

BEFORE THE COUNCIL OF THE  
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF AUTHORIZING THE )  
EXECUTIVE OFFICER TO ENTER INTO A )  
CONTRACT WITH L & H GRADING, INC. FOR )  
WORK ASSOCIATED WITH THE CLOSURE )  
OF SUB-AREA 1 OF THE ST. JOHNS LANDFILL )

RESOLUTION NO. 92-1588

Introduced by Rena Cusma,  
Executive Officer

WHEREAS, It is in the public interest that the St. Johns Landfill closure process move forward in an expeditious manner; and

WHEREAS, Work associated with and including the construction of an improved multi-layered cover system, gas collection system and storm water collection system on Subarea 1 will advance the closure process; and

WHEREAS, On January 9, 1992 the Metro Council authorized issuance of a Request for Bids for the above listed work; and

WHEREAS, L & H Grading, Inc. has been determined to be the apparent lowest responsive, responsible bidder after an open competitive bid process; and

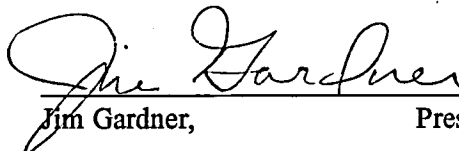
WHEREAS, the award is conditioned upon the receipt of a Performance Bond and all other bid document submittal requirements; and

WHEREAS, This resolution, authorizing the Executive Officer to enter into a contract with L & H Grading, Inc. was submitted to the Executive Officer for consideration and was forwarded to the Council for approval; now therefore,

BE IT RESOLVED, That the Council of the Metropolitan Service District authorizes the Executive Officer to enter into a contract to L & H Grading, Inc. in the amount of \$4,389,300 for work associated with the Closure of Subarea 1 of the St. Johns Landfill.

ADOPTED by the Council of the Metropolitan Service District this 26th day of

March, 1992.

  
\_\_\_\_\_  
Jim Gardner, Presiding Officer

**SECTION 00500  
CONSTRUCTION AGREEMENT**

This Construction Agreement is made by and between L & H Grading, Inc. hereinafter called Contractor and the Metropolitan Service District, a political subdivision of the State of Oregon, hereinafter called Metro.

Contractor and Metro agree as follows:

1. Contract Documents

The Contract Documents consist of this Construction Agreement, the Advertisement for Bids, the Invitation to Bid, the Instructions to Bidders, the Bid Forms (including Schedule of Bid Prices, Surety, Disadvantaged Business Program Compliance, Prevailing Wage Rate Compliance, Resident/Non-resident Bidder Status, Signature Page, Non-Collusion Affidavit, Bid Bond, DBE and WBE Utilization), the Performance and the Labor and Materials Payment Bonds, the General Conditions, the Supplementary Conditions, the Technical Specifications, the Drawings, the approved and updated Construction Schedule, and other information and data as listed in the Supplementary Conditions, and any modifications of any of the foregoing in the form of Addenda or Change Orders in accordance with the terms of the Contract. Where applicable, reference to this Construction Agreement herein shall be deemed to refer to all of the Contract Documents.

These documents form the Contract and are, by this reference, expressly incorporated herein. All are as fully a part of the Contract as if attached to this Construction Agreement and repeated fully herein. No amendment made to this Contract nor Change Order issued shall be construed to release either party from any obligation contained in the Contract Documents except as specifically provided in any such amendment or Change Order.

2. Scope of Work

Contractor agrees to provide all labor, tools, equipment, machinery, supervision, transportation, permits, and every other item and service necessary to perform the Work described in the Contract Documents. Contractor agrees to fully comply with each and every term, condition and provision of the Contract Documents.

3. Contract Amount

As consideration for Contractor's performance hereunder, Metro agrees to pay contractor the Contract Amount as adjusted by approved Change Orders issued pursuant to the Contract Documents and subject to the availability of monies in the Construction Fund. Contractor agrees to accept the Contract Amount as full payment for contractor's performance of the above-described Work.

The Contract Amount is FOUR MILLION THREE HUNDRED EIGHTY-NINE THOUSAND THREE HUNDRED AND NO/100TH DOLLARS (\$4,389,300.00).

Metro shall make payments to Contractor in the manner and at the times provided in the Contract Documents.

4. Additional or Deleted Work

Contractor shall, when so instructed by Metro under the procedures of the contract Documents, perform additional Work or delete Work in accordance with the Contract Documents. Any increase or decrease in the Contract Amount shall be determined pursuant to the applicable provisions of the Contract Documents.

5. Time of Completion; Adjusted Payments

Time is of the essence of this Construction Agreement. The Contract Time shall commence upon issuance of the Notice to Proceed. Contractor shall commence work under this Contract within ten (10) calendar days after issuance of written Notice to Proceed. Contractor shall bring the work to substantial completion no later than October 31, 1992 or 180 calendar days after issuance of Notice to Proceed, whichever is the longer Contract Time. By executing this Construction Agreement, Contractor confirms and accepts that the Contract Time so stated is a reasonable period for performance of all of the Work.

If Contractor fails to substantially complete the Work, within the Contract Time, as determined by Metro in accordance with the Contract Documents, Contractor shall be liable for adjusted payments to Metro as described in the Contract Documents.

6. Bonds

Contractor submits herewith a Performance Bond and a separate Labor and Materials Payment Bond, both in a form acceptable to Metro and otherwise in accordance with the Contract Documents and each in the Contract Amount to ensure full compliance, execution and performance of this Contract by Contractor and payment by Contractor of labor and material Suppliers as more fully described in the Contract Documents. The Performance Bond shall stay in force for a period of one (1) year after written acceptance of the Work by Metro as a guarantee of repair or replacement of any item(s) of Work found to be defective by reason of faulty workmanship or defective materials. The Labor and Materials Payment Bond shall remain in force for the time required for actions against the bond to be filed in accordance with ORS 279.536.

7. Remedies for Default

If Contractor fails to perform as specified in the Contract Documents, Metro shall be entitled to all the rights and remedies which this Contract provides, as well as all remedies provided by law. This Contract shall not be construed as limiting or reducing the remedies provided by law which Metro would have in the absence of any provision of the Contract.

8. Laws of Oregon Apply

The law of Oregon shall govern the interpretation and construction of this Construction Agreement and all of the Contract Documents.

9. Entire Agreement

The Contract Documents constitute the final written expression of all of the terms of this Construction Agreement and are a complete and exclusive statement of those terms. Any and all representations, promises, warranties, or statements by either party that differ in any way from the terms of this written agreement shall be given no force and effect. This Contract shall be changed, amended, or modified only by written instrument signed by both Metro and Contractor. This Contract shall not be modified or altered by any course of performance by either party.

**L & H GRADING, INC.**

**METROPOLITAN SERVICE DISTRICT**

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_



# METRO

2000 SW First Avenue  
Portland, OR 97201-5398  
(503) 221-1646  
Fax 241-7417

February 21, 1992

Executive Officer  
Rena Cusma

Metro Council

Tanya Collier  
Presiding Officer  
District 9

Jim Gardner  
Deputy Presiding  
Officer  
District 3

Susan McLain  
District 1

Lawrence Bauer  
District 2

Richard Devlin  
District 4

Tom DeJardin  
District 5

George Van Bergen  
District 6

Ruth McFarland  
District 7

Judy Wyers  
District 8

Roger Buchanan  
District 10

David Knowles  
District 11

Sandi Hansen  
District 12

**Re: Request for Bids, #91B-49-SW,  
St. Johns Landfill Closure of Subarea 1**

Enclosed is a copy of Addendum No. 2 to the Contract Documents for RFB #91B-49-SW. Please remember to acknowledge receipt of this Addendum on the bid forms.

Please note that the Bid opening has been rescheduled for 3:00 p.m., Friday February 28, 1992 in the Metro Council Chambers.

Sincerely,

Linda M. Pang-Wright, P.E.  
Project Engineer

LW:ay

#### Enclosures

cc: James Watkins, Engineering and Analysis Manager  
Dennis O'Neil, Senior Planner  
Craig Lewis, Senior Management Analyst  
Todd Sadlo, Senior Assistant Counsel  
Rich Wiley, Procurement Officer

**ADDENDUM NO. 2 to the Contract Documents for  
St. Johns Landfill Closure of Subarea 1**

Note: The following changes, additions and deletions to the Contract Documents dated January, 1992, hereby become part of the Contract Documents. Bidders should notify all subcontractors affected by this Addendum. It is essential that all prospective bidders note the contents of the Addendum, and Metro be made aware that each Bidder has received this Addendum. Therefore, please acknowledge receipt of this Addendum by inserting its number in the space provided in the bid forms.

1. SECTION 00030, "Invitation To Bid", Page 00030-1:

CHANGE the first paragraph, third sentence to:  
"Ms. Linda Pang-Wright, Engineer no later than 3:00 p.m., Pacific Standard Time (PST), Friday, February 28, 1992."

2. SECTION 00800, "Supplementary Conditions", Page 00800-1, Subsection 5:

CHANGE in first paragraph, first sentence to:  
"Prevailing Wage -- It is Metro's understanding that ORS 279.350, OAR chapter 839, Division 16 and section 14.03.07 of this contract ..." (remainder of sentence unchanged).

CHANGE in second paragraph, first sentence:  
from "specified in the paragraph" to "specified in the preceding paragraph", (remainder of sentence unchanged).

3. SECTION 00800, "Supplementary Conditions", Page 00800-2, Subsection 6:

DELETE last sentence and REPLACE with:

"As of October, 1992, royalties due generally to the State of Oregon will be:

1. 60 cents per cubic yard for material taken from below River Mile 72 of the Willamette River and its tributaries;
2. 41 cents per cubic yard for material taken from above River Mile 72 of the Willamette River and its tributaries; and
3. 38 cents per cubic yard for material taken from other state-owned waterways.

4. ADDENDUM No. 1 to the Contract Documents:

CHANGE in the page footers, the RFB # to:  
"RFB #91B-49-SW"

Jim Watkins  
Jim Watkins, Engineering and Analysis Manager

2/21/92  
Date

# METRO

2000 SW First Avenue  
Portland, OR 97201-5398  
(503) 221-1646  
Fax 241-7417

February 18, 1992

**Re: Request for Bids, #91B-49-SW,  
St. Johns Landfill Closure of Subarea 1**

**Executive Officer**  
Rena Cusma

**Metro Council**

Tanya Collier  
*Presiding Officer*  
District 9

Jim Gardner  
*Deputy Presiding Officer*  
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Ruth McFarland  
District 7

Judy Wyers  
District 8

Roger Buchanan  
District 10

David Knowles  
District 11

Sandi Hansen  
District 12

Enclosed is a copy of Addendum No. 1 to the Contract Documents for RFB #91B-49-SW. Please remember to acknowledge receipt of this Addendum on the bid forms. In addition, enclosed is a list of questions derived from the prebid conference held January 27, 1992 and from written submittals received up to February 10, 1992 by Metro. Answers were provided by the Metro project team.

Also enclosed is a copy of the revised Bid Book. This Bid Book, printed on blue paper, shall replace the original Bid Book printed on lilac paper. The revised Bid Book shall be submitted as stated in the Contract Documents. Please note that the Bid opening has been rescheduled for 9:00 a.m. Thursday, February 27, 1992 in the Metro Council Chambers.

Sincerely,



Linda M. Pang-Wright, P.E.  
Project Engineer

LW:ay

**Enclosures**

cc: James Watkins, Engineering and Analysis Manager  
Dennis O'Neil, Senior Planner  
Todd Sadlo, Senior Assistant Counsel  
Rich Wiley, Procurement Officer

**ADDENDUM NO. 1 to the Contract Documents for  
St. Johns Landfill Closure of Subarea 1**

**Note:** The following changes, additions and deletions to the Contract Documents dated January, 1992, hereby become part of the Contract Documents. Bidders should notify all subcontractors affected by this Addendum. It is essential that all prospective bidders note the contents of the Addendum, and Metro be made aware that each Bidder has received this Addendum. Therefore, please acknowledge receipt of this Addendum by inserting its number in the space provided in the bid forms.

**1. BID BOOK:**

REPLACE entire bid book with attached revised copy printed on blue paper.

