| Form P: Proposal Information | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bidder: | |  | Bidder Rep: | | | |  | | | |
| Notes:   1. The City reserves the right to clarify, investigate, and request additional information to confirm the Bidder’s claim regarding any data provided. 2. The Bid Evaluation is not based solely upon the information submitted on this form. 3. This form is made available to Bidders in both PDF and Microsoft Word format. In the event of a discrepancy between the forms, the PDF version will take precedence. 4. Complete “Bidder Response” section in full. Failure to complete or submit required information may result in disqualification of the complete Bid. 5. If insufficient space is provided, attach additional sheets with required information. | | | | | | | | | | |
| **Item** | **Description** | | | | **Bidder Response** | | | | | |
| **.** | **Published Canadian Price List (Section A)** | | | | | | | | | |
| **.** | **General** | | | | | | | | | |
| .. | As requested in B13, is a published price list provided for all electromagnetic flowmeter, pressure transmitter, and temperature transmitter components? | | | | Yes, a published price list is provided:  The price list is in Canadian Dollars.  The price list is in US Dollars.  The price list is in Euros.  The price list is applicable for the following regions: | | | | | |
| .. | Is the price list comprehensive of the manufacturer’s entire electromagnetic flowmeter, pressure transmitter, and temperature transmitter offering, including all replacement parts? | | | | Yes  No. Provide details below: | | | | | |
| .. | Is the price list consistent with the prices and discounts indicated in Form B? | | | | Yes  No. Provide details below: | | | | | |
| **.** | **Electromagnetic Flowmeters (Section A)** | | | | | | | | | |
| **.** | **General** | | | | | | | | | |
| .. | Years of experience in the design and manufacture of electromagnetic flowmeters. | | | | <5 years  5 to 9 years  10 to 14 years  15 to 19 years  20 to 24 years  >25 years | | | | | |
| .. | Approvals | | | | Only indicate approvals applicable to all products proposed:  CSA  Applicable to all products proposed.  Applicable to some of the products proposed (list below)  UL – Canadian (cUL)  Applicable to all products proposed.  Applicable to some of the products proposed (list below)  FM – Canadian (cFM)  Applicable to all products proposed.  Applicable to some of the products proposed (list below)  Other Canadian Recognized Approval: | | | | | |
| .. | Documentation | | | | Product datasheets included with proposal  Product O&M manuals included with proposal | | | | | |
| **.** | **Product Lifecycle Guarantee** | | | |  | | | | | |
| .. | Active sale and production guarantee | | | | No plans to remove any of the proposed products from active sale and/or production are in place.  There are plans to remove the product for active sale and/or production, but plans call for:  5 or more years of active production.  3 or more years of active production.  Less than 3 years of active production and sale.  Additional Details: | | | | | |
| .. | Product support guarantee | | | | The product is guaranteed to be operable, maintainable, and fully supported by the manufacturer, including availability of spare parts for the following duration after any of the proposed products are removed from active sale:  5 or more years.  Years guaranteed:  <5 years (Not acceptable)  Additional Details: | | | | | |
| **.** | **Flow Tubes - General** | | | | | | | | | |
| .. | ASME B16.5 (ANSI) Class 150 minimum size in the proposed product series | | Minimum Size:  6 mm (1/4”)  12 mm (1/2”)  20 mm (3/4”)  25 mm (1”)  > 25 mm (>1”)  Other: | | | | | | | |
| .. | ASME B16.5 (ANSI) Class 150 maximum size in the proposed product series | | Maximum Size:  600 mm (24”)  750 mm (30”)  900 mm (36”)  >900 mm (>36”)  Other: | | | | | | | |
| .. | Flowtube technology | | Pulse DC  AC  Other (identify below): | | | | | | | |
| .. | Available Liner Materials | | Ceramic  EPDM  ETFE  Neoprene  PFA  Polyurethane  PTFE (Teflon)  Rubber - Soft  Rubber - Ebonite  Rubber - Hard  Rubber - NBR  Rubber - Linatex  Other:  Other:  Other: | | | | | | | |
| .. | Available Electrode Materials | | Hastelloy C22  Hastelloy C276  Nickel Alloy  Tantalum  Titanium  Platinum  Platinum (80%) / Iridium (20%)  Platinum with Gold and Titanium  Stainless Steel - 316L  Other:  Other:  Other: | | | | | | | |
| .. | Available Electrode Styles | | Flat  Bulletnose  Other: | | | | | | | |
| .. | Available Grounding Options | | Grounding Straps  Grounding Electrodes  Grounding Rings  Lining Protectors (also act as Grounding Rings)  Other: | | | | | | | |
| .. | Flowtube housing material provided on all flowmeters, Type 1 through Type 6. | | Carbon Steel  Stainless Steel  Other:    If different materials are provided for Types 1 through 6, then indicate below which material is provided for each type of flowmeter: | | | | | | | |
| .. | Flowtube flange material provided on all flowmeters, Type 1 through Type 6 | | Carbon Steel  Stainless Steel  Other:    If different materials are provided for Types 1 through 6, then indicate below which material is provided for each type of flowmeter: | | | | | | | |
| **.** | **Transmitters** | | | | | | | | | |
| .. | Indicate the compatible PROFIBUS PA Profile version(s) of the proposed electromagnetic flowmeters. | | PROFIBUS Profile Version 3.02  PROFIBUS Profile Version 3.01  PROFIBUS Profile Version 3.00  PROFIBUS Profile Version 2.x  Other: | | | | | | | |
| .. | Indicate the available device parameter file formats for integration of the proposed electromagnetic flowmeters on a PROFIBUS network. | | GSD (General Station Data) file certified by Profibus International  EDDL (Electronic Device Description Language)  FDT/DTM (Field Device Tool / Device Type Manager) | | | | | | | |
| .. | Indicate optional capabilities regarding intrinsically safe outputs. | | Optional Intrinsically Safe HART output  Optional Intrinsically Safe PROFIBUS PA output  Other: | | | | | | | |
| .. | Is an internal totalizer available via the PROFIBUS and HART interfaces? | | Yes, both HART and PROFIBUS.  Yes, HART only.  Yes, PROFIBUS only.  Not available.  Other: | | | | | | | |
| .. | Is the display backlit? | | Yes  No  Other: | | | | | | | |
| .. | Integral transmitter enclosure material. | | Select the material that is proposed for flowmeter types 1, 2, and 3:  Aluminum  Stainless Steel  Polyamide  Polycarbonate  Other: | | | | | | | |
| .. | Wall-mount transmitter enclosure material | | Select the material that is proposed for flowmeter types 4, 5, and 6:  Aluminum  Stainless Steel  Polyamide  Polycarbonate  Other: | | | | | | | |
| .. | Configuration security | | No configuration security is provided.  Configuration is password protected.  A jumper is provided to secure the configuration. | | | | | | | |
| .. | Maximum cable length between flowtube and transmitter | | m | | | | | | | |
| **.** | **Environmental** | | | | | | | | | |
| .. | Indicate the ambient operating temperature range of the flowtube / sensor. | | to       °C | | | | | | | |
| .. | Indicate the ambient operating temperature range of the integral local mounted transmitter. | | to       °C | | | | | | | |
| .. | Indicate the ambient operating temperature range of the remote wall mount transmitter. | | to       °C | | | | | | | |
| .. | Integral Local Transmitter Enclosure Rating | | Check all that apply:  Unknown  NEMA 4  NEMA 4X (Specified)  IP67 (Specified)  NEMA 6 (Desired feature)  IP68 (Desired feature)  Other: | | | | | | | |
| .. | Remote Wall Mount Transmitter Enclosure Rating | | Check all that apply:  Unknown  NEMA 4  NEMA 4X (Specified)  IP67 (Specified)  NEMA 6 (Desired feature)  IP68 (Desired feature)  Other: | | | | | | | |
| **.** | **Functionality** | | | | | | | | | |
| .. | Indicate the functional features of the proposed flowmeter transmitters. | | Bi-directional flow measurement.  Simulation capability to override output for testing. | | | | | | | |
