

## 1.0 **INTRODUCTION**

1.01 This section contains Development Procedure and Policy for the City of Port Alberni.

## 2.0 **GENERAL INFORMATION AND POLICIES**

2.01 Except as specified below the entire cost of works and services required for subdivision and/or development in the City is usually at the Applicant's expense.

2.02 Topographical surveys, design and preparation of drawings for all services shall be carried out by Consulting Engineers engaged or employed by the Applicant.

### 2.03 Oversize Cost-Sharing -

The City Council has adopted a policy of sharing the cost of installing civil works for subdivisions or developments when the service being installed is larger in size than is required to serve solely the property being subdivided or developed. The larger size service must be installed and cost-sharing payment may be made in accordance with the following rules:

- |         |                        |  |
|---------|------------------------|--|
| 2.03.01 | <u>Watermains</u>      | The difference in material cost between the diameter pipe required to serve the development (150 mm minimum) and the cost of the pipe actually installed.  |
| 2.03.02 | <u>Sanitary Sewers</u> | One and one-half times the difference in material cost between the diameter pipe required to serve the development (200 mm minimum) and the cost of the pipe actually installed.   |
| 2.03.03 | <u>Storm Drains</u>    | One and one-half times the difference in material cost between the diameter pipe required to serve the development (375 mm minimum) and the cost of the pipe size actually installed.  |
| 2.03.04 | <u>Roads</u>           | Where Collector or Major road construction is required in excess of standard residential road requirements, extra depth of asphalt and base materials will be paid through the residential width as well as the total cost for the extra width of road construction exceeding residential road criteria (excluding curb, gutter and sidewalk). |

- 2.03.05 Street Lighting The cost of collector and arterial road lighting in excess of normal requirements as established by the City for residential streets.

Payment of claims is subject to City funds being available in the current budget and approval by Council. Requests for payment of cost sharing funds should be submitted after approval of as-built drawings but must be submitted prior to warranty expiry.

- 2.04 Except as provided for in Section 7.0 no building permits shall be issued until the subdivision plan is registered and until watermain, sanitary sewer, and drainage works together with a road capable of supporting emergency and service vehicles are installed and approved by the City Engineer as ready for use. In addition, all road cuts and underground service work which might restrict use of the road shall be completed and as-built drawings for the water, sewer, and drain works must have been delivered to, and approved by the City.

### 3.0 **RIGHT-OF-WAY OR EASEMENT DOCUMENTS**

- 3.01 The City shall prepare all Right-of-Way documents for sewer, storm drain and water where the City will assume responsibility for maintenance. Two weeks are required for preparation of the documents. The Applicant will be responsible for all survey work, preparation of all Right-of-Way plans, and subsequent registration of the Right-of-Way.
- 3.01.01 A right-of-way plan, reference plan acceptable to the Land Titles Office must be submitted at least three weeks prior to anticipated registration to allow time for document preparation. A current copy of the State of Titles Certificate is also required.
- 3.01.02 Private easement documents must be prepared by the applicant's lawyer and must be submitted, along with the lawyer's letter of intent to register same with the subdivision plan, prior to approval by the Approving Officer of the subdivision plan.
- 3.01.03 Documents for rights-of-way outside of the subdivision shall be returned to the Applicant for registration prior to design approval.
- 3.02 Right-of-way documents for power, telephone, cablevision, and natural gas facilities shall be prepared and registered by the respective utility companies.
- 3.03 Where a single storm drain, sanitary sewer or water right-of-way is required, the minimum acceptable width is 3.0 m.
- 3.04 Where more than one service is installed in a right-of-way, the width of the right-of-way must be increased sufficiently to accommodate the pipe sizes required together with no less than 1.2 m of clearance between pipes and edge of right-of-way. The minimum acceptable width is 3.7 m.
- 3.05 Rights-of-way shall be located within a single property adjacent and parallel to property boundaries and shall be clear of proposed building sites.

- 3.06 Rights-of-way within a proposed subdivision or development shall be provided by the Applicant for the eventual extension of watermains, sanitary sewers and/or storm drains as required by the Engineer.

