deleting the words “These plans may be by hand, provided they are of good quality and clarity.” after the words “are involved”.
- In the existing Paragraph 7 by inserting the words “at a scale of” after the words “plan view” and before the figures “1:500; by deleting the words “the Municipal Standards and Specifications and the” and substituting with the words “this Bylaw or the Master Municipal Construction Documents and any other” after the words “noting reference(s) to” and before the words “appropriate design”; and further, by deleting the word “should” and substituting with the words “are to” after the words “lighting plan(s)” and before the words “be accompanied with”.
- In the existing Paragraph 8 by deleting the words “the Municipal Standards and Specifications” and substituting with the words “this Bylaw or the Master Municipal Construction Documents.” after the words “detailed in” and before the words “Where there”; by inserting the words “document and” after the words “refer to the” and before the words “drawing number”; and further, by inserting the words “an MMCD or City” after the words “there is a” and before the words “Standard Drawing”.

- By inserting the following new Paragraph:
  - “2.1.4.2  
All public utilities including, but not limited to, water, sanitary sewer and storm drainage are to be located within the public road right of way as per the requirements of this Bylaw. Rear yard utility main installations are only permitted with the expressed written approval of the Engineering Director. If permitted, such utilities shall be located within a minimum 6 metre wide statutory right of way having a maximum cross-fall of 5% and shall be paved.”
- That the Section entitled “General”, be amended as follows:
  - In the first paragraph by inserting the words “as per the standards as set out by the Association of Professional Engineers and Geoscientists of BC” after the words “design submissions” and before the words “Failure to do so”; and further, by inserting the word “applied” after the word “practice”;
  - In the second paragraph by deleting the words “previously detailed requirements” and substituting with the words “requirements detailed in Paragraphs 2.1.4.1, 2.1.4.2 and 2.1.4.3”, after the words “Notwithstanding the” and before the words “the following”;
  - In the second paragraph, first bulleted item, by inserting the words “in NAD 83 geodetic elevations” after the words “grade, inverts” and before the words “and type of material”;
  - In the second paragraph, second bulleted item, by inserting the words “direction of flow” after the words “off-sets, curvatures” and before the words “size and identification”;
  - In the second paragraph, fifth bulleted item, by inserting the words “in NAD 83 geodetic” after the words “design invert” and before the words “elevations of each culvert”;
  - In the third paragraph by deleting the words “three complete” and substituting with the words “two complete full size” before the words “sets of drawings”;
  - By inserting the following after the first bulleted item in the third paragraph:
    - “(2) one complete reduced set of drawings on 11” x 17” size paper”
  - In the third paragraph, the existing second bulleted item, by inserting the words “signed and sealed by a Professional Geotechnical Engineer” after the words “soils report” and before the words “to verify”;
  - In the fourth paragraph, by inserting the words “outlined in Section 2.1.4.5” after the words “previous submission” and before the words “shall consist of”;
  - In the fourth paragraph, third bulleted item, by deleting the words “highlighted with yellow and changes made by the Project Engineer” and substituting with the words “any significant changes made by the Project Engineer highlighted with yellow or noted with a revision cloud,” after the words “shall have” and before the words “which are”;



- In the fourth paragraph, fourth bulleted item, by inserting the words “that are” after the word “items” and before the words “red lined”;
- After the fourth paragraph, by adding the following new Paragraphs:
  - “(2) A complete construction estimate as per Section 2.1.7 of this Schedule.
  - (3) A complete estimate of the soils or material to be deposited or removed in cubic metres, as per the City’s Soil Removal and Deposit Bylaw, in force from time to time, signed and sealed by the Project Engineer.”
- By deleting the existing Paragraph entitled Construction Submission in its entirety and inserting the following and renumbering the existing Sections accordingly:

**“2.1.5 CONSTRUCTION DRAWINGS**

**2.1.5.1**

Prior to commencement of construction, the Project Engineer shall submit three complete sets of full-sized drawings, two sets of reduced drawings on 11” x 17” paper, and one digital set of drawings in Adobe Acrobat PDF file form, clearly marked “ISSUED FOR CONSTRUCTION”.

**2.1.5.2**

All manholes are to be clearly identified on construction drawings using numbering provided by the City at the time of municipal acceptance of the design submission.

**2.1.6 GAS, ELECTRIC, TELEPHONE, AND CABLEVISION DRAWING SUBMISSIONS**

**2.1.6.1**

Privately owned utility companies, such as gas, electric, telephone and cablevision etc., shall:

- (1) if within or for a development, submit three sets of hardcopy design drawings to the Project Engineer. The Project Engineer shall review the drawings for conflicts with existing or new works. Upon review, the Project Engineer shall submit to the Manager of Land Development all three sets of design drawings, along with a signed and sealed letter certifying there are no conflicts. After review and acceptance, the Manager of Land Development shall return one accepted hardcopy set to the utility company.
- (2) if not within or for a development, submit three sets of hardcopy design drawings to the Manager of Land Development. After review and acceptance, the Manager of Land Development shall return one accepted hardcopy set to the utility company.

2.1.6.2

All design drawings shall meet the requirements as set out in the City’s Policy Directive No. G-6 – Subdivision and Development Control and shall include:

- (1) the signature and seal of the Professional Engineer responsible for the design;
- (2) the Professional Engineer’s name, the client’s name, the location or legal description of the lands involved, and an index;
- (3) all existing public and private utilities showing the size and NAD 83 UTM Zone 10 North coordinate location and NAD 83 geodetic invert elevation;
- (4) all existing structures, including houses, sheds, fences, wells, septic tanks and fields, with a notation indicating their fate (i.e. to be removed, filled, etc.); and,
- (5) the clearance between mains at all cross-over points.

2.1.6.3

One set of record drawings shall be submitted to the City upon completion of the works, signed and sealed by the Professional Engineer responsible for the design.”

- 37.** Said Bylaw is further amended in Schedule “A”, by deleting Section 2.1.4, CONSTRUCTION ESTIMATE CALCULATION, in its entirety and substituting with the following and renumbering the existing Sections accordingly:

“2.1.7.1

Construction estimates shall be submitted prior to commencement of any works signed and sealed by the Project Engineer and are to:

- (1) be in Master Municipal Construction Document (MMCD) format;
- (2) include a detailed listing of materials (with quantities, prices and totals) in MMCD format;
- (3) clearly define the separation between off-site and on-site works; and
- (4) be attached to a cover sheet summarizing costs identified in the detailed listings as totals for each major cost area.

2.1.7.2

The items and costs in Section 2.1.7.1 will be reviewed and accepted by the Manager of Land Development and amended by the Project Engineer, if necessary.

2.1.7.3

Hydro and telephone costs are to be bonded but are not to be included in the calculation of the administration fee.”

- 38.** Said Bylaw is further amended in Schedule “A”, by deleting Section 2.1.5, SERVICE CONNECTION CARDS, in its entirety and substituting with the following:

“Service connection cards shall indicate clearly and accurately the size, the NAD 83 UTM Zone 10 North coordinate location and NAD 83 geodetic invert elevation, etc. of each municipal utility connection. The legal lot description, civic address and municipal project number shall be required on all cards, as per the City’s Standard Drawing DC-3. Service connection cards are considered part of the record drawing submission and are to be provided to the Manager of Land Development prior to the Substantial Completion Inspection, as per Section 1.8.3.”

- 39.** Said Bylaw is further amended in Schedule “A”, Section 2.1.6, “AS CONSTRUCTED” SUBMISSIONS, as follows:

- By renaming Section 2.1.6 to RECORD DRAWING SUBMISSIONS.
- By deleting Paragraphs (a) to (c) in their entirety and substituting with the following:

“2.1.9.1

Information shown on the record drawings shall be considered as-constructed. The Project Engineer shall be responsible for ensuring that the works have been constructed as per the approved design and the specifications and restrictions of this Bylaw. All final drawing submissions will be free from copyright, Ownership and printing/distribution restrictions. Drawing and digital file Ownership reverts to the City upon final submission.

2.1.9.2

In conjunction with Section 1.8.3 of this Schedule, the following procedures shall be followed in the submission of record drawings for the City’s acceptance:

- (1) Upon completion of all works within the development and prior to the Substantial Completion Inspection, the Project Engineer shall submit one draft hardcopy set of record drawings, excluding the road cross-section sheet(s).
- (2) When the City is satisfied with the draft record drawing submission, prior to the issuance of “Form F-3 - Certificate of Substantial Completion”, the Project Engineer will be required to submit the following:
  - (a) Three sets of original paper prints of record drawings signed and sealed, plotted with waterproof ink, metric size A1 or equivalent, with the following certification:

“I certify this drawing represents the constructed Works and Services which have been periodically inspected by our company and are in substantial compliance with the approved design plans and changes.”

The signature and seal shall be by the Project Engineer certifying that all works have been constructed as per the approved design and with the specifications and restrictions of this Bylaw.

- (b) One set of record drawings in Adobe Acrobat PDF file format and one complete set in AutoCAD file format on CD clearly marked as “Record Drawings”, including all relevant files associated with the drawings (including, but not limited to x-references, .shx files, .ctb files, etc.) exactly representing the signed and sealed record drawings as set out in Section 2.1.9.2 (1) above.”

- In Paragraph (d) by deleting the words “As Constructed drawings shall be prepared as follows” and substituting with the words “record drawings shall include the following”.
- In Paragraph (d), Subparagraph (ii) by inserting the word “and” after the words “Detailed plan” and before the words “profile drawings”; by inserting the words “pipe lengths” after the word “inverts” and before the words “and offsets”; and further, by deleting the words “the works” and substituting with the words “and read” after the words “to show” and before the words “as constructed”.
- In Paragraph (d), by adding the following new Subparagraphs:
  - “(c) Detailed plans showing street lighting;
  - (d) Coversheet noting the drawings submitted.”
- In Paragraph (e) by deleting the word “two” and substituting with the word “three” after the words “shall submit” and before the words “complete set”; and further, by adding the following:
  - “(5) All elevations will be relative to the NAD 83 geodetic datum and all horizontal coordinates shall be referenced to the NAD 83 UTM Zone 10 North coordinate system. All coordinates shall be in metres and have two decimal places of precision. North should be towards the top or right side of the drawings whenever possible.”

**40. Said Bylaw is further amended in Schedule “A”, Section 2.2.2, PER CAPITA DEMAND FLOW, as follows:**

- By inserting the following before the item starting with the words “Average day domestic flow”:
  - “2.2.2.1  
Domestic flow values are as follows:”.
- By inserting the following after the item ending with the words “Peak hour domestic flow – 2,270 litres/capita/day”:

“2.2.2.2

Table 2.2.2 below is a guideline for applying minimum density by land use to determine flow:

**Table 2.2.2: Minimum Density by Land Use**

Residential Density	Persons/Unit
Standard SFD: $\leq 16$ units per hectare	3.0
Small Lot SFD (R1- D): $\geq 17$ and $\leq 20$ units per hectare	3.0
Strata Retirement Rancher: 21 units per hectare	2.0
Townhouse: $\geq 22$ and $\leq 44$ units per hectare	2.3
Apartment – 4 Storey: $\geq 45$ and $\leq 200$ units per hectare	1.9
Apartment – High Rise: $\geq 200$ and $\leq 400$ units per hectare	1.9
Non-Residential Density	Equivalent Population/Hectare (Gross)
Commercial	75
Industrial	50
Institutional	75”

- By deleting the second paragraph in its entirety and substituting with the following:

“2.2.2.3

For non-residential areas, design flows shall be calculated for the actual proposed use, as well as flow based on Table 2.2.2. The larger of the two calculations shall be used for system sizing.”

- By adding the words “The maximum allowable design velocity should be 4.0 m/s.” after the words “C = Hazen-Williams coefficient (120 for all mains)”.

- 41.** Said Bylaw is further amended in Schedule “A”, by deleting Section 2.2.3, FIRE FLOW DEMAND in its entirety and substituting with the following:

“2.2.3.1

Minimum fire flows shall be met for the noted zones as per Table 2.2.3:

**Table 2.2.3: Minimum Fire Flows**

Zone	Minimum Required Fire Flow
HR, SR, R1-A, R1-B, R1-C, R1-D, R2, R2-A, R3, R3-A, R3-B: One and Two Family Residential RMH: Mobile Home Park	60 litres/sec (800 Igpm) for 2.0 hours
R4: Low Density Multi-Family Residential - 40 Units/hectare R4-A: Townhouse Multi-Family Residential - 50 Units/hectare	150 litres/sec (2,000 Igpm) for 2.5 hours
R5: Medium Density Multi-Family Residential - 135 Units/hectare - building height 15 metre - 4 floors (maximum)	150 litres/sec (2,350 Igpm) for 2.5 hours
R7: Residential – Special Service - mixed use, multi-family with commercial - 100 Units/hectare - building height 15 metre - 4 floors (maximum)	225 litres/sec (2,650 Igpm) for 2.5 hours
R6: High Density Multi-Family Residential - 185 Units/hectare or more - building height 25 metre or more - 5 floors or more	225 litres/sec (3,000 Igpm) for 3.0 hours
R8: Town Centre High Rise Multi-Family Residential - 185 Units/hectare or more - building height 25 metre or more - 5 floors or more	225 litres/sec (3,000 Igpm) for 3.0 hours
C1, C1-A, C2, C3, C4, C5, CS1, CS2, CSM, CP, C6, C7: Commercial	200 litres/sec (2,650 Igpm) for 2.5 hours if sprinklered
M1, M2, M3, M4, M5, M6, M1-A: Industrial	225 litres/sec (3,000 Igpm) for 3.0 hours
P1, P2, P3, P4, P5, P6: Institutional	225 litres/sec (3,000 Igpm) for 3.0 hours

2.2.3.2

The fire flow requirements for any zone or build form not identified in Section 2.2.3.1 are subject to the approval of the Engineering Director.

2.2.3.3

The minimum required fire flow can be provided from two hydrants. Hydrants shall be located within distance of 150 m for single family residences and within a distance of 90 m for industrial, commercial, institutional and high density residential development. Hydrant locations shall be as per Section 2.2.10.

2.2.3.4

Fire sprinklers must be installed in all new homes constructed within the City’s fire limits area defined in Schedule “K” of the City’s Building Regulation Bylaw, in force from time to time, when:

- (1) homes are located greater than 8 kilometers by road from the nearest City of Chilliwack fire hall;
- (2) road grades to homes are greater than 12%; or,
- (3) driveway grades are greater than 15% and homes are constructed greater than 45 m from the road.”

**42.** Said Bylaw is further amended in Schedule “A”, Section 2.2.4, WATER PRESSURE, as follows:

- By inserting the following before the first item starting with the words “Minimum pressure at peak hour”;

“2.2.4.1

Standard water pressures are as follows:”

- By adding the following after the last item ending with the figures “150 kPa (22 psi):

“Minimum pressure in system during design fire flow 150 kPa (22 psi) and maximum day demand”

- In the second paragraph by adding the words “All proposed lots with design pressures less than 50 psi shall be serviced with 25 mm diameter copper water connections.” after the words “proposed house”.
- In the last paragraph by adding the words “where the maximum pressure exceeds 515 kPa (76 psi)” after the words “the building”.