| .. | How is the flowtube calibration data passed to a new field replaced transmitter? | | Cannot be accomplished in the field – requires factory involvement.  Via manual entry of a number stamped onto the flowtube.  Flowtube calibration data is stored within non-volatile memory within the sensor, and automatically passed to a new flowmeter transmitter.  Other: | | | | | | | |
| **.** | **Diagnostic Capabilities** | | | | | | | | | |
| .. | Indicate the basic diagnostic capabilities of the flowmeters. | | | | Empty Pipe Detection  Electronics Temperature  Coil Fault  Transmitter Faults  Reverse Flow  Other: | | | | | |
| .. | Indicate the coil diagnostics capabilities. | | | | Coil Signature (Magnetic Field Strength)  Coil Resistance  Other: | | | | | |
| .. | Indicate the electrode diagnostics capabilities. | | | | Electrode Resistance  Other: | | | | | |
| .. | Describe means to verify the calibration of the flowmeter in the field, without performing a full known volume flow calibration: | | | | No field calibration verification is possible  A factory service representative can perform a calibration verification utilizing a special tool.  A meter verification tool is available for purchase to allow maintenance personnel to verify the calibration of the flowmeter.  The transmitter has built-in capability to measure and verify the calibration of the flowmeter.  Other: | | | | | |
| .. | Are all diagnostics available via the PROFIBUS interface (where specified)? | | | | Yes, all diagnostics are available via the PROFIBUS PA interface.  No, diagnostics are not available via the PROFIBUS PA interface.  Other: | | | | | |
| **.** | **Deficiencies and Additional Features** | | | | | | | | | |
| .. | Identify any deficiencies where the proposed electromagnetic flowmeters do not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| .. | Identify any additional features applicable to all flowmeters proposed that:   * significantly exceed the specified requirements, * would be of benefit to the City of Winnipeg; and * are included in the price in Form B.   Do not include any item identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Electromagnetic Flowmeter – Type 1, 50mm** | | | | | | | | | |
| .. | Complete model numbers of the electromagnetic flowmeter proposed. | | | | Flowtube:  Transmitter:  Grounding Rings:  Other: | | | | | |
| .. | Indicate the liner material utilized in the proposed electromagnetic flowmeters. | | | | PFA  PTFE (Teflon)  Ceramic  Other: | | | | | |
| .. | Indicate the electrode material utilized in the proposed electromagnetic flowmeters. | | | | 316L stainless steel  Hastelloy C-22  Hastelloy C-276  Other: | | | | | |
| .. | Digital accuracy of the proposed electromagnetic flowmeter. Accuracy to include the combined effects of linearity, hysteresis, repeatability, and calibration uncertainty. | | | | @ 0.5 m/s:       %  @ 10 m/s:       %  Other details: | | | | | |
| .. | Output Signal | | | | PROFIBUS PA (Specified)  4-20 mA output included with PROFIBUS output  HART  Other: | | | | | |
| .. | Identify any deficiencies where the proposed electromagnetic flowmeters do not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Electromagnetic Flowmeter – Type 2, 100mm** | | | | | | | | | |
| .. | Complete model numbers of the electromagnetic flowmeter proposed. | | | | Flowtube:  Transmitter:  Grounding Rings:  Other: | | | | | |
| .. | Indicate the liner material utilized in the proposed electromagnetic flowmeters. | | | | PFA  PTFE (Teflon)  Ceramic  EPDM  ETFE  Rubber - Ebonite  Other: | | | | | |
| .. | Indicate the electrode material utilized in the proposed electromagnetic flowmeters. | | | | 316L stainless steel  Hastelloy C-22  Hastelloy C-276  Other: | | | | | |
| .. | Accuracy of the proposed electromagnetic flowmeter. Accuracy to include the combined effects of linearity, hysteresis, repeatability, and calibration uncertainty. | | | | @ 0.5 m/s:       %  @ 10 m/s:       %  Other details: | | | | | |
| .. | Output Signal | | | | PROFIBUS PA (Specified)  4-20 mA output included with PROFIBUS output  HART  Other: | | | | | |
| .. | Identify any items where the proposed product does not meet the specifications or the intent of the specifications. | | | |  | | | | | |
| **.** | **Electromagnetic Flowmeter – Type 3, 150mm** | | | | | | | | | |
| .. | Complete model numbers of the electromagnetic flowmeter proposed. | | | | Flowtube:  Transmitter:  Grounding Rings:  Other: | | | | | |
| .. | Hazardous Location Approval – Flowtube and transmitter | | | | Unclassified  CSA Class I, Div/Zone 2  CSA Explosion Proof (Class I, Div/Zone 1)  Other: | | | | | |
| 2.. | Indicate the liner material utilized in the proposed electromagnetic flowmeters. | | | | PFA (Perfluoroalkoxy)  PTFE (Teflon)  Ceramic  Other: | | | | | |
| .. | Indicate the electrode material utilized in the proposed electromagnetic flowmeters. | | | | 316L stainless steel  Hastelloy C-22  Hastelloy C-276  Other: | | | | | |
| .. | Accuracy of the proposed electromagnetic flowmeter. Accuracy to include the combined effects of linearity, hysteresis, repeatability, and calibration uncertainty. | | | | @ 0.5 m/s:       %  @ 10 m/s:       %  Other details: | | | | | |
| .. | Output Signal | | | | PROFIBUS PA (Specified)  4-20 mA output included with PROFIBUS output  HART  Other: | | | | | |
| .. | Identify any deficiencies where the proposed electromagnetic flowmeters do not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Electromagnetic Flowmeter – Type 4, 200mm** | | | | | | | | | |
| .. | Complete model numbers of the electromagnetic flowmeter proposed. | | | | Flowtube:  Transmitter:  Grounding Rings:  Other: | | | | | |
| .. | Hazardous Location Approval – Flowtube | | | | Unclassified  CSA Class I, Div/Zone 2  CSA Explosion Proof (Class I, Div/Zone 1)  Other: | | | | | |
| .. | Hazardous Location Approval – Transmitter | | | | Unclassified  CSA Class I, Div/Zone 2  CSA Explosion Proof (Class I, Div/Zone 1)  Other: | | | | | |
| .. | Indicate the liner material utilized in the proposed electromagnetic flowmeters. | | | | PFA (Perfluoroalkoxy)  PTFE (Teflon)  Polyurethane  Neoprene  Other: | | | | | |
| .. | Indicate the electrode material utilized in the proposed electromagnetic flowmeters. | | | | 316L stainless steel  Hastelloy C-22  Hastelloy C-276  Other: | | | | | |
| .. | Accuracy of the proposed electromagnetic flowmeter. Accuracy to include the combined effects of linearity, hysteresis, repeatability, and calibration uncertainty. | | | | @ 0.5 m/s:       %  @ 10 m/s:       %  Other details: | | | | | |
| .. | Output Signal | | | | PROFIBUS PA (Specified)  4-20 mA output included with PROFIBUS output  HART  Other: | | | | | |
| .. | Identify any deficiencies where the proposed electromagnetic flowmeters do not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Electromagnetic Flowmeter – Type 5, 400mm** | | | | | | | | | |
| .. | Complete model numbers of the electromagnetic flowmeter proposed. | | | | Flowtube:  Transmitter:  Grounding Rings:  Other: | | | | | |
| .. | Hazardous Location Approval - Flowtube | | | | Unclassified  CSA Class I, Div/Zone 2  CSA Explosion Proof (Class I, Div/Zone 1)  Other: | | | | | |
| .. | Hazardous Location Approval – Transmitter | | | | Unclassified  CSA Class I, Div/Zone 2  CSA Explosion Proof (Class I, Div/Zone 1)  Other: | | | | | |
| .. | Indicate the liner material utilized in the proposed electromagnetic flowmeters. | | | | PFA (Perfluoroalkoxy)  PTFE (Teflon)  Polyurethane  Neoprene  Other: | | | | | |
| .. | Indicate the electrode material utilized in the proposed electromagnetic flowmeters. | | | | 316L stainless steel  Hastelloy C-22  Hastelloy C-276  Other: | | | | | |
| .. | Accuracy of the proposed electromagnetic flowmeter. Accuracy to include the combined effects of linearity, hysteresis, repeatability, and calibration uncertainty. | | | | @ 0.5 m/s:       %  @ 10 m/s:       %  Other details: | | | | | |
