



## **REQUEST FOR QUOTATIONS**

**Title: Supply and Delivery of Pre-Insulated Pipe and Other Ancillary Products**

**Reference No.:** 1220-040-2019-047

### **FOR THE SUPPLY AND DELIVERY OF GOODS**

(General Services)

Issue Date: November 28, 2019

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## REQUEST FOR QUOTATIONS

### 1. INTRODUCTION

The City of Surrey (the "City") invites suppliers 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 "Supplier") 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.

Suppliers should carefully review Schedule A to Attachment 1 for a detailed description of the City's requirements. The City intends to secure preferred pricing on pre-insulated pipe that is specified for use in the City district energy distribution system. The City currently intends that Quotations will be evaluated by the City in relation to their overall value, which will be assessed in the City's sole and absolute discretion.

### 2. NATURE OF AGREEMENT

It is understood and agreed by the Supplier that Goods and Services will be ordered by the City, or an agent or Contractor on behalf of the City, solely on an "as and when required" basis. The aggregate value of Goods and Services which may be ordered is conditional upon the needs of the City. No compensation will be accrued, owed or paid in the event that the Goods and Services are not ordered. The City may place an Order for Goods and Services specified in the Order and the Supplier agrees to provide those Goods and Services.

### 3. ADDRESS FOR DELIVERY

A Quotation should be labelled with the Supplier'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 Supplier may submit a Quotation either by email or in a hard copy, as follows:

#### (a) Email

If the Supplier chooses to submit by email, the Supplier 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, Suppliers should phone [604-590-7274] to confirm receipt. A Supplier bears all risk that the City's computer equipment functions properly so that the City receives the Quotation.

#### (b) Hard Copy

If the Supplier chooses NOT to submit by email, the Supplier should submit one (1) original unbound Quotation and two copies (three (3) in total) which must be delivered to the City at the office of:

Name: Richard D. Oppelt, Manager, Procurement Services  
at the following location:

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

#### 4. DATE

The City would prefer to receive Quotations on or before **December 19, 2019**. The City's office hours are 8:30 a.m. to 4:00 p.m., Monday to Friday, except statutory holidays.

#### 5. 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, Manager, Procurement Services  
E-mail: [purchasing@surrey.ca](mailto:purchasing@surrey.ca)  
Reference: 1220-040-2019-047

#### 6. 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 Supplier 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 Supplier. By delivery of a Quotation, the Supplier is deemed to have received, accepted and understood the entire RFQ, including any and all addenda.

#### 7. 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 Suppliers or may at any time invite or permit the submission of quotations (including prices and terms) from other parties who have not submitted Quotations.

#### 8. 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 Supplier. A Quotation is not accepted by the

City unless and until both the authorized signatory of the Supplier 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.

**9. SUPPLIER'S EXPENSES**

Suppliers 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 Supplier for any claims, whether for costs, expenses, losses or damages, or loss of anticipated profits, incurred by the Supplier in preparing and submitting a Quotation, or participating in negotiations for a contract, or other activity related to or arising out of this RFQ.

**10. SUPPLIER'S QUALIFICATIONS**

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

**11. CONFLICT OF INTEREST**

A Supplier 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.

**12. SOLICITATION OF COUNCIL MEMBERS AND CITY STAFF**

Suppliers and their agents will not contact any member of the City Council and City staff with respect to this RFQ, other than the contact person named in Section 5, at any time prior to the award of a contract or the cancellation of this RFQ.

**13. CONFIDENTIALITY**

All Quotations become the property of the City and will not be returned to the Supplier. All Quotations will be held in confidence by the City unless otherwise required by law. Suppliers 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.

**14. 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 Supplier and include the following:

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

## **15. EQUIVALENTS, SUBSTITUTIONS, ALTERNATIVES**

Unless otherwise expressly stated, if and wherever the specifications set out in Schedule A Specification of Goods to Attachment 1 – Agreement Goods and Services, use a brand name of a manufacturer, make, trade name, or catalogue designation in specifying an item, it does not restrict Suppliers to the identified manufacturer, make, trade name, or catalogue designation. The usage of such identification is simply to indicate the character, quality and/or performance equivalence of the commodity identified.

Prior to the Date, a Supplier may request, pursuant to Section 5 the City to approve a commodity(ies) (each, an “Equivalency”) to be included in a Quotation in substitution for a commodity(ies), indicated in Schedule A Specification of Goods and Scope of Services to Attachment 1 – Agreement Goods and Services, on the basis that the substitution of the same or better character, quality and/or performance as the commodity(ies) indicated in Schedule A Specification of Goods and Scope of Services and to Attachment 1 – Agreement Goods and Services, such that that the proposed Equivalency will serve the purpose for which it is intended to be used equally as well. Applications for an Equivalency should be in writing delivered to the City Representative, accompanied by appropriate supporting information, data, specifications and documentation. The City may request any additional supporting information, data, specifications and documentation it considers necessary to make a decision with respect to the application. If the City decides in its sole discretion to accept an Equivalency, then the City will provide written confirmation of such acceptance to the Supplier, without notification to other Suppliers (subject to the City’s discretion under Section 6). The City is not obligated to review or accept any application for an Equivalency. Without limiting the City’s discretion as set out in this Section 15, the City may specifically refuse to approve an application for an Equivalency with which there may be an associated increase to an Application Price or a delay to the supply and delivery of the Goods and Services.

The Supplier should clearly identify in its Applicant any Equivalencies approved by the City under this Section 15.

If the Supplier does not in its Quotation indicate any Equivalencies, the Supplier will be deemed to accept the commodity(ies) described in Schedule A Specification of Goods and Scope of Services to Attachment 1 – Agreement Goods and Services.

## **16. QUOTATION PRICE**

The prices set out in the Supplier's Quotation will, applied in accordance with the terms as set out in Attachment 1 – Agreement – Goods, represent the entire cost to the City for the complete performance of the supply and delivery of the Goods, exclusive only of GST and PST, calculated upon such prices, but inclusive of all other costs.

Prices must be quoted in Canadian currency.

Prices should be firm during the full Term of the Agreement.

Prices are to be quoted F.O.B. Destination, Freight Prepaid, Surrey, British Columbia. For greater certainty, freight, insurance, unloading at the destination designated by the City (or loading onto City, agent or Contractor vehicles, as the delivery location), import duties, brokerage, royalties, handling, overhead, profit and all other similar costs are to be included in Quotation prices.

The City's requests pricing for all items listed on the Schedule of Prices and the City reserves the right to award a contract on one or more items with one or more Suppliers. From time to time during the year, the City may place Orders for various Goods on an "as and when required" basis and the Goods shall be delivered within the time and at the prices set forth on the Schedule of Prices.

## **17. MULTIPLE SUPPLIERS**

The City reserves the right and discretion to divide up the Goods and Services, either by scope, geographic area, or other basis as the City may decide, and to select one or more Suppliers to enter into discussions with the City for one or more Contracts to perform a portion or portions of the Goods and Services. If the City exercises its discretion to divide up the Goods and Services, the City will do so reasonably having regard for the RFQ and the basis of Quotations.

In addition to any other provision of this RFQ, Quotations may be evaluated on the basis of advantages and disadvantages to the City that might result or be achieved from the City dividing up the Goods and Services and entering into one or more Contracts with one or more Suppliers.

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**Attachment No. 1 - SUPPLY AGREEMENT**

**Reference RFQ Title: Supply and Delivery of Pre-Insulated Pipe and Other Ancillary Products**

**RFQ No.: 1220-040-2019-047**

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

**BETWEEN:**

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

**AND:**

\_\_\_\_\_  
*(Insert Full Legal Name and Address of Supplier)*  
(the "**Supplier**")

**WHEREAS:**

- A.** The City is interested in purchasing, for use in its district energy system, and the Supplier is interested in supplying pre-insulated pipe and other ancillary products.
- B.** The parties have entered into this Agreement for this purpose.

**WITNESSES** that in consideration of the premises and the mutual covenants herein contained, the parties hereto agree as follows:

**1. DEFINITIONS AND INTERPRETATION**

1.1 In this Agreement, the following definitions apply:

- (a) "**Agreement**" has the meaning set out in Section 1.2;
- (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 retained by the City to install the Goods and Services;
- (e) "**Fees**" means the prices in Canadian dollars provided by the Supplier specified in Schedule B to Attachment 1, for the Goods and Services and includes all taxes except PST and GST;
- (f) "**Goods**" means any portion of the equipment or materials (if any) as described generally in Schedule A, to Attachment 1, that the City requests the Supplier provide;
- (g) "**Order**" means a written order executed by the City, its agent or Contractor;



- (h) **“Services”** means any portion of the services as described generally in Schedule A, to Attachment 1 that the City requests that the Supplier provide, including anything and everything required to be done for the fulfilment and completion of the services in accordance with this Agreement;
- (i) **“Standing Offer”** means a standing offer agreement between the City and the Supplier, the nature of which is discussed in Section 2.1;
- (j) **“Supplier”** means a supplier whose Quotation has been accepted by the City and who is providing the Goods and Services under this Agreement;
- (k) **“Term”** has the meaning described in Section 8.1; and
- (l) **“Year of the Term”** as used herein shall mean each twelve-month period commencing on (START DATE).

