



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 495-2018

**PROVISION OF NON-DESTRUCTIVE INSPECTION SERVICES FOR PIPELINE
RIVER CROSSINGS**

Note to Proponents: Please be aware of revisions to B18.3

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 PROVISION OF NON-DESTRUCTIVE INSPECTION SERVICES FOR PIPELINE RIVER CROSSINGS

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, June 29, 2018.
- B2.2 Proposals determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

- B3.1 Further to C3.1, the Contract Administrator or an authorized representative will be available at the following locations starting at 9:00 A.M. on June 13, 2018 to provide Bidders access to the Sites included in the proposed work. The site investigation is being held in conjunction with a site investigation for Bid Opportunity 492-2018 and not all of the sites listed below are applicable to this RFP. Proponents are instructed meet at the first location at 9:00 A.M. after which the site investigation will move on to the subsequent location:
- (a) Site 6 – Fort Garry/St. Vital Feeder Main, West Chamber (Bishop Grandin, immediately west of the Fort Garry Bridges, access off eastbound Bishop Grandin)
 - (i) Chamber entry available
 - (b) Site 6 – Fort Garry/St. Vital Feeder Main, East Chamber (Bishop Grandin immediately east of the Fort Garry Bridges, access off eastbound Bishop Grandin at River Avenue)
 - (i) Chamber entry available
 - (c) Site 1 – Kildonan-Redwood Feeder Main, East Chamber (Hespeler Ave, immediately east of the Harry Lazarenko Bridge)
 - (i) Chamber entry available
 - (d) Site 1 – Kildonan-Redwood Feeder Main, West Chamber (Hespeler Ave, immediately west of the Harry Lazarenko Bridge)
 - (i) Chamber entry available
 - (e) Site 4 – Newton Ave Force Main, discharge chamber (Newton Ave and Scotia St.)
 - (i) No chamber entry available
 - (f) Site 4 – Newton Ave Force Main, valve chamber (Kildonan Dr. and Larchdale Cres.)
 - (i) Chamber entry available
- B3.2 Proponents attending the site investigation are required to register for the site investigation at least 48 hours prior to the site investigation by contacting the Contract Administrator listed in D4.1.
- B3.3 The Bidder is advised that all valve chambers are Confined Entry locations. At the Site Investigation, no confined entry will be permitted. Chambers and Manholes will be opened by City forces for viewing.
- B3.4 Further to C3.1, the Bidder may make an appointment to view and enter Confined Entry locations at the Sites by contacting the Contract Administrator.

- B3.5 The Bidder is advised that all valve chambers are Confined Entry Locations. Persons wishing to enter the chambers will be required to supply all necessary personal protective safety equipment, including body harness, hard hats, safety boot, gas detector, personal lighting, top support, retrieval hoist, surface lighting, and a gas detector for pre entry measurements and all other equipment and personnel to safely enter structures in accordance with Manitoba legislation and their individual company policy. The City of Winnipeg will provide support to open structures only.
- B3.6 Although attendance at the Site Investigation is not mandatory, the City strongly suggests that Proponents attend.
- B3.7 The Proponent shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Proponent's direct observation, or is provided by the Contract Administrator in writing.
- B3.8 The Proponent may view portions of the site located within public right of ways without making an appointment.

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.
- B4.2 If the Proponent finds errors, discrepancies or omissions in the Request for Proposal, or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.
- B4.3 If the Proponent is unsure of the meaning or intent of any provision therein, the Proponent should request clarification as to the meaning or intent prior to the Submission Deadline.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Request for Proposal will be provided by the Contract Administrator to all Proponents by issuing an addendum.
- B4.5 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Request for Proposal will be provided by the Contract Administrator only to the Proponent who made the enquiry.
- B4.6 The Proponent shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

- B5.1 Information provided to a Proponent by the City or acquired by a Proponent by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:
- (a) was known to the Proponent before receipt hereof; or
 - (b) becomes publicly known other than through the Proponent; or
 - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B5.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.3 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>
- B6.4 The Proponent is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.5 The Proponent shall acknowledge receipt of each addendum in Paragraph 9 of Form A: Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Request for Proposal.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Proponent shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Total Performance.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Proponent who requested approval of the substitute.

- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Proponents. The Proponent requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Proponent may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Proponent bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B23.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B8. PROPOSAL SUBMISSION

- B8.1 The Proposal shall consist of the following components:
- (a) Form A: Proposal;
 - (b) Form B: Prices;
- B8.2 The Proposal should also consist of the following components:
- (a) Experience of Proponent and Subcontractors (Section C) in accordance with B11;
 - (b) Experience of Key Personnel Assigned to the Project (Section D), in accordance with B12;
 - (c) Project Understanding and Methodology (Section E) in accordance with B13; and
 - (d) Project Schedule (Section F) in accordance with B14.
- B8.3 Further to B8.1 all components of the Proposal shall be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.
- B8.4 Further to B8.2, all components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely.
- B8.5 Proponents should submit one (1) **unbound** 8.5” x 11” original (marked “original”) including drawings and six (6) copies (copies can be in any size format) for sections identified in B8.1 and B8.2.
- B8.6 Proposal format, including type of binding, number of pages, size of pages and, font, etc., will not be regulated, except that the Proposal should contain a table of contents, page numbering and should be in the Sections identified above. Proponents are encouraged to use their creativity to submit a Proposal which provides the requested information for evaluation and other information which illustrates the strength of their team.
- B8.7 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B23.1(a).
- B8.8 The Proposal shall be submitted enclosed and sealed in an envelope/package clearly marked with the RFP number and the Proponent's name and address.
- B8.9 Proposals submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B8.10 Proposals shall be submitted to:
- The City of Winnipeg

Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg MB R3B 1J1

B8.11 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B9. PROPOSAL

B9.1 The Proponent shall complete Form A: Proposal, making all required entries.

B9.2 Paragraph 2 of Form A: Proposal shall be completed in accordance with the following requirements:

- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
- (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
- (c) if the Proponent is a corporation, the full name of the corporation shall be inserted;
- (d) if the Proponent is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

B9.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.

B9.3 In Paragraph 3 of Form A: Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.

B9.4 Paragraph 12 of Form A: Proposal shall be signed in accordance with the following requirements:

- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, it shall be signed by the Proponent;
- (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Proponent is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;
- (d) if the Proponent is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B9.4.1 The name and official capacity of all individuals signing Form A: Proposal should be printed below such signatures.

B9.5 If a Proposal is submitted jointly by two or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

B10. PRICES

B10.1 The Proponent shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B10.1.1 Notwithstanding C11.1.3, prices on Form B: Prices shall not include the Goods and Services Tax (GST) or Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.

- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Proposals.
- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. EXPERIENCE OF PROPONENT AND SUBCONTRACTORS (SECTION C)

- B11.1 Proposals should include:
- (a) details demonstrating the history and experience of the Proponent and Subcontractors in providing pipeline electromagnetic inspection and wall thickness estimation services on up to three projects of similar complexity, scope and value.
- B11.2 For each project listed in B11.1(a), the Proponent should submit:
- (a) description of the project;
 - (b) role of the contractor;
 - (c) project's original contracted cost and final cost;
 - (d) schedule (anticipated Project schedule and actual project delivery schedule);
 - (e) project owner;
 - (f) reference information (two current names with telephone numbers per project).
- B11.2.1 Where applicable, information should be separated into Proponent and Subcontractor project listings.
- B11.3 The Proposal should include general firm profile information, including years in business, average volume of work, number of employees and other pertinent information for the Proponent and all Subcontractors.