| .. | Output Signal | | | | PROFIBUS PA (Specified)  4-20 mA output included with PROFIBUS output  HART  Other: | | | | | |
| .. | Identify any deficiencies where the proposed electromagnetic flowmeters do not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Electromagnetic Flowmeter – Type 6, 750mm** | | | | | | | | | |
| .. | Complete model numbers of the electromagnetic flowmeter proposed. | | | | Flowtube:  Transmitter:  Grounding Rings:  Other: | | | | | |
| .. | Hazardous Location Approval - Flowtube | | | | Unclassified  CSA Class I, Div/Zone 2  CSA Explosion Proof (Class I, Div/Zone 1)  Other: | | | | | |
| .. | Hazardous Location Approval – Transmitter | | | | Unclassified  CSA Class I, Div/Zone 2  CSA Explosion Proof (Class I, Div/Zone 1)  Other: | | | | | |
| .. | Indicate the liner material utilized in the proposed electromagnetic flowmeters. | | | | Neoprene  PFA (Perfluoroalkoxy)  PTFE (Teflon)  Polyurethane  Other: | | | | | |
| .. | Indicate the electrode material utilized in the proposed electromagnetic flowmeters. | | | | 316L stainless steel  Hastelloy C-22  Hastelloy C-276  Other: | | | | | |
| .. | Indicate the submergence rating provided. | | | | Not rated for submergence  Rated for submergence to the following depth:        m | | | | | |
| .. | Accuracy of the proposed electromagnetic flowmeter. Accuracy to include the combined effects of linearity, hysteresis, repeatability, and calibration uncertainty. | | | | @ 0.5 m/s:       %  @ 10 m/s:       %  Other details: | | | | | |
| .. | Output Signal | | | | PROFIBUS PA (Specified)  4-20 mA output included with PROFIBUS output  HART  Other: | | | | | |
| .. | Identify any deficiencies where the proposed electromagnetic flowmeters do not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Electromagnetic Flowmeter Calibration Verification Tool (Non-Mandatory)** | | | | | | | | | |
| .. | Information regarding the Electromagnetic Flowmeter Calibration Verification Tool proposed. | | | | A tool is not proposed.  A tool is proposed as per below:  Model Number:  Accessories:  Other: | | | | | |
| .. | Hazardous Location Approval | | | | Unclassified  CSA Class I, Div/Zone 2  CSA Explosion Proof (Class I, Div/Zone 1)  Other: | | | | | |
| .. | Identify the disassembly and connection requirements required to perform the calibration verification. Check all that apply. | | | | Removal of the flowtube  Removal of the transmitter  Connection to the flowtube  Connection to the transmitter  Other: | | | | | |
| .. | Indicate the components tested by the tool. | | | | Transmitter  Flowtube  Wiring Insulation  Magnetism  Other: | | | | | |
| .. | Indicate the presentation of the calibration verification tool results. | | | | Results not indicated.  Pass / fail displayed on screen.  Measurements displayed on screen.  Measurements displayed on computer screen.  Basic report transferable to a computer for printing.  Detailed report transferable to a computer for printing.  Other details: | | | | | |
| .. | Indicate the certified accuracy of the calibration verification. | | | | Accuracy of verification is not documented.  The tool can certify that the complete flowmeter installation is within       % of the factory calibration. | | | | | |
| **.** | **Pressure Transmitters (Section A)** | | | | | | | | | |
| **.** | **General** | | | | | | | | | |
| .. | Years of experience in the design and manufacture of pressure transmitters. | | | | <5 years  5 to 9 years  10 to 14 years  15 to 19 years  20 to 24 years  >25 years | | | | | |
| .. | Documentation | | | | Product datasheets included with proposal  Product O&M manuals included with proposal | | | | | |
| **.** | **Product Lifecycle Guarantee** | | | | | | | | | |
| .. | Active sale and production guarantee | | | | No plans to remove any of the proposed products from active sale and/or production are in place.  There are plans to remove the product for active sale and/or production, but plans call for:  5 or more years of active production.  3 or more years of active production.  Less than 3 years of active production and sale.  Additional Details: | | | | | |
| .. | Product support guarantee | | | | The product is guaranteed to be operable, maintainable, and fully supported by the manufacturer, including availability of spare parts for the following duration after any of the proposed products are removed from active sale:  5 or more years.  Years guaranteed:  <5 years (Not acceptable)  Additional Details: | | | | | |
| **.** | **Environmental and Ingress Protection** | | | | | | | | | |
| .. | Operating temperature range | | | | to       °C | | | | | |
| .. | Enclosure Rating | | | | Check all that apply:  Unknown  NEMA 4  NEMA 4X (Specified)  IP67 (Specified)  NEMA 6 (Desired feature)  IP68 (Desired feature)  Other: | | | | | |
| **.** | **Local Operator Interface** | | | | | | | | | |
| .. | Display | | | | Display not provided (Does not meet specification)  Display Provided  Indicates pressure unit of measurement.  Backlit  Display is rotatable in the field.  Diagnostic / fault indicator  Other features (Indicate below): | | | | | |
| **.** | **Functionality** | | | | | | | | | |
| .. | Indicate the functional features of the proposed pressure transmitter(s). | | | | Configuration security protection via jumper and/or software password.  Simulation capability to override output for testing. | | | | | |
| **.** | **Communication** | | | | | | | | | |
| .. | Indicate the compatible PA Profile version(s) of the proposed pressure transmitters. | | | | PROFIBUS Profile Version 3.02  PROFIBUS Profile Version 3.01  PROFIBUS Profile Version 3.00  PROFIBUS Profile Version 2.x  Other: | | | | | |
| .. | Indicate the available device parameter file formats for integration of the proposed temperature transmitters on a PROFIBUS network. | | | | GSD (General Station Data) file certified by Profibus International  EDDL (Electronic Device Description Language)  FDT/DTM (Field Device Tool / Device Type Manager) | | | | | |
| .. | Indicate the PROFIBUS output data update rate. | | | | Unknown  As per below:        ms | | | | | |
| .. | Power supply | | | | Power supply independent of communication bus (Does not meet specifications)  PROFIBUS PA bus powered  Maximum current consumption:       mA | | | | | |
| .. | Power supply minimum voltage | | | | VDC | | | | | |
| **.** | **Deficiencies and Additional Features** | | | | | | | | | |
| .. | Identify any deficiencies where the proposed pressure transmitters do not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| .. | Identify any additional features proposed that:   * significantly exceed the specified requirements, * would be of benefit to the City of Winnipeg; and * are included in the price in Form B.   Do not include any item identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Pressure Transmitter, Type 1, Gauge** | | | | | | | | | |
| .. | Complete model number of the pressure transmitter proposed. | | | | Transmitter:  Manifold:  Other: | | | | | |
| .. | Confirm the following specified features are provided by the proposed pressure transmitter: | | | | Local display  Calibration certificate  PROFIBUS PA communication | | | | | |
| .. | Approvals | | | | Only indicate approvals applicable to the products proposed:  CSA  UL – Canadian (cUL)  FM – Canadian (cFM)  Other Canadian Recognized Approval: | | | | | |
| .. | Hazardous Location Approval | | | | Unclassified  CSA Intrinsically Safe (Class I, Zone 1)  CSA Explosion Proof (Class I, Zone 1)  Other: | | | | | |
| .. | Range limits of the proposed pressure transmitter. | | | | URL:       kPa  LRL:       kPa | | | | | |
| .. | Reference accuracy of the proposed pressure transmitter, at the indicated user span. | | | | % of user span setting (0 – 689.5 kPag)  Where (URL / user span) = | | | | | |
| .. | Stability of the proposed pressure transmitter. | | | | % of URL over five-years | | | | | |
