STANDBY CONTRACT WORK ASSIGNMENT TYPE OF CONTRACT: COST PLUS FIXED FEE

Site Name and Number: Trimmer Rd Landfill, Site No. 8-28-012 NYSDEC Project Manager: George F. Momberger, P.E.

I. Narrative

A. General Site Information:

The Trimmer Road Landfill Site encompasses approximately 60 acres, consisting of a 40 acre unlined landfill, and a 10 acre pond. The landfill was privately owned and operated until approximately 1983. A Phase II investigation was completed in 1986 and due to the low levels of contaminants found (chlorinated solvents and metals) the site was delisted. Additional investigation of the downgradient groundwater noted exceedences of groundwater standards and the site was relisted as a Class 2 in 1997.

A Record of Decision (ROD) was issued in March 2001. The remedy selected requires construction of evapotranspirative vegetative covers to: (1) reduce infiltration into the waste mass and (2) retard shallow ground water flow in three seep areas external to the landfill area.

Construction of the evapotranspirative vegetative cover above the waste mass will be divided into two phases. Phase one, a three year pilot study, will consist of the construction, operation, maintenance, and monitoring, and evaluation of three test plots to determine the optimum design criteria. Phase two will consist of the construction of the evapotranspirative vegetative cover over the waste mass based on results of the phase one study.

This construction contract will provide for: (1) placement of an evapotranspirative vegetative cover over three offsite seep areas, (2) construction of three evapotranspirative vegetative cover test plots on the landfill surface, and (3) the operation, maintenance, and monitoring of the test plots. The contract will have two separate parts; designated as A and B.

Part A, to include the placement of an evapotranspirative vegetative cover over three offsite seep areas and construction of three evapotranspirative vegetative cover test plots on the landfill surface, shall be Substantially Completed within three hundred and thirty (330) days from the date established in the Notice to Proceed. The time frame for completion of Part A will include a winter shutdown from approximately Dec 15, 2006 through March 15, 2007 to allow for planting of trees in the spring of 2007 when planting conditions are optimal.

Part B will provide for the operation, maintenance, and monitoring of: (1) the three offsite evapotranspirative covers and (2) the three cover test plots. Part B will start at substantial completion of Part A and run for a period of three years. Part B shall be Substantially Completed within one thousand four hundred sixty (1460) days

from the date established in the Notice to Proceed.

This work assignment is for the provision of construction management and inspection services during the remedial action (Part A of the construction contract).

B. Scope of Work

The Department does not have the staff to provide adequate inspection during critical stages of construction at the site and requires services from the standby consulting engineer to comply with the requirements of TAGM #4011. These services include liaison work between the Department and contractor on issues related to the project, quality review of construction, inspecting the work, complete record keeping for all pertinent activities, and review of all documents implementing and documenting the work.

During the construction phase, the Engineer shall perform all on-site responsibilities necessary for the successful completion of the contract entered into between the Department and the construction contractor and herein after referred to as the "Construction Contract." The Engineer shall maintain a professional level of effort deemed adequate by the Department to meet the Department's needs for construction engineering and inspection. The Engineer shall comply with the Department's directives, regulations, requirements and communications. The Engineer shall comply with and follow provisions of the Construction Contract documents that describe procedures that the Department and Engineer must follow.

All files, reports and other documentation are to be turned over to the Department at the completion of the project, including one copy in an electronic format that complies with the Division's Electronic Document Standards or as otherwise directed by the Department. All data generated under this contract shall be submitted in an electronic data deliverable (EDD) that complies with the Division's Electronic Data Warehouse Standards or as otherwise directed by the Department. All electronic submittals shall be with Adobe Acrobat 7.0. See attached eDocs_CheatSheet for file naming convention.

Task 1. Develop Detailed Work Plan

Engineer shall develop and submit for the Department's review and approval, a proposed work plan that includes, at a minimum, a description of major tasks and subtasks; a schedule with milestones and deliverables; a staffing plan, a budget; a M/WBE utilization plan; and a list of proposed subcontractors. The proposed work plan must address each of the tasks outlined below.

