



## **REQUEST FOR QUOTATIONS**

**Title:** Water Meter Maintenance Services

**Reference No.:** 1220-040-2018-043

**FOR THE SUPPLY OF GOODS AND SERVICES**

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## REQUEST FOR QUOTATIONS

### 1. INTRODUCTION

The City of Surrey (the "City") invites contractors to provide a quotation on the form attached as Schedule B to Attachment 1 (the "Quotation") for the supply of the goods (if any) and services described in Schedule A to Attachment 1 (the "Goods and Services"). The description of the Goods and Services sets out the minimum requirements of the City. A person that submits a Quotation (the "Contractor") should prepare a Quotation that meets the minimum requirements, and may as it may choose, in addition; also include goods, services or terms that exceed the minimum requirements.

### 2. ADDRESS FOR DELIVERY

A Quotation should be labelled with the Contractor's name, RFQ title and number. A Quotation should be submitted in the form attached to this RFQ as Schedule B – Form of Quotation.

The Contractor may submit a Quotation either by email or in a hard copy, as follows:

#### (a) Email

If the Contractor chooses to submit by email, the Contractor should submit the Quotation electronically in a single pdf file which must be delivered to the City by email at: [purchasing@surrey.ca](mailto:purchasing@surrey.ca).

PDF emailed Quotations are preferred and the City will confirm receipt of emails. Note that the maximum file size the City can receive is 10Mb. If sending large email attachments, Contractors should phone to confirm receipt. A Contractor bears all risk that the City's equipment functions properly so that the City receives the Quotation.

#### (b) Hard Copy

If the Contractor chooses NOT to submit by email, the Contractor should submit one (1) original unbound Quotation and one (1) copy (two (2) in total) which should be delivered to the City at the office of:

Name: Richard D. Oppelt  
Purchasing Manager  
at the following location:

Address: Surrey City Hall  
Finance & Technology Department – Purchasing Section  
Reception Counter 5<sup>th</sup> Floor West  
13450 – 104<sup>th</sup> Avenue,  
Surrey, B.C., V3T1V8, Canada

**3. DATE**

The City would prefer to receive Quotations on or before **June 22 2018**. The City's office hours are 8:30 a.m. to 4:00 p.m., Monday to Friday, except statutory holidays.

**4. INQUIRIES**

All inquiries related to this RFQ should be directed in writing to the person named below (the "**City Representative**"). Information obtained from any person or source other than the City Representative may not be relied upon.

Name: Richard D. Oppelt, Purchasing Manager  
E-mail: [purchasing@surrey.ca](mailto:purchasing@surrey.ca)  
Reference: 1220-040-2018-043

**5. ADDENDA**

If the City determines that an amendment is required to this RFQ, the City's Representative will issue a written addendum by posting it on the BC Bid Website at [www.bcbid.gov.bc.ca](http://www.bcbid.gov.bc.ca) (the "BC Bid Website") and the City Website at [www.surrey.ca](http://www.surrey.ca) (the "City Website") that will form a part of this RFQ. It is the responsibility of Contractor to check the BC Bid Website and the City Website for addenda. The only way this RFQ may be added to, or amended in any way, is by a formal written addendum. No other communication, whether written or oral, from any person will affect or modify the terms of this RFQ or may be relied upon by any Contractor. By delivery of a Quotation, the Contractor is deemed to have received, accepted and understood the entire RFQ, including any and all addenda.

**6. NO CONTRACT**

This RFQ is simply an invitation for quotations (including prices and terms) for the convenience of all parties. It is not a tender and no obligations of any kind will arise from this RFQ or the submission of Quotations. The City may negotiate changes to any terms of a Quotation, including terms in Attachment 1 and Schedules A and B and including prices, and may negotiate with one or more Contractors or may at any time invite or permit the submission of quotations (including prices and terms) from other parties who have not submitted Quotations.

**7. ACCEPTANCE**

A Quotation will be an offer to the City which the City may accept at any time by signing the copy of the Quotation and delivering it to the Contractor. A Quotation is not accepted by the City unless and until both the authorized signatory of the Contractor and the authorized signatory of the City have signed. Delivery of the signed Agreement by the City may be by fax or pdf e-mail or hard copy. In that event, the contract will be comprised of the documents included in the definition of Agreement in Attachment No. 1 – Quotation Agreement – Goods and Services.

## **8. CONTRACTOR'S EXPENSES**

Contractors are solely responsible for their own expenses in preparing and submitting Quotations, and for any meetings, negotiations or discussions with the City or its representatives and consultants, relating to or arising from the RFQ. The City will not be liable to any Contractor for any claims, whether for costs, expenses, losses or damages, or loss of anticipated profits, incurred by the Contractor in preparing and submitting a Quotation, or participating in negotiations for a contract, or other activity related to or arising out of this RFQ.

## **9. CONTRACTOR'S QUALIFICATIONS**

By submitting a Quotation, a Contractor represents that it has the expertise, qualifications, resources, and relevant experience to supply the Goods and Services.

## **10. CONFLICT OF INTEREST**

A Contractor should disclose in its Quotation any actual or potential conflicts of interest and existing business relationships it may have with the City, its elected or appointed officials or employees. The City may rely on such disclosure.

## **11. SOLICITATION OF COUNCIL MEMBERS, CITY STAFF AND CITY CONSULTANTS**

Contractors and their agents will not contact any member of the City Council, City staff or City consultants with respect to this RFQ, other than the contact person named in Section 4, at any time prior to the award of a contract or the cancellation of this RFQ.

## **12. CONFIDENTIALITY**

All Quotations become the property of the City and will not be returned to the Contractor. All Quotations will be held in confidence by the City unless otherwise required by law. Contractors should be aware the City is a "public body" defined by and subject to the *Freedom of Information and Protection of Privacy Act* of British Columbia.

## **13. SIGNATURE**

The legal name of the person or firm submitting the Quotation should be inserted in the Quotation. The Quotation should be signed by a person authorized to sign on behalf of the Contractor and include the following:

- (a) If the Contractor is a corporation then the full name of the corporation should be included, together with the names of authorized signatories. The Quotation should be executed by all of the authorized signatories or by one or more of them provided that a copy of the corporate resolution authorizing those persons to execute the Quotation on behalf of the corporation is submitted;
- (b) If the Contractor is a partnership or joint venture then the name of the partnership or joint venture and the name of each partner or joint venturer should be included, and each partner or joint venturer should sign personally (or, if one or more person(s) have signing authority for the partnership or joint venture, the partnership or joint venture should provide evidence to the satisfaction of the City

that the person(s) signing have signing authority for the partnership or joint venture). If a partner or joint venturer is a corporation then such corporation should sign as indicated in subsection (a) above; or

- (c) If the Contractor is an individual, including a sole proprietorship, the name of the individual should be included.

#### **14. BRAND NAMES**

Wherever the specifications state a brand name, make, name of manufacturer, trade name, or Contractor catalogue number, it is for the purpose of establishing a grade or standard. It is not intended to rule out competition from equal brands or makes. If vehicles or equipment other than that specified is offered, it is the Contractor's responsibility to provide information in its Quotation that enables the City to confirm equivalency and acceptance.

Except where stated otherwise, the specifications described in **Schedule A** describe what is considered necessary to meet the performance requirements of the City and Contractors should consider this in its Quotation. If the Contractor cannot meet specifications, the Contractor may identify and offer an alternative which it believes to be an equal or better alternative.

Contractors shall clearly indicate any variances from the City's specifications or conditions and attach descriptive literature.

The City is not obligated to accept any alternatives. The City will determine what constitutes acceptable deviations and overall best value.

**-END OF PAGE-**

**ATTACHMENT 1**



**DRAFT QUOTATION AGREEMENT**

**Title:** Water Meter Maintenance Services

**Reference No.:** 1220-040-2018-043

**FOR THE SUPPLY OF GOODS AND SERVICES**

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## DRAFT QUOTATION AGREEMENT – GOODS AND SERVICES

Reference RFQ Title: Water Meter Maintenance Services

**THIS AGREEMENT** dated for reference this \_\_\_\_\_ day of \_\_\_\_\_, 201\_\_.

AGREEMENT No.: 1220-040-2018-043

### BETWEEN:

**CITY OF SURREY**  
13450 - 104 Avenue  
Surrey, B.C., Canada, V3T 1V8  
(the "**City**")

### AND:

\_\_\_\_\_  
(*Insert Full Legal Name and Address of Contractor*)

(the "**Contractor**")

**WHEREAS** the City wishes to engage the Contractor to provide Goods and Services and the Contractor agrees to provide Goods and Services.

**THEREFORE** in consideration of the payment of one (\$1.00) dollar and other good and valuable consideration paid by each of the parties to the other (the receipt and sufficiency of which is hereby acknowledged) the City and the Contractor agree as follows:

## 1. DEFINITIONS AND INTERPRETATION

### 1.1 In these General Terms and Conditions:

- (a) "Agreement" means this agreement and all schedules attached hereto;
- (b) "Calendar Year" means the time period from January 1st to December 31st;
- (c) "City" means the City of Surrey;
- (d) "Contractor" means a contractor whose Quotation has been accepted by the City and who is providing the Goods and Services under this Agreement;
- (e) "Department Representative" means the Manager Engineering Operations, or designate, who shall represent the City for the purposes of this Contract, or such other person who may subsequently be appointed in writing by the Department Representative and so notified to the Contractor;
- (f) "Fees" means the price set out in Schedule B to Attachment 1, for the provision of the Goods and Services, unless otherwise agreed by the parties in writing, and includes all taxes;
- (g) "Goods" means the equipment or materials (if any) as described generally in Schedule A, to Attachment 1, including anything and everything required to be done for the fulfilment and completion of this Agreement;
- (h) "Indemnities" has the meaning described in Section 11.2;
- (i) "RFQ" means the Request for Quotations;

- (j) "Services" means the services as described generally in Schedule A, to Attachment 1 including anything and everything required to be done for the fulfilment and completion of this Agreement;
- (k) "Term" has the meaning described in Section 3.1; and
- (l) "Year of the Term" as used herein shall mean each twelve-month period commencing on July 9, 2018.

1.2 This Agreement may be modified only by express and specific written agreement. In the event of a conflict between the provisions of any documents listed below, then the documents shall govern and take precedence in the following order:

- (a) this Agreement;
- (b) Addenda (if any);
- (c) the RFQ; and
- (d) other terms, if any, that are agreed to by the parties in writing.

1.3 The following attached Schedules are a part of this Agreement:

Schedule A Specifications of Goods & Scope of Services;  
Schedule A-1 Water Meter Design Criteria Manual & Supplementary Specifications (dated June 2016);  
Attachment 1 Prime Contractor Designation – Letter of Understanding;  
Attachment 2 Contractor Health & Safety Expectations, Responsibility of Contractor(s);  
Attachment 3 Contractor Performance Assessment Review (CPAR);  
Attachment 4 Compliance to Safety Procedure Entry Procedure for Confined Space;  
Attachment 5 Compliance to Safety Procedure Working in Confined Space; and  
Schedule B Quotation.

## **2. GOODS AND SERVICES**

2.1 The Contractor covenants and agrees with the City to provide the Goods and Services in accordance with this Agreement. The Goods and Services provided will meet the specifications and scope set out in Schedule A, to Attachment 1, and as described in Schedule B, to Attachment 1.

2.2 The City may from time to time, by written notice to the Contractor, make changes in the specifications of Goods and scope of Services. The Fees will be increased or decreased by written agreement of the City and the Contractor according to the rates set out in Schedule B, to Attachment 1.

2.3 The Contractor will, if required in writing by the City, provide additional goods or services. The terms of this Agreement will apply to any additional goods or services, and the fees for additional goods or services will generally correspond to the fees as described in Schedule B, to Attachment 1. The Contractor will not provide any additional goods or services in excess of the specification of Goods and scope of Services requested in writing by the City.

2.4 The Contractor will perform the Services with that degree of care, skill and diligence normally provided by a qualified and experienced practitioner performing services similar to the Services, and on the understanding that the City is relying on the Contractor's

experience and expertise. The Contractor represents that it has the expertise, qualifications, resources, and relevant experience to supply the Goods and Services.

- 2.5 The Contractor will deliver the Goods free and clear of all liens and encumbrances in the manner and to the destination stipulated. In the event of the Contractor's failure to meet this condition, the Contractor will, on written notice from the City, forthwith return all monies paid by the City on account of the Goods and in addition the City may by written notice terminate this Agreement without liability, and in such event, in addition to the above, the Contractor will be liable for any and all expenses or losses incurred by the City resulting from such failure.

### **3. TERM**

- 3.1 The Contractor will provide the Goods and Services for the period commencing on (August 1, 2018) and terminating on (July 30, 2019) (the "Term").
- 3.2 The City may at any time prior to 30 days before the end of the Term, by written notice to the Contractor, extend the Term for a period of time not to exceed two (2) one-year renewal terms. If the City elects to extend the Term, the provisions of this Agreement will remain in force, including the Fees, except where amended in writing by the parties.

### **4. CONTRACTOR'S PERFORMANCE REVIEW**

- 4.1 The Contractor agrees that upon completion of the Services or the termination of the Contract that:
- (a) the Contractor's work performance will be evaluated by the Department Representative using the form referred to **Appendix 3 - Contractor Performance Assessment Report (CPAR)**;
  - (b) the Department Representative shall liaise with the Contractor in completing the Report although the Department Representative reserves the ultimate right to complete the Report (other than the Contractor's comments); and
  - (c) the City may use this CPAR Report for evaluation of the Contractor's performance in the assessment of future procurement opportunities.
- 4.2 The Contractor further agrees that neither the Contractor nor any other person shall have any claim against the City, or employees, or agents of the City under any circumstances as a result of the preparation and use of the Report.
- ### **5. TIME**
- 5.1 Time is of the essence.
- ### **6. FEES**
- 6.1 The City will pay the Fees to the Contractor in accordance with this Agreement. Payment by the City of the Fees will be full payment for the Goods and Services and the Contractor will not be entitled to receive any additional payment from the City.

- 6.2 For greater certainty, costs of general management, non-technical supporting services and general overhead are deemed to be covered by the Fees and will not be subject to additional payment by the City. The Fees shall also include without limitation all costs of boxing, packing, crating, and loading and unloading the Goods at the prescribed destination.
- 6.3 The parties agree that all fees as set out in this Agreement will remain in force for a period of twelve (12) months and thereafter the fees will be subject to an increase during the term once per Year of the Term by a percentage which shall not be greater than the percentage increase in the Consumer Price Index (All items) for Vancouver, British Columbia as published by Statistics Canada ("CPI"), or any successor government agency for the Calendar Year immediately preceding the applicable January 1st of the current Calendar Year.

## **7. PAYMENT**

- 7.1 Subject to any contrary provisions set out in Schedule B, to Attachment 1, the Contractor will submit a monthly invoice to the City requesting payment of the portion of the Fees relating to the Goods and Services provided in the previous month. Invoices should include the Contractor's name, address and telephone number, the City's purchase order number <insert purchase order or contract reference number> , the Contractor's invoice number, the names, charge-out rates and number of hours worked in the previous month of all employees of the Contractor that have performed Services during the previous month; the percentage of Services completed and Goods delivered at the end of the previous month; the total budget for the Goods and Services and the amount of the budget expended to the date of the invoice; taxes (if any); and grand total of the invoice.
- 7.2 If the City reasonably determines that any portion of an invoice is not payable, then the City will so advise the Contractor.
- 7.3 The City will pay the portion of an invoice which the City determines is payable within 30 days of the receipt of the Invoice, except the City may hold back from payments 10% of the amount the City determines is payable to the Contractor until such time as the Contractor provides its final report to the City.
- 7.4 If the Contractor offers the City a cash discount for early payment, then the City may, at the City's sole discretion, pay the portion of an Invoice which the City determines is payable at any time after receipt of the Invoice.
- 7.5 In an effort to support sustainability, reduce risk and improve customer service, the City has introduced an electronic fund transfer (EFT) option for Contractors. Electing to participate in this program will allow Contractors to receive their payments directly into their bank accounts, reducing risk of fraud and improving the timeliness of their payment receipt.
- 7.6 To receive your payments electronically, fax your request on company letterhead to 604-591-4488. You may contact us at 604-592-7010 (Accounts Payable General Inquiries) for more information.

### **SUBMITTING YOUR ELECTRONIC INVOICE**

Please send electronic invoices to the City of Surrey by email to [surreyinvoices@surrey.ca](mailto:surreyinvoices@surrey.ca).

In order to process your payment, the following submission guidelines **must** be met:

- Invoice(s) must be sent as attachments.
- Attachment(s) must be in PDF format.
- PDF attachment(s) must be named: <Company name>\_<Invoice Number>.
- Email(s) must not exceed 2MB.

**Please Note:** failure to meet the guidelines above may result in payment processing delays or in your payment not being processed.

### **SUBMITTING YOUR INVOICE BY HARD COPY**

Mail hard copy invoices to:

Surrey City Hall – Accounts Payable  
13450 – 104 Avenue  
Surrey, B.C., Canada, V3T 1V8

- Submit only invoices to this address.
- Submit any supporting documents to your City of Surrey business contact.
- Don't send duplicate hard copy or soft-copy invoices in any manner. Should a need arise to submit an invoice copy, ensure it is clearly labeled COPY.
- Incomplete invoices will be returned.

