

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 987-2010

2010 SEWER CLEANING AND INSPECTION – SPG3, SPG4 AND TRUNK SEWER RE-INSPECTIONS

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 2010 SEWER CLEANING AND INSPECTION – SPG3, SPG4 AND TRUNK SEWER RE-INSPECTIONS

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, January 14, 2011.
- B2.2 Bids 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 Bidder may view the Site without making an appointment.
- B3.2 The Bidder is advised that sewers may be located in easements through private property or City owned parklands and Right-of-Ways where there may exist no paved roads. It will be the Contractor / Bidder's responsibility to identify these sewers, arrange for access and to restore any surface damage to private and City owned property.

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.
- B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder 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. ADDENDA

- B5.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B5.2 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.
- B5.2.1 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

- B5.2.2 The Bidder is responsible for ensuring that he 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.
- B5.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B6. SUBSTITUTES

- B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 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.
- B6.4 The Bidder 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 Substantial Performance 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 Substantial Performance and Total Performance.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his 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.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B6.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative may base his 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 B15.

- B6.9 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.
- B6.10 Notwithstanding B6.2 to B6.9, and in accordance with B7.6 deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B15.1(a).

B7. BID COMPONENTS

- B7.1 The Bid shall consist of the following components:
 - (a) Form A: Bid;
 - (b) Form B: Prices;
 - (c) Bid Security
 - Form G1: Bid Bond and Agreement to Bond, or Form G2: Irrevocable Standby Letter of Credit and Undertaking, or a certified cheque or draft;
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B7.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B7.4.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid.
- B7.5 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B15.1(a).
- B7.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.8 Bids shall be submitted to:

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

B8. BID

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
 - (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted:
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;

- (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 Paragraph 12 of Form A: Bid shall be signed in accordance with the following requirements:
 - (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder:
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder 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 Bidder is carrying on business under a name other than his 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.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B9. PRICES

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.1.1 Notwithstanding C.12.2.3(c), prices on Form B: Prices shall not include the Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.
- B9.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B9.3 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.
- B9.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B10. QUALIFICATION

- B10.1 The Bidder 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; 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.
- B10.2 The Bidder 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/matmqt/debar.stm
- B10.3 The Bidder 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);
- B10.4 Further to B10.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
 - (a) a valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association or by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or
 - (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt)
- B10.5 The Bidder 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 Bidder and of any proposed Subcontractor.
- B10.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B11. BID SECURITY

- B11.1 The Bidder shall provide bid security in the form of:
 - (a) a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond); or
 - (b) an irrevocable standby letter of credit, in the amount of at least ten percent (10%) of the Total Bid Price, and undertaking 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 included in the Bid Submission (Form G2: Irrevocable Standby Letter of Credit and Undertaking); or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", in the amount of at least fifty percent (50%) of the Total Bid Price, drawn on a bank or other financial institution registered to conduct business in Manitoba.
- B11.1.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.
- B11.1.2 All signatures on bid securities shall be original.
- B11.1.3 The Bidder shall sign the Bid Bond.

- B11.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.
- B11.2 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly executed by the successful Bidder and the performance security furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.
- B11.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B11.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.
- B11.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.
- B11.3 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Bid Opportunity.

B12. OPENING OF BIDS AND RELEASE OF INFORMATION

- B12.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Division, or in such other office as may be designated by the Manager of Materials.
- B12.1.1 Bidders or their representatives may attend.
- B12.1.2 Bids determined by the Manager of Materials, or his designate, to not include the bid security specified in B11 will not be read out.
- B12.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) 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
- B12.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) 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
- B12.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B13. IRREVOCABLE BID

- B13.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B13.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid.

B14. WITHDRAWAL OF BIDS

B14.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

- B14.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B14.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 12 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B14.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
 - (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 12 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B14.1.3(b), declare the Bid withdrawn.
- B14.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B13.2 shall be liable for such damages as are imposed upon the Bidder 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, including the right to retain the Bidder's bid security.

B15. EVALUATION OF BIDS

- B15.1 Award of the Contract shall be based on the following bid evaluation criteria:
 - (a) compliance by the Bidder with the requirements of the Bid Opportunity, or acceptable deviation there from (pass/fail):
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B9.4 (pass/fail);
 - (c) Total Bid Price:
 - (d) economic analysis of any approved alternative pursuant to B6.
- B15.2 Further to B15.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.
- B15.3 Further to B15.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.
- B15.4 Further to B15.1(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.
- B15.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.
- B15.4.2 Further to B15.1(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.