**2. SECTION 00030, "Invitation To Bid", Page 00030-1:**

CHANGE the first paragraph, third sentence to:

"Ms. Linda Pang-Wright, Engineer no later than 9:00 a.m., Pacific Standard Time (PST), Thursday, February 27, 1992."

CHANGE the second paragraph, last sentence to:

"At Metro's discretion, alternate work can include installation of gas extraction wells, PVC and HDPE gas piping, construction of a temporary gas flare system, and construction of a temporary gas condensate system."

**3. SECTION 00110, "Instructions to Bidders", Page 00110-1, Subsection 1, "Description of Work":**

CHANGE the last sentence to:

"At Metro's discretion, alternate work can include installation of gas extraction wells, PVC and HDPE gas piping, construction of a temporary gas flare system, and construction of a temporary gas condensate system."

**4. SECTION 00110, "Instructions to Bidders", Page 00110-5, Subsection 12, "Basis of Award":**

DELETE from first paragraph, in first sentence :

"or Base Bid + Alternate No. 2 Bid, or Base Bid + Alternative No. 1 Bid + Alternative No. 2 Bid"

**5. SECTION 00110, "Instructions to Bidders", Page 00110-6, Subsection 13, "Alternates":**

DELETE third sentence.

**6. SECTION 00200, "Information Available to Bidders", Page 00200-1, Report #5:**

DELETE "October 17, 1991" and REPLACE with "Revised January 8, 1992"

7. SECTION 00300, "Schedule of Bid Prices":

CHANGE Item No. 11. quantity from "7,000 S.Y." to "20,000 S.Y.".

ADD Items No.:

12A.	20,000 Tons	Procure and Deliver Imported Low Permeable Soil		
(Per Ton)			\$	\$

12B.	15,000 S.Y.	Compact Additional Low Permeable Soil in Type 'A' Cover Areas		
(Per Square Yard)			\$	\$

CHANGE Item No. 13. quantity from "105,000 S.Y." to "90,000 S.Y.".

DELETE on Page 00300-14, section pertaining to Alternate Bid No. 2.

8. SECTION 00700, "General Conditions", Page 00700-45, Subsection 11.02.03, "Environmental Impairment Liability Insurance":

ADD to end of subsection:

"Two acceptable alternatives for Environmental Impairment Liability (EIL) insurance will be allowed, providing coverage for the perils listed in paragraph one of this subsection 11.02.03:

The first alternative is a Pollution Legal Liability form, on a claims made basis, covering bodily injury, property damage and associated costs. Bodily injury is defined as bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death resulting therefrom caused by pollution conditions. Property damage is defined as physical injury or destruction of property, clean up costs, and loss of use of property not physically injured.

The second alternative is a pollution liability endorsement on a Lloyds of London general liability policy. Claims made basis is acceptable.

Whichever alternative is used, the policy shall be in force for the year of the contract with a tail of one year after completion of the contract."

9. SECTION 01010, "Summary of Work", Page 01010-1, Subsection 1.2, "Scope of Work":

CHANGE in paragraph B, the second line to read:

"final cover system and related appurtenances for Subarea 1, a portion of Subarea 2, and the"

10. SECTION 01025, "Measurement and Payment", Subsection 1.8 "Description of Base Bid Items":

ADD to Item 3, Page 01025-7, "Existing Topsoil Removal":

"5. Removal and disposal of On-site Debris shall be incidental to the work and included in this bid item."



CHANGE in Item 12, Page 010125-10, "Construction of Low Permeable Soil for Type 'A' Cover", last line in paragraph 1, from "Section 02220,3.61" to "Section 02220, 3.6".

ADD to the same section and subsection, Page 01025-10, the following Items:

**"12A. Procure and Deliver Imported Low Permeable Soil**

1. The unit price per ton, less a weight deduction for excess moisture and scale check differences shall constitute full compensation for all labor, materials, and equipment required to procure and deliver, dump and spread Imported Low Permeable Soil materials to locations and grades indicated in the Contract Documents.
2. The costs for grading and compacting the material are not included.
3. The costs for temporary protection of materials prior to placement is included in this bid item.
4. This material is intended to supplement existing low permeable soil stripped from the subarea 1 closure area. Written approval by the Engineer will be required before procurement.

**12B. Compact Additional Low Permeable Soil in Type 'A' Cover Areas**

1. The unit price per square yard shall constitute full compensation for all labor and equipment required for grading and compacting low permeable soil to the required thickness in Type 'A' areas determined to be deficient of in place low permeable soil.
2. All costs for rough grading to the required thickness, establishing surface drainage and erosion control features are considered incidental to this item.
3. The costs for temporary protection of materials after placement is included in this bid item.
4. The cost of Imported Low Permeable Soil delivered to the site has been included as a separate bid item."

ADD to Item 12, Page 01025-10, "Construction of Low Permeable Soil for Type 'A' Cover:"

- "3. If, after exerting reasonable care in removing existing topsoil, zones containing less than 6-inches of in-place low permeable soil exist, the Contractor shall place and compact additional low permeable soil in these zones. Zones containing less than 6-inches of existing in-place low permeable soil will be marked in the field by the Geotechnical Engineer. The Contractor may supplement required low permeable soil with Imported Low Permeable Soil as directed by Metro.

ADD to Item 13, Page 01025-11, "Construction of Low Permeable Soil for Type 'B' Cover":

- "3. If the Contractor is deemed by Metro to have used reasonable care and workmanship in excavating and stockpiling low permeable soil, and a shortage of low permeable soil results, the Contractor may supplement required low permeable soil with Imported Low Permeable Soil as directed by Metro.

CHANGE in Item 16, Page 01025-12, "Compact Subgrade Embankment", paragraph 4, "low permeable soil" to " bentonite mat".

11. SECTION 01025, "Measurement and Payment", Subsection 1.9, "Description of Alternate No. 1 Bid Items":

CHANGE in Item A37, Page 01025-23, "Laborers for Temporary System Construction", "unit price per hour" to "unit price per man-hour".

CHANGE in Item A38, Page 010125-23, "Operator and Equipment for temporary System Construction", "unit per hour" to "unit price per man-hour".

12. SECTION 01025, "Measurement and Payment", Page 01025-24, Subsection 1.10, "Description of Alternate No. 2 Bid Item":

DELETE entire subsection 1.10.

13. SECTION 01400, "Contractor's Quality Control", Page 01400-6, Subsection 3.2.A:

ADD in paragraph A, at the end of the phrase:  
"and Plasticity Index test when required at borrow sites"

14. SECTION 02010, "Subsurface Investigation", Page 02010-1, Subsection 1.2.B "Geotechnical Reports":

CHANGE the first report item to read:  
"Cornforth Consultants, January, 1992. Geotechnical Investigation, Update Report, Subarea 1 Interim Clay Cover."

15. SECTION 02220, "Embankment and Grading", Page 02220-1, Subsection 1.2.A, "Applicable Publications":

ADD:  
"D 2216 Moisture Content Determination  
D 4643 Moisture Test - Microwave Oven Method"

16. SECTION 02220, "Embankment and Grading", Page 02220-2, Subsection 1.3, "Quality Control":

CHANGE in paragraph A "unless otherwise specifically approved" to " unless otherwise specified in this document".

17. SECTION 02220, "Embankment and Grading", Page 02220-3, Subsection 1.4.B:

REPLACE first and second sentences with:  
"Proposed Borrow Sources - Contractor shall submit the name, location and owner of all proposed borrow sources with an estimate of the quantity of suitable materials available. The submittal shall include gradation tests for Imported Low Permeable Soil, Type I Sand and Subgrade Embankment as well as Certification by Contractor that the proposed borrow sources contain no hazardous contaminants or hydrocarbons. Imported Low Permeable Soil submittal shall also include Plasticity Index testing in accordance with ASTM D4318."

18. SECTION 02220, "Embankment and Grading", Page 02220-4, Subsection 1.6.D, "Degree of Compaction":

ADD at the end of paragraph:

"Degree of compaction may also be specified as the number of passes of a specified compactor per soil lift."

19. SECTION 02220, "Embankment and Grading", Page 02220-5, Subsection 1.7, "Final Cover":

REPLACE entire Subsection 1.7 with the following:

**1.7 FINAL COVER**

A. The barrier layer of the final cover is composed of a geomembrane underlain by a Low Permeable Layer. Two types of final covers will be constructed for this Contract: i) Final Cover Type 'A' will be constructed on the steeper sideslopes of Subareas 1, 2 and the northern portion of the Powerline Corridor (PLC). The Type 'A' cover utilizes the existing Low Permeable Soil in its existing position. The in-place Low Permeable Soil will be recompacted under strict compaction control requirements; and ii) Final Cover Type 'B' will be located on the flat-top slopes of Subareas 1, 2 and the flat area of the PLC. The Type 'B' cover in Subareas 1, 2, and the northern portion of the PLC utilizes the existing Low Permeable Soil which will be removed from Subarea 1 and stockpiled. Twelve inches, compacted thickness of Low Permeable Soil will be placed and compacted under strict conditions of moisture and compaction control. Type 'B' cover in the PLC south of Subarea 1 will consist of a Bentonite Mat underlain by a minimum 12-inch, compacted thickness of Subgrade Embankment.

B. The final cover elements above the Type 'A' and Type 'B' barrier layers consists of a geonet composite, 18 inches of Type 1 Sand, and 12 inches of topsoil.

C. The locations for Type 'A' and Type 'B' cover construction are shown on the Drawings."

20. SECTION 02220, "Embankment and Grading", Page 02220-11, Subsection 3, "Execution":

REPLACE entire subsection 3, "Execution" with attached revised subsection 3.

21. SECTION 02272, "Geosynthetics":

DELETE from Subsection 1.4.1.B, Page 02272-2, first sentence:

"shall be listed by the National Sanitation Foundation as having met the current Standard 54 for Flexible Membrane Liners, and"

CHANGE in Subsection 2.2.B, Page 02272-13, the accepted values for Density from "Density g/cc (Min) ASTM 1505 .90" to "Density g/cc (range) ASTM 1505 0.90 - 0.935".

CHANGE in Subsection 2.2.B, Page 02272-13, the accepted values for Carbon Black from "Carbon Black % (Min) ASTM D1603 2.0" to "Carbon Black % (range) ASTM D1603 2.0 - 3.0".

CHANGE in Subsection 2.3.D, Page 02272-14, from "Type 'B' geonet composite" to "geonet composite".

REPLACE Subsection 3.2.D.3, Page 02272-18, first sentence with:

"The Bentonite Mat is extremely sensitive to moisture and drying."

REPLACE Subsection 3.2.D.3, Page 02272-18, last sentence with:

"Any portion of Bentonite Mat that becomes wet or dried by any cause shall be removed and replaced at the Contractors expense."

22. SECTION 02610, "Pipe and Fittings", Page 02610-2, Subsection 2.3,A.8:

ADD to end of paragraph:

"8 x 8 x 3 tee for perimeter gas collection trench shall be SDR 15.5."

23. Appendix J, "Construction Quality Assurance Plan", Page 4, Subsection 2.1.4.4, "Resident Geotechnical Engineer":

REPLACE the paragraph with:

"The Resident Geotechnical Engineer is an on-site representative of the Engineer. The Resident Geotechnical Engineer will carry out full time observation of all low permeability soil barrier construction and will be responsible for inspection of all on-site earthworks."

24. PLANS, Sheet 4, "Construction Site Plan":

DELETE note:

"Approximate Location of Temporary Haul Road by Soil Procurement Contractor"

25. PLANS, Sheet 11, "Final Cover Details":

REPLACE Type 'A' Cover Existing Low Perm Soil note on Detail C9 with:

"Existing Low Perm Soil surface to be compacted in place, per specifications."

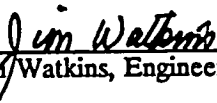
REPLACE Type 'A' Cover Low Perm Soil note on Detail C12 with:

"Low Perm Soil compacted in place, per specifications (depth varies)"

26. PLANS, Sheet 22, "Piping Details/Gas Collection System":

ADD note to Detail P14:

"Cut 3-inch diameter hole in HDPE pipe at 8 x 8 x 3 tee location. Orient hole in line with 3 inch HDPE - LFG outlet."