**43.** Said Bylaw is further amended in Schedule “A”, Section 2.2.5, HYDRAULIC NETWORK CONSIDERATIONS, as follows:

- In Paragraph (e) by inserting the words “subject to the approval of the Engineering Director” after the words “can be met” and before the words “In Rural areas”; and further, by deleting the words “and compliance with City Policy” after the words “Engineering Director” and before the words “Wherever practical”.
- In Paragraph (f) by inserting the words “in diameter” after the words “to 100mm” and before the words “depending on demand; and further, by adding the words “and if the length of the main is less than 50 m” after the words “on demand”.

**44.** Said Bylaw is further amended in Schedule “A”, Section 2.2.7, WATERMAIN GRADES, as follows:

- In the first paragraph by inserting the words “of any water main” after the words “maximum grade” and before the words “shall be”; and further, by deleting the words “Standard Drawings MMCD – G8”) and substituting with the words “MMCD Standard Drawing G8” after the words “(refer to” and before the words “Steeper slopes”.
- In the second paragraph by inserting the words “of minimum 0.1%” after the words “rising grade” and before the words “whenever possible”; by inserting the words “as per Section 2.2.11 of this Schedule” after the words “at that location” and before the words “Hydrants shall”; and further, by deleting the words “refer to Section 2.2.11” after the words “release valve”.

**45.** Said Bylaw is further amended in Schedule “A”, Section 2.2.8, MINIMUM CLEARANCE, as follows:

- In the first paragraph by deleting the figure “0.5 mm” and substituting with the figure “500 mm” after the words “at least” and before the words “above the crown”;
- In the second paragraph by deleting the word “clearance” and substituting with the word “separation” after the words “minimum horizontal” and before the words “between a water” and deleting the words “concrete encased or” after the words “sewer main is” and before the words “installed in”.
- In the third paragraph by deleting the word “above” and substituting with the words “clearance identified in Section 2.2.8.2”; in the first bulleted paragraph by inserting the words “water main” after the word “The” and before the words “joints are”; in the second bulleted paragraph by deleting the words “shrink wrapped or tape wrapped” and substituting with the words “wrapped with heat shrink plastic or packed with compound and wrapped with tape” after the words “joints are to be” and before the words “over a length”; and further, in the third bulleted paragraph by inserting the words “with heat shrink plastic packed with compound and wrapped with tape” after the words “to be wrapped”.

**46.** Said Bylaw is further amended in Schedule “A”, Section 2.2.9, VALVING, as follows:

- In Subparagraph (a) by adding the words “so that specific sections of mains may be isolated” after the words “At intersections”.
- By adding the following new Paragraph:

“(5) Not more than 20 service connections isolated.”
- In the last paragraph by adding the words “subject to the approval of the Engineering Director” after the words “(with suitable reducers)”.



47. Said Bylaw is further amended in Schedule “A”, Section 2.2.10, HYDRANTS, as follows:

- By deleting the first paragraph in its entirety and replacing with the following:

“2.2.10.1

Fire hydrant locations will be dependent upon the fire flow requirement for the designated zoning. In general, fire hydrants shall be located at street intersections and at a maximum spacing of 150 m in low density residential areas and no more than 90 m from a building. In medium and high density residential, institutional, commercial and industrial areas, hydrants shall be located at a maximum spacing of 90 m or as approved by the Engineering Director. Additional hydrants may be required by the Engineering Director at schools or other major developments.”

- In the second paragraph by deleting the words “Where possible” before the words “hydrants shall”; by deleting the word “a” after the words “12 metres from” and before the words “building to be protected”; and further, by deleting the words “Centre of hose outlet shall not be less than 457 mm above final grade” after the words “to be protected”.
- In the third paragraph by deleting the word “Consultant’s” and substituting with the words “Project Engineer’s” after the words “It shall be the” and before the words “responsibility to ensure”; by deleting the word “and” after the word “hydro” and before the word “telephone”; by inserting the words “gas or cablevision” after the words “hydro, telephone” and before the words “work, etc.”; and further, by deleting the words “or within 1 m of the back of curb” and substituting with the words “within 2 m of the back of curb or 1 m from any other obstruction, or 0.5 m of the back of sidewalk” after the words “open ditches”.
- By deleting the last paragraph in its entirety and substituting with the following:

“2.2.10.4

Hydrants to be installed within Rural areas shall be as per City Standard Drawing DW-1.

2.2.10.5

All fire hydrants that are to be connected to existing water mains shall be installed by the City at the expense of the developer.

2.2.10.6

Pumper ports (100 mm) are required on all hydrants installed on 150 mm diameter or greater size water mains complete with a quick connect Storz connection.

2.2.10.7

Centre of any hose outlet shall not be less than 575 mm above final grade.

2.2.10.8

The hydrant barrel flange is to be a minimum of 100 mm and a maximum of 150 mm above the finished grade adjacent to the hydrant location.

2.2.10.9

All public and private hydrants are to be painted with General Paint’s self-priming urethane enamel, as follows:

Public:           Body – Yellow No. 16-202  
                      Top – Red No. 16-208  
                      Pumper Port Cap – Black No. 16-216  
                      Hose Port Caps (2) – Red No. 16-208

Private:           Body – Yellow No. 16-202  
                      Top – Mid-Green No. 10-136  
                      Pumper Port Cap – Black No. 16-216  
                      Hose Port Caps (2) – Mid-Green No. 10-136”

**48.** Said Bylaw is further amended in Schedule “A”, Section 2.2.11, AIR VALVES, as follows:

- By inserting the following before the first paragraph:

“2.2.11.1

Air release valves shall be single acting air valves or as approved by the Engineering Director”

- In the first paragraph by deleting the words “Air release valves are also” and substituting with the words “Combination air/vacuum valves are” after the figure “600 mm” and before the words “required on any”; and further, by deleting the words “Air release valves shall be single acting air valves or as approved by the Engineering Director” after the words “100 m apart”.

- By adding the following after the first paragraph:

“2.2.11.3

Air release valves shall be installed in a chamber within the boulevard, behind the curb or sidewalk, wherever possible as per the City’s Standard Drawing DW-3.”

**49.** Said Bylaw is further amended in Schedule “A”, Section 2.2.12, BLOW-OFFS, by adding the following:

“2.2.12.2

Blow-offs shall be installed within the boulevard, behind the curb or sidewalk, wherever possible as per the City’s Standard Drawing DW-2.”

**50.** Said Bylaw is further amended in Schedule “A”, Section 2.2.13, THRUST RESTRAINT, in the first paragraph, by deleting the words “See standard drawing MMCD W1” and substituting with the words “Refer to MMCD Standard Drawing W1)” after the words “and blow-offs” and before the words “Thrust blocking”.

**51.** Said Bylaw is further amended in Schedule “A”, Section 2.2.14, CHAMBER DRAINAGE, in the second paragraph by deleting the word “such” after the words “design of” and before the words “facilities housed”; and further by deleting the word “and” after the words “Engineering Director” and before the words “where a high”.

**52.** Said Bylaw is further amended in Schedule “A”, Section 2.2.15, SERVICE CONNECTION, by deleting the last four paragraphs and substituting with the following:

“2.2.15.2

Water service connections shall be:

- (1) a minimum size of 19 mm diameter;
- (2) a maximum size of 25 mm, unless approved by the Engineering Director;
- (3) a minimum of 25 mm where the water pressure in the City water main is less than 345 kPa (50 psi);
- (4) Type K copper when 25 mm diameter or smaller;
- (5) installed with a corporation stop.

2.2.15.3

New pre-service water connections shall be installed as per the City’s Standard Drawings DW-7A and DW-7B.

- (1) The water meter box or chamber and water meter setter models, determined by size in Table 2.2.15 below or a City approved equivalent, are required for all new pre-service water connections.
- (2) All meter chambers for 100 mm, 150 mm, 200 mm and 250 mm meter sizes shall be installed with a lid, complete with galvanized steel hatch, as per the City’s Standard Drawings DW-9 and DW-10.

**Table 2.2.15: Water Meter Box and Setter Models for Pre-Service Water Connections**

Size	Meter Box/Chamber Model		Meter Setter Model
	Langley Concrete	A.E. Concrete	
19 mm (3/4")	-	B-937	Ford VBHH92-15W-44-33A-Q
25 mm (1")	-	T266	Ford VBHH92-15W-44-44A-Q
38 mm (1 1/2")	-	T266	Ford VBHH76-86-12BHC-1166 c/w #6 idler and 2 Ford model C87-66 pack joint couplers
50 mm (2")	-	5686	Ford VBHH77-87-12BHC-177 c/w #7 idler and 2 Ford model C87-77 pack joint couplers
100 mm (4")	2121		-
150 mm (6")	2121		-
200 mm (8")	2121		-
250 mm (10")	3151		-

2.2.15.4

All new water connections shall be installed as per the City’s Standard Drawing DW-8.

- (1) All new water connections shall have the water meter chamber pre-installed by the developer, as per Table 2.2.15 and the City’s Standard Drawings DW-9 and DW-10, unless approved by the Engineering Director.

2.2.15.5

New water connections shall typically be located as per the City’s Standard Drawings DC-1 and DC-2 and the curb stop and meter box located within the road right of way adjacent to the property line.

2.2.15.6

Water services and water meters shall not be located within a driveway or vehicle access unless approved by the Engineering Director.

- (1) Where it is not possible for a water meter to be outside of a driveway or vehicle access, the water meter box or chamber lid must be rated for static H-20 loading.

2.2.15.7

All domestic and combined water connections shall require a backflow prevention device to be installed on private property, located after the water meter but before any onsite connections.

The backflow preventer shall be:

- (1) installed prior to connection to the City’s live Water System;
- (2) in compliance with the City’s Cross Connection Control Program; and,
- (3) tested annually.

2.2.15.8

In all Urban areas with new concrete curb and gutter, the location of the water service shall be clearly identified with the letter “W” on the face of the curbing. The letter is to be 50 mm high and permanently and clearly cast into the concrete at time of pouring. In areas of existing concrete curbing and where the retention of the existing concrete curbing has been approved, the service location shall be identified with a 6 mm deep saw cut painted blue on the top face of the existing curb.”

- 53.** Said Bylaw is further amended in Schedule “A”, by deleting Section 2.2.16, WATER WELLS (FORM F-5), in its entirety and substituting with the following:

“Private water wells, buildings and appurtenances required for servicing of development located outside of the service area of the community water supply system shall be as per the requirements of the latest editions of the BC Ministry of Health, BC Safe Water Drinking Regulations and the Guidelines for Canadian Drinking Water Quality, and shall be to the acceptance of the Fraser Health Authority. Any buildings shall be reviewed and conform to the applicable Building Code.”

- 54.** Said Bylaw is further amended in Schedule “A”, Section 2.2.17, RESERVOIRS, as follows:

- In the first paragraph by inserting the words “of the application” after the words “particular circumstances” and before the words “Reservoir capacity”; and further, in the second bulleted item, by inserting the words “shall be” after the word “Material” and before the words “reinforced concrete”.
- By deleting the remaining text following the fifth bulleted item and substituting with the following:
  - “(6) Hatches to be watertight aluminum complete with hinges and related hardware, drains, locks and intrusion alarms;
  - (7) All interior surfaces of the reservoir to be epoxy lined to AWWA Standards;
  - (8) Ventilation pipes or openings;
  - (9) Slope floor to sump;
  - (10) Drain sump in concrete reservoirs to be a minimum 1,000 mm x 1,000 mm x 400 mm; invert of drain pipe to be flush with sump floor; grating to be installed over sump;
  - (11) Sub-drain under floor to collect and drain any leakage;

- (12) Interior wall ladders from roof accesses to floor (no exterior ladder required);
- (13) Fall prevention railings;
- (14) All pipework within the reservoir to be stainless steel, steel, or ductile iron coated to AWWA standards;
- (15) All metal parts within the reservoir including bolts, nuts, screws, anchors, ladders, etc. to be stainless steel;
- (16) Pressure transducer or ultrasonic level controls for each cell;
- (17) Wash-down connection in each cell, complete with backflow preventer and 65 mm diameter pipe;
- (18) Above ground reservoirs require a ground level maintenance access opening;
- (19) Inlet, outlet pipe to be designed to disperse water throughout the reservoir;
- (20) Each inlet pipe to be equipped with a Tideflex Mixing System or an approved alternate;
- (21) Outlet pipes from each cell to be equipped with a tap for water sampling;
- (22) Overflow drain to be provided and sized to transmit the maximum pump discharge. The overflow drain shall be connected to an acceptable point of discharge;
- (23) Paved access roads;
- (24) Fencing, lighting, locks, alarms, and other security facilities to minimize vandalism and prevent water contamination;
- (25) Electrical control to be housed in a building;
- (26) Telemetry to City’s SCADA system. Supply and installation of the City’s SCADA system shall be completed by the City at the expense of the developer;
- (27) Geotechnical report on foundation conditions;
- (28) Additional features that may be required, subject to system details, include the following:
  - (a) sampling ports for inlet, outlet and reservoir water;
  - (b) flow measurement and recording;
  - (c) heat, light and ventilation to local and WCB standards;
  - (d) chlorine residual analyzer;
  - (e) provision for re-chlorination facilities;
  - (f) provision for de-chlorination facilities.

2.2.17.3

Reservoir valve chamber design shall incorporate the following features:

- (1) All valves associated with the reservoir operation;
- (2) Entrance at a grade large enough to permit safe removal of largest equipment;
- (3) Lifting beams and hoists, where necessary, to enable removal of equipment;
- (4) Interior and exterior of all steel piping to be coated to AWWA standards, or use stainless steel;
- (5) Include a drainage sump in valve chamber floor, connected to overflow pipe;
- (6) Include a 50 mm valve outlet off-supply line within valve chamber for water supply for cleaning reservoir;
- (7) Have OS and Y valves throughout.

2.2.17.4

Design submission to the City shall include:

- (1) Certified design drawings for the reservoir including civil, structural and electrical components.
- (2) A design brief identifying the design service area, capacity, location, control philosophy, control set points, alarm and trip signals, operator interface materials, mixer system, etc.

2.2.17.5

Operation and Maintenance Manual submissions shall be provided to the City, prior to the City commissioning of the reservoir, and incorporate the following features:

- (1) Three copies bound in heavy duty ACCO Expandable type catalogue binders with glossy black fabric;
- (2) Shall be in the following format:  
Part A: General Project Data – shall include:
  - (a) Section 1 – Reservoir Design Report – to be prepared by the Professional Engineer responsible for the reservoir design. The report shall include:
    - (i) a general description of the reservoir;
    - (ii) the design criteria, including the reservoir catchment area; and,
    - (iii) the Professional Engineer’s signature and seal.
  - (b) Section 2 – Electrical Engineering Report – to be prepared by the Professional Engineer responsible for the electrical design. The report shall include:

- (i) the control philosophy;
  - (ii) the control set points;
  - (iii) the alarm and trip signals;
  - (iv) the operator interface; and
  - (v) the Professional Engineer’s signature and seal.
- (c) Section 3 – Project Directory
  - (d) Section 4 – Record Drawings
  - (e) Section 5 – Letters of Assurance

Part B: Building Architectural – Layout, detail elevation drawings and sections, etc., to be included as related to the specific project. Section numbering shall be included as needed and continued from Part A, subject to approval by the Engineering Director.

Part C: Equipment – Mixer, valves, etc., to be included as related to the specific project. Section numbering shall be included as needed and continued from Part B, subject to approval by the Engineering Director.

Part D: Building Mechanical – Fans, heating, security, lighting, etc., to be included as related to the specific project. Section numbering shall be included as needed and continued from Part C, subject to approval by the Engineering Director.

Part E: Electrical – All related electrical equipment and material listing to be included as related to the specific project. Section numbering shall be included as needed and continued from Part D, subject to approval by the Engineering Director.