7.7 Unless otherwise provided, all dollar amounts referred to in this Agreement are in lawful money of Canada.

7.8 If the Contractor is a non-resident of Canada and does not provide to the City a waiver of regulation letter, the City will withhold and remit to the appropriate governmental authority the greater of:

- (a) 15% of each payment due to the Contractor; or
- (b) the amount required under applicable tax legislation.

## **8. USE OF WORK PRODUCT**

8.1 The Contractor hereby sells, assigns and transfers to the City the right, title and interest required for the City to use and receive the benefit of all the reports, drawings, plans, designs, models, specifications, computer software, concepts, products, designs or processes or other such work product produced by or resulting from the Services rendered by the Contractor. This Section does not give the City the right to sell any such work product to any third party and the City may sell the work product only with the prior approval of the Contractor. The Contractor may retain copies of the work product.

## **9. PERSONNEL AND SUBCONTRACTORS**

9.1 The Contractor will provide only personnel who have the qualifications, experience and capabilities to provide the Goods and perform the Services.

- 9.2 The Contractor will provide the Goods and Services using the personnel and sub-contractors as may be listed in the Quotation and the Contractor will not remove any such listed personnel or sub-contractors from the Services without the prior written approval of the City.
- 9.3 If the City reasonably objects to the performance, qualifications, experience or suitability of any of the Contractor's personnel or sub-contractors then the Contractor will, on written request from the City, replace such personnel or sub-contractors.
- 9.4 Except as provided for in Section 8.2, the Contractor will not engage any personnel or sub-contractors, or sub-contract or assign its obligations under this Agreement, in whole or in part, without the prior written approval of the City.
- 9.5 The Contractor will preserve and protect the rights of the City with respect to any Services performed under sub-contract and incorporate the conditions of this Agreement into all sub-contracts as necessary to preserve the rights of the City under this Agreement. The Contractor will be as fully responsible to the City for acts and omissions of sub-contractors and of persons directly or indirectly employed by them as for acts and omissions of persons directly employed by the Contractor.

## **10. LIMITED AUTHORITY**

- 10.1 The Contractor is not and this Agreement does not render the Contractor an agent or employee of the City, and without limiting the above, the Contractor does not have authority to enter into any contract or reach any agreement on behalf of the City, except for the limited purposes as may be expressly set out in this Agreement, or as necessary in order to provide the Goods and Services. The Contractor will make such lack of authority clear to all persons with whom the Contractor deals in the course of providing the Goods and Services. Every vehicle used by the Contractor in the course of providing the Goods and Services shall identify the Contractor by name and telephone number.
- 10.2 The Contractor is an independent contractor. This Agreement does not create the relationship of employer and employee, a partnership, or a joint venture. The City will not control or direct the details, means or process by which the Contractor performs the Services. The Contractor will determine the number of days and hours of work required to properly and completely perform the Services. The Contractor is primarily responsible for performance of the Goods and Services and may not delegate or assign any Services to any other person except as provided for in Section 8.4. The Contractor will be solely liable for the wages, fringe benefits, work schedules and work conditions of any partners, employees or sub-contractors.

## **11. CONFIDENTIALITY AND DISCLOSURE OF INFORMATION**

- 11.1 Except as provided for by law or otherwise by this Agreement, the Contractor will keep strictly confidential any information supplied to, obtained by, or which comes to the knowledge of the Contractor as a result of the provision of the Goods or performance of the Services and this Agreement, and will not, without the prior express written consent of the City, publish, release, disclose or permit to be disclosed any such information to any person or corporation, either before, during or after termination of this Agreement, except as reasonably required to complete the Goods and Services.



11.2 The Contractor acknowledges that the City is subject to the *Freedom of Information and Protection of Privacy Act* of British Columbia and agrees to any disclosure of information by the City required by law.

11.3 The Contractor agrees to return to the City all of the City's property at the completion of this Agreement, including any and all copies or originals of reports provided by the City.

## **12. WARRANTIES**

12.1 The Contractor guarantees and warrants that all works including installation and development, and supply of any equipment and materials covered by, or supplied pursuant to the Quotation should:

- (a) comply with the latest Specifications, **Schedule A-1 Water Meter Design Criteria Manual & Supplementary Specifications (dated June 2016)**;
- (b) have a warranty of at least twelve (12) months from the date of receipt by the City of Surrey, or should the equipment not be installed for use during that period, a further twelve (12) month warranty would apply from the date equipment is installed and put into operation. Any such defect should be rectified, replaced or repaired to the entire satisfaction of the City of Surrey, at the sole expense of the Contractor. The Contractor should supply a warranty document at the time of completion; and
- (c) Meter pits installed in concrete or asphalt driveways must have a warranty of twenty four (24) months.

12.2 The Contractor warrants that the Goods shall be free from defects in design, materials, workmanship and title, shall conform in all respects to the terms of this Agreement, shall be fit and suitable and perform satisfactorily for the purposes and under the conditions made known to the Contractor by the City or which were reasonably inferable. The Goods shall be at least equal to the higher of national standards or codes (such as, by way of illustration, CSA or ASTM), or standards and codes customarily applicable at the place where the City will use the Goods. The Goods shall be of the best quality, if no quality is specified. This general warranty is independent of and without prejudice to any specific warranty or service guarantee offered by the Contractor or third party manufacturer or supplier of the Goods in connection with the purpose for which the Goods were purchased. The Contractor shall assign to the City any warranty or service guarantee offered by a third party manufacturer or supplier of the Goods. Notwithstanding this assignment, if at any time up to one year from the date of delivery or installation (if applicable) the City determines the Goods or any part do not conform to these warranties, the City shall notify the Contractor within a reasonable time after such discovery, and the Contractor shall then promptly correct such nonconformity at the Contractor's expense. Goods used to correct a nonconformity shall be similarly warranted for one year from the date of installation. The Contractor's liability shall extend to all liabilities, losses, damages, claims and expenses incurred by the City caused by any breach of any of the above warranties.

12.3 The Contractor warrants and guarantees that Goods and Services delivered under this Agreement do not infringe any valid patent, copyright or trademark, foreign or domestic, owned or controlled by any other corporation, firm or person, and agrees to indemnify and save harmless the City and all of its elected and appointed officials, officers, employees,



servants, representatives and agents (collectively the "Indemnitees"), from and against any and all claims, demands, causes of action, suits, losses, damages and costs, liabilities, expenses and judgments (including all actual legal costs) by reason of any claim, action or litigation arising out of any alleged or actual infringement of any patent, copyright or trademark, foreign or domestic, relating to the Goods and Services supplied under this Agreement.

### **13. INSURANCE AND DAMAGES**

- 13.1 The Contractor will indemnify and save harmless the Indemnitees from and against all claims, demands, causes of action, suits, losses, damages and costs, liabilities, expenses and judgments (including all actual legal costs) for damage to or destruction or loss of property, including loss of use, and injury to or death of any person or persons which any of the Indemnitees incur, suffer or are put to arising out of or in connection with any failure, breach or non-performance by the Contractor of any obligation of this Agreement, or any wrongful or negligent act or omission of the Contractor or any employee or agent of the Contractor.
- 13.2 The indemnities described in Sections 11.2, 12.1 and 18.3 will survive the termination or completion of this Agreement and, notwithstanding such termination or completion, will continue in full force and effect for the benefit of the Indemnitees.
- 13.3 The Contractor will, without limiting its obligations or liabilities and at its own expense, provide and maintain throughout this Agreement the following insurances in forms and amounts acceptable to the City from insurers licensed to conduct business in Canada:
- (a) commercial general liability insurance on an occurrence basis, in an amount not less than five million (\$5,000,000) dollars inclusive per occurrence against death, bodily injury and property damage arising directly or indirectly out of the work or operations of the Contractor, its employees and agents. The insurance will include cross liability and severability of interests such that the coverage shall apply in the same manner and to the same extent as though a separate policy had been issued to each insured. The insurance will include, but not be limited to: premises and operator's liability, broad form products and completed operations, owners and contractors protective liability, blanket contractual, employees as additional insureds, broad form property damage, non-owned automobile, contingent employers liability, broad form loss of use, personal injury, and incidental medical malpractice. The City will be added as additional insured;
  - (b) automobile liability insurance on all vehicles owned, operated or licensed in the name of the Contractor in an amount not less than three million (\$3,000,000) dollars per occurrence for bodily injury, death and damage to property; and
  - (c) contractor's equipment insurance in an all risks form covering construction machinery and equipment used for the performance of the Services.
- 13.4 The Contractor will provide the City with evidence of the required insurance prior to the commencement of this Agreement. Such evidence will be in the form of a completed certificate of insurance acceptable to the City. The Contractor will, on request from the City, provide certified copies of all of the Contractor's insurance policies providing coverage relating to the Services, including without limitation any professional liability insurance policies. All required insurance will be endorsed to provide the City with thirty (30) days advance written notice of cancellation or material change restricting coverage. To the extent the City has an insurable interest; the builder's risk policy will have the City

as first loss payee. The Contractor will be responsible for deductible amounts under the insurance policies. All of the Contractor's insurance policies will be primary and not require the sharing of any loss by the City or any insurer of the City.

- 13.5 The Contractor acknowledges that any requirement by the City as to the amount of coverage under any policy of insurance will not constitute a representation by the City that the amount required is adequate and the Contractor acknowledges and agrees that the Contractor is solely responsible for obtaining and maintaining policies of insurance in adequate amounts. The insurance policy coverage limits shall not be construed as relieving the Contractor from responsibility for any amounts which may exceed these limits, for which the Contractor may be legally liable.
- 13.6 The Contractor shall place and maintain, or cause any of its sub-contractors to place and maintain, such other insurance or amendments to the foregoing policies as the City may reasonably direct.
- 13.7 The Contractor hereby waives all rights of recourse against the City for loss or damage to the Contractor's property.

#### **14. CITY RESPONSIBILITIES**

- 14.1 The City will, in co-operation with the Contractor, make efforts to make available to the Contractor information, surveys, and reports which the City has in its files and records that relate to the Goods and Services. The Contractor will review any such material upon which the Contractor intends to rely and take reasonable steps to determine if that information is complete or accurate. The Contractor will assume all risks that the information is complete and accurate and the Contractor will advise the City in writing if in the Contractor's judgment the information is deficient or unreliable and undertake such new surveys and investigations as are necessary.
- 14.2 The City will in a timely manner make all decisions required under this Agreement, examine documents submitted by the Contractor and respond to all requests for approval made by the Contractor pursuant to this Agreement.
- 14.3 If the City observes or otherwise becomes aware of any fault or defect in the delivery of Goods or the provision of Services, it may notify the Contractor, but nothing in this Agreement will be interpreted as giving the City the obligation to inspect or review the Contractor's performance with regards to delivering Goods or the performance of the Services.

#### **15. DEFICIENCIES**

- 15.1 The City shall have a reasonable time to inspect and to accept the Goods and Services. The City may reject any Goods or Services not in accordance with this Agreement, whether due to damage resulting from improper packing, loading, unloading or otherwise. The City shall notify the Contractor of rejection of the Goods whereupon the Goods will be held subject to the disposition by the Contractor. Any costs or expenses incurred by the City as a result of the rejection of the Goods or Services are, immediately upon written demand by the City, payable by the Contractor, and may be set off against any payments owing by the City to the Contractor.

- 15.2 The City may hold back from payments otherwise due to the Contractor up to 150% of a reasonable estimate, as determined by the City, on account of deficient or defective Goods or Services. This holdback may be held, without interest, until replacement Goods are received or such deficiency or defect is remedied.

## **16. DEFAULT AND TERMINATION**

- 16.1 In the event the Contractor does not deliver the Goods or perform the Services by the date specified in this Agreement, then:
- (a) the City reserves the right to terminate this Agreement, in whole or in part, and in the event of such termination no payment will be owing by the City on account of this Agreement and the Contractor will be liable for any and all expenses or loss resulting from such failure or delay and will return all monies paid by the City; or
  - (b) if the City does not terminate this Agreement for late delivery or performance, the City may deduct and setoff from any payments owing to the Contractor all additional costs the City reasonably incurs on account of the late delivery or performance.
- 16.2 The City may by written notice at any time cancel this Agreement with respect to Goods which, as of the date of cancellation, have not been shipped.
- 16.3 The City may at any time and for any reason by written notice to the Contractor terminate this Agreement before the completion of all the Goods and Services, such notice to be determined by the City at its sole discretion. Upon receipt of such notice, the Contractor will perform no further Goods and Services other than the work which is reasonably required to complete the Goods and Services. Despite any other provision of this Agreement, if the City terminates this Agreement before the completion of all the Goods and Services, the City will pay to the Contractor all amounts owing under this Agreement for Goods and Services provided by the Contractor up to and including the date of termination, plus reasonable termination costs in the amount as determined by the City in its sole discretion. Upon payment of such amounts no other or additional payment will be owed by the City to the Contractor, and, for certainty, no amount will be owing on account of lost profits relating to the portion of the Goods and Services not performed or other profit opportunities.
- 16.4 The City may terminate this Agreement for cause as follows:
- (a) If the Contractor is adjudged bankrupt, or makes a general assignment for the benefit of creditors because of its insolvency, or if a receiver is appointed because of its insolvency, the City may, without prejudice to any other right or remedy the City may have, terminate this Agreement by giving the Contractor or receiver or trustee in bankruptcy written notice; or
  - (b) If the Contractor is in breach of any term or condition of this Agreement, and such breach is not remedied to the reasonable satisfaction of the City within 5 days after delivery of written notice from the City to the Contractor, then the City may, without prejudice to any other right or remedy the City may have, terminate this Agreement by giving the Contractor further written notice.
- 16.5 If the City terminates this Agreement as provided by Section 15.4 then the City may:
- (c) enter into contracts, as it in its sole discretion sees fit, with other persons to complete the Goods and Services;

- (d) withhold payment of any amount owing to the Contractor under this Agreement for the performance of the Goods and Services;
- (e) set-off the total cost of completing the Goods and Services incurred by the City against any amounts owing to the Contractor under this Agreement, and at the completion of the Goods and Services pay to the Contractor any balance remaining; and
- (f) if the total cost to complete the Goods and Services exceeds the amount owing to the Contractor, charge the Contractor the balance, which amount the Contractor will forthwith pay.

## **17. CURING DEFAULTS**

- 17.1 If the Contractor is in default of any of its obligations under this Agreement, then the City may without terminating this Agreement, upon 5 days written notice to the Contractor, remedy the default and set-off all costs and expenses of such remedy against any amounts owing to the Contractor. Nothing in this Agreement will be interpreted or construed to mean that the City has any duty or obligation to remedy any default of the Contractor.

## **18. DISPUTE RESOLUTION**

- 18.1 The parties will make reasonable efforts to resolve any dispute, claim, or controversy arising out of this Agreement or related to this Agreement ("Dispute") using the dispute resolution procedures set out in this Section.
- 18.2 Negotiation: The parties will make reasonable efforts to resolve any Dispute by amicable negotiations and will provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate negotiations.
- 18.3 Mediation: If all or any portion of a Dispute cannot be resolved by good faith negotiations within 30 days, either party may by notice to the other party refer the matter to mediation. Within 7 days of delivery of the notice, the parties will mutually appoint a mediator. If the parties fail to agree on the appointment of the mediator, then either party may apply to the British Columbia International Commercial Arbitration Centre for appointment of a mediator. The parties will continue to negotiate in good faith to resolve the Dispute with the assistance of the mediator. The place of mediation will be Surrey, British Columbia. Each party will equally bear the costs of the mediator and other out-of-pocket costs, and each party will bear its own costs of participating in the mediation.
- 18.4 Litigation: If within 90 days of the request for mediation the Dispute is not settled, or if the mediator advises that there is no reasonable possibility of the parties reaching a negotiated resolution, then either party may without further notice commence litigation.

## **19. WCB AND OCCUPATIONAL HEALTH AND SAFETY**

- 19.1 The Contractor agrees that it shall, at its own expense, procure and carry, or cause to be procured, carried and paid for, full Workers' Compensation Board coverage for itself and all workers, employees, servants and others engaged in the supply of the Goods and Services. The Contractor agrees that the City has the unfettered right to set off the amount of the unpaid premiums and assessments for the Workers' Compensation Board coverage against any monies owing by the City to the Contractor. The City will have the right to

withhold payment under this agreement until the Workers' Compensation Board premiums, assessments or penalties in respect of the Goods and Services have been paid in full.

