



INVITATION TO TENDER 18-26
FIR STREET UTILITY UPGRADES

MASTER MUNICIPAL CONSTRUCTION DOCUMENTS - 2009
Platinum Edition

UNIT PRICE CONTRACT

November 6th, 2018



INVITATION TO TENDER 18-26
FIR STREET UTILITY UPGRADES
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The complete Contract Documents consist of the following parts:

1. The Master Municipal Construction Documents (Tender Package) consisting of the following parts (**included in this tender package**):
 - Invitation to Tender
 - Instructions to Tenderers, Part I
 - Form of Tender
 - Appendix 1 -- Schedule of Quantities and Prices
 - Appendix 2 -- Preliminary Construction Schedule
 - Appendix 3 -- Experience of Superintendent
 - Appendix 4 -- Comparable Work Experience
 - Appendix 5 – Subcontractors
 - Appendix 6 – Tenderer's Current Projects Underway
 - Agreement - Draft
 - Schedule 1 -- Schedule of Contract Documents
 - Schedule 2 -- List of Contract Drawings
 - Appendix 7 - Safety Covenant
 - Appendix 8 - Prime Contractor Agreement
 - Appendix 9 – Letter of Acceptance – Base Course Gravel in Advance of Paving
 - Supplementary General Conditions
 - Supplementary Specifications
2. Additional reference documentation consisting of the following parts (**not distributed in this tender package**) available at www.campbellriver.ca:
 - Supplementary Specifications, City of Campbell River, Design Standards 2010, Appendix A to Subdivision and Development Servicing Bylaw 3419
 - City of Campbell River, Approved Utility Product List April 2011
3. The balance of the Master Municipal Construction Documents, Platinum, 2009 edition. These documents are available in the "MMCD - General Conditions, Specifications and Standard Detail Drawings" (**not distributed in this tender package**):



INVITATION TO TENDER 18-26

FIR STREET UTILITY UPGRADES

The City of Campbell River invites tenders for the Fir Street Utility Upgrades project which includes the following generalized scope of work:

The renewal of approximately 382 lineal meters of PVC watermain on Fir Street from 9th Avenue northward to the 1100Blk Laneway, accompanied by approximately 175 lineal meters of PVC storm drain on Fir Street from 10th Avenue to the 1100Blk Laneway. In general terms the work includes the installation of new services, hydrants, manholes, catch basins, headwalls and miscellaneous appurtenances and reinstatement of the affected asphalt road surface and flat works.

Asphalt paving is excluded from this contract and will be done by the City under a separate paving contract. The work does include all preparation work for paving and coordination and scheduling directly with the paving contractor.

This Tender is available electronically by downloading it from the City's website at:
<http://www.campbellriver.ca/business-economy/do-business-with-the-city/bidopportunities>

A mandatory site meeting will **NOT** be held.

This Tender is scheduled to close at:

Tender Closing Time:	3:00 p.m. local time
Tender Closing Date:	Tuesday November 27th, 2018 <i>There will NOT be a Public Opening for this Tender</i>
Delivered to:	City of Campbell River City Hall 301 St. Ann's Road 1 st Floor Reception Desk Campbell River, BC V9W 4C7 ATTN: Clinton Crook
Tender Enquiries:	Clinton J. Crook, SCMP, CPSM Purchasing & Risk Management Officer Telephone: 250.286.5766 Email: purchasing@campbellriver.ca



INVITATION TO TENDER 18-26

FIR STREET UTILITY UPGRADES

RECEIPT CONFIRMATION FORM

As receipt of this document, and to directly receive any further information, addendums, etc. regarding this competition, please return this form to:

Email: purchasing@campbellriver.ca

Fax: 250.286.5741

Company Name: _____

Address: _____

City: _____

Province/State: _____ Postal/Zip Code: _____

Telephone No: _____ Fax No: _____

Contact Person: _____

Title: _____

Email: _____

CITY OF CAMPBELL RIVER
INVITATION TO TENDER 18-26
FIR STREET UTILITY UPGRADES
INSTRUCTIONS TO TENDERERS PART I

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4	Additional Instructions to Tenderers	IT 4

INSTRUCTIONS TO TENDERERS - PART I

(TO BE READ WITH "INSTRUCTIONS TO TENDERERS - PART II"
CONTAINED IN THE EDITION OF THE PUBLICATION
"MASTER MUNICIPAL CONSTRUCTION DOCUMENTS" AND APPLICABLE CITY OF CAMPBELL
RIVER BYLAWS SPECIFIED IN ARTICLE 2.2 BELOW)

Reference No.: TENDER 18-26

Contract: FIR STREET UTILITY UPGRADES

Introduction

1

1.1 These Instructions apply to and govern the preparation of tenders for this *Contract*. The *Contract* is generally for the following work:

The renewal of approximately 382 lineal meters of PVC watermain on Fir Street from 9th Avenue northward to the 1100Blk Laneway, accompanied by approximately 175 lineal meters of PVC storm drain on Fir Street from 10th Avenue to the 1100Blk Laneway. In general terms the work includes the installation of new services, hydrants, manholes, catch basins, headwalls and miscellaneous appurtenances and reinstatement of the affected asphalt road surface and flat works.

Asphalt paving is excluded from this contract and will be done by the City under a separate paving contract. The work does include all preparation work for paving and coordination and scheduling directly with the paving contractor.

1.2 Direct all tender inquiries regarding the *Contract*, to:

Clinton J. Crook, SCMP, CPSM
Purchasing & Risk Management Officer
Telephone: 250.286.5766
Email: purchasing@campbellriver.ca

Tender Documents

2

2.1 The tender documents which a tenderer should review to prepare a tender consist of all of the *Contract Documents* listed in Schedule 1 entitled "Schedule of Contract Documents". Schedule 1 is attached to the Agreement which is included as part of the tender package. The *Contract Documents* include the Drawings listed in Schedule 2 to the Agreement, entitled "List of Drawings".

2.2 A portion of the Contract Documents is included by reference. Copies of these documents have not been included with the tender package. These documents are the Instructions to Tenderers - Part

II, General Conditions, Specifications and Standard Detail Drawings contained in the publication entitled "Master Municipal Construction Documents - General Conditions, "Specifications and Standard Detail Drawings" and relevant sections of Supplementary Specifications, City of Campbell River, Design Standards 2010, Appendix A to Subdivision and Development Servicing Bylaw 3419. Refer to Schedule 1 attached to the Agreement or, if no edition has been specified, then the applicable edition shall be the most recent edition as of the date of this *Contract*. All sections of this publication are by reference included in the *Contract Documents*.

- 2.3 Any additional information made available to Tenderers prior to the Tender Closing Time by the *Owner* or representative of the *Owner*, such as geotechnical reports or as-built plans, which is not expressly included in Schedule 1 or Schedule 2 to the Agreement, is not included in the *Contract Documents*. Such additional information is made available only for the assistance of tenderers who must make their own judgement about its reliability, accuracy or completeness and neither the *Owner* nor any representative of the *Owner* gives any guarantee or representation that the additional information is reliable, accurate or complete.

**Submission of
Tenders**

3

- 3.1 Tenders must be submitted in a sealed opaque package, clearly marked on the outside with the above *Contract* Title and Reference No., and must be received on or before:

***Tender Closing Time:* 3:00 p.m. local time**

***Tender Closing Date:* Tuesday November 27th, 2018**
There will NOT be a Public Opening for this Tender

Delivered to: City of Campbell River City Hall
301 St. Ann's Road
1st Floor Reception Desk
Campbell River, BC V9W 4C7
ATTN: Clinton Crook

- 3.2 Late tenders will not be accepted or considered, and will be returned unopened.

3.3 Tender Submission

- .1 Tenders **must** be submitted on the Tender Forms included in these tender documents. The addition to or changing of any words in these Tender Forms by the tenderer or the failure to comply with and complete all items may be cause for rejection without consideration of the tender.
- .2 The Tender Submission **must** include acknowledgement of receipt of all issued addenda.

- .3 The Tender Submission **must** include:
 - Appendix 1 – Schedule of Quantities and Prices – GST Excluded;
 - Appendix 2 – Preliminary Construction Schedule;
 - Appendix 3 – Subcontractors;
 - Appendix 4 – Comparable Work Experience;
 - Appendix 5 – Subcontractors;
 - Appendix 6 – Tenderers Current Projects Underway.
- .4 The Tender Submission **must** include the specified financial security, in the form of the “Bid Security” as required in Section 5.2 of the Instructions to Tenderers Part II.
- .5 The Form of Tender **must** bear the signature of a legal signing authority of the tenderer.
- .6 Other than acknowledgement of receipt of addenda, or request for withdrawal or revision, documents submitted as part of a tender will **not** be considered if received by any of the Owner's facsimile machines.
- .7 Except as expressly and specifically permitted in these Instructions to Tenderers, no Tenderers shall have any claim for any compensation of any kind whatsoever, as a result of participating in the tender, and by submitting a bid, each Tenderer shall be deemed to have agreed that it has no claim.

**Additional
Instructions to
Tenderers**

4

**Freedom of
Information**

4.1

The *Owner* is subject to the provisions of the Freedom of Information and Protection of Privacy Act. As a result, while Section 21 of the Act does offer some protection for third party business interests, the *Owner* cannot guarantee that any information provided to the *Owner* can be held in confidence. All tenders, after closing time and date become the property of the *Owner*.

**Cost of Tender
Submission**

4.2

The *Owner* shall not be liable for a Tenderer's cost of submitting a tender.

**Evaluation
Criteria**

4.3

(a) The *Owner* reserves the right to waive informalities in or reject any or all tenders or accept the tender deemed most favourable in the interests of the *Owner*. Tenders will be evaluated on the combination of information provided in the Form of Tender and Appendices, which may offer the best value and not necessarily the lowest price. The *Owner* reserves the right to conduct pre-selection meetings with Tenderers. The *Owner* further reserves the right to conduct post-selection meetings in order to correct, change or adapt the selected Tender to the wishes of the *Owner*. **Acceptance of any tender may be subject to budgetary considerations and/or City of Campbell River**

Council approval, and/or the approval of other jurisdictions having authority.

- Good Neighbour Policy** 4.4
- 4.4.1 The *Owner's* Good Neighbour Policy as adopted by City of Campbell River Council on April 15, 1997 shall apply to this contract.
- 4.4.2 The Policy states: "That Contractors working on Municipal rights-of-way or on private land where new rights-of-way are being created, be required to provide written notice to the residents in the immediate area of the works, describing what is being constructed, when the works will occur, who to contact for more information and what precautions should be taken if necessary; and that the work-site be posted for safety reasons."
- Mandatory Site Meeting** 4.5 A Mandatory Site Meeting will **NOT** be held.
- Addition\Deletion** 4.6 Tenderers are advised that the *Owner* may, at its option, and subject to available funding and budgetary considerations, delete any *Work* described in the *Contract Documents* or may require that optional work be added to the scope of *Work*.
- Omissions and Discrepancies** 4.7 The Tenderer must carefully examine the *Contract Documents* and the site of the proposed works, judging for and satisfying themselves as to the probable conditions to be encountered. Should a Tenderer find omissions from or discrepancies in the *Contract Documents*, or be in doubt as their meaning, the Tenderer should notify the *Owner* no later than 5 days prior to the tender closing, who may cause to send a written instruction to all Tenderers in the form of an addendum, which shall become part of the contract and shall be covered in the contract price. The Tenderer may not claim, after the submission of a tender, that there was any misunderstanding with respect to the conditions imposed by the documents. No oral interpretations made to a Tenderer as to the meaning of the *Contract Documents* shall be considered binding. Every request for an interpretation shall be made in writing, forwarded to the office referred to in paragraph 3.1 of the Instructions to Tenderers – Part I.
- Amendment of Tenders** 4.8
- 4.8.1 Delete Paragraphs 12.1 of the Instructions to Tenderers, Part II and replace with the following paragraphs 4.9.2 and 4.9.3:
- 4.8.2 A Tenderer may, without prejudice to itself, withdraw or revise a tender after it has been deposited with the *Owner*, provided the request for withdrawal or revision is filed with the *Owner* in writing before the time set for the Tender closing. Non-facsimile request(s) should be submitted in a sealed opaque envelope clearly marked with the contract name and reference number to the office referred to in paragraph 3.1 of the Instructions to Tenderers - Part 1. In the

case of revision(s), a revised price will not be accepted, only the addition to or deduction from the tender price will be accepted. Written withdrawals or revisions must be signed by the same person or persons who signed the original Form of Tender.

- 4.8.3 In the case of facsimile or e-mail requests for withdrawal or revision, they will only be accepted if they are received by the *Owner's* Supply Management Department facsimile machine at 250.286.5763 or via e-mail at purchasing@campbellriver.ca before the scheduled tender closing time. Tenderers assume the entire risk that the facsimile and computer equipment and staff at the above office will receive the facsimile or e-mail containing the withdrawal or revision. The *Owner* assumes no risk or responsibility whatsoever that any facsimile or e-mail will be received as required and shall not be liable to any *Tenderer* if for any reason a facsimile or e-mail is not received.

For purposes of this paragraph 4.9.3, "received" means the request for withdrawal or revision is visible to the *Owner's* staff in its entirety, and is either in printed form or is capable of immediate reproduction in printed form.

**Sub-Surface
Conditions**

- 4.9 A geotechnical assessment or a geotechnical exploration has not been completed. Tenderers shall make their own assessment of the soil and groundwater conditions at the location.

**Environmental
Conditions**

- 4.11 No environmental assessment has been completed for this project.

Working Hours

- 4.12 Work inside the *Owner's* Property shall be carried out between the hours of 7:00 a.m. and 10:00 p.m. seven (7) days a week unless other arrangements are made between the *Owner* and the *Contractor*.

**Commencement
And Completion
of Work**

- 4.13 The *Owner* requires that the *Work* under this Contract to commence on Monday April 15th, 2019, or as mutually agreed upon by the *Owner* and the *Contractor*, and within the following milestones:

Substantial Performance of this Contract to be achieved within 90 Days from Notice to Proceed.

Appendix 1 of this Form of Tender. Our *Tender Price* is based on the estimated quantities listed in the *Schedule of Quantities and Prices*, and excludes *GST*.

3 I (WE) CONFIRM:

3.1 that we understand and agree that the quantities as listed in the *Schedule of Quantities and Prices* are estimated, and that the actual quantities will vary.

4 I (WE) CONFIRM:

4.1 that the following Appendices are attached to and form a part of this tender:

4.1.1 the Appendices as required by paragraph 5.3 of the Instructions to Tenderers - Part II; and

4.1.2 the ***Bid Security*** as required by paragraph 5.2 of the Instructions to Tenderers – Part II stated as:

A tender must be accompanied by the *Bid Security* in the form of:

a a Bid Bond issued by a surety licensed to carry on the business of suretyship in British Columbia in a form reasonably satisfactory to the *Owner*; or

b cash, bank draft or letter of credit in a form acceptable to the *Owner*;

in an amount equal to 10% of the *Tender Price*.

5 I (WE) AGREE:

5.1 that this tender will be irrevocable and open for acceptance by the *Owner* for a period of 60 calendar days from the day following the *Tender Closing Date and Time*, even if the tender of another tenderer is accepted by the *Owner*. If within this period the *Owner* delivers a written notice ("*Notice of Award*") by which the *Owner* accepts our tender we will:

5.1.1 within 10 *Days* of receipt of the written *Notice of Award* deliver to the *Owner*.

Tenderer's Initial Owner's Initial

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- a a Performance Bond and a Labour and Material Payment Bond, each in the amount of 50% of the *Contract Price*, issued by a surety licensed to carry on the business of suretyship in the province of British Columbia, and in a form acceptable to the *Owner*; and
- b a *Construction Schedule*, as provided by GC 4.6.1; and as per *Supplemental Specifications* in 01 31 00; and
- c a "clearance letter" indicating that the tenderer is in WCB compliance; and
- d a copy of the insurance policies as specified in GC 24 indicating that all such insurance coverage is in place; and
- e a Health and Safety Program Manual pertaining to the Work.

5.1.2 As per General Condition 4.6.6, the Owner shall issue the Notice to Proceed within 14 days of receipt of the documentation required under item 5.1.1 above.

5.1.3 within 2 Days of receipt of written "*Notice to Proceed*", or such longer time as may be otherwise specified in the *Notice to Proceed*, commence the *Work*.

5.1.4 sign the *Contract Documents* as required by GC 2.1.2.

6 I (WE) AGREE:

6.1 that, if we receive written *Notice of Award* of this *Contract* and, contrary to paragraph 5 of this Form of Tender, we:

6.1.1 fail or refuse to deliver the documents as specified by paragraph 5.1.1 of this Form of Tender; or

6.1.2 fail or refuse to commence the *Work* as required by the *Notice to Proceed*,

then such failure or refusal will be deemed to be a refusal by me (us) to enter into the *Contract* and the *Owner* may, on written notice

Tenderer's Initial Owner's Initial

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to me (us), award the *Contract* to another party. I (We) further agree that, as full compensation on account of damages suffered by the *Owner* because of such failure or refusal, the *Bid Security* shall be forfeited to the *Owner*, in an amount equal to the lesser of:

6.1.3 the face value of the *Bid Security*; and

6.1.4 the amount by which my (our) *Tender Price* is less than the amount for which the *Owner* contracts with another party to perform the *Work*.