1.2 This Agreement consists of all of the documents listed below and 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 the precedence in the following order:

- (a) Order;
- (b) this Agreement;
- (c) Schedule B – Application Extracts;
- (d) Schedule B-1 – Schedule of Prices;
- (e) Schedule A – Specifications of Goods and Scope of Services;
- (f) Schedule A-1 – Technical Specification Pre-Insulated Underground Piping Specification 15179; and
- (g) 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 and Scope of Services;  
Schedule A-1 – Technical Specification Pre-Insulated Underground Piping Specification 15179;  
Schedule B – Quotation; and  
Schedule B-1 – Schedule of Prices.

## **2. NATURE OF AGREEMENT**

2.1 It is understood and agreed by the Supplier that Goods and Services will be ordered by the City, or an agent or Contractor on behalf of the City, solely on an “as and when required” basis. The aggregate value of Goods and Services which may be ordered is conditional upon the needs of the City. No compensation will be accrued, owed or paid in the event that the Goods and Services are not ordered. The City may place an Order for Goods and Services specified in the Order and the Supplier agrees to provide those Goods and Services.

## **3. GOODS AND SERVICES**

3.1 The Supplier covenants and agrees that it will, if ordered by the City, or an agent or Contractor on behalf of the City, provide the Goods and Services in accordance with this Agreement.

- 3.2 The Supplier 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.
- 3.3 The Supplier covenants and agrees to ship the Goods within 8-12 weeks or earlier after the Supplier receives the Order.
- 3.4 The Supplier covenants and agrees to provide emergency services, as specified by the City, within three (3) calendar days of receipt of request from the City, its agent or Contractor.
- 3.5 The Supplier 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 Supplier's experience and expertise. The Supplier represents that it has the expertise, qualifications, resources, and relevant experience to supply the Goods and Services.
- 3.6 The Supplier 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 Supplier's failure to meet this condition, the Supplier 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 Supplier will be liable for any and all expenses or losses incurred by the City resulting from such failure.

#### **4. DELIVERY LOCATION**

- 4.1 The Supplier will take steps as required so that all the Goods are properly prepared for delivery and unloaded and the Goods shall be delivered directly to the job site(s), F.O.B. Destination prepaid, within the boundaries of Surrey, British Columbia, Canada between the hours of 8:00 a.m. to 3:30 p.m., Monday through Friday (the "Delivery Location"), as instructed by the City, an agent or Contractor. The Supplier shall ensure the integrity of the Goods during transportation, handling and temporary storage. Due regard shall be given by the Supplier to protection from loss and pilferage, physical damage, and the effect of the elements and environmental conditions. Any loss, damage, or repair cost resulting from delivery to the Deliver Location will be the Supplier's sole responsibility.

Forty-eight (48) hours advance notice of delivery, is preferred.

#### **5. MARKETABLE TITLE**

- 5.1 The Supplier warrants that it has or will at the time of transfer of title described in Section 6 have good and marketable title to the Goods, free and clear of all liens restriction, reservations, encumbrances or claims of any kind and that it will defend the City's title to the Goods. In the event of the Supplier's failure to meet this condition, the Supplier 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 Supplier will be liable for any and all expenses or losses incurred by the City resulting from such failure.

## **6. TRANSFER OF TITLE**

- 6.1 Title and all other property rights in and to all tangible personal property, and in and to all parts of tangible personal property that are or are intended to be part of the Goods or are otherwise provided to the Delivery Location by or on behalf of the Supplier under this Agreement, including consumables, products, materials, equipment, tools, supplies and other items, but not the risk of loss with respect to such tangible personal property, the risk of which will remain with the Supplier until such time as specified in Section 4, will pass to the City free and clear of all encumbrances at the time the Goods are delivered to the Delivery Location.

## **7. RISK OF LOSS**

- 7.1 Risk of loss with respect to the Goods will remain with the Supplier and will not transfer to the City unless and until the City, or an agent or Contractor accepts and takes possession and control of the Goods. No loss, injury or destruction of the Goods shall release the Supplier from any obligations under this Agreement.

## **8. TERM**

- 8.1 The Standing Offer will commence upon signing by both parties and will continue for a period of five (5) years, unless terminated earlier (the "Term").
- 8.2 The City may at any time prior to 90 days before the end of the Term, by written notice to the Supplier, extend the Term for a period of time not to exceed five (5) years. 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.

## **9. TIME**

- 9.1 Time is of the essence.

## **10. FEES**

- 10.1 The City intends that the City, an agent or Contractor will order the Goods and Services and specify the location the Goods are to be delivered to. The Supplier covenants and agrees to supply the Goods and Services ordered by the City, an agent or Contractor at the prices and all other terms and conditions of the Agreement.
- 10.2 The City will pay the Fees to the Supplier in accordance with this Agreement. Payment by the City of the Fees will be full payment for the Goods and Services and the Supplier will not be entitled to receive any additional payment from the City.
- 10.3 For greater certainty, costs of general management, non-technical supporting services and general overhead are deemed to be covered by the Fees and 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.
- 10.4 Duty, royalties, berthage, wharfage, harbour dues, assessments, taxes and all other charges shall be paid by the Supplier.

10.5 Notwithstanding any other provision hereof, if the Supplier is, at any time during the Term of this Agreement, party to a contract with another customer pursuant to which the Supplier charges effective prices lower than the prices charged to the City for reasonably comparable Goods and Services, the above listed prices shall be adjusted, retroactively to the date of effectiveness of such other contract, so that the prices charged hereunder are at least as low as the effective prices charged pursuant to such other contract.

#### 10.6 Price Adjustment

The parties agree that all fees as set out in this Agreement will remain in force for a period of 12 months, except for price adjustments based on changes in currency exchange rate at the time of an order, and thereafter the fees will be subject to a revision during the term once per Year of the Term which shall not be greater than the following formula:

$$Pr = Pc \times (Fs + (Ss \times Sd/Sb) + (PUs \times PUd/PUb) + (PEs \times PEd/PEb)) \times EXd/EXb$$

where:

Pr = Price Revised

Pc = Contract Price

Fs = Fixed Share (20%)

Ss = Steel Share (40%)

PUs = Polyurethane Share (20%)

PEs = Polyethylene Share (20%)

Sd = Steel index on the date of adjustment

Sb = Steel index on Base Date

PUd = Foam components index on the date of adjustment

PUb = Foam components index on Base Date

PEd = Polyethylene components index on the date of adjustment

PEb = Polyethylene components index on Base Date

EXb = Exchange rate Euro/CAD on Base Date

EXd = Exchange rate Euro/CDN on date of adjustment

Base Date = Agreement reference date

The following indices are to be used:

- Steel  
Steel business Briefing ([steelbb.com](http://steelbb.com))  
Northern Europe Domestic HRC (hot rolled coils) average price index
- PUR – Foam components  
Plastic Information Europe ([piweb.com](http://piweb.com))  
MDI Polymeric, price index
- Polyethylene  
Plastic Information Europe ([piweb.com](http://piweb.com))  
HDPE blow moulding price index

#### 10.7 Estimates

Where an estimate of the cost of providing the Goods is required, the City, an agent or Contractor will provide the Supplier with a statement of the requirements and the

Supplier must provide the City, an agent or Contractor with an estimate of the cost of providing the specified Goods in accordance with the pricing provision of the Standing Offer. The Supplier must not undertake any of the specified Goods unless and until an Order is issued by the City, an agent or Contractor. The estimated cost stated in the Order must not be exceeded without the specific written authorization of the City, an agent or Contractor.

## **11. PAYMENT**

- 11.1 Advance Payment Prohibited. No advance payment shall be made for the Goods and Services furnished by Supplier pursuant to this Agreement.
- 11.2 The City will pay the invoice, in the amount as the Contractor or the City determines is correct within 30 days of the receipt of the invoice from the Supplier after the receipt of the Goods and Services, unless the parties have agreed in writing to other payment terms. The payment by the City of any invoice will not bind the City with respect to any subsequent payment or final payment and will not mean that the City has accepted Goods and Services that are not in accordance with the requirements of this Agreement, or that Supplier is in any manner released from its obligation to comply with this Agreement.
- 11.3 If the Supplier 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.