- 19.2 The Contractor will provide the City with the Contractor's Workers' Compensation Board registration number and a letter from the Workers' Compensation Board confirming that the Contractor is registered in good standing with the Workers' Compensation Board and that all assessments have been paid to the date thereof prior to the City having any obligations to pay monies under this agreement.
- 19.3 The Contractor agrees that it is the prime contractor for the Goods and Services as defined in the *Workers Compensation Act*. The Contractor will have a safety program in place that meets the requirements of the Workers' Compensation Board Occupational Health and Safety Regulation and the *Workers Compensation Act*. As prime contractor, the Contractor will be responsible for appointing a qualified coordinator for insuring the health and safety activities for the location of the Goods and Services. That person will be the person so identified in Schedule B of this agreement, and the Contractor will advise the City immediately in writing if the name or contact number of the qualified coordinator changes.
- 19.4 Without limiting the generality of any other indemnities granted by the Contractor in this agreement, the Contractor shall indemnify and save harmless the Indemnitees from and against all claims, demands, causes of action, suits, losses, damages, costs, liabilities, expenses, judgements, penalties and proceedings (including all actual legal costs) which any of the Indemnitees incur, suffer or are put to arising out of or in any way related to unpaid Workers' Compensation Board assessments owing from any person or corporation engaged in the performance of this agreement or arising out of or in any way related to the failure to observe safety rules, regulations and practices of the Workers' Compensation Board, including penalties levied by the Workers' Compensation Board.
- 19.5 The Contractor will ensure compliance with and conform to all health and safety laws, by-laws or regulations of the Province of British Columbia, including without limitation the *Workers Compensations Act* and Regulations pursuant thereto.
- 19.6 The City may, on twenty-four (24) hours written notice to the Contractor, install devices or rectify any conditions creating an immediate hazard existing that would be likely to result in injury to any person. However, in no case will the City be responsible to ascertaining or discovering, through inspections or review of the operations of the Contractor or otherwise, any deficiency or immediate hazard.
- 19.7 The Contractor understands and undertakes to comply with all Workers' Compensation Board Occupational Health and Safety Regulations for hazardous materials and substances, and in particular with the "Workplace Hazardous Materials Information System (WHMIS)" Regulations. All "Material Safety Data Sheets (MSDS)" shall be shipped along with the Goods and any future MSDS updates will be forwarded.

## **20. BUSINESS LICENSE**

- 20.1 The Contractor will obtain and maintain throughout the term of this Agreement a valid City of Surrey business license.

## **21. GENERAL PROVISIONS FOR GOODS**

- 21.1 Documentation for shipments of Goods from outside Canada shall be provided by a Contractor by airmail and shall include all documents as required by law or customary practice. All packages shall be marked as follows:

“Upon arrival, please contact customs broker:  
Livingston International Inc.  
Telephone: 604-685-3555  
Fax: 604-605-8231  
Email: [cst19@livingstonintl.com](mailto:cst19@livingstonintl.com)”

- 21.2 If this Agreement pertains to the fabrication, assembly or other processing of the Goods, representatives of the City shall be permitted free access at all reasonable times for the purpose of inspection, testing or obtaining information as to the progress of the fabrication, assembly or processing.
- 21.3 The City may require that shop drawings be submitted by the Contractor for review prior to the delivery of the Goods. The City may require that a qualified registered professional engineer stamp and approve a shop drawing prior to submission. Any review of shop drawings by the City will not relieve the Contractor from its obligation to deliver Goods in full compliance with all requirements of this Agreement.

## **22. COMPLIANCE**

- 22.1 The Contractor will provide the Services in full compliance with all applicable laws, building codes and regulations.
- 22.2 The Contractor will, as a qualified and experienced practitioner, interpret applicable codes, laws and regulations applicable to the performance of the Services. If an authority having jurisdiction imposes an interpretation which the Contractor could not reasonably have verified or foreseen prior to entering into this Agreement, then the City will pay the additional costs, if any, of making alterations so as to conform to the required interpretation.

## **23. JURISDICTION OF COUNCIL AND NON-APPROPRIATION**

- 23.1 Nothing in this Agreement limits or abrogates, or will be deemed to limit or abrogate, the jurisdiction of the Council of the City in the exercise of its powers, rights or obligations under any public or private statute, regulation or by-law or other enactment.
- 23.2 The Contractor recognizes and agrees that the City cannot make financial commitments beyond the City's current fiscal year. The City will annually make bonafide requests for appropriation of sufficient funds to cover all payments covered by this Agreement. If City Council does not appropriate funds, or appropriates insufficient funds, the City will notify the Contractor of its intention to terminate or reduce the services so affected within 30 days after the non-appropriation becomes final. Such termination shall take effect 30 days from the date of notification, shall not constitute an event of default and shall relieve the City, its officers and employees, from any responsibility or liability for the payment of any further amounts under this Agreement.



## **24. WAIVER**

- 24.1 Any failure of the City at any time or from time to time to enforce or require the strict keeping or performance of any of the terms and conditions contained in this Agreement shall not constitute a waiver of the terms and conditions and shall not affect or impair the terms or conditions in any way or the City's right at any time to avail itself of any remedies as the City may have for any breach of the terms and conditions.

## **25. APPLICABLE LAW**

- 25.1 This Agreement shall be governed by and construed in accordance with the laws of the Province of British Columbia. The City and the Contractor accept the jurisdiction of the courts of British Columbia and agree that any action under this Agreement shall be brought in such courts.

## **26. NOTICES**

- 26.1 Any notice, report or other document that either party may be required or may wish to give to the other should be in writing, unless otherwise expressly provided for, and will be deemed to be validly given to and received by the addressee:

- (a) by hand, on delivery;
- (b) by facsimile, on transmission; or
- (c) by mail, five calendar days after posting.

- 26.2 The addresses for delivery will be as shown in the Quotation. In addition, the City may give notice to the Contractor by email at the Contractor's email address as shown in the Quotation, which email will be deemed to be validly given and received by the Contractor on transmission. The Contractor may not give notice to the City by email.

## **27. MERGER AND SURVIVAL**

- 27.1 The representations, agreements, covenants and obligations set out in this Agreement shall survive the delivery of the Goods and performance of the Services and payment of the Fees and Disbursements.

## **28. ENTIRE AGREEMENT**

- 28.1 This Agreement, including the Schedules and any other documents expressly included by reference in this Agreement, contains the entire agreement of the parties regarding the provision of the Goods and Services, and no understandings or agreements, oral or otherwise, exist between the parties except as expressly set out in this Agreement. This Agreement supersedes and cancels all previous agreements between the parties relating to the Goods and Services.
- 28.2 In the event that the Contractor issues an invoice, packing slip, sales receipt, or any like document to the City, the City accepts the document on the express condition that any terms and conditions in it which constitute terms and conditions which are in addition to or which establish conflicting terms and conditions to those set out in this Agreement are expressly rejected by the City.

## 29. SIGNATURE

- 29.1 This Agreement shall be signed by a person authorized to sign on behalf of the Contractor.
- 29.2 This Agreement may be executed in or one or more counterparts all of which when taken together will constitute one and the same Agreement, and one or more of the counterparts may be delivered by fax transmission or as a PDF file.

## 30. FUEL EMISSIONS DATA

- 30.1 As of January 1, 2013, the City requires contractors to report the quantity of fuel used to operate vehicles, equipment and machinery as part of the delivery of operating (non-capital) services defined as "Traditional Services" in the Carbon Neutral Workbook.v2 as part of the BC Climate Action Charter. Typical data to be submitted would include the following for each calendar year:
- Type of vehicle/vehicle class used to deliver the contracted services;
  - Type of fuel consumed by each vehicle class; and
  - Litres of fossil fuels consumed in relation to the service delivered under the contract.
- 30.2 Fuel consumption associated with the provision of these services must be provided to the City within thirty (30) days of the end of the calendar year or the termination of the contract, whichever is earlier. An excel-based Fuel Use Reporting template will be provided by the City. The most current version of the workbook is located on the Climate Action Toolkit website for your reference at <http://toolkit.bc.ca/carbon-neutral-government>.

## 31. NON ROAD DIESEL ENGINE EMISSION REGULATION

- 31.1 If you **own, operate, or hire** diesel powered equipment, Metro Vancouver's Non-Road Diesel Engine Emissions Regulation Bylaw No 1161, 2012 (the Bylaw) may impact your business. The Bylaw came into force on January 1, 2012 and requires owners or operators to register and label Tier 0 and Tier 1 non-road diesel engines that are 25 horsepower (19kW) or greater in order to operate within Metro Vancouver. Tier 0 engines must have **90 days** of registration purchased by **December 31, 2014** or the engine(s) will be **prohibited from ever operating** in Metro Vancouver. To be fully registered an owner/operator must:
- provide required information (machine/engine/company details),
  - pay fees, and
  - label machines with Metro Vancouver issued registration number.
- 31.2 Other important information:
- Non-road Tier 1 engines must be registered and pay fees to operate,
  - Failure to comply with the Bylaw may result in fines up to \$200,000, and
  - 80% of fees paid into the program can be recovered.
- 31.3 The City may, at its discretion, give preference to equipment that meets higher emission standards.



31.4 Contact Metro Vancouver staff at 604-451-6655, visit [www.metrovancouver.org/nonroaddiesel](http://www.metrovancouver.org/nonroaddiesel) or email [nonroaddiesel@metrovancouver.org](mailto:nonroaddiesel@metrovancouver.org) for more information about the Bylaw, the rebate program, and for assistance with the registration process.

## 32. ENUREMENT

32.1 This Agreement shall enure to the benefit of and be binding upon the respective successors and permitted assigns of the City and the Contractor.

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

### CITY OF SURREY

by its authorized signatory(ies):

\_\_\_\_\_  
(Signature of Authorized Signatory)

\_\_\_\_\_  
(Signature of Authorized Signatory)

\_\_\_\_\_  
(Print Name and Position of Authorized Signatory)

\_\_\_\_\_  
(Print Name and Position of Authorized Signatory)

**<<NAME OF CONTRACTOR>>**

**I/We have the authority to bind the Contractor.**

\_\_\_\_\_  
(Legal Name of Contractor)

\_\_\_\_\_  
(Signature of Authorized Signatory)

\_\_\_\_\_  
(Signature of Authorized Signatory)

\_\_\_\_\_  
(Print Name and Position of Authorized Signatory)

\_\_\_\_\_  
(Print Name and Position of Authorized Signatory)

## **SCHEDULE A**

### **SPECIFICATIONS OF GOODS AND SCOPE OF SERVICES**

#### **PROJECT TITLE: WATER METER MAINTENANCE SERVICES (19mm – 25mm)**

##### **1. SERVICE REQUIREMENTS**

The City invites Quotations from experienced and qualified Contractors for the provision of water meter maintenance services and any other requirements to the City's residential and commercial water meters under program work. The Contractor may be required to replace existing meters and perform water meter testing works to the City's various sites.

The instructions and specifications listed apply to and govern minor water meter maintenance services and water meter testing works. All maintenance services are to be completed in accordance with Schedule A-1 Water Meter Design Criteria Manual & Supplementary Specifications (dated June 2016), when possible, included herein as. In addition, all maintenance services; water meter testing are to be completed by a certified plumber or alternatively a certified plumber is to be on site during the maintenance service and field testing.

##### **2. SCOPE OF SERVICES**

The Contractor will provide, at a minimum, all labour, materials, tools, equipment, supervision, inspections, transportation and related services to provide water meter maintenance services. The Services to be performed by the Contractor should include, but not limited to the following:

###### **2.1 Water Meter Maintenance Program**

The City anticipates that on an annual basis approximately 1500-2000 positive displacement meters will experience read difficulties and require maintenance to address one or more of maintenance items as listed in Schedule B-2.

Water meters requiring maintenance under program work will be provided to the Contractor in monthly maintenance service lists and work orders generated by the City's work management system (Cityworks).

###### **2.2 Water Meter Testing**

The City's water customers may request their water meter to be tested when the customer feels the meter is unfavourably registering the water being consumed. Accordingly, the City may request the Contractor to test the meter. Testing is preferred to be undertaken in the field, but in certain circumstances would be required to be done in a test lab. A certified meter tester will be required to undertake all meter testing. Contractor will be required to send a copy of testing equipment certification tags.

### 3. APPROVED METERS FOR THIS CONTRACT

Sensus	iperl	20mm
	iperl (UL Listed)	25mm
	Omni C2	50mm
Badger (New)	RCDL 35	20mm
	RCDL 55	25mm
	RCDL 170	50mm
	RCDL Compound	50mm
Neptune (New)	T-10	20mm
		25mm
		50mm

### 4. RESPONSIBILITIES OF THE CONTRACTOR

The Contractor should:

- (a) Determine the maintenance schedule for the defective water meters provided in the maintenance lists supplied by the City;
- (b) Locate water meters and carryout maintenance services listed in accompanying work orders;
- (c) Carryout necessary repairs at the Contractor's cost, to any property damage (City and third-party including private properties) caused directly or indirectly during (due to) execution of the Contractor's maintenance service. Action should be immediate and the property should be restored to its original state at an accepted standard by the property owner;
- (d) Advise the property owner and the City, prior to commencement of work, of any site alterations that are required to complete the maintenance service. Digital photos taken before and after maintenance service and details of the alterations must be provided to the City. All alterations must be restored to original state or better;
- (e) Communicate with property owners/tenants of the sites that are serviced. This includes scheduling of work, post-service communication and hand delivery of any advisory / instruction letters issued by the City to the respective property owners/tenants;
- (f) Report electronically to the City on a weekly basis the completion status of all sites issued for maintenance;
- (g) Collect meter data as specified by the City and forward it in a format specified by the City and tag all removed meters (usable and unusable). Tags and notes are to be waterproof and must indicate the account number, property address of the site from which the meter was removed and the meter reading at removal date. The removed meters are to be delivered to the City of Surrey Works Yard located

at 6651 – 148 Street, Surrey, BC. The Contractor will dispose of all other parts after maintenance service at a location approved by the City;

- (h) Undertake the work without causing damage to the City's shut-off valve and service pipe and without causing damage to the owner's plumbing system. The Contractor will be responsible for any damages, including costs to repair the shut-offs and service pipe;
- (i) Provide notification to the City of any required asphalt or concrete removal areas prior to undertaking the maintenance service;
- (j) Provide notification to the City if the City shut-off valve(s) is not operational or cannot be located prior to commencing any meter repairs. The Contractor is to confirm that the meter cannot be read via touch read method electronically. If the meter can be read electronically no further work shall be undertaken and this status (no maintenance required) must be reported to the City within 48 hours;
- (k) Perform quality control audits necessary to conform compliance of the work with City standards;
- (l) At all times ensure the safety of the public (vehicular and pedestrian traffic) and its employees while performing water meter maintenance services; and
- (m) The Contractor is responsible for the cleanliness of the job sites and is accountable for the disposal of all excess and scrap materials. The job sites, at all times must be kept clean of any debris to avoid mishaps and all unwanted materials must be disposed of in an environmentally friendly manner at approved sites with no extra expense to the City;
- (n) At all times the Contractor must be able to display personal photo Identification tags while on location and vehicles must identify the name of the organization or have City of Surrey Contractor decals.

## **5. WEATHER LIMITATIONS**

- 5.1 The Services are to be continuous except in the event of inclement weather. The City reserves the right to suspend any or all work due to poor weather conditions. The City reserves the right to authorize the delayed work to be performed at a later date, or the City may deem it more appropriate to omit the delayed work and resume the normal schedule. The Contractor should not perform any suspended work without written authorization from the City.
- 5.2 While work is suspended due to inclement weather conditions, the Contractor should maintain readiness to resume work when conditions again become favorable enough to proceed.

## **6. CHANGES TO THE WORK**

- 6.1 If additional or different maintenance is required but is not listed in the Schedule B, the Contractor should notify the City prior to completing the service and document the exact maintenance required. The City reserves the right to deny or approve of any additional maintenance service work that is required to bring the water meter system to City standards. If the Contractor has completed additional maintenance work other than the services listed in Schedule B without prior written notification to, and acknowledgement

by the City, the City will not be responsible for those additional costs and the Contractor should be responsible for the costs.

- 6.2 The locations of program work will be provided to the Contractor in aforementioned maintenance service items. It is at the Contractor's discretion to determine an appropriate maintenance schedule, although the City reserves the right to prioritize, any portion or the entire maintenance service items as it sees fit. The Contractor will be expected to complete the sites as advised and their quoted prices will remain valid.

The City reserves the right to add or remove any site/location from any of the lists provided during the course of the Contract.

## **7. INSPECTION OF SERVICES PERFORMED**

- (a) The City may conduct perioding inspections and spot checks to review the quality of work performed, the accuracy of submitted records, and claims for any type of maintenance service completed. If, in the opinion of the City, the Contractor is not meeting the requirements of the Contract, or the concerns arise relating to the quality of maintenance service being completed, or the accuracy of recorded information, the City may impose full time inspection for the remainder of the Contract. The additional cost for the full time inspection by the City is estimated at \$500.00 per day. The cost for the additional inspection should be borne by the Contractor;
- (b) City may decide to reduce the level of this full time inspection at any time, if the City is satisfied that the performance has improved during the Term of the Contract.
- (c) If it is determined during the spot checks that the maintenance work has not been satisfactorily completed or performed as intended, the Contractor must make the necessary changes at no extra expense to the City.

## **8. ESTIMATED QUANTITIES**

The respective amounts of work to be done and carried out and materials to be furnished in the schedule of quantity ranges and unit prices are an estimate for purpose of comparing Quotations only. The City does not expressly nor by implication agree that the actual amounts of work or material of any class will correspond even approximately to this estimate, but reserves the right to increase or decrease the amounts of any class or portion of the work, or to omit portions of the work that may be deemed necessary or expedient by the City. The Contractor should make no claim for anticipated profits, for loss of profit, for damages, or for any extra payment whatsoever, except as provided for herein, because of any difference between the amount of actual work done and material actually furnished and the quantities stated in the schedule of quantity ranges and unit price.