Part F: Instrumentation – All related instrumentation equipment to be included as related to the specific project. Section numbering shall be included as needed and continued from Part E, subject to approval by the Engineering Director.”

**55.** Said Bylaw is further amended in Schedule “A”, Section 2.2.18, PUMP STATIONS, as follows:

- In the first paragraph by inserting the word “Booster” before the words “pump stations”; by inserting the word “the” before the words “balancing storage“ wherever they appear within the first paragraph; and further, by deleting the last 2 sentences.
- By inserting the following after the first paragraph:

“2.2.18.2

Booster pump stations are permitted to supply water to storage reservoirs only.  
No closed water supply systems are allowed with booster pump stations in place.



2.2.18.3

A standby power supply shall also be provided unless approved by the Engineering Director.

2.2.18.4

A minimum of two fire pumps are required. The station shall be able to supply fire flow with one unit out of service.”

- In the second paragraph by deleting the bulleted items in their entirety and substituting with the following:

- “(1) Aesthetically pleasing reinforced concrete, split face concrete block, or brick construction;
- (2) The structure shall be designed to meet seismic requirements;
- (3) Access doorways sized so that the largest single piece of equipment may be safely removed and replaced;
- (4) Lifting hooks or rails with pulley blocks, as required;
- (5) Roof hatches for removing pumps with crane;
- (6) Electric motors to be 600 volt, 3 phase, premium efficiency, with thermal protection. Lower voltage (208 volt, 3 phase) may be considered, depending upon service voltage available from power company;
- (7) Motors 100 hp and above to have analogue vibration recording and protection;
- (8) Air relief discharge and pilot lines to be piped to floor drains;
- (9) Housekeeping pads for MCCs;
- (10) Hydraulically operated or motorized pump control valves with isolation valves, unless pumps have variable speed drives that control transient pressures;
- (11) Pumps to start and stop individually. Start and stop to be based on water levels in reservoir. Automatic alternation of pump sequence;
- (12) Power failure protection with manual reset;
- (13) High water override start plus alarm;
- (14) High pressure (discharge) override start;
- (15) Low pressure (discharge) override start plus alarm;
- (16) Low pressure/no flow (suction) override start;
- (17) Alarms to be audible and visible;
- (18) Control valves to minimize starting and stopping surges;
- (19) Power factor correction, as required by power authority;
- (20) Hour meters on each pump;

- (21) Recording flow meter at each pump station, as per the City’s Standard Drawing DW-12;
- (22) Recording suction and discharge pressure gauges at each pump station;
- (23) Spring return “silent” check valves;
- (24) High pressure and surge relief valves with isolation valves, if warranted by system characteristics and transient analysis;
- (25) Mechanical pump seals;
- (26) Water quality sampling ports;
- (27) Interior and exterior of pipework coated to AWWA standards, or use stainless steel;
- (28) Pump station floor drainage to be connect to sanitary Sewer System;
- (29) Automatic heating, ventilating and dehumidifying systems;
- (30) In-station lighting;
- (31) Chlorination room equipped with sodium hypochlorite system;
- (32) Drainage to be provided for all areas of the pump station;
- (33) Telemetry and pump controls to City’s SCADA system. Supply and installation of the City’s SCADA system will be completed by the City at the expense of the developer;
- (34) Electrical phase loss protection;
- (35) Electrical drawing schematics for control panels;
- (36) Duplex strainers on control panel;
- (37) Paved access roads;
- (38) Pump, electrical, equipment, and operations manual;
- (39) Work desk and chair;
- (40) Bookshelf suitable for storage of operation and maintenance manuals and associated literature;
- (41) Interior wall surfaces insulated to minimum R14 with ¾” G1S plywood painted white;
- (42) Ceilings insulated to minimum R40 with ½” gyproc filled, sanded and painted white. Painted wood trim strip to be provided at joint between ceiling and walls;
- (43) Noise attenuation to suit location and the City’s Noise Control Bylaw, in force from time to time;
- (44) Building size to adequately accommodate the above noted equipment and provide adequate clearances for operation and maintenance purposes;
- (45) One heavy duty Schlage “C” dead bolt #D660P per door and one heavy duty Schlage “C” entrance set #D53PD per door;

- (46) Minimum clearance of 1 m from any equipment to a wall or other obstruction;
- (47) Security fence around the site.”

- In paragraph 3, in the first bulleted item, by deleting the word “includes” and substituting with the word “including” after the words “the design” and before the words “civil, structural”; and in the last bulleted item, by adding the following words “location, control philosophy, control set points, alarm and trip signals, operator interface, materials, etc.” after the words “fire flows”.
- By deleting the last paragraph and Items A and B in their entirety and substituting with the following:

“2.2.18.7

Operation and maintenance manual submissions shall be provided to the City, prior to the City commissioning of the pump station, and incorporate the following features:

- (1) Three copies bound in heavy duty ACCO expandable type catalogue binders with glossy black fabric;
- (2) Shall be in the following format:

Part A: General Project Data – shall include:

- (a) Section 1 – Pump Station Design Report – to be prepared by the Professional Engineer responsible for the pump station design. The report shall include:
  - (i) a general description of the pump station;
  - (ii) the design criteria, including the pump performance curves; and,
  - (iii) the Professional Engineer’s signature and seal.
- (b) Section 2 – Electrical Engineering Report – to be prepared by the Professional Engineer responsible for the electrical design. The report shall include:
  - (i) the control philosophy;
  - (ii) the control set points;
  - (iii) the control modes;
  - (iv) the alarm and trip signals;
  - (v) the operator interface; and,
  - (vi) the Professional Engineer’s signature and seal.
- (c) Section 3 – Project Directory
- (d) Section 4 – Record Drawing
- (e) Section 5 – Manufacturer Recommended Maintenance Schedules for Major Equipment – to include:

- (i) the manufacturer’s data on operation, maintenance, replacement parts list, lubrication charts and recommended inspection intervals for all mechanically and/or electrically operated items of equipment, including but not limited to, pumps, valves, electrical lighting, controls, switches, heating and ventilating equipment, access hatches, etc.; and,
- (ii) the manufacturer’s data including maintenance schedule for the equipment, which shall include a list of required activities, as well as the recommended frequency for each activity.

(f) Section 6 – Letters of Assurance

Part B: Building/Kiosk Architectural – Layout, detail elevation drawings and sections, etc., to be included as related to the specific project. Section numbering shall be included as needed and continued from Part A, subject to approval by the Engineering Director.

Part C: Equipment – Generator, pumps, valves, etc., to be included as related to the specific project. Section numbering shall be included as needed and continued from Part B, subject to approval by the Engineering Director.

Part D: Building/Kiosk Mechanical – Fans, heating, security, lighting, etc., to be included as related to the specific project. Section numbering shall be included as needed and continued from Part C, subject to approval by the Engineering Director.

Part E: Electrical – All related electrical equipment and material listing to be included as related to the specific project. Section numbering shall be included as needed and continued from Part D, subject to approval by the Engineering Director.

Part F: Instrumentation – All related instrumentation equipment to be included as related to the specific project. Section numbering shall be included as needed and continued from Part E, subject to approval by the Engineering Director.”

**56.** Said Bylaw is further amended in Schedule “A”, Section 2.2.19, PRESSURE REDUCING STATIONS, as follows:

- By combining the first two paragraphs together; by inserting the words “ the City’s” after the words “as per” and before the words “standard drawing” by deleting the reference “DW-5” and substituting with the references “DW-4A and DW-4B” after the words “standard drawing” and before the words “to a good engineering standard”; by inserting the words “the approval of the” after the words “meet the” and before the words “Engineering Director”; by deleting the word “with” after the words “and meet” and before the words Engineering Director; and further, by deleting the word “approval” after the words “Engineering Director”.

- By adding the following:

“2.2.19.2

Pressure reducing station design must conform to good general design practice, as identified in MMCD and AWWA design manuals. In general, the design shall incorporate the following features:

- (1) minimum chamber size 3 m x 2 m x 2 m (inside height);
- (2) structure to meet seismic requirements;
- (3) parallel pressure reducing valves;
- (4) isolating valves;
- (5) air release valves;
- (6) upstream and downstream pressure gauges;
- (7) interior and exterior of steel pipework coated to AWWA standards, or use stainless steel;
- (8) fresh air ventilation;
- (9) external kiosk, to house electrical and electronic equipment;
- (10) PLC Controls, including security switches, discharge and suction pressure transmitters and modem;
- (11) Telemetry to the City’s SCADA system. Supply and installation of the City’s SCADA system shall be completed by the City at the expense of the developer.

2.2.19.3

Operation and maintenance manual submissions shall be provided to the City, prior to the City commissioning of the pressure reducing station, and incorporate the following features:

- (1) Three copies bound in heavy duty ACCO expandable type catalogue binders with glossy black fabric;
- (2) Shall be in the following format:
  - (a) Section 1 – Pressure Reducing Station Design Report
  - (b) Section 2 – Project Directory
    - (i) 2.1 – Engineer/Designer
    - (ii) 2.2 – Letters of Assurances
    - (iii) 2.3 – Contractor and Subcontractors
    - (iv) 2.4 – List of Suppliers
  - (c) Section 3 – Record Drawings

- (d) Section 4 – Materials
- (e) Appendix A – System Analysis, Fire Flow Demand, Peak Hour Demand, Average Hour Demand”

**57.** Said Bylaw is further amended in Schedule “A”, Section 2.2.20, WATER SYSTEM LOCATION/CORRIDORS, as follows:

- In the first paragraph by adding the word “classification” after the words “for the road”.
- In the second paragraph by adding the words “Refer also to Paragraph 2.1.4.2” after the words “Engineering Director”.
- In the third paragraph by deleting the words “the above” and substituting with the words “Section 2.2.20.2” after the word “notwithstanding” and before the words “the right of way”; and further, by adding the words “Additional right of way width may also be required in order to accommodate manholes, valve chambers or other appurtenances.” after the words “Engineering Director.

**58.** Said Bylaw is further amended in Schedule “A”, Section 2.2.21, CROSS CONNECTION CONTROL, by deleting the words “and the Engineering Director’s specifications” and substituting with the words “City’s Waterworks Regulation Bylaw, in force from time to time, and specifications of the Engineering Director” after the words “control standards”.

**59.** Said Bylaw is further amended in Schedule “A, Section 2.3, DRAINAGE, by adding the words “or found online at [www.chilliwack.com](http://www.chilliwack.com)” after the word “Department”.

**60.** Said Bylaw is further amended in Schedule “A”, Section 2.4.2, DESIGN FLOWS, as follows:

- By deleting the first paragraph in its entirety and substituting with the following:
  - “2.4.2.1  
The sanitary Sewer System shall be designed using the average daily flows of 410 litres/capita/day for the zone noted under Section 2.4.2.2.”
- By inserting the following Paragraph before the second paragraph:
  - “2.4.2.2  
Table 2.4.2 below is a guideline for applying minimum density by land use to determine flow.

**Table 2.4.2: Minimum Density by Land Use**

Residential Density	Persons/Unit
Standard SFD: $\leq 16$ units per hectare	3.0
Small Lot SFD (R1-D): $\geq 17$ and $\leq 20$ units per hectare	3.0
Strata Retirement Rancher: 21 units per hectare	2.0
Townhouse: $\geq 22$ and $\leq 44$ units per hectare	2.3
Apartment – 4 Storey: $\geq 45$ and $\leq 200$ units per hectare	1.9
Apartment – High Rise: $\geq 200$ and $\leq 400$ units per hectare	1.9
Non-Residential Density	Equivalent Population/Hectare (Gross)
Commercial	75
Industrial	50
Institutional	75”

- By deleting the second paragraph in its entirety and substituting with the following:  

“For non-residential areas, flows should be based on specific data related to the actual development or zoning use, as well as flow based on Table 2.4.2. The larger of the two calculations shall be used for system sizing.

- By adding the following:

“2.4.2.4  
 Specific flow information shall be provided if requested by the Engineering Director.”

- In the third paragraph by deleting the word “above” after the words “added to the” and before the word “flows” and by adding the words “identified in Sections 2.4.2.1, 2.4.2.2 and 2.4.2.3. Peak factors are not to be applied to infiltration flows.” after the word “flows”.

**61.** Said Bylaw is further amended in Schedule “A”, Section 2.4.4, MANHOLES, as follows:

- By inserting the following after the paragraph ending “no greater than 150 m apart”:

“2.4.4.3  
 Both outside and inside of manholes should be grouted to prevent infiltration. Where below the water table, all manhole risers should be sprayed outside with two coats butyl asphaltic spray and 100 mm wide ConWrap installed around outside joints.”

- By adding the following after the paragraph ending “ponding will not occur”:

“2.4.4.5

Manholes shall be designed and installed to meet the Workers’ Compensation Board of BC Occupational Health and Safety (OHS) Regulation.

2.4.4.6

Force main discharges should be directed into the receiving manhole outflow pipe. Manhole benching should be extended a minimum of 200 mm above the force main crown. If a manhole cannot be avoided, a drop pipe inside the manhole is required.

**62.** Said Bylaw is further amended in Schedule “A”, Section 2.4.5, HYDRAULIC LOSSES ACROSS MANHOLES, as follows:

- In Paragraph (c), by deleting the words “450 mm and 600 mm. See” and substituting with the words “300 mm and 600 mm as per MMCD” after the words “inverts is between” and before the words “Standard Drawing S3.:
- In Paragraph (d) by deleting the figure “450 mm” and substituting with the figure “300 mm” after the words “permitted up to” and before the words “from invert”.

**63.** Said Bylaw is further amended in Schedule “A”, Section 2.4.8, VELOCITIES, by deleting the word “at” and substituting with the words “subject to” after the words “grade is limited” and before the words “the approval of”; and further, by adding the following words “However, in no case shall a pipe grade be less than 0.35%.” after the words “pipe diameter”.

**64.** Said Bylaw is further amended in Schedule “A”, by deleting Section 2.4.9, MINIMUM GRADE, in its entirety and substituting with the following:

“2.4.9.1

The grade(s) of any sewer is governed by the minimum velocity of 0.6 m/sec; however, the upstream section of a residential sewer serving a design population of 25 or less should have a minimum grade of 1.5%, unless otherwise approved by the Engineering Director.”

2.4.9.2

Sanitary force main grades shall:

- (1) Have a maximum grade of 10.0% unless provisions are made to anchor the pipe to the bottom of the trench with concrete poured in place (refer to MMCD Standard Drawing G8). Steeper slopes without anchors will require recommendation of a geotechnical engineer. Damsac or rock fill plugs and cross ditches may be required on steep slopes to prevent erosion of trench fill;
- (2) Be designed with a rising grade of minimum 0.1% whenever possible to minimize high points in the system. Where a high point is unavoidable, air release valve shall be installed at that location as per Section 2.4.15.2 of this Schedule.”



**65.** Said Bylaw is further amended in Schedule “A”, Section 2.4.11, CURVILINEAR SEWERS, by deleting the figure “0.91” and substituting with the figure “0.90” after the words “must exceed” and before the words “m/sec.”; and further, by adding the words “Joint deflection should not exceed 75% of the maximum recommended by the pipe manufacturer.” after the words “located by survey”.

