

CONSTRUCTION MANAGEMENT PLAN

**CONSTRUCTION MANAGEMENT SERVICES FOR LAYON LANDFILL SYSTEMS,
ENTRANCE FACILITIES, ACCESS ROAD, SEWER SYSTEM, AND UTILITIES**

PROJECT NO. RECEIVER-SW-09-03

LAYON, INARAJAN, GUAM

**FOR THE SOLID WASTE MANAGEMENT DIVISION
GOVERNMENT OF GUAM**

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SECTION I - INTRODUCTION

A. Purpose and Goals

This Construction Management Plan (CM Plan) sets forth the procedures and approach for the construction of the Entrance Area Facilities, Liners for Landfill Cells 1 and 2 (Project No. SWMD-09-02); and, Access Road and Sewer System (Project No. SWMD-09-03). The goal of the CM Plan is to obtain a successful project. The definition of a successful project is safe construction of quality facilities on schedule, and within the budget.

The CM Plan will serve Winzler & Kelly (W&K), the Owner's Representatives, and Contractors by defining the project, project team members and their roles, coordination among team members, procedures, and key milestones and schedule constraints. By establishing these parameters early in the project, the CM Plan will help control resources and costs, and establish communication and coordination between W&K, the Designers (TG Engineers as the Prime Consultants and A-Mehr, Inc. for Landfill Design), and the Contractors (Black Construction Corp. for Landfill Construction and Core Tech International for the Access Road, Sewer System, and Utilities Construction).

B. Project Descriptions

SWMD-09-02 Entrance Area Facilities and Cells 1 & 2

The landfill ("Project") involves the erection of facilities within the entrance area of the landfill site, installation of liners for Cells 1 and 2, and construction of the operations road, sewer system, and utilities within the site. The scope of work includes, but is not limited to, removal of existing roadbed and sub-grade where such occurs; clearing and grubbing; mass grading (cut and fill); utility relocation and extensions; construction of two-lane asphalt concrete roadway with shoulders, drainage facilities, guardrails, street lighting, signing and striping; construction of water, sewer and power utilities; installation of the liner system; and other related work as necessary to make the Project complete and ready to use.

SWMD-09-03 Access Road and Sewer System

The work is limited to the proposed roadway construction and reconstruction from Route 4 to the New Layon Municipal Sanitary Landfill; sewer force main and pump stations from the landfill site down Route 4 to Inarajan; gravity sewer piping system; water main and joint utility trench from near Route 4 to the New Layon Municipal Sanitary Landfill; overhead electric power lines; and other related work as necessary to make the Project complete and ready to use.

C. Schedule

The Notice to Proceed (NTP), project lengths and initial contract deadlines for the two projects comprising the Project are as follows:

BLACK CONSTRUCTION CORP.: ENTRANCE AREA AND CELLS 1 AND 2:

NTP DATE: 12/30/09
CONTRACT LENGTH (CALENDAR DAYS): 500
CONTRACT COMPLETION DATE: 5/14/11

CORE TECH INTERNATIONAL, ACCESS ROAD AND SEWER SYSTEM:

NTP DATE: 12/14/09
CONTRACT LENGTH (CALENDAR DAYS): 500
CONTRACT COMPLETION DATE: 4/27/11

These projects are unique in that they are managed under the control of the U.S. District Court - appointed receiver, Gershman, Brickner and Bratton, and must be completed before the Ordot Dump can be closed as required by the U.S. District Court. The contractors acknowledge that failure to complete the projects within the time provided in the contracts could be detrimental to the island and Government of Guam and may result in significant penalties from the U.S. District Court to the Government of Guam and even worse, it could leave the island with no location to dispose of trash which could be catastrophic. If the contractor fails to complete the work within the time prescribed herein, they will be responsible to cover any losses or damages that the Government of Guam may have incurred through the (Liquidated Damages) LD clauses in the contract. The LD clauses for both projects set forth in their respective contracts, are as follows:

BLACK CONSTRUCTION CORP.: ENTRANCE AREA AND CELLS 1 AND 2:

LIQUIDATED DAMAGE CLAUSE AMOUNT \$3,300/Day

CORE TECH INTERNATIONAL, ACCESS ROAD AND SEWER SYSTEM:

LIQUIDATED DAMAGE CLAUSE AMOUNT \$3,300/Day

D. Budget

The construction contracts and initial budgets for both projects are as follows:

BLACK CONSTRUCTION CORP.: ENTRANCE AREA AND CELLS 1 AND 2:

INITIAL CONTRACT AMOUNT \$20,477,000.00

CORE TECH INTERNATIONAL, ACCESS ROAD & SEWER SYSTEM:

INITIAL CONTRACT AMOUNT \$26,800,000.00

The contractors are to submit a Schedule of Values (SOV) that provides a detailed breakdown for the lump sum costs in their contracts for the purpose of determining percentage of work complete for partial pay requests. It is important to note that the SOV quantities will be developed by the contractors for the purpose of estimating percent complete for the partial payments and not for determining the contractual quantities. In the event that it is determined a contractor's quantity estimate was inaccurate then the unit cost used for partial pay estimates will be adjusted appropriately and no change in the lump sum cost will occur. Any credit or deduct required to adjust the partial payment with the correct percent complete will take place on the next Pay Request.

E. Warranty Periods:

The contract warranty periods are one year from final acceptance except for various items that are subject to longer manufacturer warranties.

SECTION II - PROJECT TEAM AND ORGANIZATION

A. Organizational Structure/Chain of Command

Winzler & Kelly has teamed with Vector Engineering and contracted with the Government of Guam through the Receiver Gershman, Brickner & Bratton (GBB) for the projects. The members of the CM team from Winzler & Kelly consist of one Principal-in-Charge, Construction Manager (CM), Construction Management Quality Assurance/Control Manager (CMQM), one Health and Safety Manager (HSM), one Administrative Assistant, one full-time Project Engineer, multiple part-time Project Engineers, one full-time inspector, multiple part-time inspectors and additional support staff. The members of the CM team from Vector Engineering consist of one Principal-in-Charge, one Quality Assurance Engineer (QAE), one Liner Construction Manager (LCM), and two Liner Inspectors.

Figure 1 shows the proposed Organizational Chart for the CM and Project Teams. The Project Team includes all the primary stakeholders in the Project such as the Receiver, regulatory and utility agencies, the contractors and CM. The upper portion of the Organizational Chart contains the key personnel for the CM Team and the lower portion of the chart shows the supporting staff. One important point is that the CM team includes two Construction Managers; the overall Construction Manager (CM), Paul Baron, of W&K; and a Liner Construction Manager (LCM), Jose Armenta, C.E.T. from Vector Engineering. The CM and LCM are supported by two key Principals: Fred Smith of W&K and Scott Purdy of Vector. In addition, Bryan Fritzler, the Liner Quality Assurance Engineer (Vector) and Jarrett Brown the Construction Quality Assurance/Quality Control Manager (W&K).

The CM will manage all non-liner related construction as well as Storm Water Pollution Prevention Plan and environmental compliance, regulatory and utility agency coordination, safety, coordination between contractors, dispute resolution, and coordination among the multiple projects. The LCM will manage the liner construction and provide support to the CM as needed for other Project issues. In addition to the above, the organizational chart shows some personnel with dual or multiple roles that crossover between key roles and support roles. Also, the contractor's Management and QA/QC Teams are integrated into the chart interfacing between the CM key personnel and the support staff; and the Receiver team has direct access to the Principals and Construction Managers.

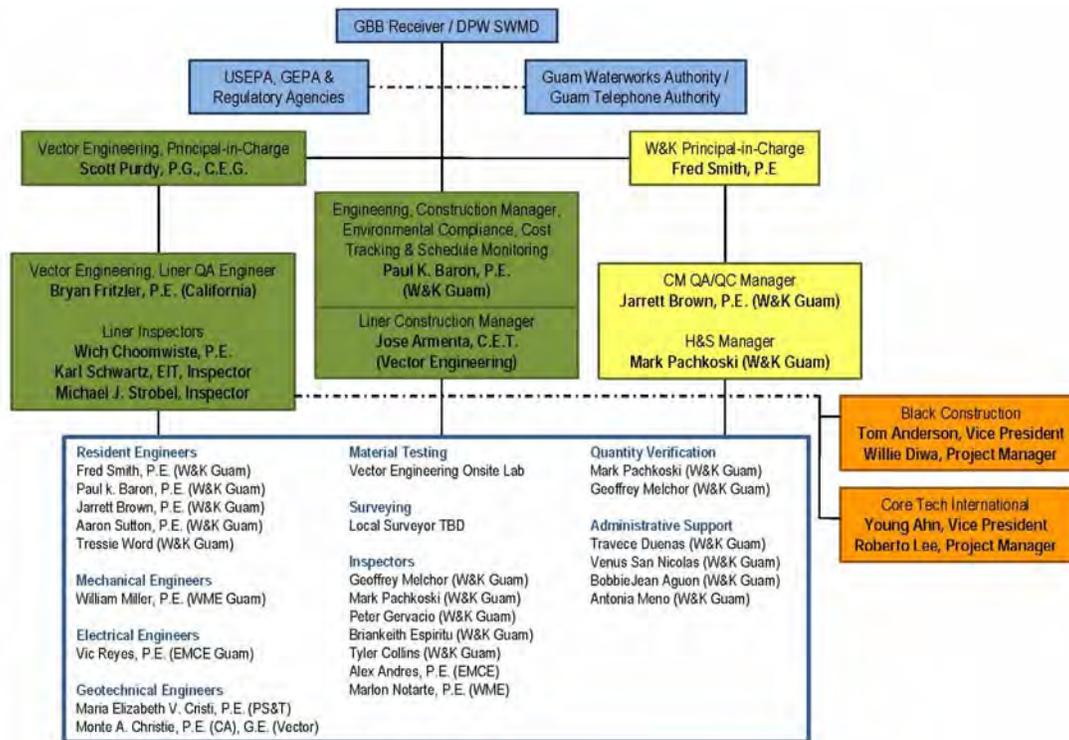


Figure 1. Organizational Chart

B. Duties and Responsibilities

General position descriptions and basic duties and responsibilities regarding construction quality assurance for the “Landfill Liner Systems” are identified in the landfill project specifications Section 01400A and attached in Appendix A. The descriptions and roles provided in Section 01400A form the basis for the Duties and Responsibilities described in the following paragraphs for the CM Team. However, they have been clarified to address the overall project structure for both projects and not just the landfill liner systems. Appendix B is a list of all key Project personnel including, name, title, project position (in accordance with Spec Section 1400A) and contact information known at the time of preparation. This is a working document and shall be updated periodically throughout the Project.

Names, titles, position descriptions and basic duties and responsibilities for the main Project team members are as follows:

1. Paul K. Baron, P.E. Construction Manager (CM)

The CM is an official representative of the Receiver and is the equivalent of the “Project Manager” listed in Section 01400A of the landfill project specifications. The CM coordinates construction and quality assurance activities: field observation for CM Team, communications, meetings, staffing for the CM Team; coordinating resolution of quality assurance issues; and coordination with local property owners, Inarajan Mayor, regulatory and utility agencies. The CM is the primary contact for incoming and outgoing Project

communications and management of the field office, daily construction engineering, and inspection and testing activities. The CM serves as a day-to-day contact with the contractors' construction superintendents, the Owner's Representative (GBB), the Design A/E, and is the primary liaison for the Project. Specific task assignments include:

- Implements the requirements of the Contract Documents and reviews plans and specifications with Contractor;
- Reviews and recommends contractor pay requests and contractor payroll;
- Coordinates contact with government agencies and potential visitors to the Project Site;
- Assigns incoming correspondence to appropriate staff for response. Reviews and signs outgoing correspondence;
- Conducts preconstruction meetings;
- Prepares for and conducts weekly progress meetings;
- Oversees of Project files and documentation;
- Reviews Change Order Requests (COR) and proposes contract change orders;
- Develops COR and assigns to staff for analysis;
- Reviews, analyzes and negotiates claim issues and disputes;
- Reviews and monitors construction schedule and monthly updates and schedule of shop drawings and schedule of values prepared by contractors;
- Prepares weekly status updates;
- Arranges and conducts Project meetings and reviews and approves minutes for circulation;
- Reviews contractor progress payment requests and approves appropriate payment amounts based on work completed;
- Coordinates submittal, Design Clarifications (DC) and Requests For Information (RFI) review and processing;
- Reviews and ensures that record drawings are kept current by contractors;
- Coordinates observation and testing activities; assures appropriate personnel are onsite. Performs periodic observation and observation of critical elements as necessary;
- Conducts final inspections and recommends final acceptance.
- Defers technical and QA decisions for work within or connected to Cells 1 and 2 and liner related issues to the Liner Construction Manager (LCM) and Quality Assurance Engineer (QAE);
- Monitors regulatory compliance for the overall project and landfill systems; and
- Maintains a professional presence and fosters good public relations with the Owner's Representative, contractors, regulatory agencies, designers and the community.
- Coordinates with groundwater monitoring consultant.

2. Jose Armenta, Liner Construction Manager (LCM) ***Geosynthetic and Soil Quality Assurance Monitor***

The LCM is primarily responsible for observing the daily construction activities related to the construction of the landfill liner systems and is a combination of the Soil and

Geosynthetic QA Monitor and roles described in Section 01400A of the landfill project specifications. The LCM has oversight for work that falls within the confines of the Cells 1 and 2 and any extension of related facilities that physically connect to the cells, including, but not limited to, related access roads, utilities, leachate and gas collection systems, and storm drainage systems. Specific task assignments include:

- On-site resident representative of the Quality Assurance Consultant (Vector Engineering);
- Represents the QAE whenever he is absent from the site while operations are ongoing;
- Designates a Soil QA Monitor to represent the LCM whenever he is absent from the site while operations are ongoing;
- Reviews plans and specifications with Contractor;
- Conducts liner pre-construction meetings;
- Prepares for and conducts weekly progress meetings for liner activities;
- Monitors, logs, photographs and/or documents soil and Geosynthetic component installation operations and other activities within or connected to Cells 1 and 2;
- Assigns QA Monitors to observe and document all liner activities requiring monitoring;
- Oversees monitoring and documenting the following operations for liner systems:
 - Material delivery
 - Unloading and on-site transport and storage
 - Sampling and conformance testing
 - Deployment operations
 - Condition of the soil and Geosynthetic components as placed
 - Monitors and documents the geomembrane seaming and joining operations including:
 - Condition of panels as placed
 - Trial seams
 - Seam preparation
 - Seaming
 - Nondestructive seam testing
 - Destructive seam testing
 - Field tensiometer testing
 - Laboratory sample marking
 - Visual observation, by walkover, of the finished soil and Geosynthetic components
 - Sampling and field testing of the finished soil and Geosynthetic components
 - Repair operations, if and when necessary
- Documents any on-site activities that could result in damage to the constructed soil or Geosynthetic components;
- Reports to the CM, and logs in the daily report, any relevant observations reported by the Soil QA Monitors;
- Prepares his own daily report;

- Prepares a daily summary of the soil component quantities estimates installed each day of construction activity;
- Oversees marking, packaging and shipping of all laboratory test samples;
- Maintains field files of all logs and reports;
- Maintains qualifications of all personnel and calibration of equipment;
- Monitors the preparation of the contractors record drawings;
- Measurements of uninstalled quantities;
- Oversees field testing and reviews test results;
- Takes weekly video of liner construction progress. Maintains inspection and photo logs;
- Notifies Contractor of deficient work immediately and then advises CM and QAE of any work believed to be unsatisfactory. Recommends corrective action;
- Provides support to the CM when available for non-liner related earthwork and inspection issues;
- Inspects the site for the Project Inspectors two hours a week during the Winzler & Kelly weekly staff meeting;
- Maintains a professional presence and fosters good public relations with the Owner's Representative, contractors, regulatory agencies, designers and the community.

3. Bryan Fritzler, P.E. Quality Assurance Engineer (QAE)

The QAE is the engineer who is personally in charge of the quality assurance work for the liner installation and for issuing a final Quality Assurance Report. Also, the QAE provides oversight of the Soil and Geosynthetic Quality Assurance Monitors which is the quality assurance work of the Liner CM and Liner Inspectors. Specific task assignments include:

- Prepares the Quality Assurance Implementation Plan (QAIP);
- Reviews all Project plans and specifications;
- Reviews other site-specific documentation;
- Develops site-specific addenda for quality assurance of liner components with the assistance of the CM and LCM as necessary;
- Administers the QAIP, including assigning and managing all quality assurance personnel, reviews all field reports, and provides engineering review of all quality assurance related issues;
- Familiarizes himself with all applicable changes to project plans and specifications as issued by the Designer;
- Familiarizes LCM and QA Monitors with the Project site and the Project QAIP;
- Attends in person or by teleconference all quality assurance related meetings, including resolution, pre-construction, daily, weekly meetings;
- Reviews the calibration certification of the on-site soil testing equipment;
- Reviews the LCM and QA Monitors' daily reports, logs, and photographs;
- Notes any on-site activities that could result in damage to the installed liner components;
- Prepares a weekly summary of soil quality assurance activities at the end of each week of the construction activity;

- Reviews the results of laboratory testing and makes appropriate recommendations;
- Recommends the approval of the final soils and geosynthetic acceptance to the CM;
- Designates the LCM to represent the QAE whenever he is absent from the Project site while operations are ongoing;
- Reports any unapproved deviations from the QAIP to the CM and LCM;
- Prepares and certifies the final Quality Assurance Report; and
- Maintains a professional presence and fosters good public relations with the Owner's Representative, contractors, regulatory agencies, designers and the community.

4. Jarrett Brown, P.E. CM QA/QC Manager (CMQM)

The CMQM is primarily responsible for assisting the CM in monitoring and oversight of the internal QA/QC systems for the CM Team. Specific task assignments include:

- Monitors quality related activities on the Project;
- Coordinates internal QA/QC efforts of the CM Team;
- Reviews and periodically audits Project files and documentation to ensure accuracy and adequacy;
- Reviews Project correspondence, inspection reports, submittal and RFI logs, and submittal reviews for errors and inconsistencies;
- Verifies contractor quality requirements are specified to vendors and included in contractor documentation submittals;
- Review and recommend contractor pay requests and payroll;
- Reviews activities of inspection personnel and their qualifications and training requirements;
- Monitors the disposition of all issued nonconformance reports;
- Coordinates all QA/QC activities with the CM;
- Initiates action and closes all client (Owner/Owner's Representative) complaints;
- Reviews closeout documentation upon the completion of the Project; and
- Maintains a professional presence and fosters good public relations with the Owner's Representative, contractors, regulatory agencies, designers and the community.

5. Mark Pachkoski, Health & Safety Manager (HSM)

The HSM oversees and directs all policies with regards to the CM Team's safety program. The HSM develops and administers programs that educate employees on, and ensure compliance with, all regulations issued by the Occupational Safety and Health Administration (OSHA) and other government agencies. Specific task assignments include:

- Prepares internal safety documents for CM Team;
- Attends all contractor safety meetings;
- Reviews contractors' safety programs and plans;
- Monitors implementation of contractor and CM Safety Plans;
- Reports any safety incidents to the CM, LCM and other appropriate entities

- immediately;
- Prepares Incident report for any lost time, injuries, or other safety related incidents that may occur; and
- Maintains a professional presence and fosters good public relations with the Owner's Representative, contractors, regulatory agencies, designers and the community.

6. Project Engineers (Multiple Staff and disciplines)

The Project Engineer role will be filled by various W&K staff and sub consultants in the fields of civil, electrical and mechanical engineering as needed to properly manage the Project. Specific task assignments include:

- Reports directly to the CM;
- Performs construction observation;
- Supports Receiver as needed and as directed by CM.
- Attends weekly construction meetings and prepare meeting minutes as directed by the CM;
- Assists and monitors construction observation and inspection staff;
- Assists and monitors administrative support staff;
- Receives, tracks, logs and processes all contractor submittals;
- Receives, tracks, logs and processes all contractor RFIs;
- Advises the CM or LCM of any submittals or RFI's requiring their attention as soon as possible;
- Submits draft responses for submittals and RFIs to the CM in a timely manner (less than 7 calendar days wherever possible) for review and approval prior to issuance to the contractor or other parties;
- Ensures that no communications occur outside the CM Team without prior knowledge of the CM;
- Monitors and oversees management of Project filing systems (electronic and hard copy);
- Assists in review of change order requests (COR) as directed by the CM;
- Acts upon the requests of the CM and LCM in timely manner;
- Reviews estimated quantities submitted with a contractor's Pay Requests and submits any discrepancies to the CM;
- Assists the CM in reviewing, analyzing and negotiating claim issues and disputes;
- Compiles and updates Master Schedule with contractor construction schedules and other schedule milestones. Provides monthly report to CM;
- Maintains schedule of shop drawings and schedule of values prepared by the contractors;
- Prepares daily reports for any observation work;
- Prepares contractor progress payment requests and approves appropriate payment amounts based on work completed;
- Coordinates submittal and RFI review processes including logging receipt of shop drawings, receiving samples, advising CM, contractor and engineer of status of RFI, shop drawing and submittal review;

- Ensures that record drawings are kept current. Updates record drawings with change orders, RFIs, and DCs; and
 - Maintains a professional presence and fosters good public relations with the Owner's Representative, contractors, regulatory agencies, designers and the community.
7. Liner Inspectors & Soil and Geosynthetic Quality Assurance Monitors (Spec 1400A) with Multiple Staff to include Jose Armenta, Karl Schwartz, & Mike Strobe

The QA Monitor role will be filled by two Vector Engineering staff as needed to properly manage the Project. Specific task assignments include:

- Monitors, logs, photographs and/or documents all liner installation operations, including:
 - Deployment operations
 - Condition of the soil components as placed
 - Visual observation, by walkover, of the finished soil components
 - Sampling and field testing of the finished soil components
 - Conducts soil sampling and testing
 - Material delivery, as required
 - Unloading and on-site transport and storage
 - Sampling for conformance testing
 - Joining and/or seaming operations
 - Condition of panels as placed
 - Visual inspection by walkover of Geomembrane components
 - Repair operations
- Monitors and documents the geomembrane seaming operations, including:
 - Trial seams
 - Seam preparation
 - Seaming
 - Nondestructive seam testing
 - Destructive seam testing
 - Field tensiometer testing
 - Laboratory sample marking
 - Repair operations
 - Measurements of uninstalled quantities
- Documents any on-site activities that could result in damage to the liner systems. Any problems noted shall be reported as soon as possible to the CM, LCM, and QAE.

8. Project Inspectors (Multiple Staff)

The Project Inspector role will be filled by various W&K staff as needed to properly manage the Project. Specific task assignments include:

- Reports to the Project Engineers unless direct interaction from the CM is required;

- Performs daily observation of ongoing work and prepares daily report;
- Prepares a daily summary of the estimated quantities installed each day of construction activity;
- Maintains field files of all logs and reports;
- Monitors the preparation of the contractor's record drawings;
- Conducts measurements of uninstalled quantities;
- Oversees field testing and reviews test results;
- Takes daily photographs and weekly video of construction progress;
- Maintains inspection and photo logs;
- Notifies Contractor of deficient work immediately and then advises CM and QAE of any work believed to be unsatisfactory; and
- Maintains a professional presence and fosters good public relations with the Owner's Representative, contractors, regulatory agencies, designers and the community.

9. Administrative Assistant (Multiple Staff)

The Administrative Assistant role will be filled by various W&K staff as needed to properly manage the project. Specific task assignments include:

- Reports directly to the CM and in the absence of the CM to the Project Engineers;
- Performs onsite and Project related administrative duties;
- Attends weekly construction meetings and assists Project Engineers to prepare meeting minutes as directed by the CM;
- Assists Project Engineers and Inspectors in compiling all records, documents and administrative paperwork on time;
- Maintains job site CM office and supplies;
- Assists in managing and documenting project expenses;
- Maintains meeting schedules and contacts for CM and LCM;
- Advises the CM or LCM of any pending meetings requiring their attention;
- Ensures that no communications occur outside the CM Team without prior knowledge of the CM;
- Assists in management of project filing systems (electronic and hard copy);
- Acts upon the requests of the CM and LCM in timely manners;
- Monitor and coordinates submission of all daily reports, schedule reviews, submittal and RFI reviews, and other documents that Project Engineers and Inspectors are to submit to the CM;
- Assists main office in preparing monthly progress payments for the CM work to the Owner's Representative;
- Maintains field files of all logs and reports; and
- Maintains a professional presence and fosters good public relations with the Owner's Representative, contractors, regulatory agencies, designers and the community.

In addition to the CM Team there are other key individuals and entities that comprise the overall Project team. The following describe the roles of other key entities or individuals on the Project Team.