Task 2. Remedial Construction Management

Subtask 2.1 Attend Preconstruction Meeting

The Engineer will attend a preconstruction meeting, and prepare and distribute minutes of the meetings. This subtask will be performed in accordance with

provisions under Work Element III, Task II of the Standby Contract.

Subtask 2.2 Field Orders and Change Orders

The Engineer shall prepare any necessary field orders and change orders to the plans and specifications for the timely transmittal to the contractor. Field orders will be used to inform the contractor in writing of all changes, modifications and clarification of the plans and specifications that do not involve cost or time. Proposed change orders and, subsequently, change orders will be developed for those involving cost or time and must include an independent, detailed cost estimate developed by the Engineer. Both will be reviewed, and approved by the Department prior to issuance.

Subtask 2.3 Review of Contractor's Submission

The Engineer shall review and approve all contractor submittals including requests for contract interpretation and "or-equal" or substitute items for conformance with contract documents, project plans and specifications, design concept. This shall include review of shop drawings, samples, as-built drawings, materials, soil tests, construction tests, progress payment requests, and any other documents generated by the contractor in connection with this project. The Engineer will provide copies of all review items to Department for review, if Department so decides, prior to approval.

The Data Usability Summary Report (DUSR) provides a thorough evaluation of analytical data without the costly and time consuming process of third party data validation. This task includes preparation of DUSR's - the primary objective of a DUSR is to determine whether or not the data, as presented, meets the site/project specific criteria for data quality and data use. For non-category B deliverables, a DUSR-like review shall be performed.

The Engineer will review applications for payment submitted by the construction contractor pursuant to Article 13 of the General Conditions of the construction contract, for compliance with criteria established in such contract, including but not limited to completeness, inclusion of proper certificates, documents and cost documentation, current status of record drawings and documents showing the work as actually constructed, and satisfactory completion of the progress schedule and submittals required by the contract documents which are due prior to the application. The Engineer shall have five days for review of each such application, and shall either indicate in writing a recommendation for payment and present the application to the Department, or return the application to the construction contractor indicating in writing the Engineer's reasons for refusing to recommend payment.

The Engineer shall determine the actual quantity and class of unit price work performed by the construction contractor and render a written decision as necessary.

The Engineer shall certify the construction contractor payment request and sign contractor's application for payment form.

The Engineer shall review the construction contractor's final application for payment pursuant to the contract criteria for review of progress payments. The Engineer shall complete such review within ten days, and shall determine whether the work has been completed in substantial conformance with the Contract Documents and the construction contractor's other obligations under the contract have been fulfilled. The Engineer shall then either issue a certificate to that effect, notify the Department and the construction contractor that the work is acceptable; or return the application to the construction contractor, indicating in writing the reasons for refusing to recommend final payment. If the Engineer determines that final completion of the work is significantly delayed through no fault of the construction contractor, the Engineer may recommend that payment be made for that portion of the work which is fully completed and accepted.

The Engineer shall meet the following review time frames:

- Interim schedule which shows 3 months of detail 5 days
- Final schedule which is submitted 20 days after notice to proceed 14 days
- Biweekly schedules 5 days

Subtask 2.4 Construction Inspection, Record keeping and Reporting

The Engineer will provide on-site inspection services during the remedial activities and conduct all related activities. The Engineer will inspect the work for conformance with the Contract Documents by providing an experienced inspector to inspect the construction activities. The Engineer will also conduct: (1) an inspection upon substantial completion of the work; and (2) final inspection upon project completion; and (3) one year warranty inspection. The Engineer will prepare a detailed list of those work items remaining unfinished. The Engineer will conduct a final inspection to determine if all work is completed and meets the requirements of the contract documents. The Engineer shall coordinate the substantial completion, final and warranty inspections with the Department's project manager.

Daily inspection reports will be electronically (Adobe pdf) submitted to the Department's project manager by close of business the following day. Relevant photographs will be included in the daily report. An example inspection report is attached.

The Engineer shall provide inspection during construction when deemed necessary by the Department, including hours other than normal working hours.