**66.** Said Bylaw is further amended in Schedule “A”, Section 2.4.12, SEWER LOCATION/CORRIDORS, as follows:

- In the first paragraph by deleting the word “applicable” after the words “noted in the” and before the words “Standard Drawing”; by deleting the word “that” and substituting the words “the applicable” after the words “Cross-Section for”; and further by adding the word “classification” after the word “road”.
- By deleting the second paragraph in its entirety and substituting with the following:

“2.4.12.2

When the utility is permitted to cross private land(s), the right of way or utility corridor shall be a minimum width of 6.0 m and the maximum single diameter for a single utility located within the right of way shall be 300 mm or as approved by the Engineering Director. Refer also to Section 2.1.4.2.

2.4.12.3

Notwithstanding Section 2.4.12.2, the right of way shall be increased by an amount to be determined by the Engineering Director for a right of way containing more than one utility and/or where the depth from designed finished surface grade to top of pipe exceeds 1.0 m and/or where the proposed diameter of the utility exceeds 300 mm or as approved by the Engineering Director.

Additional right of way width may also be required in order to accommodate manholes, valve chambers or other appurtenances.”

- In the third paragraph by deleting the word “standard” and substituting with the words “paved surface” after the words “constructed to a” and before the words “adequate to support”.

**67.** Said Bylaw is further amended in Schedule “A”, by deleting Section 2.4.13, SANITARY SEWER SERVICE CONNECTIONS, in its entirety and substituting with the following:

“2.4.13.1

Sanitary sewer connections shall be

- (1) required for all new lots and new development on existing lots where a new or existing sanitary main is adjacent to the lot;
- (2) a minimum of 100 mm;
- (3) a minimum grade of 1.5% from the main to the property line;
- (4) a minimum depth of 1.0 m at the property line;

- (5) a maximum depth of 1.2 m at the property line, unless otherwise approved by the Engineering Director;
- (6) connected at a point just above the spring line;
- (7) connected to new mains using wye fittings;
- (8) connected to existing mains using saddles.
- (9) connected to existing mains using inserta tee

2.4.13.2

Sanitary sewer connections shall typically be located as per the City’s Standard Drawings DC-1 and DC-2, with an inspection chamber (IC) as per the City’s Standard Drawing DS-4, located within the road right of way adjacent to the property line.

2.4.13.3

All sanitary sewer service connections that are to be connected to existing sanitary sewer mains shall be installed as per the City’s Standard Drawing DS-3, by the City at the expense of the Developer.

2.4.13.4

Control manholes may be required for non-residential sanitary sewer service connections instead of an inspection chamber.

2.4.13.5

Sanitary sewer service connections are not to be made into manholes. Where no alternative exists and approval is granted by the Engineering Director, the connection may be made provided that:

- (1) the connection is not in an adverse direction to the flow in the sewer main; and,
- (2) the provisions noted in Section 2.4.5 are met.

2.4.13.6

In all Urban areas requiring new concrete curb and gutter, the location of the sanitary sewer service shall be clearly identified with the letter “S” on the face of the curbing. The letter is to be 50 mm high permanently and clearly cast into the concrete at time of pouring. In areas of existing concrete curbing, the service location shall be identified with a 6 mm deep saw cut painted red on the top face of the existing curb.”

**68.** Said Bylaw is further amended in Schedule “A”, Section 2.4.14, SANITARY PUMP STATIONS, as follows:

- By inserting the following paragraph before the existing first paragraph:

“2.4.14.1

This Bylaw is applicable to all pump stations with a firm capacity less than 50 L/s and a pump motor size less than 50 hp. For pump stations that exceed those sizes, consult the City for project specific requirements.”

- In the existing second paragraph by deleting the word “these” and substituting with the words “sanitary pump” after the words “type of” and before the words “stations will be”; and further, by deleting the word “will” and substituting with the word “shall” after the words “per hour, etc.)” and before the words “be provided by”.
- In the existing third paragraph by deleting the word “detail” after the words “Chilliwack Standard” and before the word “Drawing”; by deleting the reference “DS 7 to DS 10” and substituting with the reference “DS-8 to DS-13B” after the word “Drawings” and before the words “Variations from”; and further, by deleting the word “details” and substituting with the word “Drawings” after the words “the Standard” and before the words “require the approval”.
- By deleting Paragraph (a) in its entirety and substituting with the following:

“All sanitary pump stations shall be designed with a minimum of 2 pumps. The station shall be capable of handling the peak wet weather flow conditions with one pump out of service. The structure shall be designed to meet seismic requirements. A mixer should be provided, or one pump equipped with automatic flush valve.”
- In Paragraph (b) by deleting the paragraph heading “Each pump must be” and substituting with “Pump requirements”.
- In Paragraph (b), by inserting the following new item (a) and renumbering the existing items accordingly:

“(a) TT Flygt or Myers model pump;”
- In the existing fourth item by inserting the words “Designed to” before the words “operate on”; and further, by inserting the following after “electrical source”:

“(f) Maximum motor speed: 1750 rpm. For small flows (less than or equal to 10.0 L/s), 3500 rpm may be considered, subject to City approval.

(g) Be able to operate alternately and independently of each other.”
- By deleting the existing fifth item and Clause (c) in their entirety and substituting with the following and renumbering the existing items accordingly:

“(3) All stations must be fibreglassed with a minimum of 2 coats of two-component white epoxy enamel. No metal stations are allowed;

- (a) In wet well and well below grade valve chambers, electrical installations are made to meet the minimum hazardous area requirements of the Canadian Electrical Code and the electrical design and installation is subject to the acceptance of the Provincial Safety Inspector. Classify the wet well and below grade valve chamber as per the latest version NFPA 820 – Standards for Fire Protection in Wastewater Treatment and Collection Facilities. Provide the City with documentation of the approach for setting the Hazardous Area Classification.
  - (b) Minimum design to meet the requirement of a Class 1, Zone 2.
  - (4) The use of ventilation equipment to lower the applicable Hazardous Area Classification is only upon authorization by the City.
  - (5) Minimum wet well size: 2.1 m diameter.
  - (6) Check valves and plug valves required on each pump discharge.”
- In the existing Paragraph (d) by deleting the words “by the Engineering Director” after the words “as required”.
  - In the existing Paragraph (f) by deleting the words “area in the pump station or in a suitable” and substituting with the words “building or” after the words “mounted in a suitable” and before the words “kiosk adjacent”.
  - By deleting Paragraphs (i) and (j) in their entirety and substituting with the following and renumbering the Paragraphs accordingly:
    - “(12) Power and control cables to be continuous from within the pump station to within the kiosk.
    - (13) Control kiosk to be designed to contain control and SCADA equipment on the front panel and power equipment on rear panel. Concrete base to be minimum 75 mm above finished grade.
    - (14) Station to be complete with an Uninterruptible Power Supply (UPS) to serve alarms and controls.
    - (15) Station may require magnetic flow meter with totalizer and connection to SCADA, depending on their size and discharge location.
    - (16) For pump stations with design capacity greater than 7.5 hp, provide an automatic generator for standby power in case of power failure, unless this requirement is waived by the City. The automatic generator will be sized to run a minimum of either 2 pumps up or the firm capacity of the pump station, whichever is the greater requirement.
    - (17) Pump stations may require variable frequency drives (VFD’s) depending on their size and discharge location.
    - (18) One heavy duty Schlage “C” Dead Bolt # D660P per door and 1 heavy duty Schlage “C” Entrance Set #D53PD per door.”

- By inserting the following after the existing Paragraph (k) and renumbering the existing Paragraphs accordingly:

“(20) Sized so that each motor does not cycle more than six times in one hour under normal operating conditions.”

- In existing Paragraph (m) by inserting the figure “50 mm” after the word “A” and before the words “water connection”.
- In existing Paragraph (n) by inserting the words “or other sensitive area within the City, at the City’s discretion, install” after the words “park or school” and before the words “chain link fencing”; by deleting the words “shall be installed” after the words “chain link fencing” and before the words “as per”; by deleting the word “fencing” after the words “City walkway” and before the word “standards”; and further, by adding the words “or other specified security provisions by the City” after the word “Standards”.
- By deleting the existing Paragraph (p) in its entirety and renumbering the existing Paragraphs accordingly.
- In Paragraph (q) by inserting the words “operator interface with indicator lamps” after the words “must incorporate” and before the words “an extra plug-in”
- By inserting the following after the existing Paragraph (s) and renumbering the existing Sections accordingly:

“(28) Odour control as required.”

“2.4.14.6

Access the potential for transient pressures on all pump stations.

- (1) Detailed assessment is not required if:
  - (a) pumping systems have flows less than 6.0 L/s;
  - (b) pumping systems have a static head of less than 10 m
- (2) Conduct a more thorough assessment if:
  - (a) total dynamic head is greater than 15.0 m and the flow rate exceeds 30.0 L/s;
  - (b) any system in which column separation can occur:
    - (i) systems with “knees” (high points);
    - (ii) force mains that require automatic venting or air vacuum valves;
    - (iii) force mains longer than 100.0 m with a steep gradient followed by a long, shallow gradient.

2.4.14.7

Valve chambers shall use the following criteria:

- (1) The valve chamber shall be sized as follows:
  - (a) For discharging piping sizes 150 mm diameter or larger, use rectangular valve chambers with a minimum internal dimension of 2400 mm by 2400 mm.
  - (b) For pipe sizes less than 150 mm, circular manholes with a minimum diameter of 1800 mm are acceptable, subject to meeting the minimum clearance as defined in Paragraph 2.4.14.7(2).
- (2) Provide the minimum clearances as follows:
  - (a) Sidewall clearance around to end of flange: 300 mm for valves.
  - (b) Clearance from wall to flange: 100 mm.
  - (c) Internal clearance between valves (as measured from edge of flange): 750 mm.

2.4.14.8

Wet well sizing shall be determined using the Active Storage Volume, as determined by the maximum pump starts per hour, for constant speed application:

- (1) Based on single pump operation.
  - (2) As per manufacturer’s requirements, but not to exceed six starts per hour. Provide calculations.
  - (3) Minimum of 150 mm between start/lead start/stop control elevations, and high and low level alarms.
  - (4) Progressive start and stop of pumps (i.e. both pumps should not start or stop at the same elevation). Note the implication of this for a duplex pump station is a minimum active depth of 450 mm (from Lag start to Lead Stop and a total monitored depth of 750 mm (includes high level and low level).
  - (5) Low level alarm should be 100 mm to 150 mm above the minimum recommended water level for the pump.
- In the third bulleted item following the existing Paragraph(s), by adding the words “location and catchment map, control philosophy, control set points, alarm and trip signals, operator interface, etc.” after the words “starts per hour”.
  - By deleting the remainder of the text, in its entirety, following the third bulleted item and substituting with the following:

“2.4.14.10

Operation and Maintenance Manual submissions shall be provided to the City, prior to the City commissioning of the pump station, and incorporate the following features:

- (1) Three copies bound in heavy duty ACCO expandable type catalogue binders with glossy black fabric.
- (2) Shall be in the following format:

Part A: General Project Data – Shall include:

- (a) Section 1 – Pump Station Design Report - to be prepared by the Professional Engineer responsible for the pump station design. The report shall include:
  - (i) a general description of the pump station;
  - (ii) the design criteria, including the pump performance curves; and,
  - (iii) the Professional Engineer’s signature and seal.
- (b) Section 2 – Electrical Engineering Report - to be prepared by the Professional Engineer responsible for the electrical design. The report shall include:
  - (i) the control philosophy;
  - (ii) the control set points;
  - (iii) the control modes;
  - (iv) the alarm and trip signals;
  - (v) the operator interface;
  - (vi) the Professional Engineer’s signature and seal.
- (c) Section 3 – Directories
  - (i) Section 3.1 – Project Directory
  - (ii) Section 3.2 – Subcontractor Directory
  - (iii) Section 3.3 – Major Supplier Directory
- (d) Section 4 – Record Drawings
- (e) Section 5 – Manufacturer Recommended Maintenance Schedules for Major Equipment - it shall include:
  - (i) the manufacturer’s data on operation maintenance, replacement parts list, lubrication charts, and recommended inspection intervals of all mechanically and/or electrically operated items of equipment including, but not limited to pumps, valves, electrical lighting, controls, switches, heating and ventilating equipment, access hatches, etc.;

- (ii) the manufacturer’s data shall include a maintenance schedule for the equipment which shall include a list of required activities as well as the recommended frequency for each activity;
- (iii) the warranty commencement date and duration of warranty.

(f) Section 6 – Letters of Assurance

Part B: Building/Kiosk Architectural – Layout, detail elevation drawings and sections, etc., are to be included as related to the specific project. Section numbering shall be included as needed and continued from Part A, subject to the approval by the Engineering Director.

Part C: Equipment – Generator, pumps, valves etc., to be included as related to the specific project. Section numbering shall be included as needed and continued from Part B, subject to approval by the Engineering Director.

Part D: Building Mechanical – Fans, heating, security lighting, etc., to be included as related to the specific project. Section numbering shall be included as needed and continued from Part C, subject to approval by the Engineering Director.

Part E: Electrical – All related electrical equipment and material listing to be included as related to the specific project. Section numbering shall be included as needed and continued from Part D, subject to approval by the Engineering Director.

Part F: Instrumentation – All related instrumentation equipment to be included as related to the specific project. Section numbering shall be included as needed and continued from Part E, subject to approval by the Engineering Director.”

**69.** Said Bylaw is further amended in Schedule “A”, Section 2.4.15 FORCE MAIN, as follows:

- In the first paragraph by inserting the word “sanitary” after the words “design of” and before the words “force main systems”.
- In Paragraph (a) by deleting the figure “3.5” and substituting with the figure “1.5” after the words “should not exceed” and before the reference “m/s”.
- By deleting Paragraph (b) in its entirety and substituting with the following and renumbering the existing Paragraphs accordingly:



**“2.4.15.2 – Air Relief Valve**

Unless authorized by the City, provide an air/vacuum valve at all high points and grade changes along the force main route. Take best reasonable efforts to avoid high points and grade changes along the force main and resultant requirements for air/vacuum relief valves. Isolate each air/vacuum relief valve with an isolation valve.

Air/vacuum relief valve to be housed in a chamber as per the City’s Standard Drawing DS-17.

Air/vacuum valves to be made out of stainless steel - Vent-O-Mat RGX series, or A.R.I. Provide sizing documentation to the City.”

- In the existing Paragraph (c) by deleting the words “shall be incorporated” and substituting with the words “is required” after the words “inside drop pipe”.
  - In the existing Paragraph (d) by deleting the figure “75” and substituting with the figure “100” after the words “shall be” and before the words “mm diameter”; and further, by adding the words “Minimum discharge assembly size shall be 75 mm.” after the words “maintained by the City”.
  - In the existing Paragraph (e) by inserting the words “or HDPE DR-18” after the reference “PVC DR-25” and before the words “Use of alternate”.
  - In the existing Paragraph (g) by inserting the words “Pig Launch and Pigging Retrieval” before the words “Flush Out Chambers”; by adding the words “the City’s” after the word “See” and before the words “Standard Drawing”.
- 70.** Said Bylaw is further amended in Schedule “A”, Section 2.4.16 GATE VALVES, by deleting the figure “C500” and substituting with the figure “C509” after the words “to AWWA” and before the words “to a working pressure”; and further, by deleting the words “a SS 304” after the words “resilient seat with” and before the words “non-rising stem.”
- 71.** Said Bylaw is further amended in Schedule “A”, Section 2.5.2, CLASSIFICATION, as follows:
- By deleting the first paragraph in its entirety and substituting with the following:

“2.5.2.1  
All public roads within the City of Chilliwack have been classified in a hierarchal system, permitting an orderly set of standards to apply to each class.”
  - In the second paragraph by deleting the words “The following table” and substituting with the words “Table 2.5.2” after the words “road classifications” and before the words “identifies the types”.

