



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 133-2009

DISMANTLING TWO ABOVEGROUND FUEL TANKS AT 0 PARIS STREET

TABLE OF CONTENTS

PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	3

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Addenda	1
B6. Substitutes	2
B7. Bid Components	3
B8. Bid	3
B9. Prices	4
B10. Qualification	4
B11. Opening of Bids and Release of Information	5
B12. Irrevocable Bid	5
B13. Withdrawal of Bids	5
B14. Evaluation of Bids	6
B15. Award of Contract	6

PART C - GENERAL CONDITIONS

C0. General Conditions	1
------------------------	---

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Contract Administrator	1
D4. Contractor's Supervisor	1
D5. Notices	1

Submissions

D6. Authority to Carry on Business	2
D7. Safe Work Plan	2
D8. Insurance	2
D9. Performance Security	3
D10. Subcontractor List	3

Schedule of Work

D11. Commencement	3
D12. Substantial Performance	4
D13. Total Performance	4
D14. Liquidated Damages	4

Control of Work

D15. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	4
--	---

Measurement and Payment

D16. Payment	5
--------------	---

Warranty

D17. Warranty	5
Form H1: Performance Bond	6
Form H2: Irrevocable Standby Letter of Credit	8
Form J: Subcontractor List	10

PART E - SPECIFICATIONS

General

E1. Applicable Specifications and Drawings	1
E2. Site Investigation Reports	
Appendix "A" – Phase III Environmental Site Assessment, August 14, 2001	
Appendix "B" – Results of Surface Water Sample, April 26, 2001	1

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 DISMANTLING TWO ABOVEGROUND FUEL TANKS AT 0 PARIS STREET

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, March 10, 2009.
- 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 the aboveground tanks are located on a small parcel of City owned land that is situated between a railway and other property not owned by the City of Winnipeg.
- B3.3 **It should be noted that records indicate a used oil spill had occurred on this site in 2003 and that all appropriate safety precautions shall be taken.**

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- 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>

- 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.
- B5.2.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 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 B14.
- 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 B7.7, deviations in consistent with the Bid Opportunity document shall be evaluated in accordance with B14.1(a).

B7. BID COMPONENTS

B7.1 The Bid shall consist of the following components:

- (a) Form A: Bid;
- (b) Form B: Prices;

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 Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.

B7.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:

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

B7.5.1 Samples or other components of the Bid Submission 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 Submission.

B7.6 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.

B7.7 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 B14.1(a).

B7.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to (204) 949-1178.

B7.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.

B7.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.

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 10 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;
- (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.

B8.4.2 All signatures shall be original.

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 the lump sum price in Canadian funds for the Work on Form B: Prices.

B9.2 Prices from Non-Resident Bidders are subject to a 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/matmgt/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 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.

B10.5 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. OPENING OF BIDS AND RELEASE OF INFORMATION

B11.1 Bids will not be opened publicly.

B11.2 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/bidopp.asp>

B11.3 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>

B11.4 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.

B12. IRREVOCABLE BID

B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B12.2 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 for the time period specified in Paragraph 9 of Form A: Bid.

B13. WITHDRAWAL OF BIDS

B13.1 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.

B13.1.1 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.

B13.1.2 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 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.

B13.1.3 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 10 of Form A: Bid; and

- (c) if the notice has been given by any one of the persons specified in B13.1.3(b), declare the Bid withdrawn.

B13.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B12.2 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.

B14. EVALUATION OF BIDS

B14.1 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 B10 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B6.

B14.2 Further to B14.1(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.

B14.3 Further to B14.1(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.

B14.4 Further to B14.1(c), the Total Bid Price shall be the lump sum price shown on Form B: Prices.

B14.4.1 If there is any discrepancy between the lump sum price written in figures and the lump sum price written in words, the price written in words shall take precedence.

B15. AWARD OF CONTRACT

B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B15.2 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.

B15.2.1 Without limiting the generality of B15.2, 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.

B15.3 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 B14.

B15.3.1 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.

- B15.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B15.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. 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 purging, dismantling and disposal of two (2) above ground storage tanks complete with all associated piping and foundations. Fencing along the South property line shall be removed completely. All other property fencing shall remain as is. All vegetation on Site shall be removed except where adjacent to fencing that is to remain.

D2.2 Tank one has a capacity of 409,140 L, while tank two has a capacity of 386,410 L. Both tanks are assumed to have stored used oil. Work must be carried out under the direction of a Licensed Petroleum Technician and in accordance with the Province of Manitoba. The removal shall be conducted in accordance with the Province of Manitoba's "Guideline for the Dismantling and Removal of Petroleum Storage Tank Systems" (version released in February 2007).

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:
Andy Urbanowicz
Project Officer
3-65 Garry Street, Winnipeg, Manitoba, R3C 4K4
Telephone No. (204) 986-2311
Facsimile No. (204) 947-2284

D3.2 At the pre-construction meeting, the Contract Administrator will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D4. CONTRACTOR'S SUPERVISOR

D4.1 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.

D5. NOTICES

D5.1 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.

D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.

D5.3 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 address or facsimile number:

The City of Winnipeg

Chief Financial Officer
Administration Building, 3rd Floor
510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: (204) 949-1174

- D5.4 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
Internal Services Department
Legal Services Division
Attn: City Solicitor
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1
Facsimile No.: (204) 947-9155

SUBMISSIONS

D6. AUTHORITY TO CARRY ON BUSINESS

- D6.1 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.

D7. SAFE WORK PLAN

- D7.1 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.
- D7.2 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>

D8. INSURANCE

- D8.1 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 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) The certificate of insurance to state: "Operations of the insured covers the removal of aboveground storage tanks plus all piping and associated equipment. Work to be performed as detailed in Bid Opportunity No. 133-2009."
- D8.2 Deductibles shall be borne by the Contractor.

- D8.3 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 but in no event later than seven (7) Calendar Days from notification of the award of Contract by Purchase Order.
- D8.4 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.
- D8.5 The City shall have the right to alter the limits and/ or coverages as reasonably required from time to time during the continuance of this agreement/ contract.

D9. PERFORMANCE SECURITY

- D9.1 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), 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.
- D9.1.1 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.
- D9.2 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 Purchase Order and prior to the commencement of any Work on the Site.

D10. SUBCONTRACTOR LIST

- D10.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

SCHEDULE OF WORK

D11. COMMENCEMENT

- D11.1 The Contractor shall not commence any Work until he is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.
- D11.2 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 D6;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D7;
 - (iv) evidence of the insurance specified in D8;
 - (v) the performance security specified in D9;

- (vi) the Subcontractor list specified in D10; and
- (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.

D11.3 The City intends to award this Contract by April 16, 2009.

D11.3.1 If the actual date of award is later than the intended date, the dates specified for Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D12. SUBSTANTIAL PERFORMANCE

D12.1 The Contractor shall achieve Substantial Performance by June 15, 2009..

D12.2 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 re-inspected.