7 I (WE) DECLARE THAT:

7.1 no person, firm or company other than the undersigned, has any interest in this tender or in the proposed *Contract* for which this tender is made;

7.2 this tender is made without any connection, knowledge, comparison of figures, or agreement with any other company, firm or person making a tender for the same work;

7.3 in tendering for this work, and when called upon to enter into an agreement with the *Owner*, I (we) will be bound to comply with all laws, statutes, and municipal bylaws pertaining to the work. The agreement will be governed by the laws of the province of British Columbia;

7.4 in submitting this tender I (we) did not rely upon any information provided by the *Owner*, or any of the *Owner's* employees or agents, relating to the conditions, contingencies, risks or other circumstances, local or otherwise, which might influence or affect the performance or the cost of the work, including, without limiting the nature of the ground, subsoil, substrata of the work site, the means of access to the work site, the quality, quantity, nature or location of the materials to be furnished or removed in performance of the work, and the conditions under which the labour force will be employed, except the extent that any such information is expressly set forth in the *Contract Documents*. I (we) have relied on our own examination of the work site and have informed ourselves as to all conditions, contingencies, risks, and circumstances, local or otherwise, which might influence or affect the performance or the cost of the work. I (we) accept the site prior to the signing of the *Contract*.

Tenderer's Initial Owner's Initial

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8 WE AGREE:

8.1 The work shall be completed entirely in 90 *Days* from Notice to Proceed (The Designated Completion Period);

8.2 There shall be no exclusion of time from the Designated Completion Period for any reason OTHER than delays clearly attributable to the OWNER, its agents, employees or any Authorized Representatives.

9 I (WE) DECLARE THAT:

9.1 I (we) recognize that the lowest or any tender will not necessarily be accepted; and

9.2 I (we) recognize that the *Owner* reserves the right to reject all tenders or to accept the tender which best suits its long term objectives; and

I (we) recognize that the *Owner* reserves the right to accept or reject all or part of this Tender at any time during the period specified by paragraph 5.1 of this Form of Tender.

10 I (WE) DECLARE THAT:

10.1 I (we) do not (or any related company) have any family, ownership, and operating relationships with the City of Campbell River, or any elected official, staff or other officials holding public office in the City of Campbell River and agree that the *Owner* reserves the right to reject any tender that may be perceived to be in a conflict of interest.

11 I (WE) DECLARE THAT:

11.1 In this tender:

(a) "Related Party of the Tenderer" means:

- an officer or director of the Tenderer;
- a shareholder of the Tenderer;
- a corporation with a shareholder or director who is also a shareholder or director of Tenderer;

(b) "Public Authority" has the same meaning as under the Community Charter.

11.2 I (we) hereby declare that neither the Tenderer nor a Related Party of the Tenderer:

Tenderer's Initial Owner's Initial

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- (a) has had a bid bond or performance bond retained or claimed against;
- (b) has breached a contract for works or services with the *Owner* or other Public Authority in British Columbia;
- (c) has been engaged in a legal action against the *Owner* or another Public Authority in British Columbia, or the elected or appointed officers and employees of the *Owner* or that other Public Authority, in relation to:
 - any other contract for works or services;
 - any matter arising from the exercise of the *Owner's* or the other Public Authority's powers, duties or functions under the Community Charter, Local Government Act or other enactment;
- (d) has been charged or convicted of an offence in relation to the performance of a contract for works or services with the *Owner* or other Public Authority;

within five years of the closing date of this Tender.

Tenderers who are unable to truthfully complete this declaration must provide full particulars of the relevant circumstances. Submission of a false declaration is grounds for rejection of a tender.

11.3 I (we) hereby declare that the *Owner* may in its absolute discretion reject a Tender submitted by a Tenderer if the Tenderer or a Related Party of the Tenderer:

- (a) has had a bid bond or performance bond retained or claimed against;
- (b) has breached a contract for work or services with the *Owner* or other Public Authority in British Columbia;
- (c) has been engaged in a legal action against the *Owner* or another public authority in British Columbia, or the elected or appointed officers and employees of the *Owner* or that other public authority, in relation to:
 - any other contract for works or services;
 - any matter arising from the exercise of the *Owner's* or the other public authority's powers, duties or functions under the Community Charter, Local Government Act or other enactment;

Tenderer's Initial Owner's Initial

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- (d) has been charged or convicted of an offence in relation to the performance of a contract for works or services with the *Owner* or other Public Authority;

within five years of the closing date of this Tender.

11.4 I (we) hereby declare that in determining whether to reject a tender the *Owner* will consider whether:

- (a) the legal action is likely to affect the Tenderers ability to work with the *Owner*, its consultants and representatives, and;

whether the *Owner's* or other public authority's experience with the Tenderer indicates that the *Owner* is likely to incur increased costs including but not limited to staff and legal costs in the administration of this contract if it is awarded to the Tenderer.

12 I (WE) AGREE THAT:

12.1 I (we) agree that if any director, officer or employee, agent or other representative of a Tenderer makes any representation or solicitation to the Mayor, any Councillor, officer or employee of the City of Campbell River, other than those specifically designated in the Tender documents, with respect to this Tender, whether before or after the submission of the Tender, the City shall be entitled to reject or not accept the Tender.

Tenderer's Initial Owner's Initial

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MY (OUR) ADDRESS is as follows:

(Full Legal Name of Corporation, Partnership or Individual)

(address)

(city, province) (postal code)

Phone: _____

Fax: _____

E-mail: _____

This Tender is executed this _____ day of _____,
2018.

(Printed Name)

(Authorized Signatory)

Tenderer's Initial Owner's Initial

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Appendix 1

SCHEDULE OF QUANTITIES AND PRICES – GST EXCLUDED

(See paragraph 5.3.1 of the Instructions to Tender – Part II)

(All prices and Quotations including the Contract Price shall include all Taxes, but shall not include GST, GST shall be shown separately)

ITEM No.	MMCD REF.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
<u>01 GENERAL REQUIREMENTS</u>						
<u>01 01 01 MOBILIZATION and DEMOBILIZATION</u>						
1	SS 3.1	Mobilization and Demobilization (max 10% of total price)	LS	1		
<u>03 30 20 CONCRETE WALKS, CURBS AND GUTTERS</u>						
2	1.4.4	Hand Formed Barrier and Rollover Concrete Curb and Gutter (c/w Granular Base) Std. Dwg c4 incl saw cutting and removal of existing curb	Lin. M.	19		
3	1.4.5	1.5m wide 120mm thick Concrete Sidewalk, (c/w Granular Base)	Lin. M.	55		
4	1.4.6	Private Concrete Driveway 120mm thick (c/w Granular Base)	Sq.M.	40		
<u>31 EARTHWORKS</u>						
<u>31 22 16.1 RESHAPING EXISTING SUBGRADE</u>						
5	1.4.1/2	Replace unsuitable subgrade (Optional)	Tonne	300		
<u>31 23 01 EXCAVATING, TRENCHING AND BACKFILLING</u>						
6	1.10.3	Over-Excavation including Backfilling (Optional)	Cu.M.	100		
7	1.10.4.1	Removal and Off-Site Disposal of Disused AC Pipe	Lin. M.	60		
8	1.10.4.2	Dump Fees for AC Pipe Disposal	Allowance	1	\$5,000	\$5,000
9	1.10.4.3	Removal and Off-Site Disposal of Disused Pipe (except AC Pipe) and Structures	Lin. M.	115		
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**CITY OF CAMPBELL RIVER
TENDER 18-26
FIR STREET UTILITY UPGRADES
FORM OF TENDER**

10	1.10.9	Prelocate existing water services near property line	Each	5		
11	1.10.10	Prelocate existing utilities at Laneway tie-in	LS	1		
12	1.10.10	Prelocate existing utilities at 10th Ave.	LS	1		
<u>31 23 23 CONTROLLED DENSITY FILL</u>						
13	1.4.1	CDF (Pipe 100mm diameter)	Lin. M.	310		
14	1.4.1	CDF (Pipe 200mm diameter)	Lin. M.	20		
<u>31 24 13 ROADWAY EXCAVATION, EMBANKMENT AND COMPACTION</u>						
15	1.8.5	Common Excavation	Cu.M.	15		
16	1.8.14	Roadway Asphalt Removal for All Thicknesses (<i>Optional</i>)	Sq.M.	1,100		
<u>32 ROADS AND SITE IMPROVEMENTS</u>						
<u>32 12 16 HOT-MIX ASPHALT CONCRETE PAVING</u>						
17	1.5.7	Saw Cut Asphalt or Concrete Pavements for permanent pavement restoration	Lin. M.	330		
18	1.5.9	Coordination with Owner's Asphalt Concrete Supplier	LS	1		
<u>32 17 23 PAINTED PAVEMENT MARKINGS</u>						
19	1.5.2	Single Centerline paint marking on Fir Street (9th Ave to 10th Ave) (<i>Optional</i>)	Lump Sum	1		
<u>32 93 01 PLANTING OF TREES, SHRUBS AND GROUND COVERS</u>						
20	1.9.1	Shrub, Trees and Plants replacement costs	Each	17		
<u>33 UTILITIES</u>						
<u>33 01 30.1 CCTV INSPECTION OF PIPELINES</u>						
21	1.6.2	CCTV Pipeline Inspection (Storm Drain)	Lin. M.	174		

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**CITY OF CAMPBELL RIVER
TENDER 18-26
FIR STREET UTILITY UPGRADES
FORM OF TENDER**

<u>33 11 01 WATERWORKS</u>						
22	1.8.1/2	Pipe-100mm dia. C900 DR18 PVC at 1.0 to 1.5m depth, import backfill	Lin. M.	104		
23	1.8.1/2	Pipe-150mm dia. C900 DR18 PVC at 1.0 to 1.5m depth, import backfill	Lin. M.	93		
24	1.8.1/2	Pipe-200mm dia. C900 DR18 PVC at 1.0 to 1.5m depth, import backfill	Lin. M.	185		
25	1.8.3	Gate Valve- 150mm FxH	Each	1		
26	1.8.3	Gate Valve- 200mm FxH	Each	4		
27	1.8.3	Cross- 200Fx200Fx200Fx200F	Each	1		
28	1.8.3	22.5 deg Bend- 200Hx200H	Each	2		
29	1.8.3	90 deg Bend- 200Hx200H	Each	1		
30	1.8.3	Reducer - 100Hx150F	Each	1		
31	1.8.3	Reducer - 150Hx200H	Each	1		
32	1.8.4	Service Connection- 19mm dia. c/w tracer, idles, setter, meter box, connection restoration	Each	44		
33	1.8.5	Test Point- Std. Dwg W5	Each	5		
34	1.8.5	Blow Off Assembly c/w chamber Chamber and H2O Frame and Lid	Each	1		
35	1.8.14	Hydrant Assembly. Std Dwg W4 Terminal City C-71P	Each	3		
36	1.8.15	Wrap watermain joints (Canus)	Each	16		
37	1.8.13	Tie-in Pre Construction- In-line 200mm Gate Valve and 100mm Cap w/ TB (Fir St. /Lane way)	LS	1		
38	1.8.13	Tie in Location 1: tie to existing 200mm PVC main (Lane way)	LS	1		
39	1.8.13	Tie in Location 2: tie to existing 200mm AC main c/w 2x 45 deg Bends and coupler (10th Ave East)	LS	1		
40	1.8.13	Tie in Location 3: tie to existing 200mm AC main c/w 2x 45 deg Bends and coupler (10th Ave West)	LS	1		
Sub-Total Page 11						

Tenderer's Initial Owner's Initial

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**CITY OF CAMPBELL RIVER
TENDER 18-26
FIR STREET UTILITY UPGRADES
FORM OF TENDER**

<u>33 40 01 STORM DRAINS</u>						
41	1.6.1, 1.6.2	Drain Pipe PVC Ribbed 300mm diameter for depth of main 0-3.5m at invert; Imported Backfill	Lin. M.	174		
42	1.6.3	Drain Pipe PVC DR28 150mm diameter service connection w/ Imported Backfill	Each	12		
43	1.6.6	Trench drain c/w plug, clean out and drain rock pit	LS	1		
44	1.6.9	Tie-in to existing open ditch pipe (10thAve)	Each	1		
<u>33 44 01 MANHOLES AND CATCHBASINS</u>						
45	1.5.1.1	Manhole base, lid, slab, cover, frame and risers 1050mm diameter	Each	3		
46	1.5.1.2	Manhole barrell 1,050mm diameter;	Lin. M.	7.5		
47	1.5.2	Catch Basins, lead and asphalt concrete apron preparation	Each	5		
48	1.5.2	Headwall structure c/w riprap armour, grate and handrail	Each	2		
Sub-Total Page 12						

SUMMARY

Sub-Total Page 9
Sub-Total Page 10
Sub-Total Page 11
Sub-Total Page 12

Sub-Total:

GST (5%):

Total:

Tenderer's Initial Owner's Initial

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Appendix 3
EXPERIENCE OF SUPERINTENDENT
(See paragraph 5.3.3 of the Instructions to Tenderers - Part II)

Name: _____

Experience:

1. Dates: _____

Project Name: _____

Responsibility: _____

References: _____

2. Dates: _____

Project Name: _____

Responsibility: _____

References: _____

3. Dates: _____

Project Name: _____

Responsibility: _____

References: _____

Tenderer's Initial	Owner's Initial

Appendix 4

COMPARABLE WORK EXPERIENCE
(See paragraph 5.3.4 of the Instructions to Tenderers - Part II)

PROJECT	OWNER/ CONTRACT NAME	PHONE NUMBER	WORK DESCRIPTION	VALUE (\$)

Tenderer's Initial	Owner's Initial

Appendix 5

SUBCONTRACTORS

(See paragraph 5.3.5 of the Instructions to Tenderers - Part II)

TENDER ITEM	TRADE	SUBCONTRACTOR NAME	PHONE NUMBER

Tenderer's Initial Owner's Initial

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Appendix 6

TENDERERS CURRENT PROJECTS UNDERWAY

PROJECT	OWNER/ CONTRACT NAME	PHONE NUMBER	WORK DESCRIPTION	VALUE (\$)	% COMPLETE

Tenderer's Owner's
Initial Initial

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Draft Agreement

Between Owner and Contractor

THIS AGREEMENT made in duplicate this _____ day of _____, 2018.

Reference No.: TENDER 18-26

Contract: FIR STREET UTILITY UPGRADES

BETWEEN: CITY OF CAMPBELL RIVER

(the "Owner")

AND: TBD

(the "Contractor")

The *Owner* and the *Contractor* agree as follows:

ARTICLE 1 THE WORK - START/COMPLETION DATES

- 1.1 The *Contractor* will perform all *Work* and provide all labour, equipment and material and do all things strictly as required by the *Contract Documents*.
- 1.2 The *Contractor* will commence the *Work* in accordance with the *Notice to Proceed*. The *Contractor* will proceed with the *Work* diligently, will perform the *Work* generally in accordance with the construction schedules as required by the *Contract Documents* and will achieve *Substantial Performance* of the *Work* within 90 Days of being issued a Notice to Proceed subject to the provisions of the *Contract Documents* for adjustments to the *Contract Time*.
- 1.3 Time shall be of the essence of the *Contract*

ARTICLE 2 CONTRACT DOCUMENTS

- 2.1 "*Contract Documents*" consist of the documents listed or referred to in Schedule 1, entitled "Schedule of Contract Documents", which is attached and forms a part of this Agreement, and includes any and all additional and amending documents issued in accordance with the provisions of the *Contract Documents*. All of the *Contract Documents* shall constitute the entire *Contract* between the *Owner* and the *Contractor*.
- 2.2 The *Contract* supersedes all prior negotiations, representations or agreements, whether written or oral, and the *Contract* may be amended only in strict accordance with the provisions of the *Contract Documents*.

ARTICLE 3 CONTRACT PRICE

- 3.1 The price for the *Work* ("*Contract Price*") shall be the sum in Canadian dollars of the following:
 - 3.1.1 the product of the actual quantities of the items of *Work* listed in the *Schedule of Quantities and Prices* which are incorporated into or made necessary by the *Work* and the Lump Sums listed in the *Schedule of Quantities and Prices*; plus
 - 3.1.2 all lump sums, if any, as listed in the *Schedule of Quantities and Prices*, for items relating to or incorporated into the *Work*; plus
 - 3.1.3 any adjustments, including any payments owing on account of *Changes* and agreed to *Extra Work*, approved in accordance with the provisions of the *Contract Documents*.

- 3.2 The *Contract Price* shall be the entire compensation owing to the *Contractor* for the *Work* and this compensation shall cover and include all profit and all costs of supervision, labour, material, equipment, overhead, financing, and all other costs and expenses whatsoever incurred in performing the *Work*.

ARTICLE 4 PAYMENT

- 4.1 Subject to applicable legislation and the provisions of the *Contract Documents*, the *Owner* shall make payments to the *Contractor*.
- 4.2 If the *Owner* fails to make payments to the *Contractor* as they become due in accordance with the terms of the *Contract Documents* then interest calculated at 2% per annum over the prime commercial lending rate of the Royal Bank of Canada on such unpaid amounts shall also become due and payable until payment. Such interest shall be calculated and added to any unpaid amounts monthly.

ARTICLE 5 RIGHTS AND REMEDIES

- 5.1 The duties and obligations imposed by the *Contract Documents* and the rights and remedies available hereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.
- 5.2 Except as specifically set out in the *Contract Documents*, no action or failure to act by the *Owner*, *Contract Administrator* or *Contractor* shall constitute a waiver of any of the parties' rights or duties afforded under the *Contract*, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach under the *Contract*.