- By deleting the first line of the table in its entirety and substituting with the following:

“Major Arterial      30.0 m<sup>1</sup>      21.0 m<sup>1</sup>      19.0 m<sup>1</sup>”

- By inserting the following after the first line of the table:

“Minor Arterial      25.0 m<sup>1</sup>      19.5 m<sup>1</sup>      12.0 m<sup>1</sup>”

- In the existing second line of the table by inserting the word “Major” before the word Collector; and further, at the end of the existing last line of the table by inserting the footnote “<sup>2</sup>” after the figure “7.0”.
- In the first bulleted item by deleting the word “These” before the words “widths are minimum”.

**72.** Said Bylaw is further amended in Schedule “A”, Section 2.5.3, GRADES as follows:

- By deleting the words “the following” after the words “as noted in” and before the word “table”; and further, by inserting the words “2.5.3 below” after the word “table” and before the words “and as noted”.
- In the first line of the table by inserting the word “Major” before the word “Arterial”.
- By inserting the following after the first line of the table:

“Minor Arterial      6%      8%

- In the third line of the table by adding the word “Major” before the word “Collector”.

**73.** Said Bylaw is further amended in Schedule “A”, Section 2.5.6, HORIZONTAL CURVES, in the first paragraph, by deleting the words “Standard cross-slopes on streets shall be 3.0% with crown point in the centre of the pavement width”.

**74.** Said Bylaw is further amended in Schedule “A”, Section 2.5.8, INTERSECTIONS, as follows:

- By deleting the second paragraph in its entirety and substituting with the following and renumbering the existing Sections according:

“2.5.7.2

Tables 2.5.7(A-1) and 2.5.7(A-2) identify the vehicle classification and design dimensions to be used based on the TAC Geometric Design Guide for Canadian Roads, Section 1.2.4 and Tables 1.2.4.1, 1.2.4.2 and 1.2.4.3.

**Table 2.5.7(A-1): Design Dimensions for Vehicle Classifications<sup>1</sup>**

Design Dimension	Vehicle Type (Classification)			
	Passenger Cars (P)	Single-Unit Trucks		
		Light (LSU)	Medium (MSU)	Heavy (HSU)
Length (m)	5.6	6.4	10.0	11.5
Front Overhang (m)	1.1	0.8	0.8	0.8
Rear Overhang (m)	1.3	2.2	2.7	2.7
Wheelbase (m)	3.2	3.4	6.5	6.5
Width (m)	2.0	2.6 <sup>1</sup>	2.6 <sup>1</sup>	2.6 <sup>1</sup>

<sup>1</sup>. Maximum dimension allowed without permit. Statistical data is not available.

**Table 2.5.7(A-2): Design Dimensions for Vehicle Classifications<sup>1</sup>**

Design Dimensions	Vehicle Type (Classification)				
	Tractor-Semitrailers		Doubles		Single-Unit Bus (B-12)
	(WB-19)	(WB-20)	A-Trains (ATD)	B-Trains (BTD)	
Length (m)	20.7	22.7	24.5	25.0	12.2
Front Overhang (m)	0.8	0.8	0.8	0.8	2.2
Rear Overhang (m)	1.7	3.3	1.5	1.3	2.8
Wheelbase 1 (m)	6.2	6.2	5.1	6.1	7.2
Wheelbase 2 (m)	12.0	12.4	6.9	9.0	-
Wheelbase 3 (m)	-	-	6.9	7.0	-
Wheelbase 4 (m)	-	-	3.3 <sup>1</sup>	0.8 <sup>2</sup>	-
Width (m)	2.6 <sup>3</sup>	2.6 <sup>3</sup>	2.6 <sup>3</sup>	2.6 <sup>3</sup>	2.4

- <sup>1</sup>. Includes 1.2 m from the rear effective axle to the hitch point and 2.1 m from the hitch point to the lead effective axle of the following unit.
- <sup>2</sup>. Represents the distance from the hitch point to the lead effective axle of the following unit.
- <sup>3</sup>. Maximum dimensions allowed without permit. Statistical data is not available.

2.5.7.3

Tables 2.5.7(B) and 2.5.7(C) show the vertical alignment at intersections requirements for major and minor roads.

- In the existing Tables “A” and “B”, by inserting the reference number “1” after the word “Distance” and further; by inserting the following foot note after the existing Table “B”:

“1. Distances are measured along the minor road from the ultimate near curb line of the major road to the beginning of the vertical curve (BVC).”

- By adding the following after the last paragraph following the existing Table “B”:

“2.5.7.5

Table 2.5.7(D) below shows the minimum sight dimensions required for intersections involving passenger cars on two lanes roads. Other vehicle types and intersection configurations will require review by City staff.

**Table 2.5.7(D): Intersection Sight Distances**

Design Speed (km/h)	Minimum Stopping Sight Distance (m)	Minimum Approach Sight Distance (m)	Minimum Departure Sight Distance (m)	
			Left turn onto major road	Right turn onto or crossing major road
20	-	15	-	-
30	-	25	-	-
40	45	35	-	-
50	65	40	105	95
60	85	50	130	110”

75. Said Bylaw is further amended in Schedule “A”, Section 2.5.9, CUL-DE-SACS, by deleting the words “The maximum length of a Cul-de-sac shall be 225 m” after the words “shall be 14 m”.

76. Said Bylaw is further amended in Schedule “A”, Section 2.5.11, CROSS SECTIONAL ELEMENTS, by inserting a new Section as follows and renumbering the existing Sections accordingly:

“2.5.10.1 **Cross Fall**

Standard cross-slopes on streets shall be 3.0% with the crown point in the centre of the pavement width.”

77. Said Bylaw is further amended in Schedule “A”, Section 2.5.11, CROSS SECTIONAL ELEMENTS, Section 2.5.11.3 Curbs, as follows:

- In the second paragraph by deleting the words “The following table” and substituting with the words “Tables 2.5.10” before the words “indicates where curbs”.
- By deleting the existing Table entitled “Location of Curbs” and substituting with the following:

“Table 2.5.10 Location of Curbs

Location/Road Type		No Curb	Barrier Curb	Roll-Over Curb
<b>Urban</b>	Commercial (all roads)	Not Permitted <sup>1</sup>	Required	Not Permitted
	Industrial (all roads)	Not Permitted <sup>1</sup>	Required	Not Permitted
	Major Arterial	Not Permitted <sup>1</sup>	Required	Not Permitted
	Minor Arterial	Not Permitted <sup>1</sup>	Required	Not Permitted
	Major Collector	Not Permitted <sup>1</sup>	Required	Not Permitted
	Minor Collector	Not Permitted <sup>1</sup>	Permitted	Permitted
	Local or Cul-de-sac	Not Permitted <sup>1</sup>	Permitted	Permitted
<b>Rural</b>	Major Arterial	Permitted	Permitted <sup>2</sup>	Not Permitted
	Minor Arterial	Permitted	Permitted <sup>2</sup>	Not Permitted
	Major Collector	Permitted	Permitted <sup>2</sup>	Not Permitted
	Minor Collector	Permitted	Permitted <sup>2</sup>	Not Permitted
	Local or Cul-de-sac	Permitted	Permitted <sup>2</sup>	Not Permitted

<sup>1</sup> The City may permit a “no curb” philosophy on Urban Roads where this is consistent with a “low imperviousness Storm Water Management Development Plan.

- In the third paragraph of Note (2) by deleting the word “Figures” and substituting with the words “MMCD Standard Drawings” after the words “as shown in” and before the words “C8 and C9”.
- In the existing Section 2.5.11.4, Sidewalks and Boulevards, by deleting the words “if requested by the Engineering Director” and substituting with the words “on both sides”; by deleting the figures “2.5.12” and substituting with the figures “2.5.11” after the words “established in Section” and before the words “are met”; and further, by deleting the figure “2.8.2” and substituting with the figure “2.9.2” after the words “See Section” and before the words “of this specification”
- In the existing Section 2.5.11.6, Pavement Drainage, by deleting the figure “2.5.11.3” and substituting with the figure “2.5.10.3” after the word “See” and before the words “of this document”.

**78.** Said Bylaw is further amended in Schedule “A”, by deleting Section 2.5.15 SIGNS in its entirety and substituting with the following and renumbering the existing Sections accordingly:

“2.5.14 TRAFFIC CONTROL

2.5.14.1

All traffic control signage shall be installed as per the latest editions of the TAC Manual of Uniform Traffic Control Devices for Canada, the Motor Vehicle Act, and the Electrical and Traffic Engineering Manual – Province of BC. The supply and installation of traffic control signage and street name signs shall be

the responsibility of the Developer and shall be erected prior to commencement of building construction. All required signage shall meet the following specifications:

- (1) Posts: Shall be 0.060 m Ø x 3.048 m long, “Long Gatorshield” Posts. No substitutes will be accepted.
- (2) Post Installation: Posts are to be placed into 0.064 m Ø (inside) x 0.457 m long, Schedule 40 steel sleeves, and cast into 0.305 m<sup>2</sup> x 0.457 m deep concrete anchors. Posts are to be inserted into the sleeve and secured with a steel wedge.

Alternative Mounting:

- (a) Signs may be mounted to ornamental light standards provided that the lamp standard is at the optimal location for the signage. Secure sign to lamp standard with “Band-it” fasteners.
- (b) Signs may be mounted to concrete sidewalks utilizing a galvanized steel base plate and 0.064 m Ø (inside) x 0.152 m long, Schedule 40 steel sleeve, anchored to the surface of the sidewalk with 0.111 m Hilti bolts. Posts are to be inserted into the sleeve and secured with a steel wedge.

2.5.14.2

A partial listing of typical signs is identified in Table 2.5.14:

**Table 2.5.14: Typical Sign Specifications**

Description	TAC Designation	Size
Stop	RA-1	60 cm x 60 cm
Cul-de-Sac	ID-31	60 cm x 60 cm
Yield	RA-2	75 cm
No Parking	RB-51	30 cm x 30 cm or 45 cm x 45 cm

2.5.14.3

Road name signs are to be 300 mm high x length to suit, extruded aluminum blade as follows:

- (1) Alcan shape 5 15116 or Indalex shape VS1682 covered with 3M brand (or equivalent) Engineering Grade white reflective sheeting.
- (2) Letters to be 100 mm upper case “Arial” font on green 3M #3277 reflective sheeting.
- (3) Mounting hardware to be HS-1, SS-1, SS-2, and Cantilever aluminum brackets by Signal Signs Ltd. No substitutes will be accepted.

2.5.14.4

Overhead road name signs to be 300 mm high x length to suit, sign grade aluminum as follows:

- (1) Sheeting to be green on white 3M “Diamond” grade sheeting;
- (2) Clearview font;
- (3) Arrows as required;
- (4) Sign materials and blank dimensions shall conform to the most recent version of the “BC Ministry of Transportation Specifications for Standard Highway Sign Materials, Fabrication and Supply”.

2.5.14.5

Multi-housing strata properties shall post a site map at any strata driveway entrance clearly indicating civic address, building and road layout, unit numbers, and fire hydrant locations.

2.5.14.6

Emergency access routes, when secured by bollards, chains, gates, or other approved removable assemblies, shall be posted with reflective signage (on each side) indicating “EMERGENCY ACCESS ONLY – NO PARKING”.

**79.** Said Bylaw is further amended in Schedule “A”, Section 2.5, ROADS, by amending Section 2.5.17.3, DRIVEWAYS, as follows:

- In the third paragraph by deleting the words “the following table” and substituting with the words “Table 2.5.17 below” after the words “are show in”; and further,
- By deleting the title “TABLE A” and substituting with the title “Table 2.5.17”.

**80.** Said Bylaw is further amended in Schedule “A”, Section 2.5, ROADS, by inserting the following and renumbering the existing Sections accordingly:

**“2.5.17 ACCESS ROUTES OR FIRE LANES**

2.5.17.2

Access routes or fire lanes shall meet the BC Building Code requirements.

2.5.17.2

Access routes or fire lanes shall:

- (1) be a minimum clear width of 6 m and shall be posted with signage stating “NO PARKING – FIRE LANE” as required to maintain the minimum required clear width;
- (2) be a minimum centerline radius of 12 m;
- (3) be a minimum overhead clearance of 5 m;

- (4) incorporate turnaround facilities for any “dead end” portion of any access route exceeding 90 m long; and”
- (5) be designed to support fire apparatus and be surfaced with concrete, asphalt, or other material designed to permit accessibility under all climatic conditions.

#### “2.5.18 SOLID WASTE COLLECTION ACCESS

##### 2.5.18.1

All strata and multi-family Developments, except apartments, shall provide solid waste collection as per the City of Chilliwack “Solid Waste Collection and Disposal Bylaw 2009, No. 3602”, in force from time to time, and provide a Collection Access Route as per Section 2.5.18.3, to each unit to be serviced by curbside collection in townhouse and bareland strata Developments greater than four units.

##### 2.5.18.2

All strata and multi-family Developments with less than five units, except apartments, shall provide solid waste collection as per the City of Chilliwack “Solid Waste Collection and Disposal Bylaw 2009, No. 3602”, in force from time to time, and provide a storage area as per Section 2.5.18.4 and loading area as per Section 2.5.18.5.

##### 2.5.18.3

A Collection Access Route shall:

- (1) provide a turnaround area for the collection service vehicle for a “dead end” strata access road longer than 15.0 m in length from the curb face of the nearest intersecting City road or strata access road. Collection vehicles shall be able to enter the site, collect the garbage and recyclables, and exit the site in a forward motion.
  - (a) A hammerhead turnaround for solid waste collection shall have a minimum width of 6 m.
  - (b) A circular turnaround for solid waste collection shall have minimum inside turning radius of 10 m and a minimum outside turning radius of 12.8 m.
- (2) be located to minimize any interference with pedestrian traffic and vehicular access, including underground garage and parking lots; and,
- (3) maintain a minimum vertical clearance of 7.5 m.



2.5.18.4

A storage area shall:

- (1) be used only for the purpose of depositing and collecting recyclable material generated by occupants, visitors, and users of a multi-family development;
- (2) have containers grouped into garbage, recycling and yard trimmings, with a minimum separation distance of 0.5 m between groupings, regardless of type of container. The separation distance can be reduced if a permanent wall is installed between groupings;
- (3) include signs to ensure material is deposited into the appropriate containers. If the storage area is not enclosed, then signs shall be on appropriate containers;
- (4) have sufficient container capacity to store all materials generated for a minimum of 7 days;
- (5) be located:
  - (a) on the lot of the multi-family Development it serves;
  - (b) at the rear end of the lot if accessed by a public lane;
  - (c) so that containers are a minimum of 3 m from any building;
  - (d) so that noise and odour impacts to residents are minimized;
  - (e) at ground level, or no more than one storey below grade.
- (6) be graded to the storm water management system of the multi-family Development and finished with a drivable surface;
- (7) maintain a minimum clearance of 7.5 m;
- (8) not block or impede any fire exits, public right of ways, or pedestrian and vehicular accesses.
- (9) be sized as per Table 2.5.18 below, for multi-family Developments of a maximum of 4 Dwelling Units, utilizing 121 litre collection containers or bags;

**Table 2.5.18: Storage Area Dimensions for Multi-Family Development**  
(Maximum 4 Dwelling Units)

Number of Units	Minimum Internal Width (with Fixed Wall)	Minimum Internal Width (without Fixed Wall)	Minimum Internal Depth
3	3.4 m	4.0 m	2.9 m
4	5.9 m	6.5 m	2.0 m

2.5.18.5

A loading area shall:

- (1) be graded to the storm water management system of the multi-family Development and finished with a drivable surface;
- (2) be located so that noise and odour impacts to residents are minimized;
- (3) maintain a minimum clearance of 7.5 m;
- (4) be a drivable surface that is a minimum of 6 m wide and 15 m long;
- (5) be connected to the storage area via a continuous slope or with a level grade to allow any wheeled recycling containers to be easily moved from the storage area to the loading area for servicing; and,
- (6) not block or impede any fire exits, public right of ways, or pedestrian and vehicular accesses.”