D12.3 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.

D13. TOTAL PERFORMANCE

D13.1 The Contractor shall achieve Total Performance by June 30, 2009..

D13.2 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 re-inspected.

D13.3 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.

D14. LIQUIDATED DAMAGES

D14.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City two hundred and fifty dollars (\$250) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.

D14.2 The amount specified for liquidated damages in D14.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.

CONTROL OF WORK

D15. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D15.1 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

D16. PAYMENT

D16.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D17. WARRANTY

D17.1 Warranty is as stated in C13.

FORM H1: PERFORMANCE BOND
(See D9)

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

BID OPPORTUNITY NO. 133-2009

DISMANTLING TWO ABOVEGROUND FUEL TANKS AT 0 PARIS STREET

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 D9)

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 133-2009

DISMANTLING TWO ABOVEGROUND FUEL TANKS AT 0 PARIS STREET

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 (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 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *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>
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.

E2. SOILS INVESTIGATION REPORT

- E2.1 Further to C3.1, a geotechnical soils investigation has been done in the vicinity of the proposed Works to determine the character of the subsurface soil and to identify the level of soil contamination. A complete copy of the soils investigation report is included as Appendix A. The results of the surface water sampling survey is included in Appendix B.
- E2.2 **Bidders are not to contact the geotechnical consultant directly.**
- E2.3 Bidders are responsible for any interpretation they place on the supplied information and are expected to make such additional investigation of the soil as they feel necessary to satisfy themselves.
- E2.4 It should be noted that records indicate a used oil spill had occurred on this site in 2003 and that all appropriate safety precautions shall be taken.

E3. SAFETY AND PERMITS

- E3.1 Prior to removing the petroleum storage tank system the contractor shall acquire all necessary permits.
- E3.2 The Contractor shall provide and erect all protective barricades as required in accordance with the requirements of the employment safety regulations under the Workplace Safety and Health Act, Employment Safety Act and Winnipeg By-Law No. 1481/77 pertaining to erection of barricades for protection and the Guideline for the Dismantling and Removal of Underground and Aboveground Petroleum Storage Tank Systems in Manitoba.

E4. DANGEROUS WORK CONDITIONS

- E4.1 Further to clause C6.26 of the General Conditions, the contractor shall be aware of the potential hazards that can be encountered at the Site as outlined in Appendix A and Appendix B.

E4. REMOVAL OF ABOVEGROUND STORAGE TANKS

- E4.1 Pump out and dispose of the standing water from the Site (based on testing of the water completed in 2001 by an environmental consultant, disposal into the sewer system is expected).

- E4.2 Excavate a sump in the gravel to further lower groundwater levels in the tanks area, to allow for stabilization of the base in order to place fill materials. It is assumed that this additional water would require disposal as hydrocarbon impacted groundwater.
- E4.3 Once the base is stabilized, purge any remaining liquid in tanks.
- E4.4 Remove the above ground tanks.
- E4.5 Dispose of aboveground tanks, piping and associated equipment.
- E4.6 Remove tank foundations. No rubble or debris is to remain on Site.
- E4.7 Backfill to final grades with imported clay fill material, ensuring a minimum of 2% slope from north to south across the site (rough grades are shown in Figure 2 of the report provided as an appendix to these specifications).
- E4.8 All dismantling and removal of petroleum storage tanks and ancillary equipment are to be completed by a Licensed Petroleum Technician.
- E4.9 All work is to be conducted in accordance with any relevant safety, fire, hazardous material and fuel storage regulations pertaining to removal of aboveground fuel sites including but not limited to the Province of Manitoba's "Guideline for the Dismantling and Removal of Petroleum Storage Tank Systems Version February 2007".
- E4.10 Subsurface soil testing to be submitted to the Province of Manitoba through a separate contract.

Appendix A

PHASE II ENVIRONMENTAL SITE ASSESSMENT

**PARIS STREET
WINNIPEG, MANITOBA**

Submitted to:

**The City of Winnipeg
Planning, Property and Development
Department**

Submitted by:

**FT Ecologistics Limited
230 – 294 William Avenue,
Winnipeg, Manitoba. R3B OR1**

In collaboration with

**AMEC Earth & Environmental Limited
440 Dovercourt Drive
Winnipeg, Manitoba R3Y 1N4**

January 2001

TABLE OF CONTENTS

TABLE OF CONTENTS.....	i
LIST OF TABLES	i
LIST OF APPENDICES	i
1.0 INTRODUCTION.....	1
1.1 SCOPE OF WORK	1
1.2 SITE DESCRIPTION	1
2.0 ASSESSMENT METHODOLOGY.....	2
2.1 TEST HOLE LOCATIONS	2
2.2 SOIL SAMPLING METHODS.....	2
2.3 MONITORING WELL INSTALLATION.....	3
2.4 LABORATORY ANALYSIS.....	3
2.5 QUALITY ASSURANCE/QUALITY CONTROL.....	3
2.6 ASSESSMENT CRITERIA.....	4
2.6.1 SITE SPECIFIC.....	5
3.0 RESULTS.....	5
3.1 SOIL.....	5
3.1.1 SOIL STRATIGRAPHY.....	5
3.1.2 SOIL COMBUSTIBLE VAPOUR LEVELS.....	5
3.1.3 LABORATORY ANALYSIS RESULTS	6
3.2 GROUNDWATER.....	7
3.2.1 MONITORING RESULTS.....	7
4.0 DISCUSSION AND CONCLUSIONS.....	7
4.1 DISCUSSION	7
4.2 CONCLUSIONS.....	8
5.0 CLOSURE.....	8
6.0 REFERENCES.....	9

LIST OF TABLES

TABLE 1: LABORATORY ANALYSIS METHODOLOGY.....	3
TABLE 2: SUMMARY OF SOIL COMBUSTIBLE VAPOUR LEVELS.....	5
TABLE 3: SOIL ANALYTICAL RESULTS	6

LIST OF APPENDICES

APPENDIX A: FIGURES	
APPENDIX B: TEST HOLE LOGS	
APPENDIX C: CERTIFICATES OF ANALYSIS	
APPENDIX D: LIMITATIONS	

1.0 INTRODUCTION

The City of Winnipeg-Planning, Property and Development Department contracted the services of FT-Ecologistics to conduct a Phase II Environmental Site Assessment (ESA) of a property located at the northeast corner of Paris Street and Lexington Street in Winnipeg, Manitoba. As explained in the proposal, FT-Ecologistics sub-contracted the services of AMEC Earth & Environmental Ltd to conduct the field work on site. FT-Ecologistics retained the responsibility of overall project management. A Phase I ESA, completed on November 2, 2000, identified that ASTs at the Site formerly contained waste oils.