B12. EXPERIENCE OF KEY PERSONNEL ASSIGNED TO THE PROJECT (SECTION D)

- B12.1 Describe your approach to overall team formation and coordination of team members.
- B12.1.1 Include an organizational chart for the Project.
- B12.2 Submit the experience and qualifications of the Key Personnel assigned to the Project for projects of similar complexity, scope and value, including the principals-in-charge, the Contractors Representative, managers of the key disciplines. Include educational background and degrees, professional recognition, job title, years of experience in current position, years of experience in inspection and years of experience with existing employer. Roles of each of the Key Personnel in the Project should be identified in the organizational chart referred to in B12.1.1. At a minimum, the following key positions shall be included;
- (a) Project Manager – responsible for overall execution and delivery of project.
 - (b) Site superintendent – responsible for overall supervision, field collection and verification of data collection
 - (c) Data analyst – responsible for verification, review, analysis and reporting of data and results
- B12.3 For each person identified, list at least two comparable projects in which they have played a primary role. If a project selected for a key person is included in B11, provide only the project name and the role of the key person. For other projects provide the following:
- (a) Description of project;

- (b) Role of the person;
- (c) Project Owner;
- (d) Reference information (two current names with telephone numbers per project).

B13. PROJECT UNDERSTANDING AND METHODOLOGY (SECTION E)

- B13.1 Describe your firm's project management approach and team organization during the performance of Services, so that the evaluation committee has a clear understanding of the methods the Proponent will use in the delivery of this Project.
- B13.2 Methodology should be presented in accordance with the Scope of Services identified in D2. Describe the collaborative process/method to be used by the Key Personnel of the team in the various phases of the Project.
- B13.3 Proposals should address:
- (a) the team's understanding of the broad functional and technical requirements;
 - (b) the teams understanding of technologies, data collection requirements, required inspection and detection resolution;
 - (c) the City's Project methodology with respect to the information provided within this RFP; and
 - (d) any other issue that conveys your team's understanding of the Project requirements.

B14. PROJECT SCHEDULE (SECTION F)

- B14.1 Proponents should present a carefully considered schedule demonstrating intended compliance to the timelines set out in this RFP. The schedule should address each requirement of the Scope of Services.
- B14.2 The Proponent's schedule should include critical dates for review and approval processes by the City and other organizations anticipated during the planning and inspection phases of the Project. Reasonable times should be allowed for completion of these processes.

B15. DISCLOSURE

- B15.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.
- B15.2 The Persons are:
- (a) PICA Corporation – Edmonton, Alberta
 - (i) Minimum inspection tool access requirements.
 - (ii) Inspection tool detection and resolution information.
 - (b) Pure Technologies – Mississauga, Ontario
 - (i) Minimum inspection tool access requirements.
 - (ii) Inspection tool detection and resolution information.

B16. CONFLICT OF INTEREST AND GOOD FAITH

- B16.1 Proponents, by responding to this RFP, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.
- B16.2 Conflict of Interest means any situation or circumstance where a Proponent or Key Personnel proposed for the Work has:

- (a) other commitments;
- (b) relationships;
- (c) financial interests; or
- (d) involvement in ongoing litigation;

that could or would be seen to:

- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Proposals or award of the Contract; or
 - (ii) compromise, impair or be incompatible with the effective performance of a Proponent's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the RFP process or the Project; or
 - (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the RFP process) of strategic and/or material relevance to the RFP process or to the Project that is not available to other proponents and that could or would be seen to give that Proponent an unfair competitive advantage.

B16.3 In connection with its Proposal, each entity identified in B16.2 shall:

- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Project;
- (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the RFP process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Project Manager; and
- (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.

B16.4 Without limiting B16.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Proponent to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.

B16.5 Without limiting B16.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:

- (a) disqualify a Proponent that fails to disclose a perceived, potential or actual Conflict of Interest of the Proponent or any of its Key Personnel;
- (b) require the removal or replacement of any Key Personnel proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
- (c) disqualify a Proponent or Key Personnel proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B16.4 to avoid or mitigate a Conflict of Interest; and
- (d) disqualify a Proponent if the Proponent, or one of its Key Personnel proposed for the Project, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.

B16.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B17. QUALIFICATION

B17.1 The Proponent shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Proponent does not carry on business in Manitoba, in the jurisdiction where the Proponent does carry on business; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B17.2 The Proponent and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/debar.stm>

B17.3 The Proponent and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba);
- (d) have evidence of compliance to the technical requirements outlined in E3.

B17.4 The Proponent shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Proponent and of any proposed Subcontractor.

B17.5 The Proponent shall provide, on the request of the Contract Administrator, full access to any of the Proponent's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Work.

B18. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

B18.1 Proposals will not be opened publicly.

B18.2 After award of Contract, the names of the Proponents and the Contract amount of the successful Proponent and their address(es) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>

B18.3 The Proponent is advised any information contained in any Proposal Submission may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).

B18.3.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Proposal Submission identified by the Proponent as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.

B18.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of his/her submission upon written request to the Contract Administrator.

B19. IRREVOCABLE OFFER

B19.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 10 of Form A: Proposal.

B19.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Proponents and these Proponents shall be bound by their offers on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any offer shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 10 of Form A: Proposal.

B20. WITHDRAWAL OF OFFERS

B20.1 A Proponent may withdraw his/her Proposal without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

B20.1.1 Notwithstanding C22.5, the time and date of receipt of any notice withdrawing a Proposal shall be the time and date of receipt as determined by the Manager of Materials.

B20.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Proposal or the Proponent's authorized representatives named in Paragraph 12 of Form A: Proposal, and only such person, has authority to give notice of withdrawal.

B20.1.3 If a Proponent gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:

- (a) retain the Proposal until after the Submission Deadline has elapsed;
- (b) open the Proposal to identify the contact person named in Paragraph 3 of Form A: Proposal and the Proponent's authorized representatives named in Paragraph 12 of Form A: Proposal; and
- (c) if the notice has been given by any one of the persons specified in B20.1.3(b), declare the Proposal withdrawn.

B20.2 A Proponent who withdraws his/her Proposal after the Submission Deadline but before his/her offer has been released or has lapsed as provided for in B19.2 shall be liable for such damages as are imposed upon the Proponent by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

B21. INTERVIEWS

B21.1 The Contract Administrator may, in his/her sole discretion, interview Proponents during the evaluation process.

B22. NEGOTIATIONS

B22.1 The City reserves the right to negotiate details of the Contract with any Proponent. Proponents are advised to present their best offer, not a starting point for negotiations in their Proposal Submission.

B22.2 The City may negotiate with the Proponents submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one or more Proponents without being obligated to offer the same opportunity to any other Proponents. Negotiations may be concurrent and will involve each Proponent individually. The City shall incur no liability to any Proponent as a result of such negotiations.

B22.3 If, in the course of negotiations pursuant to B22.2, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

B23. EVALUATION OF PROPOSALS

- B23.1 Award of the Contract shall be based on the following evaluation criteria:
- | | |
|--|-------------|
| (a) compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: | (pass/fail) |
| (b) qualifications of the Proponent and the Subcontractors, if any, pursuant to B17: | (pass/fail) |
| (c) Total Bid Price; (Section B) | 40% |
| (d) Experience of Proponent and Subcontractor; (Section C) | 20% |
| (e) Experience of Key Personnel Assigned to the Project; (Section D) | 15% |
| (f) Project Understanding and Methodology (Section E) | 20% |
| (g) Project Schedule. (Section F) | 5% |
- B23.2 Further to B23.1(a), the Award Authority may reject a Proposal as being non-responsive if the Proposal Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Proposal, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.
- B23.3 Further to B23.1(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in its Proposal or in other information required to be submitted, that it is responsible and qualified.
- B23.4 Further to B23.1(d), Experience of Proponent and Subcontractors will be evaluated considering the experience of the organization on projects of similar size and complexity as well as other information requested, in accordance with B11.
- B23.5 Further to B23.1(e), Experience of Key Personnel Assigned to the Project will be evaluated considering the experience and qualifications of the Key Personnel and Subcontractor personnel on Projects of comparable size and complexity, in accordance with B12.
- B23.6 Further to B23.1(f), Project Understanding and Methodology will be evaluated considering your firm's understanding of the City's Project, project management approach and team organization, in accordance with B13.
- B23.7 Further to B23.1(g), Project Schedule will be evaluated considering the Proponent's ability to comply with the requirements of the Project, in accordance with B14.
- B23.8 Notwithstanding B23.1(d) to B23.1(g), where Proponents fail to provide a response to B8.2(a) to B8.2(d), the score of zero may be assigned to the incomplete part of the response.
- B23.9 Further to B23.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B23.9.1 Further to B23.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
- B23.10 This Contract will be awarded as a whole.
- B23.11 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B23.1(a) and B23.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.
- B23.12 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B21.