Invoices will be submitted by the Supplier by mail to:

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

- 11.4 Unless otherwise provided, all dollar amounts referred to in this Agreement are in lawful money of Canada.
- 11.5 If the Supplier 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 Supplier; or
  - (b) the amount required under applicable tax legislation.

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

- 12.1 Except as provided for by law or otherwise by this Agreement, both parties will keep strictly confidential any information supplied to, obtained by, or which comes to the knowledge of either party 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 provide the Goods or complete the Services.
- 12.2 The Supplier 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.

### **13. WARRANTIES**

- 13.1 Supplier 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 Supplier 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, EN 253 Pre-insulated Bonded Pipe for Hot Water District Heating, EN 448 Pre-insulated Fittings, EN 488 Pre-insulated Valves, EN 489 Joint Kits, EN 14419 Surveillance System (leak detection) and EN 13941 Design and Installation), 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 Supplier or third party manufacturer or supplier of the Goods in connection with the purpose for which the Goods were purchased. The Supplier 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 five years 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 Supplier within a reasonable time after such discovery, and the Supplier shall then promptly correct such nonconformity at Supplier's expense. Goods used to correct a nonconformity shall be similarly warranted for five years from the date of installation. Supplier'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.
- 13.2 Supplier 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 supplied under this Agreement.

### **14. CANCELLATION**

- 14.1 In the event the Supplier receives a request from the City for cancellation of an Order or a portion thereof the Supplier will be compensated for the Goods and Services completed at the date of notification. The request for cancellation from the City shall be made in writing.
- 14.2 If Goods are cancelled prior to production there is no penalty. The City is responsible for return freight.

### **15. SUBCONTRACTORS**

- 15.1 The City reserves the right to approve all subcontractors of the Supplier at any time.

## **16. LIABILITY FOR DEFICIENCIES**

- 16.1 The City, its agent or Contractor, shall have a reasonable time to inspect and to accept the Goods. The City, its agent or Contractor, may reject any Goods not in accordance with this Agreement, whether due to damage resulting from improper packing, loading, or otherwise. The City, its agent or Contractor, shall notify the Supplier of rejection of the Goods whereupon the Goods will be held subject to the disposition by the Supplier. Any costs or expenses incurred by the City as a result of the rejection of the Goods are, immediately upon written demand by the City, payable by the Supplier, and may be set off against any payments owing by the City to the Supplier.
- 16.2 Supplier's liability for deficiencies shall be valid for five (5) years from the time of delivery of the Goods. Within that period, the Supplier shall be obliged and entitled to remedy deficiencies found in the Goods in the form of repair or the delivery of new products, as the Supplier may see fit. Supplier shall not reimburse the cost of excavation, dismantling, transport, installation and reestablishment.
- 16.3 If Supplier shall be liable for deficiencies, the City must show to the best of its ability that the Goods have deficiencies, which are attributable to Supplier and the City must further show that it is likely that the Goods have been stored, installed, used and maintained correctly and in accordance with the prescriptions laid down by the Supplier, taking the soil conditions into account and ensuring that there are no leaks because of internal corrosion in the media pipe. Moreover, the Supplier's responsibility is conditional upon the City, on its own initiative, arranging for immediate access for Supplier to the deficient elements with a view to remedial action.
- 16.4 Supplier's responsibility shall lapse if the City uses components in connection with the Goods, which are not manufactured or approved by Supplier, unless the City is able to prove that such use has not caused the deficiency.
- 16.5 In case of serious default, the City shall be entitled to cancel its purchase and demand a pro-rata reduction or compensation within the limitations described in Section 17.1

## **17. LIMITATIONS OF LIABILITY**

- 17.1 Supplier shall under no circumstances be liable for the City's indirect damage or loss of any kind, including damages, any daily penalties or contract penalties which the City may have to pay to a third party, nor for the City's operating loss, time loss, lost supplies or similar losses. Even if, in individual cases, Supplier may waive a claim or right vis-à-vis the City, this shall not mean that Supplier has waived all such claims or rights in other cases than the one where a specific agreement to this effect has been made.

## **18. DEFAULT AND TERMINATION**

- 18.1 In the event the Supplier 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 Supplier 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 Supplier all additional costs the City reasonably incurs on account of the late delivery or performance.
- 18.2 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.
- 18.3 The City may at any time and for any reason by written notice to the Supplier 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, Supplier 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 Supplier all amounts owing under this Agreement for Goods and Services provided by the Supplier 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 Supplier, 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.
- 18.4 The City may terminate this Agreement for cause as follows:
  - (a) If Supplier 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 Supplier or receiver or trustee in bankruptcy written notice; or
  - (b) If the Supplier 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 five (5) days after delivery of written notice from the City to the Supplier, then the City may, without prejudice to any other right or remedy the City may have, terminate this Agreement by giving the Supplier further written notice.
- 18.5 If the City terminates this Agreement as provided by Section 18.4 then the City may:
  - (a) enter into contracts, as it in its sole discretion sees fit, with other persons to complete the Goods and Services;
  - (b) withhold payment of any amount owing to Supplier under this Agreement for the performance of the Goods and Services;
  - (c) set-off the total cost of completing the Goods and Services incurred by the City against any amounts owing to Supplier under this Agreement, and at the completion of the Goods and Services pay to Supplier any balance remaining; and
  - (d) if the total cost to complete the Goods and Services exceeds the amount owing to the Supplier, charge Supplier the balance, which amount Supplier will forthwith pay.

## **19. CURING DEFAULTS**

- 19.1 If the Supplier is in default of any of its obligations under this Agreement, then the City may without terminating this Agreement, upon five (5) days written notice to Supplier, remedy the default and set-off all costs and expenses of such remedy against any amounts owing to the Supplier. 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 Supplier.



## **20. DISPUTE RESOLUTION**

- 20.1 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.
- 20.2 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.
- 20.3 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 seven (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.
- 20.4 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.

## **21. COMPLIANCE**

- 21.1 Supplier will provide the Services in full compliance with all applicable laws, building codes and regulations.
- 21.2 Supplier will, as a qualified and experienced practitioner, interpret applicable codes, laws and regulations applicable to the provision of the Goods and performance of the Services. If an authority having jurisdiction imposes an interpretation which Supplier 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.

## **22. WAIVER**

- 22.1 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.

## **23. APPLICABLE LAW**

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

## **24. NOTICES**

- 24.1 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 (5) calendar days after posting.
- 24.2 The addresses for delivery will be as shown on the first page of this Agreement.

## **25. ENTIRE AGREEMENT**

- 25.1 This Agreement, including the attached Schedules, 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.
- 25.2 In the event that Supplier 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.

## **26. SIGNATURE**

- 26.1 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.

**- END OF PAGE -**

**27. ENUREMENT**

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

**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)

**<<LEGAL NAME OF SUPPLIER>>**

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)

## **SCHEDULE A**

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

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

This Agreement covers the supply and delivery, F.O.B. destination, freight prepaid of:

#### **PRE-INSULATED PIPE AND OTHER ANCILLARY PRODUCTS**

The Specifications of Goods and Scope of Services consists of the supply and delivery of various sizes of pre-insulated pipe and other ancillary products. The Specifications of Goods and Scope of Services are detailed in Schedule A-1: Technical Specification Pre-Insulated Underground Piping Specification 15179 as prepared by FVB Energy Inc.

**- END OF PAGE -**

**SCHEDULE A-1: TECHNICAL SPECIFICATION  
PRE-INSULATED UNDERGROUND PIPING  
SPECIFICATION 15179**

**CITY OF SURREY  
DISTRICT ENERGY EXPANSION**

**REQUEST FOR QUOTATIONS**

Prepared by: FVB Energy Inc.

This document is the property of FVB Energy Inc., and the information herein is not to be used or copied, except for the specific project it was issued, without the written authorization of FVB Energy Inc.

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## 1. PART 1 – GENERAL

### 1.1 Description

- 1.1.1 The project is part of the City of Surrey’s District Energy (“DE”) expansion and includes the supply of new pre-insulated piping, accessories, and the leak detection system for the distribution piping expansion of the existing system. The City of Surrey is seeking Quotations for a long-term material supply Agreement.
- 1.1.2 The table below summarizes the current District Energy System (“DES”) expansion projects projected to be designed and installed. The list is not extensive and there may be projects added or deleted. Detailed material lists will be provided when the piping designs have been completed by the Consultant.