1.1 SCOPE OF WORK

The scope of work was proposed as follows:

- Drill up to 4 test holes at the site, in the vicinity of two approximately 100 000 L ASTs and install a monitoring well in one of the test holes, if hydrocarbon impacts were identified.
- Submit up to two soil samples for laboratory analysis of Oil & Grease and one soil sample for PHC, BTEX and leachable lead. Also submit up to one water sample for laboratory analysis of benzene, toluene, ethylbenzene and xylenes (BTEX) and total lead.
-
- Submit a report that summarizes the findings of the subsurface investigation.

1.2 SITE DESCRIPTION

The Site was located north of the intersection of Paris Street and Lexington Avenue in Winnipeg, Manitoba. At the time of the Site investigation, the Site contained two 100 000 L ASTs, however was otherwise undeveloped. The adjacent properties consisted of light industrial developments, fronting onto Mission Street, to the south and east, undeveloped land followed by the CNR Reddit Subdivision to the north and undeveloped land to the west. No underground utilities were present at the site.

The Site was relatively low-lying, within an elevation up to 1.5 m lower than the adjacent properties. The central and northern portions of the Site accumulated water and at the time of the Site investigation these areas were covered with up to approximately 1.0 m of water of which the upper approximately 0.45 m was ice.

A plan showing the site layout and adjacent properties is shown in Figure A1, Appendix A.

2.0 ASSESSMENT METHODOLOGY

2.1 TEST HOLE LOCATIONS

Due to the accumulation of excess water and ice on the central and northern portions of the Site, at the time of the Site investigation, test holes were advanced on the southern portion of the Site only. On 1 December, 2000, a total of four (4) test holes were drilled at the site, to depths between 4.6 and 6.1 m below grade. Specifically, the test holes were advanced to the south east (in the vicinity of two half buried 205 L barrels) and south west of AST A (see Figure 1), between the two ASTs and south of AST B. The test holes were advanced in these locations in order to determine if historical storage and handling of waste oils had impacted the Site. Based on the results of the field screening, a monitoring well was installed in the test hole located between the two ASTs.

The test hole locations are shown in Figure 1 Appendix A and the test hole logs, as recorded at the time of drilling, are included in Appendix B.

2.2 SOIL SAMPLING METHODS

Soil sampling was conducted with the aid of a backhoe mounted drill rig which was supplied and operated by Maple Leaf Enterprises Limited of Winnipeg, Manitoba. Solid stem augers of 125 mm diameter were used and at regular intervals duplicate soil samples were removed from the auger flights by hand (with clean nitrile gloves) and sealed in clear plastic bags. The Ambient Temperature Headspace (ATH) vapour concentration was determined from one of the bagged soil samples at each sampling interval using a Gastech Tracetechor combustible vapour meter calibrated in the "no methane response mode" with hexane gas. As well, each soil sample was examined for signs of hydrocarbon contamination such as staining or odours. The second soil sample from select soil intervals was sealed in a glass jar with a Teflon lined lid, supplied by AMEC's Edmonton laboratory, for possible chemical analysis. Headspace in the glass jar was minimized to reduce analyte volatilization before laboratory analysis.

All sample containers were labelled with the project number, date of sampling, name of sampler and sample depth. All jarred samples were immediately placed into an ice packed cooler. The jarred samples were retained in the cooler while in the field and during shipping to AMEC's Edmonton Laboratory. A chain of custody/analytical request form was completed and accompanied the soil samples. Jarred samples that were not analyzed are typically held in cold storage at the laboratory for not less than thirty days and then disposed of.

The test holes were sealed at the top and bottom and through any impacted sections with granular bentonite and backfilled with auger cuttings throughout the remainder of the holes.

2.3 MONITORING WELL INSTALLATION

After the completion of soil sampling activities on 1 December, 2000, TH3 was completed as a monitoring well in order to monitor subsurface vapour concentrations and establish the groundwater conditions at the Site. The monitor well was constructed with 50 mm diameter Schedule 40 PVC pipe, 10 slot well screen and 50 mm diameter Schedule 40 solid riser pipe to approximately 0.9m above the ground surface. Silica sand was placed in the annular space between the pipe and test hole to a depth of about 0.3 m above the top of the screen. Granular bentonite seals (1.5m thick) were placed immediately above the silica sand. The remainder of the test hole located between the bentonite seals was backfilled with drill cuttings consisting of high plasticity clay. An above ground steel casing was installed over the well for protection and padlocked for security. The monitor well construction details are shown on the appropriate test hole log (Figure B3).

2.4 LABORATORY ANALYSIS

Based on the findings of the historical review and the field screening which indicated moderately elevated vapours, one soil sample was submitted for laboratory analysis of PHC, BTEX, Oil & Grease and lead (leachable). Also an additional soil sample was submitted for laboratory analysis of PHC and BTEX. Samples submitted for laboratory analysis and the laboratory methods utilized are summarized in Table 1. The Certificates of Analyses are included in Appendix C.

Sample ID (depth in m)	Media	Analysis Requested	Laboratory Method Used
TH1-2 @ 0.6	Soil	PHC (and BTEX), Lead & Oil & Grease	BTEX – EPA Reference Method 5021/CCME PHC – EPA Reference Method 3550/CCME Lead – EPA Reference Method 1311/APHA 3120
TH3-4 @ 2.1	Soil	PHC (and BTEX)	Oil & Grease – EPA Reference Method 418.1

2.5 QUALITY ASSURANCE/QUALITY CONTROL

Analytical quality control is provided by the laboratory through analysis in duplicate of a percentage of samples submitted and by the determination of the percentage of surrogate analyte recovery. Surrogate analyte recovery analysis was performed on samples TH1-2 and TH3-4 and was determined to be within an acceptable range. Field quality assurance was provided by adherence to AMEC soil sampling protocols as stated in Section 2.2.

2.6 ASSESSMENT CRITERIA

Manitoba Conservation currently references the environmental assessment criteria as outlined in the following two documents produced by the Canadian Council of Ministers of the Environment (CCME):

- CCME. 1999. Canadian Environmental Quality Guidelines.
- CCME. 2000. Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil.

The CCME documents are either directly referenced by federal, provincial and territorial governments as either the standard criteria or have provided the basis for the development of other provincial/territorial criteria. The above documents support various legislative acts, such as the Canadian Environmental Protection Act (CEPA, 1985) and the Guideline for Environmental Site Investigations in Manitoba (June, 1998) as published by Manitoba Conservation (formerly Manitoba Environment).

The CCME documents are based on the assessment and consistent management of risks posed to humans, plants, animals and environmental processes from contaminant exposure. The criteria are laid out with a three tiered approach for dealing with contaminated sites with each tier incorporating more detailed Site specific information while maintaining the same environmental and human health protection goals. The first tier consists of the direct adoption of the criteria published in the EQGs and/or CWS-PHCs. The second tier involves the generation of site specific criteria when site conditions exist that significantly modify exposure and risk scenarios which were used to formulate the tier one values. The third tier relies on the use of risk assessment procedures to establish remediation objectives at contaminated sites on a site-specific basis. Tier 2 and 3 Evaluations are to be applied where specific environmental quality guidelines are not available, or detailed site specific information should be applied, or where human health and/or environmental risks cannot be effectively quantified.