| .. | Identify secondary seal provided. | | | | External secondary process seal provided.  Internal secondary process seal provided to ANSI/ISA 12.27.01‑2011 compliance:  Certified by CSA  Certified by other 3rd party approval agency.    Certified by manufacturer | | | | | |
| **.** | **Pressure Transmitter, Type 2, Differential** | | | | | | | | | |
| .. | Complete model number of the pressure transmitter proposed. | | | | Transmitter:  Manifold:  Other: | | | | | |
| .. | Confirm the following specified features are provided by the proposed pressure transmitter: | | | | Local display  Calibration certificate  PROFIBUS PA communication | | | | | |
| .. | Approvals | | | | Only indicate approvals applicable to all products proposed:  CSA  UL – Canadian (cUL)  FM – Canadian (cFM)  Other Canadian Recognized Approval: | | | | | |
| .. | Hazardous Location Approval | | | | Unclassified  CSA Intrinsically Safe (Class I, Zone 1)  CSA Intrinsically Safe (Class I, Zone 2)  CSA Explosion Proof (Class I, Zone 1)  Class I, Div/Zone 2. Method of protection: | | | | | |
| .. | Range limits of the proposed pressure transmitter. | | | | URL:       kPa  LRL:       kPa  (If capable, indicate maximum negative pressure) | | | | | |
| .. | Reference accuracy of the proposed pressure transmitter, at the indicated user span. | | | | % of user span setting (-2.0 – 2.0 kPa)  Where (URL / user span) = | | | | | |
| .. | Stability of the proposed pressure transmitter. | | | | % of URL over five-years | | | | | |
| .. | Identify secondary seal provided. | | | | External secondary process seal provided.  Internal secondary process seal provided to ANSI/ISA 12.27.01‑2011 compliance:  Certified by CSA  Certified by other 3rd party approval agency.    Certified by manufacturer | | | | | |
| **.** | **Pressure Transmitter, Type 3, Flow** | | | | | | | | | |
| .. | Complete model number of the pressure transmitter proposed. | | | | Transmitter:  Manifold:  Other: | | | | | |
| .. | Confirm the following specified features are provided by the proposed pressure transmitter: | | | | Local display  Local pushbuttons  Calibration certificate | | | | | |
| .. | Approvals | | | | Only indicate approvals applicable to the products proposed:  CSA  UL – Canadian (cUL)  FM – Canadian (cFM)  Other Canadian Recognized Approval: | | | | | |
| .. | Hazardous Location Approval | | | | Unclassified  CSA Intrinsically Safe (Class I, Zone 1)  CSA Intrinsically Safe (Class I, Zone 2)  CSA Explosion Proof (Class I, Zone 1)  Class I, Div/Zone 2. Method of protection: | | | | | |
| .. | Range limits of the proposed pressure transmitter. | | | | URL:       kPa  LRL:       kPa | | | | | |
| .. | Reference accuracy of the proposed pressure transmitter, at the indicated user span. | | | | % of user span setting (0 – 2.0 kPa)  Where (URL / user span) = | | | | | |
| .. | Stability of the proposed pressure transmitter. | | | | % of URL over five-years | | | | | |
| .. | Identify secondary seal provided. | | | | External secondary process seal provided.  Internal secondary process seal provided to ANSI/ISA 12.27.01‑2011 compliance:  Certified by CSA  Certified by other 3rd party approval agency.    Certified by manufacturer | | | | | |
| .. | Output Signal | | | | PROFIBUS PA (Preferred)  HART  Other | | | | | |
| **.** | **Pressure Transmitter, Type 4, Level** | | | | | | | | | |
| .. | Complete model number of the pressure transmitter proposed. | | | | Transmitter:  Diaphragm Seal:  Other: | | | | | |
| .. | Confirm the following specified features are provided by the proposed pressure transmitter: | | | | 75 mm diaphragm seal  Local display  Calibration certificate  PROFIBUS PA communication | | | | | |
| .. | Approvals | | | | Only indicate approvals applicable to the products proposed:  CSA  UL – Canadian (cUL)  FM – Canadian (cFM)  Other Canadian Recognized Approval: | | | | | |
| .. | Hazardous Location Approval | | | | Unclassified  CSA Intrinsically Safe (Class I, Zone 1)  CSA Intrinsically Safe (Class I, Zone 2)  CSA Explosion Proof (Class I, Zone 1)  Class I, Div/Zone 2. Method of protection: | | | | | |
| .. | Range limits of the proposed pressure transmitter. | | | | URL:       kPa  LRL:       kPa | | | | | |
| .. | Reference accuracy of the proposed pressure transmitter, at the indicated user span. | | | | % of user span setting (0 – 689.5 kPag)  Where (URL / user span) = | | | | | |
| .. | Stability of the proposed pressure transmitter. | | | | % of URL over five-years | | | | | |
| .11. | Identify secondary seal provided. | | | | External secondary process seal provided.  Internal secondary process seal provided to ANSI/ISA 12.27.01‑2011 compliance:  Certified by CSA  Certified by other 3rd party approval agency.    Certified by manufacturer | | | | | |
| **.** | **Temperature Transmitters (Section A)** | | | | | | | | | |
| **.** | **General** | | | | | | | | | |
| .. | Years of experience in the design and manufacture of temperature transmitters. | | | | <5 years  5 to 9 years  10 to 14 years  15 to 19 years  20 to 24 years  >25 years | | | | | |
| **.** | **Product Lifecycle Guarantee** | | | |  | | | | | |
| .. | Active sale and production guarantee | | | | No plans to remove any of the proposed products from active sale and/or production are in place.  There are plans to remove the product for active sale and/or production, but plans call for:  5 or more years of active production.  3 or more years of active production.  Less than 3 years of active production and sale.  Additional Details: | | | | | |
| .. | Product support guarantee | | | | The product is guaranteed to be operable, maintainable, and fully supported by the manufacturer, including availability of spare parts for the following duration after any of the proposed products are removed from active sale:  5 or more years.  Years guaranteed:  <5 years (Not acceptable)  Additional Details: | | | | | |
| **.** | **Temperature Transmitter, Type 1, Process** | | | | | | | | | |
| .. | Complete model number of the temperature transmitter proposed. | | | | Transmitter:  Sensor:  Thermowell:  Other: | | | | | |
| .. | Documentation | | | | Product datasheets included with proposal  Product O&M manuals included with proposal | | | | | |
| .. | Approvals | | | | Only indicate approvals applicable to the products proposed:  CSA  UL – Canadian (cUL)  FM – Canadian (cFM)  Other Canadian Recognized Approval: | | | | | |
| .. | Hazardous Location Approval | | | | Unclassified  CSA Intrinsically Safe (Class I, Zone 1)  CSA Intrinsically Safe (Class I, Zone 2)  CSA Explosion Proof (Class I, Zone 1)  Class I, Div/Zone 2. Method of protection: | | | | | |
| .. | Sensor compatibility of the transmitter | | | | RTD Pt100 (Mandatory)  RTD Pt1000 (Desired) | | | | | |
| .. | RTD Sensor Tolerance | | | | IEC 60751 Class B ±(0.3 + 0.005 |t|) (Specified)  IEC 60751 Class A ±(0.15 + 0.002 |t|)  ASTM E1137 Grade B ±(0.25 + 0.0042 |t|)  ASTM E1137 Grade A ±(0.13 + 0.0017 |t|)  Other    Where |t| is the absolute value of temperature in °C | | | | | |
| .. | Enclosure Rating | | | | Check all that apply:  Unknown  NEMA 4  NEMA 4X (Specified)  IP67 (Specified)  NEMA 6 (Desired feature)  IP68 (Desired feature)  Other: | | | | | |
| .. | Display provided. (Note that a display is not a mandatory requirement.) | | | | Display not provided and is not available.  Display provided and included in the Form B price.  Display not provided but is available on the proposed transmitter model as an option.  Display not provided but is available on an alternate temperature transmitter model. | | | | | |
| .. | Display features (Where provided or optional) | | | | Display not available  Display provided (not required)  Indicates temperature units.  Backlit  Display is rotatable in the field.  Diagnostic / fault indicator  Other features (Indicate below): | | | | | |
| .. | Galvanic Input / Output Isolation | | | | Not provided (Does not meet specification)  Unknown  As indicated below:        V ac | | | | | |