## **9. MAINTENANCE SERVICE ITEMS**

- (a) **Locate and Expose Buried Meter Box** should include locating, exposing, and cleaning the meter box (lid included), reinstatement of landscaping and all other works required to locate and expose the meter. Cost for disposing the material

removed while exposing the meter should also be included. This item will only be applicable when the City has defined the problem type as "locate & expose buried meter box". Payment will not be considered for any other circumstances.

- (b) **Removal and Re-installation of Asphalt or Concrete Surfaces** should include the supply and finishing of asphalt, removal and disposal of asphalt or concrete, and all other works required to restore the asphalt or concrete surface. All asphalt and concrete materials used to restore the removed surface should be in accordance with City specifications. At no time unless otherwise specified by the City, is the Contractor to use temporary materials to restore the removed surface.
- (c) **Hazards and Debris Removal** should include collection and disposal costs. Syringes and needles must be placed in a SHARPS container. Areas of hazard and debris removal include the inside of the meter box and five square meters (5m<sup>2</sup>) surrounding the meter box suitable to provide clean access to read meter.
- (d) **Replace Wiring** (from meter to touchpad) should include the supply and installation of the wiring, disposal of the old wiring, and all other works required to replace wiring.
- (e) **Lid Replacement** should include the supply and installation of the lid and disposal of the old lid.
- (f) **Mount Pitpad** into existing lid should include costs for drilling a hole into the lid, placement of the pitpad into the lid, and all other works required to mount the pitpad. Mount Pitpad with new lid should include costs for the lid, the placement of the pitpad into the lid, and all other works required to place the pitpad into the new lid.
- (g) **Replace Remote Receptacle** should include the supply and installation of a wall mount pad or pitpad, disposal costs of the old touchpad, and all works required to install the remote receptacle.
- (h) **Relocate Remote Receptacle** should include the cost for removal and installation of the remote receptacle from its current location to a more accessible area, wiring, and all other works required to relocate remote receptacle.
- (i) **Pre-Cast Concrete Meter Box Risers** should include the supply and installation of the riser(s), removal of the surrounding landscape, disposal of materials, and all other works required to adjust the height of the meter box or replace damaged or missing meter box risers;.
- (j) **Replace Register** should include supply and installation of the register, removal of the old register, disposal of the old register, connection to the remote receptacle, and all other works required to install the register.
- (k) **Replace Water Meter** should include supply and installation of the new water meter, removal and reading of old meter, recording of new meter information, fittings, piping, and all other works required to install the new meter. The cost should also include the delivery of the removed water meter to the City's Works Yard.
- (l) **Replace Meter Setter** should include the supply and installation of the meter setter, removal of old meter setter, meter and debris from the meter pit (includes drainage rocks, soil, dirt, etc.), supply and installation of new piping, fittings, and all other works required to replace the meter setter.

- (m) **Replacement of Water Meter System** should include supply and installation of: water meter, remote receptacle, lid, meter setter, meter box, piping, fittings, valves, removal and reinstatement of landscaping, raising the meter to specifications from the depth specified, and all other work required to replace the water meter system.
- (n) **No Maintenance Site Visit** should include travel time and vehicle cost. This cost will apply if the Contractor is unable to perform maintenance services upon arrival at the site and for site investigations. This cost may be used once per site unless the City has approved the additional visits.
- (o) **Replace Meter Base Plates** should include the supply and installation of the base plate, removal and disposal of the old base plate, and all other works required to replace the base plate.
- (p) **Service Pipe Leak Repairs** should include the determination of the location of the leak, repair of the service pipe, and/or connectors, removal and disposal of the damaged service pipe and/or connectors, and all other works required to repair the service pipe. At no time unless otherwise authorized by the City, is the Contractor to repair service pipe beyond 0.5 meter from the face of the meter box. In all instances, prior authorization from the City is required for any repairs to Service pipes.
- (q) **Meter Testing** should include the testing, reporting and all other work required to test the water meter. Wherever possible, the meter is to be tested in the field. Test flows should include a minimum of three (3) representative flows for high, low and cross-over conditions as provided, by the meter manufacture, and two (2) flows representative of the property owners' water consumption as determined by the City.

Meter Testing is intended to be based on customer requests or City concerns regarding the accuracy of a specific meter. The City proposes to issue a separate Contract(s) for the sample testing of meters to assess the accuracy of overall meter population. The City reserves the exclusive right to determine under which Contract the testing of a meter to be assigned.
- (r) **Confined Space Entry** should include all equipment and manpower to setup and carryout work in a confined space as defined by Work Safe BC.
- (s) **Dewatering Meter Chamber** should include all equipment and manpower to remove water from the water meter chamber to permit maintenance repairs to the water meter.
- (t) **Line Freeze** should include all equipment and supplies to freeze the water line to the permit maintenance repairs to the water meter.
- (u) **Curb Stop Maintenance** should include determination of the location of the leak, repairs to the City's curb stop, removal and disposal of the damaged curbstop, and all other works required to repair the curb stop. In all instances, prior authorization from the City is required for any repair to curb stops.
- (v) **Re-Program Register** should include all equipment and supplies to re-program the water meter register to indicate correct and accurate meter readings.
- (w) **MXU Installation** should include supply and installation of Meter Transceiver Unit (MXU) and all other works required to install an MXU to an existing meter.



- (x) **Miscellaneous Work** should include additional, non-listed works considered necessary by the Contractor to adequately reflect his carrying out of the minor meter maintenance. The Costs listed should not include any expenses reflected to the previous listed works. The Contractor is to provide a brief description of his anticipated miscellaneous work.

**N.B.** All Unit prices are to include reading of the repaired meter and submission of an electronic repair report and the same information entered in a City work order.

## **10. TRAFFIC AND PUBLIC SAFETY**

- (a) At all times during the work or activities included in this specification the Contractor should take full responsibility to ensure that traffic control is carried out in accordance with the Ministry of Transportation and Highways regulations for work performed on provincial highways and including their right-of ways. 16.2 The City may apply for permit from the Ministry of Transportation and Highways for work performed on provincial highways and including their right-of-ways. The *Contractor* should at his own expense obtain a copy of the permit from the City and should comply with all conditions of the permit.
- (b) The Contractor should at all times ensure the safety of the public (vehicular and pedestrian traffic) and its employees while maintaining or replacing existing meters and performing water meter testing works to various City meters.
- (c) Whenever such works are carried out in City road allowances and/or Provincial roads, the Contractor at its expense, is to provide:
- all necessary signs, materials, barricades, and other warning devices;
  - qualified and trained Traffic Control Personnel for traffic flagging services;
  - and,
  - Additional services to ensure safety may be required at the discretion of the City. The Contractor is to provide such additional services as directed at no extra cost.

## **11. CLEANLINESS AND DISPOSAL OF UNWANTED MATERIALS**

- (a) The Contractor is responsible for the cleanliness of the job sites and accountable for the disposal of all excess and scrap materials. The job sites, at all times must be kept clean of any debris to avoid mishaps and all unwanted materials must be disposed of in an environmentally friendly manner at approved sites with no extra expense to the City;
- (b) The Contractor should dispose of all debris, trash and unsuitable materials collected under this Contract off site. The Contractor is solely responsible for any and all damages done or regulations violated in the disposal of waste materials and for any other actions, which the Contractor performs; and
- (c) The Contractor should be responsible to take all necessary measures to comply with the requirements of the Federal and Provincial environmental protection agencies, City by-laws, the *Waste Management Act*, R.S.B.C. 1996, c. 482, as



amended and any other applicable acts and regulations in respect to air, earth and water pollutants.

## **12. NOTIFICATION/SCHEDULE OF WORK**

- (a) The Contractor should notify the City of his work schedule one week in advance, either by electronic submission, or weekly scheduled meetings as optimally determined by the City.
- (b) The hours of work will be from 7:00 a.m. to 5:00 p.m., Monday through Friday, or as approved by the City.
- (c) The City should be informed one week in advance of any planned stoppage or restart of work.
- (d) If at any time the Contractor discovers that the time schedule cannot be met it will immediately advise the City in writing and provide a revised time schedule for the City to review and approve.

## **13. CONTRACTOR'S VEHICLES AND EQUIPMENT**

- (a) The Contractor's vehicles and equipment used in the performance of the Services should be properly equipped to deliver the Services. All of the Contractor's vehicles and equipment should be equipped with approved back-up alarms, multiple lite revolving / strobe lights, or other necessary warning systems, which should be maintained and in proper operating condition at all times. In the event of a breakdown, the Contractor should arrange for reserve equipment, with always the intent to maintain the schedule frequency.
- (b) Vehicles used in the performance of the Services should be identified on both sides with the full company name and telephone number. This must be fully legible and displayed in a professional manner.
- (c) The Contractor should affix a City Surrey Contractor sign to each side of their vehicle(s).
- (d) Driving speed through City parks will be at a maximum of 10 km/ hour, and the Amber lights on each vehicle must be used during the course of business in City parks.
- (e) In carrying out the Service, or any portion thereof, the convenience of the public must always be considered and provided for by the Contractor, who must not obstruct any street, thoroughfare or sidewalk longer than necessary. All pedestrian walkways must be maintained in a safe condition at all times. Any discontinuities likely to prove hazardous to the public and / or pedestrians must be removed, barricaded or clearly and safely marked.

## **14. HEALTH, SAFETY AND PROTECTION**

- 14.1 All personnel shall wear the proper personal protective equipment to perform grass cutting work which shall include but are not limited to CSA approved footwear, eye and hearing protection in accordance with the Occupational Health and Safety Act, WCB. of

British Columbia and in accordance with the equipment manufacturer's operating instructions, while performing grass cutting operations.

- 14.2 The Contractor shall assume all responsibility for damages to property or injuries to persons, including accidental death, attorneys fee and costs of defence which may be caused by Contractor's performance of the Services, whether such performance be by itself, its subcontractor, or anyone directly or indirectly employed by Contractor or its subcontractors and whether such damage shall accrue or be discovered before or after termination of the Services.
- 14.3 The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Services. The Contractor shall take every precaution to instruct personnel about and otherwise safeguard them against any possible injuries as well as other potential hazards within the parks.
- 14.4 Accident Reports: The Contractor shall comply with all WCB regulations and other regulatory agency requirements for record keeping and reporting of all accidents resulting in death, trauma, or occupational illness. Any and all accidents, regardless of how minor, involving another person, private property, or vehicle, shall be reported immediately within one hour of occurrence and a written follow-up report to the Surrey RCMP. The Department Representative shall also be contacted immediately and be provided a copy of any reports.
- 14.5 The Contractor shall conform to all applicable Federal, Provincial and local laws, and to the requirements of this Agreement. In performing Services under this Agreement the Contractor must:
- (a) Take all reasonable steps and precautions to prevent accidents and to preserve the health and safety of Contractor's personnel performing or in any way coming into contact with the performance of this Agreement;
  - (b) Take all reasonable precautions to prevent the release of hazardous chemicals into the environment;
  - (c) Take such additional precautions as the Department Representative, or designate may reasonable require for health, safety and environmental protection; and,
  - (d) Any violation of these health, safety and environmental rules and regulations, unless promptly corrected as directed by the Department Representative, or designate shall be grounds for termination of this Agreement in accordance with the Default Clause of this Agreement.
- 14.6 Smoking is not permitted in any City Building or Park.

**-END OF PAGE-**

## SCHEDULE A-1



### **WATER METER DESIGN CRITERIA MANUAL & SUPPLEMENTARY SPECIFICATIONS (DATED JUNE 2016)**

**NOTE:**

This document is intended for new installations and that not all specifications can be achieved when upgrading an existing meter systems . The contractor will have to bring designs forward to the city for review on some locations.



# WATER METER



## Design Criteria Manual & Supplementary Specifications

JUNE 2016

## SCHEDULE OF REVISIONS

Description	Page
<b>General</b>	
Numbering - The numbering scheme has been revised to better distinguish between the Preamble, Design Criteria Manual, and Supplementary Specifications sections of the document.	All
<b>Preamble</b>	
Temporary Construction Services – Responsibilities for metering of temporary construction water service connections has been included.	ii
<b>Design Criteria Manual</b>	
Meter Sizing – Revisions to the meter sizing methodology include: <ul style="list-style-type: none"> <li>Removing the requirement to size the meter based on 80% of the manufacturer's maximum instantaneous flow rating and maximum pressure loss of 48 kPa at the total peak fixed demand.</li> <li>Revising how the total peak fixed demand is calculated based on the domestic and irrigation demands.</li> <li>Adding a meter sizing table in Appendix A for various flow ranges.</li> </ul>	1 and Appendix A
Meter Selection – The protocol for metering residential homes with fire sprinklers has been updated.	1
Meter Location – The horizontal distance between the property line and meter box has been adjusted to a range of 300 mm to 800 mm.	1
Meter Configuration – Sub-sections have been added to detail the requirements for Reducers, Setters, and Test Ports.	2 - 3
Remote Receptacles – The requirement to equip inside meters with a radio transmitter end-point has been included.	3
<b>Supplementary Specifications</b>	
Approved Products – The list of approved water meters has been revised.	SS-1
Registers – Specifications have been updated to reflect new electronic registers.	SS1 - SS-2
Setters – A section has been added to outline the specifications for meter setters.	SS-3

Description	Page
<b>Appendices</b>	
Appendix A – A revised meter sizing calculation sheet and example are provided in addition to a meter sizing table.	Appendix A
Appendix B – The Supplementary Detail Drawings have been updated.	Appendix B



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**APPENDICES**

APPENDIX A	Water Meter Sizing Calculation Sheet and Example
APPENDIX B	Supplementary Detail Drawings



## PREAMBLE

### Introduction

This document outlines the *City's* requirements for the installation of cold-water meters on municipal water services. It is divided into two separate parts, the Design Criteria and the Supplementary Specifications.

### Intent

The Design Criteria are intended to provide direction to the *Applicant* and *Applicant's Engineer* on the elements required to be considered in the design of new water meter installations. It is intended to be used in conjunction with the *City of Surrey* Design Criteria Manual.

The Supplementary Specifications are intended to provide direction to the *Applicant* and *Applicant's Engineer* on the specifications that must be incorporated into building servicing contracts for the installation of new water meters. The Supplementary Specifications are to be used in conjunction with the *City of Surrey* Supplementary Specifications document and the *City* approved edition of the Master Municipal Construction Document (MMCD).

### Glossary of Terms

" <i>Applicant</i> "	Refers to a property <i>Owner</i> , <i>Developer</i> , or authorized agent who makes an application for connection to a water service.
" <i>Applicant's Engineer</i> "	Refers to a professional engineer hired by the <i>Applicant</i> to design the installation of the meter.
" <i>ASTM</i> "	Refers to the American Society for Testing and Materials.
" <i>AWWA</i> "	Refers to the American Water Works Association.
" <i>City</i> "	Means the <i>City of Surrey</i> .
" <i>CSA</i> "	Means the Canadian Standards Association.
" <i>Developer</i> "	Means person(s) or organization(s) developing property as per <i>City</i> guidelines.
" <i>General Manager, Engineering</i> "	Means the General Manager or their appointed designate of the Engineering Department of the <i>City</i> .
" <i>NFPA</i> "	Refers to the National Fire Protection Association.
" <i>Owner</i> "	Means the property <i>Owner</i> as defined by the latest Surrey Waterworks Regulation By-law.

## Responsibilities

The Surrey Waterworks Regulation and Charges By-law, 2007, No. 16337 (as amended) Part 9 outlines metering requirements for specific scenarios.

For all new connections, the *Applicant* must supply and install all piping, fittings, meter chamber(s) / vault(s), and equipment.

The *City* supplies and installs 19 mm meters for single family and duplex residential construction at the *Applicant's* cost. Meters for temporary construction service connections are supplied and installed by the *Applicant*.

Backflow prevention devices, although not covered within this document, are to be installed in accordance with Surrey Waterworks Cross Connection Control By-law, 2013, No. 17988 (as amended).

## Timing

For new connections, the installation of a water meter is triggered by an application for a Building Permit or Plumbing Permit. Following the issuance of the Building Permit, the *Applicant* and *City* shall confirm the meter size and location within the property and relative to any structures.

For new single family residential dwellings, water meter chambers, setters, and lids are to be installed by the *Applicant* and the *City* supplied and installed water meter shall be in place prior to *City* activation of the water service curb stop.

The meter area must be kept free and accessible at all times in order to facilitate the installation of the meter. The *Applicant* is responsible for protection of the meter installation from damage and must repair any damage that occurs to the chamber, setter, meter, or lid. The *Applicant* shall ensure that the meter chamber and lid are adjusted to final grade and remain unobstructed to facilitate maintenance, reading, and testing.

In the case where a drawing submission is required (Design Criteria Manual Section E) installation of the water service, chamber, or meter within private property shall not begin prior to *City* approval of the meter design drawings.