The tier one criteria are derived according to broad use categories (i.e. agricultural, residential/parkland, commercial and industrial for soil) which are further divided into exposure pathways (i.e. soil ingestion, vapour inhalation, protection of potable groundwater, etc.). The generic land use categories are described in detail in the CCME publications.

As the CCME EQGs or CWS-PHCs do not provide guidelines for groundwater with a non-potable use category, AMEC utilizes the non-potable groundwater criteria based on groundwater use criteria (which is subdivided for fine and coarse grained soils) as outlined in the Ministry of Ontario Environment's (MOE) document "*Guideline for Use at Contaminated Sites in Ontario*", June, 1996. Based on conversations with officials at Manitoba Conservation, the MOE Non-Potable Groundwater criteria are acceptable for use at Sites in Manitoba for comparison purposes.

2.6.1 SITE SPECIFIC

Based on the former on-Site and current off-Site industrial land uses, CCME EQGs and CWS-PHCs for an industrial land use situation have been used as the applicable criteria for the BTEX and fractional PHC components. Since the current CCME guidelines do not directly quantify Oil & Grease and lead (leachable), the MC Level III and MC Dangerous Goods Handling and Storage Act parameters were used for the applicable criteria for Oil & Grease and lead (leachable), respectively.

As there are no near surface aquifers in the area and since domestic water for the area is supplied by the City of Winnipeg municipal water system, the MOE Non-Potable Groundwater criteria are applicable for BTEX and lead (total) parameters for water at the Site.

3.0 RESULTS

3.1 SOIL

3.1.1 SOIL STRATIGRAPHY

The soil stratigraphy as recorded on the test hole (TH) logs (Appendix B) generally consisted of sand and clay fill materials extending to approximately 1.0 m below grade followed by a silty clay and/or silt layer to a depth of up to 2.7 m. The silty clay and/or silt was followed by a high plasticity clay that extended to the maximum test hole depth of 6.1 m below grade. An approximately 150 mm thick silt lense was identified in TH1, TH3 and TH4 at a depth of approximately 2.3 m.

3.1.2 SOIL COMBUSTIBLE VAPOUR LEVELS

The ATH vapour concentrations were determined for each soil sample recovered from the test holes during drilling and are shown on the test hole logs (Appendix B). The soil vapour levels measured during the drilling program are summarized in Table 2.

Location	Test Hole Depth (m)	Hydrocarbon Staining Zone (m)	Elevated Soil Vapour (>150 ppm _v) Depth Range (m)	Maximum Soil Vapour Level	
				Level (ppm _v)	Depth (m)
TH1	6.1	0.15 to 1.1	0.3 to 2.1	1500	0.6
TH2	4.6	None	0.3 to 1.2	150	0.6
TH3	4.6	1.0 to 3.3	0.3 to 2.1	1200	0.3
TH4	4.6	0.6 to 1.1	0.9 to 1.1	180	1.1

Notes: ppm_v- parts per million organic vapour

3.1.3 LABORATORY ANALYSIS RESULTS

The results of the laboratory analyses conducted on selected soil samples are summarized in Tables 3 and 4. Copies of the Certificates of Analyses are provided in Appendix C.

Location (depth)	Soil Vapour Level (ppm)	Soil Type	Benzene	Toluene	Ethylbenzene	Xylenes	Lead (leachable)	Oil & Grease
TH1-2 @ 0.6 m	1500	Sand/Clay Fill	0.55	<u>340</u>	<u>58</u>	<u>220</u>	0.173	<u>43900</u>
TH3-4 @ 2.1 m	200	Clay	<0.020	1.1	0.70	3.1		
CCME EQG <i>Industrial</i>			5	14	20	20	NC	NC
MC DGH&T			NC	NC	NC	NC	5	NC
MC Level III			N/A	N/A	N/A	N/A	NC	5000

Sample No. (depth)	Soil Vapour Level (ppmv)	Soil Texture	F1-VPH (C ₈ – C ₁₀)	F2-EPH (C ₁₀ -C ₁₆)	F3-EPH (C ₁₅ -C ₃₄)	F4-EPH (C ₃₄ -C ₅₀)
TH1-2 @ 0.6 m	1500	Sand/Clay Fill	250	<u>1800</u>	<u>18100</u>	1600
TH3-4 @ 2.1m	200	Clay	52	330	4100	400
CCME CWS-PHC ¹ <i>Industrial</i> , coarse grained soil <1.5m depth			330	760	1700	3300
CCME CWS-PHC ¹ <i>Industrial</i> , fine grained soil >1.5m depth			1000	3000	5000	10000

Notes

- all concentrations in micrograms per gram (ug/g)
- ppmv - parts per million total organic vapour
- Bold and underline indicates parameter exceeds applicable guideline
- CCME EQG – Canadian Council of Ministers of the Environment, Canadian Environmental Quality Guidelines (1999).
- ¹ – Tier 1 exposure pathway – eco soil contact
- NA – Not applicable
- CCME CWS-PHC – Canadian Council of Ministers of the Environment Canada-Wide Standards for Petroleum Hydrocarbons in Soil (2000) for an Industrial site.
- MC Level III – Manitoba Conservation, A Guideline for the Environmental Investigation and Remediation of Petroleum Storage Sites in Manitoba (1993).
- MC DGT & H - Manitoba Conservation, Dangerous Goods Transportation and Handling Act (1987).
- NC - No guideline available from CCME EQG (1999)
- N/A - Not applicable

The laboratory results indicated that the toluene, ethylbenzene and xylenes concentrations in soil sample TH1-2 at 0.6 m below grade exceeded the CCME EQG for an industrial site. The Oil & Grease concentration in soil sample TH1-2 exceeded the MC Level III criteria. The laboratory results also indicated that the F2 (>C₁₀ to C₁₅) and F3 (>C₁₆ to C₃₄) fractions exceeded the CCME CWS-PHC for a coarse surface soil. The laboratory results indicated that hydrocarbon impacts were present in soil sample TH3-4 at 2.1 m below grade, however the concentrations were below the respective criteria.

3.2 GROUNDWATER

3.2.1 MONITORING RESULTS

AMEC visited the Site on December 7, 2000 to complete groundwater monitoring, at which time the water in the monitoring well was frozen. The depth to the ice within the well from ground surface was 0.3 m. As a result, groundwater monitoring could not be completed.

4.0 DISCUSSION AND CONCLUSIONS

4.1 DISCUSSION

The Site investigation consisted of the advancement of two test holes to the south east and south west of AST A (TH1 and TH4), one test hole centrally located between ASTs A and B (TH3) and one test hole located south of AST B (TH2). TH1 was located near transfer piping extending from AST A, as well as two partially buried 205 L barrels. TH2 was located near transfer piping extending from AST B.