The Engineer shall periodically review the construction contractor's "as-built"

documents and assure that they are on site and available for inspection. The Engineer shall notify the construction contractor and the Department if they are not maintained up-to-date.

The Engineer shall conduct biweekly project meetings at the site or as requested by the Department. The Engineer shall also attend a system start-up conference in accordance with the Contract Documents.

The Engineer is responsible for disapproving or rejecting work when necessary with the concurrence from the Department. Also, to require special inspection and testing per 12.8-9 of general conditions of the construction contract.

The Engineer shall interpret contract documents and determine acceptability of work and make recommendations to the Department.

Upon timely notice of the construction contractor's intent to cover work, the Engineer shall inspect, test or approve work as necessary. If the construction contractor covers work contrary to written request by the Engineer, the Engineer will require uncovering, inspection and/or testing as necessary.

Whenever the Engineer believes there may be defective work, timely notice will be given to the construction contractor and the Department. The Engineer shall promptly make a recommendation to the Department.

When necessary, the Engineer shall recommend to the Department that a stop work order be issued.

The Engineer will maintain complete and detailed records as required by Department related to construction activities. The complete original records shall become the property of the NYSDEC after the completion of the project. These records and reports include but are not limited to the following:

- 1. Inspection Reports
- 2. Work completed and important conversations. The Engineer shall provide the Department copies of everything written to the construction contractor by the Engineer or by others and obtained by the Engineer. This includes written confirmation of all telephone and verbal conversations. The Engineer shall comply with the Department's directives as to all addressees for communications.
- 3. Listing and usage of Contractor's personnel, material and equipment which allows for quantification of contractor's production.
- 4. Records documenting Contractor's deviation from work as specified in the Contract Documents and associated work plans,

actions and resolutions.

- 5. Unusual circumstances (weather conditions, labor disputes, environmental problems, health and safety hazards encountered, etc.).
- 6. Record progress in reference to the work schedule submitted by the Contractor and the overall efficiency of Contractor's operations; along with recommendations for improving performance. The Engineer shall provide the Department with regular reports on the adequacy of the performance of the construction Contractor, its key employees and its subcontractors.
- 7. General files including correspondence and other documentation related to the project including but not limited to manifests and bills of lading. At the completion of construction, the file must include a complete set of the Contractor logs (e.g., visitors).
- 8. Job meetings minutes with documentation on resolution of issues.
- 9. Record of Contractor's submittals including shop drawings and material tests, action taken, and when (e.g., approval, disapproval, further information needed).
- 10. Field Orders, Proposed Change Orders and Change Orders
- 11. Construction photos. A minimum of twelve (12) digital photographs per day of the work during its progress and photographs of the site at completion of the work. A log shall be maintained containing the engineer's name, contractor name, name of contract, site number, short description of view, photo number and date taken. Also, photos before work begins and other situations where disputes may arise with Contractor or Public.
- 12. Video highlights of the project. The Engineer will videotape work on the project site at all its phases to provide a record of project activities. The total recording time is to be approximately 6 hours.
- 13. Telephone conversations.
- 14. The Engineer shall provide the Department with an up-to-date analysis of the effects on the progress of the project that result from a change in the progress schedule.
- 15. The Engineer shall advise the Department in the event of any emergencies which affect the safety of persons or property.
- 16. The Engineer shall give the Department timely notice if other work

- at the site impacts the contract work, and shall include any recommendations for action.
- 17. The Engineer must document and justify to the Department why work had to be uncovered. If it is caused by the Engineer's mistake or failure to inspect, the Engineer shall bear responsibility for all increased costs and delays incurred and awarded to the construction contractor.
- 18. The Engineer shall evaluate subsurface condition, differing site conditions, and underground facilities and provide written recommendations to the Department within 10 days of discovery.
- 19. The Engineer shall provide written recommendation including justification and cost reduction for accepting defective work or justification for replacement/correction.
- 20. The Engineer shall promptly investigate and notify the Department of any conflict, error, or discrepancy and then issue a recommendation to the Department. The Engineer shall resolve minor issues and then notify the Department promptly of resolution.
- 21. The Engineer shall notify the Department immediately if they become aware of the following:
 - (i) Construction contractor commences bankruptcy proceedings.
 - (ii) Someone files against the construction contractor for relief.
 - (iii) Construction contractor makes general assignment for benefit of creditors.
 - (iv) Someone is appointed to take charge of the construction contractor's property.
 - (v) Construction contractor writes about inability to pay debts.
- 22. The Engineer shall notify the Department immediately in writing if:
 - (i) Construction contractor fails to perform work in accordance with contract documents.
 - (ii) Construction contractor disregards laws and