## DESIGN CRITERIA MANUAL

### A. Meter Sizing Methodology

For all single family residential homes without fire sprinklers the water meter size shall be 19 mm except in the case where the *Applicant's Engineer* can demonstrate the need for a larger service connection. All other meters should be sized in accordance with AWWA M22 *Sizing Water Service Lines and Meters* and the *City of Surrey Water Meter Sizing Calculation Sheet* contained in Appendix A. It should be noted that this methodology is based on the AWWA fixture value method and not the fixture unit method employed in the BC Building Code for piping within buildings.

For developments that are proposed to be phased, the meter chamber and piping must be sized for the meter required for the ultimate build-out of the development. However, the initial meter installed must be sized to accurately capture the range of flows for the first phase.

The *Applicant* or *Applicant's Engineer* must ensure that the meter selection and installation requirements are appropriate for the designed application without unnecessarily oversizing the meter or restricting water pressure.

### B. Meter Selection

Meters approved for use in the *City* are listed in Section 1.1 of the Supplementary Specifications.

Only one domestic meter is to be supplied per property unless otherwise approved by the *City*. The only exception is duplex units where two separate domestic meters are to be provided.

Fire services shall be separated from domestic services at property line. The exception to this is for single family residential homes that employ fire sprinklers. In this case a combined service is acceptable, but the meter must be of the appropriate size and type for fire protection applications.

Backflow prevention device requirements are outlined in Surrey Waterworks Cross Connection Control By-law, 2013, No. 17988 (as amended).

### C. Meter Location

All meters 50 mm and smaller must be located at the property line in a chamber unless otherwise approved by the *City*.

For property line installations the meter box or vault must be located on private property, within 300 mm to 800 mm from the property line as indicated on Supplementary Detail Drawing SSD-WM1. Water meters shall not be installed within any utility right-of-way, unless such right-of-way is designated for a water meter installation. An area of at least 1.0 m horizontal and 2.0 m vertical around the meter box or vault should be free of major landscaping or objects, including shrubs, fences, retaining walls, etc., to facilitate future



maintenance of the meter assembly. Grading of the area around the chamber must ensure positive drainage away from the chamber.

Where the meter is approved to be installed within a building, the installation should be within reasonable distance of a floor drain. The floor drain must be suitably sized to accept the flows associated with meter testing. The meter should be installed a minimum of 600 mm above the floor slab. A space of at least 1.0 m horizontal and 1.0 m vertical from the meter assembly shall be free of obstruction to allow for convenient servicing and testing of the meter at all times. No electrical, mechanical, or water-sensitive equipment should be placed or installed under the meter assembly or in an area where splash or flow from the meter assembly could occur during the servicing of the meter.

#### **D. Meter Configuration**

The general configuration for single family residential meter installations is illustrated on Supplementary Detail Drawing SSD-WM1. For all meters 50 mm and larger, configuration details shall be determined by the *Applicant's Engineer* and outlined in the submittal drawings.

For all meters 50 mm and larger, adequate straight length pipe shall be provided upstream and downstream of the meter in order to comply with manufacturer's recommendations for maximum accuracy. Bypass tees and isolation gate valves may be located within the straight length distance in accordance with manufacturer's recommendations. A restrained coupling must be provided on the downstream side of the meter for flexibility in case of meter removal.

##### **i. Isolation Valves**

Isolation valves are required to be installed upstream and downstream of the meter assembly. Isolation valves must be the same size as the corresponding incoming and outgoing water service connection. Isolation valves must be in the same chamber as the meter, unless otherwise approved by the *City*.

##### **ii. Reducers**

Any reduction in the size of the incoming or outgoing water service connection must occur between the isolation valves and within the chamber. If the installation involves a reduction in water service size, the isolation valve spacing must be sufficient to accommodate a meter that is the same size as the service connection.

##### **iii. Bypasses**

A locking bypass is required to be installed on all 50 mm and larger meters.

For all meters, the bypass shall be half the size of the water service (prior to any reduction), except for facilities with critical flow requirements. Where a combined fire and domestic service is approved for a single family residential home with fire sprinklers, the bypass shall be the same size as the water service.

The complete bypass (including tees, piping, and valve) must be within the same chamber as the meter.

After testing the installation, the bypass valve must be closed and sealed.

Bypasses must not be located directly above the meter in a chamber setting; however, rotating the bypass 45 degrees is permitted if space governs.

**iv. Setters**

Setters are only permitted for water meters 50 mm diameter or smaller.

**v. Test Ports**

Test ports shall be provided for all meter assemblies 50 mm diameter or larger. In the absence of a test port on the meter case, a test tee must be installed with a 50 mm diameter threaded lateral and plug at a distance of three pipe diameters downstream of the meter.

**vi. Remote Receptacles**

For exterior meters installations, remote receptacles must be mounted to the chamber lid. At least 1.8 metres of 22 gauge, three-colour (red, green, black) wire shall be provided between the receptacle and meter. Remote wiring connections shall be factory or field sealed to ensure that the connection is waterproof.

For inside meter installations, where approved by the *City*, wall mounted remote receptacles should be located approximately 1.6 metres above grade and easily accessible for reading. Where possible, receptacles should be located adjacent to gas or electric meters. For all inside meters, the remote receptacle shall be equipped with a radio transmitter end-point.

**vii. Chambers**

Meter chambers, or where specifically approved above ground enclosures, must be selected to provide adequate space for removal and testing of all equipment within the meter assembly. Access lids, latches, and ladders must comply with the current requirements of the Workers Compensation Board and provide adequate space for testing and removal of meters, and where applicable, backflow prevention devices.

Thrust beams must be designed for all chambers housing equipment 75 mm or larger to ensure that the thrust force is transferred to the full width of the chamber. The *Applicant's Engineer* shall ensure that the chamber manufacturer is in agreement with the thrust bearing area on the chamber.

All chambers for meters 75 mm and larger must be equipped with a sump and drained by either a gravity connection to the storm sewer, or where this is not possible by a sump pump. The *Owner* is responsible for providing power to the sump pump in accordance with the BC Electrical Code.

## E. Submissions

For all meters 50 mm and larger, the Plumbing Permit Application submitted by the *Applicant* shall be accompanied by:

- A site plan at 1:500 scale and chamber layout at 1:250 scale;
- Location of meter chamber relative to overall site development plan (dimensioned from property corner);
- Future phasing of the project;
- Meter size, type, and manufacturer;
- Demand flow calculations in accordance with Appendix A;
- Chamber drain type and discharge location;
- Site specifics (ie. building use);
- On-site fire system (hydrants, fire sprinklers);
- Irrigation systems; and
- Any other relevant information pertaining to the proposed meter installation.

For all meter assemblies 50 mm and larger, the *Applicant's Engineer* must provide sealed design drawings and shop drawings of the complete meter installation and relevant calculations, to demonstrate the appropriateness of the sizing of the meter, for *City* approval prior to installing the meter. A meter chamber design drawing template is provided in Appendix B (SSD-WM2).



## SUPPLEMENTARY SPECIFICATIONS

### 1.0 PRODUCTS

#### 1.1 Water Meters

- .1 Unless a variation is justified, the *City* will only accept approved makes and models of water meters. The following meters are approved by the *City*:

Table 1 – Acceptable Meters

Manufacturer	Model	Sizes
Sensus	iPERL	25 mm and smaller
	OMNI C <sup>2</sup>	50 mm and larger

Alternate meters may be accepted, but must be approved by the *General Manager, Engineering*.

- .2 All meters 25 mm and smaller shall meet the following requirements:
- Must meet appropriate AWWA standards.
  - Must be capable of 95% accuracy at low flows less than or equal to 0.031 L/s (0.5 usgpm).
- .3 All meters 50 mm and larger shall meet the following requirements:
- Must meet appropriate AWWA standards.
  - Must be capable of 95% accuracy at low flows less than or equal to 0.031 L/s (0.5 usgpm).
  - Must have bolt flanged ends.
- .4 All meters must be new. Used or reconditioned meters are not acceptable.

#### 1.2 Registers

- .1 Meters must have encoder-type remote-registration conforming to the latest version of AWWA C707.
- .2 The register must provide at least eight-digit visual registration at the meter with the ability to simultaneously encode (in digital format) at least eight significant digits of the meter reading for transmission through the remotely located receptacle. A meter identification number must also be provided with each reading. For the purposes of billing, electronic registration must return registration (meter read) to the nearest cubic metre.



- .3 The month and year of manufacture and other identification information must be clearly printed on the face of the register. The register must have an electronic flow-indicating display, including flow direction. The units of measurement shall also be electronically displayed on the register.
- .4 All registers must be provided with factory podded moisture protection for internal components suitable for operation in flooded or humid pit / chamber conditions.
- .5 All registers must have integral data logging capabilities and able to store a minimum of 30 days of hourly data. Battery life must be guaranteed for a minimum of 10 years.
- .6 All registers must be new. Used or reconditioned registers are not acceptable.

### **1.3 Remote Receptacles**

- .1 Remote receptacles must either be wall or pit mount style. Remote receptacles must not include a remote display or data storage.
- .2 The materials employed must be corrosion resistant, resistant to ultraviolet degradation, unaffected by rain or condensation, and compatible with rugged service and expected life.
- .3 Wall mounted receptacles shall be sealed to prevent water intrusion with the terminal screws concealed by the receptacle. Excess wire must be looped and mounted on the wall adjacent to the meter.
- .4 The receptacle shall be mounted such that it is easily accessible by the meter reader or *City* staff.

### **1.4 Pipe and Fittings**

- .1 Connections 75 mm in diameter and greater must be restrained to the *City* watermain.
- .2 All pipe material within chambers shall be ductile iron, Schedule 80 PVC, C900 PVC, polyethylene, or Type K copper. All products must be approved for potable water application. All joints within the chamber must be restrained (ie. flanged, glued, welded, threaded).

## 1.5 Valves

- .1 Valves, except for lockable bypass valves, up to 50 mm in diameter must meet AWWA C800, and must have bronze case with National Pipe Threaded (NPT), soldered, compression type or flange connections. Valves must be full port ball valves using rubber o-ring seals. Actuation is to be by a curb-stop style operating nut.

Valves over 50 mm in diameter on domestic services must be ductile iron, resilient seat, with non-rising stem (NRS), gate valves with flanged ends, and must meet AWWA C509. Stem seal to be o-ring type. Actuation is to be by a standard 50 mm square-operating nut.

- .2 All valves on fire service lines must comply with NFPA and Fire Code requirements.
- .3 All 50 mm bypass valves must be brass (inside) or stainless steel (chamber) with locking lever (MA Stewart or approved equal). All bypass valves must have a lock wing on the operating nut and the case.

## 1.6 Setters

- .1 For 19 mm and 25 mm services, setters shall be equipped with a full port inlet ball valve and dual check valve on the outlet. For 50 mm services, the setter shall be equipped with a full port inlet ball valve and full port outlet ball valve.
- .2 All setters must meet NSF 61 Annex F/G requirements.

## 1.7 Flange Adapters

- .1 Flange adapters for 50 mm to 200 mm sizes must conform to AWWA C219.

## 1.8 Bolts and Nuts

- .1 Bolts and nuts must be stainless steel. Bolts shall conform to ASTM F-599 or F-731. Heavy hex nuts shall conform to ASTM F-574 or F-836. Threads, fit, and dimension must conform to AWWA C111.

## 1.9 Meter Chambers

- .1 Meter pits and vaults shall be pre-cast concrete.

Alternate meter pit materials may be accepted, but must be approved by the *General Manager, Engineering*.

- .2 Lids must be capable of withstanding H-20 static loading, except where lids are located in travelling surfaces where H-20 dynamic loading applies.

- .3 Lids for meter boxes up to and including 560 mm x 860 mm (internal dimensions) shall be cast iron. Lids for meter chambers larger than 560 mm x 860 mm (internal dimensions) must be aluminum spring assisted and divided into multiple sections where the dimensions exceed 900 mm in any direction. Manhole access is not acceptable unless approved by the *City*.
- .4 Lids must have one 45 mm hole for mounting the remote receptacle, which must be sealed until the installation of the receptacle.
- .5 Exterior surfaces of all chambers must be damp proofed by applying an asphalt emulsion coating to all exterior surfaces. Construction joints must be made water tight with an appropriate sealant. All pipe penetrations through chamber walls must be sealed and waterproof.

## 2.0 EXECUTION

### 2.1 Meter Installation

- .1 Meters must be installed horizontally with the register casing oriented upward. For single family residential dwellings the meter should be centered as much as possible in the chamber.
- .2 Meters, valves, and bypasses should be supported with appropriate steel pipe stands. Meter installations must be checked for leakage at completion of the installation. The assembly should be flushed and air must be eliminated from the system. By running water through the meter and performing a visual check of the low-flow indicator, the proper operation of the meter should be established.
- .3 For all temporary connections, meters are required and must be installed at the upstream end of the connection.
- .4 Insulation blankets must be installed for all single family installations.

### 2.2 Receptacle Installation

- .1 For meters installed at property line, remote register receptacles must be mounted to the meter box or chamber lid according to the manufacturer's instructions. A minimum length of 1.8 metres of 22-gauge three-colour (red, green, black) wire shall be provided, connected and sealed at the receptacle without terminal exposure. Remote wiring connections must either be factory or field sealed to ensure waterproof connections.

- .2 Wall mounted remote receptacles must be located where possible near the gas or electric meter approximately 1.6 metres above grade (ground) and easily accessible for reading. The communication cable (wire) from the meter to the receptacle must be installed in accordance with the manufacturer's instructions and must not exceed recommended length. The cable must be run neatly in horizontal or vertical directions only, in an approved casing or duct. Buried casing / duct should be at least 600 mm deep. Wall penetrations associated with remote receptacle wiring shall be sealed to prevent moisture intrusion.

### **3.0 SUPPLEMENTARY DETAIL DRAWINGS**

#### **3.1 Supplementary Detail Drawings**

- .1 The following Supplementary Detail Drawings are provided in Appendix B:
- SSD-WM1 – Installation Detail for Meters 25 mm Diameter and Smaller
  - SSD-WM2 – Meter Chamber Design Drawing Template

## **Appendix A – Water Meter Sizing Calculation Sheet and Example**





# Water Meter Sizing Calculation Sheet

For Non-Fire Service Meters

Methodology: AWWA M22

## General Information

Customer Name: \_\_\_\_\_ PID Number: \_\_\_\_\_

Address: \_\_\_\_\_ Project Number: \_\_\_\_\_

Building Permit Number: \_\_\_\_\_

Type of Occupancy: Multifamily ☐ Institutional ☐ Industrial ☐ Number of Units: \_\_\_\_\_

Commercial ☐ Other ☐

Is this a phased development? Yes ☐ No ☐

Calculations presented below are for: Buildout ☐ Phase ☐ Phase Number: \_\_\_\_\_

*Separate calculations must be provided for both current phase and buildout.*

## Step 1: Calculate Total Fixture Value

Fixture	Fixture Value (GPM @ 60 psi)		No. of Fixtures		Fixture Value (GPM @ 60 psi)
Bathtub	8	x	_____	=	_____
Bedpan Washers	10	x	_____	=	_____
Bidet	2	x	_____	=	_____
Dental Unit	2	x	_____	=	_____
Dishwasher	2	x	_____	=	_____
Drinking Fountain - Public	2	x	_____	=	_____
Hose Bibs (c/w 50 ft Wash Down):					
- 1/2 inch	5	x	_____	=	_____
- 5/8 inch	9	x	_____	=	_____
- 3/4 inch	12	x	_____	=	_____
Kitchen Sink	2.2	x	_____	=	_____
Lavatory	1.5	x	_____	=	_____
Showerhead (Shower only)	2.5	x	_____	=	_____
Service Sink	4	x	_____	=	_____
Toilet:					
- Flush Valve	35	x	_____	=	_____
- Tank Type	4	x	_____	=	_____
Urinal:					
- Pedestal Flush Valve	35	x	_____	=	_____
- Wall Flush Valve	16	x	_____	=	_____
Wash Sink (Each Set of Faucets)	4	x	_____	=	_____
Washing Machine	6	x	_____	=	_____
Other:					
_____		x	_____	=	_____
_____		x	_____	=	_____
_____		x	_____	=	_____
Total Fixture Value				=	_____ GPM (A)

PID Number: \_\_\_\_\_

**Step 2: Calculate Probable Peak Demand**

Refer to Figure 4-2 or 4-3

**Probable Peak Demand** = \_\_\_\_\_ **GPM (B)**
**Step 3: Apply Pressure Adjustment Factor**

Water System Pressure (not to exceed 80 psi) = \_\_\_\_\_ psi

Pressure Factor from Table 4-1 = \_\_\_\_\_ (C)

**Adjusted Peak Demand (B x C)** = \_\_\_\_\_ **GPM (D)**
**Step 4: Identify Irrigation Demand**
**Total Irrigation Demand** = \_\_\_\_\_ **GPM (E)**

Larger irrigation areas should be divided into zones, with a maximum irrigation demand of 50 GPM. If the irrigation demand is greater than 50 GPM, the Applicant's Engineer shall provide a detailed irrigation plan with appropriately designed zones.