10. Owner' Representative. U.S District Court Appointed Receiver, GBB, Chris Lund – Representative

The Project Owner is the Government of Guam, represented by the receiver for all intents and purposes of the construction and CM work.

11. Contractors

Landfill Project: Black Construction Corp. (BCC)
Tom Anderson, Corp. Representative, BCC
Willie Diwa, Project Manager, BCC
Augie De Leon, Superintendent, BCC

Access Road Project: Core Tech International
Young Ahn, Corp. Representative, CTI
Roberto Lee, Project Manager, CTI
Roel Lague, Superintendent, CTI

As discussed previously, the contractors are BCC for the Landfill project and CTI for the Access Road project. The contractors have a lot of responsibilities based on the contract requirements which are too great to elaborate in this CM Plan. However, both contractors have structured their hierarchy in similar ways with the Project Managers as the individuals responsible for managing the overall Project and the Superintendents the individuals directly responsible for managing the contractor's field crews. Both BCC and CTI have established Corporate Representatives to provide oversight and support for the Project Managers. In general, the Project Manager shall represent the contractor at all site meetings and acts as the contractor's spokesman on the Project. In the event that the Project Manager is not present, this responsibility shall be automatically delegated to the Superintendent. In all cases, the CM Team recognizes that the authority of the Corporate Representative supersedes that of the Project Manager and Superintendent when present during meetings and for decisional matters.

12. Subcontractors

Landfill Project: JS & Sons - Trucking
Northwest Linings – Liner Installation

Access Road Project: Primos Heavy Equipment - Earthworks
Korando Corporation – Utility Lines

In general, subcontractors are under the direction of the contractors and are not to be directly managed or supervised by the CM Team. However, the CM Team shall be communicating to the contractors any and all issues related to subcontractor performance.

13. Engineer. TG Engineers, Robert Schneider, EIT - Designer Representative

TGE prepared the design, including Project plans and specifications for the landfill system along with several subconsultants. The Engineer is responsible for approving all design and specification changes and making design clarifications necessitated during construction that the CM is not able to properly interpret or decide upon. The following are the Designers of Record and associated firms that worked on the project as sub-consultants to TGE.

Discipline	Engineer of Record	Firm
Civil Engineering	Tor Gudmundsen	TG Engineers
Landfill Engineering	Tor Gudmundsen / Ali Mezz	TGE/A-mehr
Structural Engineering	Cheng T. Chien	CT Chien & Associates
Electrical Engineering	Wayne Wixon	Wixon & Associates
Mechanical Engineering	Conrado Vales	EMC2
Architecture	Phillip Noret	RIM Architects
Geotechnical Engineering	Ali Mezz	A-mehr Inc.

14. Manufacturer. The manufacturer produces any of the various geosynthetic lining system components used in the Work. Each manufacturer is responsible for the production of its geosynthetic product. In addition, each manufacturer is responsible for the condition of the geosynthetic product until the material is accepted by the Project Manager upon delivery. Each manufacturer shall produce a consistent product that meets the Project specifications. Each manufacturer shall provide quality control documentation for its product as required in these Specifications.

15. Geosynthetic Installer

The Geosynthetic Installer (Installer), Northwest Linings, is the BCC subcontractor which installs the geosynthetic components of the lining system. The Geosynthetic Superintendent is the individual responsible for the Installer's field crew. The Geosynthetic Superintendent shall represent the Installer at all site meetings and act as the Installer's spokesman on the Project.

The Installer is responsible for field handling, storing, deploying, seaming, temporary restraining and all other aspects of the geosynthetics installation. The Installer may also be responsible for transportation of these materials to the Project Site and for anchor systems, if required by the project specifications.

16. Utility Agencies

The major underground utilities that will be connected to the Project Site and Project areas are the water and sanitary sewer operated by the Guam Waterworks Authority (GWA), the electrical service operated by the Guam Power Authority (GPA) and storm drain systems managed by the Department of Public Works.

Utilities shown on the plans may vary in location and elevation. Prior to doing earthwork near any utilities, the contractor should verify their locations.

17. Regulatory Agencies

The primary regulatory agencies having jurisdiction over the Project include, but are not limited to: the Guam Environmental Protection Agency (GEPA), Guam Historic Preservation Office (GHPO), Department of Public Works Building Safety Official (DPWBSO), and US Army Corps of Engineers (USCOE). Of these agencies only the DPWBOS and GEPA has direct jurisdiction over the construction aspects of the Project by their respective permits. However, the remaining agencies have the right to inspect for compliance with permit conditions and approve changes to the Project. All regulatory agency inspections should be coordinated with the CM. The Contractor and CM should be familiarized with the construction conditions in the building permit through DPWBOS and the solid waste facility permit through GEPA.

18. Project Biologist and Archeologist

The Project Biologist is Dan Wooster and the Project Archeologist is Dave DeFant of SWCA Environmental Consultants. These entities are typically contracted by the Receiver through the Design Team. All formal communications with the Biologist and Archeologist should go through the Design Team representative Bob Schneider.

SECTION III - CONSTRUCTION CONTRACT ADMINISTRATION

A. General

There is no substitution for detailed and precise documentation. Factual information gathered by the field staff during the course of work is critical for proper analysis in settlement of all issues or claims.

B. Communications with Contractors

The authorized lines of communication and authority are specified herein. The CM will be the Owner's and/or Owner's Representative contact regarding routine communication between the Owner and/or Owner's Representative and the contractors.

The contractors' Project Manager's (PM's) will be the principal point of contact for the CM, and in their absence, the contractor Superintendents will be the backup contact. The Superintendent shall be copied on all correspondences and the contractor corporate representative shall be copied on all contractual issues (BCC has requested that their corporate representative be copied on all correspondence). Safety issues shall be copied to the contractors Safety Officers and all procurement related issues shall be copied to the contractor's Procurement Officers (submittals and RFIs).

All communications regarding design clarifications are to be among the CM, GBB and TG Engineers. The Design Team shall not contact contractors, subcontractors, suppliers, etc. directly, and the contractor shall not contact the quality assurance testing lab, design consultant, etc., directly unless approved in advance by the CM to facilitate quick responses. In all cases all parties should obtain concurrence from the CM prior to any decisions that result in a change or revision in the plans, specifications, contract, schedule, or Project costs.

Typical means of communication are described in the following paragraphs. Note that verbal instructions to the contractors must be documented in writing.

1. Written Correspondence/Documentation (Electronic or Hard copy formats)
 - a. From Contractors

Via Email: PaulBaron@w-and-k.com
or via Hardcopy Addressed to:
CM at Winzler & Kelly Guam Office
194 Hernan Cortez Avenue, Suite 213
Hagatna, GU 96910

Receiving Electronic Mail (email):

Written correspondence can be in the body of the email as an attachment in PDF format. Email and attachment (if so provided)

are printed and filed together in the "Hard Copy" file. Electronic file is filed as Outlook message format in appropriate electronic file. PDF files can be filed as standalone file from email file if desired. Incoming and outgoing emails for project should be archived periodically. Forward and copy emails as necessary.

Receiving hard copies through regular mail:

After stamping "received" (with date), file a copy in the Project "Hard Copy" files and distribute copies, including to the CM field office.

b. To Contractors

Via Email to the Project Managers and others copied as noted above or hard copy from the CM to Project Manager addressed to the contractor's main office.

After signature, deliver original to contractor's office, and distribute copies to files and noted cc's.

2. Routine Written Correspondence

Request for Information (RFI). The contractor's standard form shall be used by the contractors in its RFI regarding any clarifications, interpretations or additional details that it may need concerning the requirements of the Contract Documents as well as any questions or comments concerning any conflicts, errors or discrepancies which the contractor may discover. The contractor shall provide sequential numbering for each RFI to simplify subsequent references to the questions involved. A separate RFI shall be submitted for each subject. The CM will issue a RFI Cover Sheet to manage distribution of all RFIs. The CM and contractors' Procurement Officers shall reconcile the RFI logs of the contractors and CM on a weekly basis.

The goal for turning around a response to an RFI is seven calendar days; not to exceed 15 calendar days, except where Design, Regulatory or Utility Agency Review is required, in which case up to 21 calendar days should be allotted. In exceptional cases, this review period may require additional time, in which case the CM shall notify the contractor by email of the potential delays in the review process. To help expedite review by the CM Team, RFIs shall clearly define the request and provide sufficient information for the reviewer to respond. Said responses shall be clear and complete and shall not initiate a change to the Construction Documents unless approved by the Owner's Representative.

Submittals and change orders shall be initiated or processed as described in paragraphs entitled "Submittals" and "Change Orders" of this section.

3. Verbal

a. From Contractor

Verbal inquiries from a contractor (to be discouraged) may be given to the CM or the LCM, but must be documented in writing by the contractor within 24 hours, and no resulting action shall be taken on the contractor's part that requires a change in schedule, cost or construction requirements without written acknowledgement from the CM.

b. To Contractor

Verbal instructions to the contractors may be given by the CM Team but must be followed up by written documentation (with copy to the respective contractor).

4. Telephone

a. From Contractor: Any telephone inquiries from the contractor should be directed to the CM, depending on the issue involved. All other telephone conversations with the contractor that do not include the CM are to be documented and reviewed by the CM.

b. To Contractor: Since the contractors and the CM will be located in proximity at the jobsite, telephone contact should be minimal. However, issues which need to be discussed by phone should be directed to the contractors on-site representatives by the CM and documented for review by the CM.

C. Communications with Engineer

The Engineer Team should act upon the requests of the CM in a timely manner. The CM Team interprets this to mean that the Engineer will notify the CM immediately if it cannot or will not review a request received from the CM, and will provide a response to the CM in three to seven calendar days, or will provide notice to the CM if review in seven days is not possible, including a time frame for a response.

D. Communications with Local Residents and Businesses

The CM and the Owner's Representative are the only authorized entities to receive and respond to written correspondence and verbal inquiries from local residents and businesses as specified in Public Notices and Community Relations section of this Plan.

In order to ensure that accurate and consistent information is provided, all questions and concerns regarding this Project from local residents and businesses should be directed to the CM.

E. Meetings

1. General

During the course of this Project, several types of meetings will be held. The attendance and agenda may vary, but generally the procedures and record keeping will be the same.

2. Weekly Progress Meetings with Contractor

a. Purpose: Formal weekly progress meetings shall be held on each Tuesday at 10 AM for the Landfill project and each Wednesday at 9 AM for the Access Road project at the respective contractor's field office. The purpose of the meeting will be to review the overall Project status in accordance with the Contract Documents. In addition, the meeting will allow for the early identification of critical issues and will facilitate resolution of potential problems, to ensure coordination of day-to-day activities, allow informal status updates, and provide an opportunity for discussion of key issues.

a. Attendees: Meetings will be conducted by the CM and attended by contractor staff and appropriate CM staff (LCM shall attend all weekly Landfill project meetings). Meetings should be scheduled to allow attendance of all parties if any controversial or critical items need to be discussed.

b. Agenda: Typical agenda items for the progress meetings will include:

- Health and Safety
- Project Administration
- Site Access & Security Control
- Construction Related Issues
 - Unresolved issues
 - New issues
 - QA/QC Issues
 - Change order status
 - Inspection/testing requirements
 - Coordination required
 - Public complaints
 - Contractor complaints/issues
 - Clean up
- Project Cost Tracking
 - Schedule of Values
 - Progress Payments
 - Activities scheduled for the month (two-week look-ahead)
- Environmental Compliance
- Submittal Status

- RFI and Clarifications Status
- Review of Schedule (including fabrication and delivery) and Progress
 - Potential delays
 - Delay mitigation plan
- Summary of Items Submitted at Weekly Meeting

c. Minutes: Minutes of the progress meetings shall be prepared and distributed by the CM.

3. Materials Testing Conference

A construction materials testing conference will be held to discuss the scheduling, sequence and requirements of testing materials used on the Project. The attendees shall include the CM, Inspector, testing consultant, the respective contractor, and any subcontractors whose work will require testing.

4. On-site Field Meetings

Onsite field meetings will be held as needed to coordinate with Regulatory Agencies, Government of Guam agencies, subcontractors and other interested parties. Meeting minutes shall be taken by the party calling and moderating the meeting. A simple one page form is provided in Appendix C that can be used to document onsite field meetings.

5. Pre-construction Meetings

Before the start of each new work task

F. Construction Schedule

1. Purpose

A work-day based, Critical Path Method (CPM) network diagram schedule is required for these projects.

The purpose of a contractor's schedule is to:

- Provide goals and deadlines to complete the construction on time and in budget.
- Provide schedule of costs for monthly progress payment requests;
- Evaluate merit of time extension requests and delay claims;
- Identify possible late/early finish;
- Provide for coordination of inspection and testing;
- Provide for coordination of others; and
- Identify opportunities to reduce construction duration.

2. Submittals

a. Initial submittal requirements include:

- (1) Contractor's proposed work schedule, key personnel, subcontractors and information on off-site yards that have been submitted at the time of preparation of this CM Plan and are currently under review by the CM.
- (2) Upon completion of the CM review, the contractor shall resubmit within ten (10) days after return of review copy – this will be the “Final CPM” and basis for all other changes.

3. Monthly Updates

- a. Schedule updates by the contractors should occur as the schedule is modified. The Contractor will include a narrative description of past progress in a written status report and all tabulation reports.
- b. The proposed updates are reviewed with the contractor at the progress meetings. The agreed-upon changes are to be incorporated in the schedule and the updated schedule is to be submitted.

4. Major Schedule Revisions

The contractor will prepare a revised schedule when:

- Delays or change orders make re-planning or rescheduling the work necessary;
- The contractor elects to change the planned method of performing the work; or
- The schedule does not accurately reflect progress of work.

This revised schedule shall be reviewed as a submittal. All changes from the original must be highlighted or otherwise identify changes.

5. Form

The CPM schedule form shall:

- Include a separate horizontal bar column for each trade or operation;
- Be cost-loaded according to the schedule of prices;
- Include all tie-ins;
- Identify each column by major specification section and by distinct graphic delineation; and

- Identify the horizontal time scale by first week day per week.

G. Progress Payments

1. Timing

The Owner or Owner's Representative shall make all efforts to pay the contractors within 30 days of receipt of an approved pay request for work in place and for stored materials, as provided for in the Contract Documents.

2. Basis of Payment

- a. Schedule of Costs (Values): The Contractors shall submit a preliminary Schedule of Values to the CM. The price breakdown as agreed upon between the contractors and the CM shall be used for preparing future estimates for partial payments to the contractor and shall list the major items of work and a price for each item. Overhead and other general costs and profit shall be prorated to each item so that the total of all items equals the lump sum price. The price breakdown shall be subject to the approval of the CM, and contractors may be required to verify the prices for any or all items.

Before payment for any work outside the scope of the original contracts can be made, a contract change order must be approved. In addition, the change order work must be added to the construction schedule as a cost-loaded activity.

3. Payment Procedures

- a. At the end of each calendar month, the contractors will submit to CM a partial payment estimate using the standard AIA Progress Payment form, (see Appendix D) filled out and signed by the contractors covering the work performed during the period covered by the partial pay estimate, including all the monthly schedule updates and reports discussed above and supported by such data as the CM may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the work, but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the CM, which will establish the Owner's title to the material and equipment, and protect its interest therein, including applicable insurance.
- b. The CM will within ten (10) calendar days after receipt of each partial payment estimate, either recommend payment to the Owner or Owner's Representative or return the estimate to the contractor indicating in writing the reasons for refusing to approve payment. In the latter case, the

contractor may make the necessary corrections and resubmit the partial pay estimate.

- c. Upon receipt of an undisputed, properly submitted progress estimate from the contractor, recommended by the CM in writing, the Owner or Owner's Representative shall act in accordance with the following:
 - (1) Each payment request shall be reviewed by the Owner's Representative as soon as practicable after receipt for the purpose of determining that the progress estimate is a proper payment request and if so, payment will be made within 45 calendar days of receipt wherever possible.
 - (2) In accordance with the contracts, a 10 percent retainage will be withheld from each payment until final payment.
 - (3) Any payment request determined not to be a proper payment request suitable for payment shall be returned to the contractor as soon as practicable but not later than ten (10) calendar days after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.

4. Special Payment Process Requirements

- a. Provide updated schedule with pay request.
- b. This is a prevailing wage rate job. Each partial pay request must be accompanied by a certified payroll statement. Pay requests submitted without the certified payroll statement will be rejected. Prevailing wage rates are included in the Contract Documents.
- c. Prevailing wages are periodically updated.
- d. The project schedules for the contractors must be submitted prior to the first partial pay request. The first partial pay request will be held by the CM until an approved schedule is achieved.

H. Submittals

1. General

Overall submittal procedures are provided in the Contract Documents and submittal requirements are in individual technical specifications. Submittals consist of administrative and technical items. (See Anticipated Submittals List in Appendix E.)

Aside from the construction schedule, the major administrative submittals required from the contractors include a Schedule of Values and the certified payrolls which show the classification, pay rate, name and work hours for each person (contractor and subcontractors) on-site.

The major technical submittals consist of shop drawings, product data, catalog cuts, manufacturers' certifications, and test reports submittals.

2. Form

All submittals shall be transmitted with a submittal transmittal form supplied by the CM.

3. Submittal Log

The CM will maintain a submittal log into which will be entered the date received, submittal number, specification section, brief description, the review status, and the date returned to the contractor. In addition, the dates sent to and received from the Design Engineer's home office will be recorded. The submittal log will be reviewed on a regular basis to determine which submittals are coming due.

The submittal log will be reviewed regularly by the CM Team to determine necessary re-submittals and outstanding anticipated submittals. Submittal status will be reviewed with the contractors as a regular item at each construction progress meeting.

4. Review Procedures

The contractors shall submit submittals by email along with a minimum of two (2) hard copies of each submittal to the CM for review. The submittal will be logged in and the CM will stamp the submittal with the review stamp. In addition, during the review process, the CM should notify the contractor immediately of any submittals with the potential for revision and re-submittal and/or rejection.

Upon completion of the review, the review comments will be annotated on each copy and the overall review status marked on the review stamp. The designer will be provided one electronic copy and the CM will retain one electronic copy and one hard copy. Submittals returned to the CM shall then be logged in and checked by the CM. The CM will sign the submittals and the submittal transmittal form. One hard copy and one electronic copy of the submittals will then be sent back to the contractor. One copy will be retained for the CM's files.

If the submittal is marked "NO EXCEPTIONS TAKEN," formal revision and resubmission of said submittal will not be required.

If the submittal is returned marked “AMEND & RESUBMIT” or “REJECTED-SEE REMARKS,” the contractor shall revise said submittal and shall resubmit one electronic and one hard copy of said revised submittal to the CM.

If the submittal is returned to the contractor marked “MAKE CORRECTIONS NOTED”, a formal revision and re-submittal of said submittal will NOT be required unless it is part of an Operations and Maintenance (O&M) document, in which case a re-submittal is required.

The maximum review time for submittals is 15 calendar days. The Construction Management Team's goal for submittal turnaround time is less than seven calendar days. Critical path submittals identified by the CM upon receipt from contractors shall be expedited.

I. Requests for Information (RFI)

1. RFI

During the construction process, the contractors will have questions regarding certain aspects of the Contract Documents which may require clarification. All requests by the contractors for clarification of the Contract Documents shall go through the CM. There shall be no direct contact between the contractors and the Designer of Record or Designer’s personnel unless approved by CM.

RFIs from the contractors shall be in written form. Verbal requests are to be discouraged due to the possibility of miscommunication. If the request for information response is simple enough to be obtained from the Design Team by telephone, the conversation with the Designer/Designer’s personnel shall be documented by the CM.

The contractors’ RFI forms are acceptable. The first form is filled out by the contractor when clarification of the Contract Documents is needed. The applicable drawing number(s) and specifications section are noted, and a description of the proposed change or clarification is provided along with any changes to the contract amount. If an RFI is originated from a subcontractor or supplier, the contractor shall clearly transcribe the comments onto the RFI form and attach the original question for reference. The contractor will also assign an RFI number to the form. This form is then submitted to the CM. The CM will route the RFI to the appropriate person for response.

If the response to the RFI does not alter the Contract Documents as they were bid, then the CM will provide the response to the contractor with instructions to proceed in accordance with the original contract. The CM will review the response to an RFI, revise as necessary, and return the response to the contractor.

If the contractor's request results in a change to the original construction contract acknowledged by the Engineer's office team and the CM, then a COR shall also be issued. The CM will note this on the RFI form.

J. Materials Testing and Quality Control

The contractor has sole responsibility for monitoring and ensuring the quality of the finished work except in the case of the liner systems in which the QAC (Vector Engineering) will also conduct material testing and quality control tests. The CM shall make arrangements for testing and inspection specifically required by the specifications and otherwise necessary to ensure compliance with the Contract Documents. Testing will be provided by the contractor's approved laboratory and field testing subcontractor. The CM will conduct random periodic QA tests of the sub-consultant testing agencies' work. Close coordination is required with the contractor in order to effectively schedule on-site sampling and testing.

One electronic and one hard copy of agency or laboratory reports of each required test or inspection shall be submitted to the CM, including survey grade information on the locations of each test taken in the field. The contractor will be required to repeat any testing which does not meet the contract requirements.

K. Change Orders

1. General

The Owner or Owner's Representative has the right to authorize changes to the work during the construction period. All changes to the Contract Documents affecting the project time, compensation or scope of work shall be made through the change order process.

Separate files shall be established for each change. Earlier correspondence shall be cross-referenced and copied to this file in order to maintain a complete record in one place. Records shall also be kept on the justification and need for the change. They will be categorized as to who made the request, either the contractor or GBB.

Both the Contract Documents and the CM Plan contain detailed procedures and shall be referred to when processing change orders.

2. Initiation of Changes

Either the contractor or the CM may suggest a change or identify the need for one. Changes are initiated by a COR. The three (3) types of changes include lump sum, unit price, and time and materials.

All COR's must be submitted on the approved form (see Appendix F). Each COR shall be sequentially numbered and entered into the CO log upon receipt or

transmittal. The CM shall establish the type and reason for each COR. All change orders must be approved by the Owner or Owner's Representative prior to execution of the work. The goal for change order turnaround is fifteen (15) calendar days from initiation to completion of negotiations and another thirty (30) calendar days to approval unless the change could impact the overall project schedule in which case the Owner's Representative shall expedite final approval as quickly as possible. Change Order's shall not be considered approved until all required signatures are obtained.

L. Claims

1. General

If a contractor-submitted COR is rejected by the CM, the contractor has a right to protest the decision. The protest procedures outlined in General Conditions of the Specifications should be implemented. Filing a protest and/or claim is the Contractor's right and should not be discouraged by the field staff.

All parties to a claim have a legal duty to mitigate or reduce damages to whatever extent possible. Fair, rapid, and professional handling of claim issues is vital. Written notice of claims is required by the General Conditions. There is no substitution for detailed and precise documentation. Factual information gathered by the field staff during the course of work is critical for proper analysis in the settlement of claims issues.

2. Resolution Procedures

General procedures for handling claims issues are as follows:

- a. If the contractor gives verbal notice of a claim, the CM shall request submittal of a written notice, note this conversation in the daily inspection diary or write it in a memo to the project file, and notify the Owner's Representative of the issue promptly.
- b. Whenever field staff notes that there is a potential for a claim, the CM shall be notified. Advance notice of the situation may help in avoiding or mitigating a claim.
- c. Initial written response to claims shall be prepared by the CM and reviewed by the Owner's Representative prior to transmittal to the contractor. The response shall be transmitted to the contractor within a reasonable time after receipt of claim. The Owner's Representative shall be involved by the CM, and in all cases, shall receive copies of claims and claim responses.

M. Forms

The following forms will be used and are in Appendix G.

- Daily CM Summary
- Daily Field Inspection
- Field Meeting Minutes
- Weekly Meeting Minutes
- Communication Record
- Communication Log
- RFI Cover Sheet
- RFI Control Log
- Submittal Cover Sheet
- Submittal Control Log
- Change Order Form
- Notice of Deficiency

SECTION IV - FIELD OFFICE ADMINISTRATION

A. General

The majority of the CM tasks will be executed and coordinated from the contractor-supplied field trailers.

B. Meetings

In addition to regular construction meetings, the field staff will meet weekly to discuss schedule, Project issues, and budgetary and personnel issues.

C. Submittal and RFI Files and Routing

The Field Office Staff will establish files for the Project. These are anticipated to be as follows:

1. **Submittals:** A folder will be established for each submittal. The folder will have a label to distinguish it from other files such as RFIs.
2. **RFIs:** All RFIs will be logged and routed in the same manner. A folder will be established for each RFI.

D. Document Processing and Distribution

The CM is responsible for processing and distributing records and logs for all incoming and outgoing communications. The CM will manage submittals using a document tracking system. A Submittal Control Log will be established to track the distribution and routing of submittals.