| .. | Measurement range of the proposed temperature transmitter. | | | | to       °C | | | | | |
| .. | Digital accuracy of the proposed temperature transmitter. | | | | +/-       °C | | | | | |
| .. | Stability of the proposed temperature transmitter. | | | | °C/year or       % span/year, whichever is greater | | | | | |
| .. | Output Signal | | | | PROFIBUS PA (Mandatory)  HART  Other | | | | | |
| .. | Indicate the compatible PROFIBUS PA Profile version(s) of the proposed temperature transmitters. | | | | PROFIBUS Profile Version 3.02  PROFIBUS Profile Version 3.01  PROFIBUS Profile Version 3.00  PROFIBUS Profile Version 2.x  Other: | | | | | |
| .. | Indicate the available device parameter file formats for integration of the proposed temperature transmitters on a PROFIBUS network. | | | | GSD (General Station Data) file certified by Profibus International  EDDL (Electronic Device Description Language)  FDT/DTM (Field Device Tool / Device Type Manager) | | | | | |
| .. | Indicate the PROFIBUS output data update rate. | | | | Unknown  As per below:        ms | | | | | |
| .. | Power supply | | | | Power supply independent of communication bus (Does not meet specifications)  PROFIBUS PA bus powered  Maximum current consumption:       mA | | | | | |
| .. | Power supply minimum voltage | | | | VDC | | | | | |
| .. | Indicate the functional features of the proposed temperature transmitters. | | | | Configuration security protection via jumper and/or software password.  Simulation capability to override output for testing. | | | | | |
| .. | Identify any deficiencies where the proposed temperature transmitters do not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| .. | Identify any additional features proposed that:   * significantly exceed the specified requirements, * would be of benefit to the City of Winnipeg; and * are included in the price in Form B.   Do not include any item identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Temperature Transmitter, Type 2, HVAC Duct** | | | | | | | | | |
| .. | Complete model number of the temperature transmitter proposed. | | | | Transmitter:  Sensor:  Other: | | | | | |
| .. | Documentation | | | | Product datasheets included with proposal  Product O&M manuals included with proposal | | | | | |
| .. | Approvals | | | | Only indicate approvals applicable to the products proposed:  CSA  UL – Canadian (cUL)  FM – Canadian (cFM)  Other Canadian Recognized Approval: | | | | | |
| .. | Describe the optional hazardous certifications available within the proposed model series. | | | | No hazardous certifications available  CSA Intrinsically Safe (Class I, Zone 1)  CSA Intrinsically Safe (Class I, Zone 2)  CSA Explosion Proof (Class I, Zone 1)  Class I, Div/Zone 2. Method of protection:    Other details: | | | | | |
| .. | RTD Sensor Tolerance | | | | IEC 60751 Class B ±(0.3 + 0.005 |t|) (Specified)  IEC 60751 Class A ±(0.15 + 0.002 |t|)  ASTM E1137 Grade B ±(0.25 + 0.0042 |t|)  ASTM E1137 Grade A ±(0.13 + 0.0017 |t|)  Other    Where |t| is the absolute value of temperature in °C | | | | | |
| .. | Enclosure Rating | | | | Check all that apply:  Unknown  NEMA 4  NEMA 4X (Specified)  IP67 (Specified)  NEMA 6 (Desired feature)  IP68 (Desired feature)  Other: | | | | | |
| .. | Galvanic Input / Output Isolation | | | | Not provided (Does not meet specification)  Unknown  As indicated below:        V ac | | | | | |
| .. | Measurement range of the proposed temperature transmitter. | | | | to       °C | | | | | |
| .. | Digital accuracy of the proposed temperature transmitter. | | | | +/-       °C | | | | | |
| .. | Stability of the proposed temperature transmitter. | | | | °C/year or       % span/year, whichever is greater | | | | | |
| .. | Output Signal | | | | PROFIBUS PA  HART (Specified)  4-20 mA  Other | | | | | |
| .. | Indicate the compatible HART revision(s) of the proposed temperature transmitters. | | | | HART Revision 7  HART Revision 6  HART Revision 5  Other: | | | | | |
| .. | Indicate the functional features of the proposed temperature transmitters. | | | | Configuration security protection via jumper and/or software password.  Simulation capability to override output for testing. | | | | | |
| .. | Identify any deficiencies where the proposed temperature transmitters do not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| .. | Identify any additional features proposed that:   * significantly exceed the specified requirements, * would be of benefit to the City of Winnipeg; and * are included in the price in Form B.   Do not include any item identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Temperature Transmitter, Type 3, HVAC Wall-Mount** | | | | | | | | | |
| .. | Complete model number of the temperature transmitter proposed. | | | | Transmitter:  Sensor:  Other: | | | | | |
| .. | Documentation | | | | Product datasheets included with proposal  Product O&M manuals included with proposal | | | | | |
| .. | Approvals | | | | Only indicate approvals applicable to the products proposed:  CSA  UL – Canadian (cUL)  FM – Canadian (cFM)  Other Canadian Recognized Approval: | | | | | |
| .. | Describe the optional hazardous certifications available within the proposed model series. | | | | No hazardous certifications available  CSA Intrinsically Safe (Class I, Zone 1)  CSA Intrinsically Safe (Class I, Zone 2)  CSA Explosion Proof (Class I, Zone 1)  Class I, Div/Zone 2. Method of protection:    Other details: | | | | | |
| .. | RTD Sensor Tolerance | | | | IEC 60751 Class B ±(0.3 + 0.005 |t|) (Specified)  IEC 60751 Class A ±(0.15 + 0.002 |t|)  ASTM E1137 Grade B ±(0.25 + 0.0042 |t|)  ASTM E1137 Grade A ±(0.13 + 0.0017 |t|)  Other    Where |t| is the absolute value of temperature in °C | | | | | |
| .. | Enclosure Rating | | | | Check all that apply:  Unknown  NEMA 4  NEMA 4X (Specified)  IP67 (Specified)  NEMA 6 (Desired feature)  IP68 (Desired feature)  Other: | | | | | |
| .. | Galvanic Input / Output Isolation | | | | Not provided (Does not meet specification)  Unknown  As indicated below:        V ac | | | | | |
| .. | Measurement range of the proposed temperature transmitter. | | | | to       °C | | | | | |
| .. | Digital accuracy of the proposed temperature transmitter. | | | | +/-       °C | | | | | |
| .. | Stability of the proposed temperature transmitter. | | | | °C/year or       % span/year, whichever is greater | | | | | |
| .. | Output Signal | | | | PROFIBUS PA  HART (Specified)  4-20 mA  Other | | | | | |
| .. | Indicate the compatible HART revision(s) of the proposed temperature transmitters. | | | | HART Revision 7  HART Revision 6  HART Revision 5  Other: | | | | | |
| .. | Indicate the functional features of the proposed temperature transmitters. | | | | Configuration security protection via jumper and/or software password.  Simulation capability to override output for testing. | | | | | |
| .. | Describe how the specified wall mounting is provided. | | | |  | | | | | |
| .. | Describe how the RTD sensor is protected in a wall mounted installation. | | | | The probe length is kept short to minimize potential for damage. Probe length is:        mm  The probe diameter provides sufficient damage protection. Probe diameter is:        mm  A protective sheath is provided for the sensor. Describe below:    Other. Describe below: | | | | | |
| .. | Identify any deficiencies where the proposed temperature transmitters do not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| .. | Identify any additional features proposed that:   * significantly exceed the specified requirements, * would be of benefit to the City of Winnipeg; and * are included in the price in Form B.   Do not include any item identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Warranty (Section A)** | | | | | | | | | |
| **.** | **General** | | |  | | | | | | |