<u>Project No.</u>	<u>DE Steel Pipe Outer Diameter</u>	<u>DE Pipe Length</u>	<u>Expected Construction Year</u>
	<u>(mm)</u>	<u>(m)</u>	
E-17265	114	115	2020
E-16733	273	225	2020
E-16475	324	420	2021
E-17270	273	975	2022
E-16732	324	300	2022
E-16743	114	30	2020
E-17269	324	400	2021
E-17545	168	50	2020
E-17544	114	430	2021
E-16808	168	400	2022
E-17562	219	275	2022
E-17563	114	25	2022

- 1.1.3 The material will be installed by the City's installation Contractor in accordance with Item 1.5: Standards, and the following:
1. The regulations of the Province of British Columbia.
  2. The Consultant’s specifications for the Work.

### 1.2 Supplier’s Responsibilities

- 1.2.1 Provide the required technical assistance on site to ensure the proper installation of the pre-insulated piping system.
- 1.2.2 Provide unit prices for all items identified in the general list displayed in Part 4 of this document. LOGSTOR component numbers and names identified are for **reference** purposes only, the Supplier should provide their own component numbers in their Quotation.

- 1.2.3 Provide the piping and accessories in accordance with this specification.
- 1.2.4 Shipping costs as identified in the general material list.
- 1.2.5 Supplier site visits as noted in the attached general material list.
- 1.2.6 Provide details of the Supplier's support services, including but not limited to:
  - 1. Name and contact information for a North American or Canadian representative;
  - 2. Availability and response time for support in emergencies and general inquiries during design and construction; and
  - 3. Training program and details of what is involved.
- 1.2.7 Five (5) year warranty on installed system.

### **1.3 Quotation Document Submittal Requirements**

- 1.3.1 This specification describes the desired performance and is intended to establish an acceptable standard. All deviations from this specification must be identified in the Quotation. Failure to note deviations will imply conformance with this specification as written.
- 1.3.2 Include a complete list of loose shipped items and field installation requirements for all relevant items.
- 1.3.3 The Supplier's Quotation will contain a commercial Quotation, and any necessary exceptions or clarifications section.
- 1.3.4 The commercial Quotation should contain the following:
  - 1. Material List as attached in Section 4;
  - 2. Material Canadian Registration Numbers (CRN) for all fittings, valves, and valve arrangements;
  - 3. Delivery Schedule;
  - 4. Equipment Warranties;
  - 5. Canadian or North American representative information;
  - 6. List of relevant projects in North America;
  - 7. Suppliers Exceptions to City's Terms and Conditions; and
  - 8. Quality Assurance certification to CSA Z299.3 or equivalent.
  - 9. Applicable certificate to meet requirements of the various EN standards identified in this document.
- 1.3.5 Please note that it is preferred that there be no exceptions to the terms and conditions as presented here in. Exceptions must be clearly noted in the Supplier's Quotation.

### **1.4 Standards**

- 1.4.1 Materials, equipment, and installation are to comply with applicable building laws, and published standards. The Supplier's product must comply with all regulations of Authorities having jurisdiction, where applicable, including, but not limited to the following:
  - 1. CSA B51 – Boiler, Pressure Vessel, and Pressure Piping Code.



2. ASTM A194/A194M - Carbon and Alloy Steel nuts for Bolts for High-Pressure and High Temperature Service.
3. ASTM A234/A234M - Piping Fittings of Wrought Carbon and Alloy Steel for Moderate and Elevated Temperatures.
4. ANSI/ASME B31.1 – Power Piping.
5. EN 13941 Design and Installation of Pre-insulated Bonded Pipe Systems for District Heating
6. EN253 Pre-insulated Bonded Piping Systems (European Standard)
7. EN448 Pre-insulated Fitting Assemblies (European Standard)
8. EN488 Pre-insulated Steel Valve Assemblies (European Standard)
9. EN489 Joint Assemblies on Pre-insulated Pipes (European Standard)

## **1.5 Quality Assurance**

- 1.5.1 Suppliers are responsible for planning and developing a quality assurance program in accordance with CSA Z299.3 or equivalent. This program will be implemented to prevent and promptly detect and rectify non-conformance.
- 1.5.2 A copy of the CSA Z299.3 certification or equivalent should be included with the commercial Quotation.

## **1.6 Examination of Documents**

- 1.6.1 Suppliers are responsible for examining the Request for Quotations and informing themselves as to existing conditions and limitations. Quotations must cover the execution of the whole of the Work described in the documents.

## **1.7 Equipment Delivery Schedule**

- 1.7.1 Within one (1) week of receipt of a purchase order from City, the Supplier will confirm with the City, the following milestones:
  1. The estimated date of departure of components from the Supplier;
  2. The estimated date of arrival on job site.
- 1.7.2 Prior to final arrival of components on job site, the Supplier will confirm with the City the expected date of arrival and pre-arrange a suitable time for on-site delivery.
- 1.7.3 Supplier in all cases shall allow reasonable time for off loading at the place of storage.

## **1.8 Submittals Following Award**

- 1.8.1 Upon receipt of the notification of award of agreement the Supplier shall provide electronic copies of the following submittal documents to the City or designated representative, within the specified timeframes. Submittal documents:
  1. Supplier's pipe & pipe accessory specifications and drawings – submitted one (1) week after receipt of award.
- 1.8.2 The Supplier will furnish to the City, the aforementioned submittals in the time frame specified. The City and Consultant will review the documentation for compliance to the requirements of the specification. Release for manufacturing will be communicated by the return of certified drawings with one of the following dispositions:

1. "Reviewed with No Comments"
2. "Make Corrections Noted"
3. "Amend and Resubmit"
4. "Rejected (See Remarks)"

1.8.3 The Supplier will revise drawings as required to reflect any markups from the Consultant and submit electronic copies of the revised prints to the Consultant, as necessary. When submitting shop and setting drawings, the Supplier will notify the Consultant in writing of changes. Re-submissions must be made within one (1) week.

1.8.4 At any point during the Term, if the Supplier changes any of the information contained in the reviewed submittals, it is the Supplier's responsibility to resubmit all relevant documents for review by the Consultant within a timely manner.

### **1.9 Mill Test Certificates and CRN Numbers**

1.9.1 All applicable Mill Test Reports/Certificates (MTR documents) shall accompany all deliveries of materials.

1.9.2 All MTR's are to be provided with a clear English translation where applicable.

1.9.3 All piping, valves and fittings shall have applicable CRN numbers for the Province of British Columbia.

### **1.10 Operation & Maintenance Manuals**

1.10.1 The Supplier shall supply four (4) copies of manuals. Manuals shall include a complete system manual, including all Suppliers documentation. The O&M manuals are to include illustrated parts lists complete with catalogue numbers, copy of factory test / commissioning reports, and recommended maintenance instructions and schedules.

### **1.11 Warranty**

1.11.1 The guarantee shall be for sixty (60) months commencing on the date of the acceptance of the start-up by the City. Start-up is defined as the following items being completed: The hot water system is circulating, and the leak detection system has been tested satisfactorily and is ready for commissioning.

1.11.2 The Supplier will repair, replace or re-adjust any defective products during the warranty period, without interruption to normal operation. If interruption to operation is unavoidable, the Supplier will be allowed to perform the Work after normal working hours.

### **1.12 Defective Products and Work**

1.12.1 Products and Work found defective, or not in accordance with the specifications, will be rejected for incorporation into the Work.

1.12.2 The Supplier shall remove rejected products and Work from the premises immediately. The Supplier shall replace rejected material and Work with new and satisfactory materials with no delay to the Work.

### **1.13 Maintenance**

1.13.1 Supplier shall provide maintenance procedures.

## **Part 2 – Products**

### **1.14 System Function**

1.14.1 The supply of the prefabricated district heating piping will be by the Supplier. Generally, the Agreement will include the following:

1. Supply of the pipe and peripherals as per the attached material list. Unit prices to be provided as final quantities may be adjusted before contract award.
2. Advice on other components or equipment deemed necessary for the proper installation or function of the product supplied by the Supplier.
3. Applicable Mill Test Certificates shall accompany all deliveries, as well as being submitted to the Consultant, with English translation provided where possible. All pipes, valves and fittings shall be registered with Technical Safety BC (TSBC) and have applicable CRN (Canadian Registration Number) numbers for the below design conditions:
4. Technical support.
5. Supply of WHMIS data sheets for all system components.

1.14.2 The district heating pipe system will be installed as a complete bonded system, in which the steel carrier pipe, insulation and outer casing are molded together to form a solid unit. As such, the expansion movements of the steel carrier pipe will be transferred to the outer casing via the foam insulation.

1.14.3 The installed piping system will be restrained by friction in which axial pipe stress in the steel carrier pipe is reduced by field-installed expansion bends, other types of expansion compensators or by pre-stressing of the system.