E. Correspondence Filing System

All original incoming and outgoing documents will be kept in the project correspondence file. The CM is responsible for ensuring that information received at, produced at, or transmitted from the jobsite is forwarded. The CM will be responsible for following the standard procedures for routing copies of incoming and outgoing documents to the appropriate files.

List of Logs and Records

- a. Correspondence - CM to GBB
- b. Correspondence - GBB to CM
- c. Correspondence - Contractors to CM
- d. Correspondence - CM to Contractors
- e. Submittal Log
- f. Submittal Control Log

- g. Change Order (CO) Log
- h. Requests for Information (RFI) Log
- i. RFI Control Log
- j. Non-compliance Log
- k. Testing Log

F. Project File Turnover to Owner

The CM Team shall prepare and submit a complete set of organized construction contract documentation and any record drawings made by the CM Team during construction at the construction closeout.

SECTION V - FIELD DOCUMENTATION

A. Documentation of Work Progress

1. Daily Records

- a. Daily Inspection Report: The Inspector will prepare a Daily Inspection Report for each working day. Each report will be recorded on a standard form and completed with the following information:
 - (1) Reports completed in a given day shall be compiled into one report and have the same number. Reports will be completed by the Inspector by noon the following working day.
 - (2) The report form shall contain owner's representative name and number, date, weather, name of project and contractor, size or type of contractor's manpower, labor, and equipment, quantities, and location of work.
 - (3) Report will document work progress to a detail that is adequate to report each day's activities and production rates. Special attention is to be given to any unusual items, delays, potential claims, change order work, nonconforming work, time and materials completion, and directions issued.
 - (4) Reports shall be reviewed weekly by the CM.
- b. Field Investigation Report: A Field Investigation Report shall be completed for each visit by Project personnel other than the CM or Inspector (i.e., Designer, sub-consultant, etc.). Any observations, results, and directives relating to a particular purpose, other than general inspection, such as problem-solving or rectifying conflicts shall be documented.
- c. Daily Extra Work Report: The Inspector shall record any and all work directed under force account (time and materials) basis. Note that this form of a change order is highly discouraged for the Government of Guam. Each Extra Work Report would include the following:
 - (1) Report shall contain location(s) of work, the size, quantity, number or type of manpower, equipment, and materials, and the associated hours or quantities for each item. Truck tags, invoices, receipts, etc., should be attached as backup to each form. The CM and contractor's superintendent shall agree on the contents and sign each Daily Extra Work Report by noon the following day.

- (2) If there is a disagreement on report content, the items on which the CM and Superintendent concur will be initialed, and copies sent to the contractor and CM. After the contractor has priced these items, the CM will again verify hours and quantities.
- (3) Upon completion of force account work, the CM will review the completed force account reports.

2. Monthly Management Report

A Monthly Management Report will be prepared by the CM and will be used in the preparation of reports for the Managing Principal and GBB. The report will contain information such as major issues, milestones, Project schedule, cost data, change order status, potential claims and Project turnaround times.

3. Construction Photographs

Photographs (or video) shall be taken to document construction progress, changed conditions, extra work, and any other special aspects of work.

- a. Pre-Construction Photographs: These photos will be taken prior to work in critical areas to document existing conditions prior to construction work.
- b. Progress Photographs: Progress photos shall be taken as a reference source or potential evidence of work relating to potential disputes or claims. Routine photos shall be taken to show a history of the work progress, document areas of potential claims, and change order work.
 - (1) Digital photos will be taken, and the reference number, date and time will be entered with each photo.
 - (2) Photos will be filed in the Project records.
 - (3) A video camera will be used for documenting potential claims or special areas of work. The Inspector may make audible notes (on tape) if deemed appropriate, or maintain a detailed written video log.

B. Surveying/Layout

1. Bench Marks

The Contract Documents provide control points for use by the contractors for alignment and level control.

2. Layout Disputes

Should the CM question the contractor's layout, the CM will provide a surveyor on an as-needed basis to check the contractor's work. Work improperly laid out and constructed by the contractor is subject to removal and reconstruction, as deemed necessary by the CM.

C. Material Testing

1. Testing Plan

a. Testing Plan: The contractor shall prepare a testing plan which will be reviewed by the CM. The plan will be a summary of all required testing, and will serve as a checklist to ensure that testing is performed in a timely manner. The testing plan shall include:

- (1) All tests required by the Contract Documents;
- (2) Specification section which defines the test;
- (3) Reference standards;
- (4) Test frequency; and
- (5) Person or organization performing tests.

b. Test Schedule: After the contractor's schedule has been reviewed and approved, the contractor will prepare a testing schedule to enable CM to schedule staff, equipment, factory tests, and laboratory services. The schedule will include the types and chronological order of tests, and a reference to the specification section.

2. Plant Inspection

Plant testing and inspection for the asphalt concrete, Portland cement concrete or other construction materials is not anticipated. Inspection of the liner manufacturing will be necessary.

3. Laboratory Tests and Certifications

a. Test Requirements: Test requirements normally include a statement calling for exact test methods, minimum level of performance, and identification of the product to be tested. This identification is to ensure that the product that is installed is the same tested. Tests shall be performed by the CM, LCM or by a recognized, independent testing laboratory acceptable to the Owner or Owner's Representative.

b. Certified Laboratory Test Results: The contractor shall provide certification that each product meets the specified requirements as well as

the chemical and physical standards. Test reports shall be submitted for standard items which require quality control testing. Tests on actual items to be installed may not be justified in some cases and are defined in the specifications.

4. Test Logs

The CM is responsible for tracking test status, keeping test logs, and updating the test schedule. Each log will note the date, location, type of test, type of material tested, a statement of conformance (pass or fail) that refers to the specifications, and notes for products that are re-tested. Original test result documents shall be kept in the CM's office files.

D. Jobsite Inspection

1. Construction Manager

- a. Responsibility: The contractors are responsible for the quality control of all work. The CM is responsible for assuring that the level of quality control of the work is consistent with the Contract Documents.
- b. Deficiencies: The CM will spot check the quality of the contractors work and report any problems or concerns. Should a deficiency be discovered, the CM shall verbally alert the respective contractor's Superintendent of the deficiency. If the CM believes that the deficiency has not been expediently corrected, he shall issue a Deficiency Notice to the respective contractor's Superintendent.

2. Inspector

The CM or inspectors employed by the CM will be responsible for day-to-day inspection of the work. These inspectors will report to the CM with regard to the contractor's work progress, and compliance with the plans and specifications.

3. Other Inspectors

Inspectors from other local agencies may visit the site on occasion but are not anticipated. All important conversations with these inspectors shall be documented in the Daily Inspection Report and brought to the attention of the CM.

E. Record Drawings

1. General

The Contract Documents require the contractor to maintain a set of Record Drawings to record differences between the drawings and what is actually constructed. The CM will monitor the contractor to do this and will record the differences to the extent possible. Examples of these differences include change order work, depth and alignment changes, and specific locations of all items which were generally located on the plans or which may not have been shown on the plans.

2. Procedure

The contractor shall continuously record on the Record Drawings any changes from or additions to the work described in the Contract Documents. The CM shall verify that the record drawings are being continuously updated prior to each pay estimate.

3. Form

Record Drawings will be one set of blue-line prints with carefully plotted and legible information overlaid in red pencil.

F. Permits and Related Requirements

1. Owner Responsibilities

The Owner has obtained the following permits and the contractors are responsible for maintaining compliance with permit conditions under the oversight of the CM:

- a. Building Permits
- b. Clearing & Grading Permits
- c. Notice of Intent for USEPA NPDES Permit
- d. EPP for the Sanitary Lift Stations

2. Contractor Responsibilities

The contractors, as applicable, are responsible for ensuring that all permits are current, paying for all additional permits and inspection fees, as required for construction and as specified by the Contract Documents. The CM shall be responsible for ensuring that the contractors, as applicable, comply with all conditions stipulated by permits. The contractors will be responsible for complying with the conditions of all permits. CTI has obtained the following permit for their material laydown area:

- a. DLM Accessory Use Permit

SECTION VI - HOME OFFICE ADMINISTRATION

A. Home Office Services

The main responsibility of the Home Office staff is to assist the CM in specific tasks at the CM's request. A general description of the various tasks is:

- Preconstruction Services
- Special Inspections
- Maintenance of Permanent Files of Winzler & Kelly

B. Meetings

The Home Office staff, as applicable, will meet with the CM as-needed to discuss budgetary, personnel, and Project issues.

Typical attendees for the monthly administration meetings will include the Managing Principal, CM, and the Office Coordinator. The meetings should be held at the Home Office.

Standard agenda items for the monthly office meetings will include:

- Budget Status
- Old Business
- Management Issues
- Project Issues
- Performance
- Owner Agenda Items

The Office Coordinator will distribute an agenda two (2) days in advance of the meeting date and will prepare and distribute the meeting minutes.

C. Files and Request Routing

The Home Office will establish Project files in general conformance with the job numbers assigned for the Project.

D. Document Processing and Distribution

The CM is responsible for processing and distributing records and logs for all incoming and outgoing communications. The CM will manage submittals using a document tracking system.

E. Filing System

All original incoming and outgoing documents will be kept in the project file (Hard copy and electronic). The CM is responsible for ensuring that information received at, produced at, or transmitted from the jobsite is forwarded. The CM will be responsible for following the standard procedures for routing copies of incoming and outgoing documents to the appropriate files.

List of Logs & Records

- a. Contractor Master List
- b. Correspondence - CM to GBB
- c. Correspondence - GBB to CM
- d. Correspondence - Contractor to CM
- e. Correspondence - CM to Contractor
- f. Correspondence Outstanding
- g. Submittal Log
- h. Submittal Control Log
- i. Change Order (CO) Log
- j. Requests for Information (RFI) Log
- k. RFI Control Log
- l. Citizen Complaints Log
- m. Test Status Log

F. Project File Turnover to Owner

The CM Team shall prepare and submit a complete set of organized construction contract documentation and any record drawings made by the CM Team during construction at the construction closeout.

SECTION VII – DOCUMENT REVIEW

Document review is an essential part of the CM Plan. Document review is required to introduce the project team to the requirements of the Owner/CM Agreement and to review the Contract Document requirements, intentions, and goals. The CM team shall review the documents, particularly the inspection and testing procedures, documentation, and form requirements. The review of contractor and designer documents, such as change orders, pay requests and submittals, are covered in their corresponding sections.

A. Contract

1. Construction Management Agreement

The Construction Management Agreement between Winzler & Kelly and the Owner. The reviewer should identify our roles, obligations, and responsibilities under the contract, and on the meaning in laymen's language of the terms and conditions of the contract.

2. Contract General Conditions

The Construction Contract General Conditions. The General Conditions are found in the project specifications. They cover the Scope of Work, Control of Work, Progress and Completion of Work, Legal Relations and Responsibility, Insurance and Liability, and Measurement and Payment.

B. Inspection Requirements

1. Contract Documents - Plans and Specifications. Each technical specification section has to be reviewed for the major materials, testing and inspection requirements. A Construction Materials Testing Plan is then developed which highlights the field and laboratory testing requirements.

2. Construction Management Plan Testing Procedures and Inspection Records. Review the CM plan and the various testing requirements for the project. Each test and test reference materials are identified. Inspection reports and forms, together with examples of how to complete the forms, are in this document. Document control and filing systems will need to be reviewed.

C. Safety and Loss Prevention

1. Safety

Winzler & Kelly's Illness and Injury Prevention Program and the Contractor's Project Specific Safety and Health Plan shall be reviewed.

SECTION VIII - EMERGENCY SERVICES

The contractors are responsible for providing and implementing their own Health and Safety Plans which will include direction for personnel should an emergency occur. Emergency contact numbers are to be posted on their respective information boards at the site offices. Incident reports will be filled out immediately after an accident, chemical spill, or other health and safety incident by the contractor's Health and Safety Officer. A copy of the report will be emailed immediately to the CM as notification.

A. Emergency Services

For emergency services, dial:

- | | | |
|----|--|----------------|
| 1. | Ambulance/fire/police/rescue/EOD/HazMat | 911 |
| 2. | Police – Non-emergency | (671) 472-8911 |
| 3. | Guam OSHA | (671) 475-0175 |
| 4. | Guam Public Health - Poison Control Center | (671) 646-8104 |
| 5. | Guam Memorial Hospital | (671) 647-2330 |

SECTION IX - PUBLIC NOTICES AND COMMUNITY RELATIONS

A. General

All public notifications and community relations efforts will be coordinated by the CM with the Owner and/or Owner's Representative.

B. Public Notices

The CM will be responsible for coordinating with the Owner or Owner's Representative prior to the production and issuance of any notices.

C. Community Relations

All employees of the CM, Owner and Owner's Representative, the Engineer and the contractors assigned to this Project will be expected to be courteous and helpful at all times when dealing with the local community.

If official response is warranted, the contractors will direct concerns expressed by local residents and businesses to the CM for resolution.

Public meetings and briefings will be held for individuals, businesses, or groups when deemed necessary by the Owner and/or Owner's Representative, and will be conducted by the CM.

SECTION X- FINAL INSPECTION AND CLOSE-OUT

A. Introduction

In preparation for final acceptance, the contractors shall conform to the Contract Documents, which include drawings, special provisions and addenda to the contract, standards and specifications, which are applicable to Project completion, final inspection, and other closeout requirements.

Note that by contracts, the Time of Completion is anticipated to be sometime in April and May of 2011. The contractors failure to attain this milestone would be cause for deduction of liquidated damages.

B. Record Drawings

The contractors shall prepare and submit contract Record Drawings for the Owner. The Record Drawings shall reflect any minor deviations from the Approved Plans that occur during the construction process.

C. Final Payment

After the contractors have, in the opinion of the CM, satisfactorily completed all corrections identified in the final inspection and have delivered, in accordance with the Contract Documents, all required documents, the contractors may make an application for the final payment following the procedure for progress payments.

If, on the basis of CM's observation of the work during construction and final inspection, and CM's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, the CM is satisfied that the work has been completed and the respective contractor has fulfilled the contract requirements, the CM will indicate in writing the CM's recommendation of payment and present this to the Owner's Representative along with the Application for Payment. Otherwise, the CM will return the Application for Payment to the respective contractor indicating in writing the reasons for refusing to recommend final payment. The amount recommended by the CM will become due, and paid by the Owner to Contractor, 40 days after the Owner's issuance of a Notice of Completion.

The making and acceptance of final payment will constitute a waiver of all claims by the Owner against the respective contractor, except claims arising from:

1. Unsettled Liens;
2. Defective work that appears after final inspection;
3. Failure to comply with the Contract Documents; and
4. Contractor's continuing obligations under the Contract Documents.

The making and acceptance of final payment will constitute a waiver of all claims by the respective contractor against the Owner other than those that have been previously submitted in writing and are still unresolved.

D. Warranty

The contractors shall guarantee all work against defects resulting from the use of inferior materials, equipment, or workmanship for a period of one (1) year commencing on the date of Notice of Completion or upon disturbance of the work by another contractor hired by the Owner, whichever is earlier. The guarantee shall cover 100% of all costs of repairs within this one (1) year period, including all costs of labor, materials, equipment, and incidentals.

E. Final Acceptance

When the Work is substantially completed the Contractor shall notify the Owner's Representative, in writing, that the work will be ready for final inspection and testing on a definite date which shall be stated in such notice. The notice shall be given at least ten (10) calendar days in advance of said date and shall be forwarded through the CM who will attach his endorsement as to whether or not he concurs with the Contractor's statement that the Work will be ready for final inspection or tests on the date given but such endorsement shall not relieve the Contractor of this responsibility in the matter.

Prior to submitting the notice for a final inspection for certification of final acceptance and final payment, the CM will submit a punch-list of items to be completed or corrected prior to contract completion.

Upon completion of final inspection, the CM will either provide written acceptance of the entire work or advise the respective contractor of work not completed. Upon acceptance of all work required and the release of all claims against the Owner, the CM shall file a written certificate with the Owner and/or Owner's Representative and with the Contractor as to the entire amount of work performed and compensation earned by the Contractor, including extra work and compensation therefor.

The following Closeout Submittals will be submitted by contractors upon completion of work at least seven (7) days prior to submitting Application for Final Payment:

1. Evidence of Compliance with Requirements of Governing Authorities
2. Project Record Documents
3. Operation and Maintenance Manuals
4. Warranties and Bonds
5. Evidence of Payment and Release of Liens or Stop Payment Notices as outlined in Conditions of the Contract
6. Release of Claims as outlined in Conditions of the Contract
7. Certificate of Final Completion

APPENDIX A

SECTION 01400A

CONSTRUCTION QUALITY CONTROL AND QUALITY ASSURANCE (For Landfill Liner System)

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Parties
- B. Communications
- C. Soil Component Acceptance
- D. Geosynthetic Components Acceptance

1.2 PARTIES

The parties described below are associated with the ownership, design, supply, manufacture, transportation, installation, and quality assurance of the Work. The definitions, responsibilities, qualifications, and submittals of these parties are outlined in the following subsections.

A. Project Manager

- 1. The Project Manager is an official representative of the Owner, defined as the individual who coordinates construction and quality assurance activities for the project. The Project Manager is responsible for coordination of all construction quality assurance activities, including communications coordination and resolution of all quality assurance issues that arise during construction.

B. Engineer

- 1. The Engineer is the individual and/or firm who prepares the design, including project plans and specifications for the lining system. The Engineer is responsible for approving all design and specification changes and making design clarifications necessitated during construction of the lining system.

C. Manufacturer

- 1. The Manufacturer is the firm which produces any of the various geosynthetic lining system components used in the Work. Each Manufacturer is responsible for the production of its geosynthetic product. In addition, each Manufacturer is responsible for the condition of the geosynthetic product until the material is accepted by the Project Manager upon delivery. Each Manufacturer shall produce a consistent product that meets the project specifications. Each Manufacturer

CONSTRUCTION QUALITY CONTROL AND QUALITY ASSURANCE (FOR LANDFILL LINER SYSTEM)

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shall provide quality control documentation for its product as required in these Specifications.

D. Earthwork Contractor

1. The Earthwork Contractor is the firm which performs the site earthwork preparation and construction of the soil components of the lining system. The Earthwork Superintendent is the individual responsible for the Earthwork Contractor's field crew. The Earthwork Superintendent may represent the Earthwork Contractor at all site meetings and acts as the Earthwork Contractor's spokesman on the project.
2. The Earthwork Contractor is responsible for constructing soil components of the lining systems in conformance to the project plan and specifications. The Earthwork Contractor may also be responsible for supplying and transporting the required earth and granular materials, concrete, piping, and other work, as outlined in the project specifications.

E. Geosynthetic Installer

1. The Geosynthetic Installer (Installer) is the firm which installs the geosynthetic components of the lining system. The Geosynthetic Superintendent is the individual responsible for the Installer's field crew. The Geosynthetic Superintendent shall represent the Installer at all site meetings and act as the Installer's spokesman on the project.
2. The Installer is responsible for field handling, storing, deploying, seaming, temporary restraining and all other aspects of the geosynthetics installation. The Installer may also be responsible for transportation of these materials to the site and for anchor systems, if required by the project specifications.

F. Soil Quality Assurance Consultant

1. The Soil Quality Assurance Consultant (Soil QAC) is the firm which observes and documents activities related to the quality assurance of the installation of the soil components of the lining system on behalf of the Owner. The Soil QAC and Geosynthetic QAC may be the same party.
2. The term Soil Quality Assurance Engineer (Soil QAE) refers to the engineer employed by the QAC who is personally in charge of the quality assurance work. The personnel of the Soil QAC also include Soil Quality Assurance Monitors (Soil QA Monitors) who are located at the site for construction observation and documentation.
3. The Soil QAC is responsible for observing and documenting activities related to the quality assurance of the construction of the soil components of the lining

systems. The Soil QAC is responsible for the implementation of the project QAP prepared by the Project Manager. The Soil QAC is also responsible for issuing a final Quality Assurance Report, sealed by a qualified Professional Engineer. Other duties of the Soil QAC shall include overseeing the soil laboratory testing.

4. The specific duties of the Soil QAC personnel are as follows:

The Soil QAE:

- a. Reviews all project plans and specifications.
- b. Reviews other site-specific documentation.
- c. Develops site-specific addenda for quality assurance of soil components with the assistance of the Project Manager as necessary.
- d. Administers the soil portions of the QAP, including assigning and managing all soil quality assurance personnel, reviews all field reports, and provides engineering review of all quality assurance related issues.
- e. Familiarizes himself with all applicable changes to project plans and specifications as issued by the Designer.
- f. Acts as on-site (resident) representative of the Soil QAC.
- g. Familiarizes all Soil QA Monitors with the site and the project QAP.
- h. Assigns Soil QA Monitors to observe and document all activities requiring monitoring.
- i. Attends all quality assurance related meetings, including resolution, pre-construction, daily, weekly meetings.
- j. Reviews the calibration certification of the on-site soil testing equipment.
- k. Manages the preparation of the record drawings.
- l. Reviews the Soil QA Monitors' daily reports, logs, and photographs.
- m. Notes any on-site activities that could result in damage to the installed soil components.
- n. Reports to the Project Manager, and logs in the daily report, any relevant observations reported by the Soil QA Monitors.
- o. Prepares his own daily report.
- p. Prepares a daily summary of the soil component quantities estimates installed each day of construction activity.
- q. Prepares a weekly summary of soil quality assurance activities at the end of each week of the construction activity.
- r. Oversees marking, packaging and shipping of all laboratory test samples.
- s. Reviews the results of laboratory testing and makes appropriate recommendations.
- t. Recommends the approval of the final soils acceptance to the Project Manager.
- u. Designates a Soil QA Monitor to represent the QAE whenever he is absent from the site while operations are ongoing.
- v. Reports any unapproved deviations from the QAP to the Project Manager.
- w. Maintains field files of all logs and reports.
- x. Maintains qualifications of all personnel and calibration of equipment.

y. Prepares the final Quality Assurance Report.

5. The Soil QA Monitor:

- a. Monitors, logs, photographs and/or documents all soil component installation operations. Photographs shall be taken routinely and in critical areas of the installation sequence. These duties shall be assigned by the Soil QAE.
- b. Monitors and documents the following operations for all soil components:
 - (1) Material delivery
 - (2) Unloading and on-site transport and storage
 - (3) Sampling and conformance testing
 - (4) Deployment operations
 - (5) Condition of the soil components as placed
 - (6) Visual observation, by walkover, of the finished soil components
 - (7) Sampling and field testing of the finished soil components
 - (8) Repair operations, if and when necessary
- c. Conducts soil sampling and testing.
- d. Documents any on-site activities that could result in damage to the constructed soil components. Any problems noted shall be reported as soon as possible to the Soil QAE.

6. Any differences of the Soil QAC's interpretation of the project plans and specifications from the Earthwork Contractor's interpretation shall be properly and adequately assessed by the Soil QAC through discussion with the Earthwork Contractor. If such assessment indicates any actual or suspected work deficiencies, the Soil QAC shall inform the Earthwork Contractor of these deficiency issues.

G. Geosynthetic Quality Assurance Consultant

1. The Geosynthetic Quality Assurance Consultant (Geosynthetic QAC) is the firm which observes and documents activities related to the quality assurance of the production and installation of the geosynthetic components of the lining systems on behalf of the Owner. The Geosynthetic QAC and Soil QAC may be the same party.
2. The term Geosynthetic Quality Assurance Engineer (Geosynthetic QAE) shall be used to designate the engineer working for the Geosynthetic QAC in charge of the quality assurance work. The personnel of the Geosynthetic QAC also include Geosynthetic Quality Assurance Monitors who are located at the site for construction observation and documentation.
3. The Geosynthetic QAC is responsible for observing and documenting activities related to the quality assurance of the production and installation of the geosynthetic components of the lining systems. The Geosynthetic QAC is responsible for reviewing work products of the Geosynthetic Quality Assurance

Laboratory. The Geosynthetic QAC is also responsible for issuing a final Quality Assurance Report, sealed by a Professional Engineer.