| .. | Warranty Length of Electromagnetic Flowmeters | | | One-year (Beginning on the date of successful commissioning or 6 months after delivery, whichever comes sooner) – Minimum Specified  Two years or longer from the date of delivery. Indicate length below:        years  Two years or longer (Beginning on the date of successful commissioning or 6 months after delivery, whichever comes sooner). Indicate length below:        years | | | | | | |
| .. | Warranty Length of Pressure Transmitters | | | One-year (Beginning on the date of successful commissioning or 6 months after delivery, whichever comes sooner) – Minimum Specified  Two years or longer from the date of delivery. Indicate length below:        years  Two years or longer (Beginning on the date of successful commissioning or 6 months after delivery, whichever comes sooner). Indicate length below:        years | | | | | | |
| .. | Warranty Length of Temperature Transmitters | | | One-year (Beginning on the date of successful commissioning or 6 months after delivery, whichever comes sooner) – Minimum Specified  Two years or longer from the date of delivery. Indicate length below:        years  Two years or longer (Beginning on the date of successful commissioning or 6 months after delivery, whichever comes sooner). Indicate length below:        years | | | | | | |
| **.** | **Delivery (Section A)** | | | | | | | | | |
| **.** | **Electromagnetic Flowmeters** | | | | | | | | | |
| .. | Indicate the delivery timeframe for proposed electromagnetic flowmeters from the date of order, for an order of up to ten (10) flowmeters within the corresponding size range. Allow 14 Calendar Days for shop drawing (submittal) reviews. | | Diameter less than 300mm (12”):  Maximum:       Calendar Days (max 42)  Diameter >= 300mm (12”) and < 600mm (“24”):  Maximum:       Calendar Days (max 63)  Diameter >= 600mm (24”):  Maximum:       Calendar Days (max 84) | | | | | | | |
| **.** | **Pressure Transmitters** | | | | | | | | | |
| .. | Indicate the delivery timeframe for the proposed pressure transmitter from the date of order, for an order of up to ten (10) pressure transmitters. Allow 14 Calendar Days for shop drawing (submittal) reviews. | | Maximum:       Calendar Days (max 42) | | | | | | | |
| **.** | **Temperature Transmitters** | | | | | | | | | |
| .. | Indicate the delivery timeframe for the proposed temperature transmitters, from the date of order, for an order of up to ten (10) pressure transmitters.. Allow 14 Calendar Days for shop drawing (submittal) reviews. | | Maximum:       Calendar Days (max 42) | | | | | | | |
| **.** | **Published Canadian Price List (Section B)** | | | | | | | | | |
| **.** | **General** | | | | | | | | | |
| .. | As requested in B13, is a published price list provided for all ultrasonic level transmitter components? | | | | Yes, a published price list is provided:  The price list is in Canadian Dollars.  The price list is in US Dollars.  The price list is in Euros.  The price list is applicable for the following regions: | | | | | |
| .. | Is the price list comprehensive of the manufacturer’s entire ultrasonic level transmitter offering, including all replacement parts? | | | | Yes  No. Provide details below: | | | | | |
| .. | Is the price list consistent with the prices and discounts indicated in Form B? | | | | Yes  No. Provide details below: | | | | | |
| **.** | **Ultrasonic Level Transmitters (Section B)** | | | | | | | | | |
| **.** | **General** | | | | | | | | | |
| .. | Years of experience in the design and manufacture of ultrasonic level transmitters. | | | | <5 years  5 to 9 years  10 to 14 years  15 to 19 years  20 to 24 years  >25 years | | | | | |
| **.** | **Product Lifecycle Guarantee** | | | | | | | | | |
| .. | Active sale and production guarantee | | | | No plans to remove any of the proposed products from active sale and/or production are in place.  There are plans to remove the product for active sale and/or production, but plans call for:  5 or more years of active production.  3 or more years of active production.  Less than 3 years of active production and sale.  Additional Details: | | | | | |
| .. | Product support guarantee | | | | The products proposed are guaranteed to be operable, maintainable, and fully supported by the manufacturer, including availability of spare parts for the following duration after any of the proposed products are removed from active sale:  5 or more years.  Years guaranteed:  <5 years (Not acceptable)  Additional Details: | | | | | |
| **.** | **Ultrasonic Level Transmitter - Type 1, Integrated Unit** | | | | | | | | | |
| .. | Complete model number of the ultrasonic level transmitter proposed, including all accessories included in the Form B price. | | | | Transmitter:  Sensor:  Mounting Flange:  Other:  Other: | | | | | |
| .. | Documentation | | | | Product datasheets included with proposal  Product O&M manuals included with proposal | | | | | |
| .. | Approvals | | | | Only indicate approvals applicable to the products proposed:  CSA  UL – Canadian (cUL)  FM – Canadian (cFM)  Other Canadian Approval (indicate below): | | | | | |
| .. | Indicate the hazardous location approvals provided | | | | Unclassified Only  CSA Class I, Div 2 / Zone 2  CSA Class I, Div 1 / Zone 1 – Explosion-proof  CSA Class I, Div 1 / Zone 1 – Intrinsically-Safe (specified)  Other: | | | | | |
| .. | Indicate the optional hazardous location approvals of the proposed transmitter / controller. The optional approvals are not required to be included in the Form B price | | | | Unclassified Only  CSA Class I, Div 2 / Zone 2 (non-incendive)  CSA Class I, Div 1 / Zone 1 – Explosion-proof  CSA Class I, Div 1 / Zone 1 – Intrinsically-Safe (specified)  Other: | | | | | |
| .. | Indicate the sensor / transmitter configuration. | | | | The sensor and transmitter are integrated into a single unit. (specified)  The transmitter is separate from the sensor.  Other: | | | | | |
| .. | Maximum operating range of the proposed transmitter | | | | m | | | | | |
| .. | Blanking distance / minimum range of the proposed transmitter | | | | m | | | | | |
| .. | Beam angle of the proposed ultrasonic level transmitter. | | | | degrees | | | | | |
| .. | Indicate the additional available optional ranges, within the same model series, that address the indicated applications. Do not include these additional sensors in the Form B price. Note that the beam angle is for the entire beam width, not the angle from the center of the beam. | | | | **Desired Range (m)** | **Desired Beam Angle** | | **Model** | **Actual Range (m)** | **Actual Beam Angle** |
| >=6 and < 10 | <=12° | |  |  | ° |
| >=10 | <=12° | |  |  | ° |
| >=15 | <=11° | |  |  | ° |
| .. | Operating Frequency | | | | Fixed        kHz  Configurable range        kHz to       kHz | | | | | |
| .. | Accuracy of the proposed ultrasonic level transmitter. | | | | Information not available  The greater of the below:        % maximum range or        mm | | | | | |
| .. | Resolution of the proposed ultrasonic level transmitter. | | | | Information not available  The greater of the below:        % maximum range or        mm, whichever is greater | | | | | |
| .. | Is integral temperature compensation provided? | | | | Yes  No | | | | | |
| .. | Temperature operating limits. | | | | to       °C | | | | | |
| .. | Volume calculation capabilities | | | | Volume calculation is not supported.  Basic circular or rectangular tank volume calculation  Calculation via selection of multiple tank shapes  Custom tank characterization - Ability to define custom linearization curves for abnormal vessel shapes (level – volume) | | | | | |
| .. | Simulation Capabilities | | | | No simulation capability is provided  Simulation capability is provided to override the output for testing. | | | | | |
| .. | Echo Processing Capabilities | | | | Manually configurable interference echo suppression.  Automatic false echo suppression. | | | | | |
| .. | Diagnostic Capabilities | | | | Echo Profile Analysis provided via:  Local Display  HART Interface  PROFIBUS Interface  Proprietary Software | | | | | |