4.0 **CIRCULATION AND APPROVAL OF DESIGN DRAWINGS**

- 4.01 Five sets of design drawings shall be submitted initially for review and approval.
- 4.02 All pertinent information required in Specification B-1 must be completed by the Consulting Engineer and included in the design drawings. Design drawing numbers must be obtained from the City Engineering Department prior to submission.
- 4.03 If the drawings are not satisfactory for circulation a marked set and correction sheet will be returned to the Consulting Engineer.
- 4.04 After circulation and review by City Departments a comment sheet will be prepared and returned to the Consulting Engineer.
- 4.05 When all items have been corrected the Consulting Engineer shall resubmit the plans with the items shown as required for final approval. If the approval package is not complete it will be returned to the Consultant for completion.
- 4.06 Council approval must be obtained prior to design drawing approval for any tree removal within the boulevard or works within existing or proposed Parkland.
- 4.07 A letter of confirmation that a Consulting Engineer/Client Agreement is in force must be supplied to the City Engineer from the Consulting Engineer prior to design approval. The Engineer/Client Agreement must provide for the level of engineering service required in this specification.
- 4.08 The registerable plan of subdivision must be submitted to the Approving Officer prior to design approval.
- 4.09 Any right-of-way outside of the proposed subdivision must be obtained and registered by the Applicant or his agent prior to design approval. See Section 3 of this specification for right-of-way preparation procedure.
- 4.10 Where authorization and/or permits are required from Senior Government, it is the Applicant's responsibility, through his agents, to obtain these. Developments adjacent to, affected by, or affecting the following, will require plans to be submitted to the appropriate non-municipal agency:
- 4.10.01 Provincial Highways
  - 4.10.02 B.C. Hydro, Centra Gas, B.C. Tel, or other utility rights-of-way
  - 4.10.03 Water courses
  - 4.10.04 Drain outfalls
  - 4.10.05 Canada Post Super Mail Box locations
  - 4.10.06 Railway

The above approvals are required prior to design approval except for Super Mail Box locations which must be obtained prior to subdivision approval

- 4.11 Complete and sealed copies of all drawings and estimates prepared by the Consulting Engineer to the satisfaction of the City Engineer as being in accordance with good engineering practice, must be submitted to the City Engineer prior to approval of plans.
- 4.12 A Financial Terms and Conditions Form (FTC-1) must be prepared by the Consulting Engineer showing the costs of works to be completed by the Applicant and payments required for those works to be completed by City forces at the Applicant's expense. This must be submitted to the City Engineer prior to approval of plans.

5.0 **APPROVAL FOR REGISTRATION of a SUBDIVISION or ISSUANCE of a BUILDING PERMIT**

- 5.01 For early registration of the subdivision plan or early issuance of a Building Permit prior to service installation (where applicable).
  - 5.01.01 A Development Servicing Agreement between the Applicant and the City shall be executed. (Standard form attached in Appendix 7.)
  - 5.01.02 Materials and Workmanship Warranty Agreements shall be executed. (Standard form attached in Appendix 7.)
  - 5.01.03 State of Title Certificate for each legal parcel involved shall be delivered to the Approving Officer.
  - 5.01.04 Certified cheque or irrevocable letter of credit that may be drawn on with no restrictions equal to 100 percent of the cost of services total indicated in the Deposit Section of Form F.T.C.-1 (Financial Terms & Conditions) in favour of the City shall be delivered to the City Engineer. Irrevocable letters of credit will not be accepted for deposit totals less than \$3,000.00. The deposit or Letter of Credit may be reduced as per Section 8.03. (Form FTC-1 attached in Appendix 7.)
  - 5.01.05 Payment in full by cheque or cash for the works to be installed by City forces as indicated in Payments Section of Form F.T.C.-1 shall be delivered to the City Engineer.
  - 5.01.06 Early issuance of building permit(s) prior to installation and acceptance of the water mains and hydrants will not be allowed where in the opinion of the Fire Chief adequate water supply does not currently exist to fight fire on the lot(s) in question.

Legal descriptions and references to ownership on all documents must conform exactly to that appearing on the State of Title Certificate.

- 5.02 For service completion prior to subdivision approval or building permit issuance the following are required:
  - 5.02.01 Submission and approval of as-built drawings,
  - 5.02.02 Completion of Sections 5.01.2, 5.01.3 and 5.01.5.
- 5.03 Right-of-way documents (if applicable) must be prepared by the City. See Section 3 of this specification for document preparation.

## 6.0 **SAFETY**

### 6.01 **General**

The safety of the public and all personnel involved with construction is of paramount importance. All work undertaken on the site shall conform to the latest revision of the Workers' Compensation Board of British Columbia's "Occupational Health and Safety Regulations."

### 6.02 **Prime Responsibility**

The Contractor responsible for site safety shall be designated as the "Prime Contractor" under WCB's Occupational Health and Safety Regulations.

### 6.03 **The Contractor shall complete the form titled "Confirmation of Prime Contractors Main Responsibilities Under Workers' Compensation Board Occupational Health and Safety Regulations and Workers's Compensation Act"**. A copy must also be provided to the City Engineer.