regulations of any public body having jurisdiction.

- (iii) Construction contractor disregards authority of the Engineer.
- (iv) Construction contractor violates in any substantial way, provisions of the contract documents. The Engineer shall recommend, in writing, a course of action including, if applicable, suspension of work or termination. Only the Department is empowered to issue a suspension of work or termination.

Task 3 Administrative

Engineer shall perform administrative duties of the standby contract as required, including M/WBE activities, preparation of applications for payment, equipment use and inventory, NSPE list maintenance and other miscellaneous activities.

Task 4 Final Remediation Report

This task provides for preparation of a Final Remediation Report approvable by the Department. The report will include a summary of construction activities and reflect all variations from the Contract Documents, horizontal and vertical survey of the work, and as-built drawings. The report will include a summary and analysis of the data collected during the work. The report will include a recommendation to the Department on any additional work that might be required at the site. The Engineer shall provide the Department with a P.E. certification that the work was completed in substantial conformance with the Contract Documents.

The final project files will be provided on a CD-ROM(s) in pdf format in accordance with the standby contract.

Task 5 Site Management Plan

This task provides for preparation of a Site Management Plan in accordance with DER guidance information. It's intended that this document be a stand alone resource for long term site management.

II. Level of Effort and Cost Estimates

			LOE Est.	Cost Est.
Task No	. Major Task Description	<u>Hours</u>	<u>(\$</u>	
1	Develop detailed work plan		30	\$3,100.00
2.1	Attend Preconstruction Meeting		35	\$3,600.00
2.2	Field Orders and Proposed Change Orders and Change Orders		40	\$4,100.00
2.3	Review of Contractor's Submission		40	\$4,100.00
2.4	Construction Inspection, Record keeping and Reporting		1,000	\$76,800.00
3	Administration		120	\$9,200.00
4	Final Remediation Report		40	\$4,100.00
5	Site Management Plan		40	\$4,100.00

Total Labor Hours:	1523
Total Labor Costs:	\$110,050.00
Direct Non-Salary Costs:	\$ 14,950.00
Total Estimated Costs:	\$125,000.00

III. Period of Performance

February 3, 2006 - September 30, 2007

^{*} LOE - Based on twenty-seven weeks (total) of construction, 40 hrs per week for a level IV resident and 40 hrs per week for a level II inspector. All hours are subject to adjustment based on actual working conditions encountered in the field as determined by the Department.

IV. Work Plan Development Cost Authorization

The estimated cost of developing the work plan and standby subcontracts is \$3,100.00.

V. <u>Project Schedule</u>

Milestone/Deliverable		Elapsed Time
1.	Issuance of Work Assignment (W.A.)	0 days
2.	Receipt of signed copy of W.A.	5 days
3.	Submission, M/WBE Utilization Plan	20 days
	Submission of Work Plan (Task 1)	20 days
* 4.	Work Plan Approval/Notice to Proceed	60 days
5.	Preconstruction conference	
6.	Construction start	est. Sept., 2006
7.	Construction substantial completion	est. June 31, 2007
* 8.	Final Remediation Report and	Within 60 days of
	Site Management Plan	substantial completion

^{*} Milestones for rating purpose

VI. <u>Project Budget</u>

The estimated total budget is \$125,000.00.

VII. M/WBE Utilization Plan

The consultant will prepare M/WBE Utilization Plan in compliance with the conditions of standby contract.