

PART E
SPECIFICATIONS

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS 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 in Adobe Acrobat (.pdf) format on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt>.
- E1.1.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.3 Further to GC:2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.

E2. PREAMBLE

- E2.1 The intent of this contract is to demolish the building at 501 Panet Road. The structure, including the contents, foundation, grade beams and concrete pads are to be taken down, removed from the site and the debris recycled in a practical, cost effective manner. The debris that cannot be recycled is to be taken to the Brady Road Land Fill Site for disposal.
- E2.2 The Contractor is advised that localized methane gas concentrations (<2.75%) have been detected along cracks and other floor penetrations within the building. These methane concentrations appear to be non-landfill related. Accordingly, the Contractor shall follow the safety procedures outlined in E12 – Construction Safety in and Around Landfills” for the demolition work of this contract.

E3. UTILITIES

- E3.1 The Contractor shall arrange and pay for the appropriate utility to disconnect and seal off from the Site, all service lines, pipes or conduits other than gas and hydro, that service the building(s) to be demolished. Further to Clause D2.2, the City has arranged to have the gas and hydro connections disconnected and meters removed.
- E3.2 The Contractor shall disconnect and seal off all sewer and water service connections. If the Contractor is unable, or not licensed to complete this work, the Contractor shall subcontract the work to a subcontractor licensed by the City to do such work on behalf of the Contractor.
- E3.3 The Contractor shall provide each utility and the City's Water and Waste Department with adequate prior notification as to when they will require these disconnection and sealing off services.

E4. PERMITS, NOTICES, LICENCES, CERTIFICATES, LAWS AND RULES

- E4.1 Further to 2.2 of the Terms and Conditions, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fees, except for the gas and hydro disconnects, in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.
- E4.2 Further to D13.1, the City has arranged to have the gas and hydro connections disconnected and meters removed. The City has applied for the Demolition Permit and it should be in place

by the time the successful bidder receives a purchase order for the Work. The Contractor shall pick up and pay for the Demolition Permit, only after the Contractor has removed and capped the sewer and water service lines as described in Clause E3.2 and has the appropriate approval from the City of Winnipeg, Water and Waste Department for having done same. The Contractor may be charged an additional deposit if the sewer and water service lines are not removed prior to picking up the Demolition Permit.

- E4.3 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.
- E4.4 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.

E5. PROTECTIVE BARRICADES

- E5.1 The Contractor shall provide and erect all protective barricades as required for demolition of buildings 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.
- E5.2 The Contractor shall also provide additional temporary barricades or rope off temporary demolition zones in the street right of way as may be necessary for any dangerous demolition operation in order to keep the public away from the Site. Such temporary barricades shall be removed as soon as possible in order to prevent unnecessary interruption of traffic.
- E5.3 The Contractor shall be responsible for maintaining all protective barricades, including gates, walks, lights, etc. in a good operating condition for the entire period of the demolition to the satisfaction of the Contract Administrator.

E6. DEMOLITION

- E6.1 Further to GC6.27, during the period between the award of Contract and the actual demolition, the Contractor shall maintain the building(s) in a boarded up state.
- E6.2 The Contractor shall demolish the existing buildings, structures, fences, sidewalks, etc. on the Site. The Contractor shall completely demolish all buildings and structures/foundations that are above and below ground and remove all debris and rubbish from the Site. The Contractor shall not store or permit debris or rubbish to accumulate on the Site for more than one Working Day. The Contractor shall completely clear the Site except for any existing trees, which the Contractor shall protect from damage.
- E6.3 The Contractor shall keep the exposed basement areas of the Site free of water until it has been backfilled to the satisfaction of the Contract Administrator. All equipment, pumps and appurtenances as may be required to keep these areas free of water shall be provided and maintained by the Contractor.
- E6.4 The Contractor shall fill the area below the existing ground exposed by the demolition with clean earth to a depth of 300 mm above the surface of the existing ground at the Site of the building. The clean earth fill shall be free of debris and rubbish of any kind and be approved by the Contract Administrator. The Contractor shall not place backfill material until the Contract Administrator has inspected the excavation. Should any backfill be placed before the permission of the Contract Administrator has been obtained, the excavation shall be re-opened by the Contractor, at his expense.
- E6.5 The Contractor shall control dust from the demolition operations by suitable means to prevent harm to the work crews and the public to the satisfaction of the Contract Administrator.