### **1.15 System Design Conditions**

1.15.1 The distribution piping system will have the following design conditions:

1. ASME B31.1 Power Piping Code
2. Design Pressure: 1,600 kPa (232 psig)
3. Design Temperature: 121°C (250°F)
4. Test Pressure is 1.5 times the Design Pressure

### **1.16 Pre-insulated Pipes**

1.16.1 The prefabricated pre-insulated pipes conforming to EN253 shall be made of a steel pipe, polyurethane foam insulation with integral copper alarm wires and an outer casing of polyethylene. The materials shall be bonded together to form a solid unit with shear strength between the steel pipe and outer casing of a minimum of 0.12 N/mm<sup>2</sup> in the axial and min. of 0.2 N/mm<sup>2</sup> in the tangential direction.

1.16.2 In order to ensure uniform shear strength, the steel pipe shall be grit blasted to min. preparation grade Sa 1 (ISO 8501-1: 2007) immediately before foaming.

### **1.17 Steel Pipes**

1.17.1 The dimensions of the steel pipes are to be in accordance with ISO 4200. The pipes shall be delivered as welded pipes in steel quality P235GH (ASTM A53 Grade B equivalent) according to DIN 1626 or a corresponding standard. Welding factor  $v = 1.0$ .

1.17.2 The pipes must conform to the technical requirements laid down in DIN 1626, and the quality must be documented in a Works certificate according to DIN 50049/3.1 B.

1.17.3 The Supplier shall be responsible for obtaining and providing Mill Test Certificates for all piping to the City. Suppliers name or trademark shall appear on all fittings and on each length of pressure pipe.

### **1.18 Foam Insulation**

1.18.1 The molded polyurethane foam must consist of minimum 88% closed cells and shall have the following properties:

1. Average density over the entire pipe length: 80 kg/m<sup>3</sup>
2. Core density: Min. 55 kg/m<sup>3</sup>
3. Compressive strength: 0.3 N/mm<sup>2</sup>
4. Continuous temperature load: Straight pipes 140°C, for 30 years
5. Thermal conductivity: 0.027 W/mK at 50° (before aging).

1.18.2 Upon request the Supplier shall be able to present documentation of the lifetime of the applied foam insulation in relation to the operation data.

### **1.19 Outer Casing**

1.19.1 Polyethylene:

1. PE-HD (Minimum PE 80, ISO 12162)
2. Properties: Minimum as required in EN 253
3. All parts are fully weldable within the melt flow index:
4. MFR variation less than or equal to 0.5 g/10 min.

1.19.2 Thermal Stability:

1. Calculated continuous surface temperature greater than or equal to 50°C for 30 years.
2. Oxidation induction timer (OIT): >30 min. at 210°C.

1.19.3 Resistance against cracking formation:

1. Slow crack formation (notch sensitivity) >300 h (notch, 4 MPa, 80°C, ISO 13479).
2. Quick crack propagation (cold sensitivity) >5 bar (0°C, ISO 13377).

1.19.4 Internal surface treatment:

1. All outer casings shall be corona-treated during production to ensure optimum adhesion between outer casing and insulation.

## **1.20 Alarm Wires / Leak Detection System**

- 1.20.1 The district heating pipe will be monitored by an alarm wire circuit to protect against leaks by a documented, proven technique.
- 1.20.2 The Supplier shall supply the leak detection system including alarm and monitoring equipment.
- 1.20.3 The Supplier shall supply information and guidelines for the installation and operation of the leak detection system including alarm and monitoring equipment.

## **1.21 Joints**

### **1.21.1 General**

- 1. After welding and pressure testing of all steel pipes, the joints shall be sealed and insulated.
- 2. The jointing material is to be delivered individually wrapped.

### **1.21.2 Joints for Outer Casing**

- 1. A joint type is required which can be either welded or heat shrunk together with the outer casing of the pre-insulated pipe to form an unbreakable unit.
- 2. The welding will be done by a tested and approved procedure, which can be applied without problems outdoors under all weather conditions.
- 3. After pressure testing the joint, it shall be possible to repair any leaks by a welding process, without having to demount the joint.
- 4. A non-destructive inspection of the welds and the quality of the foam insulation shall be possible. The Supplier shall describe the method.

### **1.21.3 Insulation of Joints**

- 1. Insulation of joints shall be of two factory made prefabricated insulation half-shells.

## **1.22 Alarm System**

### **1.22.1 General**

- 1. The alarm system shall be established on the basis of copper wires molded into the insulation. The system shall be able to detect any moisture occurring in the foam insulation by a measurement between copper wire and steel pipe and it shall be able to locate the fault before damage leads to corrosion of the steel pipe.
- 2. Moreover, the alarm system shall be able to locate a break of the measuring wire, and it shall be prepared for central surveillance by a combination of the integral copper wires and other system components.

### **1.22.2 Joining of Alarm Wires**

- 1. The Supplier shall deliver the crimp connectors and all tools necessary to ensure a correct jointing of the wires. All wire joints shall be crimped and soldered.
- 2. The Supplier shall deliver a hygroscopic material to be placed around the wires in each joint in order to ensure a rapid and reliable detection of any fault occurring.

## **1.23 Valve Arrangements**

- 1. Isolation valves to EN 488 will be delivered as pre-insulated units, which can be buried directly in the soil in the same manner as all other components. Insulation and

- outer casing material shall fulfill the same quality requirements as apply to all other components in the system. Steel quality P235GH (ASTM A53 Grade B equal).
2. Isolation valves shall be designed on the basis of a maintenance-free ball valve with an all-welded valve body and a stainless-steel polished valve ball placed in a spring-loaded Teflon seat.
  3. Valve arrangements shall be designed so that a problem-free operation is ensured regardless of their position in a pre-stressed pipe system.
  4. Isolation valves shall be marked permanently with closed and open position, and it shall be possible to replace stop and stem seals without having to remove casing and insulation material.
  5. Valves shall be shipped to site after having been pressure tested and flushed clean by the Supplier. Valve ends shall be factory sealed prior to shipment to prevent the entrance of foreign matter into the valves during shipment, storage and installation.
  6. In addition to the manufacturers standard ball valve offering, the City is requesting pricing for an alternative valve as specified below:
    - (a) fully welded forged steel ball valve with trunnion-mounted stainless-steel ball.  
Standard of acceptance – Bohmer or equivalent as approved by the City.

#### **1.24 Branch System**

1. The Supplier shall indicate system solutions that, in the case of future connections to a main pipe, will enable branches to be installed at any point in the pipe run.
2. Cutting of the main pipe run shall be avoided to the fullest extent possible.
3. At any point in the system it shall be possible to install branches at right angles or parallel to the main pipe run.
4. The Supplier shall indicate which branches are to be reinforced.
5. Whatever branch technique is used, the finished branch shall be of the same quality as the other parts of the system.

##### **1.24.1 Bends and Directional Changes**

1. Bends and curved pipe elements shall be delivered as system solutions, which – after their installation – are the same quality as all other system parts. Steel quality P235GH (ASTM A53 Grade B equal).
2. Directional changes in the pipe dimension diameter of 88.9/160 mm or smaller shall, to the extent possible, be affected by curving the pipes on site (using special tools as specified by the Supplier).
3. Directional changes in the pipe dimension diameter of 114.3/200 mm or larger shall, to the extent possible, be affected by using pipes curved in the factory according to the indicated curving angle.
4. For the curving of pipes on site as well as in the factory, techniques and equipment shall be used which ensure that sporadic overloading of the materials used is avoided.
5. Depending on the position of the mitering and pipe dimension, the Supplier shall provide the necessary instructions for size and execution.

### **Part 3 – Execution and Installation Technique**

#### **1.25 General**

- 1.25.1 The direct buried portion of the pipe system will be installed as a system locked/restrained by friction.

1.25.2 This can be done by observing the requirements of a firm bond between steel pipe, insulation and outer casing as described under Item 2.1 above. The temperature variations of the district heating water shall be absorbed either as axial stresses in the steel carrier pipe, by reducing expansion movements or by a combination.

### **1.26 Expansion Movements**

1.26.1 Foam pad layers for expansion

1. In places where there are large movements such as at bends and branches, absorbed by providing extra expansion foam pad layers between outer casing and trench wall.
2. The Supplier shall provide the foam pads.

### **1.27 Sand for Backfilling Around Pipes**

1.27.1 Upon request, the Supplier shall either recommend or give an approval for the sand bedding and surround material.

### **1.28 Venting and Draining**

1.28.1 When valve arrangements are delivered with venting and draining facilities, the outlets must be furnished with valves with CRN numbers.

### **1.29 Operating Equipment**

1.29.1 For the operation of valves in dimensions smaller than diameter 219.1 mm, the Supplier shall deliver standard T-keys.