B24. AWARD OF CONTRACT

- B24.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B24.2 The City will have no obligation to award a Contract to a Proponent, even though one or all of the Proponents are determined to be responsible and qualified, and the Proposals are determined to be responsive.
- B24.2.1 Without limiting the generality of B24.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Work;
 - (b) the prices are materially in excess of the prices received for similar work in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
 - (d) only one Proposal is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B24.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Proponent submitting the most advantageous offer.
- B24.3.1 Following the award of contract, a Proponent will be provided with information related to the evaluation of his/her Proposal upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Supply of Services* (Revision 2007 04 12) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Supply of Services* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Request for Proposal to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Supply of Services*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for Supply of Services*, these Supplemental Conditions are applicable to the Work of the Contract.

D2. SCOPE OF SERVICES

D2.1 The Work to be done under the Contract shall consist of electro-magnetic inspection of ferrous metallic pipes, and estimation of local and overall wall loss, to aid in determination of pipeline condition and estimated remaining service life.

D2.2 The major components of the Work are as follows:

- (a) Site Mobilization.
- (b) Internal electromagnetic inspection of two (2) 600 mm (nominal) steel water feeder mains crossing under rivers.
- (c) External inspection and wall loss estimation of one (1) 500 millimetre (nominal) insulated sewer force main, suspended below a traffic bridge.
- (d) Data Analysis and Reporting

D3. DEFINITIONS

D3.1 When used in this Request for Proposal:

- (a) "**Proponent**" means any Person or Persons submitting a Proposal for Services;
- (b) "**Support Contractor**" means a third party Contractor engaged by the City under Bid Opportunity 492-2018 to provide pipeline access modifications, pipeline cleaning and inspection support services in support of work under this RFP;
- (c) "**Contractor**" or "**Inspection Contractor**" means the Contractor completing work identified in this RFP;
- (d) "**CSA**" means Canadian Standards Association;
- (e) "**ASTM**" means American Society for Testing and Materials;
- (f) "**AWWA**" means American Water Works Association;
- (g) "**Site 1**" means the Kildonan-Redwood Feeder Main crossing of the Red River;
- (h) "**Site 2**" means the Charleswood-Assiniboia Feeder Main crossing of the Assiniboine River;
- (i) "**Site 3**" means the St. Vital Bridge Force Main crossing of the Red River;

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is AECOM Canada Ltd., represented by:

Adam Braun, P.Eng.
Municipal Engineer

Telephone No. 204- 477-5381

Email Address: adam.braun@aecom.com

D4.2 Before commencement of Work, Mr. Braun will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D4.3 Bids Submissions must be submitted to the address in B8.

D5. CONTRACTOR'S SUPERVISOR

- D5.1 Further to C6.19, the Contractor shall employ and keep on the Work, at all times during the performance of the Work, a competent supervisor and assistants, if necessary, acceptable to the Contract Administrator. The supervisor shall represent the Contractor on the Site. The supervisor shall not be replaced without the prior consent of the Contract Administrator unless the supervisor proves to be unsatisfactory to the Contractor and ceases to be in his/her employ.
- D5.2 Before commencement of Work, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.
- D5.2.1 Further to C5.5 Contract Administrator may give instructions or orders to the Contractor's supervisor and such instructions or orders shall be deemed to have been given to the Contractor.

D6. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

- D6.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.
- D6.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D6.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;
- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D6.4 A Contractor who violates any provision of D6 may be determined to be in breach of Contract.

D7. NOTICES

- D7.1 Notwithstanding C22.3, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer.

SUBMISSIONS

D8. AUTHORITY TO CARRY ON BUSINESS

- D8.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D9. SAFE WORK PLAN

- D9.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D9.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg,

Corporate Finance, Materials Management Division website at
<http://www.winnipeg.ca/matmgt/safety/default.stm>

- D9.3 Support Contractor under City of Winnipeg Bid Opportunity 492-2018 supplying pipeline modification, cleaning and support for work under this RFP shall be designated the “Prime Contractor” as defined in the Manitoba Workplace Safety and Health Act. The Contractor shall coordinate site activities and comply with all safety requirements as identified by the Support Contractor.

D10. INSURANCE

- D10.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured; such liability policy to also contain a cross-liability clause, non-owned automobile liability and products and completed operations cover, to remain in place at all times during the performance of the Work;
 - (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Service. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
- D10.2 Deductibles shall be borne by the Contractor.
- D10.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D10.4 The Contractor shall not cancel, materially alter, or cause the policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D11. PERFORMANCE SECURITY

- D11.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
 - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (c) a certified cheque or draft payable to “The City of Winnipeg”, drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- D11.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.
- D11.2 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award and prior to the commencement of any Work on the Site.

D12. EQUIPMENT LIST

D12.1 The Contractor shall provide the Contract Administrator with a complete list of the equipment which the Contractor proposes to utilize (Form K: Equipment List) at least two (2) Business Days prior to the commencement of any Work on the Site.

D13. DETAILED WORK SCHEDULE

D13.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site.

D13.2 The detailed work schedule shall consist of the following:

(a) a Gantt chart for the Work.

D13.3 Further to D13.2(a), the schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks:

- (a) Site Mobilization;
- (b) Site 1 Field Inspection;
- (c) Site 2 Field Inspection;
- (d) Site 3 Field Inspection;
- (e) Draft Data Analysis Report; and
- (f) Final Data Analysis Report.

SCHEDULE OF WORK

D14. COMMENCEMENT

D14.1 The Contractor shall not commence any Work until he/she is in receipt of a notice of award from the City authorizing the commencement of the Work.

D14.2 The Contractor shall not commence any Work on the Site until:

- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D8;
 - (ii) evidence of the workers compensation coverage specified in C6.14;
 - (iii) the Safe Work Plan specified in D9;
 - (iv) evidence of the insurance specified in D10;
 - (v) the performance security specified in D11;
 - (vi) the equipment list specified in D12; and
 - (vii) the detailed work schedule specified in D13.
- (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.

D14.3 The Contractor shall commence the Work on the Site in accordance to dates established in D16.

D14.4 The City intends to award this Contract by July 31, 2018;

D14.4.1 If the actual date of award is later than the intended date, the dates specified for Commencement and Critical Stages will be adjusted by the difference between the aforementioned intended and actual dates

D15. SCHEDULE RESTRICTIONS

D15.1 Feeder Main Shutdowns

D15.1.1 Inspections windows are dependent on the City's ability to isolate and dewater the identified feeder mains for modification and cleaning under Bid Opportunity 492-2018 and inspection under this RFP. Feeder main shutdowns will be scheduled based on a number of factors including routine maintenance and repair work, water demand, weather and other factors. The City shall endeavour to make the specified time periods available to the Contractor to schedule his Work requiring isolation and draining of various feeder mains, without limiting the City's control over the operation of the regional water system to complete other work, maintain adequate system service and maintain the integrity of the infrastructure. The City shall reserve the right to cancel and/or delay these schedule dates at any time, due to any circumstances that could adversely affect water supply system operation, including but not limited to high water demand, abnormal weather, failures of related water system components and/or security concerns.

D15.1.2 Feeder Main shutdowns will only be permitted between September 1st and May 15th.

D16. CRITICAL STAGES

D16.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:

- (a) Mobilization for Pipeline Inspection – The Contractor shall be mobilized and prepared to undertake the identified inspections by the date established in D16.2(a).
- (b) Submission of Draft Data Report – A draft data report shall be submitted to Contract Administrator within sixty (60) Calendar Days of completion of the data collection in D16.1(a).
- (c) Submission of Final Data Report – A final data report shall be submitted within thirty (30) Calendar Days of receipt of comments from the Contract Administrator on the submitted Draft Report.