ARTICLE 6 NOTICES

- 6.1 Communications among the *Owner*, the *Contract Administrator* and the *Contractor*, including all written notices required by the *Contract Documents*, may be delivered by hand, e-mail, fax, or by pre-paid registered mail to the addresses as set out below:

The *Owner*: City of Campbell River
301 St. Ann's Road
Campbell River, BC
V9W 4C7
Attention: Mr. David Dougherty, ASCT, Capital Works Supervisor
E-mail: david.dougherty@campbellriver.ca

The *Contractor*: **TBD**

The *Contract Administrator*: City of Campbell River
301 St. Ann's Road
Campbell River, BC
V9W 4C7
Attention: Mr. David Dougherty, ASCT, Capital Works Supervisor
E-mail: david.dougherty@campbellriver.ca

- 6.2 A communication or notice that is addressed as above shall be considered to have been received:
- 6.2.1 immediately upon delivery, if delivered by hand; or
- 6.2.2 immediately upon transmission if sent and received by fax or e-mail; or
- 6.2.3 after 5 *Days* from date of posting if sent by registered mail.

- 6.3 The *Owner* or the *Contractor* may, at any time, change its address for notice by giving written notice to the other at the address then applicable. Similarly if the *Contract Administrator* changes its address for notice then the *Owner* will give or cause to be given written notice to the *Contractor*.
- 6.4 The sender of a notice by fax or e-mail assumes all risk that the fax or e-mail will be received properly, and the provisions of paragraph 12.5 of the Instructions to Tenderers, Part II apply to the sender.

ARTICLE 7 GENERAL

- 7.1 This *Contract* shall be construed according to the laws of British Columbia.
- 7.2 The *Contractor* shall not, without the express written consent of the *Owner*, assign this *Contract*, or any portion of this *Contract*.
- 7.3 The headings included in the *Contract Documents* are for convenience only and do not form part of this *Contract* and will not be used to interpret, define or limit the scope or intent of this *Contract* or any of the provisions of the *Contract Documents*.
- 7.4 A word in the *Contract Documents* in the singular includes the plural and, in each case, vice versa.
- 7.5 This agreement shall ensure to the benefit of and be binding upon the parties and their successors, executors, administrators and assigns.

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

Contractor:

TBD

(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL)

(AUTHORIZED SIGNATORY)

(WITNESS)

Owner:

City of Campbell River

(AUTHORIZED SIGNATORY)

(WITNESS)

SCHEDULE 1

CITY OF CAMPBELL RIVER

Schedule of Contract Documents

The following is an exact and complete list of the *Contract Documents*, as referred to in Article 2.1 of the *Agreement*.

NOTE: The documents noted with "*" are contained in the "Master Municipal Construction Documents - General Conditions, Specifications and Standard Detail Drawings", 2009 PLATINUM edition. All sections of this publication are included in the *Contract Documents*.

The documents noted with "***" are available at www.campbellriver.ca

- a) Agreement;
- b) Addenda;
- c) Supplementary General Conditions;
- d) General Conditions*;
- e) Supplementary Specifications;
- f) Specifications*;
- g) Drawings listed in Schedule 2 to the Agreement;
- h) Supplementary Detail Drawings;
- i) Standard Detail Drawings*;
- j) Executed Form of Tender;
- k) Instructions to Tenderers;
- l) All other Contract Documents;
- m) Supplementary Specifications, City of Campbell River, Design Standards 2010, Appendix A to Subdivision and Development Servicing Bylaw 3419**;
- n) City of Campbell River: Approved Utility Product List***;

Appendix 7

SAFETY COVENANT

BETWEEN:

(Company Name (Print legibly))

(Address)

(City)

(Postal Code)

(Phone no.)

(Email)

hereinafter referred to as the "Contractor"

AND: **CITY OF CAMPBELL RIVER** hereinafter called the "Owner"

WHEREAS:

The Contractor covenants and agrees that when performing any work for the Owner in British Columbia, whether directly as a contractor or indirectly as a sub-contractor, it will adhere to all of the requirements of the Occupational Health and Safety (OHS) Regulation, B.C. Reg. 296/97, as may be amended from time to time, that are applicable to the work being performed, and as well will comply with the provisions of the *Workers Compensation Act, R.S.B.C., 1996, c.492*, as amended (the 'Act').

The Contractor covenants and agrees that when performing any work for the Owner in which Federal occupational health and safety regulations may apply that the contractor or indirectly as a subcontractor will adhere to such regulations as administered by the Government of Canada.

Without limiting the generality of the foregoing, the Contractor agrees, with respect to any and all work performed by the Contractor in British Columbia:

- 1) Before commencing any work for the Owner, the Contractor will consult the OHS Regulation and will determine which provisions of the OHS Regulation is applicable to the work that the Contractor is to perform. The Contractor will strictly comply with all applicable OHS Regulations when performing the work.
- 2) Before commencing any work for the Owner, the Contractor will review and familiarize itself with any existing policies or procedures developed by the Owner in relation to the work. If in the opinion of the Contractor, by following a policy or procedure that the Owner has established in relation to the work, the Contractor, or an employee of the Contractor or of the Owner, or any other worker, is put at increased risk, the Contractor must request a written change of policy or procedure from the Owner, applicable only to the work the Contractor is to perform, before proceeding with the work.

- 3) The Owner reserves the right to refuse to amend its policies or procedures in response to any such request where the Owner, after such consultation with WorkSafeBC as the Owner considers necessary, determines that the Owner's policy or procedure does not increase the risk to any worker at the location of the work to be performed, and determines that the Contractor's request is unreasonable, or is unnecessary for the protection of workers at the location of the work.
- 4) To have read every section of the OHS Regulation that pertains to the job(s) at hand, to ensure that it understands the pertinent OHS Regulation and its application to the supervisor(s) and to all of the workers at the location of the work, and to ensure that each worker under the Contractor's supervision follows the applicable OHS Regulation. To assist Contractors with this task, the City of Campbell River directs them to consult with WorkSafeBC directly, to access the WorkSafeBC Regulations and Policies available on the WorkSafeBC website.
- 5) To understand, comply with and, to the full extent of the Contractor's lawful authority, to enforce all of the following provisions of the WorkSafeBC OHS Regulations as they pertain to the job at hand and to the workers employed by the Contractor, and to provide to the owner, at any time upon request, evidence of compliance with the following:
 - a) Rights & Responsibilities – Occupational Health & Safety Program (Part 3, including;
 - i) Joint Health and Safety Committees
 - ii) Occupational First Aid
 - iii) Investigations
 - iv) Inspections
 - v) Written Instructions
 - vi) Records and Statistics
 - vii) Supervision
 - viii) Refusal of unsafe work
 - b) General Conditions (Regulation – Part 4)
 - c) Chemical and Biological Substances (Regulation – Part 5)
 - d) Substance Specific Requirements (Regulation – Part 6)
 - i) Asbestos handling protocols (Regulation – Part 6, s. 6.1 – 6.32)
 - e) Noise, Vibration, Radiation and Temperature (Regulation – Part 7)
 - f) Personal Protective Clothing and Equipment (Regulation - Part 8)
 - g) Confined Spaces (Regulation – Part 9)
 - h) De-energization and Lock-out (Regulation – Part 10)
 - i) Fall Protection (Regulation – Part 11)
 - j) Tools, Machinery and Equipment (Regulation – Part 12)
 - k) Ladders, Scaffolds and Temporary Work Platforms (Regulation – Part 13)
 - l) Cranes and Hoists (Regulation – Part 14)
 - m) Rigging (Regulation – Part 15)
 - n) Mobile Equipment (Regulation – Part 16)
 - o) Traffic Control (Regulation – Part 18)
 - p) Electrical Safety (Regulation – Part 19)
 - q) Construction, Excavation & Demolition (Regulation – Part 20)
 - i) Coordination of Multiple Employer Workplaces (Regulation – Part 20, s. 20.3)
 - r) Blasting operations (Regulation – Part 21)
 - s) Underground Workings (Regulation – Part 22)
 - t) Diving, Fishing and Other Marine Operations (Regulation – Part 24)
 - u) Forestry Operations (Regulation – Part 26)

- v) Aircraft Operations (Regulation – Part 29)
- w) Firefighting (Regulation – Part 31)
- x) Evacuation and Rescue (Regulation – Part 32)

PROVISIONS OF THE *WORKERS COMPENSATION ACT* – PART 3 SPECIFIC TO CONTRACTORS ON A WORKSITE:

- i. Division 3 – General duties of Employers, Workers and Others (Sections 115, 116, 117, 118, 119, 120, 121, 122, 123, 124);
 - ii. Division 4;
 - iii. Division 10.
- 6) The *Workers Compensation Act* stipulates that the Owner (the City of Campbell River) is required to enforce any observed infraction of the Act or Regulation. The Contractor accepts that the City of Campbell River will be conducting periodic checks of the Contractor during the Contractor's work for the City of Campbell River and will be asking the Contractor to comply with the Act/Regulation in the event that any contravention is observed. If a contravention is observed and not corrected, the Contractor may be asked to leave the worksite and may result in termination of the contract for the work.
- 7) For the purposes of streamlining large construction projects and multiple employer worksites, the Owner reserves the right to designate a "prime contractor" amongst contractors who are working on a job-site together. A designated person employed by the "prime contractor" – appointed by the Owner - will act as the coordinator of the other contractors on that job-site and will ensure that each of the contractors on the job site are following all of the Act and WorkSafeBC Regulations as well as site-specific policies and procedures. This includes having in place an approved WorkSafeBC Health and Safety Program and a list of the qualified persons amongst the other contractors who have been designated to be responsible for each of the other contractor's site health and safety activities.
- 8) In the event that a prime contractor has been designated, it is the responsibility of the Contractor to inquire who the "prime contractor" is for the worksite and to comply with the requirements for a multiple employer worksite where a prime contractor has been designated, as set out in the preceding section.

NOTE:

- a) Payment of WorkSafeBC Assessments by any Contractor does not obviate the responsibility of the contractor to any of the foregoing.
- b) The foregoing constitutes requirements of the Prevention Division of WorkSafeBC BC for any workplace in the Province of British Columbia and constitutes the Owner's expectations of contractors.

The Contractor covenants and agrees that when performing any work for the Owner, whether directly as a contractor or indirectly as a sub-contractor, it will adhere to all of the requirements of the B.C. Employment Standards Act (RSBC 1996), as may be amended from time to time, that are applicable to the work being performed, including but not limited to:

- 1) Section 36 (2); an employer must ensure that each employee has at least 8 consecutive hours free from work between each shift worked.

- 2) Section 39; despite any provision of this Part, an employer must not require or directly or indirectly allow an employee to work excessive hours or hours detrimental to the employee's health or safety.

THIS Covenant made the _____ day of _____, 2018, in the
City of Campbell River, in the Province of British Columbia.

CONTRACTOR:

Company Name

Authorized Signatory

(Printed Name & Title)

Appendix 8

PRIME CONTRACTOR AGREEMENT

1. The Contractor shall, for the purposes of the Workers Compensation Act, and for the duration of the Work of this Contract:
 - .1 be the "prime contractor" for the "Work site", and
 - .2 do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with the Act and its regulations, as required to ensure the health and safety of all persons at the "Work site".
- .2 The Contractor shall direct all Subcontractors, Sub-subcontractors, Other Contractors, employers, Workers and any other persons at the "Work site" on safety related matters, to the extent required to fulfill its "prime contractor" responsibilities pursuant to the Act, regardless of:
 - .1 whether or not any contractual relationship exists between the Contractor and any of these entities, and
 - .2 whether or not such entities have been specifically identified in this Contract.

As per the requirements of the Workers Compensation Act Part 3, Division 3, Section 118(1-3) which states:

Coordination of multiple-employer Workplaces

118(1) In this section:

"multiple-employer Workplace" means a Workplace where Workers of 2 or more employers are Working at the same time;

"prime contractor" means, in relation to a multiple-employer Workplace,

- (a) the directing contractor, employer or other person who enters into a written agreement with the owner of that Workplace to be the prime contractor for the purposes of this Part, or
- (b) if there is no agreement referred to in paragraph (a), the owner of the Workplace.

(2) The prime contractor of a multiple-employer Workplace must

- (a) ensure that the activities of employers, Workers and other persons at the Workplace relating to occupational health and safety are coordinated, and
- (b) do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with this Part and the regulation in respect to the Workplace.

(3) Each employer of Workers at a multiple-employer Workplace must give to the prime contractor the name of the person the employer has designated to supervise the employer's Workers at that Workplace.

The Contractor covenants and agrees that when performing any work for the Owner, whether directly as a contractor or indirectly as a sub-contractor, it will adhere to all of the requirements of the B.C.

Employment Standards Act (RSBC 1996), as may be amended from time to time, that are applicable to the work being performed, including but not limited to:

- 3) Section 36 (2); an employer must ensure that each employee has at least 8 consecutive hours free from work between each shift worked.
- 4) Section 39; despite any provision of this Part, an employer must not require or directly or indirectly allow an employee to work excessive hours or hours detrimental to the employee's health or safety.

I fully understand and accept the responsibilities of the prime contractor designation in accordance with the Workers Compensation Act and the B.C. Employment Standards Act while contracted by the *City* on

project location: _____ and will abide by all Workers Compensation Board Regulation requirements.

Date: _____

Project: _____

Company Name: _____

Authorized Signatory: _____

Printed Name: _____

Witness Signatory: _____

Printed Name: _____

Appendix 9

ACCEPTANCE OF BASE COURSE FOR ASPHALT PAVING

Prior to the laying of asphalt pavement, representatives from (i) the City and Tayco Paving, for direct City constructed project or from (ii) the City's Consultant, and the General Contractor for contracted projects, agree to the condition, surface elevations and quality of the road base.

Date: _____

Owner or Consultant's Representative:

General Contractor Representative:

This acceptance does not relieve the General Contractor or the City's Consultant of their responsibilities for the surface elevations and/or condition or subsequent failure of materials below the asphalt pavement. Tayco Paving will continue to be responsible for the asphalt paving relating to the asphalt material and its placement.

The general conditions and specifications for the work will apply and take the precedence over this acceptance. The "Limiting Terms and Conditions" of Tayco Paving also take precedence over this acceptance.

An acceptable method of checking elevations will be used to ensure that the road base is graded ready for asphalt. The intention of this survey is to ensure that asphalt tonnage does not exceed Tayco's calculated estimated tonnage by more than 5%.

Conversion from square metres to tonnage will be calculated at the rate of 125 Kg per square metre for a 50mm thickness of asphalt.



SUPPLEMENTARY GENERAL CONDITIONS

**TO BE READ WITH "General Conditions"
CONTAINED IN THE PLATINUM EDITION (printed 2009) OF THE PUBLICATION
"MASTER MUNICIPAL CONSTRUCTION DOCUMENTS"**

Reference No.: TENDER 18-26
Contract: Fir Street Utility Upgrades

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25 Maintenance Period	SGC 6

DEFINITIONS

1.0

1.67.1

(delete clause 1.67.1 and replace as follows)

"Substantial Performance" means the stage of completion of all of the *Work*, as certified by the *Payment Certifier*, when:

- a) the *Work* is ready for use or is being used for its intended purpose; **and**
- b) the total of the incomplete, defective and deficient *Work* can be completed at an estimated cost of no more than:

3% of the first \$500,000 of the *Contract Price*
2% of the next \$500,000 of the *Contract Price*
1% of the balance of the *Contract Price*

1.79

(add new clause 1.79 as follows)

"(amend clause X.XX as follows)" preceding a supplementary clause means this clause provides additional information or restrictions to the referenced clause in the Master Municipal Construction Documents, Volume II.

1.80

(add new clause 1.80 as follows)

"(add new clause X.XX as follows)" preceding a supplementary clause means this clause provides additional requirements or information not found in the Master Municipal Construction Documents, Volume II.

1.81

(add new clause 1.81 as follows)

"(delete clause X.XX and replace as follows)" preceding a supplementary clause means this clause replaces the referenced clause in the Master Municipal Construction Documents, Volume II, in its entirety.

1.82

(add new clause 1.82 as follows)

"Payment Certifier" has the meaning set out in SGC 18.6.6.

1.83

(add new clause 1.83 as follows)

"Provide" or "Provision of" means supply and placement of an item.

1.84

(add new clause 1.84 as follows)

"Engineer" shall mean the *Owner's* engineer appointed to provide technical support during the course of the *Work*.

1.85

(add new clause 1.85 as follows)

"Critical Path Method" (CPM) means the method of scheduling a project as follows:

The essential technique for using CPM is to construct a model of the project that includes:

- (1) A list of all activities required to complete the project (typically categorized within a work breakdown structure),
- (2) The time (duration) that each activity will take to completion, and
- (3) The dependencies between the activities.

Using these values, CPM calculates the longest path of planned activities to the end of the project, and the earliest and latest that each activity can start and finish without making the project longer. This process determines which activities are "critical" (i.e., on the longest path) and which have "total float" (i.e., can be delayed without making the project longer). This determines the shortest time possible to complete the project. Any delay of an activity on the critical path directly impacts the planned project completion date (i.e. there is no float on the critical path). A project can have several, parallel, near critical paths. An additional parallel path through the network with the total durations shorter than the critical path is called a sub-critical or non-critical path.

DOCUMENTS 2.0

Interpretation 2.2.5

(add new clause 2.2.5 as follows)

The Contract Drawings shall not be used for the construction of the Work unless Issued For Construction by the *Contract Administrator*.