Elevated ATH vapour concentrations were identified in soil samples retrieved from all of the test holes over depths ranging from ground surface to a maximum depth of approximately 2.1 m. Hydrocarbon staining and odours were identified in soil samples retrieved from all of the test holes over depths ranging from ground surface to a maximum depth of approximately 3.3 m below grade.

The laboratory results for soil sample TH1-2 at 0.6 m below grade indicated that hydrocarbon impacts above the CCME EQG and CWS-PHC for an industrial Site and the MC Level III criteria were present on the Site. Significantly elevated ATH vapour concentrations and hydrocarbon staining and odours, similar to those noted in TH1-2 at 0.6 m below grade, were identified in the upper 1.0 m of soil in TH3. Therefore the upper 1.0 m of soil in the vicinity of TH3 is suspected of having concentrations of hydrocarbons above the CCME EQG and CWS-PHC for an industrial Site and/or the MC Level III criteria.

The laboratory results for soil sample TH3-4 at 2.1 m below grade indicated that hydrocarbon impacts were present in the soil (F_3 fraction exceeds CWS-PHC for a residential Site), however the concentrations were below the CCME EQG and CWS-PHC for an industrial Site.

Due to the accumulation of surface water (frozen to approximately 0.6 m below grade) on the northern and central portions of the Site, only the southern portion of the Site was investigated.

A groundwater sample from the Site could not be retrieved because the water within the well was frozen. The depth from ground surface to the ice (groundwater level) was 0.3 m.

4.2 CONCLUSIONS

The Phase II ESA identified hydrocarbon impacts above the CCME EQG and CWS-PHC for an industrial Site and the MC Level III criteria in TH1. Furthermore, hydrocarbon impacts above the criteria are suspected in the upper depths of TH3. The lab results, however, are inconsistent with the reported storage of waste oil. The high BTEX concentrations are indicative of the presence of a more volatile substance, such as solvents or gasoline.

The investigation did not identify the lateral extent of the hydrocarbon impacts, specifically to the north as a result of the extensive surface water in that area of the Site. As a result further delineation is recommended once the area is accessible.

If re-development of the Site is endeavoured, the ASTs must be dismantled as per Manitoba Conservation Guidelines.

5.0 CLOSURE

The American Society for Testing and Materials Standard of Practice notes that no environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of a standardized environmental site assessment protocol is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with the property, given reasonable limits of time and cost. The findings of this investigation are based on the interpretation of data from a limited number of test holes and analytical results pertaining to specific samples. The evaluation and interpretations do not preclude the existence of chemical substances other than those identified herein, or the possibility that contaminate concentrations can vary between the areas of investigation.

This report has been prepared for the exclusive use of The City of Winnipeg, Planning Property and Development Department and their agents for specific application to the property defined in this report. The environmental assessment was conducted in accordance with generally accepted assessment practices. No other warranty, expressed or implied, is made. The limitations of this report are specified in Appendix E.

We trust that this report meets your present requirements. If you have any questions or if we can be of further assistance, please contact our office.

Respectfully submitted,

FT Ecologistics Limited



Jammi Kumar
General Manager

6.0 REFERENCES

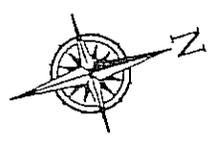
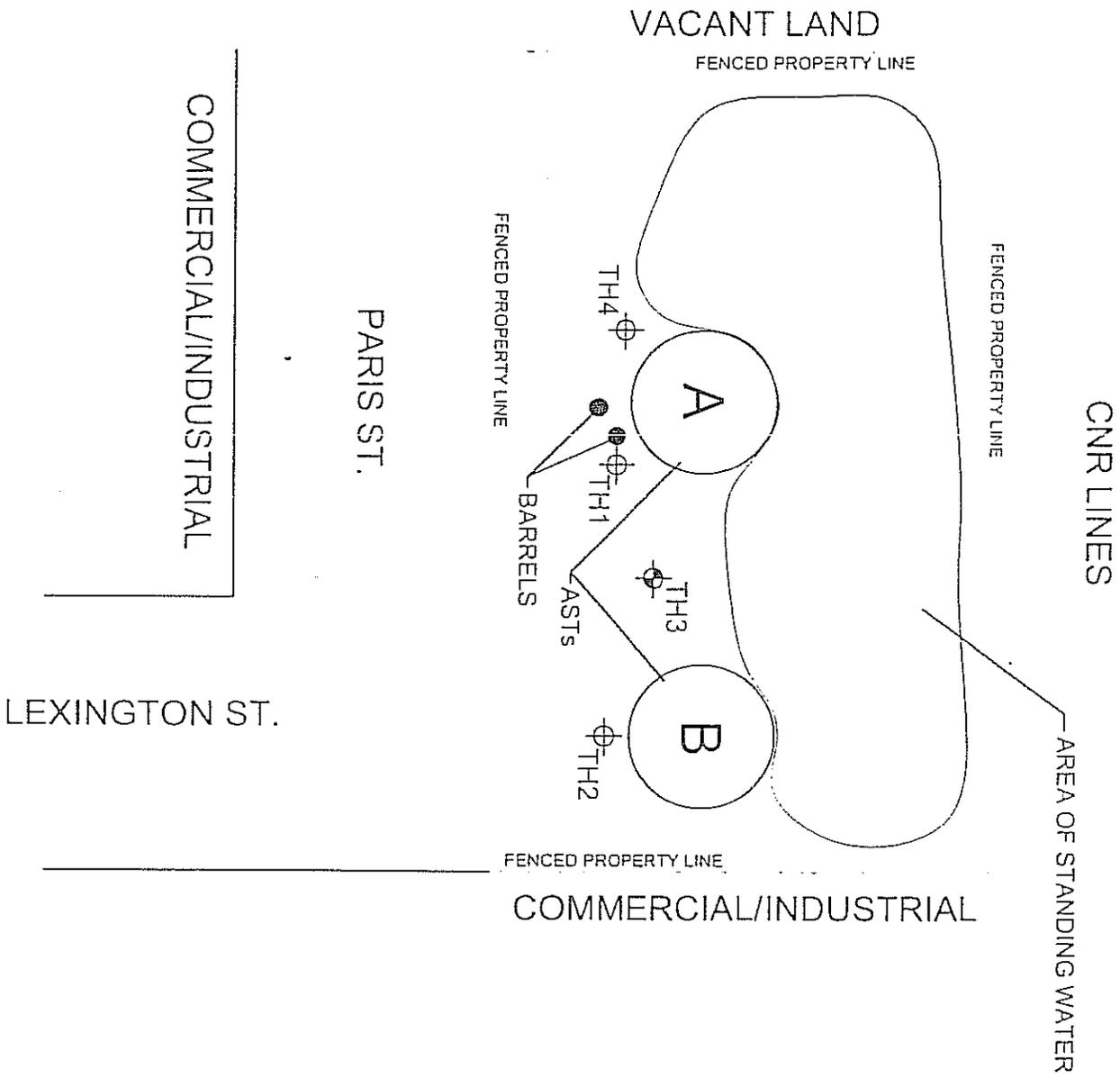
Canadian Council of Ministers of the Environment. 1999. Canadian Environmental Quality Guidelines.