D16.2 Final Critical Stage date for D16.1(a) will be established immediately upon receipt of letter of intent, on a mutually agreeable schedule between the Support Contractor, the City of Winnipeg, and the Contractor based on the availability of all parties and procurement of materials. The Contract Administrator will schedule a meeting with all parties within three (3) Business Days of receipt of the Letter of Intent. Schedule dates shall be limited by the following dates:

- (a) Mobilization for pipeline inspection shall be no later than October 12, 2018

D16.3 Once inspection dates are established, the Critical Stage Date identified in D16.2(a) will be established.

D17. TOTAL PERFORMANCE

D17.1 The Contractor shall achieve Total Performance within thirty (30) consecutive Calendar Days of the receipt of comments on Draft Report as defined in E3.4(d).

D17.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D17.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D18. LIQUIDATED DAMAGES

D18.1 If the Contractor fails to achieve Critical Stages or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following

amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:

- (a) Mobilization for Pipeline Inspection (D16.1(a) – two thousand dollars (\$2,000.00);
- (b) Total Performance – one hundred dollars (\$100.00).

D18.2 The amounts specified for liquidated damages in D18.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve critical stages or Total Performance by the days fixed herein for same.

D18.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D19. JOB MEETINGS

D19.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.

D19.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D20. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D20.1 Further to C6.23, the Support Contractor under City of Winnipeg Bid Opportunity 492-2018 shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

D21. SAFETY

D21.1 The Support Contractor under City of Winnipeg Bid Opportunity 492-2018 shall be solely responsible for safety at the Site and for compliance with all laws, rules, regulations and practices required by the applicable safety legislation.

D21.2 The Contractor shall be solely responsible for securing the Site, and any existing facility thereon, and for the proper care and protection of the Work already performed.

D21.3 Notwithstanding D21.1, the Contractor shall be responsible for safety of own forces and for compliance with all laws, rules, regulations and practices required by the applicable safety legislation.

D21.4 The Contractor shall provide the Prime Contractor with safety plans and procedures for approval, and shall abide by all safety procedures provided by the Prime Contractor.

D21.5 The Contractor shall do whatever is necessary to ensure that:

- (a) no person, property, right, easement or privilege is injured, damaged or infringed by reason of the Contractor's activities in performing the Work;
- (b) the health and safety of all persons employed in the performance of the Work or otherwise is not endangered by the method or means of its performance;
- (c) adequate medical services are available to all persons employed on the Work and at all times during the performance of the Work;

D22. INSPECTION

D22.1 Before beginning or resuming operations upon any portion of the Work, the Contractor shall notify the Contract Administrator so as to enable him to arrange for inspection. If the Contractor fails to notify the Contract Administrator, the Contractor shall, if and when required by the Contract Administrator, forthwith take down or expose and redo that portion of the Work required to facilitate inspection. The cost of such taking down or exposure, and redoing, if any, shall be borne by the Contractor.

D22.2 If and when required by the Contract Administrator, the Contractor shall take down or expose forthwith any portion of the Work where the Contract Administrator determines that the Work is not in accordance with the Contract. The cost of such taking down or exposure, and redoing, if any, shall fall upon the City if the taking down or exposure indicates that the portion exposed was properly performed, but if otherwise the cost shall be borne by the Contractor.

D23. DEFICIENCIES

D23.1 Further to C10.5, the Contract Administrator may order the Contractor to alter or improve his/her methods, to increase or improve his/her Plant, to furnish additional or more suitable Material, or to employ additional or more qualified labour if, at any time, the Contract Administrator determines that:

- (a) the Work is not being, or will likely not be, performed satisfactorily; or
- (b) progress is not being, or will likely not be, maintained in accordance with the work schedule.

MEASUREMENT AND PAYMENT

D24. INVOICES

D24.1 Further to C11, the Contractor shall submit an invoice for each portion of work performed to the Contract Administrator as identified in D4

D24.2 Invoices must clearly indicate, as a minimum:

- (a) the City's Bid Opportunity number;
- (b) date of delivery;
- (c) type and quantity of work performed;
- (d) the amount payable with GST and MRST shown as separate amounts; and
- (e) the Contractor's GST registration number.

D24.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

D25. PAYMENT

D25.1 Further to C11, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D25.1 Notwithstanding C12, Warranty does not apply to this Contract.

FORM H1: PERFORMANCE BOND
(See D11)

KNOW ALL MEN BY THESE PRESENTS THAT

_____ ,
(hereinafter called the "Principal"), and

_____ ,
(hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), in the sum of

_____ dollars (\$ _____)

of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee for

RFP NO. 495-2018

PROVISION OF NON-DESTRUCTIVE INSPECTION SERVICES FOR PIPELINE RIVER CROSSINGS

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall:

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner;
- (c) make all the payments whether to the Obligee or to others as therein provided;
- (d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and
- (e) indemnify and save harmless the Obligee against and from all loss, costs, damages, claims, and demands of every description as set forth in the Contract, and from all penalties, assessments, claims, actions for loss, damages or compensation whether arising under "The Workers Compensation Act", or any other Act or otherwise arising out of or in any way connected with the performance or non-performance of the Contract or any part thereof during the term of the Contract and the warranty period provided for therein;

THEN THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety shall not, however, be liable for a greater sum than the sum specified above.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that nothing of any kind or matter whatsoever that will not discharge the Principal shall operate as a discharge or release of liability of the Surety, any law or usage relating to the liability of Sureties to the contrary notwithstanding.

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

_____ day of _____, 20____.

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D11)

(Date)

The City of Winnipeg
Legal Services Department
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1

RE: PERFORMANCE SECURITY – RFP NO. 495-2018

PROVISION OF NON-DESTRUCTIVE INSPECTION SERVICES FOR PIPELINE RIVER
CROSSINGS

Pursuant to the request of and for the account of our customer,

(Name of Contractor)

(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding
in the aggregate

Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.

Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on

(Date)

It is a condition of this Standby Letter of Credit that it shall be deemed to be automatically extended from year to year without amendment from the present or any future expiry date, unless at least 30 days prior to the present or any future expiry date, we notify you in writing that we elect not to consider this Standby Letter of Credit to be renewable for any additional period.

This Standby Letter of Credit may not be revoked or amended without your prior written approval.

This credit is subject to the Uniform Customs and Practice for Documentary Credit (2007 Revision), International Chamber of Commerce Publication Number 600.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

FORM K: EQUIPMENT
(See D12)

PROVISION OF NON-DESTRUCTIVE INSPECTION SERVICES FOR PIPELINE RIVER CROSSINGS

1. Category/type: Internal Pipeline Inspection	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
2. Category/type: External Pipeline Inspection	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
3. Category/type:	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	

FORM K: EQUIPMENT
(See D12)

PROVISION OF NON-DESTRUCTIVE INSPECTION SERVICES FOR PIPELINE RIVER CROSSINGS

4. Category/type:	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
5. Category/type:	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
6. Category/type:	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

E1.1 These Specifications shall apply to the Work.

E1.2 The following are applicable to the Work:

<u>Appendix No.</u>	<u>Title</u>
A	Record Drawings
B	Pipeline Modification Drawings for Bid Opportunity 492-2018
C	Site Photos
D	City of Winnipeg Under Bridge Crane (UBC) Training Requirements

E1.3 Proponents are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B7.

E2. SERVICES

E2.1 The Contractor shall provide non-destructive pipeline inspection services in accordance with the requirements hereinafter specified.

E2.2 Item No. 1 – Inspection planning services shall be as per E3.4(a).

E2.3 Item No. 2 – Site mobilization shall be as per E3.4(b).

E2.4 Item No. 3 – Field inspection services shall be as per E3.4(c).

- (a) Site 1 - Kildonan-Redwood Feeder Main
- (b) Site 2 - Charleswood-Assiniboia Feeder Main
- (c) Site 3 - St. Vital Bridge Force Main

E2.5 Item No. 4 – Analysis and reporting shall be as per E3.4(d).