  
Jim Watkins, Engineering and Analysis Manager

2/19/92  
Date

### 3. EXECUTION

#### 3.1 WEATHER CONDITIONS

- A. All earthwork described in this section shall be performed during dry weather, typically May through October.
- B. The Geotechnical Engineer will monitor wet weather conditions during the Contract Period. If the quality of the work is susceptible to degradation due to deficient construction procedures, or if undue damage to existing installations such as haul roads, vegetation covers, or engineered soil covers is occurring, the Engineer shall recommend to Metro that the work be stopped.

#### 3.2 FINAL COVER

- A. The barrier layer for the final cover is composed of two parts: a Low Permeable Soil Layer and a geomembrane. There are two variations of the barrier layer. These two variations are identified on the Drawings as Final Cover Types `A' and `B'.
- B. Final Cover Type `A' is generally located on the steeper sideslopes of the landfill as shown on the Drawings. The barrier layer for Type `A' cover utilizes a minimum 6-inch thickness of the existing Low Permeable Soil in its existing position. After removal of the topsoil, the exposed surface will be probed at selected locations by the Geotechnical Engineer to determine the thickness of Low Permeable Soil. Areas with less than 6 inches of suitable, in-place, Low Permeable Soil, as determined by the Geotechnical Engineer, shall be filled with 6 inches, compacted thickness, of suitable Low Permeable Soil, in accordance with the Specifications. The surface of the Low Permeable Soil barrier shall then be prepared in accordance with the Specifications. Textured geomembrane shall then be placed over the prepared surface of the Type `A' soil barrier. Subgrade for Type `A' areas shall be graded as shown on the Drawings. Local areas shall be no steeper than 15° slope at any location.
- C. Final Cover Type `B' is located on the flat top-slope portions of Subareas 1 and 2, and the drainage swales to be constructed in the Powerline Corridor as shown on the Drawings. Final Cover Type `B' has two types of barrier layers as follows:
  - The first consists of 12 inches of compacted, Low Permeable Soil. This would be constructed in Subareas 1 and 2, and the portion of the Powerline Corridor immediately east of Subarea 1.

- The second consists of a Bentonite Mat underlain by 12 inches of Subgrade Embankment. This would be constructed in the portion of the Powerline Corridor south of Subarea 1 where interim cover does not exist. The surface will be probed at selected locations by the Geotechnical Engineer to determine the limits of the area to be covered by the Bentonite Mat.
- D. Prior to placing the barrier layer for Type `B' cover, the existing topsoil and Low Permeable Soil shall be removed and stockpiled and Subgrade Embankment material placed to achieve final subgrade contours. The Subgrade for Type `B' areas shall be graded as shown on the Drawings. Local areas shall be no steeper than 6.5° slope at any location.

After the Subgrade Embankment material is placed, the appropriate Low Permeability Soil or Bentonite Mat barrier layer would be constructed in accordance with the Specifications. The surface of the Low Permeable Soil barrier shall then be prepared in accordance with the Specifications. Smooth geomembrane shall then be placed over the surface of the Type `B' Bentonite Mat or Low Permeability Soil barrier.

- E. In areas to receive Type `A' cover and where excavation through the existing Low Permeable Soil is required for downslope flumes and horizontal gas collection trenches, the existing Low Permeable Soil shall be excavated, protected, and reused in accordance with the requirements for Type `B' cover.
- F. The final cover elements above the Type `A' and Type `B' barrier layers consist of a geonet composite, 18 inches of Type 1 Sand and 12 inches of topsoil.

### 3.3 EXISTING TOPSOIL REMOVAL AND STOCKPILING

- A. The Contractor shall develop and follow an approved plan for stripping areas of existing on-site topsoil, stockpiling of reusable topsoil, and placing existing reusable topsoil on the prepared slopes of the final cover.
- B. Contractor shall remove existing topsoil to a depth sufficient to insure that most of the topsoil has been removed from the surface of the underlying existing Low Permeable Soil. Approximately 6-inch thickness of topsoil will be stripped.
- C. Existing grass vegetation may be removed with the underlying topsoil provided it is cut to a height not exceeding 3 inches at the time of topsoil removal, and thoroughly mixed with the underlying topsoil prior to or during the topsoil removal process. Grass clippings resulting from cutting the grass to the specified height may also be mixed with the underlying topsoil, provided the clippings are mulched and evenly spread over the mowed area in a layer not exceeding 1.5 inches thick prior to the topsoil removal process.

- D. Topsoil deemed unsuitable for reuse by the Engineer shall be disposed of on site in Subarea 4 unless otherwise approved by the Engineer. Unsuitable topsoil means soil material which appears to be unable to support the required growth of surface grasses. Topsoil suitable for reuse shall be placed in a stockpile at a location approved by the Engineer and/or shown on the Drawings. Stockpiled topsoil shall be kept free of contamination by refuse or other objectionable materials. Temporary covering of the stockpile with plastic to prevent contamination or erosion may be necessary.
- E. Only surface vegetation shall be removed from the Powerline Corridor south of Road F except in areas where excavation is needed for grading requirements.
- F. On-Site Debris shall be removed and disposed of in Subarea 4.

### 3.4 EXCAVATION IN REFUSE

- A. The variety of refuse disposed of within the landfill is unknown. Where excavation in refuse is required, the Contractor shall remove and dispose of all materials encountered in the refuse. Excavated refuse shall be disposed of on-site in Subarea 4 unless otherwise approved by the Engineer.
- B. When it is necessary to excavate into refuse in order to perform any of the work, the Contractor shall follow an approved Health and Safety Plan during excavating, handling, and disposing of the refuse, and whenever working in proximity to exposed refuse. The Contractor is cautioned that the possibility of encountering potentially harmful gases, liquids or wastes exists.
- C. Excavation of refuse may be required to obtain a portion of the grades shown on the grading plan, for installation of horizontal gas wells, condensate tanks, drainage ditches, and sedimentation basin construction. Excavation of refuse for other facilities may also be required.
- D. Excavation into refuse may require surface water/leachate diversion and groundwater/leachate removal and disposal. Prior to any dewatering, the Contractor shall submit for approval to the Engineer a plan of the methods, installations and details of the proposed water control system and his intended disposal methods for contaminated groundwater/leachate collected during dewatering. The Contractor shall follow a plan approved by the Engineer for all dewatering. Dewatering activities shall be performed in accordance with the Contractor's approved Health and Safety Plan.

### 3.5 EXCAVATION AND STOCKPILING OF EXISTING LOW PERMEABLE SOIL

- A. Existing Low Permeable Soil shall be excavated from areas to receive Type `B' cover or Subgrade Embankment. The locations of Existing Low Permeable Soil removal and stockpiles are shown on the Contract Drawings. Low Permeable Soil does not exist in the PLC south of Road F.
- B. The surface of the Existing Low Permeable Soil shall be free of all topsoil and other on-site debris, and shall be approved by the Geotechnical Engineer, prior to commencing the removal and stockpiling of Existing Low Permeable Soil for future use.
- C. Contractor shall remove the Existing Low Permeable Soil to within 2 inches of the underlying daily cover/refuse material. Approximately 24 to 42 inches of Existing Low Permeable Soil exists above the refuse in the area shown on the Drawings. This thickness and condition of the Existing Low Permeable Soil varies over the site as shown in the revised January, 1992 report by Cornforth.
- D. Contractor shall insure that the Low Permeable Soil remains clean and free from Topsoil, refuse, and other extraneous matter throughout the removal, haul, and stockpile operations. Removal of the Existing Low Permeable Soil shall be carefully performed so that refuse or other materials are not picked up and mixed with the Low Permeable Soil Stockpile.

### 3.6 CONSTRUCTION OF TYPE `A' BARRIER

- A. The Type `A' cover shall be constructed by compacting the in-place Existing Low Permeable Soil after the Topsoil has been removed. Prior to compaction, foreign materials and protrusions shall be removed and the surface made uniformly sloping as indicated on the Drawings. The surface shall be free from angular rocks, roots, grass and vegetation. Cavities, excavations, and zones containing less than 6 inches of in-place Low Permeable Soil shall be backfilled with material meeting the Specification for Imported Low Permeable Soil.
- B. After removal of topsoil, the exposed surface will be probed and the cavities, excavation, and zones containing less than 6 inches of in-place Low Permeable Soil will be marked in the field by the Geotechnical Engineer prior to the Contractor beginning compaction of the Type `A' Low Permeable Soil. Within the marked areas, the Contractor shall place 6-inch compacted thickness of Low Permeable Soil on top of the existing soil. The Low Permeable Soil shall be placed and compacted as stipulated in Paragraph 3.7D, Items 1, 2, 3 and 5.



- C. Contractor may supplement required Low Permeable Soil from an off-site source only after all Low Permeable Soil stripped from the Subarea 1 closure area is exhausted and written approval from Metro is obtained.
- D. After suitable Low Permeable Soil thickness has been placed, final compaction shall be accomplished using a multi-tired pneumatic or heavy pneumatic rubber tire roller greater than 40,000 pounds. A minimum of four passes of the roller encompassing the area of Type `A' cover construction shall be required. The roller shall provide uniform compaction, work well on a slope, and leave a relatively smooth surface. Vibratory action shall not be used. The specific roller used for compacting the Type `A' cover shall be approved by the Geotechnical Engineer in advance of the work. Placement and compaction shall be observed by the Geotechnical Engineer or other Metro representative. Compaction will be verified by the Geotechnical Engineer with periodic testing as deemed necessary by the Geotechnical Engineer.
- E. General construction traffic shall not be allowed on the compacted Low Permeable surface except for grading equipment needed to finish the surface prior to placing the geosynthetic.
- F. The surface of the Type `A' cover shall be finished as stipulated in Paragraph 3.10.
- G. Textured geomembrane shall be placed on the finished Type `A' Low Permeable Soil surface as stipulated in Section 02272.

### 3.7 CONSTRUCTION OF TYPE `B' BARRIER

- A. The Type `B' cover shall be constructed by placing the Low Permeable Soil or Bentonite Mat barrier layer after the design subgrade on the top slopes of Subarea 1, Subarea 2, and the PLC have been prepared. In the PLC, a minimum of 12 inches, compacted thickness, of Subgrade Embankment shall be placed prior to installing the Bentonite Mat. Excavation of refuse may be required in local areas of Subareas 1, 2, and the PLC to achieve the required grades. Prior to placing the smooth geomembrane, foreign materials and protrusions shall be removed and the surface made uniformly sloping as indicated on the Drawings.

## **B. Low Permeable Soil**

- 1. Low Permeable Soil delivered to Subarea 1, or the PLC, will be visually inspected by the Geotechnical Engineer. Material which is outside the Specifications will not be accepted for placement based on the visual inspection. Unacceptable materials shall be disposed of at the Contractor's expense.**
- 2. Contractor shall utilize all stockpiled Low Permeable Soil from the Subarea 1 closure area, prior to importing Low Permeable Soil from off-site.**
- 3. The Low Permeable Soil shall be placed and compacted using the following procedure:**
  - The Low Permeable Soil shall consist of clods no greater than 1.5 inches in the largest dimension. If larger clods are present, the Soil shall be repeatedly pulverized using a farm type disc, rototiller, or other appropriate means to meet the size requirement.**
  - The moisture content of the soil shall be adjusted to be within a range of 2 percent below optimum to 3 percent above optimum based on ASTM D698 (standard Proctor).**
  - Compaction shall be accomplished using a medium weight roller greater than 30,000 pounds penetrating feet greater than 6 inches long. The roller shall provide uniform compaction. Vibratory action shall not be used. The specific roller used for compacting the Type `B' cover shall be approved by the Geotechnical Engineer in advance of the work.**
  - The Type `B' cover shall be constructed in two 6-inch finish thickness lifts. The material shall be placed in successive horizontal layers and compacted to the 6-inch thickness as required. Each layer shall be compacted by the Contractor to the specified requirement before the overlying lift is placed.**
  - Each layer shall be compacted to not less than 95 percent of the standard Proctor maximum dry density. Placement procedures will be monitored by the Geotechnical Engineer. Compaction will be verified by the Geotechnical Engineer via periodic testing of the lifts.**

4. General construction traffic shall not be allowed on the compacted Low Permeable Surface except for grading equipment needed to finish the surface prior to placing the Geosynthetic.
5. The surface of the Type `B' Low Permeable Soil shall be finished as stipulated in Paragraph 3.10.
6. Smooth geomembrane shall be placed on the finished surface of the Type `B' Low Permeable Soil as stipulated in Section 02272.