- E6.6 The Contractor shall utilize rubbish chutes to carry down all rubbish from the building under demolition.
- E6.7 The Contractor shall ensure that the demolition operation be conducted with the minimum interference with streets, sidewalks, etc. No salvage material shall be placed or stored on streets, sidewalks, etc. within or surrounding the Site.
- E6.8 The Contractor shall protect all existing trees located on the Site or within the street right-of-way from damage during the demolition operation. The Contractor shall not remove existing trees without the written consent of the Contract Administrator.
- E6.9 The Contractor shall not burn debris or other material on the Site.
- E6.10 Unless directed otherwise by the Contract Administrator, the Contractor shall haul and deposit all material, except as described in Clause E7.1 and E8, from the Site to the City's Brady Road Landfill site.
- E6.11 The City will be responsible for the tipping fees for all demolition material not salvaged or recycled by the Contractor.
- E6.12 The Contractor shall submit, within twenty-four hours of a request by the Contract Administrator, how many tonnes of organic/building material and how many tonnes of concrete/rubble each Site is expected to generate. The Contractor shall haul the two materials separately; no mixed loads will be accepted at the Brady Road Landfill site or the concrete crushing plant described in E8.1(c).

E7. SALVAGED MATERIALS

- E7.1 All salvaged building materials resulting from the demolition including fixtures, except items noted hereinafter, shall become the property of the Contractor and shall be removed from the Site. All goods and chattels at the Site shall become the property of the City of Winnipeg, and shall be removed by the City prior to the demolition and sold to offset the cost of the demolition, unless in the judgment of the Contract Administrator these goods have no reclaimable value, in which case, these items shall be disposed of by the Contractor as refuse.
- E7.2 Service meters shall remain the property of the utility owning service.
- E7.3 The Contractor shall disconnect water meters and return them to the City of Winnipeg, Water and Waste Department, Emergency Services, Stores - 552 Plinguet Street, east end of building, within seven (7) days of disconnection.
- E7.4 The Contractor shall supply the Contract Administrator with the water meter receipt received from Water and Waste Department. The receipt shall accompany the Contractor's invoice.

E8. RECYCLING OF CONCRETE

- E8.1 The Contractor shall recycle all rebar, concrete and concrete products by:
- (a) removing the rebar and crushing the concrete and concrete products to 100 mm down, utilizing the Contractor's own forces or others, then recycling the material as the Contractor sees fit; or
 - (b) stockpiling rebar, concrete and concrete products on the Contractor's own property for future recycling as the Contractor sees fit; or
 - (c) loading and hauling the rebar, concrete and concrete products directly to the Maple Leaf Construction asphalt plant located at 2245 Brookside Boulevard, Winnipeg. The City will pay for crushing costs and the Contractor shall pay for all costs related to loading and

hauling of the material to the crushing plant. The recycled materials will become the property of Maple Leaf Construction.

E8.2 The Contractor shall not stockpile rebar, concrete or concrete products at the Site.

E9. HAZARDOUS MATERIALS

E9.1 If asbestos or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instructions by the Contract Administrator.

E9.2 The Contractor is advised that a Phase II Environmental Site Assessment has been conducted. All potential asbestos containing material (ACM) identified in the report have been removed. The forty-six (46) lighting fixtures identified as potentially containing PCB's have also been removed.

E10. VERIFICATION OF WEIGHTS

E10.1 All material which is paid for on a weight basis shall be weighed on a scale certified by Consumer & Corporate Affairs, Canada.

E10.2 All weight tickets shall have the gross weight and the time and date of weighing printed by an approved electro/mechanical printer coupled to the scale.

E10.3 The tare weight and net weight may either be hand written or machine printed. All weights, scales and procedures shall be subject to inspection and verification by the Contract Administrator. Such inspection and verification may include, but shall not be limited to:

- (a) checking Contractor's scales for Consumer & Corporate Affairs certification seals;
- (b) observing weighing procedures;
- (c) random checking of either gross or tare weights by having such trucks or truck/trailer(s) combinations as the Contract Administrator shall select weighed at the nearest available certified scale;
- (d) checking tare weights shown on delivery tickets against a current tare.