- (a) Site 1 – Kildonan-Redwood Feeder Main
- (b) Site 2 – Charleswood-Assiniboia Feeder Main
- (c) Site 3 - St. Vital Bridge Force Main

E3. ELECTROMAGNETIC INSPECTION SERVICES

E3.1 Description

- (a) This specification describes minimum technical requirements for provision of Inspection Services, reporting and analysis for ferric pipelines.

E3.2 Scope of Work

- (a) Proposed inspection work in this contract includes 3 inspection sites described as follows:

Site	Location	Media	Diameter (mm)	Length (m)	Material	Inspection Method
1	Kildonan-Redwood Feeder Main	Water	600	218 (horz) 12 (vert)	Cast Iron and Steel	Internal
2	Charleswood-Assiniboia Feeder Main	Water	600	223	Steel	Internal
3	St. Vital Bridge Force Main	Sewer	500	5 locations x 3 m each	Steel	External

E3.3 Inspection Technical Requirements

(a) Minimum Inspection Performance and Resolution – Internal Pipe Inspections

- (i) Internal Electromagnetic inspections shall be capable of defect detection to the following minimum requirements:

Parameter	Description
Pipe Material	Iron, Steel
Pipe Diameter	600 mm
Pipe Wall Thickness	12.7mm steel; 25.4mm iron
Survey Speed	3m to 5m/min typical, up to 10m/min
Threshold for Defect Detection (depth)	20% Wall Loss
Threshold for Defect Detection (size)	<=20 mm in maximum dimension
Accuracy of Defect Resolution	+/- 15% for pits; +/- 5% for general thinning
Accuracy of Defect Location (axial)	< 1.0 m

- (ii) Provide evidence supporting equipment capability to provide specified inspection resolution.

(b) Minimum Inspection Performance and Resolution – External Pipe Inspections

- (i) For bare pipe applications
 - (i) Threshold of Detection (ToD) local wall loss (LWL) on the internal pipe surface to be a 9.5 mm diameter flat bottom hole with a depth equal to 20% of wall thickness.
 - (ii) ToD for LWL on the exterior surface to be a 6.35 mm diameter flat bottom hole with a depth equal to 20% of the wall thickness.
 - (iii) ToD for general wall Loss from the inner and outer surfaces is 15% of wall thickness.

E3.4 Inspection Services

(a) Inspection Planning

- (i) Provide inspection planning services and develop inspection deployment plan
- (ii) Attend one (1) planning and site review meeting in Winnipeg. Assume one full day of a minimum 8 hours to investigate Sites, and attend planning meeting with the City of Winnipeg, Support Contractor and Contract Administrator in attendance. A minimum

- of one (1) representative of the inspection firm with authority to represent the company in planning discussions shall attend.
- (iii) Review record drawings for sites as provided in Appendix A
 - (iv) Review proposed pipeline modification plans as provided in Appendix B. Identify to the Contract Administrator any concerns with proposed pipeline access modifications that could impact inspection tool deployment.
 - (v) Prepare and submit an inspection plan for each site to the Contract Administrator a minimum of ten (10) business Days prior to schedule commencement of inspection activities
- (b) Mobilization
- (i) Mobilization shall include mobilizing and demobilizing from the site to perform inspection services.
 - (ii) Mobilization shall include all costs for attending the sites, including but not limited to room and board, lodging, meals, transportation required to complete inspections.
- (c) Field Inspection Services
- (a) An Inspection Support contract (Bid Opportunity 492-2018) has been issued to provide support services to facilitate inspection under this contract. This includes;
 - (i) Pipeline Modification for Inspection Access as outlined in E4;
 - (ii) Development of River Crossing site access as outlined in E5;
 - (iii) Provision of Confined Entry Support as outlined in E7;
 - (iv) Pipeline cleaning as outlined in E8;
 - (v) Water and feeder main disinfection as outlined in E9;
 - (vi) Inspection Support Services as outlined in E10
 - (b) Inspection Contractor shall provide all tools, personnel and equipment required to complete inspection activities including but not limited to;
 - (i) Provision of electromagnetic inspection platform(s).
 - (ii) Provision of means of propulsion of inspection including winches, tow pigs, cables and other equipment required to deploy inspection equipment and obtain inspection data. Winch lines for cleaning shall not cause damage to pipelines or pipeline coatings. Provide synthetic winch line such as Amsteel or cable coated with sacrificial synthetic coating.
 - (iii) Provision of gauge pigs and plates as required to ensure that adequate cleaning has been completed and defects or anomalies that may be present in the pipe can be navigated by the inspection tool. Gauge pigs are to be pulled through the line by the Support Contractor as part of the cleaning process. Gauge pigs shall be provided to the Support Contractor a minimum of ten (10) Business Days prior to the agreed upon inspection date unless otherwise agreed to by the Contract Administrator and the Support Contractor.
 - (iv) Deploy and retrieve inspection tools, download and obtain inspection data. Provide all labour, tools and equipment to launch and retrieve inspection tools. Support Contractor will provide lifting equipment to aid Inspection Contractor in deploying tools.
 - (v) Complete preliminary review of data to ensure data integrity is acceptable for further analysis. Data review shall be completed within 12 hours of completion of field data collection. Advise Contract Administrator immediately of data integrity concerns.
 - (vi) In the event that inspection re-run is required due to data integrity, equipment failure or technical errors, cost of re-running inspection shall be borne by Inspection Contractor.
 - (c) The Contractor shall perform all work in such a manner to minimize the chance that equipment used for modifications, cleaning, and inspection, will become stuck in the pipe. Should equipment become stuck that cannot be retrieved by the Contractor, the City will handle the retrieval efforts by any means necessary to restore proper

functionality of the pipe. The City will not pay for any resulting tool damage or loss during the equipment retrieval efforts, or claims for loss of use or lost revenue as a result of equipment being lodged in pipe.

(d) Reporting and Analysis

- (a) Reporting of inspection shall at a minimum include;
 - (i) Overview of inspection including procedures utilized, dates, times and other general notes, inspection concerns or noteworthy items, length of inspected pipe, and field measured pipe data.
 - (ii) Reporting of inspected results including location, size and depth of defects
 - (iii) Provide analysis of inspected length as recorded by on board odometer devices vs measures survey distance. Report corrected axial location and measured axial location.
 - (iv) Analysis of average and local wall loss per unit length of pipe
 - (v) Analysis of location of defects circumferentially around the pipe
 - (vi) Report findings in tabular and graphical form.
 - (vii) Provide actual defect calibration data if available, or provide assumed calibration data.
- (b) Draft data report shall be submitted to the Contract Administrator for review within sixty (60) calendar days of completion of inspection.
- (c) Contract Administrator and City will review and provide comments on Draft report within thirty (30) Calendar Days of submittal.
- (d) Final data report shall be submitted within thirty (30) Calendar Days of receipt of comments from the Contract Administrator.

E3.5 Measurement and Payment

- (a) Measurement and Payment shall be made as follows;
 - (i) Inspection Planning
 - ◆ Inspection Planning will be measured on a lump sum basis. Inspection Planning shall include attending one (1) site investigation and planning session in Winnipeg, review of all provided Records, drawings and specifications, preparation of detailed inspection plan, preparation of project safety plan, review of Support Contractor plans and procedures, and shall be payment in full for works identifies in this Specification.
 - (ii) Site Mobilization
 - ◆ Site Mobilization will be measures on a Lump Sum basis. Site mobilization will include mobilization and demobilization of inspection crews, materials and equipment to the site, project setup teardown. Mobilization will include a minimum of one (1) formal site progress meeting, daily correspondence and reporting to the Contract Administrator, and co-ordination with Site Support Contractor. The Lump Sum Payment will be compensation in full for the work and items identified in this specification. The Lump Sum Fee will be payable as follows:
 - 75 % on full and complete mobilization to the Site
 - 25% on full and complete demobilization from the Site.
 - ◆ Remobilization as a result of data integrity, equipment failure or technical errors will not be compensated, and will be the responsibility of the Inspection Contractor.
 - (iii) Field Inspection Services
 - ◆ Field Inspections will be measured on a lump sum basis per site, plus an per unit price for inspection length successfully completed and reported,

and shall be compensation in full for the work and items identified in this specification, and identified on Form B:Prices.