#### C. Bentonite Mat

1. A minimum of 12 inches, compacted thickness, of Subgrade Embankment shall be placed beneath the Bentonite Mat barrier. The surface of the Subgrade Embankment fill shall be finished as stipulated in Paragraph 3.10.
2. The Bentonite Mat shall be installed as stipulated in Section 02272, Paragraph 3.2
3. At the transition between Low Permeable Soil and Bentonite Mat, the mat shall be in intimate contact with and overlap 2 feet over the top of the adjacent Low Permeable Soil.
4. Construction personnel and traffic shall not be allowed onto the Bentonite Mat except for personnel required to place the geomembrane.
5. Smooth Geomembrane shall be placed on the Bentonite Mat as stipulated in Section 02272.

#### 3.8 PLACEMENT OF TYPE 1 SAND

- A. Type 1 Sand shall be installed over completed sections of the Geonet Composite. During Type 1 Sand installation, the Geonet Composite shall be protected as stipulated in Section 02272.
- B. Type 1 Sand shall be placed in a single 18-inch finished thickness lift with minimal compactive effort. Extreme care shall be exercised during placement to prevent damage or major disturbance to the geosynthetic liner system. Compaction shall consist of not more than three passes with a smooth-drum or grid type roller, or light to medium grading equipment. Placement method, design and location of temporary haul roads, number of passes, and type and weight of compaction equipment shall be pre-approved by the Engineer.

Type 1 Sand delivered to the site during construction will be visually inspected by the Geotechnical Engineer. Material which is outside the Specifications will not be accepted for placement based on the visual inspection. Unacceptable materials shall be disposed of at the Contractor's expense.

All Type 1 Sand material shall be imported from off-site sources. On-site Type 1 Sand that has been stockpiled shall not be used for this work.

- C. The surface of the Type 1 Sand shall be uniformly smooth-graded to within  $\pm 2$  inches of the line, grade, and cross-sections shown on the Drawings.
- D. No construction traffic shall be allowed over the finished areas. Any damage to the liner system as a result of the Type 1 Sand placement and compaction activities shall be corrected by the Contractor at his expense.
- E. Any significantly disturbed portions of the liner system, particularly on the sideslopes, shall be corrected by the Contractor at his expense.
- F. Topsoil shall be placed on the finished surface of the Type 1 Sand as stipulated in Section 02220.

### 3.9 PLACEMENT AND COMPACTION OF OTHER FILLS

- A. Fills or embankments to achieve subgrade contours within Subarea 1 and the PLC as shown on the Drawings shall consist of Subgrade Embankment materials. The complete fill shall conform to the shape of the typical sections and contours indicated on the Drawings. The material shall be placed in successive horizontal layers of 12 inches in loose depth and shall be compacted to not less than 90 percent of the standard Proctor maximum dry density. Subgrade Embankment placed within 3 feet of wells shall be compacted via powered hand tamper to protect well from damage.

Subgrade Embankment material delivered to the site during construction will be visually inspected by the Geotechnical Engineer. Material which is outside the specifications will not be accepted for placement based on the visual inspection. Unacceptable materials shall be disposed of at the Contractor's expense. Materials that contain excessive free water will not be accepted for placement.

All Subgrade Embankment material shall be imported from off-site sources. On-site Subgrade Embankment that has been stockpiled shall not be used for this work.

- B. **Crushed Rock:** Each layer of fill shall be compacted by rolling with compaction equipment approved by the Geotechnical Engineer. Materials shall be compacted in horizontal lifts to not less than 95 percent of the standard Proctor maximum dry density.
- C. **Roadway Embankment and Crushed Rock Base Course for Access Roads:** The roadway materials shall be compacted in horizontal 6-inch (loose measure) lifts. Each lift shall be compacted to not less than 97 percent of the standard Proctor maximum dry density.
- D. **All fills shall be shaped to line, grade, and cross-section, and compacted as specified.** Soft or otherwise unsatisfactory material shall be removed and replaced with suitable compacted material up to the required grades as directed by the Engineer.
- E. **All fills shall be finished as stipulated in Paragraph 3.10.**

**3.10 FINISHED EXCAVATION, FILLS, EMBANKMENTS AND GROUND SURFACE FOR GEOSYNTHETICS**

- A. **All surfaces to be covered by geosynthetics, including excavated, filled, and embankment sections and adjacent transition areas, shall be uniformly smooth-graded and compacted to within  $\pm 3$  inches of the line, grade, and cross-sections shown on the Drawings.** The surface in contact with the geosynthetic shall be smooth and free of broken face stones greater than  $\frac{3}{8}$ -inch, smooth stones greater than 1 inch, sticks, roots, sharp objects, or other debris of any kind. The surface shall provide a firm, unyielding foundation for the geosynthetics with no sudden sharp or abrupt changes or breaks in grade, except as shown on the Drawings. No standing water or excessive moisture will be allowed. No construction traffic shall be allowed over the exposed subgrade.

Low Permeable Soil and Bentonite Mat Surfaces shall be protected. Finished surfaces shall be covered with geomembrane as soon as possible. The surface shall be protected prior to geomembrane placement with a temporary covering or other method. If cracking, moisture damage, or other damage occurs, it shall be repaired as directed by the Geotechnical Engineer at the Contractor's expense.

Connection of Low Permeable Soil Layer to previously placed Low Permeable Soil Layer shall be performed. This shall include Low Permeable Soil Layer connections between Type `A' and Type `B' covers, Low Permeable Layers which are being extended when the edge has been exposed for more than three days, and connections to Low Permeable Soil Layers placed in previous construction seasons. The outside 1 foot of material shall be removed from the edge of the

previously placed Low Permeable Soil Layer. The edge of the Low Permeable Soil Layer shall then be cut back on a 4H:1V slope. The placement of the new Low Permeable Soil shall begin at the top of the 4H:1V cutback slope. The prepared slope shall be inspected by the Engineer prior to placement of the new material. If the prepared surface of the previously placed Low Permeable Soil is cracked or otherwise damaged, additional Low Permeability Soil shall be removed as necessary to provide a suitable surface.

- B. Ditches or channels shall be cut accurately to the cross-sections and grades indicated. Care shall be taken not to excavate or grade ditches or channels below the elevations required. Provide temporary erosion control measures, described elsewhere, as needed, to maintain ditch geometry and grade during construction activities prior to placement of the final cover system materials and the permanent erosion control measures.
- C. Other surfaces shall be uniformly smooth-graded and compacted reasonably true to line, grade and cross-sections shown on the Drawings.

### 3.11 PROTECTION

- A. During construction, fills, embankments, and excavations shall be kept shaped and drained. Newly graded areas shall be protected from traffic and erosion, and any local subsidence or washing away that may occur from any cause shall be repaired and grades re-established to required elevations and slopes. All work shall be conducted in accordance with environmental protection requirements of the Contract. Ditches and drains along subgrade shall be maintained in such a manner as to drain effectively at all times. The finished subgrade shall not be disturbed by traffic or other operation and shall be protected and maintained by the Contractor in a satisfactory condition until final cover materials are placed. The storage or stockpiling of materials on the finished subgrade will not be permitted. Final cover materials shall not be laid until the subgrade has been checked and approved by the Contractor and Engineer, and in no case shall final cover materials be placed on a muddy, spongy, or frozen subgrade.
- B. Existing structures such as wells, control points, benchmarks, culverts, manholes and utilities poles within and adjacent to the construction area shall be clearly marked and protected from damage.
- C. Abandonment of Wells D-8A and C-3 in the Powerline Corridor will be accomplished by others prior to earthwork starting in that area. Other existing wells in Subarea 1 and the Powerline Corridor are to be protected and remain undisturbed. The wells to be protected in Subarea 1 and the PLC include D-1A, B and C, D-2A and B, G-7 and H-1. Additional wells to be

protected will be delineated on the proposed on-site hauling plan. Appropriate protection devices may be required.

- D. Extension of Well H-1 in Subarea 1 will be performed by others during placement of Subgrade Embankment material. Contractor shall coordinate this work through Metro and protect this well.

### 3.12 TOPSOIL PLACEMENT

- A. Topsoil for the final cover shall conform to the requirements of this section. On-site existing topsoil that has been removed and stockpiled shall be used first for the final cover. When on-site topsoil has been depleted, the Contractor shall supply sufficient imported topsoil as necessary to complete the work.
- B. The Contractor shall spread topsoil evenly over the specified areas. The topsoil shall be placed in two lifts. The first lift shall be approximately 4 to 6 inches (4"-6") thick and shall be mixed into the top 3 to 4 inches (3"-4") of sand by discing, or by other methods approved by the Engineer. The second lift shall be 8 to 6 inches (8"-6") thick and shall be placed to equal the total depth shown on the plans or as otherwise ordered by the Engineer.
- C. Topsoil shall not be placed when the ground or topsoil is frozen, excessively wet, or in the opinion of the Engineer, in a condition detrimental to the work. After the topsoil has been spread, all large clods, hard lumps, rocks larger than 1 inch in diameter, and litter shall be removed from the surface and disposed of by the Contractor. The topsoil shall then be placed to a uniform, dense state ready for hydroseeding operations.
- D. During topsoil placement and up to the time the vegetative cover is established, the Contractor shall protect the work from erosion, traffic, Contractor's activities, and any other cause of damage. The Contractor shall repair or replace any damaged topsoil and vegetative cover at no additional expense to Metro.

**\* \* \* END OF SECTION \* \* \***

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QUESTIONS AND ANSWERS  
for the St. Johns Landfill Closure of Subarea 1  
RFB # 91B-49-SW

Written comments and questions were accepted by Metro through February 10, 1992. The questions which were answered by the Metro project team are presented below. Some of the submittals have resulted in modifications to the Contract Documents. Refer to the addendum. Some submittals were suggestions that Metro chose not to implement. Questions received at the Prebid Conference on January 27, 1992, are also included in this list.

**Q:** With regards to Section 00700, 7.01.03, does Metro envision the Bidder providing a "full time" Quality Control Manager and does Metro envision a "full time" Quality Assurance Manager?

**A:** Refer to Specifications Section 01400, "Contractor's Quality Control" for Contractor's responsibilities. Metro's Quality Assurance Manager will be available as needed.

**Q:** Is it the goal of Metro to provide specific percentage of work to DBE and WBE entities or can an assignment of only a DBE or WBE for the total of both percentages constitute full compliance to these goals?

**A:** Refer to Section 00700, Article 12, "Disadvantaged Business Program"; Appendix G, "Metro Letter Regarding Disadvantage Business Program Compliance"; and Appendix H, "Metro Code Section 2.04.100". Language is clear with respect to goal programs. Contractors are urged to voluntarily make good faith efforts to utilize Disadvantage, Minority and Women Owned Business Enterprises as subcontractors and suppliers.

**Q:** Clarify Section 00800, #5, "Supplementary Conditions" regarding prevailing wage rate for this project.

**A:** The instructions do not need clarification. Metro's "understanding" as stated in the Supplementary Conditions has been confirmed with the Oregon Bureau of Labor and Industries (BOLI). If a Bidder does not understand the paragraph or state prevailing wage law, the Bidder should seek professional advice.

The paragraph clearly does not direct bidders to price the work "with prevailing wages paid to all delivery truck drivers." In conjunction with Section 00700-14.03.07, it instructs bidders not to deliberately exclude from the bid price prevailing wages that are currently due under Oregon law, in the hopes of challenging Oregon law in the manner that the Federal Davis-Bacon Act was challenged in Building and Construction Trades Department, AFL-CIO v. U.S. Department of Labor and Industries and Midway Excavators, Inc., No. 90-5341 (CA DC, 5/17/91). Metro will not allow a windfall to a Contractor based on a post-bid change in state prevailing wage law.

Bids should include all amounts necessary to pay prevailing wage to truck drivers in conformance with Oregon Law, which at this time appears to cover the following:

- Truck drivers employed by the Contractor to haul materials to the site;



- Truck drivers employed by a subcontractor to haul materials to the site;
- Truck drivers employed by a material supplier, if the source of material is a borrow pit dedicated exclusively or nearly so to the public works project. (See OAR 839-16-035(5) for further explanations.)