| .. | Power supply | | | | Power supply independent of communication bus (Does not meet specifications)  PROFIBUS PA bus powered  Maximum current consumption:       mA | | | | | |
| .. | Power supply minimum voltage | | | | VDC | | | | | |
| .. | Indicate the types of signal outputs included with the proposed ultrasonic level transmitter. | | | | PROFIBUS PA (specified)  PROFIBUS DP | | | | | |
| .. | Indicate the compatible PROFIBUS DP/PA Profile version(s) of the proposed ultrasonic level transmitter. | | | | PROFIBUS Profile Version 3.02  PROFIBUS Profile Version 3.01  PROFIBUS Profile Version 3.00  PROFIBUS Profile Version 2.x  Other: | | | | | |
| .. | Indicate the available device parameter file formats for integration of the proposed ultrasonic level transmitter on a PROFIBUS network. | | | | GSD (General Station Data) file certified by Profibus International  EDDL (Electronic Device Description Language)  FDT/DTM (Field Device Tool / Device Type Manager)  Other: | | | | | |
| .. | Display | | | | Display not provided (Does not meet specification)  Display Provided  Indicates level unit of measurement.  Indicates sensor temperature.  Backlit  Display is rotatable in the field.  Diagnostic / fault / loss of echo indicator  Other features (Indicate below): | | | | | |
| .. | How is the transmitter configured? | | | | Indicate all proposed methods:  Via local keypad  Via HART communicator  Via PROFIBUS Interface  Via proprietary handheld programmer / configuration tool.  Via proprietary PC configuration tool (supplied at no additional charge). | | | | | |
| .. | Sensor Mounting | | | | 75mm (3”) ASME Flange – Material as indicated below:  Stainless Steel  Carbon Steel  Other:    Other: | | | | | |
| .. | Identify any deficiencies where the proposed ultrasonic level transmitter does not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| .. | Identify any additional features proposed that:   * significantly exceed the specified requirements, * would be of benefit to the City of Winnipeg; and * are included in the price in Form B.   Do not include any item identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Ultrasonic Level Transmitter - Type 2, Remote Sensor** | | | | | | | | | |
| .. | Complete model number of the ultrasonic level transmitter proposed, including all accessories included in the Form B price | | | | Transmitter:  Sensor:  Mounting Flange:  Other:  Other:  Other: | | | | | |
| .. | Documentation | | | | Product datasheets included with proposal  Product O&M manuals included with proposal | | | | | |
| .. | Indicate the sensor / transmitter configuration. | | | | The transmitter is separate from the sensor. The transmitter is integrated with the controller. (specified)  The sensor and transmitter are integrated into a single unit.  The transmitter is integrated into the sensor. The controller (relays) is a separate device.  Other: | | | | | |
| .. | Approvals - Transmitter | | | | Only indicate approvals applicable to the products proposed:  CSA (Specified)  UL – Canadian (cUL)  FM – Canadian (cFM)  Other Canadian Approval (indicate below): | | | | | |
| .. | Indicate the hazardous location approvals of the proposed sensor / transducer. | | | | Unclassified (Does not meet specifications)  CSA Class I, Div 2 / Zone 2  CSA Class I, Div 1 / Zone 1 – Explosion-proof  CSA Class I, Div 1 / Zone 1 – Intrinsically-Safe  Other: | | | | | |
| .. | Indicate the optional hazardous location approvals of the proposed transmitter / controller. The optional approvals are not required to be included in the Form B price. | | | | Unclassified  CSA Class I, Div 2 / Zone 2  CSA Class I, Div 1 / Zone 1 – Explosion-proof  CSA Class I, Div 1 / Zone 1 – Intrinsically-Safe  Other: | | | | | |
| .. | Maximum operating range of the proposed sensor | | | | m | | | | | |
| .. | Blanking distance / minimum range of the proposed sensor | | | | m | | | | | |
| .. | Beam angle of the proposed ultrasonic level sensor. | | | | degrees | | | | | |
| .. | Indicate the additional available optional CSA approved sensors that address the indicated applications. Do not include these additional sensors in the Form B price. Note that the beam angle is for the entire beam width, not the angle from the center of the beam. | | | | **Desired Range (m)** | **Desired Beam Angle** | | **Model** | **Actual Range (m)** | **Actual Beam Angle** |
| >=3 & < 6m | <=12° | |  |  | ° |
| >=10 | <=12° | |  |  | ° |
| >=15 | <=11° | |  |  | ° |
| >=30 | <=6° | |  |  | ° |
| .. | Operating Frequency | | | | Fixed        kHz  Configurable range        kHz to       kHz | | | | | |
| .. | Accuracy of the proposed ultrasonic level transmitter / sensor combination. | | | | Information not available  The greater of the below:        % maximum range or        mm, whichever is greater | | | | | |
| .. | Resolution of the proposed ultrasonic level transmitter / sensor combination. | | | | Information not available  The greater of the below:        % maximum range or        mm, whichever is greater | | | | | |
| .. | Temperature compensation provided | | | | Not provided  Integral to sensor / transducer (specified)  An external temperature sensor is provided  Other: | | | | | |
| .. | Is an optional external compensation provided whereby the transmitter will average the temperature in the sensor / transducer and a remote temperature sensor? | | | | No available.  Available as an option. | | | | | |
| .. | Temperature operating limits – Transmitter / Controller | | | | to       °C | | | | | |
| .. | Temperature operating limits – Sensor / Transducer | | | | to       °C | | | | | |
| .. | Volume calculation capabilities | | | | Volume calculation is not supported.  Basic circular or rectangular tank volume calculation  Calculation via selection of multiple pre-programmed tank shapes  Custom tank characterization - Ability to define custom linearization curves for abnormal vessel shapes (level – volume) | | | | | |
| .. | Level Alarm Capabilities | | | | No Level Alarms Provided  Hi Hi  Hi  Lo  Lo Lo | | | | | |
| .. | Pump Control Capabilities | | | | No pump control capability provided  Pump control capability provided for:  Two pumps  Three pumps  Four pumps  Pump Alternation Capability | | | | | |
| .. | Simulation Capabilities | | | | No simulation capability is provided  Simulation capability is provided to override the output for testing. | | | | | |
| .. | Echo Processing Capabilities | | | | Manually configurable interference echo suppression.  Automatic false echo suppression.  Means to connect multiple ultrasonic level transmitters to cancel echo interference if mounted in close proximity. | | | | | |
| .. | Diagnostic Capabilities | | | | Echo Profile Analysis provided via:  Local Display  HART Interface  PROFIBUS Interface  Proprietary Software | | | | | |
| .. | Power Supply | | | | 120 VAC (preferred)  24 VDC | | | | | |
| .. | Indicate the types of signal outputs included with the proposed ultrasonic level transmitter. | | | | PROFIBUS DP  PROFIBUS PA | | | | | |
| .. | Indicate the compatible PROFIBUS DP/PA Profile version(s) of the proposed ultrasonic level transmitter. | | | | PROFIBUS Profile Version 3.02  PROFIBUS Profile Version 3.01  PROFIBUS Profile Version 3.00  PROFIBUS Profile Version 2.x  Other: | | | | | |
| .. | Indicate the available device parameter file formats for integration of the proposed ultrasonic level transmitter on a PROFIBUS network. | | | | GSD (General Station Data) file certified by Profibus International  EDDL (Electronic Device Description Language)  FDT/DTM (Field Device Tool / Device Type Manager) | | | | | |
| .. | Indicate the output relay configuration of the proposed ultrasonic level transmitter. | | | | The transmitter is not equipped with relay outputs.  The transmitter is equipped with relay outputs – Indicate quantity below:        Fixed Function SPST (Form A) relays        Fixed Function SPDT (Form C) relays        Configurable Function SPST (Form A) relays        Configurable Function SPDT (Form C) relays | | | | | |