Canadian Council of Ministers of the Environment. 2000. Canada Wide Standards for Petroleum Hydrocarbons (PHC) in Soil.

Manitoba Environment. 1997. A Guideline for the Environmental Site Investigations in Manitoba. Guideline 98-01.

Government of Manitoba. 1987. Regulation 282/87. Dangerous Goods Handling and Transportation Act. Classification Criteria for Products, Substances and Organisms Regulation.

APPENDIX A
FIGURES



LEGEND

⊕ APPROX. TEST HOLE LOCATION

⊖ APPROX. MONITORING WELL LOCATION



NO.	REVISION	DATE	BY

amec
EARTH & ENVIRONMENTAL LIMITED

PHASE II ESA
CITY OF WINNIPEG
PARIS STREET
WINNIPEG, MANITOBA

TEST HOLE LOCATION PLAN

SCALE: AS SHOWN
DATE: DEC/2000

FIGURE 1

APPENDIX B
TEST HOLE LOGS

Phase II ESA - Paris Street Contractor: Maple Leaf TEST HOLE NO: TH2
 City of Winnipeg Drill Rig: VL 60 PROJECT NO: WX05055
 Auger: 125 mm SS ELEVATION: 99.3 m

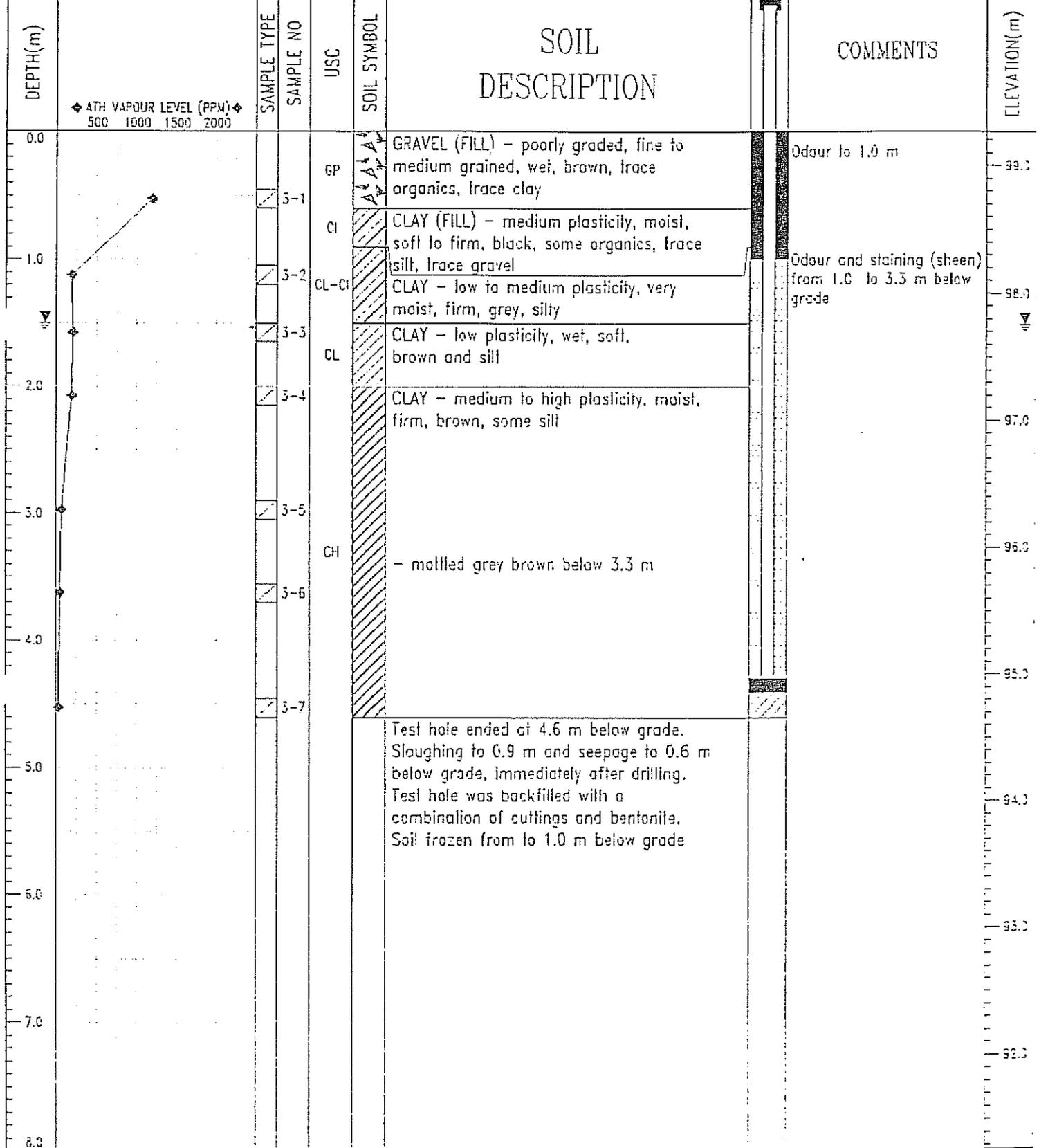
SAMPLE TYPE SHELBY TUBE CUTTINGS SPT CORE NO RECOVERY CONT. SAMPLE
 BACKFILL TYPE BENTONITE PEA GRAVEL SLOUGH GROUT DRILL CUTTINGS SAND

DEPTH(m)		SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL	SOIL DESCRIPTION	INSTRUMENTATION DATA	COMMENTS	ELEVATION(m)
0.0									
0.0	◆ ATH VAPOUR LEVEL (PPM) ◆ 500 1000 1500 2000								
0.15			2-1	CI		SAND (FILL) - poorly graded, fine to medium grained, moist, brown, trace organics, trace clay		Slaining and odour from 0.15 to 1.1 m	99.3
1.0			2-2	CL-CI		CLAY (FILL) - medium plasticity, moist, soft to firm, black, some organics, trace silt, trace sand			
1.5						CLAY - low to medium plasticity, very moist, firm, grey, some silt, sand inclusions			98.0
2.0						CLAY - low plasticity, moist, soft, brown and silt			
2.5			2-3						97.0
3.0			2-4			CLAY - high plasticity, moist, firm, brown, trace silt			96.0
3.5			2-5	CH					95.0
4.0			2-6						94.0
4.6						Test hole ended at 4.6 m below grade. No sloughing or seepage, immediately after drilling. Test hole was backfilled with a combination of cuttings and bentonite. Soil frozen to 0.2 m below grade.			93.0
5.0									92.0
5.5									
6.0									
6.5									
7.0									
7.5									
8.0									

