

PART 1 - GENERAL

1.1 SCOPE

- .1 This specification section specifies requirements for:
 - .1 Remediation to address leachable lead impacted soil at Cape Pine site. Work involves removal, transportation and off site treatment of impacted soil to a Provincially approved facility. Note that land filling of the excavated leachable lead impacted soil will not be permitted.
 - .2 Supply, transportation and placement of clean backfill material as specified.
- .2 The Contractor is to note that the Departmental Representative will stake out the exact area to be remediated, prior to the Contractor initiating excavation activities. In this regard, the location of the work, as shown on drawing 1 of 3, Appendix A is to be considered approximate.

1.2 GENERAL REMEDICATION PROCESS

- .1 Remove soil and sod in the impacted zone, as noted on drawing 1 of 3, Appendix A to a depth of 150 mm below ground level (bgl). Leachable lead impacted soil is to be transported off-site to a Provincially approved treatment facility.
NOTE: large rocks > 200 mm, if encountered are to be left undisturbed on site.
- .2 Backfill excavated area using Class "A" as specified in Section 31 14 11. Prior to backfilling lay geotextile material as specified in Section 31 32 19.01 - Geotextiles.
- .3 If the Contractor chooses to stockpile excavated soil on site, install a

temporary liner system, at a location approved by the Departmental Representative.

1.3 MEASUREMENT
FOR PAYMENT

- .1 Leachable Lead impacted soil: As specified, the removal, treatment and disposal of Leachable Lead impacted soil, including all plant, labour, materials and equipment will be measured in tonnes. Include incidental to this all costs for excavation, transportation, soil treatment and disposal, geotextile and supply, placement and compaction of Class "A" backfill material.
- .2 All items not included in the unit price table are to be included incidental, or in the lump sum portion of the work on the Bid and Acceptance Form.

1.4 TRUCKS

- .1 All trucks used in the transportation of impacted material to have tail gates with seals in good working order. Contractor must ensure that truck box is water tight and no leakage occurs prior to or during transportation of material. Any vehicles failing to meet these requirements will be rejected. In the event of a spill during transportation, the Contractor shall be responsible for the immediate clean-up and must notify the Departmental Representative and appropriate authorities immediately.

1.5 TEMPORARY LINER

- .1 Minimum requirements related to the installation of a double plastic liner to temporarily store impacted soil, if the Contractor chooses to stockpile the material on site will consist of a prepared base, double 6 mil HDPE plastic

liner and tarp cover. The Contractor will be responsible for the final disposal of the liner system at project completion and the restoration of the storage site.

1.6 TREATMENT FACILITY

- .1 After award/acceptance of Bid, the successful Contractor will provide the following:
 - .1 A copy of the treatment facilities certificate of approval from the Government of Newfoundland and Labrador to receive, store and treat lead contaminated soils in Newfoundland and Labrador for the volumes as required by the contract. If the facility has been in operation for more than one year, a copy of a letter of compliance issued by the Government of Newfoundland and Labrador for the treatment facility will also be required.
- .2 Upon notification of award of the contract, the Contractor shall provide the following within 14 calendar days of receiving notification.
 - .1 Copy of the treatment facilities environmental liability impairment insurance in the amount of at least \$1,000,000.
 - .2 Copies of Certificate of Approval for transporting waste.
- .3 All leachable lead impacted soils removed from the site are to be transported to an approved facility. Land filling of the soil will not be permitted.

1.7 WEIGH SCALES

- .1 Weigh scales shall conform/meet the following requirements.
 - .1 Shall be sufficient capacity to weigh vehicles in a single operation.
 - .2 Contractor shall use facilities weigh scales for contaminated soil or use

temporary scales, or make arrangements to use the Provincial Highways weigh scales, in all cases weigh scales must conform to all requirements of this section.

- .2 Contractor to submit a recent copy of the weigh scales certification(s) to DR at least seven (7) days prior to their use.
- .3 Regulatory Requirements: Prior to use, have weigh scales certified (if existing certificate is older than three months) as meeting requirements of Statutes of Canada, Chapter 36, Weights and Measures Act 1970-71-72 and subsequent amendments. Display certificate in prominent position.
- .4 Contractor shall ensure weigh tickets are in triplicate and provide a copy to the DR at the end of each day.
- .5 Soils, materials and vehicles shall be weighed upon entering and exiting the treatment facility and pits.

PART 2 - PRODUCTS

Not used

PART 3 EXECTION

3.1 SITE PREPARATION/WORK

- .1 Contractor shall exercise caution while working in close proximity to the private dwellings, any damage to the property shall be repaired/replaced at contractor's expense.
- .2 The DR shall identify the boundary area for excavation.

3.2 STOCKPILING

- .1 Stockpile backfill materials so they do not interfere with ongoing site operations

and adjacent tenant property.

- .2 Contaminated soils stockpiled at any temporary storage area shall be placed on tarps/geomembranes to prevent contamination of underlying soils.
- .3 Contractor shall take care not to tear or perforate geomembrane during placement and removal of contaminated soils.

3.3 EXCAVATION

- .1 Advise DR in writing at least 3 days in advance of excavation operations to permit work site identification.
 - .2 Where temporary unbalanced earth pressures are liable to develop, erect bracing or shoring to counteract unbalance. These measures shall be left in place until DR approves their removal.
 - .3 Excavate to lines, grades, elevations and dimensions as specified or directed by DR.
- NOTE: Contractor shall not exceed unit price table quantities for all items without prior written authorization from the DR. Contractor shall notify DR when the 90% unit of measure for any item has been reached.
- .4 Protect open excavations from flooding and damage due to surface run-off.
 - .5 All trucks used for the transportation of contaminated soils are to have their tailgates and seals in good working order.
 - .6 Contractor must ensure that truck boxes are water tight and no leakage occurs during transportation of material. Any trucks failing to meet these requirements will be rejected.

- .7 In the event of a spill during transportation the contractor shall be responsible for the immediate cleanup and notification to the appropriate authorities and DR.
- .8 Contractor is responsible to clean their own equipment.
- .9 Obtain DR approval prior to backfilling any excavation.

3.4 DISPOSAL OF MATERIAL

- .1 All material for disposal will be removed from site. It is the sole responsibility of the contractor to dispose of all material at approved facilities.
- .2 All materials being transported for treatment must be contained using liquid tight, covered haulage vehicles.

3.5 BACKFILLING SITES

- .1 Do not commence backfilling until directed by the DR.
- .2 All sites shall be backfilled with clean Class "A" material imported from off site and shall be uniformly graded so that no depressions exist.
- .3 Contractor shall reinstate all materials that were removed to perform the work.