**Step 5: Confirm Design Demand**
**Design Demand (Greater of D & E)** = \_\_\_\_\_ **GPM (F)**
**Step 6: Size and Select Water Meter**

Design Demand *		Meter Size	
(L/s)	(USGPM)	(mm)	(inches)
0 - 1.96	0 - 31	19	3/4
1.96 - 3.09	31 - 49	25	1
3.09 - 11.36	49 - 180	50	2
11.36 - 28.39	180 - 450	75	3

*\* Based on 90% of operating range of City approved meters.*

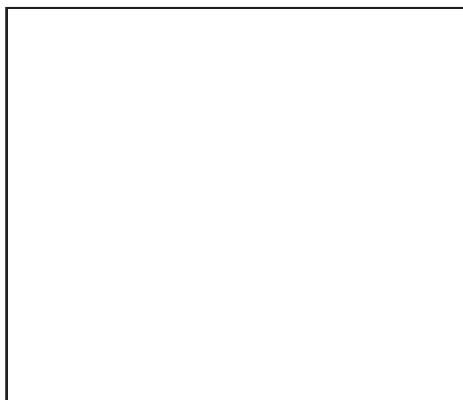
Water Meter Make / Model: = \_\_\_\_\_

Water Meter Size = \_\_\_\_\_ mm

Water Service Connection Size (for information only) = \_\_\_\_\_ mm

Meter Location (Outside / Inside) = \_\_\_\_\_

*Meters 50 mm or smaller must be located outside at property line.*

**Professional Certification**


Seal

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Date: \_\_\_\_\_

Revision: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

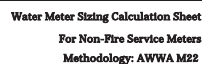
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_





## Page 1 of 3

Customer Name:		Example		PID Number:		Example	
Address:		Example		Project Number:		Example	
		Example		Building Permit Number:		Example	
Type of Occupancy:	Multifamily	<input checked="" type="checkbox"/>	Institutional	<input type="checkbox"/>	Industrial	<input type="checkbox"/>	Number of Units: _____
	Commercial	<input type="checkbox"/>	Other	<input type="checkbox"/>			
Is this a phased development?			Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	
Calculations presented below are for:			Buildout	<input checked="" type="checkbox"/>	Phase		Phase Number: _____
Separate calculations must be provided for both current phase and buildout.							

The following methodology is based on the AWWA M22 Sizing Water Service Lines and Meters. *Applicant's Engineers* are expected to purchase and use this publication when completing this methodology. A 31 unit townhouse development has been chosen as an example to demonstrate the use of this sizing method.

Customer and development information is to be provided in this initial section.

Note: For phased developments, separate calculation sheets must be prepared for each phase and also for build-out. Meters are to be sized for the respective phase, but the chamber / building space must be sized for the ultimate meter.

<b>Fixture</b>	<b>Fixture Value (GPM @ 60 psi)</b>	<b>No. of Fixtures</b>	<b>Fixture Value (GPM @ 60 psi)</b>
Bathtub	8	x	248
Bedpan Washers	10	x	
Bidet	2	x	
Dental Unit	2	x	
Dishwasher	2	x	62
Drinking Fountain - Public	2	x	
Hose Bibs (c/w 50 ft Wash Down):			
- 1/2 inch	5	x	310
- 5/8 inch	9	x	
- 3/4 inch	12	x	
Kitchen Sink	2.2	x	68
Lavatory	1.5	x	140
Showerhead (Shower only)	2.5	x	78
Service Sink	4	x	
Toilet:			
- Flush Valve	35	x	
- Tank Type	4	x	372
Urinal:			
- Pedestal Flush Valve	35	x	
- Wall Flush Valve	16	x	
Wash Sink (Each Set of Faucets)	4	x	
Washing Machine	6	x	186
Other:			
		x	
		x	
		x	
		<b>Total Fixture Value</b>	<b>= 1463 GPM (A)</b>

The AWWA M22 sizing methodology is based on the Fixture Values (which are actual peak flows that the device produces) and not Fixture Units which are used in the BC Building Code for building piping design.

In this example, the following fixtures are identified for each of the 31 units in the development:

- 1 bathtub
- 1 standalone shower
- 3 toilets (tank type)
- 3 bathroom sinks (lavatory)
- 1 kitchen sink
- 1 dishwasher
- 1 washing machine
- 2 hose bibs (1/2 inch)

The above fixtures yield a Total Fixture Value of 1463 GPM for the development.

Note: If a fixture is proposed that is not on the list then the peak flow value (fixture value) can be included on one of the blank lines under Other based on the manufacturer's information.

Refer to Figure 4-2 or 4-3

Probable Peak Demand = 70 GPM (B)

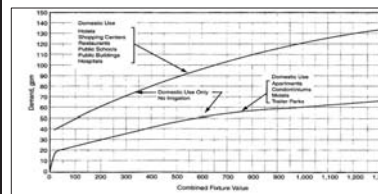


Figure 4-2 Water flow demand per fixture value—low range

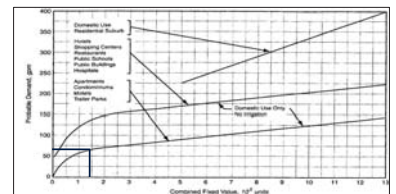


Figure 4-3 Water flow demand per fixture value—high range

The Total Fixture Value calculated in Step 1 is 1463 GPM. In other words, this is the peak flow that would be realized if all fixtures were turned on at the same time. Step 2 correlates the total peak flow to a probable peak flow based on the probability of multiple fixtures being on at the same time. The AWWA M22 Manual includes two graphs (Figures 4-2 and 4-3) which outline the probable flow demand for various development types.

For this example, Figure 4-3 applies since the Total Fixture Value falls into the high range. The Apartments curve indicates that a Total Fixture Value of 1463 GPM corresponds to a Probable Peak Demand of 70 GPM.

The fixture values listed in Step 1 represent peak flows at a pressure of 60 psi. This step increases or decreases the peak demand based on the pressure at the outlet of the meter. Table 4-1 in the AWWA M22 Manual provides adjustment factors for various pressures.

For this example, the pressure downstream of the meter is identified as 55 psi. Interpolating from Table 4-1, the pressure adjustment factor is 0.95 and the Adjusted Peak Demand is 66.5 GPM.

Note that for the purpose of this sizing methodology, the maximum pressure for which to apply an adjustment is 80 psi.

Step 3: Apply Pressure Adjustment Factor

Water System Pressure (not to exceed 80 psi) = 55 psi  
Pressure Factor from Table 4-1 = 0.95 (C)  
Adjusted Peak Demand (B x C) = 66.5 GPM (D)

Table 4-1 Pressure adjustment factors\*

Working Pressure at Meter Discharge (psi)	Average Flow from 50 ft of 1/2-in. Hose and Sprinkler (gpm)	Pressure Adjustment Factor
35	6.7	0.74
40	7.2	0.80
50	8.1	0.90
55	8.6	0.95
70	9.8	1.09
80	10.5	1.17
90	11.2	1.25
100	12.1	1.34

\*Derived from Table 4-1 and 4-2 of Manual M22 (1975).

NOTE: To convert psi to kPa: psi x 6.89476; to convert gpm to m<sup>3</sup>/hr: gpm x 0.227.



Water Meter Sizing Calculation Sheet  
For Non-Fire Service Meters  
Methodology: AWWA M22

Example

Page 3 of 3

Step 4: Identify Irrigation Demand

Total Irrigation Demand = 35 GPM (E)

Larger irrigation areas should be divided into zones, with a maximum irrigation demand of 50 GPM. If the irrigation demand is greater than 50 GPM, the Applicant's Engineer shall provide a detailed irrigation plan with appropriately designed zones.

The AWWA M22 Manual provides guidance for calculating irrigation demands.

For this example, an area of 3000 ft<sup>2</sup> is irrigated by a spray irrigation system. The AWWA M22 Manual indicates that for spray irrigation each section represents a flow of 1.16 GPM. A section is defined as 100 ft<sup>2</sup>. So the calculation yields:

Total Irrigation Demand = 3000 ft<sup>2</sup> / 100 ft<sup>2</sup> = 30 sections x 1.16 GPM = 34.8 GPM = 35 GPM (rounded)

Step 5: Confirm Design Demand

Design Demand (Greater of D & E) = 66.5 GPM (F)

The Design Demand is based on the greater of the Adjusted Peak Demand and Total Irrigation Demand. This is because the peak domestic demand and peak irrigation demand are not expected to occur at the same time. Sizing based on the greater of the domestic and irrigation flows avoids unnecessarily oversizing the meter.

For this example, the Adjusted Peak Demand of 66.5 GPM governs over the Total Irrigation Demand of 35 GPM.

Step 6: Size and Select Water Meter

Design Demand *		Meter Size	
(L/s)	(USGPM)	(mm)	(inches)
0 - 1.96	0 - 31	19	3/4
1.96 - 3.09	31 - 49	25	1
3.09 - 11.36	49 - 180	50	2
11.36 - 28.39	180 - 450	75	3

\* Based on 90% of operating range of City approved meters.

Water Meter Make / Model: = Sensus OMNI C<sup>2</sup>  
Water Meter Size = 50 mm  
Water Service Connection Size (for information only) = 75 mm  
Meter Location (Outside / Inside) = Outside

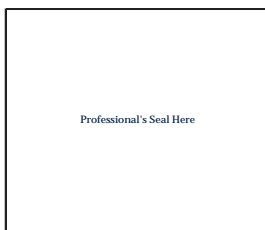
Meters 50 mm or smaller must be located outside at property line.

Using the sizing table provided in Step 6, a Design Demand of 66.5 GPM corresponds to a meter size of 2 (50mm).

As per Section C of the Design Criteria Manual, the meter location is outside since it is 50mm or smaller in size. The meter make / model is a Sensus OMNI C<sup>2</sup>, which is an approved product listed in Section 1.1 of the Supplementary Specifications.

Note that the AWWA M22 sizing methodology is based on US customary units. The fixture values, probability curves, and pressure adjustment factors have all been derived using US units. In this final step of the sizing calculation sheet, the units are converted to metric.

Professional Certification



Seal

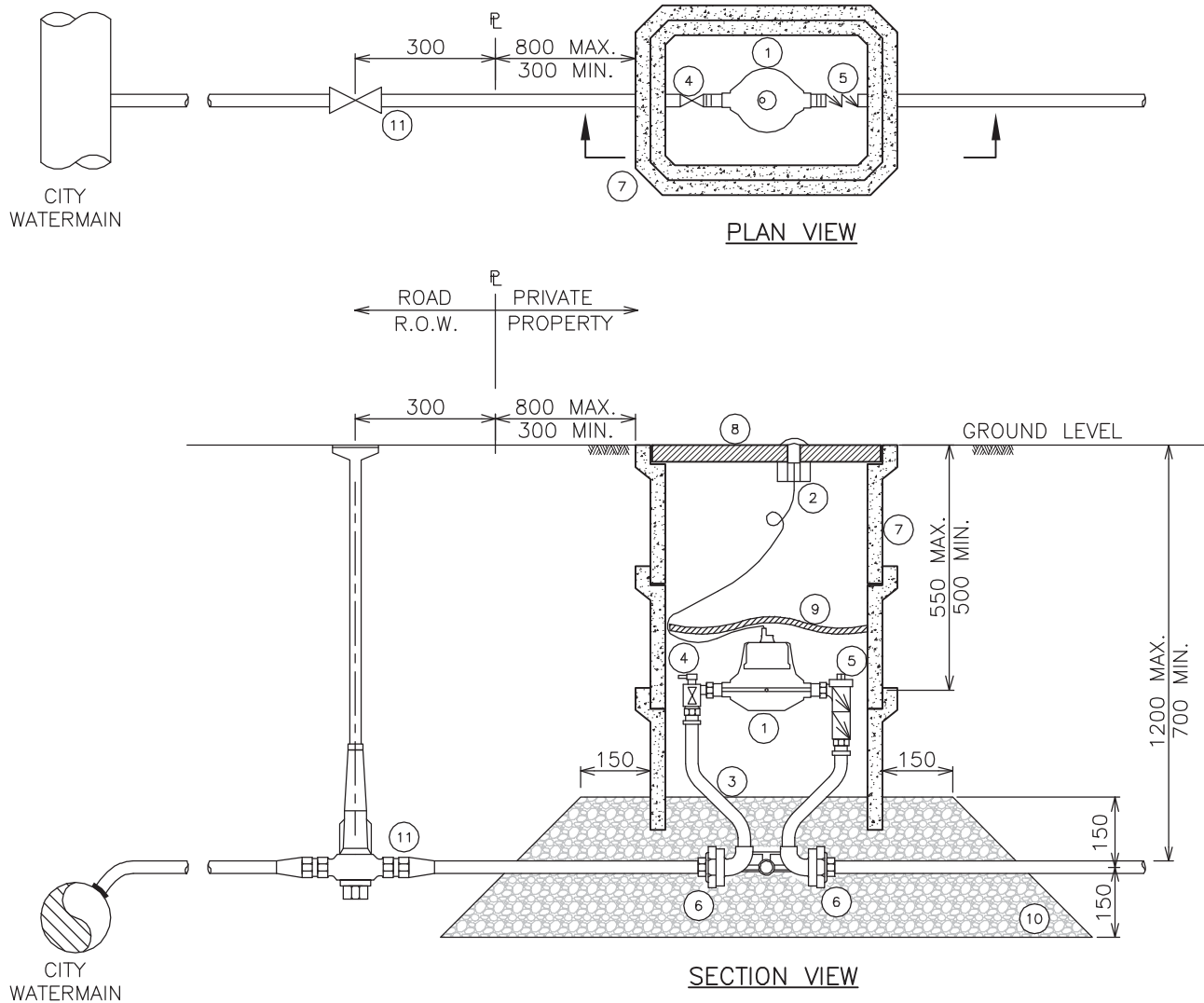
Name: Example  
Company: Example  
Date: Example  
Revision: Example

Comments:

This section is for the Applicant's Engineer to certify the water meter sizing calculation.

The comments space is provided to explain any unique aspects of the development that impact the proposed meter sizing.


## **Appendix B – Supplementary Detail Drawings**



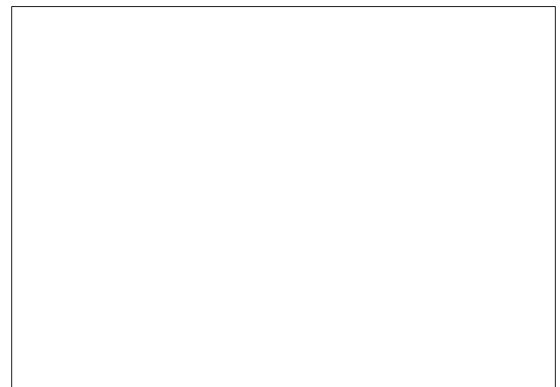
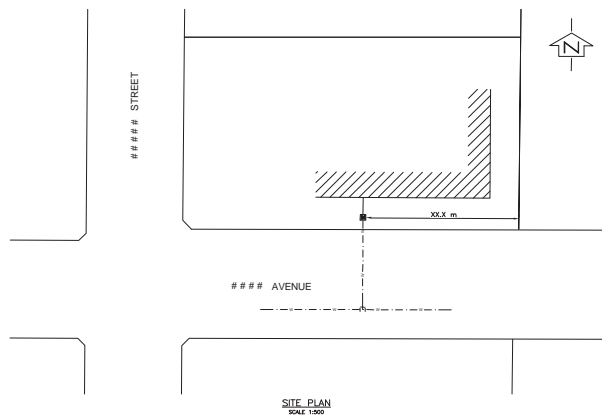
#### NOTES:

1. THIS DRAWING SHOULD BE REVIEWED IN CONJUNCTION WITH THE CITY OF SURREY WATER METER DESIGN CRITERIA MANUAL & SUPPLEMENTARY SPECIFICATIONS.
2. MINIMUM 1.0m HORIZONTAL AND 2.0m VERTICAL CLEARANCE AROUND METER BOX TO REMAIN FREE OF LANDSCAPING OR OTHER OBSTRUCTIONS.

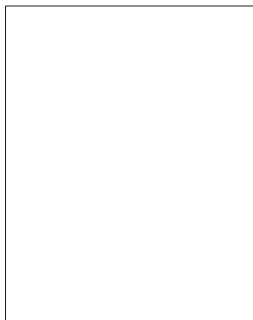
ITEM	DESCRIPTION	ITEM	DESCRIPTION
①	WATER METER (SENSUS iPERL OR APPROVED EQUAL)	⑦	#37 PRECAST CONCRETE METER BOX
②	REMOTE RECEPTACLE	⑧	CAST IRON LID
③	METER SETTER (CAMBRIDGE BRASS SERIES 6020 OR APPROVED EQUAL)	⑨	FOIL BUBBLE WRAP INSULATION BLANKET (CUT TO FIT METER BOX OPENING)
④	INLET BALL VALVE – FULL PORT (PART OF SETTER)	⑩	19mm CLEAR CRUSHED DRAIN ROCK (PLACED INSIDE BOX TO STABILIZE SETTER)
⑤	DUAL CHECK VALVE (PART OF SETTER)	⑪	CURB STOP C/W RISER
⑥	COMPRESSION FITTINGS (PART OF SETTER)		

3		All Dimensions Shown In millimetres, Unless Otherwise Noted	
2		Title INSTALLATION DETAIL FOR METERS 25mm DIAMETER AND SMALLER	
1			
	Revision Date	Approved	
 <b>CITY OF SURREY</b> the future lives here.		Approved	DRAWING NUMBER <b>SSD-WM1</b>
		Date	
		Drawn By	
WATER METER SUPPLEMENTARY DETAIL DRAWINGS		JUNE 2016	
		Urban Systems Ltd.	