The specific duties of the Geosynthetic QAC personnel are as follows:

4. The Geosynthetic QAE:
 - a. Familiarizes himself with all project plans and specifications.
 - b. Reviews other site-specific documentation, including proposed layouts, and manufacturer's and installer's literature.
 - c. Develops site-specific addenda for quality assurance of geosynthetics with the assistance of the Project Manager, as necessary.
 - d. Administers the geosynthetic portions of the QAP, including assigning and managing all geosynthetic quality assurance personnel, reviewing all field reports, and providing engineering review of all quality assurance related issues.
 - e. Reviews for familiarity all appropriate changes to design drawings and project specifications as issued by the Designer.
 - f. Acts as the on-site (resident) representative of the Geosynthetic QAC.
 - g. Familiarizes all Geosynthetic Quality Assurance Monitors with the site and the project QAP.
 - h. Assigns Geosynthetic Quality Assurance personnel to observe and document geosynthetic installation activities requiring certification.
 - i. Attends all quality assurance related meetings, including resolution, pre-construction, daily, weekly.
 - j. Reviews all Manufacturer and Installer certifications and documentation and makes appropriate recommendations.
 - k. Reviews the Installer's personnel qualifications for conformance with those qualifications pre-approved for work on site.
 - l. Manages the preparation of the record drawings.
 - m. Reviews the calibration certification of the on-site testing equipment, as required.
 - n. Reviews all Geosynthetic Quality Assurance Monitor's daily reports, logs and photographs.
 - o. Notes any on-site activities that could result in damage to the geosynthetics.
 - p. Reports to the Project Manager, and logs in the daily report, any relevant observations reported by the Geosynthetic Quality Assurance Monitors.
 - q. Prepares his own daily report.
 - r. Prepares a daily summary of the quantities estimates of geosynthetics installed that day.
 - s. Prepares the weekly summary of geosynthetic quality assurance activities.
 - t. Oversees the marking, packaging and shipping of all laboratory test samples.
 - u. Reviews the results of laboratory testing and makes appropriate recommendations.
 - v. Recommends the approval of the final liner acceptance to the Project Manager.

- w. Designates a Geosynthetic Quality Assurance Monitor to represent the QAE whenever he is absent from the site while operations are ongoing.
 - x. Reports any unapproved deviations from the QAP immediately to the Project Manager.
 - y. Prepares the final Quality Assurance Report.
5. The Geosynthetic Quality Assurance Monitor:
- a. Monitors, logs, photographs and/or documents all geosynthetic installation operations. Photographs shall be taken routinely and in critical areas of the installation. These duties shall be assigned by the Geosynthetic QAE.
 - b. Monitors the following operations for all geosynthetics:
 - (1) Material delivery, as required
 - (2) Unloading and on-site transport and storage
 - (3) Sampling for conformance testing
 - (4) Deployment operations
 - (5) Joining and/or seaming operations
 - (6) Condition of panels as placed
 - (7) Visual inspection by walkover
 - (8) Repair operations
 - c. Monitors and documents the geomembrane seaming operations, including:
 - (1) Trial seams
 - (2) Seam preparation
 - (3) Seaming
 - (4) Nondestructive seam testing
 - (5) Destructive seam testing
 - (6) Field tensiometer testing
 - (7) Laboratory sample marking
 - (8) Repair operations
 - (9) Measurements of uninstalled quantities
 - d. Documents any on-site activities that could result in damage to the geosynthetics. Any problems noted shall be reported as soon as possible to the Geosynthetic QAE.
6. Any differences between the Geosynthetic QAC's and Installer's interpretation of the project plans and specifications shall be properly and adequately assessed by the Geosynthetic QAC. If such assessment indicates any actual or suspected work deficiencies, the Geosynthetic QAC shall inform the Installer, or the Installer's representative, of these deficiencies.

H. Soil Quality Assurance Laboratory

- 1. The Soil Quality Assurance Laboratory (Soil QAL) is the firm which conducts tests on soil samples taken from the site. The Soil QAL and Geosynthetic QAL may be the same party. The Soil QAL is responsible for conducting the appropriate

laboratory tests as directed by the Soil QAE. The test procedures shall be done in accordance with the test methods outlined in these specifications.

I. Geosynthetic Quality Assurance Laboratory

1. The Geosynthetic Quality Assurance Laboratory (Geosynthetic QAL) is the firm which conducts tests on samples of geosynthetics taken from the site. The Geosynthetic QAL and the Soil QAL may be the same party. The Geosynthetic QAL is responsible for conducting the appropriate laboratory tests as directed by the Geosynthetic QAE. The test procedures shall be done in accordance with the test methods outlined in these specifications

1.3 COMMUNICATIONS

Communications shall be facilitated by the following meetings.

A. Pre-Construction Meeting

1. A pre-construction meeting shall be held at the site prior to beginning of lining system installation. The meeting shall be attended by the Project Manager, Designer, Earthwork Contractor, Geosynthetic Installer, Soil/Geosynthetic QAE, surveyor, and the Owner's technical representative. Specific topics considered for this pre-construction meeting include review of the project QAP for any problems or additions. The responsibilities of each party should also be reviewed and understood clearly. The meeting shall be documented by a person designated at the beginning of the meeting, and minutes shall be transmitted to all parties.

B. Progress Meetings

1. Progress meetings shall be held weekly, or as directed by the Project Manager, between the Soil/Geosynthetic QAE, Earthwork Contractor's/Installer's Superintendent, Project Manager and any other concerned parties. This meeting shall discuss current progress, planned activities for the next week, issues requiring resolution, and any new business or revisions to the work. The Soil/Geosynthetic QAE shall log any problems, decisions, or questions arising at this meeting in his weekly report. If any matter remains unresolved at the end of this meeting, the Project Manager shall be responsible for the resolution of the matter and the communication of the decision to the appropriate parties. The Project Manager may require daily progress meetings at his discretion.

1.4 SOIL COMPONENTS ACCEPTANCE

- A. Upon written recommendation by the Soil QAC, the Project Manager shall consider accepting the soil components of the lining system. The Earthwork Contractor will retain all ownership and responsibility for the soil lining components until acceptance by the Project

Manager. At the Project Manager's discretion, the lining system may be accepted in sections or at points of substantial completion.

- B. The soil components of the lining system will be accepted by the Project Manager when:
 - 1. The installation of the soil components is finished.
 - 2. Verification of the adequacy of the constructed components, including repairs, if any, is completed in accordance with the specifications.
 - 3. All documentation of installation is completed.
 - 4. The Soil QAC is able to recommend acceptance.

- C. The Soil QAC shall certify that installation of the soil components has proceeded in accordance with the soil portions of the specifications except as noted to the Project Manager.

1.5 GEOSYNTHETIC COMPONENTS ACCEPTANCE

- A. Upon written recommendation by the Geosynthetic QAC, the Project Manager shall consider accepting the geosynthetic components of the lining system. The Installer will retain all ownership and responsibility for the geosynthetics in the lining system until acceptance by the Project Manager. At the Project Manager's discretion, the lining system may be accepted in sections or at points of substantial completion.

- B. The geosynthetic components of the lining system will be accepted by the Project Manager when:
 - 1. The installation of the geosynthetic components is finished.
 - 2. Verification of the adequacy of all seams including associated testing and repairs, if any, is completed in accordance with the specifications.
 - 3. All documentation of installation is completed.
 - 4. The Geosynthetic QAC is able to recommend acceptance.

- C. The Geosynthetic QAC shall certify that installation has proceeded in accordance with the geosynthetic portions of the specifications except as noted to the Project Manager.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

CONSTRUCTION QUALITY CONTROL AND QUALITY ASSURANCE (FOR LANDFILL LINER SYSTEM)

Layon Municipal Sanitary Landfill

Project No. SWMD-09-02

01400A-8

APPENDIX B

**Guam Landfill CM
Project Contact List**

No.	Name	Title	Firm	Phone	Cell	Email
BLACK CONSTRUCTION CORPORATION						
1	Dante Abucay	Q/C Manager	Black Construction Corporation	671-646-4861	671-988-1566	dantea@blackguam.com
2	Tom Anderson	Executive VP	Black Construction Corporation	671-646-4861	671-727-1888	toma@blackguam.com
3	Augie De Leon	Project Supt.	Black Construction Corporation	671-646-4861	671-727-4871	augied@blackguam.com
4	Willie Diwa	Project Manager	Black Construction Corporation	671-646-4861	671-487-4862	wilfredogd@blackguam.com
5	Roger Dulay	Electrical Supervisor	Black Construction Corporation	671-646-4861		rogerd@blackguam.com
6	Orly Nojadera	Mech Supervisor	Black Construction Corporation	671-646-4861		orlandonojadera@yahoo.com
7	Leonard Rabago	Safety Officer	Black Construction Corporation	671-646-4861		leonardr@blackguam.com
8	Johnny Sol	Mech Project Eng.	Black Construction Corporation	671-646-4861		juanitos@blackguam.com
9	Leony Torcelino	Electrical Project Eng.	Black Construction Corporation	671-646-4861		leonciot@blackguam.com
10	Alice Valencia	Civil Proj. Eng.	Black Construction Corporation	671-646-4861		alicev@blackguam.com
CORE TECH INTERNATIONAL (CTI)						
11	Mr. Young Ahn	Vice President	Core Tech International	671-473-5000	671-486-5600	young.ahn@coretechintl.com
12	Pepito Bedia	Safety Officer	Core Tech International	671-473-5000	671-486-5112	pepito.bedia@coretechintl.com
13	Medel Bias	General Manager	CTI / AB MER Const. Corp.	671-637-8401	671-888-3204	abmer@guam.net
14	Aurora Casiquin	Procurement Mng.	Core Tech International	671-473-5000	671-486-5010	au.casiquin@coretechintl.com
15	Art Chan	Marketing Manager	CTI / Hawaiian Rock Products	671-734-2971		achan@hawaiianrock.com
16	Ramir Javelosa	Manager Elec Dept.	Core Tech International	671-473-5000	671-486-5118	ramir.javelosa@coretechintl.com
17	Byong Kim	President	CTI / Korando	671-649-7880		koracorp@ite.net
18	Seung Kim	Supporting Team	Core Tech International	671-473-5000	671-486-5111	seung.kim@coretechintl.com
19	Roberto Lee	Project Manager	Core Tech International	671-473-5000	671-486-5012	roberto.lee@coretechintl.com
20	Irwin Liwag	Project Mng. Elec.	Core Tech International	671-473-5000	671-486-5024	irwin.liwag@coretechintl.com
21	Roel Lague	Supervisor	Core Tech International	671-473-5000	671-486-5688	main@coretechintl.com
22	Felix Quan	General Manager	CTI / Primos Heavy Equip. Rental	671-632-7114	671-898-9382	
23	Joel Santos	Q/C Manager	Core Tech International	671-473-5000	671-486-5021	joel.santos@coretechintl.com
24	Mr. Kuk Song	Manager Civil Dept.	Core Tech International	671-473-5000	671-486-5080	kj.song@coretechintl.com
EA SCIENCE & TECHNOLOGY						
25	Jerome Lambiotte	Geologist	EA Science & Technology	671-646-5231		mlambiotte@eaest.com
EMCE						
26	Val DeGuzman	Electrical Designer	EMCE	671-649-0166		valdg@emceconsulting.com
29	Abner Mariano	Assoc. Project Engineer	EMCE	671-649-0166		amar@emceconsulting.com
28	Vic Reyes Jr.	Principal	EMCE	671-649-0166		vr@emceconsulting.com

**Guam Landfill CM
Project Contact List**

No.	Name	Title	Firm	Phone	Cell	Email
GBB INC.						
29	Chace Anderson	Vice President	GBB Inc.	703-573-5800		candersongbb@gmail.com
30	Jeff Larioni		GBB Inc.			
31	Chris Lund	Vice President	GBB Inc.	703-663-2435	703-853-7806	Clund@gbbinc.com
32	David Manning	Special Principal Associate	GBB Inc.			Dmanning@gbbinc.com
33	Jack Tucker		GBB Inc.			jtucker@gbbinc.com
GEO-ENGINEERING & TESTING						
34	Ukrit Siriprusanan	President	Geo-Engineering & Testing	671-646-7710		ukrit@geoguam.com
GUAM EPA						
35	Cris Bensen	Engineer II	Guam EPA	671-475-1658		cris.bensan@guamepa.net
36	Ray Calvo	Palnner IV	Guam EPA	671-475-1644		ray.calvo@guamepa.net
37	Benny Cruz	Engineer Supervisor	Guam EPA	671-646-4361		benny.cruz@guamepa.net
38	Oscar Delfin	Engineer III	Guam EPA	671-475-1608		oscar.delfin@guamepa.net
39	Angel Marquez	Engineer Supervisor	Guam EPA	671-475-1638		angel.marquez@epa.guam.gov
40	Conchita Taitano	Program Director	Guam EPA	671-475-1658		conchita.taitano@guamepa.net
JAEDRA PACIFIC						
41	Willy Flores, PE	President	Jaedra Pacific Dev.	671-646-1714	671-482-6387	wbsmflores@jaedrapacific.com
MAEDA PACIFIC CORPORATION						
42	Steve Aguon	Asst. Safety Officer	Maeda Pacific Corp.	671-646-4326/6050	671-898-0938	
43	Danny Lizama	Project Manager	Maeda Pacific Corp.	671-646-4326/6050	671-888-2933	
44	Tom Nielsen	President	Maeda Pacific Corp.	671-646-4326/6050	670-888-5851	tnielsenmpc@teleguam.net
45	Marnel Pilarca	Site Surveyor	Maeda Pacific Corp.	671-646-4326/6050	671-898-2323	
46	Miguel Rangel	Safety Officer	Maeda Pacific Corp.	671-646-4326/6050	671-898-0959	miguelpmc@teleguam.net
47	Joe Sohl	Asst. Safety Officer-Onsite	Maeda Pacific Corp.	671-646-4326/6050	671-888-0790	
48	Pete Yparraguirre	Asst. Project Manager	Maeda Pacific Corp.	671-646-4326/6050	671-898-5005	
MDI						
49	Cesar Calzada	Well Capping	MDI	671-646-5500	671-888-5260	mdi@geoguam.com
PACIFIC SOILS ENGINEERING & TESTING						
51	Maria Cristi	Quality Control Testing	Pacific Soils Engineering & Testing	671-646-1489/5790		pacsoils@ite.net
SUMITOMO MITSUI CONSTRUCTION CO. (SMCC)						
51	Kazuo Imacho	Cell Excavation & Embankment	SMCC	671-649-7521-4	671-888-2093	imacho@ite.net
52	J. Nandagopalan	Cell Excavation & Embankment	SMCC	671-649-7521-4	671-888-1712	sumicon@ite.net
53	Takeuyki Shiino	Cell Excavation & Embankment	SMCC	671-649-7521-4	671-888-2891	tkshiino@smcon.co.jp

**Guam Landfill CM
Project Contact List**

	Name	Title	Firm	Phone	Cell	Email
SWCA ENVIRONMENTAL CONSULTANTS						
54	David Defant	Archaeological Support Services	SWCA	472-3117/477-6566	671-888-3307	ddefant@swca.com
TG ENGINEERS, PC						
55	Marc Gagarin	Chief Engineer	TG Engineers, PC	671-647-0808		marcg@tg-engr.com
56	John Garcia	Construction Site Inspector	TG Engineers, PC	671-647-0808 x212	671-898-3810	johng@tg-engr.com
57	Robert Schneider	Construction Manager	TG Engineers, PC	671-647-0808 x209	671-888-1177	roberts@tg-engr.com
USEPA REGION 9						
58	Chris Lichens	SFD Ordot RPM	USEPA Region 9	415-972-3809		lichens.chris@epa.gov
59	John McCarroll	Chief Pacific Island Office	USEPA Region 9	415-972-3774		mccarroll.john@epa.gov
60	Mike Montgomery	Chief Federal Facilities Branch	USEPA Region 9	415-972-3438		montgomery.mike@epa.gov
61	Mike Wolfram	Guam Program Manager	USEPA Region 9	415-972-3027		wolfram.michael@epa.gov
V OLIVARES RLS						
62	V Olivares	Surveyor	V Olivares RLS	671-734-5836	671-727-7734	vigilio_olivares@yahoo.com
WINZLER & KELLY CONSULTING ENGINEERS						
63	Paul Baron	Office Managing Principal	Winzler & Kelly	671-472-6792	671-727-6802	PaulBaron@w-and-k.com
64	Jarrett Brown	Civil Engineer IV	Winzler & Kelly	671-472-6792	671-727-6805	JarrettBrown@w-and-k.com
65	Saman Chaudry	Chief Business Officer	Winzler & Kelly	415-283-4970	415-710-9933	SamanChaudry@w-and-k.com
66	Tyler Collins	Office Managing Principal	Winzler & Kelly	671-472-6792		TylerCollins@w-and-k.com
67	Travece Duenas	Office Managing Principal	Winzler & Kelly	671-472-6792	671-687-1207	TraveceDuenas@w-and-k.com
68	Briankeith Espiritu	Staff Civil Engineer I	Winzler & Kelly	671-472-6792		Briankeithespiritu@w-and-k.com
69	Peter Gervacio	Civil CAD Technician I	Winzler & Kelly	671-472-6792	671-688-9401	PeterGervacio@w-and-k.com
70	Mark Pachkoski	Civil CAD Technician II	Winzler & Kelly	671-472-6792	671-727-6803	MarkPachkoski@w-and-k.com
71	Fred Smith	Office Manager	Winzler & Kelly	670-234-0483		FredSmith@w-and-k.com
72	Aaron Sutton	Civil Engineer V	Winzler & Kelly	671-472-6792	671-727-6804	AaronSutton@w-and-k.com
73	Tressie Word	Staff Civil Engineer II	Winzler & Kelly	671-472-6792	671-727-6807	TressieWord@w-and-k.com
VECTOR ENGINEERING						
74	Jose Armenta		Vector Engineering	530-272-2448	671-727-0601	armenta@vectoreng.com
75	Bryan Fritzler	Director of Technical Services	Vector Engineering	303-279-7533		fritzler@vectoreng.com
76	Scott Purdy	Vice President Marketing	Vector Engineering	530-272-2448		purdy@vectoreng.com
WM ENGINEERING SERVICES						
77	Bill Miller	Principal Mechanical Engineer /Pre	WM Engineering	671-646-8127		wgmiller@guam.net
78	Marlon Notarte	Senior Mechanical Engineer	WM Engineering	671-646-8127		wmesmarlon@guam.net
79	Ramil Tio	Junior Engineer	WM Engineering	671-646-8127		ramil@guam.net

**Guam Landfill CM
Project Contact List**

	Name	Title	Firm	Phone	Cell	Email
80	Dr. Robin Wentworth	President	Organizational Excellence Intl.	601-544-3072		robinwent@aol.com
81	Dan Wooster				671-688-3264	danwoo@ite.net

APPENDIX C

ON-SITE MEETING MINUTES

Project: _____ Project Number: SWMD-09-0

A/E Project Number: _____
Owner: _____ Meeting Location: Onsite
Re: _____ Meeting Date: _____ Time: _____

This confirms and records our interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within seven days of the date below, we will assume that the following interpretation or description is complete and accurate.

Participants:

Item	Description	Action By

Attachments

Prepared by: Paul Baron

Date: 1-25-10

Copies: Participants _____ _____ _____ _____ _____ File

APPENDIX D

APPLICATION AND CERTIFICATE FOR PAYMENT

TO: **Winzler & Kelly** PROJECT: **Layon Municipal Sanitary Landfill** APPLICATION NO: **01** Distribution To:
 ATTN: **PAUL K. BARON, P.E., LEED AP, CPESC** Entrance Area Facilities Cells 1&2 PERIOD TO: **January 31, 2010** Owner
Senior Project Manager/ Guam R.M.E. Inarajan, Guam PROJECT NO.: **SWMD-09-02** Architect
 FROM (SUB-CONTRACTOR): **Black Construction Corporation** VIA: Contractor
P.O. Box 24887, GMF, Guam 98921

CONTRACT DATE:

CHANGE ORDER SUMMARY			ADDITIONS	DEDUCTIONS
Change Orders approved in previous months by Owner				
TOTAL				
Approved this Month				
NO.	Date Approved			
1				
2				
3				
4				
Net change by Change Orders			0.00	0.00

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief, the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: **Black Construction Corporation**

By: 
WILLIE DIWA 04-Feb-10
 Project Manager Date

Application is made for Payment, as shown below

1. ORIGINAL CONTRACT SUM	20,477,000.00
2. Net change by Change Orders	0.00
3. CONTRACT SUM TO DATE (Line 1 + Line 2)	20,477,000.00
4. TOTAL WORK COMPLETED & STORED TO DATE	510,672.49
5. RETAINAGE:	
2.48%	
10.00%	(51,067.25)
6. TOTAL EARNED LESS RETAINAGE	458,605.24
(Line 4 less Line 5 Total)	
7. LESS PREVIOUS INVOICES	
8. CURRENT PAYMENT DUE	458,605.24
9. BALANCE TO FINISH	20,017,394.76
(Line 3 less Line 6)	

ENGINEER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Engineer certifies to the Owner that to the best of Engineer's knowledge, information and belief, the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$459,605.24
 (Attach explanation if amount certified differs from the amount applied for)

ENGINEER'S APPROVAL by:  Date: 2-22-10

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein issuance, payment and acceptance of payment are without prejudice to any right of the Owner or Con

OWNER'S CERTIFICATION FOR PAYMENT

All charges are accurate and reasonable. Quality of all work completed is consistent with the quality standards of the contract. All payments requested are in compliance with the terms and conditions of the contract.

CHRISTOPHER A. LUND

Receiver - Gershman, Brickner & Bratton, Inc.
 Reviewed and recommended for payment of \$

Date

Approved for Payment
DAVID L. MANNING

Date

Receiver Representative - Gershman, Brickner & Bratton, Inc.

AIA Document G702™ - 1992

Application and Certificate for Payment

TO OWNER: GOVERNMENT OF GUAM	PROJECT: LAYON MUNICIPAL SANTARY LANDFILL ACCESS ROAD AND SEWER SYSTEM VIA ARCHITECT: TG ENGINEERS, PC 125 Tun Jesus Crisostomo St., Sunny Plaza, Suite 303, Tamuning, Guam 96913	APPLICATION NO: 01 PERIOD TO: December 31, 2009 CONTRACT FOR: CONTRACT DATE: December 11, 2009	Distribution to: OWNER: <input type="checkbox"/> ARCHITECT: <input type="checkbox"/> CONTRACTOR: <input type="checkbox"/> FIELD: <input type="checkbox"/> OTHER: <input type="checkbox"/>
FROM CONTRACTOR: CORE TECH INTERNATIONAL CORPORATION			

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet, AIA Document G703, is attached.

1. ORIGINAL CONTRACT SUM.....	\$ 26,800,000.00
2. Net change by change Orders.....	\$ 0.00
3. CONTRACT SUM TO DATE (Line 1+2).....	\$ 26,800,000.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703).....	\$ 171,947.00
5. RETAINAGE:	
a. 5% of Contract Sum to Date (Line 3)	\$ 17,194.70
b. 10% of Stored Material (Column F on G703)	\$ 0.00
Total Retainage (Lines 5a + 5 or total in Column I of G703).....	\$ 17,194.70
6. TOTAL EARNED LESS RETAINAGE.....	\$ 154,752.30
(Line 4 Less Line 5 Total)	
7. PREVIOUS CERTIFICATES FOR PAYMENT.....	\$ 154,752.30
(Line 6 from prior Certificate)	
8. CURRENT PAYMENT DUE.....	\$ 154,752.30
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6)	\$ 26,645,247.70

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that the current payment shown herein is now due.

CONTRACTOR:

By: MR. HO S. EUN Date December 31, 2009

State of: Guam
Country of: United States of America
Subscribe and sworn to before
me this 31st day of December 2009

Notary Public: [Signature]
My Commission expires: Feb. 22, 2012

PRINCESS P. GOMEZ
NOTARY PUBLIC
In and for Guam, U.S.A.
My Commission Expires: **Feb. 22, 2012**
195 Tun Jose Salas Street
Tamuning, Guam 96913

ARCHITECTS CERTIFICATE OF PAYMENT

In accordance with Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of AMOUNT CERTIFIED.

AMOUNT CERTIFIED..... \$ _____
(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: _____ Date: _____

This certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$	\$
Total approved this Month	\$	\$
TOTALS	\$	\$
NET CHANGES by Change Order	\$	

1. All charges are accurate and reasonable
2. Quality of all work completed with the quality standards of the contract; and
3. All payments requested are in compliance with the terms and condition of the contract.

CHRIS A. LUND, P. E.
Reviewed and recommended for payment of \$ _____ Date _____
Gershman, Brickner & Bratton, Inc.

Approved for payment _____ Date _____
David L. Manning
Receiver Representative - Gershman, Brickner & Bratton, Inc.