CONTRACTOR 4.0

Protection of Work, Property and the Public 4.3.7

(add new clause 4.3.7 as follows)

The *Contractor* shall locate, mark and protect from damage or disturbance, any and all stakes, survey pins, monuments and markers at the *Place of the Work*.

All survey stakes, pins, monuments or markers which, in the opinion of the *Owner*, have been damaged or disturbed shall be made good following construction by a registered B.C. Land Surveyor at the *Contractor's* expense.

Good Neighbour Policy 4.3.8

(add new clause 4.3.8 as follows)

The *Owner's* Good Neighbour Policy as adopted by City of Campbell River Council on April 15, 1997 shall apply to this contract. The Policy states: "That *Contractors* working on Municipal rights-of-way or on private land where new rights-of-way are being created, be required to provide written notice to the residents in the immediate area of the works, describing what is being constructed, when the works will occur, who to contact for more information and what precautions should be taken if necessary; and that the work-site be posted for safety reasons."

Damage to Improvements and Utilities 4.3.9

(add new clause 4.3.9 as follows)

The *Contractor's* Work shall be confined to the *Owner's* premises, including statutory right-of-ways easements and construction permit limits, whenever possible. The *Contractor* shall not enter upon or place materials on other private premises except by written consent of the individual *Owners* and shall save the *Owner* harmless from all suits and actions of every kind and description that might result from use of private property.

Use of Working Site 4.3.10

(add new clause 4.3.10 as follows)

The *Contractor* shall confine his equipment, storage of materials and operation of Work to the limits indicated by law, permits, or direction of the *Contract Administrator*, and shall not unreasonably encumber the premises with his materials. The *Contractor* shall comply with the *Contract Administrator* instructions regarding signs, advertisements, fires and smoking.

The working site shall at all times be kept free of rubbish and unnecessary hazards to persons, materials, and equipment.

**Local, Emergency
Traffic and
Property Access**

4.3.11

(add new clause 4.3.11 as follows)

Local traffic shall be provided access to private properties at all times.

Emergency traffic such as Police, Fire, and Disaster Units shall be provided reasonable access at all times. The *Contractor* shall be liable for any damage which may result from his failure to provide such reasonable access.

**Traffic
Management Plan**

4.3.12

(add new clause 4.3.12 as follows)

If requested, the *Contractor* shall submit a Traffic Management Plan for Approval prior to start of construction in which the extent and duration of any road closures associated with the work are identified. Two-way traffic via one open lane shall be maintained on public roads at all times unless the *Contractor* has obtained the *Owner's* approval via a Road Closure Permit. The *Contractor* is cautioned that approval of full road closures is not guaranteed. Traffic control on all roads shall be in strict accordance with the Traffic Control Manual for Work on Roadways published by the Ministry of Transportation and Highways. The *Contractor* shall only use appropriately accredited personnel for Traffic Control.

**Temporary
Structures and
Facilities**

4.4.3

(add new clause 4.4.3 as follows)

The *Contractor* shall provide clean sanitary latrine accommodations for the use of his employees as may be necessary to comply with the requirements and regulations of the Ministry of Health and other bodies having jurisdiction. The *Contractor* shall permit no public nuisance.

**Construction
Schedule**

4.6.1

(delete clause 4.6.1 and replace as follows)

The *Contractor* shall, within the time set out in the *Form of Tender*, prepare and submit to the *Contract Administrator* a time-scaled construction schedule (the "*Baseline Construction Schedule*") prepared using the *Critical Path Method* (CPM). The schedule shall:

- .1 Show all significant construction activities, shop drawing submittals and procurement activities.
- .2 Show the dependencies between activities so that it may be established what effect the progress of any one activity has on the schedule.
- .3 Show completion time and all specific dates and sequencing requirements. Identify activities making up the critical path.

Unless specifically approved by the *Contract Administrator*, show activities on the schedule with a duration not longer than 15 working days or an assigned value not greater than \$100,000 (except activities showing only submittal, fabrication or delivery of material or equipment). Divide activities which exceed these limits into more detailed components. The schedule shall include allowances made for legal holidays and normal weather conditions.

The *Baseline Construction Schedule* shall indicate completion of the *Work* in compliance with the *Milestone Dates*. The *Contractor* shall

ensure that the *Baseline Construction Schedule* is in more detail than the *Preliminary Construction Schedule* so as to enable the *Contract Administrator* to compare actual construction progress during the performance of the *Work* with the *Baseline Construction Schedule* as adjusted pursuant to GC 4.6.2.

Fair Wages

4.8.2

(add new clause 4.8.2 as follows)

The *Contractor* attests to compliance with Section 5 of the Skills Development and Fair Wage Act in projects where the provincial contribution to a Municipal project exceeds \$250,000.

Test and Inspections

4.12.4

(delete clause 4.12.4 and replace as follows)

The *Contractor* shall as part of the *Work* perform, or cause to be performed, all tests, inspections and approvals of the *Work* as required in the *Contract Documents* or as required by the *Contract Administrator* as part of the *Quality Control*. Any reference in the specifications to inspection and testing shall mean that the *Work* described in the specification must be inspected and approved in a manner approved by the *Contract Administrator*. The *Contractor* shall only employ or engage, as an agent or consultant for testing, a person approved by the *Owner*. Where the specification indicates that the *Contract Administrator* will arrange for testing, the *Contractor* continues to be solely responsible for testing of the *Work*. The *Contract Administrator* may perform additional tests for the *Owner's* sole benefit. The costs of these additional tests will be the responsibility of the *Owner*.

Truck Routes and Disposal Sites

4.17.1

(add new clause 4.17.1 as follows)

In hauling of material to and from the work site, the routes to be followed by trucks shall be confined to designated arterial and collector roads as shown on the road classification plan as issued by the *City*. Where a dumpsite can only be accessed by way of a local road, the route shall be the shortest possible way from an arterial or collector road, and shall be agreed to by the *Contract Administrator* in advance of the work. The *Contractor* shall be responsible for road cleanup along all trucking routes used in association with the work. The cost of this cleanup shall be paid by the *Contractor* and considered incidental to the work. It should be noted that a "Soil Deposition Permit" is required for any dumpsite within the *City of Campbell River*. The *Contractor* shall be responsible for obtaining and securing a legal dumpsite. All costs associated with that dumpsite shall be the responsibility of the *Contractor* and shall be considered incidental to the *Work*.

Disposal of Wood Debris, Organic Debris, and/or Waste Excavated Material

4.18.1

(add new clause 4.18.1 as follows)

Prior to disposal of any wood debris, organic debris and/or waste excavated material, the *Contractor* shall submit a disposal management strategy in accordance with all applicable *Laws, Bylaws and Regulations* to the *Contract Administrator* for approval. Subject to the *Contract Administrator's* approval, the *Contractor* shall ensure that all wood debris, organic debris and/or waste excavated material that is removed from the work site is managed in accordance with this approved disposal management strategy. The *Contractor* shall be required to employ acceptable methods of disposal, approved disposal site location(s), and shall be required to obtain and submit copies of all relevant permits and/or approvals prior to the disposal of any wood debris, organic debris and/or waste excavated material

Regardless of the aforementioned, the *Owner* reserves the right to disallow any or all of the *Contractor's* proposed disposal management strategy if it is determined that they will result in undesirable environmental impacts.

OTHER CONTRACTORS 6.0

Coordination and Connection 6.2.2

(add new clause 6.2.2 as follows)

If the performance of any Contract for the project is likely to be interfered with by the simultaneous execution of some other Contract or Contracts, the *Contract Administrator* shall decide which *Contractor* shall cease Work temporarily and which *Contractor* shall continue, or whether the Work under the Contracts can be coordinated so the Contracts may proceed simultaneously. The *Owner* shall not be responsible for any damages suffered or extra costs incurred by the *Contractor*, resulting directly or indirectly from the award or performance or attempted performance of any other Contract or Contracts on the project, or caused by any decision or omission of the *Contract Administrator* respecting the order of precedence in the performance of the Contracts other than for the extension of time.

VALUATION OF CHANGES AND EXTRA WORK 9.0

Valuation Method 9.2.1.3

(add new clause 9.2.1.3 as follows)

Should a lump sum method be used for determination of the value of a *Change*, the *Contractor* shall determine the value of the *Change* by calculating the cost for each item contained within the *Change* and applying a 10% mark up on all costs associated with the *Change* for Overhead and Profit. All costs are required to be supported by documentation satisfactory to the *Contract Administrator* and all applicable rates are to be satisfactory to the *Contract Administrator*.

FORCE ACCOUNT 10.0

Force Account Costs 10.1.1.4

(delete 10.1.1.4 and replace as follows)

Force Account Work performed by a *Subcontractor* shall be paid for in the lesser of: (i) the amount as provided by subparagraphs (1), (2) and (3) of this GC, plus a markup of 5%, or (ii) the actual amount the *Contractor* pays the *Subcontractor* including a markup of 10% on such actual cost to cover all overhead and profit.

DELAYS 13.0

Liquidated Damages for Late Completion 13.9.1.1

(delete 13.9.1.1 and replace as follows)

as a genuine pre-estimate of the *Owner's* increased costs for the *Contract Administrator* and the *Owner's* own staff caused by such delay an amount of \$1,000 per day or pro rata portion for each calendar day that actual *Substantial Performance* is achieved after the *Substantial Performance Milestone Date*; plus

PAYMENT 18.0

Holdbacks 18.4.1

(delete 18.4.1 and replace as follows)

The *Owner* will retain a holdback but will not establish a Holdback Trust Account pursuant to Section 5 of the *Builders Lien Act*.

Substantial Performance 18.6.5

(delete clause 18.6.5 and replace as follows)

The *Owner* will release any builder's lien holdback on the 56th day following the date of *Substantial Performance*, or other date as required by law, but the *Owner* may holdback the amounts for any deficiencies or filed builders liens as provided in GC 18.4.2, GC 18.4.3 and 18.4.4, or the Maintenance Period Financial Security if not received by this date.

Payment Certifier 18.6.6

(delete clause 18.6.6 and replace as follows)

The *Contract Administrator*, as defined herein, shall be the *Payment Certifier* responsible under Section 7 of the *Builders Lien Act* for certifying *Substantial Performance* of the *Work* of the *Contractor*, but not the *Work* of *Subcontractors*. The *Contractor* shall co-operate with and assist the *Contract Administrator* by providing information and assistance in as timely manner as the *Contract Administrator* considers necessary to carry out the duties of the *Payment Certifier* for the Contract.

The *Contractor* shall be the *Payment Certifier* responsible under Section 7 of the *Builders Lien Act* for certifying *Substantial Performance* of the *Work* of each *Subcontractor*. Prior to certifying completion for a *Subcontractor*, the *Contractor* shall consult with the *Contract Administrator* and obtain the *Contract Administrator's* comments on the status of completion by the *Subcontractor*, including any deficiencies or defects in the *Subcontractor's Work* noted by the *Contract Administrator*. The *Contractor* will indemnify and save the *Owner* harmless from any and all liability the *Owner* may have to anyone arising out of the certification by the *Contractor* of *Substantial Performance* for that *Subcontractor*.

Notwithstanding any other provision of the *Contract*, no payments will be due or owing to the *Contractor* so long as a Lien filed by anyone claiming under or through the *Contractor* remains registered against the Project or any lands, or interest therein, on which *Work* for the project was performed. Failure of the *Contractor* to remove all Liens promptly will entitle the *Owner* to damages.

WORKERS COMPENSATION REGULATIONS 21.0

Contractor is "Prime Contractor" 21.2.2

(add new clause 21.2.2 as follows)

If the *Work* is being completed as part of a project for which the *Owner* already has a *Prime Contractor* designated then the *Contractor* will be responsible to ensure that they assume direction from the *Prime Contractor* as per the requirements of the Workers Compensation Act Part 3, Division 3, Section 118(1-3).

INSURANCE 24.0

Required Insurance 24.1.7 *(add new clause 24.1.7 as follows)*
The *Contractor* shall ensure the following are additional named insured under this contract:

- The City of Campbell River

MAINTENANCE PERIOD 25.0

Correction of Defects 25.1.4 *(add new clause 25.1.4 as follows)*
The *Owner* is authorized to make repairs to defects or deficiencies if, ten days after giving written notice, the *Contractor* has failed to make or undertake with due diligence the required repairs. However, in the case of emergency where, in the opinion of the *Owner*, delay is not reasonable, repairs may be made without notice being sent to the *Contractor*. All expenses incurred by the *Owner* in connection with repairs made pursuant to GC 25 shall be paid by the *Contractor* and may be deducted from the Maintenance Security, or other holdbacks. The *Contractor* shall promptly pay any shortfall.

Maintenance Period Financial Security 25.4.1 *(add new clause 25.4.1 as follows)*
within 10 days of the issue of the Certificate of substantial Performance deliver to the Owner, a Maintenance Period Financial Security in the form of cash, or a clean, irrevocable Letter of Credit in a form acceptable to the Owner in the amount of 5% of the Contract Price, issued by a major Canadian chartered bank which has a branch in Campbell River BC, payable to the Owner within the Maintenance Period.



SUPPLEMENTARY SPECIFICATIONS

TO BE READ IN CONJUNCTION WITH THE "MASTER MUNICIPAL CONSTRUCTION DOCUMENTS"

Reference No.: TENDER 18-26

Contract: FIR STREET UTILITY UPGRADES

General

1.1

- a) Payments will be made on the basis of the unit prices bid in the Tender, and in accordance with Article 18 of the General Conditions.
- b) The unit prices bid, unless specifically noted otherwise, shall include the supply of all *LABOUR, PLANT, MATERIAL* and *PRODUCT* equipment necessary to construct *THE WORK* in accordance with the specifications.
- c) The prices bid for supply and installation shall be full compensation for supplying, hauling, installing, cleaning, testing, and placing in service together with all other work subsidiary and incidental thereto for which separate payment is not provided elsewhere.
- d) Other materials on site, whether existing structures, vegetation, topsoil, gravel, sand or other excavated or piled materials, are the property of the *OWNER* or of the owner of the land on which *THE WORK* is located. Only those materials specifically noted in the specification or on drawings, as belonging to the *CONTRACTOR* shall become the *CONTRACTOR's* property.
- e) Where there are excess excavated materials, unsuitable materials excavated or materials of any kind that are excavated but not used in *THE WORK*, such materials are not the property of the *CONTRACTOR* unless authorized in writing by the *CONTRACT ADMINISTRATOR* or specified to be disposed of by the *CONTRACTOR*.

Unit Price Contracts

2.1

- a) Payments will be made on the basis of the following:
 - .1 Unit Price items in the Schedule of Quantities and Unit Prices.
 - .2 Changes in *THE WORK* for items not covered by unit prices, in accordance with Article 7 - *CHANGES IN THE WORK* of the General Conditions.

- b) For each item in the Schedule of Quantities and Unit Prices, the *Contract Administrator* will, in cooperation with the *Contractor*, measure the quantity of the item completed at the end of the payment period and this will be shown as a percentage of the work completed against the appropriate value for the lump sum assigned to the respective line item.
- Mobilization and Demobilization** 3.1 a) Mobilization and demobilization shall include the *Contractor's* costs of mobilization at the beginning of the project; and the costs of demobilization at the end of the project.
- b) Included in mobilization are such items as bonding, insurance, permits, moving personnel, materials and equipment to the site, setting up temporary facilities, First-Aid, Site Safety, temporary utilities and all preparation for performing *THE WORK*.
- c) Included in demobilization are preparation and submission of operation and maintenance manuals, As-Constructed Record Drawings, comprehensive Bill Of Materials, removal of all personnel, materials and equipment; and cleanup of the site and *THE WORK*.
- d) The lump sum price bid for this work shall be relative to the costs involved but shall not exceed ten percent of the Tender Price.
- e) Payment will be made as follows, as approved by the *CONTRACT ADMINISTRATOR*:
- I. 60% of the lump sum bid will be included in the first progress payment certificate;
 - II. 40% of the lump sum bid will be included in the final progress payment certificate.
- The *CONTRACT ADMINISTRATOR* may at his discretion recommend partial payment if mobilization or demobilization is not complete.
- Dust Control** 4.1 During the performance of *THE WORK*, the *CONTRACTOR* is to at all times keep the worksite and such immediate surrounding areas which it may utilize free from waste materials, debris or rubbish and is to employ adequate dust control measures. Water shall be the only material acceptable for dust suppression. If accumulation of such materials, debris, rubbish or dust constitutes a nuisance or safety hazard or is otherwise objectionable in any way, as reasonably determined by the *OWNER* or *CONTRACT ADMINISTRATOR*, the *CONTRACTOR* is to promptly remove it. If any claim, suit, losses, or action is brought by a person affected by the transportation of materials, equipment, goods or wastes to and from the worksite, the *CONTRACTOR* shall defend, indemnify and hold harmless all indemnified parties.
- Underground Utilities** 5.1 It is the *CONTRACTOR'S* responsibility wherever necessary to determine location of existing pipes, valves, conduits, vaults, or

other underground structures. Wherever it is necessary to explore and excavate to determine the location of the existing underground structures, the *CONTRACTOR*, at his own expense, shall make explorations and excavations for such purposes. The *CONTRACTOR* shall notify the *CONTRACT ADMINISTRATOR* or his representative of any conflicts.

The *CONTRACTOR* shall, at his own expense, provide for the uninterrupted flow of all watercourses, sewers, drains, and any other utility encountered during the work. Water control and siltation control shall be under the direction of a qualified environmental monitor engaged by the *CONTRACTOR*.