E10.4 The Contractor shall ensure that each truck or truck/trailer(s) combination delivering material which is paid for on a weight basis carries a tare not more than one (1) month old.

E10.5 The tare shall be obtained by weighing the truck or truck/trailer(s) combination on a certified scale and shall show:

- (a) upon which scale the truck or truck/trailer(s) combination was weighed;
- (b) the mechanically printed tare weight;
- (c) the license number(s) of the truck and trailer(s);
- (d) the time and date of weighing.

E11. TRUCK WEIGHT LIMITS

E11.1 The City shall not pay for any portion of material which results in the vehicle exceeding the maximum gross vehicle weight allowed under *The City of Winnipeg Traffic By-Law*, unless such vehicle is operating under special permit.

E12. CONSTRUCTION SAFETY IN AND AROUND LANDFILLS

Note: The accuracy of this information or its completeness is not warranted by the City and must be Verified in each particular by the Contractor.

- E12.1 Further to Manitoba Regulation 204/77, "W210 The Workplace Safety and Health Act", this provision shall cover safety requirements and procedures for construction on and around landfills, dumps and disposal areas. The Contractor shall acquaint himself with all landfills, dumps and disposal areas within and/or adjacent to his construction site. (The Contractor may refer to the Water and Waste Department, Solid Waste Services Division, for information on site locations).
- E12.2 The Contractor is advised that landfill gas (methane and other gases) can emanate from the natural decomposition of refuse or other highly organic material and that such gases may migrate through soils a distance of approximately 90 m. The migration distance may be greater through underground conduits or where surface conditions interfere with normal venting.
- E12.3 Accordingly, the Contractor is advised of the existence of or the potential for the development of hazardous conditions where construction or maintenance activities are undertaken on or within 90 metres of a landfill, dump or disposal area.
- E12.4 The hazard may be one or more of the following:
- (a) Fire may start spontaneously from exposed and/or decomposing refuse or other highly organic material.
 - (b) Fires and explosions may occur from the presence of methane gas.
 - (c) Landfill gases may cause an oxygen deficiency in underground trenches, vaults, conduits and structures.
 - (d) Hydrogen sulphide, a highly toxic and flammable gas, may be present.
 - (e) Possible caving of trenches and excavations when Working over or in refuse or highly organic fills.
- E12.5 Prior to commencing any Work, the Contractor shall notify the Engineer of any portion of the construction site which falls on or within 90 metres of landfills, dumps or disposal areas and adequate tests shall be made at the site to determine the concentration of methane or other gases present.
- E12.6 Unless the presence of methane in the area can definitely be ruled out, safety requirements for construction or maintenance Work on or within 90 metres of a landfill, dump or disposal area shall include, but not be limited to the following:
- The Contractor shall designate the responsibility of safety to a supervisory person on the site. The person responsible for safety shall be trained in the use of gas detection equipment and shall be responsible for maintaining the detection equipment in accordance with the manufacturer's instructions. He shall be present at all times during excavation with equipment to test for oxygen deficiency and the presence of methane and hydrogen sulphide. He shall test the excavation areas for safe Working conditions and shall ensure that the following safety measures are undertaken. These safety measures shall be explained in detail to all construction supervisors on the site prior to construction and their importance emphasized.