(iv) Analysis and Reporting

- ◆ Analysis and Reporting will be measured on a lump sum basis per site as identified on Form B: Prices. The payment will be made as 75% upon submittal of a draft report and 25% upon submittal and acceptance of the final report incorporating comments provided by the Contract Administrator.

(v) Provisional

- ◆ Site standby rates will be measured on a daily basis as identified on Form B: Prices for each full day of delay in inspection that in the opinion of the Contract Administrator is outside of the control of the Contractor. Partial days and weather related delays will not be considered for payment. Payment for standby rates will include all costs associated with delays as defined herein.

E4. PIPELINE MODIFCATIONS FOR INSPECTION ACCESS

E4.1 Description

- (a) This Specification describes modification of valve chambers, feeder mains, and force mains, as required for cleaning and inspection the river crossing pipelines.
- (b) These modifications and services will be provided by Support Contractor, and are included for information only.

E4.2 Description of Work:

E4.2.1 Piping Modifications:

- (a) Drawings in Appendix B are provided for informational purposes to the Inspection Contractor for planning inspection activities.
- (b) Site 1 – Kildonan-Redwood Feeder Main
 - (i) Install new gate valve on 300 mm water main offtake, exterior to existing valve chamber.
 - (ii) Remove chamber piping as shown on the Drawings.
 - (iii) Remove existing fire hydrant and related piping, and patch wall penetration.
 - (iv) Remove abandoned 300 mm water main piping and patch wall penetrations.
 - (v) Install temporary piping to enable cleaning and inspection of the feeder main as shown on the Drawings.
 - (vi) Reinstall existing chamber piping components to be re-used as shown on the Drawings upon completion of inspection
- (c) Site 2 – Charleswood-Assiniboine Feeder Main
 - (i) Install permanent inspection wyes and temporary piping to enable cleaning and inspection of the feeder main as shown on the Drawings.
 - (ii) Remove launch risers on completion of inspections.
- (d) Site 3 – St. Vital Bridge Force Main
 - (i) Remove select areas of existing cladding and insulation from 500 mm force main as indicated on the Drawings.
 - (ii) Coat exterior of pipeline.
 - (iii) Install new insulation and cladding.

E5. RIVER CROSSING SITE ACCESS

E5.1 Description

- (a) Site Access will be developed by the Support Contractor. Inspection Contractor shall coordinate use of Site Access. The following is provided for information only.

E5.2 Site Access Provisions and Constraints

- (a) Site 1 – Kildonan-Redwood Feeder Main (Redwood Ave / Harry Lazarenko Bridge from Main Street to Glenwood Cres)
- (i) Access to chambers is available on both sides of the river is by local streets.
 - (ii) Support Contractor will develop site access as required to complete the work. Contractor shall limit activity to a single access path and the space required to complete the pipeline investigation.
 - (iii) Support Contractor will be responsible for providing and maintaining all necessary traffic control in accordance with the City of Winnipeg Manual of Temporary Traffic Control. A minimum of two lanes of traffic (one lane each direction) on Redwood Ave and Hespeler Ave approaching the Harry Lazarenko Bridge will be maintained at all times.
 - (iv) Support Contractor will submit completed Regional Street Lane Closure requests and provide notification to Inspection Contractor prior to any such closure.
 - (v) Construction trailers and all vehicles not required to complete work shall be parked on adjacent residential streets.
 - (vi) Support Contractor to maintain access to all private approaches.
 - (vii) Support Contractor will provide access to pipe and chambers including:
 - (i) Excavation to top of valve chambers;
 - (ii) Removal of concrete roof panels.
- (b) Site 2 – Charleswood-Assiniboia Feeder Main (Assiniboine Avenue at Rouge Road to Berkley Street)
- (i) Access to chambers on both sides of the river is via a grassed right-of-way off residential streets.
 - (ii) Support Contractor will provide access to both chambers for preparation, cleaning, and inspection work.
 - (iii) Support Contractor is restricted to limit disturbance of existing grassed areas to a single access path (6 m wide max) and an area near the work site as required to complete modifications and pipeline investigation. Inspection Contractor shall remain within areas provided.
 - (iv) Construction trailers and all vehicles not required to complete work shall be parked on adjacent residential streets.
 - (v) Support Contractor to maintain access to all private approaches.
- (c) Site 3 – St. Vital Bridge Force Main (Osborne Street from Kingston Row to Churchill Drive)
- (i) Access on both sides of the bridge is via local streets.
 - (ii) Support Contractor will develop site access and work areas as required to complete the work. Contractor shall limit activity to a single access path and the space required to complete the investigation and pipeline repair.
 - (iii) Support Contractor will provide the pipeline at the areas designated on the drawings by scaffolding from ground level wherever possible.
 - (iv) City will provide use of an under bridge crane (UBC) if required in completing the pipeline modification and inspection work where necessary, with UBC access to the pipeline from northbound Osborne Street.
 - (v) Support Contractor will submit a completed Regional Street Lane Closure request to the Contract Administrator a minimum of five (5) Business Days prior to any such closure.

- (vi) Support Contractor will be responsible for providing and maintaining all necessary traffic control in accordance with the City of Winnipeg Manual of Temporary Traffic Control.
 - (i) A minimum of one lane of northbound traffic on Osborn Street is to be maintained at all times.
 - (ii) Northbound lane closures on Osborn Street may be restricted during the AM weekday peak period.
- (d) The Inspection Contractor shall exercise caution to prevent damage to existing pavements, curbs, sidewalks, grassed areas, and trees. Surface restoration outside of the designated construction areas shall be the responsibility of the Inspection Contractor.
- (e) Where site access utilizes grassed right-of-ways, limit access for trucks and equipment to a single pathway directly from street to work area as developed and maintained by the Support Contractor. Protect grassed areas with planking or other measures to minimize rutting and damage.
- (f) Laydown and storage areas shall be staged away from areas prone to damage.
- (g) The Inspection Contractor shall maintain access to all businesses during business hours, except where written authorization has been provided by the business.
- (h) The Inspection Contractor shall not park company or private vehicles inside a barricaded work zone in a manner that will block sightlines for vehicles and pedestrians approaching and crossing intersections.
- (i) The Support Contractor is responsible for maintaining safe vehicular traffic through their work site. The Support Contractor shall rectify any unsafe conditions immediately upon notification. This could include but is not limited to providing flag persons, clearing debris and snow from sites, moving equipment, and erecting additional signage.

E6. OPERATING CONSTRAINTS FOR WORK IN CLOSE PROXIMITY TO FEEDER MAINS

E6.1 Description

E6.1.1 This Section details operating constraints for all work to be carried out in close proximity to the City feeder mains and other critical water infrastructure. Close proximity shall be deemed to be any construction activity within a 5 m horizontal offset from the centreline of the feeder main, within 5 m of valve chambers and other appurtenances, and any other infrastructure identified below.

E6.1.2 The following shall be considered critical pipelines and water infrastructure for this project:

- (a) Site 1: Kildonan-Redwood Feeder Main
- (b) Site 2: Charleswood-Assiniboia Feeder Main
- (c) Site 6: Fort Garry/St. Vital Feeder Main
- (d) Feeder main valve chambers located on the sites identified herein and as shown on the Drawings.

E6.2 Feeder Main Isolation and Dewatering

- (a) Isolation of the feeder main crossings will be completed by City forces using mainline valves and secondary valves wherever possible.
- (b) The City and Support Contractor will be responsible for dewatering all feeder mains sufficient to launch inspection tools prior to inspection.

E6.3 General Considerations for Work in Close Proximity to Feeder Mains

E6.3.1 Feeder mains are a critical component of the City of Winnipeg Regional Water Supply System and work in close proximity to feeder mains shall be undertaken with an abundance of caution. Feeder mains cannot typically be taken out of service for extended periods to facilitate construction and inadvertent damage caused to the pipe would likely have catastrophic consequences.