Workers who appear not to be entitled to prevailing wages under Oregon Law include:

- Owner-operated truck drivers;
- Truck drivers employed by a commercial supplier, as specified in OAR 839-16-035(5);

Workers at borrow pits are entitled to prevailing wages only in circumstances specified in OAR 839-16-035(5) when the pit is "dedicated exclusively or nearly so to the public works project."

The Midway case mentioned above held that the Davis-Bacon Act does not apply to truck drivers delivering materials to a public works site, regardless of the relationship under which they were hired or the source of the materials. This project is not subject to Davis-Bacon, but is being conducted under Oregon's Prevailing Wage statutes, ORS 279.348-279.365. The Oregon Administrative Rules relevant to an understanding of Oregon's prevailing wage law are located at OAR Chapter 839, Division 16. Copies of the relevant legal provisions and other information can be obtained from the Bureau of Labor and Industries (BOLI), 1400 SW Fifth Avenue, Portland, Oregon 97201 (Telephone: (503) 229-5737, FAX: (503) 229-6372). Some information on Oregon prevailing wage law is included in Appendix F of the Contract Documents. If your questions are not answered by any of the above authorities, you are urged to seek professional legal advice. Please note that the information provided herein is Metro's interpretation and is not intended to supplant existing law.

Q: Can all refuse encountered on site be disposed of at the St. Johns Landfill?

A: Refer to Specifications, Section 02220, 3.4, "Excavation in Refuse" and Section 02680, 3.7.K, "Vertical Extraction Wells". All solid waste which is excavated may be reburied in Subarea 4 at a location designated by Metro if it is suitable for burial in a municipal solid waste landfill. Solid waste judged unsuitable for reburial by both Metro and the Contractor will be properly managed at Metro's expense.

Q: Can all liquid waste encountered on site be disposed of at the St. Johns Landfill?

A: Liquid waste may be placed in the waste water pond located in Subarea 5 after prior notification of Metro. Refer to Section 02680, 3.11.C.5. Drilling fluids containing significant amounts of bentonite clay shall be treated as solid waste and will be disposed of in Subarea 4.

Q: Should a geotextile be placed between the Topsoil and Type 1 Sand in the Final Cover?

A: No. Refer to Sections 02220, 3.8, "Placement of Type 1 Sand" and 3.12, "Placement of Topsoil" and Drawing, Sheet 11.

Q: Please address possible radioactivity on site.

A: Refer to Specifications Section 01100, "Health and Safety Program"; and Appendix D, "Site Evaluation of Low Level Radiation Letter Report". In 1990, waste with very low levels of radioactivity was disposed of in Subareas 4 and 5 at St. Johns Landfill. This waste was disposed of with the approval of the Radiation Control section of the Oregon State Health Division. Metro is not aware of any information which indicates radioactivity levels at St. Johns Landfill in excess of background levels.

Q: Is this landfill considered a "Superfund" site or otherwise listed as a hazardous waste site?

A: St. Johns Landfill is not on the National Priority List (Superfund list) and is not on the list of confirmed releases of hazardous substances maintained by the Oregon Department of Environmental Quality.

Q: Are there any regulations which may impose time restrictions or other constraints on this project?

A: Refer to Specifications, Section 00700, 14, "Miscellaneous Statutory Responsibilities of Contractor". It is the responsibility of the Contractor to contact appropriate regulatory agencies to determine which regulations may limit periods of construction activities.

- Refer to Specifications Section 01560, 1.5. The City of Portland and Oregon Department of Environmental Quality's noise rules may impose limitations on the hours of certain activities.
- Refer to Specifications Section 01560, 1.8 with regards to traffic constraints.

Q: Will Metro provide inspection services as required by the Contractor's work schedule, such as long shifts, weekends, holidays, etc.?

A: Refer to Specifications Section 01400, "Contractor's Quality Control". Metro will coordinate with the Contractor and provide quality assurance as required.

Q: Specifically, what tests required in Section 01400, 3.2 "Testing", are required of the Contractor?

A: The Contractor should refer to the appropriate sections in the technical specifications. These include: Section 02220, 1.2 regarding gradational tests and plastic index tests; Section 02220, 1.4B regarding borrow site requirements; Section 01100, 1.3 regarding potentially hazardous substances monitoring; Section 02272, 1.7, 2, and 3 regarding geotextiles and geomembranes. The Contractor assumes the responsibility for testing which may be required by other regulatory agencies.

Q: What roads are available for use on site by the Contractor?

A: Refer to the Construction Site Plan included as Attachment A for additional information.

Q: What are the compaction ranges to be anticipated in the existing interim cover?

A: Refer to information included as Attachment B, from the "1980 Contract Documents for Operation of the St. Johns Landfill". The current interim cover was constructed by the

landfill operations contractor in 1981 and 1982 in accordance with specifications, 2.11 "Placement of Cover Material".

**Q:** What are the required compaction specifications for placement of various soil components?

**A:** The Contractor should refer to the appropriate sections in the technical specifications including Section 2220, "Embankment and Grading": Subsections 3.6 and 3.7 regarding Low Permeable Soil; 3.8 regarding Type 1 Sand; 3.9 regarding Subgrade Embankment, Roadway Embankment and Crushed Rock Base Course.

**Q:** Who needs to be certified for Hazardous Waste Handling?

**A:** Tasks which involve the possibility of exposure to hazardous substances are outlined in Specifications 01100, 1.3. Personnel involved in these tasks must have training and be certified as required by 29 CFR 1910.120. All others must be excluded from the immediate area and if not in danger of exposure need not be certified. All personnel working on the site must be familiar with the Site Health and Safety Plan.

It is our understanding that personnel who will not be expected to use respirators will require a 24-hour period of training and certification while a more stringent 40-hour course and certification is required for personnel who may be required to use respirators. In addition the company employing personnel who will use respirators must have a written respirator program (29 CFR 1910.134). Personnel must also be evaluated by a licensed physician who must provide a written statement that the worker may safely use the respirator.

**Q.** With regards to Section 11301, 23, vacuum pumps:

1. What are design inlet gas conditions? I.E. pressure, temperature, relative humidity, altitude, specific gravity of gas.
2. Did you have a specific selection/manufacturer in Mind?
3. Would a liquid ring pump be acceptable?

**A.** 1. Condensate drains from low points in the gas collection header into the condensate collection piping which drains into a condensate collection tank. The vacuum pumps draw a vacuum on the condensate collection tank. Under normal conditions this is a gravity system and the inlet gas would be essentially air. However, under upset conditions, the condensate collection system could be exposed to the environment within the gas collection manifold resulting in a negative pressure and methane in the condensate system. Therefore, at worst case the inlet design condition for the gas at the suction of the vacuum pump are as follows:

- Pressure: 60 inches WC vacuum maximum
- Temperature: 100 degrees Fahrenheit maximum
- Relative humidity: 100% maximum
- Specific gravity: 1
- Altitude: 50 feet

2. Pumps shall be manufactured by Rietschle, Model No. VFT 80 or approved equal.
3. Liquid ring pumps are not acceptable due to their sensitivity to temperature.

- Q: Plan Sheet 22, Detail P14: How does 6-inch HDPE perforated pipe connect to 8" x 8" x 3" tee?
- A. The 6-inch HDPE perforated pipe shall be inserted through the 8" x 8" x 3" tee. There shall be no connection between the tee and the perforated pipe.
- Q. Plan Sheet 23, Detail P16 and P17: What are the size and configuration of well casing pipe perforations?
- A. Perforated sections of PVC pipe for use in both single and double completion gas extraction wells shall be standard 40-slot screen.
- Q. The specification and drawings do not detail the size and number of Parshall Flumes required.
- A. One 18" Parshall Flume required. See Bid Item 28.
- Q. Data is not sufficient to determine the height of the 48" diameter integral manhole for flume.
- A. Elevation of existing road is approximately 22.0' at flume location.
- I.E. of 27" outlet pipe at flume is approximately 14.8'
  - Provide maximum 16", minimum 4" concrete adjusting rings between manhole and access frame. Top of access frame shall be existing road grade.
- Q. Please detail the manufacturer and model number of the 24" diameter cast iron or steel frame and cover for the flume manhole.
- A. Inland Foundry Co., Springfield, OR, NO. 802-1 or approved equal.
- Q. Section 02610, 2.7: Cannot identify pipe reference AASHTO m278. Is there an ASTM reference for it?
- A. The basic PVC (non-pressure) pipe material shall meet the requirements for ASTM D3034.
- Q. Section 02831 (Fence): Specification requires top tension wire with brace and truss. Potential for footing to lift when pressure applied to truss. Should a continuous top brace be included?
- A. No change in specifications. Tension of fence will be adjusted in field if warranted.
- Q. Section 02272 (Geosynthetics): What are the warranty requirements for the geosynthetics?
- A. Refer to Section 00700, "General Conditions" 7.04, 7.05 and 7.06
- Q. Will subcontractors be required to have Environmental Impairment Liability insurance coverage?
- A. We only expect the prime contractors to carry \$1,000,000 of coverage. We do not expect subcontractors to have EIL insurance. Requiring EIL insurance in no way limits potential liability of the prime or subcontractors for pollution exposures to the amount stated above.

- Q. In Section 01025, 1.2.B.2 there is no provision for slopes, for horizontal measurement, so should the Bidders add differential materials to account for slopes for the pay quantities?
- A: For those types of pay items, the intention was to look at horizontal areas with the final in place thicknesses in order to calculate volume. From a bidding point of view, any additional material for compensation of slopes should be added in if it is warranted.
- Q. Section 02272, 2.3D: Is the transmissivity requirement for Type 'A' Geonet Composite the same as for Type 'B' geonet composite?
- A. Yes, refer to the addendum.
- Q. Section 02272, 1.4.2.B: Will subcontracted experience for geomembrane liner installation be acceptable:
- A. Projects involving subcontracted installation experience will be accepted for the manufacturers installers when the manufacturer retained contractual responsibility for the installation and provided supervisory and CQA personnel during the installation work.