**81.** Said Bylaw is further amended in Schedule “A”, Section 2.5.19, ROAD BASE AND PAVEMENT DESIGN, as follows:

- In Paragraph (b) by deleting the table entitled “Classification” in its entirety and substituting with the following:

**“Table 2.5.20: Benkelman Beam Requirements**

Road System Type	Minimum Granular Thickness		Minimum Asphalt Thickness		Maximum Benkelman Beam Heading <sup>3</sup>
	Sub-Base <sup>1</sup> (mm)	Base <sup>2</sup> (mm)	Base (mm)	Surface (mm)	Finished Pavement (mm)
Walkway/Lane	20	100	65	-	1.50
Rural	300	100	40	35	1.50
Local	300	100	40	35	1.50
Minor/Major Collector	300	100	40	35	1.30
Minor/Major Arterial	300	100	40	35	1.30

1. Sub-Base shall be 75 mm minus pit run.
2. Base shall be 20 mm minus crushed gravel.
3. Maximum seasonally adjusted rebound reading.”

**82.** Said Bylaw is further amended in Schedule “A”, Section 2.5.21, PAVING PROCEDURE, as follows:

- By adding the following after Paragraph (b):

- “(3) The top surfaces of all manhole frames and lids, valve boxes, chambers, and other such appurtenances located within the paved portion of any roadway are to be set to match the surface of the first asphaltic base course, and shall be adjusted to match the design contour and grade of the finished asphalt surface at the time of placement of the final lift. The use of “riser rings” for the adjustment of these appurtenances is not permitted.
- (4) The finished asphalt surface shall be within 6 mm of the design elevation, but not uniformly higher or lower.”
- (5) The finished asphalt surface shall not have irregularities exceeding 6 mm when checked with a 3.0 m straight edge placed in any direction.”

- 83.** Said Bylaw is further amended in Schedule “A” - DESIGN CRITERIA, MASTER MUNICIPAL CONSTRUCTION DOCUMENTS AND STANDARD DRAWINGS, Section 2.5, ROADS, by adding the following:

**“2.5.23 RETAINING STRUCTURES**

**2.5.23.1**

All retaining structures within, or visible from, City of Chilliwack public corridors are to be constructed in accordance to this Bylaw, and the City’s Hillside Development Standards.

**2.5.23.2**

Any retaining structure over 1.2 metres in height:

- (1) must be designed, inspected, and certified by a Professional Engineer registered with British Columbia Association of Professional Engineers;
- (2) within or visible from a public corridor are subject to review and acceptance by the City of Chilliwack for “Form and Character”;
- (3) that is adjacent to or within the public corridor may be required to be installed with concrete no-post barriers, complete with handrails, as specified in Subsection 2.6.3 of this Bylaw.

**2.5.23.3**

Designs of retaining structures are to be submitted by the Design Engineer as part of the site grading plan or typical section design for roadways, laneways, and pedestrian walkways.”

- 84.** Said Bylaw is further amended in Schedule “A”, Section 2.6.1, SIDEWALKS, as follows:

- In the first paragraph by inserting the words “City’s” after the words “noted on the” and before the words “Standard Drawing”.
- By deleting the second and third paragraphs their entirety.

- 85.** Said Bylaw is further amended in Schedule “A”, Section 2.6.2, WALKWAYS, in the third paragraph by inserting the words “(as per Section 2.6.3)” after the words “hand rails” and before the words “independent of the chain”;
- 86.** Said Bylaw is further amended in Schedule “A”, Section 2.6.3, HANDRAILS, by inserting the reference “MMCD” after the words “as per” and before the words “Standard Drawing”.
- 87.** Said Bylaw is further amended in Schedule “A”, by inserting the following new Section 2.7, PRIVATE UTILITIES, and renumbering the existing Sections accordingly:

**“2.7 PRIVATE UTILITIES**

**2.7.1 SERVICING REQUIREMENTS**

**“2.7.1.1**

In areas of the City designated other than Rural or agricultural under the City’s Official Community Plan Bylaw, in force from time to time, extension of electrical, telephone, and cablevision distribution systems and connection are to be underground.

**2.7.1.2**

Underground electrical, telephone, and cablevision services shall be required for:

- (1) Subdivisions or boundary adjustments within the Urban containment boundary, as defined in the City’s Official Community Plan, in force from time to time;
  - (a) of three lots or greater; or,
  - (b) of two lots, where the distribution system is adjacent to the Subdivision.
- (2) all new commercial and industrial buildings or building additions greater than 50% of the existing floor area;
- (3) all new multi-family Developments.

**2.7.2 DESIGN REQUIREMENTS**

Gas, electric, telephone and cablevision design drawings shall be submitted to the City for acceptance prior to the start of construction as per Section 2.1.6 of this schedule.”

- 88.** Said Bylaw is further amended in Schedule “A”, Section 2.7.1, GENERAL, as follows:
- By deleting the words “The drawing is to note the types of refractors to be used. All new installations will require glare shields” after the words “shall be submitted”.
  - By adding the following Sections:

**“2.8.1.2**

All davit type luminaires shall be GE M-250R2 HPS with cutoff optics (flat glass).

2.8.1.3

Heritage style luminaires, in accordance with the City’s Standard Drawings DE-1 and DE-2, may be used subject to City approval.

2.8.1.4

Hand-holes on all metal luminaire poles shall:

- (1) be securely welded closed with four 25 mm long welds at corners immediately following streetlight acceptance and activation; or,
- (2) be equipped with a WireSentry anti-theft plate.”

89. Said Bylaw is further amended in Schedule “A”, Section 2.7.2, MINIMUM LEVELS OF ILLUMINATION, as follows:

- In the first paragraph by deleting the word “follows” and substituting with the words “per Table 2.8.2 below:” after the words “lux shall be as”;
- By inserting the title “**Table 2.8.2 – Minimum Levels of Illumination**”;
- In the first paragraph under the existing title “NOTES” by deleting the words “the above table” and substituting with the reference “Table 2.8.2” after the words “noted in” and before the words “shall be”; and further, by deleting the title “NOTES”.

90. Said Bylaw is further amended in Schedule “A”, Section 2.7.3, STREETLIGHT POLE LOCATIONS, c) Local roads, by adding the words “or one sided” after the words “staggered spacing”.

91. Said Bylaw is further amended in Schedule “A”, Section 2.7.4, UNDERGROUND DUCTS, in the second paragraph by inserting the words “City of Chilliwack” after the words “to the applicable” and before the words “Standard Drawing”.

92. Said Bylaw is further amended in Schedule “A”, Section 2.7.4, UNDERGROUND DUCTS, by inserting the following after the third paragraph and renumbering the existing paragraph accordingly:

“2.8.4.4

Underground ducts must be located beneath concrete or asphalt surfaces where possible. Where it is not possible and the duct is accessible under landscaping, the duct must be galvanized steel conduit or encased with a minimum of 0.1 m of concrete above the pipe.”

93. Said Bylaw is further amended in Schedule “A”, by deleting Section 3.1.1, COPIES AND ENQUIRIES, in its entirety and substituting with the following:

“This Bylaw does not include a copy of the MMCD document. To obtain copies of the MMCD document, or if you have any enquiries or comments regarding the documents, please contact:

Master Municipal Construction Documents Association  
 #102 - 211 Columbia Street  
 Vancouver, BC V6A 2R5  
 Phone: 604-681-0295  
 Fax: 604-681-4545

You can also visit their website at [www.mmcd.net](http://www.mmcd.net) for the latest information about the document and the MMCD Association.”

94. Said Bylaw is further amended in Schedule “A”, Section 3.1.2, MASTER MUNICIPAL CONSTRUCTION DOCUMENT, in the first paragraph by deleting the figure “2000” and substituting with the figure “2009 (or latest edition thereof)” after the word “dated” and before the words “save and except”; by inserting the words “identified in Table 3.2” after the words “the MMCD” and before the words “which are not”; and further, by deleting the remainder of the text in its entirety and substituting with the following and renumbering the existing Sections accordingly:

“Table 3.2: MMCD Amendments

Part	Description
Section 31 05 17: Aggregates and Granular Materials	
2.7.2	Delete “pit run sand” and “river sand”
Section 33 11 01: Waterworks	
1.5	Delete in whole and insert “shop drawings and technical data are required for all valves, hydrants and appurtenances”.
2.1.1	Delete “PVC”.
2.2.2	Delete in whole.
2.2.3	Delete in whole.
2.2.5	Delete in whole.
2.2.6	Delete in whole.
2.3.2.1	Delete “solid wedge or double disc valves and”.
2.3.2.2	Delete in whole.
2.3.2.7	Delete “as specified in Contract Documents” and insert “Clow or Mueller.”
2.3.3	Add “Acceptable manufacturer is Pratt.”
2.3.5	Delete “Air/Vacuum and Combination Air”.
2.3.5.5	Add “Air release valves shall be 25 mm Terminal City, Apco Model 50, or Val Matic Model 22, single acting air valves or as approved by the Engineering Director
2.3.6.1.1	Delete in whole.
2.4.1	Delete “200 mm” and insert “100 mm”.

2.4.2	Add “Refer to City of Chilliwack Development and Regulatory Enforcement Services Department for specific details”.
2.5.1	Delete in whole and insert “Pipe diameters of 19 mm & 25 mm shall be Type K annealed copper to ASTM B88M. Pipe diameters greater than 25 mm and up to 75 mm are to be Pressure Class 160 PVC certified to CSA B137.1 and shall be fitted with 28 gauge tracer wire. Pipe diameters greater than 75 mm to be ductile iron pipe to AWWA C151”.
2.6.1.1	Delete “or slide gate”.
2.6.1.6.2	Delete in whole and insert “Hydrant ‘Pumper Port’ to be 100 mm nominal diameter equipped with a “Quick Connect” Storz adaptor”.
2.6.1.6.3	Delete in whole.
2.6.2	Delete “as specified in Contract Documents” and insert “All public and private hydrants are to be painted with General Paints self-priming urethane enamel as follows: Public: Body – Yellow No. 16-202 Top – Red No. 16-208 Pumper Port Cap – Black No. 16-216 Hose Port Caps (2) – Red No. 16-208 Private: Body – Yellow No. 16-202 Top – Mid-Green No. 10-136 Pumper Port Cap – Black No. 16-216 Hose Port Caps (2) – Mid-Green No. 10-136”
2.6.3	Delete “specified in Contract Documents or Municipal Supplementary Specifications.” and insert “follows: 1. Terminal City C-71P 2. Canada Valve Century 3. Or equal as approved by the Engineer.”
2.7.2.2	Delete in whole and insert “To be Mueller CC15008 for tapping 19 mm to 25 mm and Ford F1000 and FB1700 for all other applications from 13 mm to 50 mm.”
2.7.3.3	Delete in full and insert “To be Ford Z41-111 (13 mm), Ford BH41-233 (19 mm), and Ford B41-344 (25 mm) compression x IPT.”
2.8.1	Delete in whole and insert “Granular Pipe Bedding and Surround Materials shall be as per Section 02226 Part 2 – 7 for all water main installations.”
3.2.1	Delete “fis” and insert “fittings”.
3.5.7	Delete in whole and insert “Use imported bedding material.”
3.6.6	Delete “Do not exceed maximum joint deflection specified in AWWA C600 nor maximum joint deflection recommended by pipe manufacturer” and insert “Do not exceed 50% of maximum joint deflection specified in AWWA C600 nor 50% of maximum joint deflection recommended by pipe manufacturer.”
3.10.4	Delete “200 mm” and insert “150 mm”.
3.10.5	Delete “200 mm” and insert “150 mm”.

3.17	Delete in full and insert “City of Chilliwack Operating Procedure for the Acceptance of New Water Main Construction to apply.”
3.18	Delete in full and insert “City of Chilliwack Operating Procedure for the Acceptance of New Water Main Construction to apply.”
3.19	Delete in full and insert “City of Chilliwack Operating Procedure for the Acceptance of New Water Main Construction to apply.”
<b>Section 33 30 01: Sanitary Sewers</b>	
2.2.1	Add “Ribbed PVC pipe is not acceptable for sanitary sewers”.
2.3.8.2	Delete in whole.
2.5.2	Add “Pit-run sand or river sand is not permitted for use as pipe bedding or surround material.”
3.6.6.1	Delete “and ribbed profile PVC plastic pipe”.
3.8.4	Delete in whole.
3.10.1	Delete “Standard Detail Drawing S7” and insert “City of Chilliwack Standard Drawings DC-1, DC-2, and DS-3 as applicable”.
3.10.2	Delete “Standard Detail Drawing S7” and insert “City of Chilliwack Standard Drawings DC-1, DC-2, and DS-3 as applicable”.
3.10.3	Delete “Standard Detail Drawing S9” and insert “City of Chilliwack Standard Drawing DS-4”.
3.12.1	Add “.6 – Ovality test”.
3.13.4	Delete “840” and insert “2130”.
3.16.1	Add “An ovality test may be performed in lieu of ball test at discretion of Contract Administrator.”
3.18.2	Add “An ovality test may be performed in lieu of ball test at discretion of Contract Administrator.”
3.19.5.2	Delete in full and insert “Acceptable ponding for mainline sewer of any size is 5% over 3 m length of pipe.”
<b>Section 33 34 01: Sewage Force Mains</b>	
1.8.5	Delete “W8”.
2.3.2.1	Delete “solid wedge and”.
2.3.2.2	Delete in whole.
2.3.4.1	Delete in full and insert “Stainless steel Vent-O-Mat model or approved alternate by City of Chilliwack Engineering Director, to be housed in a chamber as per City of Chilliwack Standard Drawing DS-4.”
2.3.5.1.1	Delete in whole.
2.3.5.1.2	Delete “as specified in Contract Documents” and insert “to be Nelson type”.
2.5.2	Add “Pit run sand or river sand is not permitted for use as pipe bedding or surround material.”
3.6.6	Delete “Do not exceed maximum joint deflection specified in AWWA C600 nor maximum joint deflection recommended by pipe manufacturer” and insert “Do not exceed 50% of maximum joint deflection specified in AWWA C600 nor 50% of maximum joint deflection recommended by pipe manufacturer.”