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APPENDIX E

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
01300			Administrative Requirements
1.3	001		Professional Land Surveyor Qualifications
	002		Copy of Site Drawings & Certificate signed by the Professional Land Surveyor
01323			Network Analysis Schedules
1.6	001		Preliminary Network Diagram defining Planned Operations for first 60 days of work, with General Outline for remainder of Work
	002		Draft of Proposal Complete Network Diagram for review
	003		Complete Network Diagram consisting of Network Diagrams & Mathematic Analysis
	004a		Updated Network Schedule for Progress Payment 1
	004b		Updated Network Schedule for Progress Payment 2
	004c		Updated Network Schedule for Progress Payment 3
	004d		Updated Network Schedule for Progress Payment 4
	004e		Updated Network Schedule for Progress Payment 5
	004f		Updated Network Schedule for Progress Payment 6
	004g		Updated Network Schedule for Progress Payment 7
	004h		Updated Network Schedule for Progress Payment 8
	004i		Updated Network Schedule for Progress Payment 9
	004j		Updated Network Schedule for Progress Payment 10
	004k		Updated Network Schedule for Progress Payment 11
	004l		Updated Network Schedule for Progress Payment 12
	004m		Updated Network Schedule for Progress Payment 13
	004n		Updated Network Schedule for Progress Payment 14
	004o		Updated Network Schedule for Progress Payment 15
	004p		Updated Network Schedule for Progress Payment 16
	004q		Updated Network Schedule for Progress Payment 17
01330			Submittal Procedures
1.2	001		Sample Submittal Form
1.3	002		Proposed Products List
1.4	003		Sample Product Data Form
1.13	004a		Photographs of Site Conditions & Construction for Progress Payment 1
	004b		Photographs of Site Conditions & Construction for Progress Payment 2
	004c		Photographs of Site Conditions & Construction for Progress Payment 3
	004d		Photographs of Site Conditions & Construction for Progress Payment 4
	004e		Photographs of Site Conditions & Construction for Progress Payment 5
	004f		Photographs of Site Conditions & Construction for Progress Payment 6
	004g		Photographs of Site Conditions & Construction for Progress Payment 7
	004h		Photographs of Site Conditions & Construction for Progress Payment 8
	004i		Photographs of Site Conditions & Construction for Progress Payment 9
	004j		Photographs of Site Conditions & Construction for Progress Payment 10
	004k		Photographs of Site Conditions & Construction for Progress Payment 11
	004l		Photographs of Site Conditions & Construction for Progress Payment 12
	004m		Photographs of Site Conditions & Construction for Progress Payment 13
	004n		Photographs of Site Conditions & Construction for Progress Payment 14
	004o		Photographs of Site Conditions & Construction for Progress Payment 15
	004p		Photographs of Site Conditions & Construction for Progress Payment 16
	004q		Photographs of Site Conditions & Construction for Progress Payment 17
01400			Quality Requirements
1.6	001		List of intended Manufacturer Field Services
01500			Temporary Facilities & Controls
1.2	001		Recycling Plan including a List of Materials that might be Recycled
1.10	002		Proposed Field Office & Parking Layout
1.14	003		Project Sign
1.17	004		Qualifications for Fire Prevention & Protection Responsible Person

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title
1.18	005		Security Program
1.19	006		Water Control Plan
1.20	007		Dust Control Plan
1.21	008		Erosion & Sediment Plan
1.22	009		Noise Control Plan
1.23	010		Pest Control Plan
1.24	011		Pollution Control Plan
1.25	012		Rodent Control Plan
01700			Execution Requirements
1.3	001		Written Report that Equipment or System has been Properly Installed & Functioning Properly
1.7	002		Project Record Documents & Actual Revisions to the Work (Review Monthly w/PP)
1.8	003		Operation & Maintenance Instructions
1.9	004		Three Copies of Preliminary Drafts of Manual for Materials & Finishes before Start of Work
	005		One Completed Volume 15 days prior to Final Inspection
	006		Two Sets of Revised Final Volumes in Final Form within 10 days after Final Inspection
1.10	007		Three Copies of Preliminary Drafts of Manual for Equipment & Systems
	008		One Completed Volume 15 days prior to Final Inspection
	009		Two Sets of Revised Final Volumes in Final Form within 10 days after Final Inspection
1.12	010		Product Warranties & Bonds prior to Final Application for Payment
01770			Project Close Out
3.1	001		Project Record Drawings to be submitted before Final Inspection Request
	002		Product Warranties & Bonds prior to Final Inspection Request
3.2	003		Written Certification that Project is Substantially Complete
	004		List of Deficiencies to be Corrected before Final Acceptance
3.3	005		Letter of Acceptance
02055			Soils
1.4	001		Test Data for Controlled Fill & Select Fill
02060			Aggregate
1.4	001		Name of Imported Fill Material Suppliers & Test Data
2.1A	002		Coarse Aggregate; 2" Minus Drain Rock
2.1B	003		Subbase Course Aggregate
2.1C	004		Base Course Coars Aggregate
2.2A	005		Proposed 1/2" Bedding Sand
02225			Low Permeability Soil Liner
1.4	001		Information & Test Results for Proposed Soil Material
	002		Work Plan for the Test Pad & Method of Mixing & Constructing the Low Permeability Soil Liner
2.1	003a		Moisture Content Test Results
	003b		Particle Size Test Results
	003c		Atterberg Limits
	003d		Laboratory Compaction Test Results
	003e		Laboratory Hydraulic Conductivity at a Specified Compaction
02230			Site Clearing
1.2	001		Product Data for Herbicide
02240			Gravel Drainage Media
1.4	001		Results of Conformance Tests
2.01	002		Proposed Gravel Drainage Media Materials
02250			Protective Soil Cover
1.4	001		Source Evaluation Tests Results
02320			Backfill

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
1.3	001		Materials Source including Name of Imported Fill Materials Suppliers & Test Data
	002		Manufacturer's Certificate
02324			Termite Control
1.3	001		Product Data on Toxicants to be used, Composition by Percentage, Dilution Schedule, Intended Application Rate (Include Product Label Information)
	002		Test Reports
	003		Manufacturer's Application Instructions
	004		Manufacturer's Certificate
1.4	005		Project Record Documents
	006		Operation & Maintenance Data
02512			Site Water Distribution
1.4	001		Product Data on Pipe Materials, Pipe Fittings, Valves, & Accessories
1.5	002		Project Record Documents
	003		Identify & Describe Discovery of Uncharted Utilities
02532			Wastewater Pumping Stations (Leachate Only)
1.7	001a		Guide Rail System
	001b		Miscellaneous Metal Fabrications
	001c		Pump Performance Curves
	001d		Wiring Diagrams
	001e		Pump Outline Drawing
	001f		Motor Data
	001g		Control Drawing & Data
	001h		Operations & Maintenance Data
	002		Shop Drawings indicating Layout for all Leachate Sump Collection Pumps
	003		Product Data
	004		Test Reports
	005		Manufacturer's Installation Instructions
	006		Manufacturer's Certificate
	007		Manufacturer's Field Reports
	008		Start-up Report before Final Acceptance of Pumps
1.8	009		Execution Requirements
	010		Record of Actual Locations of Packaged Pumping Stations
	011		Executed Certification of Pumping Station After Performance Testing
	012		Spare Parts List & Rebuild Kits
	013		Operations & Maintenance Manuals
02536			
	001		Certificate of Compliance
	002		Proposed Equipment and Methods
	003		Manufacturers Installation Instructions
	004		Manufacturer's Certificate
02538			Sanitary System
1.5	001		Product Data indicating Pipe Material Used & Pipe Accessories
02577			Pavement Markings
1.4	001		Manufacturer's Printed Product Data Sheets
02630			Storm Drainage
1.3	001		Product Data indicating Pipe, Pipe Accessories, & Catch Basins & Grates
	002		Manufacturer's Installation Instructions
1.4	003		Catch Basins, Cleanouts, & Invert Elevations
02640			Slope Protection Rock
1.4.1	001		Source Evaluation Tests Results of Slope Protection Rock to be Supplied
1.4.2	002a		Reports on Quality Control Tests conducted by the Manufacturer
1.4.2	002b		Specification for Geotextile including All Properties published by the Manufacturer
1.4.2	002c		Written Certification that Manufacturer inspected Geotextile to be Needle-Free

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
1.4.2	002d		Written Quality Control Certificates including Roll ID Numbers, Testing Procedures &
1.4.3	003		Concrete Materials Information & a Concrete Mix Design
02721			Aggregate Base Course
1.3	001		Materials Source: Name of Imported Materials Suppliers & Test Data
02725			Polyethylene Landfill Pipe
1.4	001		Geosynthetics CQA Certificates of Compliance for Pipe Materials & Fittings
	002		Proposal for Equipment & Methods to be used for Welding Pipe
02730			Leachate Collection Riser Assembly
1.4	001		Certificates of Compliance for all Components of Assembly
	002		Shop Drawings of Assembly prior to Fabrication or Installation
02735			Landfill Gas System Components
1.4	001a		Specifications & Manufacturer's Data for HDPE Pipe & Fittings
	001b		Specifications & Manufacturer's Data for PVC Pipe & Fittings
	001c		Specifications & Manufacturer's Data for Valves
	001d		Specifications & Manufacturer's Data for Condensate Sumps/Pump Stations
02740			Flexible Pavement
1.5	001		Product Information & Mix Design
	002		Manufacturer's Certificate
02750			Rigid Pavement
1.3	001		Product Data on Joint Filler, Admixtures, & Curing Compounds
02751			Geomembrane
1.4	001		Dated QC Certificates from resin supplier
			Written Certification that Min Values in Specs guaranteed by Manufacturer
			QC Certificates from AGRU America
			Resin Supplier's name & Plant Locations
			Manufacturer's Test Results
			List of Materials which comprises Geomembrane
			QC Manual for Field Installation of Geomembrane
			Manufacturer's Proposed Panel Layout Drawing
			Manufacturer's Qualifications as Geosynthetic Liner Installer (Including History of Manufacturer, Resume of Key Personnel, & List of Master Seamers & QC Technicians)
02752			Geotextiles
1.4	002		Manufacturing QC Test Results
			SKAPSGE-116 16oz. Non-Woven Geotextile Property Sheet
			SKAPS Industries' Manufacturing QC Program Outline & Certifications
			Written QC Certificates signed by a Responsible Party Employed by Manufacturer
			Manufacturer's Origin & Identification
			Test Report conducted by Manufacturer that Resin used to Manufacture Geotextile meets Manufacturer's Resin Specifications
02753			Geocomposite
1.4	003		Manufacturing QC Test Results
			Transnet 300-2-8 Primary, Transnet 270-2-8 Secondary & Subdrain Geocomposite Property Sheets
			Written QC Certificate
02754			Rain Cap
1.5	001		Complete Materials Specifications, Descriptive Drawings, & Literature
	002		Recommended Method for Handling & Storage Prior to Installation
	003		Manufacturer's Certification that the Personnel, Equipment, & HDPE Materials used for installing the Materials are approved
02821			Chain Link Fences & Gates
1.4	001		Shop Drawings
	002		Product Data on Fabric, Posts, Accessories, Fittings, & Hardware

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title
	003		Manufacturer's Installation Instruction
1.5	004		Project Record Documents indicating Actual Locations of Property Perimeter Posts Relative to Property Lines & Easements
	005		Operations & Maintenance Data
02924			Seeding & Soil Supplements
1.2	001		Product Data for Seed Mix, Fertilizer, Mulch, & other Accessories
	002		Test Reports indicating Topsoil Nutrient & PH Levels with Recommended Soil Supplements & Application Rates
	003		Manufacturer's Certificate
1.3	004		Operation & Maintenance Data
03110			Concrete Formwork
1.2.1	001		Shop Drawings showing Details of Formwork, including Dimensions of Joints, Supports, Sudding & Shoring, & Sequence of Form & Shoring Removal
03210			Reinforcing Steel
1.2.1	001		Shop Drawings showing Reinforcing Steel Placement, Schedules, Sizes, Grades, & Splicing & Bending Details
1.2.2	002		Certified Copies of Mill Reports attesting that the Reinforcing Steel Furnished contains no less than 25% Recycled Scrap Steel
03300			Cast-in-Place Concrete
1.2.1	001		Name & Manufacturer of each Cementitious Material, Admixture, Curing Compound, & Aggregate Source.
1.2.2	002		Concrete Mix Design for Approval prior to the use of the Concrete Mix
1.2.3	003		Methods of Repair or Replacement directed by the Contracting Officer
03351			Metallic Concrete Topping
1.4	001		Product Data including Manufacturer's Technical Bulletins & MSDS for each Product
	002		Samples of 2"x2" Specified Topping Section for Verification
	003		List of Project References as Documented in this Specification under Quality Assurance Article, including Contact Name & Phone Number of Overseer
	004		Quality Control Submittals of Protection Plan of Surrounding Areas & Non-Cementitious Surfaces
04200			Masonry
1.2.1	001		Shop Drawings of Plans, Elevations, & Details of Wall Reinforcement, Reinforcing Bars at Corners & Wall Intersections, Offsets, Tops, Bottoms, & Ends of Walls, Control & Expansion Joints, Lintels, & Wall Openings.
05120			Structural Steel
1.3.1	001		Fabrication Drawings, including Description of Connections
	002		Erection Plan, including Description of Temporary Supports
1.3.2	003		Product Data of Shop Primer
1.3.3	004		Certificates for Steel, Bolts, Nuts, Washers, Welding Electrodes & Rods, & Non-Shrink Grout
05300			Steel Decking
1.2.1	001		Fabrication Drawings including Type, Configuration, Structural Properties, Location, Necessary Details of Deck Units, Accessories, Supporting Members, Size & Location of Holes to be cut, Reinforcement to be provided, Location & Sequence of Welded Connections, & the Manufacturer's Erection Instruction
1.2.2	002		Product Data including Design Computations for Structural Properties of the Deck Units or SDI Certification that the Units are Designed in accordance with SDI Specifications
1.2.3	003		Manufacturer's Certificates Attesting that Decking Material meets Specified Requirements
05520			Handrails & Railings

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title
1.4	001		Shop Drawings indicating Profiles, Sizes, Connection Attachments, Anchorage, Size & Type of Fasteners, & Accessories
06114			Wood Blocking & Curbing
1.3	001		Technical Data on Wood Preservative & Fire Retardant Treatment Materials & Application Instructions
06410			Custom Cabinets
1.4	001		Shop Drawings indicating Materials, Component Profiles & Elevations, Assembly Methods, Joint Details, Fastening Methods, Accessory Listings, Hardware Location, & Schedule of Finishes
	002		Product Data for Hardware Accessories
07140			Fluid-Applied Waterproofing
1.4	001		Shop Drawings Indicating Special Joint or Termination Conditions & Conditions of Interface with other Materials
	002		Product Data for Surface Primer, Flexible Flashings, Joint Cover Sheet, & Joint & Crack Sealants, with Temperature Range for Application of Waterproofing Membrane
	003		Manufacturer's Installation Special Procedures & Perimeter Conditions Requiring Special Attention
	004		Manufacturer's Certificate
	005		Manufacturer's Warranty
07213			Batt Insulation
1.4	001		Manufacturer's Product Data for Batt Insulation & Board Insulation, & Pressure Sensitive Tape
	002		Manufacturer's Certificate
07260			Vapor Retarders
1.4	001		Product Data indicating Material Characteristics, Performance Criteria, & Limitations
	002		Manufacturer's Installation Instruction indication Preparation, & Installation Requirements Techniques
07540			Fluid-Applied Roofing
1.3	001		Shop Drawings indicating Special Joint or Termination Conditions & Conditions of Interface with other Materials
	002		Product Data for Material Description, Physical Properties, Recommended Storage Conditions, Shelf Life, Precautions, Flexible Flashings, Joint Cover Sheet, & Joint & Crack Sealants, with Temperature Range for Application of Waterproofing Membrane
	003		Manufacturer's Installation Instructions indicating Special Procedures & Perimeter Conditions Requiring Special Attention
07620			Sheet Metal Flashing & Trim
1.4	001		Shop Drawings indicating Material Profile, Jointing Pattern, Jointing Details, Fastening Methods, Flashings, Terminations, & Installation Details
	002		Product Data on Manufactured Components, Metal Types, Finishes, & Characteristics
07900			Joint Sealers
1.3	001		Product Data indicating Sealant Chemical Characteristics, Performance Criteria, Substrate Preparations, Limitations, & Color Availability
	002		Manufacturer's Installation Instructions including Special Procedures for Surface Preparation, & Perimeter Conditions Requiring Special Attention
	003		Manufacturer's Warranty
08114			Standard Steel Doors
1.3	001		Shop Drawings indicating Door Elevations, Internal Reinforcement, Closure Method, & Finishes
	002		Product Data detailing Door Configurations, Location of Cut-outs for Hardware Reinforcement

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
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<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
	003		Manufacturer's Installation Instructions
	004		Manufacturer's Certificate
08115			Standard Steel Frames
1.3	001		Shop Drawings indicating Frame Elevations, Reinforcement, Anchor Types & Spacing, Location of Cutouts for Hardware & Finish
	002		Product Data detailing Frame Configuration & Finishes
	003		Manufacturer's Certificate
	004		Manufacturer's Installation Instructions
08120			Aluminum Doors & Frames
1.5	001		Shop Drawings indicating System Dimensions, Framed Opening Requirements, & Tolerances, Affected Related Work
	002		Product Data detailing Component Dimensions, Description of Components within the Assembly, Anchorage & Fasteners, Glass & in-fill, Door Hardware, & Internal Drainage
	003		Engineering Calculations indicating System Performance under Design Loads
	004		Manufacturer's Certificate
08212			Flush Wood Doors
1.3	001		Shop Drawings illustrating Door Opening Criteria, Elevations, Sizes, Types, Swings, Undercuts Required, Factory Finishing Criteria, Identify Cutouts for Glazing & Louvers
	002		Product Data providing Information on Door Core Materials & Construction & on Veneer, Type & Characteristics
	003		Manufacturer's Installation Instructions
	004		Two Sample of Door, indicating Door Construction
08310			Access Doors & Panels
1.3	001		Shop Drawings indicating Exact Position of Access Door Units
	002		Product Data including Literature indicating Sizes, Types, Finishes, Hardware, Scheduled Locations, Fire Resistance Listings, & Details of Adjoining Work
	003		Manufacturer's Installation Instructions
1.4	004		Project Record Documents indicating Actual Locations of Access Units
08333			Overhead Coiling Doors
1.5	001		Shop Drawings indicating Pertinent Dimensioning, Anchorage Methods, Hardware Locations, & Installation Details
	002		Product Data detailing General Construction, Component Connections & Details, Wiring Diagram & Electrical Equipment
	003		Manufacturer's Installation Instruction
1.6	004		Operation & Maintenance Data including Lubrication Requirements & Frequency, & Periodic Adjustments Required
08410			Metal-Framed Storefronts
1.5	001		Shop Drawings indicating System Dimensions, Framed Opening Requirements & Tolerances, Affected Related Work & Expansion & Contraction Joint Location & Details
	002		Product Data detailing Component Dimensions, Description of Components within Assembly, Anchorage & Fasteners, Glass & in-fill, Door Hardware, & Internal Drainage Details
	003		Design Data indicating Framing Member Structural & Physical Characteristics, Calculations, Dimensional Limitations
	004		Manufacturer's Certificate
08520			Aluminum Windows
1.5	001		Shop Drawings indicating Opening Dimensions, Framed Opening Tolerances, Affected Related Work, & Installation Requirements
	002		Product Data detailing Component Dimensions, Anchorage & Fasteners, Glass, Internal Drainage, & Typical Details

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Date: 01-20-10
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Spec Section	Submittal	Rev	Title
	003		Manufacturer's Certificates
08710			Door Hardware
1.4	001		Shop Drawings indicating Locations & Mounting Heights of each type of Hardware, Schedules, Catalog Cuts, including Manufacturer's Parts Lists, & Templates
	002		Manufacturer's Installation Instructions
1.5	003		Project Record Documents indicating Actual Locations of Installed Cylinders & their Master Key Code
	004		Operation & Maintenance Data on Operating Hardware, Lubrication Requirements, & Inspection Procedures related to Preventative Maintenance
	005		Keys delivered with ID Tags to Owner by Security Shipment direct from Hardware Supplier
08800			Glazing
1.4	001		Product Data for Glass including Structural, Physical & Environmental Characteristics, Size Limitations, Special Handling or Installation Requirements
	002		Product Data for Glazing Sealants, Compounds & Accessories including Chemical, Functional & Environmental Characteristics, Limitations, Special Application Requirement, & identify available Colors where exposed
	003		Manufacturer's Certificates
09220			Portland Cement Plaster
1.3	001		Product Data on Plaster Materials, Characteristics & Limitations of Products Specified
	002		Two 12"x12" Sized Samples illustrating Finish Color & Texture
09260			Gypsum Board Assemblies
1.4	001		Product Data on Metal Framing, Gypsum Board, Joint Compound & Tape
09300			Ceramic Tile
1.3	001		Shop Drawings of Custom Tile Mural & Tile inset of Northern Mariana Islands showing Tile Layout & Colors
	002		Product Data including a Color Chart & Instructions for using Adhesives & Grouts
	003		Initial Installation of Section of Tile Work to be reviewed & approved prior to Continuation of Work
	004		Manufacturer's Certificate
1.4	005		Recommended Cleaning methods, Cleaning Materials, Stain Removal Methods, & Polishes & Waxes
09510			Acoustical Ceiling
1.4	001		Product Data on Metal Grid System Components & Acoustic Units
	002		Manufacturer's Installation Instructions
09650			Resilient Flooring
1.3	001		Product Data describing Physical & Performance Characteristics, including Sizes, Patterns, Colors Available, & Installation Instructions
	002		Manufacturer's Complete Set of Color Samples for Initial Selection
1.4	003		Maintenance Procedures, Recommended Maintenance Materials, & Suggested Schedule for Cleaning, Stripping, & Re-Waxing
09900			Paints & Coatings
1.4	001		Product Data on Finishing Products
	002		Special Surface Preparation Procedures, & Substrate Conditions Requiring Special Attention
	003		Manufacturer's Samples of Paint Colors
1.5	004		Data on Cleaning, Touch-up, & Repair of Painted & Coated Surfaces
10171			Solid Phonetic Toilet Compartments
1.3	001		Shop Drawings indicating Partition Plan, Elevation Views, Dimensions, Details of Wall, Ceiling Supports, & Door Swings

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title
	002		Product Data on Panel Construction, Hardware, & Accessories
	003		Two 6"x6" Sized Samples illustrating Panel Finish, Color, & Sheen
	004		Special Procedures, Perimeter Conditions Requiring Special Attention
10440			Signs
1.3	001		Shop Drawings indicating Sign Styles, Lettering Font, Foreground & Background Colors,
	002		Installation Template & Attachment Devices
10500			Lockers
1.3	001		Shop Drawings indicating Locker Plan Layout & Numbering Plan
	002		Product Data on Locker Types, Sizes & Accessories
	003		Two 3"x6" Sized Samples of each Color Selected, Applied to Specified Base Metal
	004		Installation Template & Attachment Devices
10523			Fire Extinguishers & Cabinets
1.4	001		Extinguisher Operational Features, Color & Finish, & Anchorage Details
	002		Special Criteria & Wall Opening Coordination Requirements
1.5	003		Test, Refill or Recharge Schedules & Re-Certification Requirements
10716			Typhoon Shutters
1.4	001		Shop Drawings coordinated with Window Schedule, Elevations of Shutter Units, Half-Sized Sections, Thickness & Gages of Materials, Fastenings, Method of Anchorage, Size & Spacing of Anchors, & Location of Hardware
	002		Shop Drawings of Schedule of Shutters
	003		Product Data for Accordion Shutters
1.8	004		Manufacturer's Operation & Maintenance Data
10800			Toilet Accessories
1.3	001		Product Data on Accessories describing Size, Finish, Details of Function, Attachment Methods
	002		Special Procedures, Conditions Requiring Special Attention
13211			Ground Level Steel Tanks For Potable Water Storage, Leachate Storage, & Subdrain Storage
1.3	001		Fabrication and/or Erection Drawings including Construction Details & Materials of Construction
	002		Product Technical Data including Acknowledgement that Products Submitted meet Requirements of Standards Referenced, Manufacturer's Installation Instructions, Design Data, Manufacturer's List of Five Similar Sized Reservoirs, & Cathodic Protection System Design & Details
	003		Test Reports
	004		Operation & Maintenance Manuals
	005		One 12"x12" Glass-Fused-to-Steel Reservoir Sample showing Actual Color prior to Fabrication of Reservoirs
15010			Basic Mechanical Requirements
1.6	001		Shop Drawings including Floor Plans, Sectional Views, Wiring Diagrams, & Installation Details of Equipment, & Equipment Spaces identifying & indicating Proposed Location, Layout & Arrangement of Items of Equipment, Control Panels, Accessories, & Piping Ductwork.
	002		Descriptive Literature of Cataloged Products, Equipment Drawings, Diagrams, Performance & Characteristic Curves, & Catalog Cuts
	003		Proof of Conformance with ANSI, ASTM, NEMA, & UL
	004		Certificates of Conformance or Compliance from the Manufacturer attesting that Materials & Equipment to be furnished for this Project comply with Requirements of Specifications
15121			Piping Expansion Compensation