B16. AWARD OF CONTRACT

B16.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

- B16.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.
- B16.2.1 Without limiting the generality of B16.2, 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 Bid 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.
- B16.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B15.
- B16.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

CO. GENERAL CONDITIONS

- C0.1 The General Conditions for Construction (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The General Conditions for Construction 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 Bid Opportunity to a section, clause or subclause with the prefix "C" designates a section, clause or subclause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of the inspection of sewers scheduled for re-inspection with some cleaning of those sewers. All Work shall take place in the City of Winnipeg.

D3. DEFINITIONS

- D3.1 When used in this Bid Opportunity:
 - (a) "WRc" means Water Research Centre, which is the accepted standard for sewer condition coding and classification.;

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is Dillon Consulting Limited, represented by:

Shane Cooper Project Manager Suite 200-895 Waverley Street Winnipeg MB R3T 5P4

Telephone No. (204) 453-2301 Facsimile No. (204) 452-4412

D4.2 At the pre-construction meeting, Mr. Cooper will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D5. CONTRACTOR'S SUPERVISOR

D5.1 At the pre-construction meeting, the Contractor shall identify his designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D6. NOTICES

- D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D4.1.
- D6.3 Notwithstanding C21, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:

The City of Winnipeg Chief Financial Officer

Facsimile No.: (204) 949-1174

D6.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

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

Facsimile No.: (204) 947-9155

D7. FURNISHING OF DOCUMENTS

D7.1 Upon award of the Contract, the Contractor will be provided with five (5) complete sets of the Bid Opportunity. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him at cost.

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

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, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability, broad form property damage cover and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
 - (b) automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;
 - (c) an all risks Installation Floater carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.
- D10.2 Deductibles shall be borne by the Contractor.

- D10.3 The Contractor shall provide the City Solicitor 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 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 each 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 If the bid security provided in his Bid was not a certified cheque or draft pursuant to B11.1(c), the Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of letter of intent and 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.

D12. SECURITY CLEARANCE

- D12.1 Each individual proposed to perform the following portions of the Work:
 - (a) any Work on private property;
 - (b) communicating with residents and homeowners in person or by telephone;
 - shall be required to obtain a Criminal Record Search Certificate from the police service having jurisdiction at his place of residence.
- D12.2 Prior to the commencement of any Work specified in D12.1, and during the term of the Contract if additional or replacement individuals are proposed to perform Work, the Contractor shall supply the Contract Administrator with a Criminal Record Search Certificate obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform such Work.
- D12.3 Any individual for whom a Criminal Record Search Certificate is not provided, or for whom a Criminal Record Search Certificate indicates any convictions or pending charges related to property offences or crimes against another person, will not be permitted to perform any Work specified in D12.1.
- D12.4 Any Criminal Record Search Certificate obtained thereby will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.
- D12.5 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated criminal records search. Any

individual who fails to provide a satisfactory Criminal Record Search Certificate as a result of a repeated criminal records search will not be permitted to continue to perform any Work specified in D12.1.

SCHEDULE OF WORK

D13. COMMENCEMENT

- D13.1 The Contractor shall not commence any Work until he is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.
- D13.2 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 C6.15;
 - (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 security clearances specified in D12: and
 - (vii) operator and coder Certification as specified in CW 2145.
 - (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
- D13.3 Commencement of the Work shall be at the discretion of the Contractor provided the commencement date will allow for the achievement of Substantial Performance in accordance with D14.

D14. HOURS OF WORK

- D14.1 All Work shall be carried out between the hours of 07:00 and 22:00 Monday to Friday and between 09:00 and 21:00 Saturday.
- D14.2 No Work shall be performed outside the hours stated in D14.1 or on Sunday or statutory or civic holidays without written permission from the Contract Administrator. Approval will only be granted if it is in the best interests of the City to do so.