Section 33 40 01: Storm Sewers	
2.1.1	Delete “900 mm” and insert “600 mm”.
2.1.2	Delete “900 mm” and insert “600 mm”.
2.4	Delete in whole.
3.5.6	Delete in whole.
3.6.2	Delete “Steel Spiral Rib Pipe to CAN3-G401”.
3.6.6.3	Delete in whole.
3.10.1	Delete “on Standard Detail Drawing S8” and insert “on City of Chilliwack Standard Drawings DC-1, DC-2, DD-2, and DD-4.”
3.10.2	Delete “on Standard Detail Drawing S8” and insert “on City of Chilliwack Standard Drawings DC-1, DC-2, and DD-4.”
3.10.3	Delete “where specified.” Delete “Standard Detail Drawing S7 or Drawing S10” and insert “City of Chilliwack Standard Drawings DC-1, DC-2, DD-2, and DD-4.” Delete “Standard Detail Drawing S9 or Drawing S10 as applicable” and insert “City of Chilliwack Standard Drawing DD-2.”
3.12.3	Add “.4 In areas subject to infiltration due to high groundwater levels, the Engineer may require that testing be carried out as per Section 33 30 01 – Sanitary Sewers.”
Section 33 42 13: Pipe Culverts	
2.1	Delete in whole.
2.3	Delete in whole.
2.2.1	Delete “maximum diameter 900 mm” and insert “maximum diameter 600 mm”.
2.2.2	Delete “greater than 900 mm” and insert “greater than 600 mm”.
3.10	Delete “S15” and insert “City of Chilliwack Standard Drawing DD-7”.
Section 33 44 01: Manholes and Catch Basins	
2.1.7	Delete “Standard Detail Drawing S1” and insert “City of Chilliwack Standard Drawing DD-1 for storm sewers and DS-1 for sanitary sewers”.
2.1.11	Insert after “diameter” “for single catch basins and a minimum of 200 mm diameter for double catch basins”.
2.1.23	Delete in whole.
3.3.18	Delete in whole.
3.4.1	Delete “Standard Detail Drawing S6” and insert “City of Chilliwack Standard Drawings DD-3 and DS-2”.

95. Said Bylaw is further amended in Schedule “A”, by deleting Section 3.2, MASTER MUNICIPAL CONSTRUCTION DOCUMENT, in its entirety and substituting with the following:

“The “Master Municipal Construction Document Detail Drawings”, dated 2009 (or latest edition thereof) save and except the following drawings identified in Table 3.3 below, which are not applicable or have been amended, will reflect those standards to be applied within the City of Chilliwack.

**Table 3.3: MMCD Standard Detail Drawing Amendments**

Drawing	Description
<b>Storm and Sanitary Sewers</b>	
S6	Not accepted.
S7	Not accepted.
S8	Not accepted.
S9	Not accepted.
S15	Not accepted.
<b>Waterworks</b>	
W2a	Not accepted.
W2b	Not accepted.
W2c	Not accepted.
W2d	Not accepted.
W4	Center of hose outlet shall not be less than 575 mm above final grade. Top of hydrant barrel flange to be minimum of 100 mm and maximum 150 mm above finished ground line adjacent to hydrant.
W6	Delete “Double Acting Air Valve” and replace with “Air Valve”.
W7	Delete “Double Acting Air Valve” and replace with “Air Valve”.
W8	Not accepted.
<b>Electrical</b>	
E1.4	R.PVC conduit is to extend 200 mm above the concrete base. The void between the R.PVC conduit and the concrete base is to be filled with approved duct seal material.
E1.5	R.PVC conduit is to extend 200 mm above the concrete base. The void between the R.PVC conduit and the concrete base is to be filled with approved duct seal material.

96. Said Bylaw is further amended in Schedule “A”, by deleting Section 4.0, CITY OF CHILLIWACK STANDARD DRAWINGS, in its entirety, inclusive of all drawings attached thereto and substituting with the following, including all drawings attached hereto and forming part of this Bylaw:

**“Table 4.0: City of Chilliwack Standard Drawings**

Drawing	Description
<b>Common</b>	
DC-1	Typical Lot Service Connections for Road Grades Less Than 2%
DC-2	Typical Lot Service Connections for Road Grades Greater Than 2%
DC-3	Sample Service Record Card
DC-4	Temporary Lot Siltation Control
DC-5	Temporary Construction Access
DC-6	Temporary Access Pad (Single Family Residential)
DC-7	Wheel Wash Facility
DC-8	Catch Basin Sediment Bag Insert
DC-9	GPS Monitoring Hub Installation
DC-10	Steel Bollard Filled With Concrete
<b>Water</b>	
DW-1	Rural Fire Hydrant Assembly
DW-2	Blow-Off
DW-3	Air and Vacuum Valve Chamber
DW-4A	Pressure Reducing Station – Typical PRV Station Layout (250 mm and Larger)
DW-4B	Pressure Reducing Station – Typical PRV Station Layout (200 mm and Smaller)
DW-5	Typical Groundwater Monitoring Well Surface Design
DW-6	Test Point Installation
DW-7A	19 mm/25 mm Water Pre-Service Connection
DW-7B	38 mm/50 mm Water Pre-Service Connection
DW-8	Water Service Connection
DW-9	100 mm, 150 mm and 200 mm Water Meter Vault
DW-10	250 mm Water Meter Vault
DW-11	Detector Check Vault
DW-12	Water Flow Meter Vault
DW-13	Yard Hydrant
<b>Storm Sewer</b>	
DD-1	Manhole Frame and Cover
DD-2	Inspection Chamber for 100 mm Storm Sewer Connection
DD-3	Storm Sewer Cleanout (Temporary)
DD-4	Storm Sewer Service Connection
DD-5	Outlet Structure
DD-6	Driveway Culvert with Bulkheads

DD-7	French Drain
DD-8	Swale
DD-9	Soak-Away Well 0.5 C.F.S.
DD-10	Soak-Away Well 1.0 C.F.S.
DD-11	Sardis-Vedder (South of Trans-Canada Highway) Rainfall Duration – Intensity Curve
DD-12	Agassiz (North of Trans-Canada Highway) Rainfall Duration – Intensity Curve
DD-13	Trash Rack – Type “A”
DD-14	Trash Rack – Type “B”
DD-15	Drainage Drywell
DD-16	Flow Control Manhole
<b>Sanitary Sewer</b>	
DS-1	Manhole Frame and Cover
DS-2	Sanitary Sewer Cleanout (Temporary)
DS-3	Sanitary Sewer Service Connection
DS-4	Inspection Chamber for 100 mm Sanitary Sewer Connection
DS-5	Control Manhole
DS-6	Sani-Dump
DS-7	Typical Sanitary Force Main Service Connection
DS-8	Typical Residential Sanitary Pump Station for Gravity Sewer Connection
DS-9	Sewage Lift Station
DS-10A	Typical Three-Phase (208 V) Sewage Lift Station – Electrical Distribution
DS-10B	Typical Single-Phase Sewage Lift Station – Electrical Distribution
DS-11A	Typical Three-Phase (208 V) Sewage Lift Station – Electrical Distribution
DS-11B	Typical Single-Phase Sewage Lift Station – Electrical Distribution
DS-12A	Typical Three-Phase (208 V) Sewage Lift Station – Electrical Elementary
DS-12B	Typical Single-Phase Sewage Lift Station – Electrical Elementary
DS-13A	Typical Three-Phase (208 V) Sewage Lift Station – Electrical Control Wiring
DS-13B	Typical Single-Phase Sewage Lift Station – Electrical Control Wiring
DS-14	Force Main Flush-Out
DS-15	Bypass and Optional Flow Meter Detail
DS-16	Sanitary Flow Meter Vault
DS-17	Valve Chamber for Sanitary Pump Station
DS-18	Air and Vacuum Valve Chambe for Sanitary Force Mainr
<b>Roads</b>	
DR-1	6 m Lane
DR-2	Rural Half-Road – 12 m Right of Way

DR-3	Rural Road – 20 m Right of Way
DR-4	Rural Arterial and Collector – 25 m Right of Way
DR-5	Urban – 8.5 m Pavement – 15 m Right of Way
DR-6	Urban – 8.5 m Pavement – 17.5 m Right of Way
DR-7	Urban – 11 m Pavement – 17.5 m Right of Way
DR-8	Urban – 11 m Pavement – 20 m Right of Way
DR-9	Urban – 13.5 m Pavement – 20 m Right of Way
DR-10	Urban – 19.5 m Pavement – 25 m Right of Way
DR-11	Urban – 21 m Pavement – 30 m Right of Way
DR-12	Urban Half-Road – 17.5 m and 20 m Right of Way
DR-13	Rural Hammerhead Turnaround
DR-14	Rural Cul-de-Sac
DR-15	Road End Barricades
DR-16	Driveway Crossing for Barrier Curbs Reduced Cross-Slope/Increased Radius
DR-17	Sign Pole Wedge
DR-18	Dyke Gate
Street Lighting	
DE-1	Street Light Luminaires
DE-2	Heritage Light – Double
DE-3	Heritage Light – Single”

Insert drawings.

97. Said Bylaw is further amended in Schedule “A, by inserting the following new Section and renumbering the existing Sections accordingly:

“5.0 APPLICATION ATTACHMENTS

**Table 5.0: Application Attachments**

Application Type	Attachment
Bare-Land Strata (Preliminary)	B
Bare-Land Strata (Final)	C
Development Permit	A
Development Variance Permit	A
Form E	2 Copies of Form E*
OCP Re-Designation	Letter
OCP Text Amendment	Letter
Phased Strata	C
Rezoning	Letter
Strata Conversion (Preliminary)	B
Strata Conversion (Final)	C
Subdivision (Preliminary)	B
Subdivision (Final)	C
Zoning Text Amendment	Letter (as appropriate)

- A. As applicable, one copy of the site, elevation and landscape plans detailing the Development (more may be requested if needed)
- B. Eight paper prints of the Subdivision plan
- C. One Mylar, two dylar and ten paper prints of the Subdivision \* Form E (Declaration to create a strata plan by Phased Development)”

98. Said Bylaw is further amended in Schedule “A, in the existing Section 5.0, FORMS, by adding the following:

- “Confirmation of Commitment F-15
- Substantial Completion Pre-Inspection Checklist F-16

99. Said Bylaw is further amended in Schedule “A”, in the existing Section 5.0, FORMS, Form F-14 – SUBDIVISION APPLICATION FORM, by deleting page 2 entitled “APPLICATION TYPE ATTACHMENT REQUIRED”; and further, by adding Form F-15 – CONFIRMATION OF COMMITMENT and Form F-16 – SUBSTANTIAL COMPLETION PRE-INSPECTION CHECKLIST, as attached hereto and forming part of this Bylaw.

- 100.** Said Bylaw is further amended by deleting Schedule “B” - SERVICING AGREEMENT attached thereto, in its entirety and substituting with a new Schedule “B” - CITY OF CHILLIWACK SERVICING AGREEMENT, attached hereto and forming part of this Bylaw.
- 101.** Said Bylaw is further amended throughout the text of the Bylaw where reference is made to section numbers and updated to reflect the new reference numbering.

Received first reading on the 18<sup>th</sup> day of March, 2014.

Received second reading on the 18<sup>th</sup> day of March, 2014.

Received third reading on the 18<sup>th</sup> day of March, 2014.

Reconsidered, finally passed and adopted on the 1<sup>st</sup> day of April, 2014.

\_\_\_\_\_  
“Sharon Gaetz”

Mayor

\_\_\_\_\_  
“Janice McMurray”

Deputy City Clerk



FORM F-15 - CONFIRMATION OF COMMITMENT

DATE: \_\_\_\_\_ FOLDER NUMBER: \_\_\_\_\_

CIVIC ADDRESS: \_\_\_\_\_

To:

**The City of Chilliwack**

Re:

\_\_\_\_\_  
Name of Project (Print)

\_\_\_\_\_  
Description of Project (Print)

The undersigned has been retained as a Coordinating Registered Professional to coordinate the design work and City submissions of the Registered Professionals required for this project in order to ascertain that the design and construction of the project will substantially comply with this Bylaw.

The Owner and the Coordinating Registered Professional understand that where the Coordinating Registered Professional or a Registered Professional ceases to be retained at any time during construction, the work on the above project will cease until such time as a new Coordinating Registered Professional or Registered Professional, as the case may be, is retained in that profession/discipline relevant.

The undersigned Coordinating Registered Professional certifies that they are a Registered Professional and agrees to coordinate the design work and City submissions of the Registered Professionals required for the project.

\_\_\_\_\_  
Coordinating Registered  
Professional’s Seal and Signature

\_\_\_\_\_  
Owner’s Signature

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Address (Print)

\_\_\_\_\_  
Address (Print)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

FORM F-16 - SUBSTANTIAL COMPLETION PRE-INSPECTION CHECKLIST

DATE: \_\_\_\_\_ FOLDER NUMBER: \_\_\_\_\_

CIVIC ADDRESS: \_\_\_\_\_

INSPECTOR: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

To be completed prior to Substantial Completion inspection:

**DOCUMENTATION**

YES	NO	N/A	N/R

- Has the Form F-2 - Certificate of Inspection been submitted to the City?
- Have the record drawings been submitted to the City (hardcopy and CAD)?
- Have the Service Record Cards been submitted to the City?

**SANITARY AND STORM SEWERS**

YES	NO	N/A	N/R

- Have the air test reports been submitted to the City?
- Have the video inspection reports been submitted to the City?
- Have the systems been flushed and cleaned?
- Are the service locations stamped at the curb?
- Have the manholes been grouted smooth?
- Are the manhole ladders to MMCD and WCB specifications?
- Are the correct manhole lids installed?
- Have bolts been installed in sanitary manhole lids?
- Do all catch basins have trapping hoods?

**WATER MAINS**

YES	NO	N/A	N/R

- Are the service locations stamped at the curb?
- Have all the valves been installed?
- Have air release valves been installed and tested?
- Are the correct manhole lids installed?
- Have the correct valve covers been installed?
- Are valve boxes clean and accessible?
- Have asphalt aprons been installed and staked?
- Have all the hydrants been painted to City specifications?
- Is bottom of hydrant 150 mm to 200 mm above final grade?
- Have the plumbing approvals been received?

**BC HYDRO/TERASEN/TELUS/SHAW CABLE**

YES	NO	N/A	N/R

- Installed, accepted and approvals received?
- Have service boxes been installed to grade?
- Do any power poles need to be removed or relocated?

**FORM F-16 - SUBSTANTIAL COMPLETION PRE-INSPECTION CHECKLIST (continued)**

DATE: \_\_\_\_\_ FOLDER NUMBER: \_\_\_\_\_

CIVIC ADDRESS: \_\_\_\_\_

**STREET LIGHTING**

YES	NO	N/A	N/R

- Have all the poles been erected and luminaries installed?
- Has the electrical inspector passed the system?
- Has the City been requested to have the system energized?
- Have the pole hand-hole covers been welded after the system is energized?
- Has a lock been obtained from the City and installed on the service box?
- Do any Hydro lease lights need to be removed?

**SUB-BASE/BASE**

YES	NO	N/A	N/R

- Was sub-grade accepted?
- Was the base checked for proper compaction, grade and cross-fall?
- Were density tests taken and passed?
- Are gravel shoulders completed?

**CONCRETE, SIDEWALKS, CURB AND GUTTER, WALKWAYS**

YES	NO	N/A	N/R

- Are sidewalks the correct thickness and width?
- Is surface finish acceptable and joints installed correctly?
- Was concrete test taken and passed?
- Is there any damage?

**ASPHALT**

YES	NO	N/A	N/R

- Has base lift been placed and accepted (40 mm)?
- If final lift is delayed, are all manholes flush with base lift?
- Has final lift for laneways been placed and accepted (65 mm)?
- Have asphalt blemishes been smoothed out?
- Has asphalt test been taken and passed?
- Are asphalt tie-ins to existing pavement step-milled to MMCD specs?