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
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Job Number : 04052.09002
Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title
1.3	001		Details of Flexible Pipe Connectors indicating Maximum Temperature & Pressure Rating, Face-to-Face Length, Live Length, Hose Wall Thickness, Hose Convolutions per Foot (Meter) & per Assembly, Fundamental Frequency of Assembly, Braid Structure, Total Number of Wires in Braid, & Adjustment Instructions
	002		Manufacturer's Installation Instructions indicating Special Procedures & External Controls
15140			Supports & Anchors
1.4	001		Manufacturer's Catalog Data detailing Load Capacity
	002		Manufacturer's Installation Instructions indicating Special Procedures & Assembly of Components
	003		Support & Bracing Shop Drawings including Plans, Sections, Details, Schedules & other Information necessary to describe Supports, Hangers & Seismic Bracing for all Mechanical Systems, Equipment, Piping & Ductwork (Indicate Location & Type of all Hangers, Supports, & Seismic Bracing)
	004		Maintenance Data & Parts List for each Type of Support & Anchor
15170			Motors
1.4	001		Wiring Diagrams with Electrical Characteristics & Connection Requirements
	002		Test Reports indicating Test Results verifying Nominal Efficiency & Power Factor for Three-Phase Motors larger than 5 Horsepower
	003		Manufacturer's Installation Instructions indicating Setting, Mechanical Connections, Lubrication, & Wiring Instructions
15190			Mechanical Identification
1.4	001		Wording, Symbols, Letter Size, & Color Coding for Mechanical Identification
	002		Valve Chart & Schedule, including Valve Tag Number, Location, Function, & Valve Manufacturer's Name & Model Number
	003		Manufacturer's Catalog Literature for each Product Required
	004		Two Samples for each Product
	005		Manufacturer's Installation Instructions indicating Special Procedures & Installation
15245			Vibration Isolation
1.4	001		Shop Drawings indicating Inertia Bases, Location of Vibration Isolators & Seismic Restraint, including Details of Suspension for Ceiling-Hung Equipment
	002		Catalog Cuts of Vibration Isolators & Seismic Restraints
	003		Manufacturer's Installation Instructions indicating Special Procedures & Setting Dimensions
	004		Seismic Certification & Analysis
	005		Code Requirements
15260			Piping Insulation
1.4	001		Product Description, Thermal Characteristics, List of Materials & Thickness for each Service, & Locations
1.5	002		Installation Procedures
15290			Ductwork Insulation
1.4	001		Product Description, Thermal Characteristics, List of Materials & Thickness for each Service, & Locations
	002		Two Samples of any Representative Size illustrating each Insulation Type
1.5	003		Installation Procedures
15320			Fire Pump
1.6	001		Manufacturer's Literature including General Assembly, Pump Curves showing
	002		Shop Drawings indicating Layout, General Assembly, Components, Dimensions, Weights, Clearances, & Methods of Assembly
1.7	003		Results of Hydrostatic Test & Field Acceptance Tests performed
			Manufacturer's Instructions indicating Support Details & Connection Requirements for Fire Pump System

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
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<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
1.8	004		Project Record Documents indicating Actual Locations of Components & Accessories
	005		Certificates for Pump along with Summary & Results of Shop Tests performed
	006		Operation Data including Manufacturer's Instructions, Start-up Data, & Troubleshooting Checklists for Pumps, Drivers, & Controllers
	007		Manufacturer's Literature detailing Cleaning Procedures, Replacement Parts Lists, & Repair Data for Pump, Driver & Controller
15410			Plumbing Piping
1.4	001		Product Data on Pipe Materials, Pipe Fittings, Valves, Accessories, & Manufacturer's Catalog Information (Indicate Valve Data & Ratings)
	002		Complete Installation Shop Drawings indicating all Locations & Invert Elevations of Plumbing Piping
1.5	003		Project Record Documents indicating Actual Locations of Valves
15430			Plumbing Specialties
1.4	001		Product Data detailing Component Sizes, Rough-in Requirements, Service Sizes, & Finishes
	002		Shop Drawings indicating Dimensions, Weights, & Placement of Openings & Holes
1.5	003		Project Record Documents indicating Actual Locations of Equipment, Cleanouts, Backflow Preventers, & Water Hammer Arrestors
15440			Plumbing Fixtures
1.3	001		Catalog illustrations of Fixtures, Sizes, Rough-in Dimensions, Utility Sizes, Trim, & Finishes
1.4	002		Manufacturer's Instructions indicating Installation Methods & Procedures
1.5	003		Maintenance Data including Fixture Trim Exploded View & Replacement Parts List
15450			Plumbing Equipment
1.4	001		Dimension Drawings of Water Heaters indicating Components, Connections to other Equipment & Piping, Electrical Characteristics, & Connection Requirements
	002		Operation & Maintenance Data including Operation, Maintenance & Inspection Data, Replacement Part Numbers & Availability, & Service Depot Location & Telephone Number
15481			Compressed Air System
1.4	001		Manufacturer's Catalog Literature with Capacity, Weight, & Electrical Characteristics & Connection Requirements
	002		Shop Drawings indicating Piping System Schematic with Electrical Characteristics & Connection Requirements
1.5	003		Inspector's Certificate for Air Receiver for Including in Operating & Maintenance Manuals
	004		Manufacturer's Installation Instructions, Hoisting & Setting Requirements, Starting Procedures
1.6	005		Project Record Documents indicating Actual Locations of Equipment & Components (Modify Shop Drawings to indicate Final Locations)
	006		Operation Data for Air Compressor, Air Receiver & Accessories, Aftercooler, Refrigerated Air Dryer, & Pressure Reducing Station
	007		Maintenance Data for Air Compressor, Air Receiver & Accessories, Aftercooler, & Pressure Reducing Station
	008		Manufacturer's Warranty
15484			Fuel Lube Oil Piping System
1.4	001		Product Data on Pipe Materials, Pipe Fittings, Valves & Accessories, & Manufacturer's Catalog Information (Indicate Valve Data & Ratings)
	002		Shop Drawings indicating Tanks, System Layout, Pipe Sizes, Location, & Elevations
1.5	003		Project Record Documents indicating Actual Locations of Piping System, Storage

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
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Spec Section	Submittal	Rev	Title
			Maintenance Data including Installation Instructions, Spare Parts List, Exploded Assembly Views
	004		Manufacturer's Warranty
15530			Leachate Sump Pumps
1.4	001		Complete Manufacturer's Data including Details of Electric Motors & Pump Curve
	002		Shop Drawings for Pump Installation including Mechanical & Electric Schematics
15535			Refrigerant Piping & Specialties
1.5	001		Shop Drawings indicating Schematic Layout of System including Equipment, Critical Dimensions & Sizes (Include Double Hot Gas Risers if recommended by Chiller Manufacturer to return Oil to Compressors)
	002		Manufacturer's Catalog Information including Load Capacity
	003		Results of Leak Test & Acid Test
	004		Manufacturer's Installation Instructions indicating Support, Connection Requirements, & Isolation for Servicing
	005		Welders Certification
1.6	006		Project Record Documents indicating Exact Locations of Equipment & Refrigeration Accessories on Record Drawings
1.7	007		Instructions for Changing Cartridges, Assembly Views, & Spare Parts Lists
15540			Liquid Level Pressure Sensor
1.4	001		Complete Manufacturer's Specifications
	002		Shop Drawings for Pump Installation including Mechanical & Electric Schematics
15545			Three-Point Level Sensor
1.4	001		Complete Manufacturer's Specifications
	002		Shop Drawings for Pump & Controls Installation including Mechanical & Electric Schematics
15550			Pump Control Panel
1.4	001		Complete Manufacturer's Specifications for Panels & Related Equipment
	002		Narrative Description & Logic Diagram for Control System
	003		Electrical Schematic & Single-Line Diagram
15560			Leachate Flow Meters
1.4	001		Complete Manufacturer's Specifications for Flow Meters & Related Equipment
	002		Shop Drawings for Installation of Sensors & Display Units
	003		Electrical Schematic & Single-Line Diagram
	004		Operation & Maintenance Manual For Flow Meter
Section			Breakout Junction Box
1.4	001		Complete Manufacturer's Specifications for Breakout Junction Box
	002		Shop Drawings for Installation of Pumps & Controls
	003		Electrical Schematic & Single-Line Diagram
15671			Air-Cooled Condensing Units
1.4	001		Shop Drawings indicating Components, Assembly, Dimensions, Weights & Loadings, Required Clearances, & Location & Size of Field Connections (Include Layouts showing Condensing Units, Cooling Coils, Refrigerant Piping, & Accessories Required for Complete System)
	002		Rated Capacities, Weights Specialties & Accessories, Electrical Name Plate Data, & Wiring Diagrams (Submission with Air Handling Units should refer to Section 15855)
1.5	003		Design Data indicating Pipe Sizing
			Manufacturer's Installation Instructions
1.6	004		Operation & Maintenance Data including Start-up Instructions, Maintenance Instructions, Parts Lists, Controls, & Accessories
1.9	005		Manufacturer's Warranty
15855			Air Handling Units

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
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Date: 01-20-10
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Job Number : 04052.09002
Project Number: SMWD-09-02

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
1.4	001		Published Literature, & Data for Filters, Fans, Sound Power Level, & Electrical Requirements
	002		Shop Drawings indicating Assembly, Unit Dimensions, Weight Loading, Required Clearances, Construction Details, Field Connection Details, & Electrical Characteristics & Connection Requirements
	003		Manufacturer's Instructions
			Maintenance Data including Instructions for Lubrication, Filter Replacement, Motor & Drive Replacement, Spare Parts Lists, & Wiring Diagrams
15890			Ductwork Accessories
1.5	001		Shop Drawings indicating Duct Fittings, Particulars such as Gages, Sizes, Welds, & Configuration prior to Start of Work (Include Duct Supports with Sway Braces)
	002		Product Data for Duct Materials
1.6	003		Project Record Documents indicating Actual Locations of Ducts & Duct Fittings
15910			Ductwork Accessories
1.4	001		Manufacturer's Installation Instructions indicating Fire Dampers & Combination Fire & Smoke Dampers
	002		Project Record Documents indicating Actual Locations of Test Holes
15940			Air Outlets & Inlets
1.4	001		Product Data for Equipment required for this Project & Schedule of Outlets & Inlets showing Type, Size, Location, Application, & Noise Level
1.5	002		Project Record Documents indicating Actual Locations of Air Outlets & Inlets
15990			Testing, Adjusting, & Balancing
1.3	001		Test Reports
	002		Name & Qualification of Adjusting & Balancing Agency
	003		Field Reports indicating Deficiencies in System that would prevent Proper Testing, Adjusting, & Balancing of Systems & Equipment to achieve specified Performance
	004		Draft Reports indicating Adjusting, Balancing, & Equipment Data Required
	005		Draft Copies of Report for Review
	006		Draft Report Indication Adjusting, Balancing, & Equipment Data.
1.4	007		Project Record Documents indicating Actual Locations of Flow Measuring Stations Balancing Valves & Rough Setting
16050			Basic Electrical Materials & Methods
1.5.1	001		Manufacturer's Catalog Data
1.5.2	002		Drawings including Wiring Diagrams & Installation Details of Equipment
1.5.3	003		Manufacturer's Instructions
1.5.4	004		Manufacturer's Certificates
1.5.4.1	005		Reference Standard Compliance
1.5.4.2	006		Independent Testing Organization Certificate
1.5.5	007		Operation & Maintenance Manuals
1.5.5.1	008		Operating Instructions
16302			Underground Transmission & Distribution
1.3	001		Megger Test Reports for all 600-Volt Wire & Cable Tests
2.0	002		Heat Fusion Work Plan
	003		Pipe Joint Test Methods, Procedures, & Apparatus
	004		Product Data for Piping Materials
	005		Product Data for Fusion Equipment
	006		Test Reports for Heat Fusion Daily Logs
	007		Test Reports for Bent Strap Testing
	008		Test Reports for Ultrasonic Testing
	009		Certificate for Fusion Equipment Experience Requirements
	010		Certificate for Experience Requirements

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Entrance Area Facilities and Cells 1 and 2

Date: 01-20-10
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
	011		Certification for NDE Technician
	012		Pipe Manufacturer Material Certificate
	013		Mechanical Coupling Manufacturer Certificate
	014		Certification for Heat Fusion Technician
2.4	015		Primary/Secondary and Communication Handhole Hardwares
3.4	016		Underground Electrical Work
16402			Interior Distribution System
1.3.1	001		Shop Drawings of Panel Boards & Wireways
1.3.2	002		Product Data for Receptacles, Circuit Breakers, Switches, Enclosed Circuit Breakers, Manual Motor Starters, CATV Outlets, Grounding Block
1.3.3	003		Test Reports for 600-Volt Wiring Test, Grounding System Test, Ground-Fault Receptacle Test
1.5.1	004		Operation & Maintenance Manuals for Electrical Systems including Single-Line Diagram of the "As-Built" Building Electrical System, & Schematic Diagram of Electrical Control System
16510			Interior Lighting
1.4.1	001		Product Data for Fluorescent Lighting Fixtures, Electronic Ballasts & Lamps, Incandescent Lighting Fixtures & Lamps, Dimmer Switch, Lighting Contactor, Time Switch, Photocell Switch, Exit Signs, Emergency Lighting Equipment, Occupancy Sensors, Electronic Dimming Ballast, & Dimming Ballast Controls
1.4.2	002		Samples of Lighting Fixtures, complete with Lamps & Ballasts
1.4.3	003		Operating Test Reports
1.4.4	004		Operation & Maintenance Data showing all Control Modules, Control Zones, Occupancy Sensors, Light Fixtures, & all Interconnecting Control Wire, Conduit, & Associated Hardware
2.1	005		Flourescent Light Fixtures
2.1.5	006		Compact Flourescent Light Fixtures
2.3	007		Emergency Light
2.4	008		Exit Light
1.4.5	009		Information Card
16520			Exterior Lighting
1.4	001		Luminaire Drawings including Poles
	002		Product Data on Luminaires, Lamps, Ballasts, Lighting Contactor, Time Switch, Photocell Switch, Concrete Poles, & Brackets
	003		Operating Test Reports for Luminaires
16612			Emergency Power System
1.0	001		Manufacturer's Brochures describing Equipment Ratings, Performances, Specification & Construction
	002		Shop Drawings of Layout to Scale giving Dimensions, Schematic & Wiring Diagrams, & Interconnection Diagrams
	003		Manufacturer's Warranty
16721			Fire Alarm System
	001		Technical Data, Wiring Diagrams, & Installation & Maintenance Instructions

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Access Road and Sewer System

Date: 01-25-10
CM Project Manager: Paul Baron
Job Number : 04052.09003
Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
102			Bid, Award, & Execution of Contract
102.01	001		Bid, Award, & Execution of the Contract are Governed by the Guam Administrative Rules and Regulation, Volume 1, Title 2, Division 4, Procurement Regulations
102.07	002		Consideration of Proposals
104			Control of Work
104.03	001		Contract Plans & Specifications including special Contract Requirements
105			Control of Material
105.1	001		Source of Supply & Quality Requirements
106			Acceptance of Work
106.03	001		Submit Certifications to the Contracting Officer when requested
107			Legal Relations & Responsibility to the Public
107.06	001		Claim for Compensation with Supporting Documents regarding the Incurred Expenses
108			Prosecution & Progress
108.02	001		SF 1413 with Part I completed (Complete Part II if Subcontracts involve on-site Labor)
	002		Statement of Cumulative Amount of all on-site Subcontracts to date
109			Measurement & Payment
109.01	001		Measurement Notes
	002a		Lump Sum Item Documentation supporting Invoiced Progress Payment 1
	002b		Lump Sum Item Documentation supporting Invoiced Progress Payment 2
	002c		Lump Sum Item Documentation supporting Invoiced Progress Payment 3
	002d		Lump Sum Item Documentation supporting Invoiced Progress Payment 4
	002e		Lump Sum Item Documentation supporting Invoiced Progress Payment 5
	002f		Lump Sum Item Documentation supporting Invoiced Progress Payment 6
	002g		Lump Sum Item Documentation supporting Invoiced Progress Payment 7
	002h		Lump Sum Item Documentation supporting Invoiced Progress Payment 8
	002i		Lump Sum Item Documentation supporting Invoiced Progress Payment 9
	002j		Lump Sum Item Documentation supporting Invoiced Progress Payment 10
	002k		Lump Sum Item Documentation supporting Invoiced Progress Payment 11
	002l		Lump Sum Item Documentation supporting Invoiced Progress Payment 12
	002m		Lump Sum Item Documentation supporting Invoiced Progress Payment 13
	002n		Lump Sum Item Documentation supporting Invoiced Progress Payment 14
	002o		Lump Sum Item Documentation supporting Invoiced Progress Payment 15
	002p		Lump Sum Item Documentation supporting Invoiced Progress Payment 16
	002q		Lump Sum Item Documentation supporting Invoiced Progress Payment 17
152			Construction Survey & Staking
152.02	001		Construction Schedule including Staking Activities
	002		Data relating to Horizontal & Vertical Alignment, Theoretical Slope Stake Catchpoints, & other Design Data
152.03	003		Plotted Field-Design Cross-Section of Final Culvert Length & Alignment
153			Contractor Quality Control
153.02	001		Quality Control Plan
153.03	002		Detailed list of Sampling & Testing to be performed for Quality Control & Quality Assurance
153.04	003		Qualifications of Quality Manager
	004		Testing & Inspection Records by Pay Item Number
153.05	005		Qualifications of Inspectors, Testers, & Company or Companies providing Quality Control
	006		Chart of Quality Control Inspections including Definable Features, Inspectors responsible, & Inspection Frequency of work
	007		Procedures for Managing Reports, Documents, Charts, Certifications, & Submittals

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Access Road and Sewer System

Date: 01-25-10
CM Project Manager: Paul Baron
Job Number : 04052.09003
Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
153.06	008		Qualifications of Individuals & Company or Companies providing Quality Assurance
153.08	009		Notification of Completion of Work
	010		Construction Operations Report
	011		Quality Control & Assurance Report
	012		Control Charts
	013		Pay Item Measurement Notes (FHWA 17348 Pay Item Record)
	014		Quality Control & Quality Assurance Test Results
155			Schedules for Construction Contract
155.02	001		Preliminary Construction Schedule
155.06	002a		Updated Construction Schedule 1
	002b		Updated Construction Schedule 2
	002c		Updated Construction Schedule 3
	002d		Updated Construction Schedule 4
	002e		Updated Construction Schedule 5
	002f		Updated Construction Schedule 6
	002g		Updated Construction Schedule 7
	002h		Updated Construction Schedule 8
	002i		Updated Construction Schedule 9
156			Public Traffic
156.03	001		Alternate Traffic Control Proposal
156.07	002		Night Lighting System Proposal
157			Soil Erosion Control
157.01	001		Environmental Protection Plan (EPP), Erosion Control Plan (ECP), & Stormwater
157.03	002		Alternate Erosion Control Plan Proposal with all Necessary Permits
203			Removal of Structures & Observation
203.01	001		Action Plan for the relocation of Existing School Bus Shelters
213			Subgrade Stabilization
213.03	001		Subgrade Stabilization Mix Design including Minimum Compressive Strengths
253			Gabions & Revet Mattresses
253.03	001		Installation Drawings
257			Alternate Retaining Walls
257.04	001		Proposal for Utilization of Gabions, Revet Mattresses, Crib Walls, or Mechanically-Stabilized Earth Walls
	002		Design Calculations
258			Reinforced Concrete Retaining Walls
258.03	001		Forms & Falsework Drawings
258.04	002		Order Lists & Bending Diagrams
301			Untreated Aggregate Courses
301.03	001		Proposed Target Values for the Appropriate Sieve Sizes along with a Representative 300-pound Sample
302			Treated Aggregate Courses
302.03	001		Treated Aggregate Course Mix Design
304			Aggregate Stabilization
304.03	001		Mix Design
	002a		Source of each Component of .bb-Mix Formula
	002b		Results of Applicable Tests of each .bb-Mix Formula
	002c		Target Values for Each Aggregate Sieve Size Specified & Stabilizing Agent for each .bb-Mix Formula
	003a		200-Pound Sample of Aggregate
	003b		50-Pound Sample of Fly Ash

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Access Road and Sewer System

Date: 01-25-10

CM Project Manager: Paul Baron

Job Number : 04052.09003

Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
	003c		25-Pound Sample of Lime
	003d		25-Pound Sample of Portland & Cement
	003e		5-Pound Sample of Retarder or Other Admixtures
309			Emulsified Asphalt-Treated Base Course
309.03	001		Proposed Target Values for the Appropriate Seve Sizes Along with a Representative 300-Pound Sample
402			Hot Asphalt Concrete Pavement by HVEEM or Marshall Mix Design Method
402.03	001		Written .bb-Mix Formulas with Form FHWA 1607 (HVEEM) or Form FHWA 1608 (Marshall)
	002		Laboratory Certification for Proposed .bb-Mix Formula including Acceptance & Payment for each .bb Mix
403			Hot Asphalt Concrete Pavement
403.03	001		Aggregate Quality, Gradation Requirements, & Mixture Criteria for the Asphalt Concrete Mix
	002		Written .bb-Mix Formulas including the Location of all Commercial Mixing Plants to be used & a Separate .bb-Mix Formula for each Plant
	003		Target Values for Percent Passing Each Sieve Size for the Aggregate Blend & each Stockpile, Stockpile Blend Ratios, Target Asphalt Binder Content, & Maximum Density Value
	004		Aggregate Sources
	005		Stockpile Gradations
	006		Representative Samples
	007		Results of Aggregate Quality Tests for Contractor Selected Sources
	008		Asphalt Binder Information
	009		Antistrip Additives information
	010		Recycled Asphalt Pavement Material information
403.12	011		Proposed Schedule of Paving Operations
	012		List of All Equipment & Personnel used in the Production & Construction of the Work
	013		Proposed Traffic Control Plan for Paving Operations including Provisions for Pavement Drop-offs & Moving Operations
	014		Contractor Quality Control Plan for Paving & Sampling & Testing
	015		Procedures for Construction Plan the Control Strip including Placing, Finishing,
	016		Acceptance Procedures
404			Minor Hot Asphalt Concrete
404.02	001		Strength, Quality, & Gradation Specifications for Asphalt Concrete Mix including Copies of Laboratory Test Reports
	002		Results of AASHTO T 209 for Maximum Specific Gravity of the Mix
405			Open-Graded Asphalt Friction Course
	001		Written .bb-Mix Formula
	002a		Target Values for Percent Passing each Sieve Size for the Aggregate Blend & Designate Target Values within the Gradation B & Specified for the Nominal Maximum Size Aggregate Grading
	002b		Source & Percentage of each Aggregate Stockpile to be used
	002c		Average Gradation of each Aggregate Stockpile
	002d		Representative Samples from each Aggregate Stockpile (800-Pounds of Aggregates Proportioned by Stockpile, 20-Pounds of Bag House Fines if Proposed in the Mix, & 20-Pounds of Mineral Filler if Proposed in the Mix)
	002e		Results of Aggregate Quality Tests
	003a		Target Asphalt Binder Content
	003b		Five 1-Gallon Samples of the Asphalt Binder to be used in the Mix

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Access Road and Sewer System