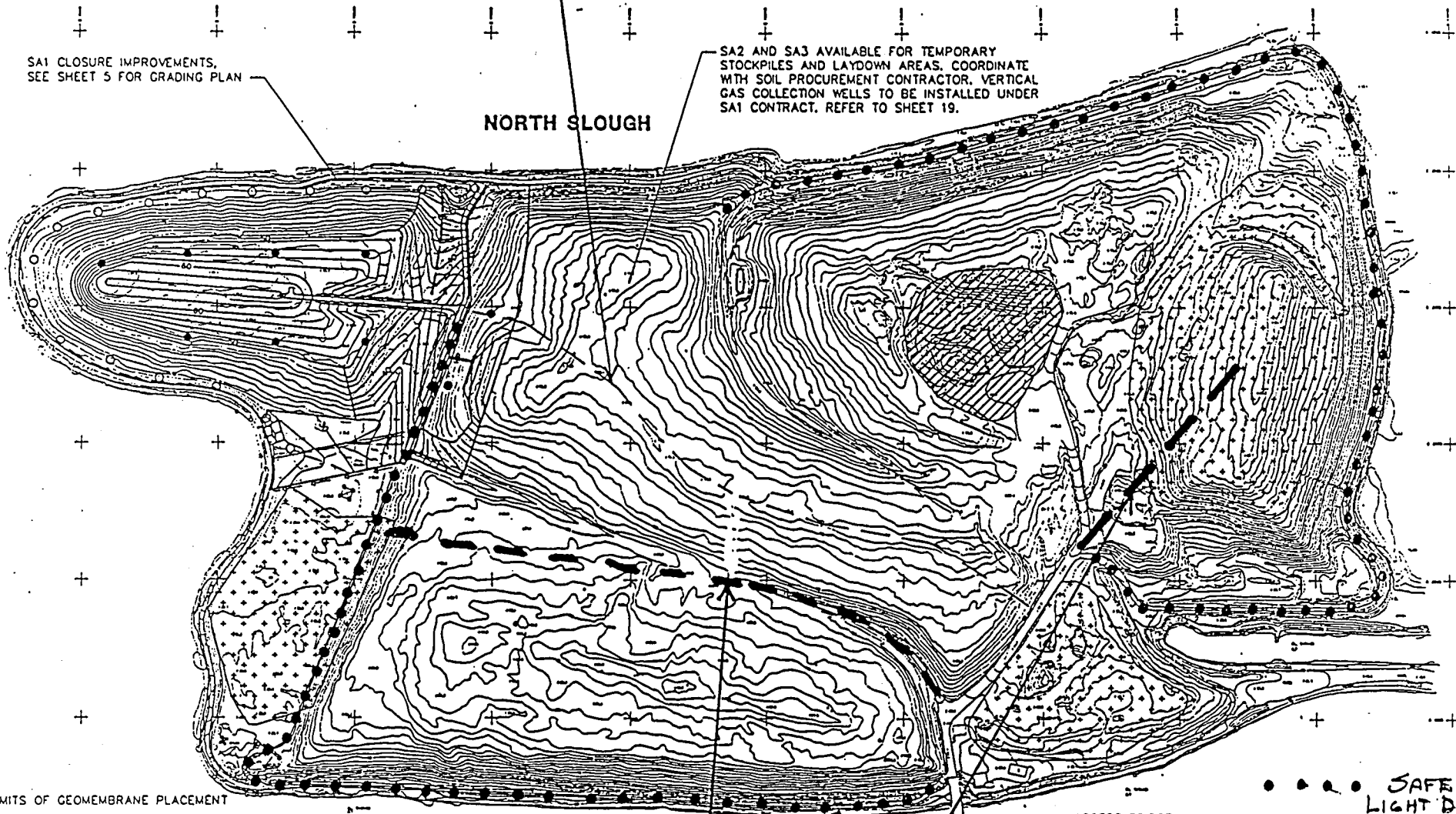
FILE: STJOHNCLOSE.SA\ADDENDUM.1\Q&A.DOC

DELETE  
SEE ADDENDUM No. 1

SA1 CLOSURE IMPROVEMENTS,  
SEE SHEET 5 FOR GRADING PLAN

SA2 AND SA3 AVAILABLE FOR TEMPORARY  
STOCKPILES AND LAYDOWN AREAS. COORDINATE  
WITH SOIL PROCUREMENT CONTRACTOR. VERTICAL  
GAS COLLECTION WELLS TO BE INSTALLED UNDER  
SA1 CONTRACT. REFER TO SHEET 19.

NORTH SLOUGH



LIMITS OF GEOMEMBRANE PLACEMENT WORK, BY OTHERS

CONSTRUCTION DEBRIS DISPOSAL AREA, BY OTHERS

EXTRACTION WELL, PROTECT IN PLACE, SEE SHEETS 16-18 FOR EXACT LOCATIONS

GAS COLLECTION TRENCH RISER; PROTECT IN PLACE, SEE SHEETS 16-18 FOR EXACT LOCATIONS

COLUMBIA SLOUGH

APPROXIMATE LOCATION OF  
TEMPORARY HAUL ROAD BY  
SOIL PROCUREMENT CONTRACTOR

ACCESS BRIDGE

NOTE:

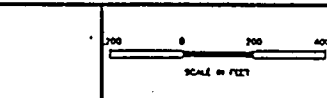
SA1 CONTRACTOR SHALL DETERMINE CONSTRUCTION ACCESS NEEDS  
AND SHALL PLAN TO CONSTRUCT SEPARATE HAUL ROAD TO ACCESS SA1.

SAFE FOR  
LIGHT DUTY  
ACCESS AND  
VEHICLES ONLY

DESIGNED BY	NAME	DATE
ONE CHECKED	ACA	11/91
ONE CHECKED	BA	11/91
ONE CHECKED	ACA	11/91
ONE CHECKED	BA	11/91
DESIGN REVIEW BY	DMF	11/91



METROPOLITAN SERVICE DISTRICT  
Solid Waste Department  
Jim Watkins, Engineering Manager  
Dennis O'Neil, Project Manager



ST. JOHN'S LANDFILL  
CLOSURE OF SUBAREA 1  
CONSTRUCTION SITE PLAN

DATE	4
OF	30
DATE	DECEMBER 1991
NO	19190304

ATTACHMENT B

to the  
Questions and Answers  
for the St. Johns Landfill closure of Subarea 1  
RFB # 91B-49-SW

Source: "1980 Contract Documents for Operation of the St. Johns Landfill", May 1980, CH2M Hill.

2.11 PLACEMENT OF COVER MATERIAL. The Contractor shall place and compact a minimum of six (6) inches of compacted cover material on all exposed refuse at the end of each working day. This shall be termed "daily cover." The daily cover shall be placed as close to closing time as is feasible, but in no instance shall placement of daily cover be completed prior to 4:00 p.m. each working day.

The Contractor shall place and compact a minimum of twenty-four (24) inches of compacted approved final cover material on the final lift of compacted refuse. This shall be termed "final cover."

All daily cover material shall be compacted in layers not exceeding six (6) inches of compacted thickness, and each layer shall be compacted by an adequate number of passes of suitable equipment, provided that all portions of the layer shall have been compacted a minimum of twice. Daily cover

material used shall be obtained by the Contractor and shall be an inorganic soil material that has a permeability of not greater than  $1 \times 10^{-3}$  cm/sec, no foreign or deleterious objects greater than 3 inches in any dimension, or other material that is acceptable to the Owner and approved in writing by the Department of Environmental Quality. Copies of these approvals must be submitted to the Owner prior to use. Contractor shall pay for all tests required to gain necessary acceptance and approvals.

An emergency stockpile of daily cover material shall be maintained near the working face of the refuse fill at all times and shall contain an adequate amount of cover material to provide cover for at least seven (7) days of operation during emergency conditions. The location and quantity of the emergency stockpile shall be coordinated and approved by the Owner. The required cover material shall be maintained at all times.

Final cover material used shall be obtained by the Contractor and shall be an inorganic soil material containing no foreign or deleterious objects greater than three (3) inches in any dimension, which has a permeability of not greater than  $1 \times 10^{-6}$  cm/sec, measured on samples at 92 percent AASHTO T-99 maximum dry density, and is acceptable to the Owner and approved in writing by the Department of Environmental Quality. Copies of these approvals must be submitted to the Owner prior to use. Contractor shall pay for all tests required to gain necessary acceptance and approvals.



**BID BOOK**  
**ST. JOHNS LANDFILL**  
**CLOSURE OF SUBAREA 1**  
**RFB #91B-49-SW**

Revised February 1992

Metropolitan Service District  
Solid Waste Department  
2000 S.W. First Avenue  
Portland, Oregon 978201-5398

SECTION 00300

BID FORMS

**NOTE TO BIDDER:** Bidders must provide all of the information requested in this Bid. Bidder should preferably type or use **BLACK** ink for completing this Bid.

To: Metropolitan Service District  
Address: 2000 S.W. First Avenue, Portland, OR 97201-5398  
Contract: St. Johns Landfill Closure of Subarea 1  
Bidder:  
Address:  
Bidder's Contact:  
Date: Telephone: ( )

**BIDDER'S DECLARATION AND UNDERSTANDING**

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of Metro, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Contract.

The Bidder further declares that it has carefully examined the Contract Documents for the completion of the Work, has personally inspected the Site, has satisfied itself as to the Work involved, and that this Bid is made in accordance with the provisions and under the terms of the Contract Documents which are hereby made a part of this Bid.

Any printed matter on any letter or paper enclosed herewith which is not part of the Bidding Documents or which was not requested by Metro is not to be considered a part of this Bid, and the undersigned agrees that such printed matter shall be entirely disregarded and, notwithstanding such printed matter, that the Bid is a bid to do the Work and furnish the labor and materials and all other things required by the Contract Documents strictly within the time and in accordance with such Specifications. This Bid is irrevocable for sixty (60) days following the date of the opening of Bids.

**BID SECURITY**

Bid security in the form of a certified check, cashier's check or bid bond as further described in the Instructions for Bidders and in the amount of ONE HUNDRED THOUSAND DOLLARS (\$100,000.00) is enclosed herewith and is subject to all the conditions stated in the Instructions for Bidders.

## CONTRACT EXECUTION, BONDS AND INSURANCE

The Bidder agrees that if this Bid is accepted, it will, within seven (7) days after Notice of Conditional Award, sign the Construction Agreement in the form annexed hereto, and will at that time deliver to Metro the Performance Bond and the Labor and Materials Payment Bond required herein and in the form annexed hereto, along with all certificates of insurance and certified copies of insurance policies specified and required in these Contract Documents, and will, to the extent of its Bid, furnish all machinery, tools, apparatus, and other means of operation and construction and do the Work and furnish all the materials necessary to complete all Work as specified or indicated in the Contract Documents.

## COMMENCEMENT OF WORK AND CONTRACT COMPLETION TIME

The time frame for the award and execution of this Contract shall be as described in the Instructions for Bidders and other Contract Documents. The Successful Bidder further agrees to commence the Work within ten (10) days of issuance of the Notice to Proceed and to diligently prosecute the Work to its final completion in accordance with the Contract Documents.

## ADJUSTED PAYMENTS

In the event the Bidder is awarded the Contract and fails to complete the Work in compliance with the time required by the Contract Documents, adjusted payments shall be paid to Metro as described in the General Conditions.

## SALES AND USE TAXES

The Bidder agrees that all applicable federal, state and local sales and use taxes are included in the stated bid prices for the Work.

## LUMP SUM AND UNIT PRICE WORK

The Bidder further proposes to accept as full payment for the Work proposed herein the amounts computed under the provisions of the Contract Documents and based on the listed lump sum and unit price amounts. The amounts shall be shown in both words and figures. In case of a discrepancy, the amount shown in words shall govern.

## PREVAILING WAGES FOR PUBLIC WORK

Bidder hereby certifies that the provisions of ORS 279.350, regarding prevailing wages, shall be complied with on this project.

SCHEDULE OF BID PRICES

The Bidder, whose legal signature binding the Bidder to the bid prices indicated on these pages is found on the signature page, hereby bids as follows:

**NOTE: If any of the items listed on the Bid Schedule contain "recycled product" (See Appendix), the Bidder shall specify the amounts of such product in an attachment to the Bid Form. If no attachment is included, the amount of "recycled product" in the items listed will be considered to be zero for the purpose of this Bid. Metro reserves the right to reject any or all Bids.**

\* \* \* BASE BID \* \* \*

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
1.	1 L.S.	Mobilization		
<u>(Per Lump Sum)</u>			\$	\$
		(Words)	(Figures)	
2.	1 L.S.	Site Safety and Health Program		
<u>(Per Lump Sum)</u>			\$	\$
3.	30,000 C.Y.	Existing Topsoil Removal		
<u>(Per Cubic Yard)</u>			\$	\$
4.	20,000 C.Y.	Imported Topsoil		
<u>(Per Cubic Yard)</u>			\$	\$
5.	130,000 Ton	Procure and Deliver Type 1 Sand Material		
<u>(Per Ton)</u>			\$	\$

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
6.	85,000 C.Y.	Place Type 1 Sand		
	(Per Cubic Yard)	(Words)	\$ (Figures)	\$
7.	70,000 S.Y.	Geonet Composite, Type A		
	(Per Square Yard)		\$	\$
8.	105,000 S.Y.	Geonet Composite, Type B		
	(Per Square Yard)		\$	\$
9.	105,000 S.Y.	Geomembrane, 40 mil, Smooth		
	(Per Square Yard)		\$	\$
10.	70,000 S.Y.	Geomembrane, 40 mil, Textured		
	(Per Square Yard)		\$	\$
11.	20,000 S.Y.	Bentonite Mat		
	(Per Square Yard)		\$	\$
12.	70,000 S.Y.	Construction of Low Permeable Soil for Type 'A' Cover		
	(Per Square Yard)		\$	\$

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
12A.	20,000 Tons	Procure and Deliver Imported Low Permeable Soil		
(Per Ton)		(Words)	\$	\$
12B.	15,000 S.Y.	Compact Additional Low Permeable Soil in Type 'A' Cover Areas		
(Per Square Yard)			\$	\$
13.	90,000 S.Y.	Construction of Low Permeable Soil for Type 'B' Cover		
(Per Square Yard)			\$	\$
14.	35 Acre	Hydroseeding		
(Per Acre)			\$	\$
15.	180,000 Ton	Procure and Deliver Subgrade Embankment Material		
(Per Ton)			\$	\$
16.	120,000 C.Y.	Compact Subgrade Embankment		
(Per Cubic Yard)			\$	\$
17.	3,500 C.Y.	Roadway Embankment		
(Per Cubic Yard)			\$	\$