- E6.3.2 Work around feeder mains shall be planned and implemented to minimize the time period that work is carried out in close proximity to the pipe and to ensure that the pipeline is not subjected to excessive construction related loads, including excessive vibrations and/or concentrated or asymmetrical lateral loads during backfill placement.
- E6.3.3 Large diameter pressure pipe generally has limited ability to withstand increased earth and live loading. Therefore, every precaution must be undertaken to ensure that applied loading during all phases of construction is within accepted loading parameters. PCCP typically fails in a non-ductile mode and has the potential to cause extensive consequential damage to infrastructure if failure should occur.
- E6.3.4 Construction in close proximity to critical infrastructure shall not commence until both the equipment and construction method statements have been submitted, reviewed, and accepted by the Contract Administrator.
- E6.4 Submittals
- (a) Submit proposed construction equipment specifications to the Contract Administrator for review ten (10) Business Days prior to construction. Submittal shall include:
 - (i) Equipment operating weight and dimensions including wheel or track base, track length or axle spacing, track widths or wheel configurations;
 - (ii) Payload weights;
 - (iii) Load distributions in the intended operating configuration.
 - (b) Submit a Construction Method Statement to the Contract Administrator for review ten (10) Business Days prior to construction. Submittal shall include:
 - (i) Proposed inspection staging and sequencing;
 - (ii) Equipment operating location(s).
- E6.5 Pre-Work, Planning and General Execution
- (a) No Work shall commence at the Site until the equipment specifications and construction sequencing submittal have been submitted and reviewed, and feeder main locations have been clearly delineated in the field by the Contractor. Work in areas in close proximity to feeder mains shall only be carried out with equipment that has been reviewed and quantified in terms of its loading implications on the pipe.
 - (b) Reduce equipment speeds to levels that minimize the effects of impact loading to the pipe.
 - (c) For construction work activities either longitudinally or transverse to the alignment of a feeder main, work only with equipment and in the manner stipulated in the accepted Construction Method Statement and the supplemental requirements noted herein.
 - (d) The Contractor shall make himself fully aware of all associated restrictions, constraints, and risks associated with working adjacent to and over the identified feeder main.
 - (e) The Contractor shall ensure that all crew members understand and observe the requirements of this specification. Prior to commencement of on-site work, the Contractor shall jointly conduct an orientation meeting with the Contract Administrator and all superintendents, foreman, and heavy equipment operators to make all workers on Site fully cognizant of the limitations of altered loading on, the ramifications of inadvertent damage to, and the constraints associated with Work in close proximity to the feeder mains. New personnel introduced after commencement of the project need to be formally orientated as to the risks and constraints associated with working over the feeder main. The Contractor shall provide meeting minutes confirming the dissemination of information regarding work near feeder mains. Include the names and positions of all attendees.

E7. CONFINED ENTRY SUPPORT

E7.1 Description

- (a) This specification covers provision of confined entry and access support for specialized inspection contractors and inspection personnel.

- (b) Confined Entry Support will be provided by the Support Contractor under Bid Opportunity 492-2018. Support Contractor is Prime Contractor with respect to Manitoba Workplace Safety and Health Act. Inspection Contractor shall abide by Manitoba Workplace health and Safety Act, regulations and safety requirements of the Prime Contractor. Prime Contractor will provide Site Specific Safety Plans to the Inspection Contractor
- (c) Notwithstanding E7.1(b), Inspection Contractor is required to prepare their own Site Specific Safety Plan in accordance with Manitoba Acts and Regulations
- (d) The Contractor's attention is drawn to the Province of Manitoba Workplace Safety and Health Act ("the Act"), and the Regulations and Guidelines there-under pertaining to Confined Space Entry Work and in particular the requirements for conducting hazard/risk assessments and providing personal protective equipment (PPE).

E7.2 Scope of Services

- (a) Inspection Contractors, consultants and City personnel may require dedicated confined entry support services during pipeline inspection of pipeline river crossings. Confined Entry Support will be provided by the Support Contractor. The following sites will require confined entry access on one or both sides of the river crossing for installation and retrieval of in-line inspection tools. For purpose of provision of services, allow for 2 entrants per side and additional support as required for standby and rescue.
 - (i) Site 1: Kildonan-Redwood Feeder Main
 - (ii) Site 2: Charleswood-Assiniboia Feeder Main

E7.3 Equipment

- (a) Support Contractor will provide Safety Retrieval winch and tripod
 - (i) Support Contractor will provide sufficient retrieval winches to support inspection crews on each side of the crossing. A maximum of two entrants is assumed per side.
 - (ii) Support Contractor will provide two body harnesses per entry location, plus additional harnesses for backup and rescue. Inspection Contractor is encouraged to provide own body harnesses
- (b) Air Quality Monitors
 - (i) Support Contractor will provide a minimum of two multi-gas air quality monitors for each crossing access location. Each monitor shall provide continuous exposure monitoring for oxygen, carbon monoxide, hydrogen sulphide and combustible gases.

E7.4 Methods

- (a) Be fully responsible for confined entry access on site, in accordance to Manitoba Workplace Health and Safety Regulation 217/2006 and subsequent amendments.
- (b) Support services will be required to support one pipeline crossing (one inspection crew) at a time. Each crossing will require support on each side of the river.
- (c) Support Contractor Safety Personnel will be dedicated to confined entry access when inspection personnel are in confirmed areas.
- (d) Support Contractor will maintain confined entry permit logs.

E8. PIPELINE CLEANING

E8.1 Description

- (a) This Specification shall cover the supply of foam pipeline cleaning pigs and the cleaning of the pipelines to be inspected.
- (b) Pipeline cleaning services will be provided by Support Contractor. The following is provided for information only.

- (c) The following pipelines require cleaning prior to inspection:
 - (i) Site 1: Kildonan-Redwood Feeder Main
 - (ii) Site 2: Charleswood-Assiniboia Feeder Main

E8.2 Submittals

E8.2.1 Cleaning Plan

- (a) The Support Contractor will submit in writing a detailed cleaning plan for each pipeline crossing for review by the Contract Administrator. The cleaning plan at a minimum shall include the following:
 - (i) Method(s) of cleaning
 - (ii) Sizes and densities of foam pigs to be used
 - (iii) Means of debris collection and disposal
- (b) The pipeline cleaning plan will be provided to the Inspection Contractor for review.
- (c) No cleaning operations shall be undertaken prior to review of the cleaning plan by the Contract Administrator.

E8.3 Products

E8.3.1 Winch Line

- (a) Winch lines for cleaning shall not cause damage to pipelines or pipeline coatings. Provide synthetic winch line such as Amsteel, cable coated with sacrificial synthetic coating, or braided flusher hose.
- (b) Tether lines used for installing winch lines shall be a minimum of 9 mm synthetic rope.

E8.3.2 Foam Tow Pigs

- (a) If used, Inspection Contractor shall provide tow pigs for their use.
- (b) Material: One piece moulded open-cell polyurethane
- (c) Pigs shall be new and packaged for shipping and storage to prevent contamination.
- (d) Pigs shall be supplied complete with a factory installed pulling cable.
- (e) For towed pigs, pigs shall be supplied complete with a steel support disc on both ends suitable for towing pigs. The steel disk shall have a minimum diameter of 100 mm.

E8.3.3 Gauge Pigs shall be supplied by the Inspection Contractor, and shall include instructions for deployment of Gauge Pig. Inspection Contractor shall examine gauge pig and determine if appropriate level of cleaning has been achieved to support inspection.

E8.3.4 Water for pig launching may be obtained from fire hydrants in accordance with CW 1120.

E8.4 Equipment

- (i) Disinfection of Equipment: Any equipment coming in contact with the potable water system shall be clean, must never have been used in a non-potable water or sewer system and shall be disinfected in accordance with E9.