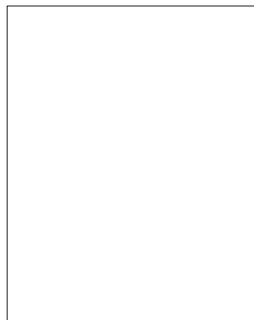
U:\Projects\1220-040-2018-043\Drawings\Appendix A\Appendix A (SSD) M&E 1 - Meter Chamber Design Drawing Template.dwg at: 10/01/2018 10:00:00 am Barry



PLAN VIEW - CHAMBER DETAIL  
OR  
UTILITY ROOM LAYOUT  
SCALE 1:500

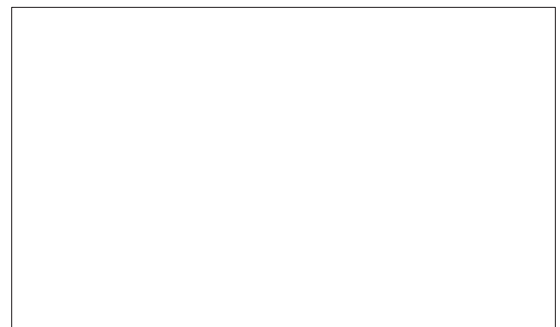


WATER METER SIZING CALCULATION  
(APPENDIX A - PAGE 1)



WATER METER SIZING CALCULATION  
(APPENDIX A - PAGE 2)

NOTES:



ELEVATION VIEW - CHAMBER DETAIL  
OR  
UTILITY ROOM DETAIL  
SCALE 1:500

3				
2				
1	Revision Date	Approved	Title	METER CHAMBER DESIGN DRAWING TEMPLATE
			Approved	WATER METER SIZING CALCULATION DETAIL DRAWINGS
			Date	JUNE 2018
			Drawn By	Urban Systems Ltd.
				DRAWING NUMBER SSD-WM2

## APPENDIX 1 PRIME CONTRACTOR DESIGNATION - LETTER OF UNDERSTANDING

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.

By signing this Agreement, the Contractor accepts all responsibilities of a prime contractor as outlined in the *Workers' Compensation Act*, and WorkSafeBC OH&S Regulation.

As a Contractor signing this Prime Contractor Designation form with the City of Surrey (the "owner"), you are agreeing that your company, management staff, supervisory staff and workers will comply with the *Workers' Compensation Board (WCB) Occupational Health and Safety Regulation* and the *Workers' Compensation (WC) Act*.

Any WorkSafeBC OH&S violation by the prime contractor may be considered a breach of contract resulting in possible termination or suspension of the agreement and/or any other actions deemed appropriate at the discretion of the Library.

Any penalties, sanctions or additional costs levied against the Library, as a result of the actions of the prime contractor are the responsibility of the prime contractor.

The Contractor acknowledges having read and understood the information above.

By signing this Prime Contractor Designation form, the Contractor agrees as a representative of the firm noted below, to accept all responsibilities of the prime contractor for this project.

**The Contractor understands and accepts the responsibilities of the prime contractor designation in accordance with the *Workers' Compensation Act* while contracted by the Library for project and will abide by all *Workers' Compensation Board Regulation* requirements.**

Project File No.: **1220-040-2018-043**

Project Title and Site Location: **Water Meter Maintenance Services**

Prime Contractor Name: *Name of Contractor*

Prime Contractor Address:

Telephone/Fax Numbers: Phone: Fax:

Name of Person in Charge of Project:

Name of Person Responsible for Coordinating Health & Safety Activities:

Phone:

Prime Contractor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please return a signed copy of this memo to the City of Surrey, Finance Department, Purchasing Section, 13450 – 104 Avenue, Surrey, British Columbia, V3T 1V8

If you have any questions, please contact the City of Surrey, Manager Occupational Health & Safety at 604-591-4658.



## **APPENDIX 2**

### **CONTRACTOR HEALTH & SAFETY EXPECTATIONS**

#### **RESPONSIBILITY OF CONTRACTOR(S)**

The City strives to maintain a safe work environment for employees and contractors and insists upon the enforcement of safe practices and procedures in all premises and in all work activities. It is essential that all contractors and their employees and sub-contractor(s) perform in the same manner. It is every employers and contractors responsibility to ensure that staff and public are protected from workplace hazards.

As a Contractor to the City of Surrey, you are expected to conform to the requirements of the Workers' Compensation Act, the WCB Occupational Health and Safety Regulation and to all federal, provincial and local laws and regulations. The City of Surrey Building Owner, Project Manager, and the Manager, Occupational Health & Safety or designate have the authority to order an unsafe act to cease or to have an unsafe piece of equipment removed from the premises or, in extreme situations, to shut down a job entirely. Any City Employee that observes a safety infraction by a contractor performing work for the City should bring it to the attention of a manager immediately or Occupational Health & Safety (604-591-4131).

The following information is provided as typical City requirements, but does not relieve the Contractor from complying with all applicable local, provincial and federal laws, regulations and bylaws.

#### **PERSONNEL**

1. You are expected to inform your employees of any potential hazard in the workplace and advise of appropriate action to be taken should a hazard be found or a fire or accident occur.
2. Contractors will restrict persons invited on the premises to employees only. No families or friends are permitted.
3. The Contractor will advise the City of any on-site accidents involving the Contractor's employees, or injuries to others caused by the Contractor's business.

#### **SAFETY MANAGEMENT SYSTEM**

1. Contractors will ensure their employees utilize proper safety equipment and clothing as required for job site activities.
2. Contractors must follow and have on site proper written safe work procedures for hazardous work, e.g. Fall protection, confined space entry, hotwork, lockout, excavations and shoring, traffic management, etc.
3. Contractor must Identify workplace risk and implement suitable controls.
4. Contractor must provide safety training and education to staff and have training records available for review.
5. Contractor must have a health & safety program for its workers and sub-contractors
6. Contractor will provide appropriate First-Aid coverage for their workers and subcontractors.
7. Contractor must forward a weekly work task list prior to work commencement.
8. The qualified safety coordinator must participate in the City OHS Orientation or attend the Prime Contractor's Orientation.

## **WORK AREAS –City Facilities**

No work by contractors shall occur in any area without prior consent of the Department Representative, or his designated representative. Work during normal business hours of the City shall not create undue noise, smells or otherwise unduly disturb the work of City staff or the public. If an activity requires that a disturbance is likely, the contractor shall whenever possible only do that work outside normal business hours.

All activities that create a hazard (i.e. work from a ladder, removal of a floor tile, emission of VOC's, etc.) to persons outside the contractor's supervision shall have warning devices, delineation or barriers, sealed spaces, etc. as would normally be required to protect any person from that hazard.

## **SAFETY ATTITUDE**

Your safety record and attitude are important criteria used to judge your qualification for future bidding on solicitations with the City.

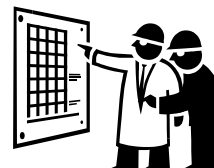
You can help ensure employee safety and your eligibility for future business with the City if you exhibit and practice a "Safe Work - Safe City" attitude.

The City is concerned about the health, safety and wellbeing of all employees and contractors. It is essential we maintain a healthy, safe and productive work environment.

### **All Employees & Contractors:**

It is everyone responsibility to:

- ❖ know and comply with WCB regulations and
- ❖ follow established safe work procedures
- ❖ immediately report any work related injury to his/her supervisor; and to the city representative
- ❖ not remain on the work site while his/her ability to work is in any way impaired
- ❖ report unsafe acts and conditions to their supervisor
- ❖ correct unsafe conditions immediately whenever it is possible to do so
- ❖ take reasonable care to protect your health & safety and the health and safety of other persons who may be affected by your act's or omissions at work



An employee must refuse to work if continuing to do so would endanger the health and safety of the employee, fellow employees or others. The worker must immediately report the circumstances of the unsafe condition to his or her supervisor or manager. If the unsafe condition is not remedied or the issue is not resolved the Manager, Occupational Health & Safety must be contacted.

**A common sense approach usually resolves the issue.**

## **GENERAL RULES**

1. For all secured worksites, contracted workers are required to sign in and sign out each day

2. (Access cards may be issued – a worker may need to provide an Identification document (i.e. Driver's License) in exchange).
3. Personal protective equipment, as determined by the City, through consultation with the Contractors Health and Safety Representatives must be worn when and where required. (Hard Hats, Safety Footwear, Safety Vests and Safety Glasses must be worn on active construction sites. Hearing Protection must be worn when noise levels are above 85dBA.)
4. Horseplay, gambling and the use of alcohol or narcotics will not be tolerated.
5. No Smoking within 7.5M of a City owned buildings door exits, windows and vents.
6. Report **ALL** injuries to your supervisor immediately and notify the City's site representative.
7. Report any unsafe conditions, including someone under the influence or hazards, which may allow an injury to occur to you, a fellow worker, or others on the worksite.
8. Report any property damage, regardless of how minor.
9. Restricted and controlled products will be labeled, used and stored in accordance with the associated regulations, e.g. WHMIS. Follow all procedural instructions when using or handling hazardous materials/controlled products and ensure that all containers of hazardous/controlled product materials are properly labelled and stored in designated areas.
10. Obey all posted signs and notices. Do not venture into areas that you are not authorized to enter.
11. Always use the correct posture when lifting and get assistance if the weight is excessive.
12. Do not work within the limits of approach to high voltage equipment.
13. If working at heights greater than 10 feet a Fall Protection system must be in place. The appropriate Fall Protection equipment must be worn at all times.
14. **Housekeeping** (Orderliness and good housekeeping are basic requirements and must be maintained at all times):
  - a) Aisles are to be kept clear at all times.
  - b) Individual work areas are to be kept clean and tidy.
  - c) All materials, tools, products and equipment are to be kept in their designated areas.
  - d) Liquid spills are to be cleaned up immediately to prevent slips and falls.
  - e) Accumulation of oily rags, combustible refuse or similar fire hazards will not be tolerated.
15. **Fire Prevention:**
  - a) Become familiar with Surroundings and emergency exit.
  - b) Ensure aisles and exits are not blocked at any time.
  - c) Anytime a fire extinguisher is used, report it immediately to your supervisor, so that it can be recharged.
16. **Equipment Operation** (Any equipment, which could create a hazard, must be maintained in good condition):
  - a) Equipment must not be repaired, adjusted or operated unless by a "competent person" who understand the safe operating procedures.
  - b) Always be aware of the use and location of the "EMERGENCY STOP" button, if equipment is so equipped, before using the equipment.
  - c) Loose clothing, jewelry and long hair must be secured to prevent becoming entangled with equipment.
  - d) The Operator must check all safety devices on equipment before operation.
  - e) All equipment must be turned off and the appropriate "lock-out" procedure followed, prior to repairs, cleaning, adjustment or lubrication.
  - f) Radio/Walkman/I-pod Head phones are not allowed to be worn during regular work operations.

- g) All ladders must be of an approved type and length. Unacceptable ladders must be removed immediately from the premises.
- h) All vehicles and equipment on City property must be kept in safe mechanical condition at all times, and be operated only by persons with a valid driver's license and/or proper training and qualifications.
- i) Contractors will not operate any equipment, valves, switches, etc., which are part of the City's operation, unless specific permission is received from the Department Representative.

17. **Ground Disturbance** –Every time you dig in the ground, with a shovel or mechanized equipment, you run the risk of loss of life or damage to property if you hit any of the many buried cables, conduits, gas or oil pipelines and/or other underground facilities that serve our city, **BC One Call Must be called and a ticket obtained prior to commencing any ground disturbance activities.**

<b>Issued By:</b>	<b>Occupational Health &amp; Safety Section - Contractor Coordination Program</b>
<b>Date:</b>	<b>Revised: January 14, 2015      Original: August 15, 2014</b>
<b>Distributed:</b>	<b>Via Email &amp; Posted on Intranet: January 16, 2015: <u>August 15, 2014</u></b>

**This document does not replace the Workers' Compensation Act or WorkSafeBC OH&S regulation. Each individual Contractor must have specific health and safety safe work rules and procedures that apply to their work tasks. Each Contractor must comply with the Workers' Compensation Act and WorkSafeBC Occupational Health & Safety Regulation and to all federal, provincial and local laws and regulations. If a contractor is unable to comply they must bring this to the attention of their qualified safety representative and to the Prime Contractor safety representative immediately.**

**Authorized Signature:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**(Please Print)**

**Date:** \_\_\_\_\_

### APPENDIX 3 CONTRACTOR PERFORMANCE ASSESSMENT REVIEW (CPAR)

#### CONTRACTOR PERFORMANCE ASSESSMENT REPORT (CPAR)

Probationary period	Pass [ ]	Fail [ ]	Contract renewal	Pass [ ]	Fail [ ]
---------------------	----------	----------	------------------	----------	----------

Period Report from \_\_\_\_\_ to \_\_\_\_\_

Contractor name:	
Contract description:	
Contract reference number:	Contract value:
Contract start date:	Contract completion date:
Name and title of assessor:	

**RATING SCALE** (enter score from 0-4 in Contractor Evaluation on following page):

**Exceptional (4):**

- performance meets contractual requirements and exceeds to City's benefit
- few minor problems for which corrective actions taken by contractor were highly effective
- no delays in performance or delivery, no cost issues, no quality problems, and responses to inquiries and technical/administrative/service issues were effective and responsive

**Very Good (3):**

- performance meets contractual requirements and exceeds some to City's benefit
- some minor problems for which corrective actions taken by the contractor were effective
- quality non-conformances, cost issues, and performance or delivery delays do not impact achievement of contract requirements
- responses to inquiries and technical/service/administrative issues were usually effective and responsive.

**Satisfactory (2):**

- performance meets contractual requirements
- some minor problems for which corrective actions were taken and appear or were effective
- non-conformance(s), cost issues, and performance or delivery delays require minor City resources to ensure achievement of contract requirements
- responses to inquiries and technical/service/administrative issues were somewhat effective and responsive

**Marginal (1):**

- performance does not meet all contractual requirements
- serious problem(s) for which the contractor has not yet identified corrective actions
- contractor's proposed actions appear only marginally effective or were not fully implemented
- non-conformance(s), cost issues, and performance or delivery delays require major City resources to ensure achievement of contract requirements
- responses to inquiries and technical/service/administrative issues were marginally effective and responsive.

**Unsatisfactory (0):**

- performance does not meet most contractual requirements and recovery is not likely in a timely manner
- serious problems for which the contractor's corrective actions appear or were ineffective
- non-conformances, cost issues, and performance or delivery delays are compromising the achievement of contract requirements despite use of City resources
- responses to inquiries and technical/service/administrative issues were not effective and responsive

**ONCE COMPLETED, EMAIL THIS FORM TO [PURCHASING@SURREY.CA](mailto:PURCHASING@SURREY.CA).**

## **ATTACHMENT # 4**

### **COMPLIANCE TO SAFETY PROCEDURE ENTRY PROCEDURE FOR CONFINED SPACE**

This procedure shall be used as a guideline only. The Contractor shall be responsible for familiarization with this and all WCB requirements.

**THERE MUST BE A MINIMUM OF TWO MEN**  
**- ONE MAN ALWAYS ON THE SURFACE, AND**  
**- ONE MAN IN THE WELL**  
**MAN LIFT/RETRIEVAL DEVICES MUST BE USED**

1. a) Open manhole lids, turn on blower/fan to ventilate wet well for approximately two to three minutes.  
b) Leave fan running until job is completed.  
c) Manhole must be circulated by a blower fan to allow fresh air into the confined space. Check levels on gas detector by lowering into well. If levels are not safe, portable fans MUST be used.
2. Turn gas detector "ON":
  - \* Oxygen levels should read between 20.0 to 21.0
  - \* H2S levels should read 000
  - \* LEL levels should read 000

NOTE: - Readings shall be taken before entering well.  
- Record gas levels on "Confined Entry Space" forms and hand in daily.
3. a) Lower gas detector by rope/cord into lower portion of wet well where work shall be performed.  
b) Pull detector to surface and check gas levels. If levels are safe, entry into well is permitted.
4. Gas detector MUST be left "ON" and brought down into well with person(s) entering.
5. Check levels on gas detector when in well. Proceed with washing/repairing of station.
6. If at any time the gas detector goes "OFF" (ringing), EXIT WET WELL IMMEDIATELY and check levels.

## ATTACHMENT # 5

### COMPLIANCE TO SAFETY PROCEDURE WORKING IN CONFINED SPACE

Where work is to be carried out, in any confined space where harmful atmosphere may develop, the following procedures must be followed:

- a) The space must be ventilated continuously.
- b) Gas detection equipment must be calibrated in an atmosphere that is known to be safe.

Tests for harmful or explosive substances and oxygen deficiency shall be made and recorded immediately prior to entry, after any interruptions in the work procedure and at intervals to ensure the continuing safety of the worker in the confined space.