1.29.2 For the operation of valves in dimensions of diameter 219.1 mm or larger the Supplier shall deliver a complete planetary gear arrangement.

1.29.3 In all cases the Supplier shall provide advice and direction for the safe and proper handling of valves supplied.

### **1.30 Training**

3.6.1 The Supplier shall provide contact information for the training.

### **1.31 Instruction on Site**

1.31.1 The Supplier shall place the necessary technical advice at the City's disposal in connection with the installation of the system.

1.31.2 The Supplier shall be available for advice and instruction.

1.31.3 The Supplier shall provide a daily, fully inclusive, cost for site visits.

### **1.32 Planning Assistance**

1.32.1 The Supplier shall make technical advice and assistance available to the City during the detailed design and installation phase.

### 1.33 Quality Assurance

#### 1.33.1 General

1. The Supplier shall document and demonstrate all quality activities throughout the entire procedure from City's request, development/design, purchase, manufacture, and installation to delivery to the City are carried out under well-organized and controlled conditions.
2. As a minimum, the Supplier will forward a quality manual or report on the quality system. The areas of responsibility and authority concerning quality shall be defined and described in such a manner that the effect of the system and the authority of the quality manager can be judged.
3. The quality system is to be based on the requirements laid down in the international standard for quality systems, the ISO 9001. If the Supplier's quality system is based on a different standard, this shall be indicated in the forwarded material.
4. If the Supplier has entered into a certification agreement with a certification body, the Supplier shall attach documentation of the extent of the sphere of validity of this agreement.

#### 1.33.2 Certificate

1. Upon request, the Supplier shall be able to document the Supplier's quality in a certificate.
2. The certificate shall contain inspection and test results for raw materials, semi-manufactured and finished components for the current delivery.

#### 1.33.3 Assurance of Joint Quality

1. The Supplier, in conjunction with the Contractor, shall prepare a quality plan outlining the quality activities carried throughout to ensure a defensible and reliable installation of joints on site.

### 1.34 Guarantee

- 1.34.1 The Supplier shall guarantee the prefabricated piping system for a period of five (5) years. The terms of guarantee shall become part of the offer.

## Part 4 – General Material List

- 4.1 The Goods and Services are as stated below:

Item #	Description	Component #	Pipe Size
<b>Pipe:</b>			<b>OD Steel/OD HDPE, mm</b>
1	50mm NPS – Pre-insulated Pipe - 12 m length (with Leak Detection)	2000	60.3/125
2	80mm NPS – Pre-insulated Pipe - 12 m length (with Leak Detection)	2000	88.9/160
3	100mm NPS – Pre-insulated Pipe - 12 m length (with Leak Detection)	2000	114.3/200



Item #	Description	Component #	Pipe Size
4	125mm NPS - Pre-insulated Pipe - 12 m length (with Leak Detection)	2000	139.7/225
5	150mm NPS - Pre-insulated Pipe - 12 m length (with Leak Detection)	2000	168.3/250
6	200mm NPS - Pre-insulated Pipe - 12 m length (with Leak Detection)	2000	219.1/315
7	250mm NPS - Pre-insulated Pipe - 12 m length (with Leak Detection)	2000	273/400
8	300mm NPS - Pre-insulated Pipe - 12 m length (with Leak Detection)	2000	323.9/450
9	350mm NPS - Pre-insulated Pipe - 12 m length (with Leak Detection)	2000	355.6/500
<b>Bends:</b>			<b>OD Steel/OD HDPE, mm</b>
10	90° Pre-insulated Bend	2500	60.3/125
11	90° Pre-insulated Bend	2500	88.9/160
12	90° Pre-insulated Bend	2500	114.3/200
13	90° Pre-insulated Bend	2500	139.7/225
14	90° Pre-insulated Bend	2500	168.3/250
15	90° Pre-insulated Bend	2500	219.1/315
16	90° Pre-insulated Bend	2500	273/400
17	90° Pre-insulated Bend	2500	323.9/450
18	90° Pre-insulated Bend	2500	355.6/500
19	45° Pre-insulated Bend	2500	60.3/125
20	45° Pre-insulated Bend	2500	76.1/140
21	45° Pre-insulated Bend	2500	88.9/160
22	45° Pre-insulated Bend	2500	114.3/200
23	45° Pre-insulated Bend	2500	139.7/225
24	45° Pre-insulated Bend	2500	168.3/250
25	45° Pre-insulated Bend	2500	219.1/315
26	45° Pre-insulated Bend	2500	273/400
27	45° Pre-insulated Bend	2500	323.9/450
28	45° Pre-insulated Bend	2500	355.6/500
<b>Parallel-Tee Branches:</b>			<b>ø Main x ø Branch, mm</b>
29	90° Pre-insulated Parallel Branch	3600	100 x 100
30	90° Pre-insulated Parallel Branch	3600	150 x 50
31	90° Pre-insulated Parallel Branch	3600	250 x 250
32	90° Pre-insulated Parallel Branch	3600	300 x 300
33	90° Pre-insulated Parallel Branch	3600	300 x 100
34	90° Pre-insulated Parallel Branch	3600	250 x 200

Item #	Description	Component #	Pipe Size
<b>45-Tee Branches:</b>			<b>ø Main x ø Branch, mm</b>
35	45° Pre-insulated Branch	3500	100 x 80
36	45° Pre-insulated Branch	3500	150 x 50
37	45° Pre-insulated Branch	3500	200 x 100
38	45° Pre-insulated Branch	3500	250 x 80
39	45° Pre-insulated Branch	3500	250 x 150
40	45° Pre-insulated Branch	3500	300 x 250
<b>Hot Tapping Branches:</b>			<b>OD Steel, mm</b>
41	Danfoss Hot Tap Ball Valve	4280	60.3
42	Danfoss Hot Tap Ball Valve	4280	76.1
43	Danfoss Hot Tap Ball Valve	4280	88.9
44	Danfoss Hot Tap Ball Valve	4280	114.3
45	Tonisco Hot Tapping Valve with Stop Plate	4280	60.3
46	Tonisco Hot Tapping Valve with Stop Plate	4280	88.9
47	Tonisco Hot Tapping Valve with Stop Plate	4280	114.3
48	Tonisco Hot Tapping Valve with Stop Plate	4280	139.7
49	Tonisco Hot Tapping Valve with Stop Plate	4280	168.3
50	Tonisco Hot Tapping Valve with Stop Plate	4280	219.1

Item #	Reductions:	Component #	OD Steel/OD HDPE, mm (From X To)
51	Prefabricated Reduction - 1000 mm	4900	88.9/160 X 60.3/125
52	Prefabricated Reduction - 1000 mm	4900	114.3/200 X 88.9/160
53	Prefabricated Reduction - 1000 mm	4900	139.7/225 X 88.9/160
54	Prefabricated Reduction - 1000 mm	4900	139.7/225 X 114.3/200
55	Prefabricated Reduction - 1000 mm	4900	168.3/250 X 114.3/200
56	Prefabricated Reduction - 1000 mm	4900	168.3/250 X 139.7/225
57	Prefabricated Reduction - 1100 mm	4900	219.1/315 X 139.7/225
58	Prefabricated Reduction - 1100 mm	4900	219.1/315 X 168.3/250
59	Prefabricated Reduction - 1500 mm	4900	273.0/400 X 168.3/250
60	Prefabricated Reduction - 1500 mm	4900	273.0/400 X 219.1/315

<b>Item #</b>	<b>Reductions:</b>	<b>Component #</b>	<b>OD Steel/OD HDPE, mm (From X To)</b>
61	Prefabricated Reduction - 1500 mm	4900	323.9/450 X 219.1/315
62	Prefabricated Reduction - 1500 mm	4900	323.9/450 X 273.0/400
63	Prefabricated Reduction - 1500 mm	4900	355.9/500 X 273.0/400
64	Prefabricated Reduction - 1500 mm	4900	355.9/500 X 323.9/450
65	Prefabricated Reduction - 1500 mm	4900	406.4/560 X 323.9/450
66	Prefabricated Reduction - 1500 mm	4900	406.4/560 X 355.6/500
67	Prefabricated Reduction - 1500 mm	4900	406.4/560 X 355.6/500
<b>Wall Entry Sleeves:</b>			<b>OD HDPE, mm</b>
68	Wall Entry Sleeve	5800	125
69	Wall Entry Sleeve	5800	160
70	Wall Entry Sleeve	5800	200
71	Wall Entry Sleeve	5800	225
72	Wall Entry Sleeve	5800	250
73	Wall Entry Sleeve	5800	280
74	Wall Entry Sleeve	5800	315
75	Wall Entry Sleeve	5800	355
76	Wall Entry Sleeve	5800	400
77	Wall Entry Sleeve	5800	450
78	Wall Entry Sleeve	5800	500
<b>Insulation End Caps:</b>			<b>OD Steel/OD HDPE, mm</b>
79	Insulation End Cap	5600	60.3/140
80	Insulation End Cap	5600	88.9/160
81	Insulation End Cap	5600	114.3/200
82	Insulation End Cap	5600	139.7/250
83	Insulation End Cap	5600	168.3/280
84	Insulation End Cap	5600	219.1/315
85	Insulation End Cap	5600	273/450
86	Insulation End Cap	5600	323.9/500
87	Insulation End Cap	5600	355.6/560
<b>Item #</b>	<b>Valves</b>	<b>Component #</b>	<b>OD Casing, mm</b>
88	Isolation Valves	4200	60.3/125
89	Isolation Valves w/ permanent gear operators	4200	60.3/125