E8.5 Internal pipeline diameters based on the best available record information. The Contractor is responsible to confirm the inner pipe diameters prior to undertaking cleaning work:

Site	Nominal Diameter (mm)	Estimated Internal Diameter (mm)
Site 1	600	594 and 584
Site 2	600	597 or 591

E8.6 Methods

E8.6.1 Pigging

- (a) Where applicable, Support Contractor to provide pig launch tubes, pipe and fittings, including valves.
- (b) Winch lines shall be inserted into the pipelines for cleaning purposes. Winch lines may be inserted by high pressure flusher nozzle, flow drone or other approved method.
- (c) Cleaning is to be completed sufficiently to accommodate in-line inspection tools, typically 25 millimetres smaller than pipe inside diameter.
- (d) Minimum cleaning requirements per pipeline crossing:
 - (i) Pull one 25 mm undersized medium density foam cleaning pig (prove bore prior to pulling the gauge pig)
 - (ii) Pull one full sized low density foam cleaning pig (debris removal)
- (e) The use of foam cleaning pigs shall not introduce air into pipeline river crossings below river levels. Many pipelines are weighted bottom installations, or shallow cover, and susceptible to floatation. Pipelines shall be kept full behind pigs
- (f) Foam cleaning pigs shall be tethered on each end and be capable of being winched in either direction.
- (g) A gauge pig will be pulled through the pipe during the cleaning operation to determine the effectiveness of the cleaning operation. Gauge pig shall be tethered on each end and be capable of being winched in either direction.
- (h) Cleaning operations will continue until the Inspection Contractor and Contract Administrator are satisfied that the pipe is passable by the inspection tools. This shall be proved by passing of the supplied gauge pig through the line.
- (i) Upon completion of cleaning, a tag line will be left in the pipeline and securely fastened, for future use by the Inspection Contractor.
- (j) The Support Contractor will be prepared to remove hard debris from the pipe during cleaning process to the extent required to pass the supplied gauge pig.
- (k) It is anticipated that pipeline cleaning will take a maximum of one day per pipeline.

E8.7 Provisional Flushing and Hydrovac Services

- (a) Where requested by the Contract Administrator, the Support Contractor will provide provisional flushing and hydrovac services to assist in inspection operations.

E8.8 Feeder Main Flushing

- (a) Flushing of solid debris from feeder mains will be completed by Support Contractor after completion of pipeline inspection work.
- (b) Disinfection of pipelines and disposal of chlorinated water will be completed by Support Contractor.

E9. WATER MAIN AND FEEDER MAIN DISINFECTION

E9.1 Description

- (a) This specification covers the disinfection of tools and equipment in contact with water mains, feeder mains, and fittings.

E9.2 Construction Methods

- (a) All equipment being used within a potable water pipeline shall have only been deployed within potable water pipelines in the past. Equipment that has operated within raw water or sewer pipelines will not be permitted.
- (b) All equipment being used within a potable water pipeline shall be spray or swab disinfected using a 200 mg/L free chlorine solution prior to entering or coming in contact with the pipe.

E10. INSPECTION SUPPORT SERVICES

E10.1 Support Services Requirements

E10.1.1 General

- (a) Support services will be provided by Support Contractor as described below.
- (b) Coordinate work hours with pipeline Support Contractor. Contractor and pipeline Inspection Contractor shall agree on time for commencement of work by the pipeline Support Contractor. The Contractor will be permitted reasonable time for preparation of activities prior to arrival of pipeline inspection contractor. Excessive site support time in advance of agreed site hours will not be measured for payment.
- (c) Pipeline inspections typically will require one day of onsite support per pipeline. It is intended that onsite support services will run on consecutive days. More than one site may be commenced on any day. No more than one inspection will occur at a time.
- (d) The pipeline Inspection Contractor may require time to configure their tooling prior to pipeline inspections. Scheduling of the inspections will be made after award of the contract.
- (e) Support Contractor will provide support labour to assist the pipeline Inspection Contractor’s crews with handling of equipment, setup, and access.
- (f) Support Contractor will provide minimum of two support persons, including small hand and power tools to assist the pipeline inspection contractor’s crew, including:
 - (i) Portable hammer drills for setting anchor bolts in concrete (minimum 12 mm drive chuck)
 - (ii) Shovels
 - (iii) Hand tools
 - (iv) Light duty transportation truck(s)
 - (v) Portable ladders (two per crossing)
 - (vi) Gas powered air compressor with 5 gallon tank (minimum) and capable of supplying 8 cfm at 90 psi.
 - (vii) Disinfection solution and equipment for the purposes of spray and swap disinfection of pipeline inspection contractor’s equipment, including but not limited to: inspection tools, launch equipment, winch lines, and any other equipment entering the pipeline. Disinfection equipment and procedures shall conform to E9.
- (g) Support Contractor personnel will assist the pipeline Inspection Contractor’s crews with access, removal of gratings, covers, installation of concrete anchors, where required, installation of flow diversion equipment, and any other general assistance to crews for completion of inspections.
- (h) The Support Contractor will provide a heated space at each site for storage and setup of the inspection tools when atmospheric temperatures are below 5°C. The space shall be a minimum of 5 x 2.5 m.
- (i) Lifting Equipment
 - (i) Support Contractor will provide mobile lifting equipment, boom truck, loader or other equipment capable of lifting, moving and lowering inspection equipment into pipelines in accordance to the following:

Pipeline Size	Inspection Tool Mass (kg)	Maximum Depth (m)
600	395	15

- (j) The Contractor is fully responsible for confined entry access on site, in accordance with Manitoba Workplace Safety and Health Regulation 217/2006 and subsequent amendments. The Support Contractor shall provide confined entry support for the pipeline inspection contractor’s crews, and AECOM personnel as needed, in accordance with E7, where required to facilitate pipeline inspections.

E10.1.2 Lighting

- (a) Where required for night work, Support Contractor will provide adequate lighting

E10.1.3 Shop Space

- (a) The Support Contractor shall provide wash facilities and a heated shop space for the pipeline Inspection Contractor for configuration and storage of inspection tools.
 - (i) A wash bay for cleaning the inspection tool for transport complete with a pressure washer capable of supplying 7 LPM at 10,300 kPa.
- (b) The Support Contractor shall provide a work shop to facilitate maintenance and conversion of inspection tools by the pipeline inspection contractor. The work shop shall meet the following minimum requirements:
 - (i) Floor space - 80 m².
 - (ii) Overhead door adequate for unloading of inspection tools and equipment with forklift or wheel loader. Minimum dimensions - 3.66 m x 3.66 m.
 - (iii) The shop must be heated.
 - (iv) Lifting hoist or forklift availability.
 - (v) Electric air compressor with 20 gallon tank (minimum) and capable of supplying 5 cfm at 90 psi.
 - (vi) Power – two (2) 15 amp, 120 volt AC power circuits.
 - (vii) Work tables complete with vice.
- (c) The shop will be accessible to the pipeline Inspection Contractor after hours and during weekends.

E10.1.4 Under Bridge Crane

- (a) If required due to elevated river levels, the City will provide an Under Bridge Crane (UBC) for use by the Support Contractor and Inspection Contractor in the preparation, inspection, and repair of the St. Vital Bridge Force Main.
- (b) The Support Contractor will provide notice a minimum of twenty (20) Business Days prior to the scheduled use of the UBC.
- (c) The Contractor shall review and undertake orientation and training provided in Appendix D, and provide evidence of appropriate training from third party sources.
- (d) Contractor shall provide required PPE including body harness and lanyard.
- (e) Only one (1) person other than the City of Winnipeg operator will be permitted in the UBC at any time.
- (f) City of Winnipeg UBC crew will be fully in charge of operation of UBC. Contractor shall abide by any instruction provided by UBC crew.

PART F - SECURITY CLEARANCE

F1. SECURITY CLEARANCE

F1.1 Each individual proposed to perform the following portions of the Work:

- (a) any Work on private property;
- (b) any Work within City facilities other than:
 - (i) an underground structure such as a manhole;
 - (ii) in areas and at times normally open to the public;
- (c) communicating with residents and homeowners in person or by telephone;

F1.1.1 Each Individual shall be required to obtain a Police Information Check from the police service having jurisdiction at his/her place of residence. Or

- (a) BackCheck, forms to be completed can be found on the website at: <http://www.backcheck.net/> ; or
- (b) Commissionaires (Manitoba Division), forms to be completed can be found on the website at: <https://www.commissionaires.ca/en/manitoba/home> .