E13. CONSTRUCTION ON LANDFILLS, DUMPS OR DISPOSAL AREAS

- E13.1 A combustible gas indicator shall be utilized at all times during trenching, excavating, drilling, or when Working within three (3) metres of an open excavation, and if a building shell or structure is penetrated, then the area penetrated shall be monitored.
- E13.2 When trenching, excavating or drilling deeper than 0.6 metres into the soil, or in the presence of detectable concentrations of methane, the operating equipment shall be provided with vertical exhaust pipes or spark-proof exhausts.
- E13.3 A minimum of two (2) fire extinguishers of the 50-pound dry chemical type (or equivalent total capacity utilizing more extinguishers) shall be within easy access at all times during trenching, excavating or drilling.
- E13.4 A minimum of two Workers shall be on the site at all times during construction activities with one Worker outside of possible gas effects. Each Worker in the vicinity of an open excavation shall have available an approved acid gas-organic vapour respirator and safety goggles for protection from nausea inducing gases which may be emitted during excavation.
- E13.5 The operator of trenching equipment shall wear an acid gas - organic vapour respirator while operating the equipment in or astride any trench or excavation.
- E13.6 At least two approved type self-contained breathing apparatus in good Working order shall be provided at the site for emergency purposes. Workers shall not be permitted to enter excavations where there is oxygen deficiency, hydrogen sulphide or a combustible mixture of methane without taking precautionary measures. Oxygen deficiency is defined as being less than 19.5 percent.
- E13.7 Personnel when in an open excavation or in the presence of landfill gas shall be fully clothed with non-sparking cloth material, wear shoes with non-metallic soles and wear a hard hat and safety goggles or glasses. The excavation shall be monitored continuously in a manner satisfactory to the Engineer for the presence of methane, hydrogen sulphide and oxygen for any duration that personnel are in an excavation. Workers shall immediately vacate an excavation if methane, hydrogen sulphide or oxygen deficiency is detected therein, and shall not be permitted to re-enter the excavation unless satisfactory precautionary measures are implemented.
- E13.8 Positive fan-forced ventilation shall be used in cases where trenches or excavations show a build-up of methane, hydrogen sulphide or a lack of oxygen.
- E13.9 Lifelines shall be provided and worn as necessary, and barriers erected to protect Workers from falling into open pits and holes from trenching, drilling operations or other excavations.
- E13.10 Workers shall Work upwind of any excavation, unless the trench is constantly monitored and declared safe.
- E13.11 Workers shall avoid contact with exposed refuse where possible. Irritants or hazardous materials may be present. When handling refuse material, all personnel shall wear gloves.
- E13.12 Motors utilized in refuse excavation areas shall be explosion-proof.
- E13.13 Smoking shall be prohibited in or near open excavations and in the vicinity of pipe-laying activities. "NO SMOKING"& "NO OPEN FLAME" signs shall be on display in these areas.
- E13.14 Welding or open flames shall be permitted only in areas of the site approved by the Engineer.
- E13.15 Start up and shut down of equipment shall not be done in areas of exposed refuse or highly organic material.

- E13.16 No trench, pit or drill hole shall be left open overnight. Large excavations shall be fenced off.
- E13.17 Any refuse exposed during construction activities shall be covered as soon as practical after exposure with at least a 6" (in) layer of earth. Refuse shall not be allowed to remain exposed overnight.
- E13.18 All refuse excavated during construction activities shall be disposed of at a legal point of disposal. Provided the Engineer approves, refuse may be temporarily stockpiled if covered with a 6" (in) layer of soil.
- E13.19 Entrance into utility access manholes shall be done with extreme caution. Sparks can occur from metal manhole covers and rings. The air in a manhole or enclosed space shall always be tested with a detector before entering. Positive ventilation shall be followed if necessary. Before entry into any underground services the Contractor shall also adhere to City guidelines re: "Safe Work Practices for Confined Entry Work".
- E13.20 The Contractor is cautioned on the possibility of caving during excavation in refuse areas.
- E13.21 In piping installations, all valves shall be closed as soon as installed to prevent the migration of gases through the pipeline.
- E13.22 Specific site conditions may also determine other measures to be taken to protect the health and safety of the Workers and the public.

E14. CONSTRUCTION NEAR (WITHIN 90 M.) OF LANDFILLS, DUMPS OR DISPOSAL AREAS

- E14.1 Any excavations shall be monitored for methane and oxygen deficiency if personnel are to be sent in. This must be carried out continuously unless the presence of methane in the area can definitely be ruled out.
- E14.2 Should methane gas be found in the area, those precautions applicable to construction on landfills, dumps or disposal areas shall also apply to this situation.



501 Panet Rd - Front



501 Panet Rd



501 Panet Rd - Rear