<b>Item #</b>	<b>Valves</b>	<b>Component #</b>	<b>OD Casing, mm</b>
90	Bohmer Isolation Valves	DN 25-400	60.3/125
91	Bohmer Isolation Valves w/ permanent gear operators	DN 25-400	60.3/125
92	Isolation Valves	4200	88.9/160
93	Isolation Valves w/ permanent gear operators	4200	88.9/160
94	Bohmer Isolation Valves	DN 25-400	88.9/160
95	Bohmer Isolation Valves w/ permanent gear operators	DN 25-400	88.9/160
96	Isolation Valves	4200	114.3/200
97	Isolation Valves w/ permanent gear operators	4200	114.3/200
98	Bohmer Isolation Valves	DN 25-400	114.3/200
99	Bohmer Isolation Valves w/ permanent gear operators	DN 25-400	114.3/200
100	Isolation Valves	4200	139.7/225
101	Isolation Valves w/ permanent gear operators	4200	139.7/225
102	Bohmer Isolation Valves	DN 25-400	139.7/225
103	Bohmer Isolation Valves w/ permanent gear operators	DN 25-400	139.7/225
104	Isolation Valves	4200	168.3/250
105	Isolation Valves w/ permanent gear operators	4200	168.3/250
106	Bohmer Isolation Valves	DN 25-400	168.3/250
107	Bohmer Isolation Valves w/ permanent gear operators	DN 25-400	168.3/250
108	Isolation Valves	4200	219.1/315
109	Isolation Valves w/ permanent gear operators	4200	219.1/315
110	Bohmer Isolation Valves	DN 25-400	219.1/315
111	Bohmer Isolation Valves w/ permanent gear operators	DN 25-400	219.1/315
112	Isolation Valves	4200	273/400
113	Isolation Valves w/ permanent gear operators	4200	273/400
114	Bohmer Isolation Valves	DN 25-400	273/400
115	Bohmer Isolation Valves w/ permanent gear operators	DN 25-400	273/400
116	Isolation Valves	4200	323.9/450
117	Isolation Valves w/ permanent gear operators	4200	323.9/450
118	Bohmer Isolation Valves	DN 25-400	323.9/450
119	Bohmer Isolation Valves w/ permanent gear operators	DN 25-400	323.9/450
120	Isolation Valves with 1 service valve	4220	60.3/125
121	Isolation Valves with 1 service valve w/ permanent gear operators	4220	60.3/125
122	Bohmer Isolation Valves with 1 service valve	DN 25-400	60.3/125
123	Bohmer Isolation Valves with 1 service valve w/	DN 25-400	60.3/125

Item #	Valves	Component #	OD Casing, mm
	permanent gear operators		
124	Isolation Valves with 1 service valve	4220	88.9/160
125	Isolation Valves with 1 service valve w/ permanent gear operators	4220	88.9/160
126	Bohmer Isolation Valves with 1 service valve	DN 25-400	88.9/160
127	Bohmer Isolation Valves with 1 service valve w/ permanent gear operators	DN 25-400	88.9/160
128	Isolation Valves with 1 service valve	4220	114.3/200
129	Isolation Valves with 1 service valve w/ permanent gear operators	4220	114.3/200
130	Bohmer Isolation Valves with 1 service valve	DN 25-400	114.3/200
131	Bohmer Isolation Valves with 1 service valve w/ permanent gear operators	DN 25-400	114.3/200
132	Isolation Valves with 1 service valve	4220	139.7/225
133	Isolation Valves with 1 service valve w/ permanent gear operators	4220	139.7/225
134	Bohmer Isolation Valves with 1 service valve	DN 25-400	139.7/225
135	Bohmer Isolation Valves with 1 service valve w/ permanent gear operators	DN 25-400	139.7/225
136	Isolation Valves with 1 service valve	4220	168.3/250
137	Isolation Valves with 1 service valve w/ permanent gear operators	4220	168.3/250
138	Bohmer Isolation Valves with 1 service valve	DN 25-400	168.3/250
139	Bohmer Isolation Valves with 1 service valve w/ permanent gear operators	DN 25-400	168.3/250
140	Isolation Valves with 1 service valve	4220	219.1/315
141	Isolation Valves with 1 service valve w/ permanent gear operators	4220	219.1/315
142	Bohmer Isolation Valves with 1 service valve	DN 25-400	219.1/315
143	Bohmer Isolation Valves with 1 service valve w/ permanent gear operators	DN 25-400	219.1/315
144	Isolation Valves with 1 service valve	4220	273/400
145	Isolation Valves with 1 service valve w/ permanent gear operators	4220	273/400
146	Bohmer Isolation Valves with 1 service valve	DN 25-400	273/400
147	Bohmer Isolation Valves with 1 service valve w/ permanent gear operators	DN 25-400	273/400
148	Isolation Valves with 1 service valve	4220	323.9/450
149	Isolation Valves with 1 service valve w/ permanent gear operators	4220	323.9/450
150	Bohmer Isolation Valves with 1 service valve	DN 25-400	323.9/450
151	Bohmer Isolation Valves with 1 service valve w/ permanent gear operators	DN 25-400	323.9/450
152	Isolation Valves with 2 service valves	4240	60.3/125

Item #	Valves	Component #	OD Casing, mm
153	Isolation Valves with 2 service valves w/ permanent gear operators	4240	60.3/125
154	Bohmer Isolation Valves with 1 service valve	DN 25-400	60.3/125
155	Bohmer Isolation Valves with 1 service valve w/ permanent gear operators	DN 25-400	60.3/125
156	Isolation Valves with 2 service valves	4240	76.1/140
157	Isolation Valves with 2 service valves w/ permanent gear operators	4240	76.1/140
158	Bohmer Isolation Valves with 2 service valve	DN 25-400	76.1/140
159	Bohmer Isolation Valves with 2 service valve w/ permanent gear operators	DN 25-400	76.1/140
160	Isolation Valves with 2 service valves	4240	88.9/160
161	Isolation Valves with 2 service valves w/ permanent gear operators	4240	88.9/160
162	Bohmer Isolation Valves with 2 service valve	DN 25-400	88.9/160
163	Bohmer Isolation Valves with 2 service valve w/ permanent gear operators	DN 25-400	88.9/160
164	Isolation Valves with 2 service valves	4240	114.3/200
165	Isolation Valves with 2 service valves w/ permanent gear operators	4240	114.3/200
166	Bohmer Isolation Valves with 2 service valve	DN 25-400	114.3/200
167	Bohmer Isolation Valves with 2 service valve w/ permanent gear operators	DN 25-400	114.3/200
168	Isolation Valves with 2 service valves	4240	139.7/225
169	Isolation Valves with 2 service valves w/ permanent gear operators	4240	139.7/225
170	Bohmer Isolation Valves with 2 service valve	DN 25-400	139.7/225
171	Bohmer Isolation Valves with 2 service valve w/ permanent gear operators	DN 25-400	139.7/225
172	Isolation Valves with 2 service valves	4240	168.3/250
173	Isolation Valves with 2 service valves w/ permanent gear operators	4240	168.3/250
174	Bohmer Isolation Valves with 2 service valve	DN 25-400	168.3/250
175	Bohmer Isolation Valves with 2 service valve w/ permanent gear operators	DN 25-400	168.3/250
176	Isolation Valves with 2 service valves	4240	219.1/315
177	Isolation Valves with 2 service valves w/ permanent gear operators	4240	219.1/315
178	Bohmer Isolation Valves with 2 service valve	DN 25-400	219.1/315
179	Bohmer Isolation Valves with 2 service valve w/ permanent gear operators	DN 25-400	219.1/315
180	Isolation Valves with 2 service valves	4240	273/400
181	Isolation Valves with 2 service valves w/ permanent gear operators	4240	273/400
182	Bohmer Isolation Valves with 2 service valve	DN 25-400	273/400