When any existing mains and/or service pipes, utility ducts, vaults or other utility structures are encountered, the *CONTRACTOR* shall support them to the satisfaction of the *CONTRACT ADMINISTRATOR* so as to protect them from injury. The *CONTRACTOR* shall, at his own expense, at once repair and make good any injury which may occur to any mains, service or utility pipes or ducts, or facilities, or to any electrical conductor, telephone, cable or natural gas facility or to any sidewalk, crosswalk as a result of this operation.

Support of power, telephone poles, underground mains, wiring and light standards required to complete the work, shall be the responsibility of the *CONTRACTOR* and completed in accordance with utility company standards. The *CONTRACTOR* shall schedule the work with the appropriate utility company in advance, so as not to delay the work. All costs associated with the work shall be considered incidental and no separate payment be made for this item.

**Construction
Surveys**

- 6.1 The *CONTRACTOR* is responsible for all survey layout, including stakes, hubs, and grade control.

The *CONTRACTOR* shall survey and layout the work including, but not limited to, as-built invert elevations, offsets and stations of all grade changes, miscellaneous appurtenances, and all existing utilities exposed during construction.

The *CONTRACTOR* shall provide all stakes, hubs, nails, flagging, and including the supply of casual labour for checking of the work, as required by the *CONTRACT ADMINISTRATOR*. The *CONTRACTOR* shall provide the *CONTRACT ADMINISTRATOR* with records of the actual surveys, and "as-built" information pick-up.

No separate or additional payment will be made for this work.

**General
Coordination**

- 7.1 The *CONTRACTOR* shall work cooperatively with B.C. Hydro, Telus, Shaw and Fortis to locate private utility ducting.

No additional payment shall be made for this work.

**Supplementary
Specifications**

8.1 The following Supplementary Specifications are complementary to the MMCD.

Section	Title
01 11 00	Summary of Work
01 31 00	Construction Schedule & Progress Payments
01 31 01	Project Meetings
01 55 00	Traffic Control, Vehicle Access & Parking
03 30 20	Concrete Walks, Curbs & Gutters
31 23 01	Excavating, Trenching & Backfill
31 23 23	Controlled Density Fill (CDF)
31 24 13	Roadway Excavation, Embankment & Compaction
32 12 16	Hot-Mix Asphalt Paving
32 93 01	Planting of Trees, Shrubs & Ground Covers
33 11 01	Water Works
33 40 01	Storm Sewers
33 44 01	Manholes & Catchbasins

SUMMARY OF WORK

- 1.1 Work Covered By Contract Documents** .1 Work of this Contract consists of the renewal of approximately 382 lineal meters of PVC watermain on Fir Street from 9th Avenue northward to the 1100Blk Laneway, accompanied by approximately 175 lineal meters of PVC storm drain on Fir Street from 10th Avenue to the 1100Blk Laneway. In general terms the work includes the installation of new services, hydrants, manholes, catch basins, headwalls and miscellaneous appurtenances and reinstatement of the affected asphalt road surface and flat works. Asphalt paving for the road and driveways is excluded from this Contract and will be done by *Other Contractor* under a separate Contract. The *Contractor* will be responsible for all preparation work required until the point in time that paving can commence and will be required to undertake all necessary coordination and scheduling directly with the paving contractor.
- 1.2 Work of the Contract** .1 The work to be done under this Contract includes, but is not limited to the construction and completion of the following:
- All excavation, shoring and bracing to facilitate the installation of water works and drainage works
 - All control of water including the removal of deleterious sediments from pumped water prior to discharge to the environment
 - All other required environmental protection measures
 - All traffic control and management
 - Removal of redundant piping including asbestos cement, corrugated metal and concrete
 - Supply and installation of PVC watermain, sizes 100 to 200 mm dia. and all associated fittings, valves, connections and appurtenances
 - Supply and installation of meter setters, and boxes for each lot service
 - Pressure testing, disinfection, flushing and biological testing of the new system
 - Tie-in of the new system to the existing at 3 locations
 - Removal of existing hydrants, valves and fittings, capping and filling the existing AC mains with controlled density fill
 - Supply and installation of PVC storm drain pipe, sizes 150 to 300 mm dia. and associated fittings and couplers
 - Supply and installation of headwalls, manholes, catch basins and service connections, CB leads and appurtenances.
 - Reshape ditches or swales to suit
 - Restore concrete curb and sidewalk panels affected
 - Restoration of landscaping and private property
 - Saw cutting and preparation for asphalt paving
 - Coordination of Asphalt paving with Tayco Paving
 - Driveway restoration

- .2 The *CONTRACTOR* shall provide all supervision, labour, materials and equipment required, and leave the work in an operable, adjusted and acceptable condition.

- .3 The City reserves the right to delete any of the work from the Contract.

END OF SECTION 01 11 00

1.0 GENERAL

1.1 Description

- .1 Prepare a time-scaled network schedule using the critical path method. The schedule will provide a basis for determining the progress status of the project relative to the completion time and specific dates and for determining the acceptability of the *CONTRACTOR*'s requests for payment.

1.2 Schedules

- .1 Depict all significant construction activities, shop drawing submittals and procurement activities. Show the dependencies between activities so that it may be established what effect the progress of any one activity has on the schedule. Except for the start and finish milestones / activities each task shall have a successor and predecessor dependency.
- .2 Show completion time and all specific dates and sequencing requirements. Identify activities making up the critical path. The Critical path is to be shown as per SGC 4.6.1.
- .3 Unless specifically approved by the *CONTRACT ADMINISTRATOR*, show activities on the schedule with a duration not longer than 15 working days or an assigned value not greater than \$100,000 (except activities showing only submittal, fabrication or delivery of material or equipment). Divide activities which exceed these limits into more detailed components. Base the scheduled duration of each activity on the work being performed during the normal 40-hour work week with allowances made for legal holidays and normal weather conditions.

1.3 Submittals for Review

- .1 Within 10 days of the Notice of Award submit a construction schedule as specified herein showing in detail all procurement and on-site construction activities.
- .2 The *CONTRACT ADMINISTRATOR* will review the submitted schedule within 14 working days of its receipt. If the *CONTRACT ADMINISTRATOR* finds that the submitted schedule does not comply with the specified requirements, or does not provide an acceptable schedule detail, the deficiencies will be identified in writing to the *CONTRACTOR* for correction and re-submittal. Correct and resubmit the schedule within 10 working days after the deficiencies have been identified by the *CONTRACT ADMINISTRATOR*. The accepted schedule will become the project baseline schedule for tracking construction progress.

1.4 Schedule Revisions

- .1 Submit proposed revisions to the accepted construction schedule to the *CONTRACT ADMINISTRATOR* for review. Changes in timing for activities may be modified with agreement of the *CONTRACTOR* and *CONTRACT ADMINISTRATOR*. A change affecting the Contract Price, the completion time, or work sequencing may be made only by approved change order.
- .2 Add separate activities to the construction schedule for each approved change order.
- .3 Should the actual sequence of work performed by the *CONTRACTOR* deviate from the planned sequence indicated in the accepted schedule, the *CONTRACT*

ADMINISTRATOR may require the *CONTRACTOR* to revise the schedule to reflect changes in the actual sequence and/or the future sequence of work.

- .4 Within 20 days following approval of the *CONTRACTOR*'s testing and commissioning plan submit a schedule revision incorporating the approved plan into the construction schedule.
- .5 Submit with each schedule revision all information as called for in submitting the original construction schedule.

1.5 Progress Status Update

- .1 Submit an updated schedule on a monthly basis concurrent with the submittal of the progress payment request. Indicate on the updated schedule progress achieved to date on all activities.
- .2 Submit three-week lookahead schedules for review and discussion at each weekly project meeting.

2.0 PRODUCTS

- .1 Not Used

3.0 EXECUTION

- .1 Not Used

END OF SECTION 01 31 00S

PROJECT MEETINGS

1. General

1.1 Administrative

- .1 The Contract Administrator will administer the pre-construction meeting, and regular progress meetings to be held weekly.
- .2 The Contractor's superintendent, and senior representatives of major sub-contractors to attend all meetings.
- .3 Representatives of Contractor, subcontractor and suppliers attending meetings to be qualified and authorized to act on behalf of the party each represents.
- .4 The Engineer or Contract Administrator will chair and record discussions and decisions, and circulate the minutes. The Contractor is to circulate the minutes to subcontractors and suppliers.
- .5 The Contractor is to notify the Contract Administrator in writing of any discrepancies or inconsistencies within 2 days of receipt of minutes for recording in next meeting. Failure to notify the Contract Administrator of discrepancies or inconsistencies within 2 days of receipt of minutes will be deemed acceptance of the minutes as recorded.

1.2 Preconstruction Meeting

- .1 Within 10 days of Notice to Award, the Contract Administrator will schedule a meeting to discuss administrative procedures and responsibilities.
- .2 Agenda includes the following:
 - a) Appointment of official representatives of participants in the Work.
 - b) Appointment of General Contractor as Prime Contractor.
 - c) Notice of Project, Insurances
 - d) Schedule of Work, progress scheduling.
 - e) Submittals.
 - f) Requirements for temporary facilities, offices, utilities, fences.
 - g) Traffic Management Plan
 - h) Environmental Protection Plan
 - i) Site Safety and Security.
 - j) Change Order procedures.
 - k) Record drawings.
 - l) Commissioning, acceptance, warranties.
 - m) Monthly progress payments, administrative procedures, holdbacks.
 - n) Appointment of inspection and testing agencies or firms.

1.3 Weekly Progress Meetings

- .1 The Contractor's superintendent and senior representatives of major subcontractors involved in the Work to be in attendance of weekly progress meeting to be held on site.
- .2 Agenda includes the following:
 - a) Past period progress.
 - b) Next period progress.

- c) Schedule of construction.
 - d) Anticipated changes in the work.
 - e) Approved changes in the work.
 - f) Submittal/RFI/SI status
 - g) Operations staff scheduling.
 - h) Site safety.
 - i) General information pertaining to the work.
 - i. Quality control
 - ii. Site cleanliness
 - iii. Environmental protection
 - iv. Other
- .3 Submit for information only, at each regularly scheduled progress meeting:
- a) Totals of all personnel currently on site associated with the contract, broken down by trade and subcontractor including all staff.
 - b) Totals of all major equipment currently on site, over two thousand dollar replacement value, broken down by type and subcontractor.

1.4 Special Meetings

- .1 Special meetings may be held at the request of the Contract Administrator, Owner, or Contractor to discuss specific items.

1.5 Payment

- .1 All required attendance of the Contractor and/or Contractor's major subcontractors to all Progress Meetings and any required Special Meetings shall be incidental to the contract and no separate payment will be made.

END OF SECTION 01 31 01

1.0 GENERAL

.4 *(Delete and replace as follows)*

Give minimum 72-hour notice to Owner prior to beginning construction and comply in all respects with their requirements. The Contractor will be responsible for any and all local permits required to execute the work.

.6 *(Add)*

The Contractor is required to provide 24-hour written notice to all residents, homes and businesses including all units in a multifamily site for any service or vehicle access interruption.

END OF SECTION 01 55 00

1.4 Measurement and Payment

.5 *(Delete and replace section 1.4.5 as follows)*

Payment for concrete sidewalks, in-fill strips and walkways and all concrete ramps where shown on Contract Drawings includes supply and placing of the concrete and granular base under the concrete sidewalk, in-fill strips walkways at a concrete thickness of 120mm.

.6 *(Delete and replace section 1.4.6 as follows)*

Payment for driveway crossings including granular base as shown on Standard detail C7 will be made on a square metre basis at a concrete thickness of 150mm and will extend to the centre of each driveway crossing as a minimum.

END OF SECTION 03 30 20

1.10 Measurement and Payment**.4 (Delete and replace as follows)**

Payment for removals will be in addition to trenchwork with no deduction made from such trenchwork and shall be made as follows:

- .1 Payment for removal and off-site disposal of disused AC pipe includes all necessary means for protection of workers, and removal, testing, permitting, wrapping, transport and disposal (except dump fees) of AC pipe and all other work and materials necessary to complete the removal and disposal as shown on the Contract Drawings and specified under this Section. Payment will be made per lineal metre of pipe disposed.
- .2 Payment of dump fees charged at disposal site will be paid separately. A markup of 5% shall be added to the dump fee and the amount shall be payable under an allowance in the Schedule of Quantities and Prices. Accurate records shall be submitted to the Contract Administrator in accordance with GC 10.3 showing all costs related to this item.
- .3 Payment for removal and off-site disposal of disused pipe (except AC) and structures includes the removal and disposal of manholes (including lid, slab, cover frame and risers), disused pipe of any kind, and all other pipe or structures encountered during the work and all other work and materials necessary to complete the removal and disposal as shown on the Contract Drawings and specified under this Section. Payment will be made by lump sum.

.9 (Add clause 1.10.9 as follows)

Pre-locating all existing water service locations will be required prior to installing new service saddles or tees and payment will be made on a per unit basis as per the Schedule of Quantities and Prices.

.10 (Add clause 1.10.10 as follows)

Contractor is required to excavate, expose and confirm all existing underground utilities within 2 metres of the tie-in location. Confirm elevation, slope, relevant dimensions of existing watermain pipe for all new works to be connected to, prior to any watermain connections being scheduled. The Contractor is to provide to the Contract Administrator proof of existing pipe dimensions and confirmation that all fittings to be used in connections to existing watermains are sized appropriately. Payment will be made on per location basis as per the Schedule of Quantities and Prices. Refer to Water System Tie-in Verification Schedule WW-03.

END OF SECTION 31 23 01

1.4 Measurement and Payment

.1 (*Delete and replace as follows*)

Payment for Controlled Density Fill (Pipe) includes removal and disposal of abandoned fittings and components such as tee's crosses, valves, hydrants, blow offs, preparation of the pipe and service connections, formwork, temporary piping, supply and placement of the Controlled Density Fill, protection during curing and all other work and materials necessary to complete the installation as shown on the Contract Drawings and specified under this Section.

Payment will be made by lineal pipe metre of main pipe based on the size of pipe to be filled, as shown on the Contract Drawings.

2.2 Mixes

.1 (*Delete and replace as follows*)

Proportion Controlled Density Fill to meet the following design criteria:

- .1 Compressive strength: 0.5MPa at 28 days
- .2 Cement content: 25kg per m³
- .3 Slump: 150-200mm
- .4 Air entrainment: 4-6%

3.1 General

.1 (*Delete and replace as follows*)

Completely fill pipe with Controlled Density Fill. Ensure no voids are left inside pipe.

END OF SECTION 31 23 23

1.8 Measurement and Payment

.5 (*Delete first paragraph and replace as follows*)

Payment for common excavation includes removal of existing, curbs and gutters, sidewalks, utilities strips, driveways, pipes and conduits which are removed as part of the operation for common excavation. Removal of existing asphalt pavements is paid separately under this Section.

.14 (*Add*)

Payment for removal of existing asphalt pavements includes removal and off-site disposal of asphalt pavement. Payment will be made on a square metre basis as specified in the Schedule of Quantities and Prices.

3.5 Compaction

.7 (*Add*)

The frequency of density tests shall be one test per 250 sq.m. per 300 mm vertical lift.

END OF SECTION 31 24 13

1.5 **Measurement and
Payment**

.9 **(Add)**

Supply and installation of all Hot-Mix Asphalt Concrete Paving will be by *Other Contractor*, for which the *Contractor* will be responsible for the coordination of all necessary *Work* effort to ensure the Hot Mix Asphalt Concrete Paving is installed in full conformance with the *Construction Schedule*. The *Contractor* assumes all responsibility for any delay related to paving. As a minimum, the *Contractor* is to provide monthly updates to the *Owners* asphalt concrete paving contractor (*Other Contractor*). Payment for this item will be made upon completion of paving in an amount directly proportional to the amount of paving laid as compared against the total amount paving to be completed.

END OF SECTION 32 12 16

1.9 Measurement and
Payment

.1 *(Delete and replace as follows)*

Supply and installation of trees, shrubs, ground covers of the same species, and size (where applicable) to match existing landscaping arrangement for each address identified on contract Drawings. Payment to including all preparatory work, supply, planting, materials, and reinstatement of irrigation components, fences, minor concrete features, edging, and other incidental specified under Section 32 93 01- Planting Trees, Shrubs, and Ground Covers including maintenance to meet Conditions of Total Performance.

END OF SECTION 32 93 01

WATER WORKS

- 1.6 Record Drawings .2 **(Submit for Information Only)**
Completed Waterworks Tie-In Record Form ref: WW-03 for each watermain tie-in.
- 1.7 Scheduling of Work .3 **(Replace Clause 1.7.3 with the following)**
Notify Contract Administrator, affected residents and businesses a minimum 72 hours in advance of any interruption of service.
- .6 **(Add the following clause)**
For any work requiring City Water Department attendance, a minimum of 5 Day's notice is required. Any work requiring City Water Department will not be approved until City Water Department attendance is confirmed.
- 1.8 Measurement and Payment .1 **(Add to this clause)**
Payment for watermain installation will be for all depths of watermain as indicated on the *Contract Drawings*.
- Typical watermain installation requires 1.28 metres of cover above the top of pipe, however where there is a conflict with other utilities, the watermain may have to be installed below or above the existing utility, but in no way will the depth of cover be less than 0.9 metres from final grade. Distance of separation from conflicting utility to be approved by Contract Administrator and comply with VIHA regulations.
- Any conflicts that arise are to be brought to the immediate attention of the *CONTRACT ADMINISTRATOR* and he/she will direct on the method that will be used to avoid the conflict.
- (Add to this clause)**
- .2 Only approved imported backfill is to be used in all trenches.
- .4 **(Replace clause 1.8.4 with the following)**
Payment for water service connections includes all fittings to tie into the main including saddles, curb stops, water meter service setter and idler, brooks box, tracer wire and tying into the existing water service at the property line as per Typical Residential Water Service Detail on drawing 16-509 sheet 3. Payment includes all applicable work described in 1.8.2.
- Measurement for service connections will be for each complete service installed with no regards for length of service pipe installed.
- .5 **(Amend clause as follows)**
Payment for blow off assembly includes manhole, frame, lid fittings, all materials, works and appurtenances required to construct the assembly and connection to the watermain as shown on the Contract Drawings.