If a harmful atmosphere develops, the worker will immediately evacuate the space and will not re-enter until it has been tested and found to be safe to do so.

- c) A safety belt or harness of a type which will keep the worker in a position to permit rescue, will be worn.
- d) A life line will be attached to the belt or harness which is tended at all times by another person stationed outside the entrance to the confined space, who shall be equipped for and capable of effecting rescue.

I, the undersigned, acknowledge having read and understand the information above.

By signing this Agreement, I agree as a representative of the firm noted below, to accept all responsibilities and compliant to all the Workers' Compensation Board regulation requirements.

Project File No. 1220-040-2018-043

Company: \_\_\_\_\_

Project Title: \_\_\_\_\_

Signed: \_\_\_\_\_  
(Company Owner)

Date: \_\_\_\_\_

Witness: \_\_\_\_\_

Date: \_\_\_\_\_





## SCHEDULE B – FORM OF QUOTATION

RFQ Title: **Water Meter Maintenance Services**

RFQ No: 1220-040-2018-043

### CONTRACTOR

Legal Name: \_\_\_\_\_

Contact Person and Title: \_\_\_\_\_

Business Address: \_\_\_\_\_

Business Telephone: \_\_\_\_\_

Business Fax: \_\_\_\_\_

Business E-Mail Address: \_\_\_\_\_

### CITY OF SURREY

City Representative: Richard D. Oppelt, Purchasing Manager

Address: Surrey City Hall  
Finance & Technology Department – Purchasing Section  
Reception Counter – 5<sup>th</sup> Floor West  
13450 - 104 Avenue, Surrey, B.C., Canada, V3T 1V8

E-mail for PDF Files: [purchasing@surrey.ca](mailto:purchasing@surrey.ca)

1. If this Quotation is accepted by the City, a contract will be created as described in:
  - (a) the Agreement;
  - (b) the RFQ; and
  - (c) other terms, if any, that are agreed to by the parties in writing.
2. Capitalized terms used and not defined in this Quotation will have the meanings given to them in the Agreement and RFQ. Except as specifically modified by this Quotation, all terms, conditions, representations, warranties and covenants as set out in the Agreement and RFQ will remain in full force and effect.

3. I/We have reviewed the RFQ Attachment 1 – Draft Agreement. If requested by the City, I/we would be prepared to enter into that Agreement, amended by the following departures (list, if any):

**Section**

**Requested Departure(s) / Alternative(s)**

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4. The City requires that the successful Contractor have the following in place **before providing the Goods and Services**:

- (a) Workers' Compensation Board coverage in good standing and further, if an "Owner Operator" is involved, personal operator protection (P.O.P.) will be provided,  
Workers' Compensation Registration Number \_\_\_\_\_;
- (b) Prime Contractor qualified coordinator is Name: \_\_\_\_\_  
and Contact Number: \_\_\_\_\_;
- (c) Insurance coverage for the amounts required in the proposed Agreement as a minimum, naming the City as additional insured and generally in compliance with the City's sample insurance certificate form available on the City's Website [Standard Certificate of Insurance](#);
- (d) City of Surrey or Intermunicipal Business License: Number \_\_\_\_\_;
- (e) If the Contractor's Goods and Services are subject to GST, the Contractor's GST Number is \_\_\_\_\_; and
- (f) If the Contractor is a company, the company name indicated above is registered with the Registrar of Companies in the Province of British Columbia, Canada, Incorporation Number \_\_\_\_\_.

As of the date of this Quotation, we advise that we have the ability to meet all of the above requirements **except as follows** (list, if any):

**Requested Departure(s) / Alternative(s)**

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5. The Contractor acknowledges that the departures it has requested in Sections 3 and 4 of this Quotation will not form part of the Agreement unless and until the City agrees to them in writing by initialing or otherwise specifically consenting in writing to be bound by any of them.

#### SECTION B-1

#### **Changes and Additions to Specifications:**

6. In addition to the warranties provided in the Agreement, this Quotation includes the following warranties:

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- 
7. I/We have reviewed the RFQ Attachment 1, Schedule A – Specifications of Goods and Scope of Services, to Attachment 1. If requested by the City, I/we would be prepared to meet those requirements, amended by the following departures and additions (list, if any):

**Requested Departure(s) / Alternative(s) / Addition(s)**

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**SECTION B-2**

**Fees and Payments**

8. The Contractor offers to supply to the City of Surrey the Goods and Services for the prices plus applicable taxes as follows:

The Contractor's pricing should include a unit price for each listed item. Accordingly, the unit price as specified for each maintenance item will be guaranteed and firm for the Term and is to include, as minimum:

- (a) The cost of all labour, material and equipment to supply and perform meter repair maintenance services including submission of repair reports and meter readings to the City;
- (b) Overhead covering and not limited to permits, licenses, drawings, mileage, truck, fuel and parts charges, transportation, environment protection and safety measures, sub-contractors;
- (c) Mobilization and traffic control to enable this work to be carried out effectively, efficiently and safely;
- (d) Site clean-up and disposal of debris are part of the overheads covered by unit prices;
- (e) Mark-ups and profits; and
- (f) Any other costs and expenses.

<b>F.O.B.</b>	<b>Payment Terms:</b>	<b>Ship Via:</b>
Destination	A cash discount of ____% will be allowed if invoices are paid	
Freight	within ____ days, or the ____ day of the month following, or net	
Prepaid	30 days, on a best effort basis.	

**PART A: PROGRAM WORK****(a) Locate and Expose Buried Meter Box**

Quantity	Price
20	\$

**(b) Removal and Re-installation of Asphalt and Concrete Surfaces**

Type	Quantity	Price
Asphalt (Sq. Meter)	100	\$
Concrete (Sq. meter)	100	\$

**(c) Hazards and Debris Removal**

Type	Quantity	Price
Debris (wood & dirt)	10	\$
Needles & Syringes	10	\$

**(d) Replace Wiring**

Type	Quantity	Price
Replace damaged wiring	25	\$

**(e) Lid Replacement**

Chamber Size	Quantity	Price
300x500	10	\$
425x750	10	\$
600x900	10	\$

**(f) Mount Pitpad**

Type	Chamber Size	Quantity	Price
Mount into Existing lid	300x500	35	\$
	425x750	35	\$
	600x900	10	\$
Mount with new lid	300x500	35	\$
	425x750	35	\$
	600x900	10	\$

**(g) Replace Remote Receptacle**

Type	Manufacturer	Quantity	Price
Wall Mounted	Sensus	25	\$
	ABB	25	\$
	Neptune	25	\$
Pit Pad	Sensus	25	\$
	ABB	25	\$
	Neptune	25	\$

**(h) Relocate Remote Receptacle**

Type	Manufacturer	Quantity	Price
Wall Mounted	Sensus	5	\$
	ABB	5	\$
	Neptune	5	\$
Pit Pad	Sensus	5	\$
	ABB	5	\$
	Neptune	5	\$

**(i) Pre-Cast Concrete Meter Box Risers**

Type	Size	Quantity	Price
300mmx500mm	150mm	10	\$
	300mm	4	\$
425mmx750mm	150mm	10	\$
	200mm	5	\$
	250mm	5	\$
600mmx900mm	150mm	4	\$
	200mm	3	\$
	250mm	2	\$

**a. Light Weight Meter Box**

Type	Size	Quantity	Price
280mm x457mm	300mm	10	\$
	300mm EXT	4	\$
	457mm	5	\$

**(j) Replace Register**

Type	Meter Size (mm)	Quantity	Price
Sensus SRII Meter (digital)		50	\$
	19	30	\$
	25	10	\$
	38	10	\$
	50	10	\$

**(k) Replace Water Meter**

Type	Meter Size (mm)	Quantity	Price
Sensus SRII Meter		6	\$
	19	5	\$
	25	4	\$
	38	3	\$
	50	2	\$
Neptune T-10 Meter	19	5	\$
	25	4	\$
	38	3	\$
	50	2	\$
Badger	19	5	\$
	25	4	\$
	38	3	\$
	50	2	\$
Sensus iPERL	19	150	\$
SensusOmni Meter	50	50	\$



**(I) Replace Meter Setter**

Type	Height (mm)	Quantity	Price
19mm	203	1	\$
	305	10	\$
	381	1	\$
	457	1	\$
	533	1	\$
	610	1	\$
25mm	254	1	\$
	305	5	\$
	381	1	\$
	458	1	\$
	534	1	\$
	610	1	\$
38mm	305	1	\$
	381	1	\$
	457	1	\$
	533	1	\$
	610	1	\$
	686	1	\$
50mm	305	1	\$
	381	1	\$
	457	1	\$
	533	1	\$
	610	1	\$

**a. Other Types Specify:** (specify height in the appropriate box)

Type	Height (mm)	Quantity	Price
16mm x19mm	686mm to 1016mm	5	\$
19mm	686mm to 1016mm	5	\$
25mm	686mm to 1016mm	1	\$
38mm	686mm to 1016mm	1	\$
50mm	686mm to 1016mm	1	\$

**(m) Replacement of Water Meter System**

Type	Meter Size (mm)	Quantity	Price
Sensus SRII Meter	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$
Neptune T-10 Meter	16x19	1	\$
	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$
Badger	16x19	1	\$
	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$
Sensus Omni Meter	50	1	\$
Sensus iPERL Meter	19	10	\$

**a. 1.6 m – 2.0 m (depth)**

Type	Meter Size (mm)	Quantity	Price
Sensus SRII Meter	16x19	1	\$
	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$
Neptune T-10 Meter	16x19	1	\$
	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$

Badger	16x19	1	\$
	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$
Sensus Omni Meter	50	1	\$
Sensus iPERL Meter	19	5	\$

**b. 2.1 m – 2.5 m (depth)**

Type	Meter Size (mm)	Quantity	Price
Sensus SRII Meter	16x19	1	\$
	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$
Neptune T-10 Meter	16x19	1	\$
	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$
Badger	16x19	1	\$
	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$
Sensus Omni Meter	50	1	\$
Sensus iPERL Meter	19	5	\$

**(n) No Maintenance Site Visit**

Quantity	Price
50	\$

**(o) Replace Meter Base Plates**

Type	Size	Quantity	Price
Sensus SR	16x19	10	\$
	19	1	\$
	25	1	\$
Neptune T-10	16x19	5	\$
	19	1	\$
	25	1	\$

**(p) Service Pipe Leak Repairs**

Type	Size	Quantity	Price
Polyethylene Tubing	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$
Copper Tubing	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$
Galvanized Iron Tubing	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$

**(q) Meter Testing**

Type	Size	Quantity	Price
Field Testing	16x19	1	\$
	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$

Bench Testing	16x19	1	\$
	19	1	\$
	25	1	\$
	38	1	\$
	50	1	\$

(r) **Confined Space Entry**

Price
\$

(s) **Dewatering Meter Chamber**

Price
\$

(t) **Line Freeze**

Price
\$

(u) **Curb Stop Maintenance**

Price
\$

(v) **Re-Program Register**

Price
\$

(w) **MXU Installation**

Price
\$

(x) **Miscellaneous Work**

Description [Specify]	Quantity	Price
1.	1	
2.	1	
3.	1	
4.	1	
5.	1	

### **Force Account Labour and Equipment Rates:**

9. Contractors should complete the following tables setting out the all-inclusive hourly labour rates including overhead and profit for approved extras/credits for all applicable categories of labour (use the spaces provided and/or attach additional pages, if necessary):

**Table 1 – Hourly Labour Rate Schedule for Services:**

Labour Category	Straight Time/hr (Plus GST)	Overtime Rate/hr (Plus GST)
.1 Superintendent	\$	\$
.2 Foreman	\$	\$
.3 Journeyman	\$	\$
.4 Apprentice	\$	\$
.5 Skilled Labourer	\$	\$
.5	\$	\$
.6	\$	\$

**Table 2 – Hourly Equipment Rate Schedule:**

No.	Equipment Description <i>(State)</i>	Hourly Equipment Rate
		\$
		\$

### **SECTION B-3**

#### **Time Schedule:**

10. Contractors should provide an estimated schedule, with major item descriptions and times indicating a commitment to provide the Goods and perform the Services within the time specified (use the spaces provided and/or attach additional pages, if necessary).

MILESTONE DATES \_\_\_\_\_

ACTIVITY	SCHEDULE									
	1	2	3	4	5	6	7	8	9	10

### **SECTION B-4**



**Key Personnel & Sub-Contractors:**

11. Contractors should provide information on the background and experience of all key personnel proposed to provide the Goods and Services (use the spaces provided and/or attach additional pages, if necessary):

**Key Personnel**

Name: \_\_\_\_\_  
Experience: \_\_\_\_\_  
Dates: \_\_\_\_\_  
Project Name: \_\_\_\_\_  
Responsibility: \_\_\_\_\_

12. Contractors should provide the following information on the background and experience of all sub-contractors and material suppliers proposed to undertake a portion of the Goods and Services (use the spaces provided and/or attach additional pages, if necessary):

<i>Description Of Goods &amp; Services</i>	<i>Sub-Contractors &amp; Material Suppliers Names</i>	<i>Years Of Working With Contractor</i>	<i>Telephone Number And Email</i>

**Contractor's Equipment:**

13. Contractor should provide a listing and details of type of equipment (including age, make and model) to be used to perform the Services (use the spaces provided and/or attach additional pages, if necessary):

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**SECTION B-5**

**Experience and References:**

14. **Experience:** Contractor should provide information on their relevant experience and qualifications in delivering Goods and Services similar to those required by the Agreement (use the spaces provided and/or attach additional pages, if necessary):

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Contractor should identify at least three projects of a size, scope and nature similar to that contemplated by this RFQ, which you have undertaken in the past three (3) years.

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15. **Reference:** Contractor's should provide information on their relevant references (name and telephone number). The City's preference is to have a minimum of three references. Previous clients of the Contractor may be contacted at the City's discretion (use the spaces provided and/or attach additional pages, if necessary):

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15. Describe your company's approach in maintaining a flexible workforce to meet the needs of the City.

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16. Contractor should briefly describe how the Contractor will provide in the quality Services as described in Schedule A.

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17. **Quality Assurance Plan:** Demonstrate that your organization has an established quality control and quality assurance plan, for identifying and preventing deficiencies in the quality of services. This plan will outline the scope of the activities, the level of resources needed, and related responsibilities in sufficient detail as specified in this RFQ;

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18. **Reports:** Describe maintenance and inspection reports to be used in the performance of Services. Provide sample reports if available.

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19. **Health, Safety and Protection:** Describe details of your company's health, safety & protection plan as described in Section 15 of Schedule A.

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20. **Training:** Describe your company's training program. Provide a list (i.e. WHMS, Health & Safety, etc.) of refresher or upgrade training, if available, that your company provide for new and existing employees, including examples of subjects covered, materials and frequency

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21. Contractor should describe their sustainability initiatives relating to the environmental impacts. The environmental attributes (green) of their Goods and Services. Anticipated objectives (e.g. carbon neutral by 2015). Information pertaining to their environmental policies, programs and practices. Confirm that the Contractor complies with any applicable objective (use the spaces provided and/or attach additional pages, if necessary):

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**Metro Vancouver's Non-Road Diesel Engine Emissions Regulation By-law:**

23. Contractors should confirm they are in compliance with By-law (if applicable):

☐ Applicable as follows   ☐ Not applicable to this project

No.	Equipment Description	Engine Tier Designation	Engine Registration Number as Issued by Metro Vancouver
1		<input type="checkbox"/> Tier 0 or <input type="checkbox"/> Tier 1	
2		<input type="checkbox"/> Tier 0 or <input type="checkbox"/> Tier 1	
3		<input type="checkbox"/> Tier 0 or <input type="checkbox"/> Tier 1	
4		<input type="checkbox"/> Tier 0 or <input type="checkbox"/> Tier 1	
5		<input type="checkbox"/> Tier 0 or <input type="checkbox"/> Tier 1	

24. I/We the undersigned duly authorized representatives of the Contractor, having received and carefully reviewed the RFQ and the Agreement, submit this Quotation in response to the RFQ.

**This Quotation** is offered by the Contractor this \_\_\_\_\_ day of \_\_\_\_\_, 201\_\_.

**CONTRACTOR**

**I/We have the authority to bind the Contractor**

\_\_\_\_\_  
(Legal Name of Contractor)

\_\_\_\_\_  
(Signature of Authorized Signatory)

\_\_\_\_\_  
(Signature of Authorized Signatory)

\_\_\_\_\_  
(Print Name and Position of Authorized Signatory)

\_\_\_\_\_  
(Print Name and Position of Authorized Signatory)

**This Quotation** is accepted by the City this \_\_\_\_\_ day of \_\_\_\_\_, 201\_\_.

**CITY OF SURREY**

\_\_\_\_\_  
(Signature of Authorized Signatory)

\_\_\_\_\_  
(Signature of Purchasing Representative)

\_\_\_\_\_  
(Print Name and Position of Authorized Signatory)

\_\_\_\_\_  
(Print Name of Purchasing Representative)

\_\_\_\_\_  
(Signature of Authorized Signatory)

\_\_\_\_\_  
(Print Name and Position of Authorized Signatory)