D15. WORKING DAYS

- D15.1 Further to GC:1.1(gg), should the Contractor choose to work on a Saturday or be permitted to work on Sunday, or a statutory or civic holiday as specified in D14, these days shall be classified as Working Days.
- D15.2 Further to GC:1.1(gg), the Contract Administrator's determination of whether or not atmospheric and Site conditions are such that a Working Day is deemed to have elapsed may be based at one time on one type of work while at another time a Working Day may be based on another type of work. When more than one type of major work is involved, the quantity of equipment that must be able to work in order to meet the requirements of a Working Day may vary considerably from that specified in the General Conditions.
- D15.3 In the event that incidental work is behind schedule which, in the opinion of the Contract Administrator, should have been or could have been carried out by the Contractor in conjunction with or immediately following work of a major type, the City hereby reserves the right to charge Working Days on the incidental work until such time as it is up to schedule.
- D15.4 When the major type of work involves restoration of the Site to the condition it was prior to rainfall, Working Days shall <u>not</u> be charged.

D15.5 The Contract Administrator will furnish the Contractor with a daily record for each major type of work showing various information concerning the equipment, the time it worked, could have worked and Working Days charged. This report is to be signed each day by an authorized representative of the Contractor.

D16. SUBSTANTIAL PERFORMANCE

- D16.1 The Contractor shall achieve Substantial Performance within sixty five (65) consecutive Working Days of the commencement of the Work as specified in D13, or by June 10, 2011, whichever occurs first.
- D16.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial 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.
- D16.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D17. TOTAL PERFORMANCE

- D17.1 The Contractor shall achieve Total Performance within ten (10) consecutive Working Days of the achievement of Substantial Performance as specified in D16.
- 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 Substantial Performance or Total Performance in accordance with the Contract by the day fixed herein for the same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day during which such failure continues:
 - (a) Substantial Performance one thousand three hundred dollars (\$1,300);
 - (b) Total Performance five hundred dollars (\$500).
- D18.2 The amount specified for liquidated damages in D18.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial Performance by the day 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 bi-weekly job meetings will be held at the offices of Dillon Consulting. 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 deems it necessary.

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

D20.1 Further to C6.24, the Contractor 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).

MEASUREMENT AND PAYMENT

D21. PAYMENT

D21.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D22. WARRANTY

D22.1 Warranty is as stated in C13.

notwithstanding.

FORM H1: PERFORMANCE BOND (See D11)

KNOW ALL	MENIDV	THECE	DDECENTO	$T \sqcup \Lambda T$

KNOW ALL MEN BY THESE PRESENTS THAT		
(herei	nafter 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 (\$	
sum t	Iful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and his, jointly and severally, firmly by these presents.	
WHE	REAS the Principal has entered into a written contract with the Obligee for	
BID C	PPORTUNITY NO. 987-2010	
2010	SEWER CLEANING AND INSPECTION – SPG3, SPG4 AND TRUNK SEWER RE-INSPECTIONS	
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) (b) (c) (d) (e)	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; perform the Work in a good, proper, workmanlike manner; make all the payments whether to the Obligee or to others as therein provided; in every other respect comply with the conditions and perform the covenants contained in the Contract; and 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;	
	I THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety not, however, be liable for a greater sum than the sum specified above.	
	IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that no 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

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

_____ day of _____ , 20___ .

SIGNED AND SEALED in the presence of:	(Name of Principal) Per:	(Seal)
(Witness as to Principal if no seal)	Per:	(Ocal)
	(Name of Surety) By: (Attorney-in-Fact)	(Seal)

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 - BID OPPORTUNITY NO. 987-2010
2010 SEWER CLEANING AND INSPECTION – SPG3, SPG4 AND TRUNK SEWER REINSPECTIONS
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 writted demand for payment made upon us by you. It is understood that we are obligated under this Standb 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 Standb 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 (1993 Revision), International Chamber of Commerce Publication Number 500.

(Name	of bank or financial institution)
Per:	(Authorized Signing Officer)
Per:	
	(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 The City of Winnipeg Standard Construction Specifications in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.1.1 The City of Winnipeg Standard Construction Specifications is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/Spec/Default.stm
- E1.1.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.2 The following are applicable to the Work:

Drawing No.	<u>Drawing Name/Title</u> 2010 SEWER CLEANING AND INSPECTION – SPG3, SPG4, AND
987-2010 Drawing Key Map	TRUNK SEWER RE-INSPECTIONS – KEY MAP
987-2010 Drawing 1	2010 SEWER CLEANING AND INSPECTION – SPG3, SPG4, AND
	TRUNK SEWER RE-INSPECTIONS – MAP 1 OF 8
987-2010 Drawing 2	2010 SEWER CLEANING AND INSPECTION – SPG3, SPG4, AND
	TRUNK SEWER RE-INSPECTIONS – MAP 2 OF 8
987-2010 Drawing 3	2010 SEWER CLEANING AND INSPECTION – SPG3, SPG4, AND
	TRUNK SEWER RE-INSPECTIONS – MAP 3 OF 8
987-2010 Drawing 4	2010 SEWER CLEANING AND INSPECTION – SPG3, SPG4, AND
-	TRUNK SEWER RE-INSPECTIONS – MAP 4 OF 8
987-2010 Drawing 5	2010 SEWER CLEANING AND INSPECTION - SPG3, SPG4, AND
9	TRUNK SEWER RE-INSPECTIONS – MAP 5 OF 8
987-2010 Drawing 6	2010 SEWER CLEANING AND INSPECTION - SPG3, SPG4, AND
9	TRUNK SEWER RE-INSPECTIONS – MAP 6 OF 8
987-2010 Drawing 7	2010 SEWER CLEANING AND INSPECTION - SPG3, SPG4, AND
3	TRUNK SEWER RE-INSPECTIONS – MAP 7 OF 8
987-2010 Drawing 8	2010 SEWER CLEANING AND INSPECTION – SPG3, SPG4, AND
	TRUNK SEWER RE-INSPECTIONS – MAP 8 OF 8
987-2010 Drawing D-8211	WATER SUPPLY HOSE TRAFFIC RAMP
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- E1.3 The Contract drawings are based on information contained in the City's GIS database. If the Contractor has trouble interpreting the drawings, or if they believe them to be wrong, the Contract Administrator shall be approached for assistance/clarification.
- E1.3.1 The Contractor shall assist the Contract Administrator in making any required measurements for the correction of errors found on the drawings.
- E1.4 Appendix A and Appendix B are applicable to the Work.

E2. CONFINED SPACE ENTRY

E2.1 The Contractor shall be aware that Hydrogen Sulphide Gas is present in all underground structures connected to the City's sewer systems, and has been known to accumulate in concentrations sufficient to cause serious harm or death to personnel who are not using adequate Personal Protective Equipment. Refer to Fugitive Emission Material Safety Data Sheet for details.

- E2.2 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 Entry Work and in particular the requirements for conducting hazard/risk assessments and providing Personal Protective Equipment (PPE).
- E2.2.1 Further to E2.2, the Contractor shall use an approved and properly maintained Supplied Air Breathing Apparatus when entering and working in sewers, manholes, and catch basins.

E3. WATER SUPPLY

- E3.1 Further to specifications CW 1120, section 3.1, CW 2140 and CW 2145, water supply for the Work may be taken from City of Winnipeg hydrants in accordance with the following:
 - (a) Water shall be taken from "white-cap" hydrants only. The locations of white-cap hydrants are shown on the drawings.
 - (b) Submit a list of proposed "white-cap" hydrant locations to the City of Winnipeg Water Services Division (WSD) for approval. If a proposed hydrant location is not approved, the Contractor shall submit an alternate hydrant location for approval.
 - (c) Only hydrants approved by WSD shall be used for water supply.
 - (d) The Contractor shall supply and use a Backflow Prevention Arrangement as shown on Standard Detail Drawing SD-019 when taking water from City hydrants. WSD will supply a meter and locks for the Backflow Prevention Arrangement.
 - (e) The Contractor is permitted to turn approved hydrants on and off provided the Contractor has received training by WSD and the turn-ons and turn-offs are done in the presence of the Contract Administrator.
 - (f) Hydrants approved for use shall be considered to be "in Contractor's control" from the time the WSD has turned the hydrant on until the Contractor has notified WSD the hydrant is no longer being used and the meter box has been removed.
 - (g) Between November 1 and April 30 of any year, the Contractor shall take all necessary precautions to prevent freezing of hydrants and related appurtenances for hydrants in their control and shall be responsible to pump out hydrants turned off by Emergency Services. Heating and hoarding of hydrants will be required by the Contractor. All costs associated with heating and hoarding shall be included in the price for "Sewer Inspection" and no separate measurement or payment will be made.
 - (h) If a hydrant or appurtenance is damaged due to freezing or improper turn on or turn off procedures while in the Contractor's control, WSD will assess the damage and determine if WSD will repair the damage or if the Contractor will be responsible to repair the damage. Costs for repairs completed by WSD will be deducted from payments owing the Contractor. Repairs completed by the Contractor will be at the Contractor's expense.
 - Erect and maintain signage (bump signs) warning oncoming traffic of hose crossings to the satisfaction of the Contract Administrator and the Manual of Temporary Traffic Control. Construct ramps as shown on attached drawing D-8211.
 - (j) Direct hook-up of sewer flushing equipment to a hydrant is not permitted unless approved by the Contract Administrator.
 - (k) WSD may at any time instruct the Contractor to make other arrangements for hydrant turnons and turn offs.
- E3.2 Further to Section 3.7 of CW 1120, charges incurred for the permit and water meters shall be paid for by the Contractor when taken out. The Contractor shall forward the invoice to the Contract Administrator for reimbursement. The billing for water usage sent to the Contractor shall be forwarded to the Contract Administrator for payment. The Bid Opportunity number shall be noted on each permit.