AMEC Earth & Environmental Limited
 Winnipeg, Manitoba

LOGGED BY: D3 COMPLETION DEPTH: 4.6 m
 REVIEWED BY: PH COMPLETE: 12/01/00
 Fig. No: B2 Page 1 of 1

SAMPLE TYPE	<input checked="" type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> CUTTINGS	<input checked="" type="checkbox"/> SPT	<input type="checkbox"/> CORE	<input type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CONT. SAMPLE
BACKFILL TYPE	<input checked="" type="checkbox"/> BENTONITE	<input type="checkbox"/> PEA GRAVEL	<input type="checkbox"/> SLOUGH	<input type="checkbox"/> GROUT	<input checked="" type="checkbox"/> DRILL CUTTINGS	<input type="checkbox"/> SAND

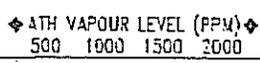


01/31/03 10:25AM (CEG_E-8)

Phase II ESA - Paris Street	Contractor: Maple Leaf	TEST HOLE NO: TH4
City of Winnipeg	Drill Rig: VL 50	PROJECT NO: WX05055
	Auger: 125 mm SS	ELEVATION: 99.15 m

SAMPLE TYPE	<input checked="" type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> CUTTINGS	<input checked="" type="checkbox"/> SPT	<input type="checkbox"/> CORE	<input type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CONT. SAMPLE
BACKFILL TYPE	<input checked="" type="checkbox"/> BENTONITE	<input type="checkbox"/> PEA GRAVEL	<input type="checkbox"/> SLOUGH	<input type="checkbox"/> GROUT	<input checked="" type="checkbox"/> DRILL CUTTINGS	<input type="checkbox"/> SAND

DEPTH(m)	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL	SOIL DESCRIPTION	INSTRUMENTATION DATA	COMMENTS	ELEVATION(m)
0.0								99.0
0.0 - 1.0		4-1	SP	SP	SAND (FILL) - poorly graded, fine to medium grained, wet, brown, trace organics, trace clay - black, some organics, some sand, clayey from 0.5 to 1.1 m		Odour from 0.15 to 2.4 m Staining from 0.6 to 1.1 m	99.0
1.0 - 2.0		4-2 4-3		CL-CI	CLAY - low to medium plasticity, very moist, firm, grey, some silt, sand inclusions			98.5
2.0 - 3.0		4-4		CL-CI	- silt lense from 2.0 to 2.2 m			97.0
3.0 - 4.0		4-5		CI-CH	CLAY - high plasticity, moist, firm, brown, trace silt			96.0
4.0 - 5.0		4-6		CI-CH				95.0
5.0 - 7.0		4-7			Test hole ended at 4.6 m below grade. Sloughing to 2.7 m and seepage to 1.0 m below grade, immediately after drilling. Test hole was backfilled with a combination of cuttings and bentonite. Soil frozen to 0.2 m below grade.			94.0
7.0 - 8.0								93.0
8.0								92.0



AMEC Earth & Environmental Limited
Winnipeg, Manitoba

LOGGED BY: DB	COMPLETION DEPTH: 4.6 m
REVIEWED BY: PH	COMPLETE: 12/01/00
Fig. No: E4	Page 1 of 1

APPENDIX C
CERTIFICATES OF ANALYSIS

AMEC Earth & Environmental
Analytical Chemistry Laboratory

Date Required: Dec 13/00

SOIL ANALYSIS
PRELIMINARY RESULTS

Attn AMEC Earth & Enviro.

Attn Bynski, David

Date Dec 6/00

9

File# 40474

Project# WX05055

Date Sampled: Dec 1/00

Analysis	Date of Analysis (dd/mm/yy)	Parameter	EPA Method	Lab. No.		19936
				Sample ID	19935	
ST	6/12/2000	Benzene	EPA 502.1/CCEM	0.020	1-2 @ 2'	3-4 @ 7'
ST	6/12/2000	Toluene	EPA 502.1/CCEM	0.030	1-2 @ 2'	3-4 @ 7'
ST	6/12/2000	Ethylbenzene	EPA 502.1/CCEM	0.020	1-2 @ 2'	3-4 @ 7'
ST	6/12/2000	Xylenes	EPA 502.1/CCEM	0.030	1-2 @ 2'	3-4 @ 7'
ST	6/12/2000	F1 - VPH (C ₈ -C ₁₀)	EPA 602.1/CCEM	1.6	1-2 @ 2'	3-4 @ 7'
ST	6/12/2000	F2 - EPH (C ₁₀ -C ₁₆)	EPA 350.0/CCEM	10	1-2 @ 2'	3-4 @ 7'
ST	6/12/2000	F3 - EPH (C ₁₆ -C ₃₄)	EPA 350.0/CCEM	10	1-2 @ 2'	3-4 @ 7'
ST	6/12/2000	F4 - EPH (C ₃₄ -C ₅₀)	EPA 350.0/CCEM	10	1-2 @ 2'	3-4 @ 7'
ST	6/12/2000	Moisture			1-2 @ 2'	3-4 @ 7'
				ug/g (ppm) dry weight		
				0.55		<0.020
				340		1.1
				58		0.70
				220		3.1
				250		52
				1800		330
				18100		4100
				1600		400
				5.8		25.9

EPA: U.S. Environmental Protection Agency, 1997, Test Methods of Evaluation of Solid Waste, 3rd ed through updates III.
 Office Solid Waste Emergency Response, U.S. Environmental Protection Agency, Washington, D.C.
 VPH-Volatile Petroleum Hydrocarbons (TVI) with BTEX sublected
 EPH: Extractable Petroleum Hydrocarbons - not corrected for PAH content.
 CCEM - Canadian Council of Ministers of the Environment - Method K, Canada Wide Standards for Petroleum Hydrocarbon in Soil - Tier 1 Method, Revision 5.0

Report reviewed by:

James A. LeBlanc, B.Sc.
QA/QC Manager
Laboratory Services

Brenda Chomin
Manager
Laboratory Services

An AMEC Company

AMEC Earth & Environmental
Analytical Chemistry Laboratory

Date Required: Dec 13/00

SOIL
PRELIMINARY RESULTS

9

File# 40474a

Project# WX05055

Date Sampled: Dec 1/00

Attn: AMEC Earth & Enviro.

Bynski, David

Date Dec 6/00

Analyst	Date of Analysis	ANALYTICAL PARAMETERS	Units	Method	MDL	19935 1-2 @ 2'
AD	12-Dec	Oil & Grease (infrared)	ug/g (ppm)	EPA 418.1*	8	43900

MDL: Method Detection Limit

McKeague: Manual on Soil Sampling and Methods of Analyses. Can. Soc. Soil Sci. Ottawa.

EPA: U.S. Environmental Protection Agency. 1997. Test Methods of Evaluation of Solid Waste 3rd Ed through Update III.