This form is attached as part of Appendix 7 and submit this to the Consulting Engineer prior to starting construction.

### 6.04 **The Consulting Engineer or his representatives shall attend the weekly safety meetings required to be held by the contractor. The Works Inspector may attend these meetings.**

## 7.0 **SERVICE INSTALLATION**

### 7.01 **The following steps shall be carried out prior to start of construction of the Utility services:**

7.01.01 Design drawings must have approval of the City Engineer.

7.01.02 The Consulting Engineer shall make arrangements to inspect the site of the work in the company of a Works Inspector 24 hours prior to start of construction.

If work proceeds without City inspections, the City Engineer may require the works to be exposed for an inspection prior to approval.

7.01.03 A permit must be obtained from the City Engineer for any work on City road allowances and/or rights-of-way.

7.01.04 Works that must be carried out by City forces are subject to prepayment of the costs. Two weeks must be allowed after payment for preparation of work orders and scheduling of the work.

7.01.05 Payment must be made to the City for all materials required to be obtained from the City.

7.01.06 Blasting for excavations will be permitted only after securing a permit from the City Engineer, as set out in the City's Blasting Bylaw.

- 7.02 Every effort must be made to protect boulevard trees from harm during service installation. No tree root over 50 mm in diameter may be cut or damaged on any boulevard tree without approval of the Manager of Parks & Facilities.
- 7.03 A copy of the approved design drawings and the City specifications and standard drawings shall be maintained by the Contractor at the construction site during the installation of all services.
- 7.04 Underground subdivision services shall not be permitted to operate as part of existing City services until the respective subdivision services have been inspected, tested and approved in writing by the City Engineer

## 8.0 **ENGINEERING SUPERVISION & INSPECTION**

### Scope

- 8.01 The Consulting Engineer shall be responsible for the layout, inspection and approval of materials and the supervision of installation of all services which are the responsibility of the Applicant.

### Inspection Levels

- 8.02 Engineering Supervision shall consist of general and sufficient resident inspection to ensure that the works and services are constructed in accordance with the approved design drawings. Sufficient inspection shall range from a minimum of one site visit per day during construction to full time resident inspection for major developments. The Consulting Engineer shall submit copies of his inspection reports to the Works Inspector on a regular basis.

### Role of Inspector

- 8.03 In addition to the Consulting Engineer carrying out supervision, the Works Inspector will periodically inspect the work and assist in co-ordinating construction with any related City works. The Works Inspector shall bring to the attention of the Contractor and the Consultant Engineer the use of materials or practices that do not conform to City Standards. If remedial action is not taken to the satisfaction of the City Engineer, he may issue instructions to the Consulting Engineer to cease construction until remedial action is taken.

### Access for Testing

- 8.04 The Contractor shall at all times provide access to the Consulting Engineer and Works Inspector to allow for inspection and testing of the site and all equipment during the contract. Access for inspection and testing shall also be provided to any off site locations where the manufacture or fabrication of materials to be employed in the contract is being

### Construction Method

#### 8.05

- 8.05.01 During the construction, the Contractor shall at all times comply with the methods of construction contained in this specification.

- 8.05.02 At any time during construction, the Consultant, if of the opinion that the Contractor's construction method is inadequate and unlikely to produce results meeting these specifications may direct the Contractor to change his construction method or to take remedial actions as necessary.
- 8.05.03 Should the Contractor not change construction method, take remedial action to any request arising from paragraph 8.05.02, the Consultant may order a stoppage of the work in progress until the necessary remedial action has been done by the Contractor.
- 8.05.04 No work shall be undertaken by the Contractor when, in the opinion of the consulting Engineer the weather is unsuitable or unfavorable for the particular class of work.
- 8.05.05 The requirements of this section shall in no way relieve the Contractor of his responsibility to meet the required specification without directions from the Consultant.

#### 8.06 Deficiencies

- 8.06.01 The Consulting Engineer shall report all deficiencies in plant, equipment and materials during either preparation of materials or subsequent construction, immediately to the Contractor. The Contractor shall take remedial action immediately.
- 8.06.02 Should the Contractor not take remedial action to any request arising from paragraph 8.06.01, the Consulting Engineer shall notify the City Engineer. The City Engineer may order stoppage of the work in progress until the necessary remedial action has been taken.
- 8.06.03 All such remedial action shall be done at the expense of the contractor.
- 8.06.04 The foregoing requirements of section 8.06 shall in no way relieve the Contractor of the responsibility to achieve the standards required without directions from the Consulting Engineer.