Item #	Valves	Component #	OD Casing, mm
183	Bohmer Isolation Valves with 2 service valve w/ permanent gear operators	DN 25-400	273/400
184	Isolation Valves with 2 service valves	4240	323.9/450
185	Isolation Valves with 2 service valves w/ permanent gear operators	4240	323.9/450
186	Bohmer Isolation Valves with 2 service valve	DN 25-400	323.9/450
187	Bohmer Isolation Valves with 2 service valve w/ permanent gear operators	DN 25-400	323.9/450
188	Valve Stem Extensions		
189	Portable Gear Operator		

Item #	Straight Couplings:	Component #	OD Casing, mm
190	BX Joint Kit (50mm NPS)	5022	125
191	BX Joint Kit (80mm NPS)	5022	160
192	BX Joint Kit (100mm NPS)	5022	200
193	BX Joint Kit (125mm NPS)	5022	225
194	BX Joint Kit (150mm NPS)	5022	250
195	BX Joint Kit	5022	280
196	BX Joint Kit (200mm NPS)	5022	315
197	BX Joint Kit	5022	355
198	BX Joint Kit (250mm NPS)	5022	400
199	BX Joint Kit (300mm NPS)	5022	450
200	BX Joint Kit	5022	500
201	C2L Joint Kit (50mm NPS)	5035	125
202	C2L Joint Kit (80mm NPS)	5035	160
203	C2L Joint Kit (100mm NPS)	5035	200
204	C2L Joint Kit (125mm NPS)	5035	225
205	C2L Joint Kit (150mm NPS)	5035	250
206	C2L Joint Kit	5035	280
207	C2L Joint Kit (315mm NPS)	5035	315
208	C2L Joint Kit	5035	355
209	C2L Joint Kit (250mm NPS)	5035	400
210	C2L Joint Kit (300mm NPS)	5035	450
211	C2L Joint Kit	5035	500
212	B2S Joint Kit (for E-comps)	0700	60.3
213	B2S Joint Kit (for E-comps)	0700	88.9
214	B2S Joint Kit (for E-comps)	0700	114.3
215	B2S Joint Kit (for E-comps)	0700	139.7
216	B2S Joint Kit (for E-comps)	0700	168.3
217	B2S Joint Kit (for E-comps)	0700	219.1

Item #	Straight Couplings:	Component #	OD Casing, mm
218	B2S Joint Kit (for E-comps)	0700	273
219	B2S Joint Kit (for E-comps)	0700	323.9
End Fitting:			OD Casing, mm
220	End Fitting with Insulation Shells	5700	140
221	End Fitting with Insulation Shells	5700	160
222	End Fitting with Insulation Shells	5700	200
223	End Fitting with Insulation Shells	5700	225
224	End Fitting with Insulation Shells	5700	250
225	End Fitting with Insulation Shells	5700	280
226	End Fitting with Insulation Shells	5700	315
227	End Fitting with Insulation Shells	5700	355
228	End Fitting with Insulation Shells	5700	400
229	End Fitting with Insulation Shells	5700	450
230	End Fitting with Insulation Shells	5700	500

Item #	Foam Pads:	Component #	OD Casing, mm
231	Expansion absorption/distribution foam pads (2000x1000x40)	7000 2000 005 001	
Crimping:			
232	Crimping Pliers (for connection of copper wires)	9000 0000 029 001	
233	Gas Soldering Iron (soldering of copper wires)	9050 0000 040 001	
234	Synthetic Cloth (for cleaning before soldering)	1998 0000 002 002	
235	Crimp Connectors (100 pcs. per bag)	8000 0000 002 044	
236	Crimp Wire		
237	Cable Extension Wire		
Warning Tape:			
238	Violet Tape with "District Heating" text (500m)	7150 0050 002 000	
Leak Detection:			
239	Terminal Box - Passive Leak Detection	8011 0000 001 517	
240	Cable Take-Off Kit	8000 0000 005 047	
241	X1L Leak Detection Panel	8000 0000 007 016	
Expansion Compensators:			OD Steel, mm
242	One-time E-comps (Max Expansion = 50mm)	0006	60.3



<b>Item #</b>	<b>Foam Pads:</b>	<b>Component #</b>	<b>OD Casing, mm</b>
243	One-time E-comps (Max Expansion = 70mm)	0006	88.9
244	One-time E-comps (Max Expansion = 80mm)	0006	114.3
245	One-time E-comps (Max Expansion = 95mm)	0006	139.7
246	One-time E-comps (Max Expansion = 105mm)	0006	168.3
247	One-time E-comps (Max Expansion = 120mm)	0006	219.1
248	One-time E-comps (Max Expansion = 125mm)	0006	273
249	One-time E-comps (Max Expansion = 135mm)	0006	323.9
<b>Miscellaneous:</b>			
250	40' Shipping Container		
251	20' Shipping Container		
252	Training (per day inclusive of travel + accommodations)		
253	Emergency Support (per day inclusive of travel + accommodations)		

**- END OF PAGE -**



## SCHEDULE B - QUOTATION

RFQ Title: **Supply and Delivery of Pre-Insulated Pipe and Other Ancillary Products**

RFQ No: 1220-040-2019-047

### SUPPLIER:

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

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

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

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

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

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

### CITY OF SURREY

City Representative: Richard D. Oppelt, Manager, Procurement Services

Address: Surrey City Hall  
Finance Department – Procurement Services 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 Supplier 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 Supplier's Goods and Services are subject to GST, Supplier's GST Number is \_\_\_\_\_; and
- (f) If Supplier 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 Supplier 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.

**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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**Schedule of Prices:**

8. The unit prices and the lump sum prices (if any) in the Schedule of Prices shall cover the Supplier's obligations under this Agreement and shall include all materials, equipment, labour, supervision and services, duty, royalties, berthage, wharfage, harbour dues, insurance, taxes excepting the Goods and Services Tax and Provincial Sales Tax; assessments, overheads, profits, all work necessary for, or reasonably incidental to the supply and delivery of the Goods.

Supplier offers to supply to the City of Surrey the Goods and Services for the prices plus applicable taxes as stated in Schedule B-1 – Schedule of Prices.

The Provincial Sales Tax and the Goods and Services Tax shall be extra to the Unit Prices. All prices quoted are to be exclusive of GST and PST, but inclusive of all other costs. Prices must be quoted in Canadian currency. Prices should be firm during the full Term of the Agreement.

Payment will be made on the basis of the unit price submitted and the actual quantities of Goods supplied.

**F.O.B.** Destination, Freight Prepaid.

Ship Via: \_\_\_\_\_

**Payment Terms:**

A cash discount of \_\_\_\_% will be allowed if invoices are paid within \_\_\_\_ days, or the \_\_\_\_ day of the month following, or net 30 days, on a best effort basis.

**ALTERNATIVES AND EQUIVALENTS AND ADDITIONAL GOODS AND SERVICES**

9. Are there goods or services with deviations, or alternative or additional goods or services suggested by Supplier? If yes, list them and their price(s), and describe them below.

Item No.	Description	Unit Price Per Metre

10. Describe the alternative goods. Attach reference documents if necessary. Use separate sheet(s) if applicable.

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**Experience, Reputation and Resources:**

11. Supplier's relevant experience and qualifications in delivering Goods similar to those required by this RFQ.

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12. Supplier should describe the level of research and development investment you make in your products.

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13. Key Personnel & Subcontractors: Suppliers 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: \_\_\_\_\_

14. Supplier'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 Supplier may be contacted at the City's discretion (use the spaces provided and/or attach additional pages, if necessary):

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**Proof of Ability (List of Plant, Warehouse and Manufacturer):**

15. The Applicant shall be competent and capable of performing the requirements under the Agreement. Applicant shall complete the following which shall form part of the Agreement documents (use the spaces provided and/or attach additional pages, if necessary).

**Plant Under Applicant's Control:**

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**Warehouse Under Applicant's Control:**

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**Name and address of Subcontractor/Manufacturer:**

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16. Suppliers are responsible for planning and developing a quality assurance program in accordance with CSA Z299.3 or equivalent. This program will be implemented to prevent and promptly detect and rectify non-conformance. A copy of the CSA Z299.3 certification or equivalent should be included with the commercial Quotation (use the spaces provided and/or attach additional pages, if necessary):

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

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

**SUPPLIER**

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

\_\_\_\_\_  
(Legal Name of Supplier)

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

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

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

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

## SCHEDULE B-1 – SCHEDULE OF PRICES



Schedule B-1 –  
Schedule of Prices.xl