Date: 01-25-10
CM Project Manager: Paul Baron
Job Number : 04052.09003
Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
	003c		Recent Test Results from the Manufacturer for the Asphalt Binder including a Temperature-Viscosity Curve
	003d		Material Safety Data Sheets
	003e		Mixing Temperature Range & Minimum Compaction Temperature for the Performance Grade Asphalt to be used in the Mix
	004a		1-Pint of Liquid Antistrip Additive or 10-Pounds of Cement, Fly Ash, or Lime Antistrip Additive
	004b		Name of the Product
	004c		Manufacturer's Data Sheets & Placement Procedures
	004d		Material Safety Data Sheet
	004e		Dosage Rate
	005a		Source & Percentage of Recycled Asphalt Pavement Material
	005b		Average Gradation of the Recycled Asphalt Pavement Material
	005c		Percent Asphalt Binder in the Recycled Asphalt Pavement
	005d		Target Value for the Asphalt Binder Content & the Percent New Asphalt Binder
	005e		200-Pounds Representative Sample of Recycled Asphalt Pavement Material
	005f		One-Gallon of Recycling Agent
563			Painting
563.03	001a		Written Plan for Acceptance that details the Measures to be used for Protecting the
	001b		Manufacturer's Material Safety Data Sheets & Product Data Sheets
	001c		Detailed Containment Plan for Removed Material, Cleaning Products, & Paint Debris
	001d		Detailed Disposal Plan for Removed Material, Cleaning Products, & Paint Debris
	001e		Specific Safety Measures to protect Workers from Site Hazards
	001f		Emergency Spill Procedures
	001g		Qualifications of Quality Control Personnel
601			Minor Concrete Structures
601.02	001		Concrete Test Results
601.02	002		Certified Mix Design Test Reports for Admixtures (If any)
601.03	003		Test Results of 7-Day & 28-Day Compressive Strength of Concrete Samples
602			
602.02	001		Plastic Pipe
605			
605.03	001		Percolation Chambers
611			Water Systems
611	001		Cast Iron Soil Pipe & Fittings
611.02a	002		Water Main Pipe
611.02c	003		Service Saddle
611.02e	004		Hydrants
611.02g	005		Underground Pipe Markers
611.03	006		Certified Cost Breakdown of the Individual Items involved in the Lump Sum Item for use in making Progress Payments & Price Adjustments
612			Sanitary Sewer System
612.02a	001		Gravity Plastic Pipe
612.02b	002		Force Mains
612.03	003		Certified Cost Breakdown of the Individual Items involved in the Lump Sum Item for use in making Progress Payments & Price Adjustments
612.03c	004		Product Data indicating Pipe Material used & Pipe Accessories
	005		Sewer Manhole Shop Drawing
612A			Wastewater Pumping Stations (Pump #3,#4)
1.7	001a		Guide Rail System

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Access Road and Sewer System

Date: 01-25-10
CM Project Manager: Paul Baron
Job Number : 04052.09003
Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
	001b		Miscellaneous Metal Fabrications
	001c		Pump Performance Curves
	001d		Wiring Diagram
	001e		Pump Outline Drawing
	001f		Motor Data
	001g		Control Drawing & Data
	001h		Operations & Maintenance Data
	002		Shop Drawings including Layout for both Leachate Sump Collection Pumps
	003		Catalog Data for Basin, Cover, Hinged Door, Side Rail Assembly, Discharge Piping, Valves, Junction Box, Level Controls, & Control Panel
	004		Pump Catalog Data, Performance Curve, Breakaway Fittings Data, & Access Frame Data
	005		Control Panel & Panel Wiring Schematic
	006		Factory Pump Inspections & Tests
	007		Manufacturer's Published Installation Instructions for Basin, Pump, & Panel System Procedures
	008		Manufacturer's Certificate
	009		Manufacturer's Field Reports
1.8	010		Requirements for Submittals
	011		Actual Locations of Packaged Pumping Stations including Basins & Control Panel
	012		Executed Certification of Pumping Stations after Performance Testing
	013		Spare Parts List & Rebuild Kits
	014		Operations & Maintenance Manual for Pumping Station & Schedule of Recommended Maintenance
617			Guardrail
617.05			Drawings from the Manufacturer for the Terminals
622			Rental Equipment
622.02	001		Model Number & Serial Number for each piece of Equipment before use
	002		Records along with Certified Copies of the Payroll
623			General Labor
	001		Records along with Certified Copies of the Payroll
626			Plants, Trees, Shrubs, Vines, & Groundcovers
626.04	001		Commercial Certifications & Complete Written Information concerning the Source of Supply for all Plant Material
626.06	002		Planting Locations & Methods of Planting
632			Power Facilities Relocation
632.05	001		Request to the Manager, GPA T&D Department & Navy Dispatcher
633			Permanent Traffic Control
633.03	001		Sign List
636			Signal, Lighting, & Electrical Systems
636.04	001		Certified Cost Breakdown of Items Involved in the Lump Sum for use in making Progress Payments & Price Adjustments
	002		List of Proposed Equipment & Material including Manufacturer's Name, Size, & Identification Number of each item
636.07	003		Readings & Test Equipment Data
636.09	004		As-Built Drawings Showing all Detail Changes from the Original Plans
701			Hydraulic Cement
701.01	001		AASHTO M85 Test Results for Portland & Cement
725			Miscellaneous Material
725.22	001a		Current Material Certifications for the Hydraulic Cement, Fine Aggregate, Expansive Admixture, & other Grout Additives

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Access Road and Sewer System

Date: 01-25-10
CM Project Manager: Paul Baron
Job Number : 04052.09003
Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
	001b		Independent Laboratory Test Results for 1-Day, 3-Day, and 7-Day Strengths, Flow Cone Times, Shrinkage and Expansion Observed, & Time of Initial Set
16302			Underground Transmission & Distribution
16302B			Basic Electrical Materials & Equipment
2.01	001		Conduits & Fittings
2.02	002		Insulated Wire & Cable, Low Voltage
2.03	003		Underground Cable 15KV Extruded Insulation with Concentric Neutral
2.00	004		Wire & Cable Identification Tags
2.01*	005		Conductor & Cable Terminating Devices
2.02*	006		Grounding
2.03*	007		Oxide Inhibiting Paste
2.04	008		Connectors; 600 Volt Sealed Insulated Underground
2.05	009		High Pressure Sodium Luminaires & Mast Arms
2.06	010		Transformers: Single Phase, Padmounted, Distribution
2.07	011		Transformers: Three Phase, Padmounted, Deadfront Construction Distribution
2.08	012		Medium Voltage Cable Joints (Splices)
16302C			Underground Electrical Work
1.1			Primary Electrical Manhole Shop Drawing
16402			Interior Distribution System
2.1	001		Materials & Equipment
2.2.1	002		Rigid Metallic Conduit
2.2.2	003		Rigid Nonmetallic Conduit
2.2.3	004		Intermediate Metal Conduit
2.2.4	005		Electrical Metallic Tubing
2.2.5	006		Plastic-Coated Rigid Steel & IMC Conduit
2.2.6	007		Flexible Metal Conduit
2.2.7	008		Fittings for Metal Conduit, EMT, & Flexible Metal Conduit
2.2.8	009		Fittings & Rigid Nonmetallic Conduit
2.2.9	010		Liquid-Tight Flexible Nonmetallic Conduit
2.3	011		Outlet Boxes & Covers
2.4	012		Cabinets, Junction Boxes, & Pull Boxes
2.5	013		Wires & Cables
2.7	014		Splices & Termination Components
2.8	015		Device Plates
2.9	016		Switches
2.10	017		Receptacles
2.11	018		Panelboards
2.12	019		Enclosed Circuit Breakers
2.13	020		Manual Motor Starters (Motor Rated Switches)
2.14	021		Telephone System
2.15	022		Community Antenna Television System
2.16	023		Grounding & Bonding Equipment
2.17	024		Nameplates
2.18	025		Wireways
16510			Interior Lighting
2.1	001		Fluorescent Lighting Fixtures
2.2	002		Incandescent Lighting Fixtures
2.3	003		Recess- & Flush-Mounted Fixtures
2.4	004		Suspended Fixtures
2.5	005		Time Switch
2.6	006		Photocell Switch
2.7	007		Exit Signs

ANTICIPATED SUBMITTALS LIST



Layon Municipal Sanitary Landfill
Access Road and Sewer System

Date: 01-25-10
CM Project Manager: Paul Baron
Job Number : 04052.09003
Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>
2.8	008		Emergency Lighting Equipment
2.9	009		Support Hangers for Lighting Fixtures in Suspended Ceilings
16520			Exterior Lighting
2.2	001		Luminaires
2.4	002		Time Switch
2.5	003		Photocell Switch
2.6	004		Poles
2.7	005		Brackets & Supports
2.8	006		Pole Foundations
No Spec			15KV Switchgear-Pad Mounted
No Spec			Pole Mounted Transformers
No Spec			Concrete Power Poles - 45'

APPENDIX F

CHANGE ORDER REQUEST (PROPOSAL)

Project: _____ _____ To: _____ _____ Re: _____	Change Order Request Number: _____ From (Contractor): _____ Date: _____ A/E Project Number: _____ Contract For: _____
--	---

This Change Order Request (C.O.R.) contains an itemized quotation for changes in the Contract Sum or Contract Time in response to proposed modifications to the Contract Documents based on Proposal Request No. _____.

Description of Proposed Change:

Attached supporting information from: Subcontractor Supplier _____ _____

Reason For Change:

Does Proposed Change involve a change in Contract Sum? No Yes [Increase] [Decrease] _____ \$ _____
 Does Proposed Change involve a change in Contract Time? No Yes [Increase] [Decrease] _____ days.

Attached pages: Proposal Worksheet Summary: _____
 Proposal Worksheet Detail(s): _____

Signed by: _____ Date: _____

Copies: Owner Consultants _____ _____ _____ _____ _____
 File

APPENDIX G

DAILY CM REPORT
LANDFILL ENTRANCE AREA AND CELLS 1 & 2
 PROJECT NO.: SWMD-09-02
LAYON LANDFILL, INARAJAN, GUAM

PAY ITEM PRODUCTION¹						
ITEM NO.	WORK ELEMENTS	UNITS	ESTIMATED DAILY PRODUCTION	ESTIMATED TOTAL TO DATE	PERCENT COMPLETE (%)	COMMENTS
1	Mobilization	LS				
2	Construction Survey and Staking	LS				
3	Contractor Sampling and Testing	LS				
4	Soil Erosion Control	LF				
5	Water for Dust Control	LS				
6	Maintenance of Temporary Access Road	LS				
7	Clearing & Grubbing	SY				
8	Entrance Area Earthwork	CY				
9	Entrance Area Drainage System & Pipe Culverts	LF				
10	Administration Building	LS				
11	Maintenance Shop	LS				
12	Generator & Pump Building	LS				
13	Site Parking, AC Pavement, Compacted Gravel Surface, Curbs, Wheel Stops & Related Facilities	LS				
14	Traffic Signs, Markers, Striping	LS				
15	Sanitary Sewer System & Lift Stations	LS				
16	Water System	LF				
17	Water Storage Tank	LS				
18	Fuel Storage Tank Pad	LS				
19	Site Electrical	LS				
20	Weigh Stations	LS				
21	Truck Mud Rack	LS				
22	Equipment Wash Rack / Sediment Basin	LS				
23	Oil / Water Separator	LS				
24	4" Thick Topsoil & Grass Seeding at Entrance Area	SF				
25	Leachate Storage Tank and Collection & Pump System	LS				
26	Earthwork for Liner Grades	LS				
27	Cells 1 & 2 Subdrain System Including Catchment Tank & Road to Tank	LS				
28	Cells 1 & 2 Liner & LCRS	LS				
29	Gas Collector System	LS				
30	Perimeter Road Extension	LS				
31	Pond 2 & Drainage Facilities	LS				
32	Fence & Gates	LF				
33	Miscellaneous Work	LS				
34	Field Office	LS				

¹ All pay item quantities are rough estimates by the Field Inspector and are not meant to reflect the exact amount of material installed or moved by the Contractor.

DAILY CM REPORT
LANDFILL ENTRANCE AREA AND CELLS 1 & 2
 PROJECT NO.: SWMD-09-02
 LAYON LANDFILL, INARAJAN, GUAM

DAILY SUMMARY

ITEM NO.	NON-LINER WORK OBSERVED
ITEM NO.	LINER WORK OBSERVED

CONTRACTOR'S QUALITY CONTROL TESTS & RESULTS

ITEM NO.	NOTES

CONSTRUCTION MANAGEMENT'S QUALITY ASSURANCE OBSERVATIONS

ITEM NO.	NOTES

ON-SITE MEETINGS

ITEM NO.	NOTES

COMMENTS

DAILY CM REPORT
LANDFILL ENTRANCE AREA AND CELLS 1 & 2

PROJECT NO.: SWMD-09-02

LAYON LANDFILL, INARAJAN, GUAM

(Causes for delays; Verbal Instructions Given to Contractor – Including Names, Reactions and Remarks; Developments that may lead to a change order or finding of fact):

Paul Baron, PE
Construction Manager
Date: February 24, 2010

DAILY PHOTO DOCUMENTATION
LANDFILL ENTRANCE AREA AND CELLS 1 & 2
PROJECT NO.: SWMD-09-02
LAYON LANDFILL, INARAJAN, GUAM

Photos

DAILY PHOTO DOCUMENTATION
LANDFILL ENTRANCE AREA AND CELLS 1 & 2
PROJECT NO.: SWMD-09-02
LAYON LANDFILL, INARAJAN, GUAM

Photo Maps

DAILY CM REPORT
LAYON LANDFILL ACCESS ROAD AND SEWER SYSTEM
 PROJECT NO.: SWMD-09-03
LAYON LANDFILL, INARAJAN, GUAM

Report Date: _____ **Calendar Days Remaining:** _____

Notice to Proceed: December 14, 2009 **Current Contract Completion:** _____

Contract Time: 500 Calendar Days **Inspector(s):** _____

Prime Contractor: Core Tech International _____

Subcontractors: _____

GENERAL CONDITIONS					
	YES	NO	<i>*Explain if work occurred on a non-working day and/or if safety issues arose.</i>		
WORKING DAY?					
WEEKEND/HOLIDAY WORK SCHEDULED AT LEAST 7 DAYS IN ADVANCE?					
SAFETY MEETING?			<i>Safety Meetings held Mondays at 7:30am</i>		
SAFETY OFFICER ONSITE?					
INCIDENT REPORTED?			<i>*If yes, see Accident, Injury & Illness Investigation Form</i>		
WEATHER CONDITIONS					
	Rain (in)	Duration (hr)	Temperature (°F)	Wind ¹ speed (mph)	Wind Direction ¹
AM					
PM					
VISITORS ONSITE					
Name	Organization		Purpose		
ENVIRONMENTAL COMPLIANCE					
	YES	NO	COMMENTS		
SWPPP Inspection					
Archeological Issues					
NOTES:					
¹ Wind data from http://www.weather.gov/climate/index.php?wfo=guam (Pending installation of onsite weather station)					

DAILY CM REPORT
LAYON SANITARY LANDFILL ACCESS ROAD AND SEWER SYSTEM
 PROJECT NO.: SWMD-09-03
LAYON LANDFILL, INARAJAN, GUAM

PAY ITEM PRODUCTION¹						
ITEM NO.	WORK ELEMENTS	UNIT	ESTIMATED DAILY PRODUCTION	ESTIMATED TOTAL TO DATE	PERCENT COMPLETE (%)	COMMENTS
15101	Mobilization	LS				
15201	Construction Survey and Staking	LF				
15401	Contractor Sampling and Testing	LS				
15701	Soil Erosion Control	LF				
15801	Watering for Dust Control	LS				
20101	Clearing & Grubbing	LF				
20301	Removal of Structures and Obstructions	LS				
20401	Roadway Excavation	LF				
20701	Geotextile Filter Fabric (Toe Protection)	LS				
30101	Aggregate Base, Grading C	LF				
30102	Subbase, Grading B	LF				
40301	Asphalt Concrete Pavement	LF				
40501	Hot Asphalt Concrete Friction Course, 1-inch	LF				
60101	Concrete Headwall	LS				
60201	Culverts	LF				
60401	Catch Basin	LF				
60501	Percolation Drainage Chamber	LS				
60801	Paved Waterways, Concrete (Cut-Off Ditch)	LS				
60802	Paved Waterway, Riprap, Class I (Toe Protection)	LS				
60803	Construct Overside Drains (OSD)	LS				
60901	Curb, Asphalt, 6-inch Depth	LF				
61101	Water System	LF				
61201	Sanitary Sewer System	LF				
612A01	Sanitary Sewer Lift Station	LS				
61701	Guard Rail, Type W	LF				
62101	Preserve GGN Monuments	LS				
62501	Turf Reinforcement Material (TRM)	LS				
62502	Turf Establishment	LS				
63301	Permanent Traffic Control	LS				
63401	Permanent Pavement Markings	LS				
63501	Temporary Traffic Control	LS				
636A01	Electrical System Including Standby Generators and Enclosures for Sanitary Sewer Lift Stations	LS				
63701	Field Offices	LS				

¹All pay item quantities are rough estimates by the Field Inspector and are not meant to reflect the exact amount of material installed or moved by the Contractor.

DAILY CM REPORT
LAYON SANITARY LANDFILL ACCESS ROAD AND SEWER SYSTEM
 PROJECT NO.: SWMD-09-03
LAYON LANDFILL, INARAJAN, GUAM

DAILY SUMMARY

ITEM NO.	WORK OBSERVED

CONTRACTOR'S QUALITY CONTROL TESTS & RESULTS

ITEM NO.	NOTES

CONSTRUCTION MANAGEMENT'S QUALITY ASSURANCE OBSERVATIONS

ITEM NO.	NOTES

ON-SITE MEETINGS

ITEM NO.	NOTES

DAILY CM REPORT
LAYON SANITARY LANDFILL ACCESS ROAD AND SEWER SYSTEM
PROJECT NO.: SWMD-09-03
LAYON LANDFILL, INARAJAN, GUAM

COMMENTS

(Causes for delays; Verbal Instructions Given to Contractor – Including Names, Reactions and Remarks; Developments that may lead to a change order or finding of fact):

Paul Baron, PE
Construction Manager
Date: February 24, 2010

DAILY PHOTO DOCUMENTATION
LAYON SANITARY LANDFILL ACCESS ROAD AND SEWER SYSTEM
PROJECT NO.: SWMD-09-03
LAYON LANDFILL, INARAJAN, GUAM

Photos

DAILY PHOTO DOCUMENTATION
LAYON SANITARY LANDFILL ACCESS ROAD AND SEWER SYSTEM
PROJECT NO.: SWMD-09-03
LAYON LANDFILL, INARAJAN, GUAM

Photo Maps

DAILY FIELD OBSERVATION REPORT

Project: _____ Report Number: _____

Owner: _____ Date: _____ Time: _____

Prime Contractor: _____ A/E Project Number: _____

Weather

- Clear
 Overcast
 Rain

- Warm
 Hot

Site Conditions

- Clear Dusty
 Muddy _____
 Temperature Range _____

Day

- Monday Thursday
 Tuesday Friday
 Wednesday _____
-

Materials Delivered:

Task No. Work Observed:



Task No. Equipment:
Hours Worked:

Staff

Position:

Remarks Nonconforming Work Reported this Date to Contractor:

Site Visitors and Testing:

Remarks:

Attachments:

Signed by:

Date:

Copies: Owner A/E Contractor Consultants _____ _____ File

ON-SITE MEETING MINUTES

Project: _____ Project Number: SWMD-09-0

A/E Project Number: _____
Owner: _____ Meeting Location: Onsite
Re: _____ Meeting Date: _____ Time: _____

This confirms and records our interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within seven days of the date below, we will assume that the following interpretation or description is complete and accurate.

Participants:

Item	Description	Action By
1		

Attachments

Prepared by: Paul Baron

Date:

Copies: Participants GBB _____ _____ _____ _____ File

Draft Weekly Construction Meeting Minutes X.X: XX/XX/10

Project: Layon Landfill Entrance Area & Cells 1&2
Project No. SWMD-09-02, W&K Job #0405209002
Meeting No.: XX
Meeting Date: XX/XX/10, 10:00 am – 11:30 am
Location: Black Construction trailer
Distribution list: All Attendees

These meeting minutes summarize the meeting on Tuesday Month XX, 2010 between GBB (Contracting Officer), W&K (Construction Manager), and BCC (Contractor) for the above-referenced project. Those in attendance are noted below.

Attendees

Paul Baron (PB)
 Aaron Sutton (AS)
 Antonia Meno (AM)
 Jose Armenta (JA)
 Tom Anderson (TA)
 Willie Diwa (WD)
 Augie De Leon (AD)
 Dante Abucay (DA)
 Alice Valencia (AV)
 Johnny Sol (JS)
 Leonard Rabago (LR)
 Orly Nojadera (ON)

Organization

Winzler & Kelly (W&K)
 W&K
 W&K
 Vector Engineering Inc. (VEI)
 Black Construction (BCC)
 BCC
 BCC
 BCC
 BCC
 BCC
 BCC
 BCC

Attendees by Phone

Chris Lund (CL)
 Jeff Larioni (JL)
 Scott Purdy (SP)

Organization

Gershman Brinker & Bratton (GBB)
 GBB
 VEI

Item No.	Description	Status	Start	Due	RP
1	Health and Safety				

Item No.	Description	Status	Start	Due	RP
2	Project Administration				
3	Site Access & Security Control				
4	General Discussion and Construction Related Issues				
5	Project Cost Tracking				
6	Environmental Compliance				
7	Submittals				
8	RFI's				
9	Schedules				
10	Items Received				

NTP DATE: 12/30/09
 ORIGINAL CONTRACT CALENDAR DAYS: 500
 APPROVED TIME EXTENSION CALENDAR DAYS 0
 CONTRACT CALENDAR DAYS EXPIRED AS OF 2/16/10 XX
 APPROX. NON WORKING DAYS PROVIDED FOR IN CONTRACT TO DATE: X
NON WORKING DAYS DUE TO INCLEMENT WEATHER TO DATE: 0
 CALENDAR DAYS REMAINING IN PROJECT: XXX

Next meeting will be held at Black Construction on-site office on Tuesday, Month XX starting at 10:00 am.

These meeting minutes constitute the official record of the items discussed, and were issued in draft form and (will be) amended based on comments received and shall stand as written. These meeting minutes were prepared by Paul Baron of Winzler & Kelly.



Paul Baron
Winzler & Kelly

Draft Weekly Construction Meeting Minutes XX: XX/XX/10

Project: Layon Landfill Access Road & Sewer Systems
Project No.: SWMD-09-03, W&K Job #0405209002
Meeting No.: XX
Meeting Date: XX/XX/10, 9:00 am – 10:30 am
Location: CTI trailer
Distribution list: All Attendees

These meeting minutes summarize the meeting on Wednesday Month XX, 2010 between GBB (Contracting Officer), W&K (Construction Manager), and CTI (Contractor) for the above-referenced project. Those in attendance are noted below.

Attendees

Paul Baron (PKB)
 Aaron Sutton (AS)
 Antonia Meno (AM)
 BrianKeith Espiritu (BE)
 Jose Armenta (JA)
 Roberto Lee (RL)
 Pepito Bedia (PB)
 Irwin Liwag (IL)
 Joel Santos (JS)
 Roel Lague (RL2)

Organization

Winzler & Kelly (W&K)
 (W&K)
 W&K
 W&K
 Vector Engineering
 Core Tech International (CTI)
 CTI
 CTI
 CTI
 CTI

Attendees by Phone

Jeff Larioni (JL)

Organization

Gershman Brinker & Bratton (GBB)

Item No.	Description	Status	Start	Due	RP
1	Health and Safety				
2	Project Administration				
3	Site Access & Security Control				
4	General Discussion and Construction Related Issues				
5	Project Cost Tracking				
6	Environmental Compliance				
7	Submittals				
8	RFI's				
9	Schedules				
10	Items Received				

NTP DATE:	12/14/09
ORIGINAL CONTRACT CALENDAR DAYS:	500
APPROVED TIME EXTENSION CALENDAR DAYS	0
CONTRACT CALENDAR DAYS EXPIRED AS OF YESTERDAY	XX
NON WORKING DAYS PROVIDED FOR IN CONTRACT TO DATE:	X
<u>NON WORKING DAYS DUE TO INCLEMENT WEATHER TO DATE:</u>	<u>0</u>
CALENDAR DAYS REMAINING IN PROJECT:	XXX

Next meeting will be held at Core Tech trailer on Wednesday, Month XX starting at 9:00am.

These meeting minutes constitute the official record of the items discussed and were issued in draft form and shall stand as written unless amended based on comments received within 7 calendar days of issuance. These meeting minutes were prepared by Paul Baron of Winzler & Kelly.


Paul Baron, Sr. Project Manager

**COMMUNICATION
RECORD**

Project: Layon Landfill Access Road and Sewer Systems Date: _____

To: _____ Project Number: SWMD-09-03

From: _____ Letter Dated: _____

Re: _____ Fax Dated: _____

Telephone Call Dated: _____
 Personal Contact Dated: _____
Contact: _____

This confirms and records our interpretation of the understanding reached concerning matters indicated. Unless notified in writing within seven days of the date below, we will assume that the following interpretation or description is complete and accurate.