#### Design Changes

- 8.07 If the Consulting Engineer wishes to make any changes in approved design either before or during the execution of the work, he shall first submit a marked print showing proposed revisions to the City Engineer's office. If approval is granted for revision, the original drawing shall be immediately revised, signed by the City Engineer and new prints issued. These two operations may be carried out simultaneously.

### 9.0 TESTING PRIOR TO ACCEPTANCE

#### 9.01 General

The Consulting Engineer is responsible to coordinate and supervise all testing required under this specification.

9.02 Testing Required

Testing required will be as specified in the Construction Specifications R2, S2, W2, and T1 and as specified in Appendices 3, 4 and 6.

9.03 Testing Laboratory

The Consulting Engineer shall appoint a certified laboratory to provide testing of materials to comply with the Specifications. Appointment of the testing laboratory is subject to approval of the City Engineer.

9.04 Test Results

9.04.01 Notification

Test results from the testing laboratory shall be forwarded directly to both the Consulting Engineer and the City Engineer as soon as they are available.

9.04.02 Re-Testing

Should any tests, required by the Consulting Engineer or City Engineer, fail to meet the requirement of the Standard Specification, the City Engineer may direct retesting to be done as he may deem necessary.

9.04.03 Work Failing Tests

Where re-testing, or initial testing where retesting is not practical, indicates failure of the work tested to meet specifications the City Engineer may require replacement or remediation of the work tested to bring it into compliance with the specifications.

9.05 Cost of Testing

9.05.01 The costs of inspection, sampling and testing services provided by the Consulting Engineer and certified testing laboratory shall be paid by the applicant.

9.05.02 Re-testing required under paragraph 9.06, due to initial failure of materials to meet the required specifications shall be paid for by the applicant if the re-test indicates the works to be in compliance with the specifications. The re-testing shall be paid for by the contractor should the retest indicate the works to be out of compliance with the specifications.

10.0 **MUNICIPAL ACCEPTANCE of WORKS and SERVICES**

10.01 Upon the authorization of the City Engineer and after the receipt of satisfactory as-built drawings, warranty security and the final acceptance of the required works, any relevant deposits guaranteeing the satisfactory installation of the works shall be returned to the Applicant.

- 10.02 Warranty security shall be held by the City in the form of an irrevocable letter of credit that may be drawn on with no restrictions or cash deposit for the one (1) year period of warranty for all services. The security shall be for an amount satisfactory to the City Engineer, with a minimum amount of 5% of the total estimated cost of installation of services.
- 10.03 The City Engineer may release a portion of any deposit made under a Development Servicing Agreement for work requiring an extended period to construct provided that:
- 10.03.01 The Consulting Engineer certifies in writing the extent and value of work completed, as well as itemizing the outstanding work and cost of same (including outstanding engineering fees for as-built submission as applicable), and that the completed works meet the specifications of the City.
- 10.03.02 Verification is obtained from the City Works Inspector that the work to date is acceptable.
- Deposits may be released up to 90% of the original deposit total to a minimum deposit amount of \$10,000.
- 10.04 As-built drawings will be checked for field deficiencies, drafting requirements, agreement with the site layout and adherence to City Specification B-2. If the drawings are unacceptable, a correction list will be prepared and sent to the Consulting Engineer.
- 10.04.01 Construction Completion Certificate - when all field deficiencies and as-built drawing corrections have been rectified, a Construction Completion Certificate shall be prepared for signature of the City Engineer. The period of the Material and Workmanship Warranty will begin on the date the as-built drawing is approved by the City Works Inspector.

11.0 **WARRANTY of WORKS and SERVICES**

- 11.01 The Applicant shall be responsible for and at his own expense execute all work, repair, alteration, reconstruction or replacement required to remedy any defect, fault or deficiency in or developing in the completed work not only up to the receipt and approval of the Consulting Engineer's as-built drawing but also during the period of warranty of twelve (12) months after the date of approval of each as-built drawing.
- 11.02 All such works of rectification, repair and warranty shall be executed upon the written request of the City Engineer. Should the Applicant neglect or fail to commence the execution of such works within the time period given by the City Engineer, the City shall complete the remedial works in accordance with the terms of the Warranty Agreement contained in Appendix 7.

11.03 Final Acceptance by the City

The City shall inspect the works prior to the expiration of the warranty period. Any deficiencies shall be corrected as noted above prior to release of deposits.

If rectification or repair does not take place within the time allowed by the City, the City shall complete the remedial works in accordance with the terms of the Warranty Agreement.

If no deficiencies have developed during the warranty period, or if such deficiencies have been rectified to the City's satisfaction deposits shall be released.

**END OF SECTION**