- .9 **(Amend clause as follows)**
There will be no payment for thrust blocks and localized concrete required for the installation of the new watermain, temporary blow offs or test-pionts, or for any temporary blocks that may be required during the watermain construction. Payment for these blocks will be included in the price for watermain installations and the various fittings.
- .10 **(Add to this clause)**
Typically if there is a conflict between the watermain and an existing utility, wherever possible the *CONTRACTOR* is to deflect the waterline underneath the other utility. Deflections can only be made to the maximum allowable for the class of pipe, based on manufacturer's instructions. Where the pipe cannot be deflected under the existing utility, and bends are required, the bends will be paid at the appropriate unit price in the contract for the bends used, but only with the approval of the Contract Administrator.
- .13 **(Add to this clause)**
The *CONTRACTOR* is to advise and attain approval from the City of Campbell River at least 72 hours in advance of any shut down of existing water lines and is required to follow item 3.23.2 of this Section for completion of the tie-in. Payment will be made for each individual tie-in as shown on the *Contract Drawings* and as listed in the Schedule of Quantities and Prices.
- .14 **(Add the following clause)**
Payment for hydrants, Terminal City C-71P, includes the hydrant body, lateral connections from mainline tee off watermain to hydrants, isolation valve at the mainline tee and curb valve with adjustable valve box, any necessary risers, the mainline tee and all other incidental work as shown on Standard Detail Drawing W4.
- .15 **(Add the following clause)**
Payment for joint wrap (Canus 'JointWarp' ANSI/AWWA C217-09) will be each joint wrapped and inspected by Contract Administrator before back filling where identified on contract drawings.
- .4.12.1.8 **(Add this clause)**
For connection to existing asbestos concrete watermain, required coupling to be used is Romac Industries Inc. MACROHP or approved equal.

- | | | | |
|------|---|-----|---|
| 2.5 | Service Connections,
Pipe, Joints and
Fittings | .6 | <p><i>(Add clause to this Specification as follows)</i>
Two cores tracer wire shall be RWU90, 10 gauge (AWG), single-strand, insulated copper wire with cross-linked polyethylene (XLPE) insulation, specifically manufactured for direct burial applications. The tracer wire is to be wrapped around the main at each corp stop and terminate in each service's Brooks Box as per the detail on 15-514 sheet 2.</p> |
| 2.10 | Exterior Bolts on
Valves, Hydrants,
Couplings and Fittings | .1 | <p><i>(Add clause to this Specification as follows)</i>
All exterior bolts on valves, hydrants and couplings shall be Stainless Steel 304 or approved equivalent.</p> |
| 3.10 | Service Connection
Installation | .13 | <p><i>(Add clause to this Specification as follows)</i>
Tracer wire shall be installed on all non-metallic water services and shall be considered incidental to the work for supply and installation the applicable water service. The wire shall be installed in such a manner as to be able to properly trace all water services without loss or deterioration of signal or without the signal migrating off the tracer wire. Refer to suggested installation detail on tender drawings.</p> |

Two cores of tracer wire shall be laid flat and securely affixed to each fitting and valve and to the top of the pipes at 1.0 m (40 in) intervals, and to valve boxes and chambers using non-adhesive tape. Each piece of tape shall be a minimum of 50 mm x 150 mm (2 in x 6 in), based on ¾ in (1.9 cm) or 1 in (2.5 cm) CTS pipe OD. Pipe shall be dry and cleaned of all dirt or dust where tape is to be applied.

The wire shall be protected from damage during the excavation or backfilling of the Works. No breaks or cuts in the tracer wire or tracer wire insulation shall be permitted during installation or backfill.

At water service saddles, the tracer wire shall not be allowed to be placed between the saddle and the water main.

Except for approved spliced connections, tracer wire shall be continuous and without splices from service box to water main.

Prior to cutting the tracer wire for connections, the tracer wire shall be loose and not taut to avoid stretching. The ends of the tracer wire shall be stripped the length required for the electrical connector using an appropriate wire-stripping tool. The exposed copper wire shall be free of nicks or scores.

Wire ends that will be used for connecting the tracing device shall be stripped of insulation and have waterproof caps installed.

An approved electrical connector shall be placed over the exposed area of the main tracer wire. The connecting tracer

wire shall be carefully inserted into the connector up to the insulation. The connection shall be tightened and the waterproof covers sealed shut. Connections shall be snug and free from exposed copper.

Continuity tests shall be conducted by the *CONTRACTOR*. Testing shall be done in the presence of and to the satisfaction of the Engineer. Tracing wire installations that fail the continuity testing shall be corrected and retested to the satisfaction of the Engineer. The *CONTRACTOR* shall provide the Engineer with sufficient notification of any testing.

The Engineer reserves the right to reject any improper connections. Rejected connections shall be cut and redone to the satisfaction of the Engineer, at the *CONTRACTOR'S* expense.

The *CONTRACTOR* shall supply all necessary testing equipment and materials. The *CONTRACTOR* shall provide, to the Engineer, documentation verifying the testing, including the name of the person conducting the test, date and time of test, location of section being tested, and any other pertinent information.

The tracer wire system shall be tested for functionality by municipal staff only after the *CONTRACTOR* has confirmed and demonstrated that the entire tracer wire system is installed and is functioning properly. The *CONTRACTOR* shall request that the municipality perform this functionality test prior to placement of asphalt.

3.23 Connections to Existing Mains

.2 (Add new clause to this Specification as follows)

Where the *CONTRACTOR* is to tie into existing mains the *CONTRACTOR* is responsible for coordinating and completing the tie-in procedure with the City Water Crew in attendance, as arranged by the *CONTRACT ADMINISTRATOR*. The steps to be followed in the tie in procedure are as presented in the attached Water System Tie-In Verification Schedule, WW-03.

END OF SECTION 33 11 01

1.6 Measurement and Payment

.3 (Add Clause 1.6.3 with the following)

All service connection to include a inspection chamber as shown on Standard Detail S7 and S9 complete with a #37 Brooks Box and cast lid labeled 'STORM' or approved alternate. Box to set flush with finished grade.

END OF SECTION 33 40 01

MANHOLES AND CATCHBASINS

1.5 Measurement and Payment

.2 *(Replace Clause 1.5.2 with the following)*

Payment for catchbasin with directional grate (Dobney B19), lawn drains, cleanouts, inspection chambers and headwalls will be for each type, size and depth range constructed to the details shown on Standard Detail Drawings as applicable under respective payment items. Payment includes excavation, disposal, of surplus excavated materials, supply of all units, cast in place concrete, pipes, fittings and related materials, bedding, imported backfill, as shown on contract drawings, cleaning and testing where applicable, surface restoration, and all other work and materials necessary to complete the installation as shown on Contract Drawings and specified herein.

Payment for precast or manufactured headwall products (Pro-Eco-Lite, Custom Industrial Fiberglass or Lombard PreCast) to be installed as per Standard detail S13 complete with trash grating and handrail.

END OF SECTION 33 44 01

FIR STREET UPGRADES

ISSUED FOR TENDER T18-26



KEY PLAN
N.T.S.

OCT. 30, 2018

DRAWING NO.16-509

DRAWING INDEX	
COVER	DRAWING INDEX, KEY PLAN
SHEET 1	GENERAL NOTES, 9TH AVE TO 10TH AVE WATERMAIN
SHEET 2	STORM NOTES, 10TH AVE TO LANEWAY WATER AND STORM REPLACEMENT
SHEET 3	DETAILS



City of
**Campbell
River**
Capital Works Department

GENERAL NOTES:

CITY OF CAMPBELL RIVER TENDER No. 16-26
CITY OF CAMPBELL RIVER FILE No. 16-01

EXISTING UTILITIES

LOCATIONS OF EXISTING UTILITIES SHOWN ARE DERIVED FROM FIELD SURVEY, AS CONSTRUCTED DRAWINGS AND THIRD PARTY SOURCES. THIS INFORMATION CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS, ELEVATIONS, PIPE SIZE AND PIPE TYPE OF ALL UTILITIES AT THE START OF THE CONTRACT AND INFORM THE CONTRACT ADMINISTRATOR OF ANY DISCREPANCY.

- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE MASTER MUNICIPAL SPECIFICATIONS (MMCD PLATINUM EDITION VOLUME I) AND STANDARD DETAIL DRAWINGS AND CITY OF CAMPBELL RIVER DESIGN STANDARDS (2010). WHERE CONFLICTS EXIST, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
- THE CONTRACTOR SHALL RESTORE ANY DAMAGE TO EXISTING STRUCTURES OR SURFACE FEATURES TO ORIGINAL CONDITION OR BETTER FOLLOWING CONSTRUCTION.
- TRAFFIC CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR AND THE CONTRACTOR SHALL COMPLY WITH THE OCCUPATIONAL HEALTH AND SAFETY REGULATIONS UNDER THE JURISDICTION OF WORKSAFE BC. THE CONTRACTOR IS TO HAVE ON-SITE A COPY OF THE CURRENT "BC TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS" AS PUBLISHED BY THE MINISTRY OF TRANSPORTATION.

WATERMAIN

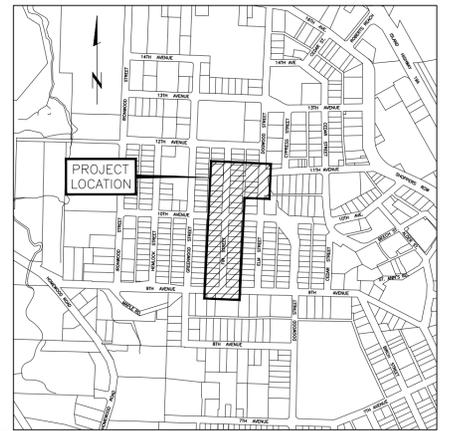
- FOR WATERMAIN SHUT DOWNS, THE CONTRACTOR MUST NOTIFY THE CONTRACT ADMINISTRATOR (MINIMUM 72 HOURS NOTICE REQUIRED) WHO WILL LIAISE WITH CITY'S WATER DEPARTMENT. ALL REQUIRED WATERMAIN ISOLATIONS WILL BE COMPLETED BY THE CITY'S WATER DEPARTMENT. ONCE THIS IS APPROVED, THE CONTRACTOR IS TO NOTIFY ALL AFFECTED WATER CUSTOMERS IN WRITING WITH A MINIMUM OF 72 HOURS NOTICE.
- ALL NEW WATER WORKS SHALL BE INSTALLED, DISINFECTED, PRESSURE-TESTED, FLUSHED AND WITNESSED BY THE CITY'S WATER DEPARTMENT PRIOR TO CONNECTION TO THE CITY OF CAMPBELL RIVER WATER SYSTEM IN ACCORDANCE WITH CONTRACT DOCUMENTS AND MMCD SECTION 3.19 OF SECTION 33.11.01 AND THE AWWA STANDARD C651-14-DISINFECTING WATER MAINS AND THE CITY OF CAMPBELL RIVER SUPPLEMENTAL SPECIFICATIONS. THE MINIMUM TEST-PRESSURE TO BE APPLIED IS 1380 kPa AT LOW POINT.
- PIPE RESTRAINTS TO BE UNI-FLANGE SERIES (1390 FOR C900 PVC AND 1400 FOR DUCTILE IRON) OR APPROVED EQUIVALENT AS PER THE CITY OF CAMPBELL RIVER APPROVED PRODUCTS LIST. RESTRAINED LENGTH AS PER MANUFACTURER RESTRAINT LENGTH CALCULATOR. T-BOLTS/STUDS TO BE HIGH STRENGTH, LOW ALLOY STEEL TO ANSI/AWWA C111/A21-11. CADMIUM PLATED REDI-ROD IS NOT PERMITTED.
- INSTALL NEW WATER SERVICE UP TO PROPERTY LINE COMPLETE WITH METER SETTER AND BROOKS BOX. TRANSFER CONNECTIONS TO EXISTING SERVICES UPON COMPLETION AND ACCEPTANCE OF ALL TESTS. NOTIFY RESIDENTS 72 HRS PRIOR TO SERVICE INTERRUPTION. NEW SERVICE LOCATIONS SHOWN SCHEMATICALLY. FINAL LOCATION TO BE LOCATED IN FIELD WITH CONTRACT ADMINISTRATOR.
- CONTRACTOR TO COMPLETE CONTINUITY TEST ON ALL TRACER WIRES IN THE PRESENCE OF THE CONTRACT ADMINISTRATOR AFTER THE TRENCH BACK-FILLING HAS BEEN COMPLETED.
- WATER SERVICE PIPE TO BE AWWA C901-22 CL160 HDPE AND CONTINUOUS LENGTH BETWEEN CORPORATION STOP AND METER SETTER. MID-RUN COUPLINGS ARE NOT PERMITTED. REFER TO DETAIL CCR W2A.
- ONLY ROMAC MACRO HP OR ALPHA COUPLINGS SHALL BE USED FOR ALL CONNECTIONS TO EXISTING MAINS. HMAX COUPLINGS WILL ONLY BE PERMITTED WHEN APPROVED BY THE CONTRACT ADMINISTRATOR. FIRE HYDRANT TO BE TERMINAL CITY C-71P MODEL.
- CATHODIC PROTECTION IS NOT REQUIRED.
- WRAP ALL WATER MAIN JOINTS WITH CANUS JOINTWRAP WHERE JOINT IS WITHIN 3M HORIZONTALLY OR 0.5M VERTICALLY FROM ANY SEWER UTILITY.
- FOR THRUST BLOCK DIMENSIONS REFER TO DRAWING CR-W1 AND CR-W1A.

ROADS AND SITE IMPROVEMENTS

- BACKFILL MATERIALS AND REQUIREMENTS TO MMCD 2009 SPECIFICATIONS FOR ROADWAY STANDARDS. BACKFILL OF TRENCH SECTION WITH 100mm MINUS PIT RUN GRAVEL COMPACTED TO 95% MODIFIED PROCTOR MAXIMUM DRY DENSITY BETWEEN PIPE ZONE AND THE ROAD WAY SUB-GRADE. REPORT UNSUITABLE GROUND CONDITION TO CONTRACT ADMINISTRATOR AND WHERE APPROVED, REMOVE AND REPLACE WITH PIT RUN AS PER ABOVE.
- CONTRACTOR IS REQUIRED TO MAINTAIN 2 WAY TRAFFIC ON SUITABLE TEMPORARY SURFACE AFTER EACH WORK DAY UNTIL FINAL PAVING IS COMPLETE.
- ASPHALT PAVING WILL BE UNDERTAKEN BY THE CITY'S PAVING CONTRACTOR. CONTRACTOR RESPONSIBLE FOR COORDINATION OF PAVING SCHEDULE WITH CITY PAVING CONTRACTOR. REFER TO LETTER OF ACCEPTANCE - BASE COURSE GRAVEL IN ADVANCE OF PAVING. THE ROAD IS TO BE PREPARED BY THE CONTRACTOR AND IS TO BE PAVED AS SOON AS POSSIBLE TO MINIMIZE THE DURATION OF TRAFFIC DISRUPTION.
- ROAD STRUCTURE TO CCR STANDARD FOR LOCAL ROADS:
PAVEMENT: 50MM THICK
CRUSHED ROAD BASE: 75MM THICK
SUBBASE: 230MM THICK

RESTORATION:

- PROPERTIES REQUIRE ADDITIONAL LANDSCAPING RESTORATION. CONTRACTOR TO MATCH EXISTING CONDITIONS OR BETTER. DISTURBED AREAS TO BE MINIMIZED.