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
18.	600 C.Y.	Crushed Surfacing Base Course		
<u>(Per Cubic Yard)</u>			\$	\$
		(Words)	(Figures)	
19.	5 EA.	Remove Existing Culverts		
<u>(Per Each)</u>			\$	\$
20.	1,200 C.Y.	Excavation for Sedimentation Basin		
<u>(Per Cubic Yard)</u>			\$	\$
21.	400 L.F.	18-Inch CMP Culvert		
<u>(Per Lineal Foot)</u>			\$	\$
22.	150 L.F.	27-Inch CMP Culvert		
<u>(Per Lineal Foot)</u>			\$	\$
23.	4,000 L.F.	4-Inch PVC Perforated Underdrain Pipe		
<u>(Per Lineal Foot)</u>			\$	\$
24.	3,500 L.F.	6-Inch PVC Perforated Underdrain Pipe		
<u>(Per Lineal Foot)</u>			\$	\$

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
25.	500 L.F.	8-Inch PVC Perforated Underdrain Pipe		
<u>(Per Lineal Foot)</u>			\$	\$
		(Words)	Figures)	
26.	1 EA.	Outlet Structure		
<u>(Per Each)</u>			\$	\$
27.	2 EA.	Storm Drain Manhole		
<u>(Per Each)</u>			\$	\$
28.	1 EA.	18" Parshall Flume w/Access Manhole		
<u>(Per Each)</u>			\$	\$
29.	250 L.F.	Fence		
<u>(Per Lineal Foot)</u>			\$	\$
30.	200 C.Y.	Quarry Spalls		
<u>(Per Cubic Yard)</u>			\$	\$
31.	12,000 S.Y.	Erosion Control Mat		
<u>(Per Square Yard)</u>			\$	\$



<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
32.	150 EA.	Strawbale Sedimentation Barriers		
<u>(Per Each)</u>			\$	\$
		(Words)	Figures)	
33.	2,000 L.F.	Sediment Fencing		
<u>(Per Lineal Foot)</u>			\$	\$

**TOTAL BASE BID \$** \_\_\_\_\_

\* \* \* ALTERNATE BID No. 1 \* \* \*

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
A1.	950 V. F.	Gas Extraction Well, Single Completion		
(Per Vertical Foot)			\$	\$
A2.	360 V.F.	Gas Extraction Well, Double Completion		
(Per Vertical Foot)			\$	\$
A3.	3,600 L.F.	Horizontal Gas Trenches		
(Per Lineal Foot)			\$	\$
A4.	1 EA.	Wellhead Completions, Type 1		
(Per Each)			\$	\$
A5.	8 EA.	Wellhead Completions, Type 2		
(Per Each)			\$	\$
A6.	16 EA.	Wellhead Completions, Type 4		
(Per Each)			\$	\$

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
A7.	3,700 L.F.	3" HDPE-LFG		
(Per Lineal Foot)		(Words)	\$	\$
A8.	2,000 L.F.	4" HDPE-LFG		
(Per Lineal Foot)			\$	\$
A9.	2,500 L.F.	6" HDPE-LFG		
(Per Lineal Foot)			\$	\$
A10.	3,200 L.F.	4" HDPE-C, Buried		
(Per Lineal Foot)			\$	\$
A11.	1,700 L.F.	1" PVC-V, Buried		
(Per Lineal Foot)			\$	\$
A12.	1,800 L.F.	2" PVC-D, Buried		
(Per Lineal Foot)			\$	\$
A13.	50 L.F.	6" D.I. Casing		
(Per Lineal Foot)			\$	\$

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
A14.	150 L.F.	8" D.I. Casing		
<u>(Per Lineal Foot)</u>			<u>\$</u>	<u>\$</u>
		(Words)	(Figures)	
A15.	100 L.F.	10" D.I. Casing		
<u>(Per Lineal Foot)</u>			<u>\$</u>	<u>\$</u>
A16.	23 EA.	Adjustable Pipe Supports		
<u>(Per Each)</u>			<u>\$</u>	<u>\$</u>
A17.	4 EA.	Adjustable Pipe Supports w/ Guide (G1)		
<u>(Per Each)</u>			<u>\$</u>	<u>\$</u>
A18.	115 EA.	Pipe Guides (G2)		
<u>(Per Each)</u>			<u>\$</u>	<u>\$</u>
A19.	9 EA.	Pipe Anchor		
<u>(Per Each)</u>			<u>\$</u>	<u>\$</u>
A20.	15 EA.	Bollards		
<u>(Per Each)</u>			<u>\$</u>	<u>\$</u>

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
A21.	5 EA.	3" Expansion Joint		
<u>(Per Each)</u>		<u>(Words)</u>	<u>\$</u>	<u>\$</u>
			<u>(Figures)</u>	
A22.	1 EA.	4" Butterfly Valve		
<u>(Per Each)</u>			<u>\$</u>	<u>\$</u>
A23.	2 EA.	6" Butterfly Valve		
<u>(Per Each)</u>			<u>\$</u>	<u>\$</u>
A24.	9 EA.	Vacuum Valve Stations		
<u>(Per Each)</u>			<u>\$</u>	<u>\$</u>
A25.	1 EA.	Vacuum Pump Station		
<u>(Per Each)</u>			<u>\$</u>	<u>\$</u>
A26.	1 EA.	Remote Condensate Pump Station		
<u>(Per Each)</u>			<u>\$</u>	<u>\$</u>
A27.	2 EA.	4" Condensate Drip Leg Fitting		
<u>(Per Each)</u>			<u>\$</u>	<u>\$</u>

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
A28.	7 EA.	6" Condensate Drip Leg Fitting		
(Per Each)		(Words)	\$	\$
A29.	16 EA.	Condensate Cleanouts		
(Per Each)			\$	\$
A30.	40 L.F.	Electrical Ductbank, Type 2		
(Per Lineal Foot)			\$	\$
A31.	1,600 L.F.	Electrical Ductbank, Type 3		
(Per Lineal Foot)			\$	\$
A32.	1 L.S.	Electrical Service		
(Per Lump Sum)			\$	\$
A33.	2,500 L.F.	Temporary 4" PVC Gas Collection Pipe		
(Per Lineal Foot)			\$	\$
A34.	200 L.F.	Temporary 2" PVC Condensate Discharge Pipe		
(Per Lineal Foot)			\$	\$

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Description of Item</u>	<u>Unit Price</u>	<u>Total Cost</u>
A35.	1 EA.	Temporary Condensate Manhole		
<u>(Per Each)</u>			\$	\$
		(Words)	(Figures)	
A36.	1 EA.	Temporary Gas Flare		
<u>(Per Each)</u>			\$	\$
A37.	400 HR.	Laborers for Temporary System Construction		
<u>(Per Man-Hour)</u>			\$	\$
A38.	120 HR.	Operator and Equipment for Temporary System Construction		
<u>(Per Man-Hour)</u>			\$	\$

**TOTAL ALTERNATE NO. 1 BID \$** \_\_\_\_\_

\*\*\*\*\*

**TOTAL BASE BID AMOUNT \$** \_\_\_\_\_  
**FROM PAGE 00300-8**





**ADDENDA**

The Bidder is presumed to have read and hereby acknowledges receipt and acceptance of Addenda Numbers:

(Insert No. and Date of Each Addendum Received)

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**SURETY**

If the Bidder is awarded a Contract on this Bid, the surety or sureties who provide(s) the Performance Bond and Labor and Materials Payment Bond will be:

**SURETY**

**ADDRESS**

1.

2.

**DISADVANTAGED BUSINESS PROGRAM COMPLIANCE FORM**

(To be submitted with Bid.)

Name of Metro Project: St. Johns Landfill Closure of Subarea 1

Name of Bidder: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

In accordance with Metro's Disadvantaged Business Program, the above-named Bidder has accomplished the following:

- \_\_\_ 1. Has fully met the contract goals and will subcontract \_\_\_ percent of the Bid Amount to DBEs and \_\_\_ percent to WBEs.
- \_\_\_ 2. Has partially met the contract goals and will subcontract \_\_\_ percent of the Bid Amount to DBEs and \_\_\_ percent to WBEs. Bidder has made good faith efforts prior to Bid opening to meet the full goals and will submit documentation of the same to Metro within twenty-four (24) hours of Metro's request.
- \_\_\_ 3. Will not subcontract any of the Bid Amount to DBEs or WBEs but has made good faith efforts prior to Bid opening to meet the contract goals and will submit documentation of such good faith efforts to Metro within twenty-four (24) hours of Metro's request.

**RESIDENT/NON-RESIDENT BIDDER STATUS**

Oregon law requires that Metro, in determining the lowest responsive Bidder, must add a percent increase on the Bid of a non-resident Bidder equal to the percent, if any, of the preference given to that Bidder in the state in which that Bidder resides. Consequently, each Bidder must indicate whether it is a resident or non-resident Bidder. A resident Bidder is a Bidder that has paid unemployment taxes or income taxes in the state of Oregon during the twelve (12) calendar months immediately preceding submission of this Bid, has a business address in Oregon, and has stated in its Bid that the Bidder is a "resident Bidder." A "non-resident Bidder" is a Bidder who is not a resident Bidder (ORS 279.029).

The undersigned Bidder states that it is: (check one)

1. A resident Bidder \_\_\_\_\_
2. A non-resident Bidder \_\_\_\_\_

Indicate state in which Bidder resides: \_\_\_\_\_

**SIGNATURE PAGE**

The name of the Bidder submitting this Bid is \_\_\_\_\_  
doing business at

\_\_\_\_\_  
Street City State Zip

which is the full business address to which all communications concerned with this Bid and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Bid, or of all of the partners, if the Bidder is a partnership or joint venture, or of all persons interested in this Bid as individuals are as follows:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If Individual

IN WITNESS hereto the undersigned has set his/her hand this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_.

\_\_\_\_\_  
Signature of Bidder

\_\_\_\_\_  
Printed Name of Bidder

\_\_\_\_\_  
Title

If Partnership or Joint Venture

IN WITNESS hereto the undersigned has set his/her hand this \_\_\_\_ day of \_\_\_\_\_, 19\_\_.

\_\_\_\_\_  
Name of Partnership or Joint Venture

By: \_\_\_\_\_

\_\_\_\_\_  
Printed Name of Person Signing

Title: \_\_\_\_\_

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this \_\_\_\_ day of \_\_\_\_\_, 19\_\_.

\_\_\_\_\_  
Name of Corporation

\_\_\_\_\_  
State of Incorporation

By: \_\_\_\_\_

\_\_\_\_\_  
Printed Name of Person Signing

Title: \_\_\_\_\_

NON-COLLUSION AFFIDAVIT

STATE OF \_\_\_\_\_)

County of \_\_\_\_\_)

I state that I am \_\_\_\_\_(Title) of \_\_\_\_\_ (Name of Bidder) and that I am authorized to make this Affidavit on behalf of the Bidder. I am the person authorized by the Bidder and responsible for the price(s) and the amount of this Bid.

I state that:

- (1) The price(s) and amount of this Bid have been arrived at independently and without consultation, communication or agreement with any other contractor, Bidder or potential Bidder, except as disclosed in the attached appendix.
- (2) Neither the price(s) nor the amount of this Bid, and neither the approximate price(s) nor approximate amount of this Bid, have been disclosed to any other person who is a Bidder or potential Bidder, and they will not be disclosed before bid opening.
- (3) No attempt has been made or will be made to induce any person to refrain from bidding on this contract, or to submit a Bid higher than this Bid, or to submit any intentionally high or non-competitive bid or other from of complementary Bid.
- (4) This Bid is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any person to submit a complementary or other noncompetitive Bid.
- (5) \_\_\_\_\_ (Name of Bidder), its affiliates, subsidiaries, officers, directors and employees (as applicable) are not currently under investigation by any governmental agency and have not in the last four years been convicted of or found liable for any act prohibited by state or federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract, except as listed and described in the attached appendix.