Office Solid Waste Emergency Response, U.S. Environmental Protection Agency, Washington, D.C.

modified method

Report reviewed by:

James A. LeBlanc, B.Sc.
QA/QC Manager
Laboratory Services

Brenda Chomin
Manager
Laboratory Services

AMEC Earth & Environmental
Analytical Chemistry Laboratory

Date Required: Dec 13/01

ICP METALS-LEACHATE
PRELIMINARY RESULTS

Attn: AMEC Earth & Enviro.
Attn: Bynski, David
Date Dec

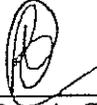
9

File# 40474b
Project# WX05055
Date Sampled: Dec 1/00

Sample	Date of Analysis	Parameters	Units	APHA Reference Method	MDL	19935 1-2 @ 2'
ME	12/11/2000	Lead	mg/L (pom)	EPA1311/APHA3120	0.001	0.173

Report reviewed by:

James A. LeBlanc, B.Sc.
QA/QC Manager
Laboratory Services


Brenda Chomin
Manager
Laboratory Services

APPENDIX D
LIMITATIONS

STATEMENT OF LIMITATIONS

1. The work performed in this report was carried out in accordance with the standard terms of conditions made part of this contract. The conclusions presented herein are based solely upon the scope of services and time and budgetary limitations described in our contract.
2. The report has been prepared in accordance with generally accepted environmental study and/or engineering practices. No other warranties, either expressed or implied, are made as to the professional services provided under the terms of our contract and included in this report.
3. The services performed and outlined in this report were based, in part, upon visual observations of the site and attendant structures. Our opinion cannot be extended to portions of the site which were unavailable for direct observation, reasonably beyond the control of FT-Ecologistics Limited/AMEC Earth & Environmental Limited.
4. The objective of this report was to assess the environmental conditions at the site, within the context of our contract and existing environmental regulations within the applicable jurisdiction. Evaluating compliance of past or future owners with applicable local, provincial and federal government laws and regulations was not included in our contract for services.
5. Our observations relating to the condition of environmental media at the site are described in this report. It should be noted that other compounds or materials other than those described could be present in the site environment.
6. The conclusions of this report are based in part, on the information provided by others. The possibility remains that unexpected environmental conditions may be encountered at the site in locations not specifically investigated. Should such an event occur, FT-Ecologistics Limited must be notified in order that we may determine if modifications to our conclusions and recommendations presented herein, are necessary.

STATEMENT OF LIMITATIONS

1. The work performed in this report was carried out in accordance with the standard terms of conditions made part of this contract. The conclusions presented herein are based solely upon the scope of services and time and budgetary limitations described in our contract.
2. The report has been prepared in accordance with generally accepted environmental study and/or engineering practices. No other warranties, either expressed or implied, are made as to the professional services provided under the terms of our contract and included in this report.
3. The services performed and outlined in this report were based, in part, upon visual observations of the site and attendant structures. Our opinion cannot be extended to portions of the site which were unavailable for direct observation, reasonably beyond the control of FT-Ecologistics Limited/AMEC Earth & Environmental Limited.
4. The objective of this report was to assess the environmental conditions at the site, within the context of our contract and existing environmental regulations within the applicable jurisdiction. Evaluating compliance of past or future owners with applicable local, provincial and federal government laws and regulations was not included in our contract for services.
5. Our observations relating to the condition of environmental media at the site are described in this report. It should be noted that other compounds or materials other than those described could be present in the site environment.
6. The conclusions of this report are based in part, on the information provided by others. The possibility remains that unexpected environmental conditions may be encountered at the site in locations not specifically investigated. Should such an event occur, FT-Ecologistics Limited must be notified in order that we may determine if modifications to our conclusions and recommendations presented herein, are necessary.

Appendix B



FAX COPY

Fax

To Dorothy Steele
Company City of Winnipeg
Fax 339-2147
Charge no
File no WX05146
Fax operator DB

From David Bynski, P. Eng.
Pages 2 (inc. this page)
Date 26 April 2001
cc Ed Dohlun, City of Winnipeg
944-8476
Jammi Kumar, FT Ecologistics
885-1504

Subject Results of Surface Water Sample
@ Paris Street
Winnipeg, Manitoba

Dorothy

Here are the results of the analysis performed on a surface water sample retrieved from the Paris Street Site. The results indicate that there are no hydrocarbon impacts in the water. Please advise on the destination of the surface water upon removal (by pumping). A storm sewer is located below the collection ditch located along the north side of Mission Road, which is located approximately 30 m south of the Site.

Respectfully,

AMEC Earth & Environmental

David Bynski, P. Eng.
Environmental Engineer

Email: dave.bynski@amec.com

DB/db

Attachment

RECEIVED
THURS APRIL 26, 01
#1 Dohlun

P:\Jobs\5000'S\505X's\5054\5054-06 revised cost estimate 9 april.doc

AMEC Earth & Environmental Limited
440 Dovercourt Dr.
Winnipeg, Manitoba
Canada R3Y 1N4
Tel +1 (204) 488-2997
Fax +1 (204) 489-8261
www.amec.com

This fax message is confidential. If you are not the intended recipient please notify us by telephone as soon as possible and either return the message by post or destroy it. If you are not the intended recipient, any use by you of its contents is prohibited.

**AMEC Earth & Environmental
Analytical Chemistry Laboratory**

Date Required: April 27/01

WATERS

PRELIMINARY RESULTS

21

File# 41028

Attn: AMEC Earth & Enviro.
Attn: Byrski, David

Project# WIX05146

Date: April 20/01

Date Sampled: April 18/01

ST/Ref#	2001/4/23	TSH (C ₁₀ -C ₂₇)	EPA 821.1B-021B	0.002	0.25
ST	2001/4/23	TPH	TVH-TPH	0.030	0.25
ST	2001/4/20	Benzene	EPA 8021.1B-021B	0.002	<0.002
ST	2001/4/20	Toluene	EPA 8021.1B-021B	0.002	<0.002
ST	2001/4/20	Ethylbenzene	EPA 8021.1B-021B	0.002	<0.002
ST	2001/4/20	Xylenes	EPA 8021.1B-021B	0.003	<0.003
ST	2001/4/20	TVH (C ₉ -C ₁₀)	EPA 802.1B-021B	0.050	<0.050
ST/Ref#	2001/4/23	TSH (C ₁₀ -C ₂₇)	EPA 821.1B-021B	0.030	0.25
ST	2001/4/23	TPH	TVH-TPH	0.030	0.25

EPA Method 821.1B
 TPH - Total Petroleum Hydrocarbons (Rangeable)
 TSH - Total Semi-volatile Hydrocarbons (Rangeable)
 TVH - Total Volatile Hydrocarbons (Sum of TVH-9+TSH)
 EPA - U.S. Environmental Protection Agency, 8371, Test Methods of Environmental Protection Agency, Washington, D.C.
 OSHA - 5017 Method Emergency Response, U.S. Environmental Protection Agency, Washington, D.C.

Report reviewed by:

George A. LeBlanc, B.Sc.
 QA/QC Manager
 Laboratory Services

Brenda Chouin
 Manager
 Laboratory Services