E4. MISCELLANEOUS SEWER CLEANING

E4.1 This specification amends and supplements specification CW 2140.

- E4.2 Perform Cleaning only where requested by the Contract Administrator.
- E4.3 Distribution of Resident Notices is required for all segments of sewer requiring cleaning as directed in E4.2.
- E4.4 Clean sewers, lift station sumps and other unforeseen locations using all related personnel, equipment, supporting vehicles, activities and operations, and:
 - (a) one combination debris removal and flushing unit; or
 - (b) one high velocity cleaning unit and one debris removal unit.
- E4.5 Further to Section 3.5:
 - (a) Operate flushing equipment so that the pressurized nozzle is not stationary at any time. If the nozzle is stationary for any amount of time the Contractor shall turn off the nozzle or reduce the water pressure.
 - (b) Do not clean more than one manhole to manhole section from any particular manhole (double run) unless approved by the Contract Administrator.
 - (c) Remove debris as directed by the Contract Administrator.
 - (d) Grease shall be removed and paid for as described in E7.
 - (e) Synergen Trouble Spots will be shown additional Drawings supplied to the Contractor at the Pre-Construction Meeting. These locations are recorded in the City's database as areas which require regular maintenance.
 - (f) No decanting shall occur within 3 sewer sections upstream of a lift station. If decanting is required within close proximity of a lift station it shall be done immediately downstream of the lift station.
- E4.6 All equipment shall be in accordance with and meet the requirements of CW 2140.
- E4.7 Sewer cleaning will be measured on a time basis and paid for at the Contract Unit Price for "Miscellaneous Sewer Cleaning", the price for which shall include all related personnel, equipment, supporting vehicles, activities and operations. The amount to be paid will be the total number of hours spent cleaning sewers, lift station sumps and other unforeseen locations in this contract, accepted and measured by the Contract Administrator.

E5. SEWER INSPECTION

- E5.1 It is the intent of this Work to obtain a quality inspection of the sewer without prior cleaning. It may however be necessary to flush sewer segments in order to complete the inspection in accordance with the Specifications.
- E5.2 For sewers with a diameter of 600mm or less, perform a light flushing of the sewer where required to ensure passage of the camera and to lower the water level in order to get a complete inspection.
- E5.3 The flusher shall not be used on pipe sizes larger than 600mm.
- E5.4 Further to clause 3.17, debris may be present during the inspection. Use the flusher to move debris where required to allow for passage of the camera, reduce flow levels, evacuate fog from the line and to ensure the camera lens does not become dirty.
- E5.5 There is no requirement for distribution of Resident Notices for flushing provided that sewer flushing equipment is used on minimum pressure and is used only as described in E5.2.
- E5.6 This specification amends and supplements specification CW 2145.
- E5.7 Further to sections 3.1 and 3.2:
 - (a) All camera and video recording equipment shall be approved by the Contract Administrator for use on this Contract.

- (b) The Contractor shall not change or alter the approved camera/recording unit setup without notifying the CA.
- (c) A videocassette recorder is not required.

E5.8 Replace Section 3.4 with:

- (a) Ensure each operator is fully trained in all aspects of sewer inspection and is capable of making accurate observations and recording all conditions that may be encountered in the sewers.
- (b) Perform coding using operators who can demonstrate proficiency coding in accordance with the requirements of the WRc "Manual of Sewer Condition Classification 3rd Edition".