**LOT GRADING/SILTATION CONTROL**

YES	NO	N/A	N/R

- Has rough lot grading been certified and accepted?
- Are property pins in place and marked?
- Are all swales and lawn basins installed?
- Has general site cleanup been done?
- Are all silt control systems in place and functioning?
- Are safety fences in place around silt pond?
- Is vegetation planted as specified?
- Are boulevards landscaped as required?
- Are existing boulevards repaired as required?

CITY OF CHILLIWACK

“Land Development Bylaw, 2004, No. 3055”

Schedule “B”

City of Chilliwack  
Servicing Agreement

CITY OF CHILLIWACK

SERVICING AGREEMENT

NO. \_\_\_\_\_

between

CITY OF CHILLIWACK

and

---

Schedule “B”

“Land Development Bylaw 2004, No. 3055”

Folder No.: \_\_\_\_\_

City of Chilliwack Servicing Agreement No.: \_\_\_\_\_

Page 2 of 13 Pages

SERVICING AGREEMENT

THIS AGREEMENT made this \_\_\_\_\_.

BETWEEN:

CITY OF CHILLIWACK, a municipality duly incorporated under the “Local Government Act” of the Province of British Columbia, and having its Municipal Offices at 8550 Young Road, Chilliwack, British Columbia, V2P 8A4

(hereinafter called the “City”)

OF THE FIRST PART

AND:

\_\_\_\_\_, a company duly incorporated under the laws of British Columbia

(Incorporation Number \_\_\_\_\_) having an office at \_\_\_\_\_

(hereinafter called the “Owner”)

OF THE SECOND PART

WHEREAS:

- A. The Owner holds an interest in lands and premises within the City of Chilliwack, in the Province of British Columbia, more particularly known and described as follows:

Civic Address: \_\_\_\_\_

Legal Description: \_\_\_\_\_

Parcel Identifier: \_\_\_\_\_

(hereinafter called the “Lands”)

- B. the Owner desires to develop on the Land.
- C. The Chief Building Inspector of the City has agreed to issue a building permit for a building(s) subject to the terms and conditions contained in this Contract, and the posting with the City of the Security Deposit described herein.

\_\_\_\_\_  
Initial

\_\_\_\_\_  
Initial

City of Chilliwack Servicing Agreement No.: \_\_\_\_\_

Page 3 of 13 Pages

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the promises, covenants and agreements hereinafter set forth, the parties hereto covenant, agree, represent and promise as follows:

1. APPENDICES:

The following Appendices will be read with and form part of this Agreement:

- Appendix “A” – A copy of the site Development plan of the Lands;
- Appendix “B” – A list of the works and an estimate of their respective construction costs;
- Appendix “C” – Construction drawings to be used for the construction of the works.

2. OWNER TO DO WORK:

The Owner covenants and agrees to construct and provide all the Works and Services listed and shown on Appendices “B” and “C” attached hereto, as approved by the City, as per the standards contained in Schedule “A” of the City’s Land Development Bylaw, in force from time to time.

3. TRANSFER OF INTEREST IN WORKS:

The Owner covenants and agrees with the City to assign, transfer and convey to the City all of its right, title and interest in the works on any and all of the lands, upon or in which the works are situate, upon the completion of the works, (as witnessed by the issuance of a Certificate of Substantial Completion.) The Owner will from time to time and at all times so long as it exercises any rights of Ownership in the said lands upon the request of the City, make, do and execute or cause or procure to be made, done and executed, all such further acts, deeds, rights of way, easements and assurances for the more effectual carrying out of this Agreement.

4. PERMISSION TO DO WORK:

The City covenants and agrees to permit the Owner to construct the works, including that portion of the works to be constructed on dedicated Highways controlled by the City; on the terms and conditions herein, and in the manner required by and at the places specified in the Plans and Specifications; provided that nothing in this Agreement shall be construed as an undertaking, promise or covenant on the part of the City to make available the use of or access to the works for any purpose, and without limiting the foregoing, for the purpose of serving the Lands or any other real property whatsoever either owned or controlled by the Owner or it associates otherwise, but rather the City reserves the right in its sole and absolute discretion to make available, operate, alter, use, extend, diminish, discontinue, tear up, sell, rent or otherwise dispose of the works as its Council from time to time deems fit.

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5. CHANGES TO BYLAWS:

The Owner covenants and agrees to comply with any changes in Subdivision requirement or standards enacted by Bylaw prior to the actual commencement upon the lands of the works contemplated by this Agreement.

6. LOT GRADING:

The Owner covenants and agrees to adhere in all respects to the contours, elevations and drainage patterns indicated on the lot grading plan or Storm Water Management Plans prepared by the Professional Engineering and/or Engineering Company indicated in Clause 11 hereof, and which are attached as Appendix “C” to this Agreement.

7. START OF WORK:

The Owner covenants and agrees not to commence work until the City’s Manager of Land Development provides the Owner with a signed Form F-1 - Permission to Construct provided in Schedule “A” of the City’s Land Development Bylaw, in force from time to time.

8. COMPLETION OF WORK:

The Owner shall complete the construction of the works, specified in Appendix “C” as Folder Number: \_\_\_\_\_ of the City, to the satisfaction of the City by \_\_\_\_\_.

9. OWNER TO GRANT RIGHTS-OF-WAY:

The Owner to grant to the City all necessary road dedications, statutory rights of way and easements over the said lands to accommodate the said works and, where the said works are located upon or under privately owned lands other than the said lands, to obtain at the Owner’s expense, all necessary road dedications, statutory rights of way and easements over such lands, in favour of the City where applicable to accommodate the said works.

10. DESIGN BY PROFESSIONAL ENGINEER:

(1) The Owner covenants and agrees that all works required herein, shall be designed by a Professional Engineer who shall be registered with the Association of Professional Engineers of British Columbia and retained by the Owner. Plans and specifications for the said works shall be prepared by or under the direct supervision of the said Professional Engineer and all plans shall bear his profession seal and signature.

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- (2) The Owner covenants and agrees to ensure that his Engineer (as specified in Section 11) maintains professional liability, and errors and omissions insurance to a value of \$250,000.00 per occurrence during the term of his engagement.
- (3) The Owner covenants and agrees to retain the Professional Engineer during the construction period for the purposes of inspection to ensure compliance with the approved design and to provide Form F-2 - Certificate of Inspection as per Schedule “A” of the City’s Land Development Bylaw, in force from time to time.

11. ENGINEERING DRAWINGS:

The Owner covenants and agrees that the intent of this Agreement is that the Owner shall construct fully completed works, and grant all necessary easements as shown in the plans and specifications prepared by \_\_\_\_\_ under Project Number \_\_\_\_\_, Drawing Numbers \_\_\_\_\_ to \_\_\_\_\_, and as received for the purposes of this Agreement by the Development and Regulatory Enforcement Services Department of the City on \_\_\_\_\_.

12. CHANGES TO DESIGN BY THE CITY:

The City’s Engineering Director may alter the plans, because of conditions at the site, so that the works function and operate in a manner satisfactory to the City’s Engineering Director. Should the works, as provided herein, prove to be in any way defective or should they not operate to the satisfaction of the City’s Engineering Director, then the Owner shall, at his own expense modify and reconstruct the works so that the works shall be fully operational and function to the satisfaction of the City’s Manager of Land Development.

13. SUBSTANTIAL COMPLETION:

The Manager of Land Development shall provide a signed Form F-3 - Certificate of Substantial Completion, as per Schedule “A” of the City’s Land Development Bylaw, in force from time to time, listing all the deficiencies upon completion of the construction. Form F-3 - Certificate of Substantial Completion shall not be construed as acceptance of the works.

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14. RECORD DRAWING SUBMISSION:

The Owner covenants and agrees to submit to the City the final record drawings, and any test results, as accepted by the City’s Manager of Land Development, pursuant to Schedule “A” of the City’s Land Development Bylaw, in force from time to time, prior to the Manager of Land Development issuing Form F-3 - Certificate of Substantial Completion.

15. MAINTENANCE PERIOD AND RESPONSIBILITY:

- (1) The Owner covenants and agrees to maintain every part of the works in perfect order and in complete repair for a period of one year from the date shown on Form F-3 - Certificate of Substantial Completion as per the requirements of the City’s Land Development Bylaw, in force from time to time.
- (2) Should the Owner, for any reason, fail to maintain when ordered, then the City’s Manager of Land Development, at his option, after giving the Owner seven days written notice (emergencies excepted), may do so, and the whole costs, charges and expenses so incurred by the City will be payable by the Owner, as provided for herein. The decision of the City’s Manager of Land Development will be final with respect to the necessity for repairs, or the adequacy of any work done.

16. CERTIFICATE OF ACCEPTANCE:

The City covenants and agrees that upon satisfactory completion by the Owner of all of the covenants and conditions in this Agreement, including the maintenance of the works in complete repair for a period of one year, the City’s Manager of Land Development shall provide the Owner with a signed Form F-4 - Certificate of Acceptance, as per Schedule”A” of the City’s Land Development Bylaw, in force from time to time. Notice of acceptance of the work will be issued by the City’s Manager of Land Development, when all deficiencies have been corrected, record drawings and service record cards received, and the maintenacne period outlined herein has expired. All such Works and Services remain at the risk of the Owner until the Form F-4 - Certificate of Acceptance for the work has been issued.

17. FINAL BUILDING INSPECTION WITHHELD:

The Owner covenants and agrees that the City will withhold the granting of a Final Inspection for the use of any building or part thereof, constructed upon the lands until all the essential services herein have been completed to the satisfaction of the City’s Manager of Land Development.

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18. OWNER INDEMNIFIES CITY:

The Owner covenants and agrees to save harmless and effectually indemnify the City against:

- (1) All actions and proceedings, costs, damages, expenses, claims, and demands whatsoever and whosoever brought by reason of the execution of the works required by this Agreement. All such claims recoverable from the City, or the property by duty or custom is obliged, directly or indirectly, in any way or to any degree, to construct, repair, or maintain during the term of the Owner’s work, shall be paid by the Owner, and if recoverable from the City shall, together with any costs and expenses incurred in connection therewith, be charged and paid forthwith by the Owner.
- (2) All expenses and costs which may be incurred by reason of the execution of the required works by the City’s Land Development Bylaw, in force from time to time, resulting in damage to any property owned in whole or in part by the City for which the City by custom or duty is obliged, directly or indirectly, in any way or to any degree, to construct, repair or maintain, shall be paid by the Owner, and if paid by the City shall together with any costs and expenses incurred in connection herewith be charged to and paid forthwith by the Owner.
- (3) All expenses and costs which may be incurred by reason of liens for non-payment of labour or materials, Workmen’s Compensation assessments, unemployment insurance, federal or provincial tax, and for encroachments due to mistakes in survey, and all such claims recoverable from the City, or the property of the City, or any property which the City by duty or custom is duly obliged directly or indirectly, in any way or to any degree, to construct, repair, or maintain shall be paid by the Owner, and if recovered from the City shall, together with any costs and expenses incurred in connection therewith, be charge to and paid forthwith by the Owner.
- (4) All expenses and costs which may be incurred by the City as a result of faulty workmanship and defective material in any of the works installed by the Owner.

The above clauses shall not be constructed as to extinguish any rights which the City would have were it not for the inclusion of this Section 18 in this Agreement.

19. INSURANCE BY OWNER:

The Owner will at his sole expense throughout the current of the work carry Comprehensive Liability Insurance acceptable to the City in the amount of at least \$5,000,000.00 with insurance companies licensed to carry on business in the Province of British Columbia in partial discharge of its obligation under Section 18.

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20. SECURITY DEPOSIT:

As security for the due performance of all of the covenants and promises contained in this Agreement the Owner has forthwith deposited with the City a Security Deposit in the amount of \$\_\_\_\_\_ (\$\_\_\_\_\_ x 125%), in the form of cash or an irrevocable Letter of Credit acceptable to the City (herein called the “Security Deposit”).

21. FORFEIT OF SECURITY DEPOSIT:

In the event that the Owner fails to construct and install the Works and Services prescribed herein within the time specified in Section 8, the said Security Deposit of \$\_\_\_\_\_ will be forfeited to the City.

22. USE OF SECURITY:

The Owner agrees that if all the works or obligations are not completed, installed or performed pursuant to this Agreement, the City may complete or fulfill the works or obligations at the cost of the Owner and deduct from the Security Deposit held by the City the cost of such completion, and the balance of the deposit shall be returned to the Owner, less any additional administration fees or costs incurred. If there is insufficient money on deposit with the City then the Owner will pay such deficiency to the City immediately upon receipt of the City’s bill for completion. It is understood that the City may do such work either by itself or by contractors employed by the City. If the works are completed as herein provided, then the deposit shall be returned to the Depositor.

25. RELEASE OF SECURITY:

If the City’s Manager of Land Development is of the opinion that the works or any portion thereof have been adequately completed, and the Owner’s covenants performed in compliance with this Agreement, and if there is no litigation pending or threatened by any third party against the City as a result of, or arising from, the construction of the works, the City’s Manager of Land Development may return all, or any portion of the Security Deposit to the Owner at such times and in such amounts as he may deem proper, provided only that he will retain an amount equal to 10% of the estimated cost of total works or \$5,000.00 whichever is greater, as certified by the Project Engineer, to secure the performance of the maintenance required of the Owner (hereinafter called the “Maintenance Deposit”).

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26. RETURN OF MAINTENANCE DEPOSIT:

If the City’s Manager of Land Development is satisfied that the Owner has complied with the covenants contained in this Agreement and if there is no litigation pending or threatened by any third party against the City as a result of, or arising from, the construction of the works, the City’s Manager of Land Development may direct that the Maintenance Deposit be returned to the Owner and thereafter the Owner’s responsibility for the works shall cease.

27. ADMINISTRATION FEE:

The Owner covenants and agrees to pay to the City a non-refundable fee in the amount of \$\_\_\_\_\_ (\$\_\_\_\_\_ x 1.5%) to cover City Administration and processing costs. These fees are payable prior to the signing of this Agreement or the commencement of construction of the works.

28. NO OTHER REPRESENTATIONS:

It is understood and agreed that the City has made no representations, covenants, warranties, guarantees, promises or agreements (verbal or otherwise) with the developer other than those in this Agreement and except those required by the Approving Officer.

29. COMPLIANCE WITH BYLAWS:

Subject to this Agreement, the within works and the Development herein shall comply with all of the Bylaws of the City of Chilliwack.

30. NO WAIVER:

The Owner covenants and agrees that nothing contained or implied herein shall prejudice or affect the rights and powers of the City in the exercise of its functions under any public and private statutes, bylaws, orders and regulations, all of which may be fully and effectively exercised in relation to the said lands as if the Agreement had not been executed and delivered by the Owner.

31. THIS CONTRACT SHALL ENURE TO THE benefit of and be binding upon the parties hereto, their respective successors and assigns.

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IN WITNESS WHEREOF the parties hereto have executed this contract the day and year first above written.

Execution(s):

	Y	M	D	
_____				by its Authorized signatory (ies)
Witness				_____ _____
				CITY OF CHILLIWACK by its authorized signatories
				_____ Mayor
_____				_____ Clerk

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**APPENDIX “A”**

A copy of the site Development plan of the Lands.

See the property file for construction drawings to be used for construction of the works.

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**APPENDIX “B”**

A list of the works and an estimate of their respective construction costs.

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**APPENDIX “C”**

Construction drawings to be used for the construction of the works

See the property file for construction drawings to be used for construction of the works

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