I state that I and \_\_\_\_\_ (Name of Bidder) understand and acknowledge that the above representations are material and important, and will be relied on by Metro in awarding the Contract for which this Bid is submitted. Any misstatement in this Affidavit will be treated as fraudulent concealment from Metro of the true facts relating to the submission of Bids for this Contract.

\_\_\_\_\_  
Signature of Affiant

\_\_\_\_\_  
Printed Name of Affiant

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_.

\_\_\_\_\_  
Notary Public for \_\_\_\_\_

My Commission Expires:     /     /

BID BOND

(NOTE: BIDDERS MUST USE THIS FORM, NOT A SURETY COMPANY FORM)

KNOW ALL MEN BY THESE PRESENTS:

We the undersigned, \_\_\_\_\_, as PRINCIPAL, and \_\_\_\_\_, a corporation organized and existing under and by virtue of the laws of the state of \_\_\_\_\_ and duly authorized to do surety business in the state of Oregon and name on the current list of approved surety companies acceptable on federal bonds and conforming with the underwriting limitations as published in the Federal Register by the audit staff of the Bureau of Accounts and the U.S. Treasury Department and is of the appropriate class for the bond amount as determined by Best's Rating System, as SURETY, hereby hold and firmly bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, unto the METROPOLITAN SERVICE DISTRICT, as OBLIGEE, in the sum of ONE HUNDRED THOUSAND DOLLARS (\$ 100,000) in lawful money of the United States of America, for the payment of which sum well and truly to be made as agreed and liquidated damages.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT whereas the PRINCIPAL has submitted to the Metropolitan Service District a certain Bid for work required for the St. Johns Landfill Closure of Subarea 1, which work is specifically described in the accompanying Bid;

NOW, THEREFORE, if the Metropolitan Service District does not award a contract to the PRINCIPAL within the time specified in the Instructions to Bidders for the work described in said Bid, or in the alternate, if said Bid shall be accepted and the PRINCIPAL, within the time and in the manner described under the Contract Documents, enters into a written contract in accordance with the Bid, files the two bonds, one guaranteeing faithful performance of the work to be done and the other guaranteeing payment for labor and materials as required by law, and files the required certified copies of insurance policies and certificates of insurance, then the obligation shall be null and void; otherwise, the same shall remain in full force and effect.

The SURETY, for value received, hereby stipulates and agrees that the obligation of said SURETY and this bond shall be in no way impaired or affected by any extension of the time within which the Metropolitan Service District may accept such Bid; and said SURETY does hereby waive notice of any such extension.

If more than one surety is on this bond, each surety hereby agrees that it is jointly and severally liable for all obligations on this bond.

IN WITNESS WHEREOF, we have hereunto set our hands and seals \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_.

\_\_\_\_\_  
SURETY  
By: \_\_\_\_\_  
Title: \_\_\_\_\_  
\_\_\_\_\_  
PRINCIPAL  
By: \_\_\_\_\_  
Title: \_\_\_\_\_

**DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION FORM**

1. Name of Metro Project: The St. Johns Landfill Closure of Subarea 1
2. Name of Bidder \_\_\_\_\_  
Address \_\_\_\_\_
3. The above-named Bidder intends to subcontract \_\_\_\_ percent of the Bid to the following Disadvantaged Business Enterprises (DBEs):

Names, Contact Persons, Addresses  
and Phone Numbers of DBE Firms  
Bidder Anticipates Utilizing

Nature of  
Participation

Dollar Value of  
Participation

Names, Contact Persons, Addresses and Phone Numbers of DBE Firms Bidder Anticipates Utilizing	Nature of Participation	Dollar Value of Participation
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total DBE Participation Amount \_\_\_\_\_

Amount of Base Bid \_\_\_\_\_

DBE Percent of Base Bid \_\_\_\_\_

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

**THIS FORM IS TO BE COMPLETED, SIGNED AND SUBMITTED WITHIN 24 HOURS OF REQUEST BY METRO**



**WOMEN BUSINESS ENTERPRISES UTILIZATION FORM**

1. Name of Metro Project: The St. Johns Landfill Closure of Subarea 1

2. Name of Bidder \_\_\_\_\_

Address \_\_\_\_\_

3. The above-named Bidder intends to subcontract \_\_\_\_ percent of the Bid to the following Women Business Enterprises (WBEs):

**Names, Contact Persons, Addresses  
and Phone Numbers of WBE Firms  
Bidder Anticipates Utilizing**

**Nature of  
Participation**

**Dollar Value of  
Participation**

<b>Names, Contact Persons, Addresses and Phone Numbers of WBE Firms Bidder Anticipates Utilizing</b>	<b>Nature of Participation</b>	<b>Dollar Value of Participation</b>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Total WBE Participation Amount** \_\_\_\_\_

**Amount of Base Bid** \_\_\_\_\_

**WBE Percent of Base Bid** \_\_\_\_\_

\_\_\_\_\_  
**Authorized Signature**

\_\_\_\_\_  
**Title**

\_\_\_\_\_  
**Date**

**THIS FORM IS TO BE COMPLETED, SIGNED AND SUBMITTED WITHIN 24 HOURS OF REQUEST BY METRO**

## SOLID WASTE COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 92-1588, FOR THE PURPOSE OF AUTHORIZING THE EXECUTIVE OFFICER TO ENTER INTO A CONTRACT WITH L & H GRADING, INC FOR WORK ASSOCIATED WITH THE CLOSURE OF SUB-AREA 1 OF THE ST. JOHNS LANDFILL

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Date: March 19, 1992

Presented by: Councilor McFarland

Committee Recommendation: At the March 17 meeting, the Committee voted unanimously to recommend Council adoption of Resolution No. 92-1588. Voting in favor: Councilors Buchanan, Hansen, McFarland, Van Bergen and Wyers.

Committee Issues/Discussion: Dennis O'Neil and Linda Pang-Wright, Engineering and Analysis Staff, explained the staff report and the proposed contract. The contract will result in the installation of a cover system in sub-area 1 and a small portion of sub-area 2 at the St. Johns Landfill. The contractor also will install a gas collection system to facilitate methane gas recovery at the landfill. The successful bid was \$4,389,300.

O'Neil explained the nature of the multi-layer cover system that will be used at the landfill. The system is designed to prevent seepage into the landfill and provide a thick enough layer to protect the growth of a variety of vegetative cover.

Councilor McFarland asked about the nature of proposed vegetative cover and expressed interest in the use of a broad variety of native plants and grasses. O'Neil responded that staff is exploring the use of many different types of plants and grasses and that the benefits of using native materials will be actively addressed.

Councilor DeJardin asked about the maintenance of the plants and grasses that will be used, particularly whether the grasses will need to be frequently mowed. O'Neil noted that maintenance issues would be explored as options for vegetative cover were considered.

Pang-Wright reviewed the contracting process, noting that the basic contract was for the cover-related work and that potential bidders had the option of bidding to install the gas collection system. A total of four bids were received and each included a bid to install the gas collection system. The winning bid was about \$20,000 lower than the next highest bid. Pang-Wright noted that the successful bidders prior work and references were very good and that no regulatory claims were pending against the firm.

Councilor Van Bergen expressed concern about the use of yard debris in the cover material because of the potential for damage to the geomembrane. O'Neil noted that this potential problem would be carefully addressed. Van Bergen also noted that the use of yard debris could introduce a broad variety of weed seeds on to the landfill site. O'Neil responded that Metro would set criteria concerning the nature of the yard debris material that could be used to control to introduction of weeds.

## STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 92-1588 FOR THE PURPOSE OF AUTHORIZING THE EXECUTIVE OFFICER TO ENTER INTO A CONTRACT WITH L & H GRADING, INC. FOR WORK ASSOCIATED WITH THE ST. JOHNS LANDFILL CLOSURE OF SUBAREA 1

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Date: March 9, 1992

Presented by: Linda Pang-Wright  
Dennis O'Neil

## PROPOSED ACTION

Adopt Resolution No. 92-1588 to authorize the Executive Officer to execute a contract with L & H Grading, Inc. the apparent lowest responsive, responsible bidder for work associated with and including the St. Johns Landfill Closure of Subarea 1. The Contract is recommended for award conditioned upon receipt of Performance Bond, Insurance Certificates, Public Utilities Commission Certification of Contractor and Subcontractors, and other bid document submittal requirements.

## FACTUAL BACKGROUND AND ANALYSIS

The primary method to control ground water and surface water contamination from St. Johns Landfill is to construct an impervious cap over the existing solid waste. Metro has solicited bids to construct an improved, multi-layered cover system and associated landfill gas and stormwater systems in a portion of the landfill in 1992. Construction of this cover is the first phase of construction of the final cover for the entire landfill. Construction of a gas collection system in Subarea 1 and adjacent Subarea 2 were included as a required alternate in this bid. This alternate allowed Metro the option of using one of the bidders or one of the methane gas recovery project proposers for construction of the gas collection system. A soil pulverization step was also included as a bid alternate pending further negotiations with DEQ staff.

Following Council approval, a Request for Bids was issued on January 13, 1992. Advertisements were published in Portland, Seattle, and Idaho newspapers and sent to a list of potentially interested parties. A prebid conference was held on January 27, 1992. The purpose of this conference was to present highlights of the project, review Metro requirements and to receive questions from interested parties. Representatives from approximately 40 businesses attended the prebid conference.

A total of two addenda to the Request for Bids document were issued. Most items in these addenda were changes in language that responded to questions and comments by bidders or other government agencies. In Addendum #1, the soil pulverization step was deleted as a bid alternate because Metro convinced DEQ staff that the procedure was not desirable.

Four bid submittals were received and opened during a public bid opening meeting on February 28, 1992. As required, all Bidders submitted bids for the Base Bid and Alternate #1 Bid. The Bidders are listed below in descending order based on their total bid prices. (The numbers below include the correction of a mathematical error in the Kiewit Pacific Co. bid.)

BIDDER	BASE BID, \$	ALT. NO. 1 BID, \$	TOTAL BID, \$
L & H Grading, Inc.	3,786,700.00	602,600.00	4,389,300.00
Ground Improvement Techniques, Inc.	3,841,368.81	568,607.89	4,409,976.70
Kiewit Pacific Co.	4,022,800.00	550,580.00	4,573,380.00
Tri-State Construction, Inc.	4,416,675.00	559,540.00	4,976,215.00

Because negotiations are in a preliminary stage with a proposer interested in recovering energy from the landfill gas, Metro staff has decided to include construction of the gas collection system in Subareas 1 and 2 as part of this contract. Therefore the price for Alternate #1 was included in determining the award of the contract.

The apparent lowest responsible, responsive bidder is L & H Grading, Inc. L & H has indicated that they will utilize recycled product during the construction of the final cover in Subarea 1. Recycled products include a geonet composite that will contain recycled plastic and imported topsoil which will include 50% yard debris compost. In addition, L&H Grading, Inc. will voluntarily subcontract work to DBE and WBE firms.

**BUDGET IMPACT**

It is expected that this work will begin in May 1992 and last for approximately six months. In the FY1991-92 budget, \$1,665,000 is allocated for work to be performed during May and June 1992. The remaining funds will come from the FY1992-93 budget after it is approved by the Metro Council.

**EXECUTIVE OFFICER RECOMMENDATION**

The Executive Officer recommends that a contract be awarded to L & H Grading, Inc.



**METRO**

2000 S.W. First Avenue  
Portland, OR 97201-5398  
503/221-1646

# Memorandum

**DATE:** March 11, 1992

**TO:** Solid Waste Committee Members  
Interested Parties

**FROM:** Marilyn Geary-Symons <sup>MP</sup> Committee Clerk

**RE:** RESOLUTION NO. 92-1588, For the Purpose of Authorizing the Executive Officer to Enter Into a Contract with L & H Grading, Inc. for Work Associated with the Closure of Sub-Area 1 of the St. Johns Landfill

The Request for Bids referred to above, Metro RFB #91B-49-SW, was filed with by the Solid Waste Department with the Council Office for the Solid Waste Committee meeting of January 7, 1992, and has been made a part of the permanent January 7, 1992 meeting record. The addenda to the RFB have been included in the current agenda packet as part of Resolution No. 92-1588, Agenda Item No. 2 for the Solid Waste Committee meeting of March 17, 1992.

Additional copies may be obtained through the Council Department, x192.