E5.9 Replace Section 3.5 with:

- (a) Perform sewer condition coding in accordance with the requirements of the WRc Manual of Sewer Condition Classification 3rd Edition.
- (b) Record place names in accordance with clause 3.9.4 of the CW 2145.
- E5.10 Further to Section 3.7.4, operators failing to meet the accuracy requirements on two occasions will not be permitted to code on the remainder of the Contract until they can demonstrate to the Contract Administrator that they can code in accordance with the requirements of the WRc Manual of Sewer Condition Classification 3rd Edition.

E5.11 Revise section 3.8 as follows:

(a) Provide 400 TV lines of resolution for digital recordings as determined by EIA Resolution Chart (1956) or ISO 12233 Resolution Chart;

E5.12 Revise section 3.11 as follows:

- (a) Video shall be hardware encoded and captured direct to MPEG-2 or MPEG-4 video (MPEG-4 is preferred);
- (b) Capture video at full D1 resolution (720 X 480 pixels) with 29.97 fps and a minimum average bit rate of 6 Mbits/s.
- (c) Inspections will be recorded on high-quality archival grade DVDs from such manufacturers as Verbatim or Taiyo Yuden which shall be approved by the Contact Administrator.
- (d) The Contractor shall supply a portable 2.5-inch hard disk drive (HDD), complete with all operating software, power adaptors and USB cables, containing all video inspections and coding data to the City upon completion of the project. The HDD shall be sized appropriately to accommodate all the above mentioned files and have dual USB 3.0 and USB 2.0 compatibility with a minimum data transfer rate of 480 Mb/s.
- (e) The Contractor shall maintain backup copies of all digital video and inspection data submissions until the Warranty period expires.
- E5.13 Further to 3.13, a paper or "hard copy" of the inspections is not required.
- E5.14 Revise 3.17.3 to read "Clean and inspect sewers at the same time, use flusher where required to ensure the following:"

E6. INSPECTION OF TRUNK AND HIGH FLOW SEWERS

E6.1 It may be necessary that inspection of sewers with high flow be carried out at night when flows are the lowest. All costs associated with night work shall be included in the price for "Sewer Inspection" and no separate measurement or payment will be made.

E7. REMOVAL OF EXCESSIVE GREASE AND ROOTS

E7.1 Grease and or roots that cannot be removed through typical cleaning efforts shall be removed by hydraulically driven saw or blade cutters or as directed by the Contract Administrator.

- E7.1.1 Further to E7.1 the Contractor shall not remove grease and roots by flushing the sewer or using "spin nozzles".
- E7.2 The Contractor shall remove grease and or roots to within 15 millimetres of the inside surface of the sewer.
- E7.3 The Contractor shall monitor the entire operation of the removal equipment (including travel to repair to the site of repair) by closed circuit television (CCTV).
- E7.4 The removal of grease and or roots from within a single manhole-to-manhole sewer segment will be considered as one (1) pay item regardless of the amount of grease and or roots removed from within that sewer segment.
- E7.5 Contractor is to coordinate the removal of grease and roots with the Contract Administrator, and this Work shall take place at the end of the Contract. Distribution of Resident Notices is required for the sewer segments requiring grease and roots removal.
- E7.6 Contractor shall supply a vacuum unit as described in CW 2140 at the downstream manhole whenever debris is being cut.
- E7.7 Measurement will be on a unit basis and paid for at the Contract Unit Price for "Removal of Excessive Grease and or Roots per Sewer Segment". The number of units to be paid for will be the total amount of manhole-to-manhole sewer segments in which grease and or roots have been removed in accordance with this specification, accepted and measured by the Contract Administrator.