KEY PLAN

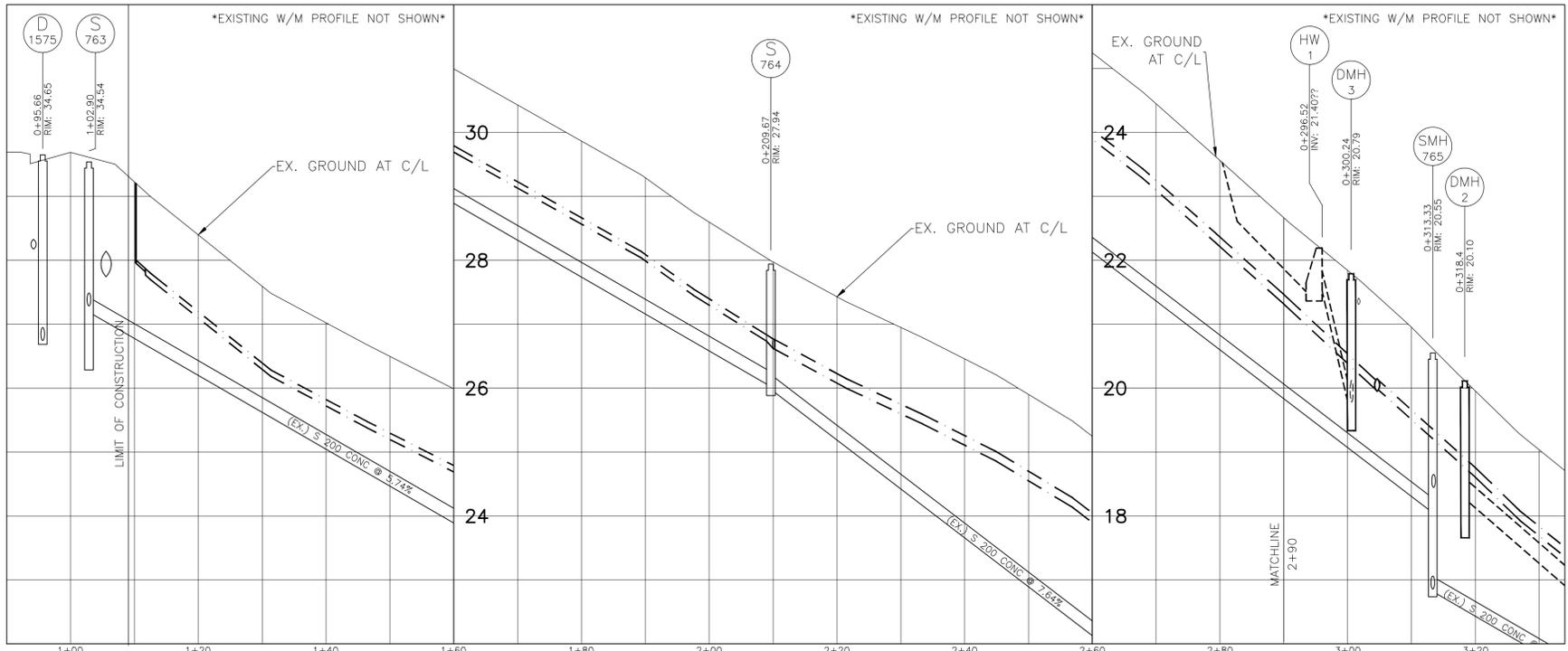
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BENCH MARKS:

MON. 81H4655 AT DOGWOOD ST. & 9th AVENUE
ELEV. 42.144
MON. 94H1269 AT GREENWOOD ST. & 12th AVENUE
ELEV. 4.070

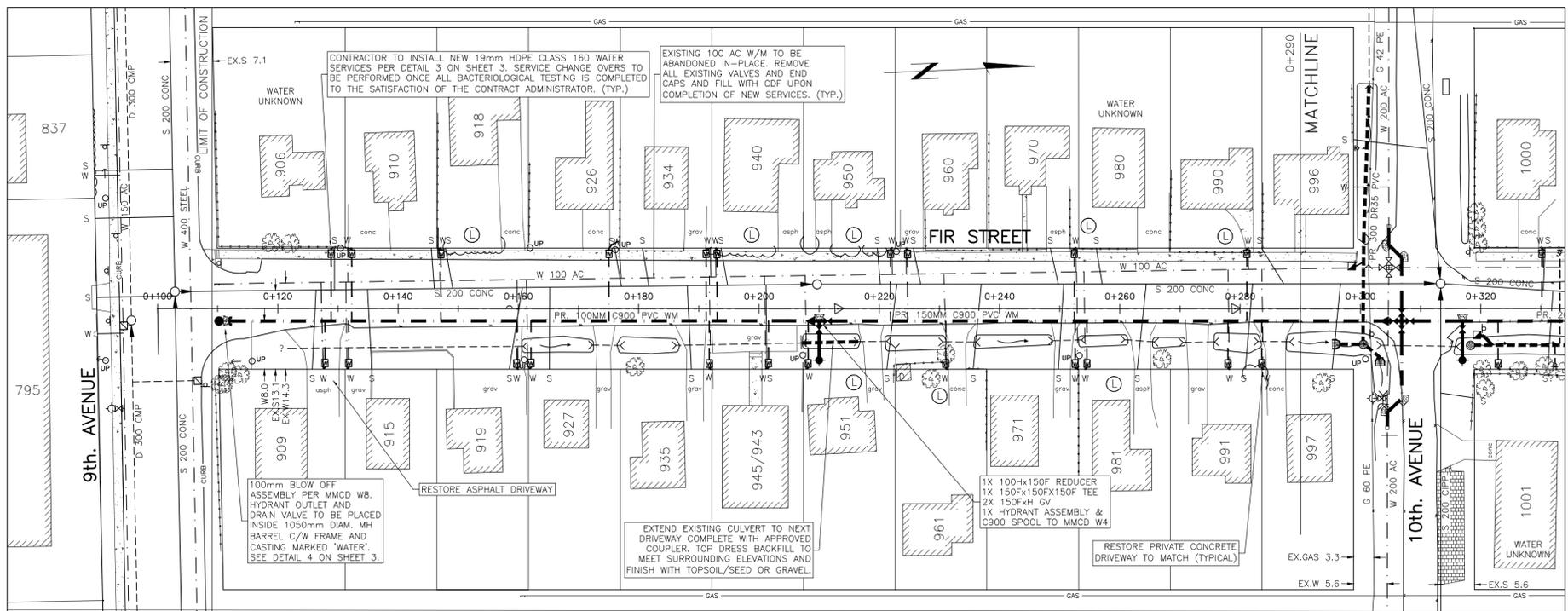
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FOR CONTINUATION SEE SHEET 2



EX. SAN	N: 16.82 E: 16.86 S: 16.85 W: 16.86	EX. 200 CONC 106.77m @ 5.74%	S: 26.03 N: 25.98	EX. 200 CONC 103.66m @ 5.74%
PROP. WATER	BLOW OFF 0+110.25	PR. 100 PVC C-900 99.75m @ 1.28m COVER	HYD. TEE 0+210.00	PR. 150 PVC C-900 96.85m @ 1.28m COVER

200 PVC C-900
10.10m @ 1.28m COVER



BENCH MARKS:

MON. 81H4655 AT DOGWOOD ST. & 9th AVENUE
ELEV. 42.144
MON. 94H1269 AT GREENWOOD ST. & 12th AVENUE
ELEV. 4.070

INFORMATION SHOWN ON THIS DRAWING IS COMPILED FROM NUMEROUS SOURCES AND MAY NOT BE COMPLETE OR ACCURATE. THE CITY OF CAMPBELL RIVER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DRAWING.

FOR CONTINUATION SEE SHEET 2

ISSUED FOR TENDER



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DRAWING PATH: G:\Capital Works\1-Current\16-01 MM Replacement Projects\oc\16-01-Design\B-Drawings\2-Fir Street\VT\16-509-FT.dwg Tab SHEET 1 Nov 02, 2018 1:48:55pm

NO.	REVISION	APPD BY	DATE	CONSTD BY	DATE	EXISTING	LEGEND	DESIGN	DATE	SCALE: H: 1:500 V: 1:50									
1	ISSUED FOR TENDER	DD	18/10/30															18/10/30	

City of Campbell River
Capital Works Department

TITLE: **FIR STREET UPGRADES
9TH AVENUE TO 10TH AVENUE
WATER MAIN REPLACEMENT**

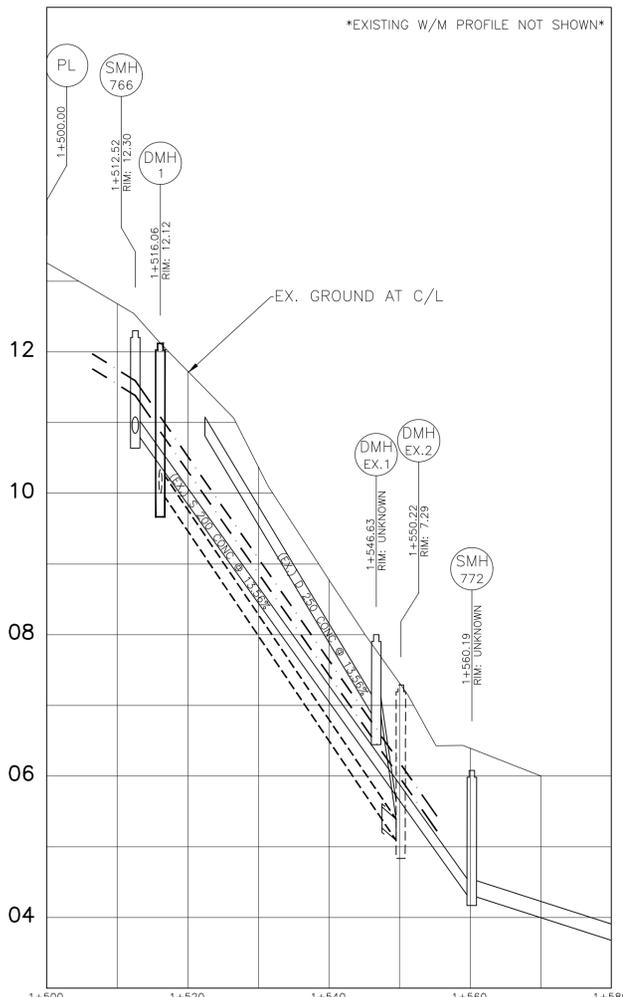
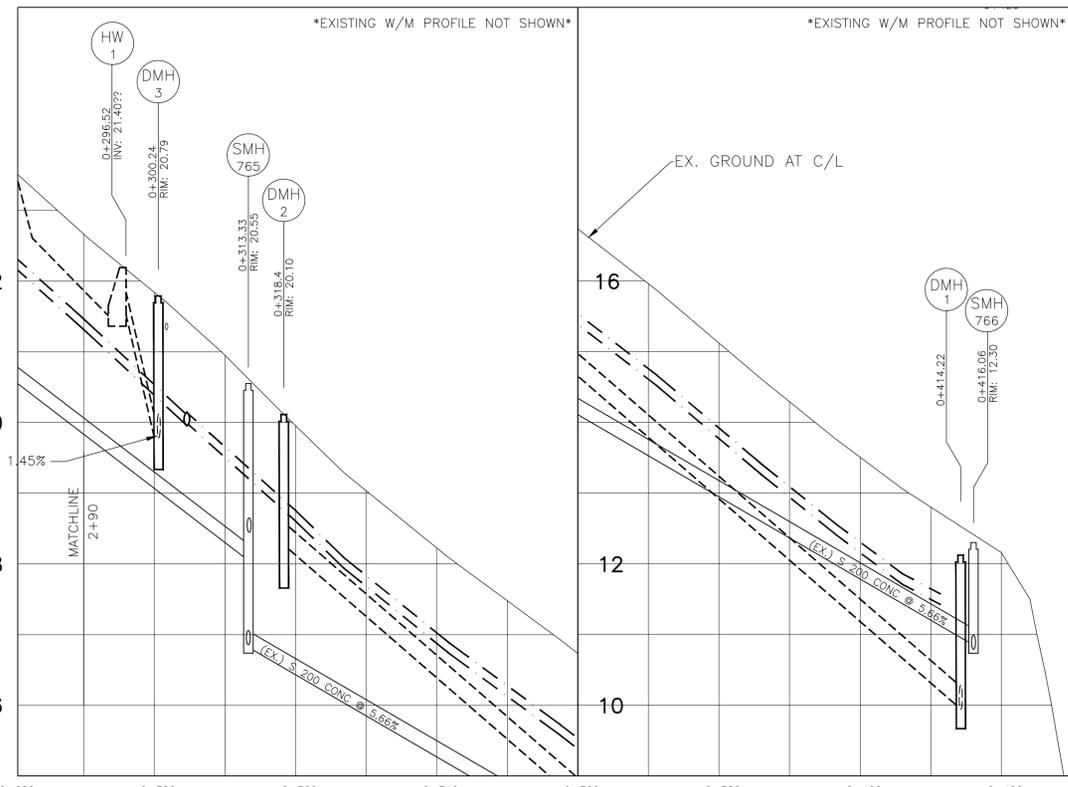
DRAWING NO. **16-509**

PROJECT: 16-01

SHEET 1 OF 3

REV. 1

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CB NO.	TYPE	RIM ELEV.
1	TOP INLET	21.68
2	TOP INLET	19.95
3	TOP INLET	16.54
4	SIDE INLET	12.80
5	SIDE INLET	12.80

ADDRESS	PROP. IC INV	DEPTH AT PL
1070	10.95	2.05
1045	11.10	1.70
1036	12.81	1.20
1035	13.00	1.70
1028	13.71	1.39
1025	15.10	1.70
1020	15.34	1.10
1011	16.35	1.70
1012	16.40	1.15
1000	17.67	0.88
1001	17.40	1.45
996	19.80	1.30

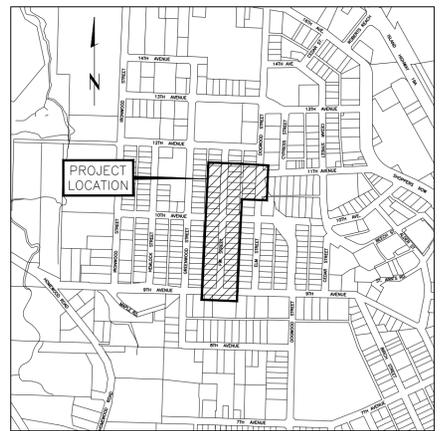
ROAD	START LOC.	END LOC.
LANEWAY-1100	1+555	1+506
BLOCK		
FIR STREET	0+357	0+372
FIR STREET	0+297.5	0+303.5
10TH AVE	SAN MAIN -3M	SAN MAIN +3M

- GENERAL STORM DRAIN NOTES:**
 LOCATIONS OF EXISTING UTILITIES SHOWN ARE DERIVED FROM FIELD SURVEY, AS CONSTRUCTED DRAWINGS AND THIRD PARTY SOURCES. THIS INFORMATION CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS, ELEVATIONS, PIPE SIZE AND PIPE TYPE OF ALL UTILITIES AT THE START OF THE CONTRACT AND INFORM THE CONTRACT ADMINISTRATOR OF ANY DISCREPANCY.
- REFER TO SHEET 1 FOR GENERAL NOTES
 - CONNECT ALL ENCOUNTERED STORM DRAIN SERVICES TO NEW MAIN, GASKETED, MOLDED WYES ARE TO BE USED AT MAIN.
 - GASKETS ARE TO REMAIN IN ALL MANUFACTURED FITTINGS.
 - REMOVE EXISTING DRAIN PIPE, CULVERTS, HEADWALLS AS ENCOUNTERED ALONG REPLACEMENT ALIGNMENT.
 - WORK TO BE COMPLETED DURING DRY WEATHER.
 - ALL STORM MANHOLES TO BE 1050MM DIAMETER UNLESS NOTED OTHERWISE.
 - ALL STORM SERVICES TO BE 150MM PVC SDR28 C/W LONG RADIUS BENDS AND INSPECTION CHAMBERS TO MMCD S9 c/w #37 BROOKS BOX MARKED 'DRAIN' WITHIN 500mm OF PROPERTY LINE.
 - CATCH BASIN LEADS ARE TO BE 200MM DIAMETER SDR35 LEADS.
 - AN APPROVED ENVIRONMENTAL SEDIMENT CONTROL PLAN IS TO BE IMPLEMENTED AND CONTROL DEVICES ARE TO BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT.
 - MH LID GROUTING PER STANDARD DETAIL DRAWING CR-510.

- RESTORATION:**
- PROPERTIES REQUIRE ADDITIONAL LANDSCAPING RESTORATION. CONTRACTOR TO MATCH EXISTING CONDITIONS OR BETTER. DISTURBED AREAS TO BE MINIMIZED.
 - REMOVE ASPHALT SURFACE FROM 10TH AVENUE INTERSECTION TO CUL DE SAC. PREPARE SURFACE FOR FINAL ASPHALT BY OTHERS. AREA IDENTIFIED BY HATCH. EXACT LIMITS TO BE DETERMINED IN FIELD BY CONTRACT ADMINISTRATOR.