| .. | Indicate the output relay rating of the proposed ultrasonic level transmitter at 120 VAC. | | | | The transmitter is not equipped with relay outputs.  The output relays are not rated for 120 VAC  < 1 A  >= 1 A and < 2 A  >= 2 A and < 3.5 A  >= 3.5 A and < 5 A  >= 5 A | | | | | |
| .. | Display | | | | Display not provided (Does not meet specification)  Display Provided  Indicates level unit of measurement.  Indicates sensor temperature.  Backlit  Diagnostic / fault / loss of echo indicator  Other features (Indicate below): | | | | | |
| .. | How is the transmitter configured? | | | | Indicate all proposed methods:  Via local keypad  Via HART communicator  Via PROFIBUS Interface  Via proprietary handheld programmer / configuration tool.  Via proprietary PC configuration tool (supplied at no additional charge). | | | | | |
| .. | Sensor cable length | | | | m | | | | | |
| .. | Sensor Mounting | | | | 100mm (4”) ASME Flange – Material as indicated below:  Stainless Steel  Carbon Steel  Other:    Other: | | | | | |
| .. | Identify any deficiencies where the proposed ultrasonic level transmitter does not meet the specifications or the intent of the specifications. Do not include any item clearly identified elsewhere on Form P. | | | |  | | | | | |
| .. | Identify any additional features proposed that:   * significantly exceed the specified requirements, * would be of benefit to the City of Winnipeg; and * are included in the price in Form B.   Do not include any item identified elsewhere on Form P. | | | |  | | | | | |
| **.** | **Warranty (Section B)** | | | | | | | | | |
| **.** | **General** | | |  | | | | | | |
| .. | Warranty Length of Ultrasonic Level Transmitters | | | One-year (Beginning on the date of successful commissioning or 6 months after delivery, whichever comes sooner) – Minimum Specified  Two years or longer from the date of delivery. Indicate length below:        years  Two years or longer (Beginning on the date of successful commissioning or 6 months after delivery, whichever comes sooner). Indicate length below:        years | | | | | | |
| **.** | **Delivery (Section B)** | | | | | | | | | |
| **.** | **Ultrasonic Level Transmitters** | | | | | | | | | |
| .. | Indicate the delivery timeframe for the proposed ultrasonic level transmitters from the date of order, for an order of up to ten (10) ultrasonic level transmitters. Allow 14 Calendar Days for shop drawing (submittal) reviews. | | Maximum:       Calendar Days (max 42) | | | | | | | |
| **.** | **Service and Support - General (Section A and Section B)** | | | | | | | | | |
| **.** | **General** | | | | | | | | | |
| .. | Describe bidder’s relationship with the manufacturer: | | | | Bidder is the manufacturer  Bidder is a distributor  Other: | | | | | |
| .. | Proposed bidder account manager: | | | | Name:  Responsibilities:  Relevant Technical Experience:       years  Relevant Account Management Experience:       years  Certifications: | | | | | |
| .. | Bidder account manager’s hours of business | | | | to  Time Zone: | | | | | |
| **.** | **Local Support** | | | | | | | | | |
| .. | Identify the company which will be providing local support for the proposed products, and where they are located. | | | | Company:  Location: | | | | | |
| .. | Local support hours of business | | | | to  Time Zone: | | | | | |
| **.** | **Manufacturer Support Services** | | | |  | | | | | |
| .. | Is manufacturer telephone technical support available? | | | | Yes – complete technical support  Limited technical support (complete details below)  Not available.  Details: | | | | | |
| .. | Availability of telephone technical support? | | | | 24/7  8am – 4:30pm CST  Other (complete below)  Other: | | | | | |
| **.** | **Service and Support (Section A)** | | | | | | | | | |
| **.** | **Local Support** | | | | | | | | | |
| .. | Local support personnel – Electromagnetic Flow | | | | Name:  Responsibilities:  Relevant Experience:       years  Certifications:  Experience with proposed products:       years  Name:  Responsibilities:  Relevant Experience:       years  Certifications:  Experience with proposed products:       years | | | | | |
| .. | Local support personnel – Pressure Transmitters | | | | Same as electromagnetic flowmeters  See below:  Name:  Responsibilities:  Relevant Experience:       years  Certifications:  Experience with proposed products:       years  Name:  Responsibilities:  Relevant Experience:       years  Certifications:  Experience with proposed products:       years | | | | | |
| .. | Local support personnel – Temperature Transmitters | | | | Same as electromagnetic flowmeters  See below:  Name:  Responsibilities:  Relevant Experience:       years  Certifications:  Experience with proposed products:       years  Name:  Responsibilities:  Relevant Experience:       years  Certifications:  Experience with proposed products:       years | | | | | |
| **.** | **Spare Parts** | | | | | | | | | |
| .. | Identify the closest location where comprehensive spare parts for the Section A instruments are located. | | | | Winnipeg  Manitoba  Canada  United States  Other (complete below)    The proposed spare parts location is:  Currently in place.  Will be in place within 1 year of Contract award. | | | | | |
| **.** | **Local Training Sessions – Electromagnetic Flowmeters** | | | | | | | | | |
| .. | Who is proposed to perform the training? | | | | Name: | | | | | |
| .. | How many years of experience does the proposed trainer have with the manufacturer’s electromagnetic flowmeters? | | | | years | | | | | |
| .. | List up to five customers for whom the proposed trainer has performed comparable training? | | | | 1.  2.  3.  4.  5. | | | | | |
| **.** | **Local Training Sessions – Pressure Transmitters** | | | | | | | | | |
| .. | Who is proposed to perform the training? | | | | Name: | | | | | |
| .. | How many years of experience does the proposed trainer have with the manufacturer’s pressure transmitters? | | | | years | | | | | |
| .. | List up to five customers for whom the proposed trainer has performed comparable training? | | | | 1.  2.  3.  4.  5. | | | | | |
| **.** | **Local Training Sessions – Temperature Transmitters** | | | | | | | | | |
| .. | Who is proposed to perform the training? | | | | Name: | | | | | |
| .. | How many years of experience does the proposed trainer have with the manufacturer’s temperature transmitters? | | | | years | | | | | |
| .. | List up to five customers for whom the proposed trainer has performed comparable training? | | | | 1.  2.  3.  4.  5. | | | | | |
| **.** | **Service and Support (Section B)** | | | | | | | | | |
| **.** | **Local Support – Ultrasonic Level Transmitters** | | | | | | | | | |
| .. | Local support personnel – Ultrasonic Level Transmitters | | | | Name:  Responsibilities:  Relevant Experience:       years  Certifications:  Experience with proposed products:       years  Name:  Responsibilities:  Relevant Experience:       years  Certifications:  Experience with proposed products:       years | | | | | |
| **.** | **Spare Parts – Ultrasonic Level Transmitters** | | | | | | | | | |
| .. | Identify the closest location where comprehensive spare parts for the Section B ultrasonic level instruments are located. | | | | Winnipeg  Manitoba  Canada  United States  Other (complete below)    The proposed spare parts location is:  Currently in place.  Will be in place within 1 year of Contract award. | | | | | |
| **.** | **Local Training Sessions – Ultrasonic Level Transmitters** | | | | | | | | | |
| .. | Who is proposed to perform the training? | | | | Name: | | | | | |
| .. | How many years of experience does the proposed trainer have with the manufacturer’s ultrasonic level transmitters? | | | | years | | | | | |
| .. | List up to five customers for whom the proposed trainer has performed comparable training? | | | | 1.  2.  3.  4.  5. | | | | | |