E8. TRAFFIC CONTROL AND MAINTENANCE OF ACCESS

- E8.1 Further to section 3.7 of CW 1130 of the General Requirements, the Contractor shall be responsible to redirect and maintain traffic with appropriate signing in accordance with The City of Winnipeg "Manual of Temporary Traffic Control in Work Areas on City Streets" at all times. Refer to http://www.winnipeg.ca/publicworks/Transportation/manual-2008-03-27.pdf for further details.
- E8.2 Work shall not be carried out on Regional Streets between 07:00 to 09:00 hours and 15:30- to 17:30 hours Monday to Friday unless approved by the Contract Administrator. Regional streets are listed in the "Manual for Temporary Traffic Control".
- E8.3 Should the City of Winnipeg require that Work on Regional Streets be carried out at night, on Sundays or on public holidays, the Contractor shall comply without additional compensation being considered to meet these requirements.
- E8.4 Further to section 3.8 of CW 1130 of the General Requirements, parking restriction signing on Regional Streets will be done by The City of Winnipeg, Traffic Services Branch.
- E8.5 The Contractor will be responsible for parking restriction signing required to perform the Work on non-regional and local residential streets. "No Parking" signs will be provided for Contractor's use.
- E8.6 Erect signs no sooner than 24 hours before the Work commences at a particular location.
- E8.7 Record the license plate numbers of vehicles already parked within the limits where the parking restriction signs are placed and fax the information to Winnipeg Police Services, Traffic Branch at 986-6998.
- E8.8 Promptly remove parking restriction signs once the Work at that location is completed. Signs shall not be left in place over a weekend if no Work will be done at that location.
- E8.9 Return signs immediately upon completion of the Work.

- E8.10 Further to section 3.6 of CW 1130 of the General Requirements, maintain safe pedestrian crossing at intersections at all times. Only one pedestrian crossing at an intersection is to be blocked at any one time. If more than one pedestrian crossing is blocked at an intersection at the same time, the Contractor shall provide flag persons to safely escort pedestrians across the intersection.
- E8.11 Do not park company or private vehicles inside the signed work zone in a manner that will block sightlines for vehicles and pedestrians approaching and crossing intersections.

E9. NOTICES TO RESIDENTS

- E9.1 Further to CW 2140 section 3.5 and CW 2145, the Contractor shall deliver notices provided by the Contract Administrator to residents on the affected sewer lines as described in E4 and E7 48 hours prior to the use of flushing equipment for either sewer cleaning or grease and roots removal.
- E9.2 All costs associated with delivering notices shall be included in the price Bid for "Sewer Cleaning" and "Sewer Inspection" and no separate measurement or payment will be made.

E10. DAMAGE TO CITY AND PRIVATE PROPERTY

- E10.1 All damage to City and private property caused by cleaning or inspection operations is the responsibility of the Contractor. The Contractor shall repair all damaged property to the satisfaction of the Contract Administrator. All costs associated with these repairs shall be at the Contractor's own expense.
- E10.2 Notify the Contract Administrator immediately when damage to property occurs.
- E10.3 The Contractor shall provide written reports to the Contract Administrator for each property attended for investigation of damage. Reports shall include photographs of all damage, dates and times, verbal or written agreements with property owner and all actions taken or proposed to rectify the damage. Reports shall be submitted to the Contract Administrator within 24 hours of attending the property.
- E10.4 Sewer "blow-back", or the build up of air pressure in the sewer lines causing trap water to blow out of plumbing fixtures and toilets as a result of cleaning or inspection, is not acceptable and shall be avoided at all costs. It is expected that where this possibility exists, the Contractor shall take appropriate measures such as making modifications to cleaning equipment and/or taking additional time to clean such sewers.
- When requested by the homeowner or Contract Administrator, the Contractor shall clean up affected residences. The cleaning shall be done by cleaning professionals, and under no circumstances are equipment operators to enter residences unless they are neat and presentable and the Contract Administrator has received a criminal record search for those individuals.
- Where actual sewage or "grey water" has flooded private property the Contractor shall immediately clean and disinfect all affected areas as well as flush all weeping tile. The Contractor shall immediately hire an independent certified water damage or flood restoration Contractor to assess any damage to contaminated building materials such as drywall, insulation, carpets, weeping tile or sub-floors, and immediately make any required repairs.
- E10.5.1 If a residence is uninhabitable as a result of a sewer back-up, the Contractor shall pay for reasonable hotel accommodations and meals for all affected residents.
- E10.6 The Contractor shall provide the Contract Administrator with a 24-hour contact number to arrange for immediate clean-up and repair of private property.

E11. COORDINATION OF CONTRACTORS

E11.1 The Contractor is advised that there may be other underground or surface work being carried out in the sewer districts during the course of this Contract. All efforts are to be made to ensure smooth coordination of Work between the Contractors involved.