TYPE	DESCRIPTION	START STATION	END STATION	COVER	ELEVATION
EX. SAN	EX. 200 CONC	104.2m	104.2m	5.66%	S.10.85, E.10.79
PROP. STORM	PR.300 PVC SDR35	95.9m	95.9m	8.54%	S.10.00, E.9.95
PROP. WATER	PR.200 PVC C-900	40.8m	40.8m	1.28m COVER	S.10.00, E.9.95
PROP. WATER	PR.200 PVC C-900	39.9m	39.9m	1.28m COVER	S.10.00, E.9.95

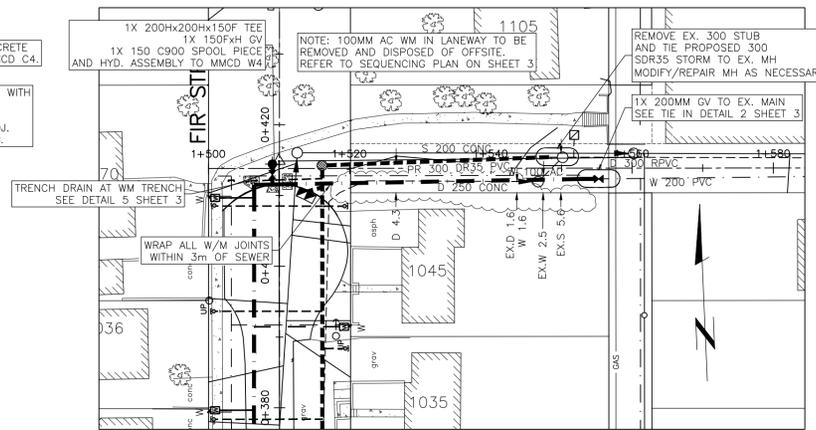
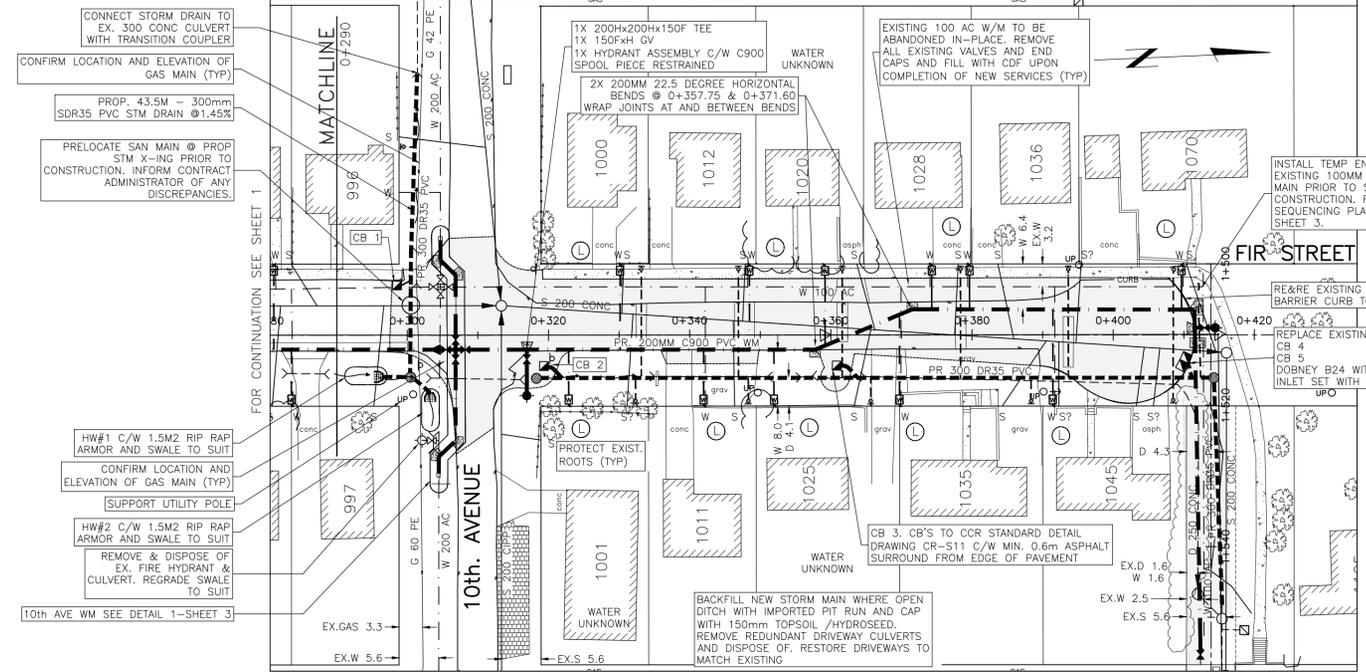
TYPE	DESCRIPTION	START STATION	END STATION	COVER	ELEVATION
EX. STORM	EX. 250 CONC	32m	32m	13.56%	S.10.85, E.10.79
EX. SAN	EX. 200 CONC	47.9m	47.9m	13.56%	S.10.85, E.10.79
PROP. STORM	PR.300 PVC SDR35	34.5m	34.5m	14.08%	S.10.00, E.9.95
PROP. WATER	PR.200 PVC C-900	48.8m	48.8m	1.28m COVER	S.10.00, E.9.95



KEY PLAN
SCALE: 1:10,000

BENCH MARKS:
 MON. 81H4655 AT DOGWOOD ST. & 9th AVENUE
 ELEV. 42.144
 MON. 94H1269 AT GREENWOOD ST. & 12TH AVENUE
 ELEV. 4.070

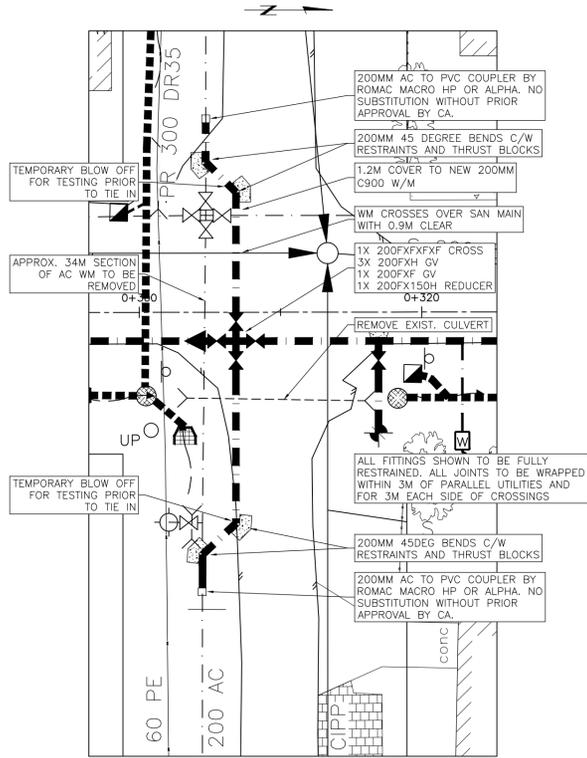
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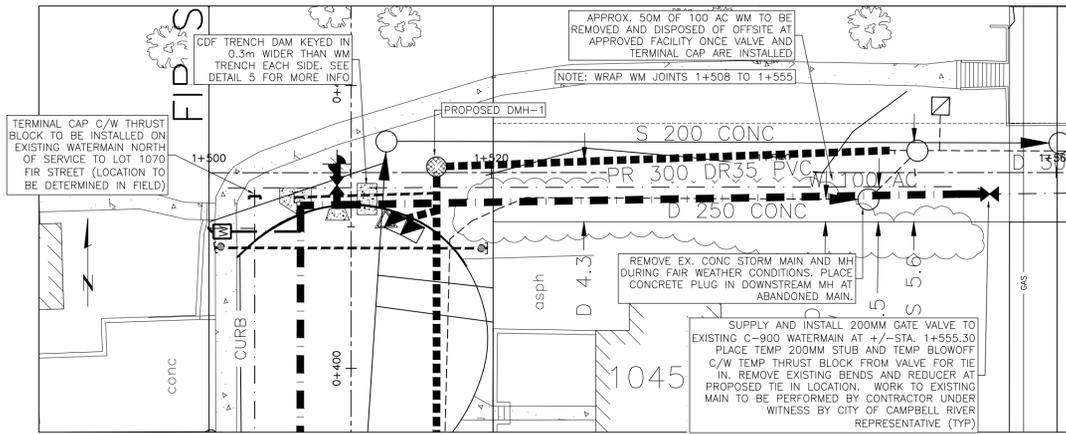
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<p>DESIGNED: TB/DD DATE: 18/10/30</p> <p>CHECKED: TM DATE: 18/10/30</p> <p>APPROVED: TM DATE: 18/10/30</p>	<p>SCALE: H:1:500 V:1:50</p> <p>CITY OF Campbell River Capital Works Department</p>	<p>TITLE: FIR STREET UPGRADES 10TH AVENUE TO LANEWAY WATER/STORM MAIN REPLACEMENT</p>	<p>DRAWING NO. 16-509</p> <p>PROJECT: 16-01</p> <p>SHEET 2 OF 3</p> <p>REV. 1</p>
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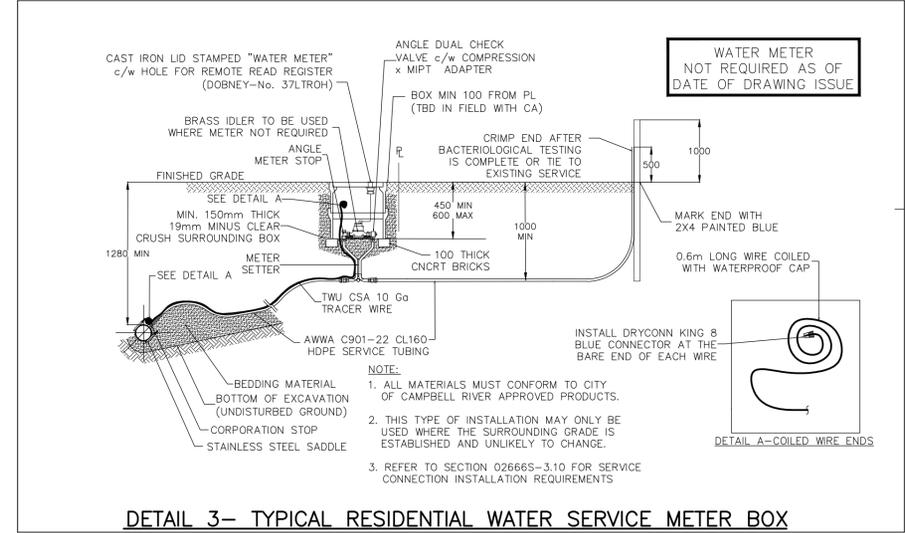
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DETAIL 1 - 10TH AVE TIE-IN
SCALE: 1:250



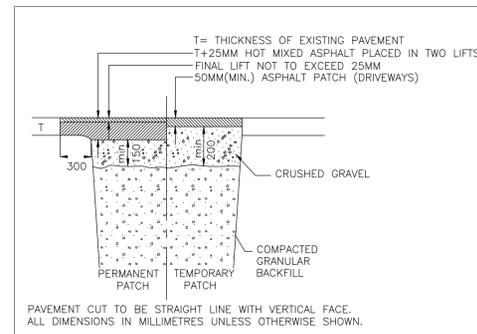
DETAIL 2 - LANEWAY TIE-IN (1100 BLK)
SCALE: 1:250



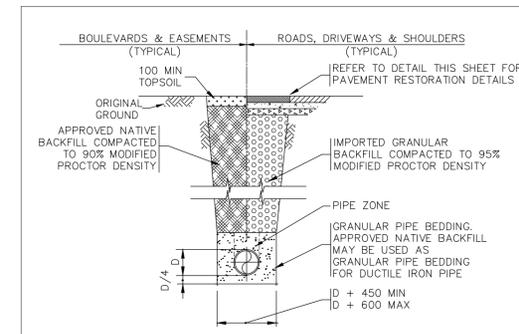
DETAIL 3- TYPICAL RESIDENTIAL WATER SERVICE METER BOX
N.T.S.

SUGGESTED WORK SEQUENCING/COMMISSIONING PLAN

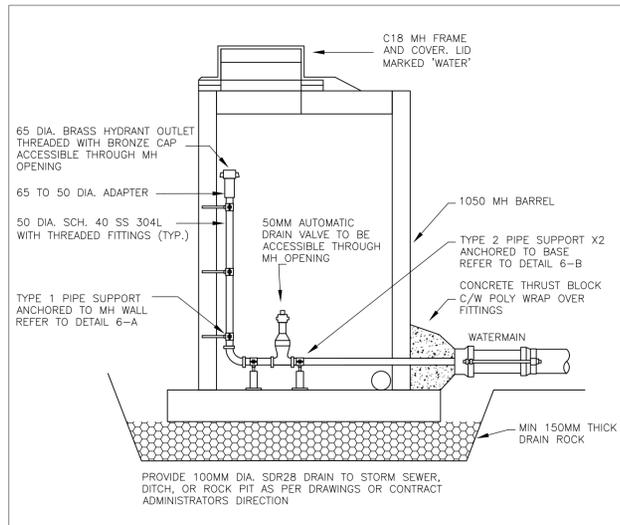
- INSTALL 200mm GATE VALVE AND TEMP CAPS TO ISOLATE AC MAIN-SEE DETAIL 2.
- REMOVE SECTION OF AC WATERMAIN AND CONC. STORM MAIN.
- INSTALL AND TEST STORM MAIN.
- INSTALL WATERMAIN AS PER SHEET 1 & 2.
- INSTALL HYDRANTS, TEST POINTS AND SERVICE CONNECTION STUBS TO PROPERTY LINE. FLUSH, PRESSURE TEST, DISINFECT, FLUSH, BIOLOGICAL TEST.
- RESTORE LANEWAY AS PER CONTRACT DOCUMENTS.
- TIE NEW MAIN TO EXISTING MAINS AT #1 AND #2. ISOLATE THE EXISTING 10th AVE MAIN AT THESE LOCATIONS (BY CITY OPERATIONS) TO COMPLETE TIE-INS AS PER DETAIL #1.
- ISOLATE OBSOLETE HYDRANTS (BAG UNTIL REMOVAL).
- SWITCH OVER SERVICE CONNECTIONS AT PROPERTY LINE.
- CAP THE EXISTING FIR STREET MAIN AT 10th AVE AND REMOVE ALL OBSOLETE HYDRANTS, VALVES, AND INSTALL CAP/PLUG WHERE FITTINGS REMOVED. FILL MAIN WITH CDF AS PER SPECIFICATIONS.
- RESTORE ROADWAY, BOULEVARDS, SWALES AND PROPERTY IMPACTS ETC.



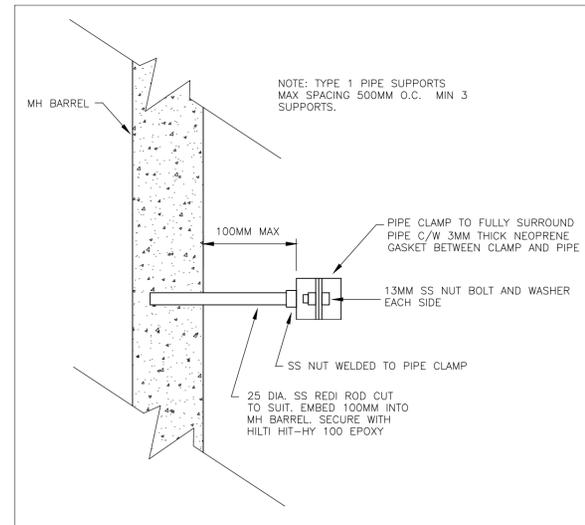
PAVEMENT STRUCTURE REINSTATEMENT DETAIL
N.T.S.



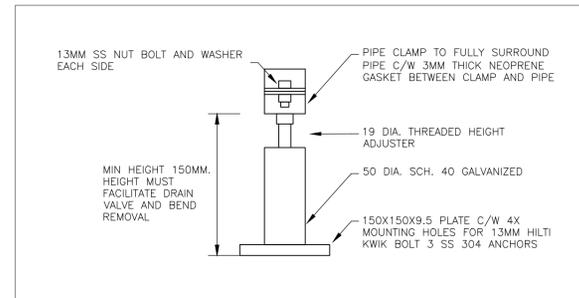
TYPICAL UTILITY TRENCH
N.T.S.



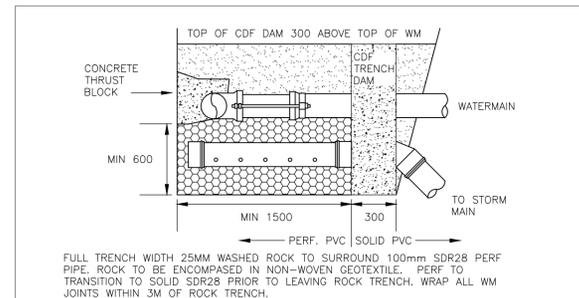
DETAIL 4 - PERMANENT BLOWOFF
N.T.S.



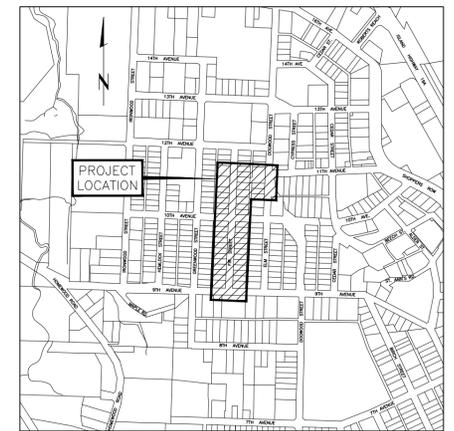
DETAIL 6-A - TYPE 1 PIPE SUPPORT
N.T.S.



DETAIL 6-B - TYPE 2 PIPE SUPPORT
N.T.S.



DETAIL 5 - TRENCH DRAIN
N.T.S.



KEY PLAN
SCALE: 1:10,000

BENCH MARKS:

- MON. 81H4655 AT DOGWOOD ST. & 9th. AVENUE ELEV. 42.144
- MON. 94H1269 AT GREENWOOD ST. & 12th. AVENUE ELEV. 4.070



INFORMATION SHOWN ON THIS DRAWING IS COMPILED FROM NUMEROUS SOURCES AND MAY NOT BE COMPLETE OR ACCURATE. THE CITY OF CAMPBELL RIVER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DRAWING.

ISSUED FOR TENDER

DESIGNED: TB/DD	SCALE: H:1:500 V:1:50	<p>City of Campbell River Capital Works Department</p>	TITLE: FIR STREET UPGRADES DETAILS	DRAWING NO. 16-509
DRAWN: TB/DD	DATE: 18/10/30			PROJECT: 16-01
CHECKED: TM	DATE: 18/10/30			SHEET 3 OF 3
APPROVED: TM	DATE: 18/10/30			REV. 1

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DRAWING PATH: G:\Capital Works\Projects\16-01 MM ReplacementProjects\ocTBD\2018\01-Design\B-Drawings\2-Fir Street\VT\16-509-IFT.dwg Tab SHEET 3 DETAILS Oct 31, 2018 10:15:12am