Attachments

Signed by: _____ Date: _____

Copies: GBB CTI EOR _____ _____ Contact File

SWMD-09-03 LAYON LANDFILL – Access Road & Sewer Systems - RFI Cover Sheet

Contractor: Core Tech International
 500 Mariner Avenue
 Barrigada, Guam 96913

Specification Section/Description	RFI No.	Date

Attachments:

Transmittal Record	Attention	Date Sent	Date Received	Date Due	Initials of Receiver
Contractor to CM					
CM to EOR					
EOR to CM					
CM to GBB					
GBB to CM					
CM to Contractor					

Contractor RFI Comments:
EOR Response Comments:
CM Response Comments:

- Notes:*
- 1). *This review is only for general conformance with the design concept and the information given in this construction documents. Corrections or comments made on the submittals or shop drawings during this review do not relieve the contractor from compliance with the requirements of the construction documents, including without limitation, the plans and specifications. Review of a specific item shall not include review of an assembly of which the item is a component. The contractor is responsible for: Dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the work with that of all other trades, and; performing all work in a safe and satisfactory manner. This review is subject to all provisions of the Contract Documents.*
 - 2). *Notations do not authorize changes to contract sum or time. If the Contractor is authorized to proceed with the work identified in this submittal, it is assumed that no change in the contract amount or completion date is required. If a change in the work due to comments from this submittal review will affect the contract amount or completion date, notify the CM prior to proceeding.*

RFI CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:			Date:				
1	Response Received		CM Project Manager: Paul Baron				
2	Response Pending		Job Number : 04052.09002				
3	Cancelled		Project Number: SMWD-09-02				
<i>No.</i>	<i>Date Received</i>	<i>Information Requested</i>	<i>Drawing Ref.</i>	<i>Spec. Ref.</i>	<i>Response</i>	<i>Date</i>	<i>Status</i>

LAYON LANDFILL – Entrance Area Facilities and Cells 1 & 2 Submittal Form

Contractor: Black Construction Corp.
P.O. Box 24667 GMF
GU 96921

Specification Section/Description	Submittal No.	Revision No.

Submitted for Review: Y/N Meets Specification: Y/N Reviewed by Contractor: _____
Initials of Contractor

Transmittal Record	Attention	Date Sent	Date Received	Date Due	Quantity				Initials of Receiver
					Reproducibles	Prints	Manufacturer's Literature	Samples	
Contractor to CM									
CM to EOR									
EOR to CM									
CM to Contractor									

Item #	Submittal Review Status								Dwg/Item	Dated	Spec/ Drawing Reference #	Description
	1 Reviewed/ No Exceptions Taken		2 Make Corrections Noted		3 Amend as Noted and Resubmit		4 Rejected/ Resubmit					
	EOR	CM	EOR	CM	EOR	CM	EOR	CM				
1												
2												
3												
4												

EOR Comments:

CM Comments:

Notes:

1). This review is only for general conformance with the design concept and the information given in this construction documents. Corrections or comments made on the submittals or shop drawings during this review do not relieve the contractor from compliance with the requirements of the construction documents, including without limitation, the plans and specifications. Review of a specific item shall not include review of an assembly of which the item is a component. The contractor is responsible for: Dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the work with that of all other trades, and; performing all work in a safe and satisfactory manner. This review is subject to all provisions of the Contract Documents.

2). Notations do not authorize changes to contract sum or time. If the Contractor is authorized to proceed with the work identified in this submittal, it is assumed that no change in the contract amount or completion date is required. If a change in the work due to comments from this submittal review will affect the contract amount or completion date, notify the CM prior to proceeding.

LAYON LANDFILL – Access Road & Sewer Systems Submittal Form

Contractor: Core Tech International
 500 Mariner Avenue
 Barrigada, Guam 96913

Specification Section/Description	Submittal No.	Revision No.

Submitted for Review: Y/N Meets Specification: Y/N Reviewed by Contractor: _____
Initials of Contractor

Transmittal Record	Attention	Date Sent	Date Received	Date Due	Quantity				Initials of Receiver
					Reproducibles	Prints	Manufacturer's Literature	Samples	

Item #	Submittal Review Status								Dwg/Item	Dated	Spec/ Drawing Reference #	Description
	1 Reviewed/ No Exceptions Taken		2 Make Corrections Noted		3 Amend as Noted and Resubmit		4 Rejected/ Resubmit					
	EOR	CM	EOR	CM	EOR	CM	EOR	CM				
1												
2												
3												
4												

EOR Comments:

CM Comments:

Notes:

1). This review is only for general conformance with the design concept and the information given in this construction documents. Corrections or comments made on the submittals or shop drawings during this review do not relieve the contractor from compliance with the requirements of the construction documents, including without limitation, the plans and specifications. Review of a specific item shall not include review of an assembly of which the item is a component. The contractor is responsible for: Dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the work with that of all other trades, and; performing all work in a safe and satisfactory manner. This review is subject to all provisions of the Contract Documents.

2). Notations do not authorize changes to contract sum or time. If the Contractor is authorized to proceed with the work identified in this submittal, it is assumed that no change in the contract amount or completion date is required. If a change in the work due to comments from this submittal review will affect the contract amount or completion date, notify the CM prior to proceeding.

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:

1	Reviewed, no exceptions taken
2	Make corrections noted
3	Revise as noted, resubmit
4	Rejected, resubmit as specified
5	Cancelled

Date:

CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
01300			Administrative Requirements									
1.3	001		Professional Land Surveyor Qualifications									
	002		Copy of Site Drawings & Certificate signed by the Professional Land Surveyor									
01323			Network Analysis Schedules									
1.6	001		Preliminary Network Diagram defining Planned Operations for first 60 days of work, with General Outline for remainder of Work									
	002		Draft of Proposal Complete Network Diagram for review									
	003		Complete Network Diagram consisting of Network Diagrams & Mathematic Analysis									
	004a		Updated Network Schedule for Progress Payment 1									
	004b		Updated Network Schedule for Progress Payment 2									
	004c		Updated Network Schedule for Progress Payment 3									
	004d		Updated Network Schedule for Progress Payment 4									
	004e		Updated Network Schedule for Progress Payment 5									
	004f		Updated Network Schedule for Progress Payment 6									
	004g		Updated Network Schedule for Progress Payment 7									
	004h		Updated Network Schedule for Progress Payment 8									
	004i		Updated Network Schedule for Progress Payment 9									
	004j		Updated Network Schedule for Progress Payment 10									
	004k		Updated Network Schedule for Progress Payment 11									
	004l		Updated Network Schedule for Progress Payment 12									
	004m		Updated Network Schedule for Progress Payment 13									
	004n		Updated Network Schedule for Progress Payment 14									
	004o		Updated Network Schedule for Progress Payment 15									
	004p		Updated Network Schedule for Progress Payment 16									
	004q		Updated Network Schedule for Progress Payment 17									
01330			Submittal Procedures									
1.2	001		Sample Submittal Form									
1.3	002		Proposed Products List									
1.4	003		Sample Product Data Form									
1.13	004a		Photographs of Site Conditions & Construction for Progress Payment 1									
	004b		Photographs of Site Conditions & Construction for Progress Payment 2									
	004c		Photographs of Site Conditions & Construction for Progress Payment 3									
	004d		Photographs of Site Conditions & Construction for Progress Payment 4									
	004e		Photographs of Site Conditions & Construction for Progress Payment 5									
	004f		Photographs of Site Conditions & Construction for Progress Payment 6									
	004g		Photographs of Site Conditions & Construction for Progress Payment 7									
	004h		Photographs of Site Conditions & Construction for Progress Payment 8									
	004i		Photographs of Site Conditions & Construction for Progress Payment 9									
	004j		Photographs of Site Conditions & Construction for Progress Payment 10									
	004k		Photographs of Site Conditions & Construction for Progress Payment 11									
	004l		Photographs of Site Conditions & Construction for Progress Payment 12									
	004m		Photographs of Site Conditions & Construction for Progress Payment 13									
	004n		Photographs of Site Conditions & Construction for Progress Payment 14									
	004o		Photographs of Site Conditions & Construction for Progress Payment 15									
	004p		Photographs of Site Conditions & Construction for Progress Payment 16									
	004q		Photographs of Site Conditions & Construction for Progress Payment 17									
01400			Quality Requirements									
1.6	001		List of intended Manufacturer Field Services									
01500			Temporary Facilities & Controls									
1.2	001		Recycling Plan including a List of Materials that might be Recycled									
1.10	002		Proposed Field Office & Parking Layout									
1.14	003		Project Sign									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:	
1	Reviewed, no exceptions taken
2	Make corrections noted
3	Revise as noted, resubmit
4	Rejected, resubmit as specified
5	Cancelled

Date:	
CM Project Manager: Paul Baron	
Job Number : 04052.09002	
Project Number: SMWD-09-02	

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
1.17	004		Qualifications for Fire Prevention & Protection Responsible Person									
1.18	005		Security Program									
1.19	006		Water Control Plan									
1.20	007		Dust Control Plan									
1.21	008		Erosion & Sediment Plan									
1.22	009		Noise Control Plan									
1.23	010		Pest Control Plan									
1.24	011		Pollution Control Plan									
1.25	012		Rodent Control Plan									
01700			Execution Requirements									
1.3	001		Written Report that Equipment or System has been Properly Installed & Functioning Properly									
1.7	002		Project Record Documents & Actual Revisions to the Work (Review Monthly w/PP)									
1.8	003		Operation & Maintenance Instructions									
1.9	004		Three Copies of Preliminary Drafts of Manual for Materials & Finishes before Start of Work									
	005		One Completed Volume 15 days prior to Final Inspection									
	006		Two Sets of Revised Final Volumes in Final Form within 10 days after Final Inspection									
1.10	007		Three Copies of Preliminary Drafts of Manual for Equipment & Systems									
	008		One Completed Volume 15 days prior to Final Inspection									
	009		Two Sets of Revised Final Volumes in Final Form within 10 days after Final Inspection									
1.12	010		Product Warranties & Bonds prior to Final Application for Payment									
01770			Project Close Out									
3.1	001		Project Record Drawings to be submitted before Final Inspection Request									
	002		Product Warranties & Bonds prior to Final Inspection Request									
3.2	003		Written Certification that Project is Substantially Complete									
	004		List of Deficiencies to be Corrected before Final Acceptance									
3.3	005		Letter of Acceptance									
02055			Soils									
1.4	001		Test Data for Controlled Fill & Select Fill									
02060			Aggregate									
1.4	001		Name of Imported Fill Material Suppliers & Test Data									
02225			Low Permeability Soil Liner									
1.4	001		Information & Test Results for Proposed Soil Material									
	002		Work Plan for the Test Pad & Method of Mixing & Constructing the Low Permeability Soil Liner									
2.1	003a		Moisture Content Test Results									
	003b		Particle Size Test Results									
	003c		Atterberg Limits									
	003d		Laboratory Compaction Test Results									
	003e		Laboratory Hydraulic Conductivity at a Specified Compaction									
02230			Site Clearing									
1.2	001		Product Data for Herbicide									
02240			Gravel Drainage Media									
1.4	001		Results of Conformance Tests									
02250			Protective Soil Cover									
1.4	001		Source Evaluation Tests Results									
02320			Backfill									
1.3	001		Materials Source including Name of Imported Fill Materials Suppliers & Test Data									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:	
1	Reviewed, no exceptions taken
2	Make corrections noted
3	Revise as noted, resubmit
4	Rejected, resubmit as specified
5	Cancelled

Date:
 CM Project Manager: Paul Baron
 Job Number : 04052.09002
 Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
	002		Manufacturer's Certificate									
02324			Termite Control									
1.3	001		Product Data on Toxicants to be used, Composition by Percentage, Dilution Schedule, Intended Application Rate (Include Product Label Information)									
	002		Test Reports									
	003		Manufacturer's Application Instructions									
	004		Manufacturer's Certificate									
1.4	005		Project Record Documents									
	006		Operation & Maintenance Data									
02512			Site Water Distribution									
1.4	001		Product Data on Pipe Materials, Pipe Fittings, Valves, & Accessories									
1.5	002		Project Record Documents									
	003		Identify & Describe Discovery of Uncharted Utilities									
02532			Wastewater Pumping Stations (Leachate Only)									
1.7	001a		Guide Rail System									
	001b		Miscellaneous Metal Fabrications									
	001c		Pump Performance Curves									
	001d		Wiring Diagrams									
	001e		Pump Outline Drawing									
	001f		Motor Data									
	001g		Control Drawing & Data									
	001h		Operations & Maintenance Data									
	002		Shop Drawings indicating Layout for all Leachate Sump Collection Pumps									
	003		Product Data									
	004		Test Reports									
	005		Manufacturer's Installation Instructions									
	006		Manufacturer's Certificate									
	007		Manufacturer's Field Reports									
	008		Start-up Report before Final Acceptance of Pumps									
1.8	009		Execution Requirements									
	010		Record of Actual Locations of Packaged Pumping Stations									
	011		Executed Certification of Pumping Station After Performance Testing									
	012		Spare Parts List & Rebuild Kits									
	013		Operations & Maintenance Manuals									
02536			Certificate of Compliance									
	001		Certificate of Compliance									
	002		Proposed Equipment and Methods									
	003		Manufacturers Installation Instructions									
	004		Manufacturer's Certificate									
02538			Sanitary System									
1.5	001		Product Data indicating Pipe Material Used & Pipe Accessories									
02577			Pavement Markings									
1.4	001		Manufacturer's Printed Product Data Sheets									
02610			Pipe Culverts									
1.3	001		Product Data on Pipe, Fittings, & Accessories									
1.4	002		Project Recorded Documents indicating Actual Location of Pipe Runs, Connections, & Invert Elevations									
02630			Storm Drainage									
1.3	001		Product Data indicating Pipe, Pipe Accessories, & Catch Basins & Grates									
	002		Manufacturer's Installation Instructions									
1.4	003		Project Recorded Documents indicating Actual Location of Pipe Runs, Connections, Catch Basins, Cleanouts, & Invert Elevations									
02640			Slope Protection Rock									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:	
1	Reviewed, no exceptions taken
2	Make corrections noted
3	Revise as noted, resubmit
4	Rejected, resubmit as specified
5	Cancelled

Date:	
CM Project Manager: Paul Baron	
Job Number : 04052.09002	
Project Number: SMWD-09-02	

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
1.4.1	001		Source Evaluation Tests Results of Slope Protection Rock to be Supplied									
1.4.2	002a		Reports on Quality Control Tests conducted by the Manufacturer									
1.4.2	002b		Specification for Geotextile including All Properties published by the Manufacturer									
1.4.2	002c		Written Certification that Manufacturer inspected Geotextile to be Needle-Free									
1.4.2	002d		Written Quality Control Certificates including Roll ID Numbers, Testing Procedures & Results of Quality Control Tests									
1.4.3	003		Concrete Materials Information & a Concrete Mix Design									
02721			Aggregate Base Course									
1.3	001		Materials Source: Name of Imported Materials Suppliers & Test Data									
02725			Polyethylene Landfill Pipe									
1.4	001		Geosynthetics CQA Certificates of Compliance for Pipe Materials & Fittings									
	002		Proposal for Equipment & Methods to be used for Welding Pipe									
02730			Leachate Collection Riser Assembly									
1.4	001		Certificates of Compliance for all Components of Assembly									
	002		Shop Drawings of Assembly prior to Fabrication or Installation									
02735			Landfill Gas System Components									
1.4	001a		Specifications & Manufacturer's Data for HDPE Pipe & Fittings									
	001b		Specifications & Manufacturer's Data for PVC Pipe & Fittings									
	001c		Specifications & Manufacturer's Data for Valves									
	001d		Specifications & Manufacturer's Data for Condensate Sumps/Pump Stations									
02740			Flexible Pavement									
1.5	001		Product Information & Mix Design									
	002		Manufacturer's Certificate									
02750			Rigid Pavement									
1.3	001		Product Data on Joint Filler, Admixtures, & Curing Compounds									
02751			Geomembrane									
1.4	001		Dated QC Certificates from resin supplier									
			Written Certification that Min Values in Specs guaranteed by Manufacturer									
			QC Certificates from AGRU America									
			Resin Supplier's name & Plant Locations									
			Manufacturer's Test Results									
			List of Materials which comprises Geomembrane									
			QC Manual for Field Installation of Geomembrane									
			Manufacturer's Proposed Panel Layout Drawing									
			Manufacturer's Qualifications as Geosynthetic Liner Installer (Including History of Manufacturer, Resume of Key Personnel, & List of Master Seamers & QC Technicians)									
02752			Geotextiles									
1.4	002		Manufacturing QC Test Results									
			SKAPS GE-116 16oz. Non-Woven Geotextile Property Sheet									
			SKAPS Industries' Manufacturing QC Program Outline & Certifications									
			Written QC Certificates signed by a Responsible Party Employed by Manufacturer									
			Manufacturer's Origin & Identification									
			Test Report conducted by Manufacturer that Resin used to Manufacture Geotextile meets Manufacturer's Resin Specifications									
02753			Geocomposite									
1.4	003		Manufacturing QC Test Results									
			Transnet 300-2-8 Primary, Transnet 270-2-8 Secondary & Subdrain Geocomposite Property Sheets									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:	
1	Reviewed, no exceptions taken
2	Make corrections noted
3	Revise as noted, resubmit
4	Rejected, resubmit as specified
5	Cancelled

Date:
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
			Written QC Certificate									
02754			Rain Cap									
1.5	001		Complete Materials Specifications, Descriptive Drawings, & Literature									
	002		Recommended Method for Handling & Storage Prior to Installation									
	003		Manufacturer's Certification that the Personnel, Equipment, & HDPE Materials used for installing the Materials are approved									
02821			Chain Link Fences & Gates									
1.4	001		Shop Drawings									
	002		Product Data on Fabric, Posts, Accessories, Fittings, & Hardware									
	003		Manufacturer's Installation Instruction									
1.5	004		Project Record Documents indicating Actual Locations of Property Perimeter Posts Relative to Property Lines & Easements									
	005		Operations & Maintenance Data									
02924			Seeding & Soil Supplements									
1.2	001		Product Data for Seed Mix, Fertilizer, Mulch, & other Accessories									
	002		Test Reports indicating Topsoil Nutrient & PH Levels with Recommended Soil Supplements & Application Rates									
	003		Manufacturer's Certificate									
1.3	004		Operation & Maintenance Data									
03110			Concrete Formwork									
1.2.1	001		Shop Drawings showing Details of Formwork, including Dimensions of Joints, Supports, Studding & Shoring, & Sequence of Form & Shoring Removal									
03210			Reinforcing Steel									
1.2.1	001		Shop Drawings showing Reinforcing Steel Placement, Schedules, Sizes, Grades, & Splicing & Bending Details									
1.2.2	002		Certified Copies of Mill Reports attesting that the Reinforcing Steel Furnished contains no less than 25% Recycled Scrap Steel									
03300			Cast-in-Place Concrete									
1.2.1	001		Name & Manufacturer of each Cementitious Material, Admixture, Curing Compound, & Aggregate Source.									
1.2.2	002		Concrete Mix Design for Approval prior to the use of the Concrete Mix									
1.2.3	003		Methods of Repair or Replacement directed by the Contracting Officer									
03351			Metallic Concrete Topping									
1.4	001		Product Data including Manufacturer's Technical Bulletins & MSDS for each Product									
	002		Samples of 2"x2" Specified Topping Section for Verification									
	003		List of Project References as Documented in this Specification under Quality Assurance Article, including Contact Name & Phone Number of Overseer									
	004		Quality Control Submittals of Protection Plan of Surrounding Areas & Non-Cementitious Surfaces									
04200			Masonry									
1.2.1	001		Shop Drawings of Plans, Elevations, & Details of Wall Reinforcement, Reinforcing Bars at Corners & Wall Intersections, Offsets, Tops, Bottoms, & Ends of Walls, Control & Expansion Joints, Lintels, & Wall Openings.									
05120			Structural Steel									
1.3.1	001		Fabrication Drawings, including Description of Connections									
	002		Erection Plan, including Description of Temporary Supports									
1.3.2	003		Product Data of Shop Primer									
1.3.3	004		Certificates for Steel, Bolts, Nuts, Washers, Welding Electrodes & Rods, & Non-Shrink Grout									
05300			Steel Decking									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:	
1	Reviewed, no exceptions taken
2	Make corrections noted
3	Revise as noted, resubmit
4	Rejected, resubmit as specified
5	Cancelled

Date:	
CM Project Manager: Paul Baron	
Job Number : 04052.09002	
Project Number: SMWD-09-02	

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
1.2.1	001		Fabrication Drawings including Type, Configuration, Structural Properties, Location, Necessary Details of Deck Units, Accessories, Supporting Members, Size & Location of Holes to be cut, Reinforcement to be provided, Location & Sequence of Welded Connections, & the Manufacturer's Erection Instruction									
1.2.2	002		Product Data including Design Computations for Structural Properties of the Deck Units or SDI Certification that the Units are Designed in accordance with SDI Specifications									
1.2.3	003		Manufacturer's Certificates Attesting that Decking Material meets Specified Requirements									
05520			Handrails & Railings									
1.4	001		Shop Drawings indicating Profiles, Sizes, Connection Attachments, Anchorage, Size & Type of Fasteners, & Accessories									
06114			Wood Blocking & Curbing									
1.3	001		Technical Data on Wood Preservative & Fire Retardant Treatment Materials & Application Instructions									
06410			Custom Cabinets									
1.4	001		Shop Drawings indicating Materials, Component Profiles & Elevations, Assembly Methods, Joint Details, Fastening Methods, Accessory Listings, Hardware Location, & Schedule of Finishes									
	002		Product Data for Hardware Accessories									
07140			Fluid-Applied Waterproofing									
1.4	001		Shop Drawings Indicating Special Joint or Termination Conditions & Conditions of Interface with other Materials									
	002		Product Data for Surface Primer, Flexible Flashings, Joint Cover Sheet, & Joint & Crack Sealants, with Temperature Range for Application of Waterproofing Membrane									
	003		Manufacturer's Installation Special Procedures & Perimeter Conditions Requiring Special Attention									
	004		Manufacturer's Certificate									
	005		Manufacturer's Warranty									
07213			Batt Insulation									
1.4	001		Manufacturer's Product Data for Batt Insulation & Board Insulation, & Pressure Sensitive Tape									
	002		Manufacturer's Certificate									
07260			Vapor Retarders									
1.4	001		Product Data indicating Material Characteristics, Performance Criteria, & Limitations									
	002		Manufacturer's Installation Instruction indication Preparation, & Installation Requirements Techniques									
07540			Fluid-Applied Roofing									
1.3	001		Shop Drawings indicating Special Joint or Termination Conditions & Conditions of Interface with other Materials									
	002		Product Data for Material Description, Physical Properties, Recommended Storage Conditions, Shelf Life, Precautions, Flexible Flashings, Joint Cover Sheet, & Joint & Crack Sealants, with Temperature Range for Application of Waterproofing Membrane									
	003		Manufacturer's Installation Instructions indicating Special Procedures & Perimeter Conditions Requiring Special Attention									
07620			Sheet Metal Flashing & Trim									
1.4	001		Shop Drawings indicating Material Profile, Jointing Pattern, Jointing Details, Fastening Methods, Flashings, Terminations, & Installation Details									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:

1	Reviewed, no exceptions taken
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4	Rejected, resubmit as specified
5	Cancelled

Date:

CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
	002		Product Data on Manufactured Components, Metal Types, Finishes, & Characteristics									
07900			Joint Sealers									
1.3	001		Product Data indicating Sealant Chemical Characteristics, Performance Criteria, Substrate Preparations, Limitations, & Color Availability									
	002		Manufacturer's Installation Instructions including Special Procedures for Surface Preparation, & Perimeter Conditions Requiring Special Attention									
	003		Manufacturer's Warranty									
08114			Standard Steel Doors									
1.3	001		Shop Drawings indicating Door Elevations, Internal Reinforcement, Closure Method, & Finishes									
	002		Product Data detailing Door Configurations, Location of Cut-outs for Hardware Reinforcement									
	003		Manufacturer's Installation Instructions									
	004		Manufacturer's Certificate									
08115			Standard Steel Frames									
1.3	001		Shop Drawings indicating Frame Elevations, Reinforcement, Anchor Types & Spacing, Location of Cutouts for Hardware & Finish									
	002		Product Data detailing Frame Configuration & Finishes									
	003		Manufacturer's Certificate									
	004		Manufacturer's Installation Instructions									
08120			Aluminum Doors & Frames									
1.5	001		Shop Drawings indicating System Dimensions, Framed Opening Requirements, & Tolerances, Affected Related Work									
	002		Product Data detailing Component Dimensions, Description of Components within the Assembly, Anchorage & Fasteners, Glass & in-fill, Door Hardware, & Internal Drainage									
	003		Engineering Calculations indicating System Performance under Design Loads									
	004		Manufacturer's Certificate									
08212			Flush Wood Doors									
1.3	001		Shop Drawings illustrating Door Opening Criteria, Elevations, Sizes, Types, Swings, Undercuts Required, Factory Finishing Criteria, Identify Cutouts for Glazing & Louvers									
	002		Product Data providing Information on Door Core Materials & Construction & on Veneer, Type & Characteristics									
	003		Manufacturer's Installation Instructions									
	004		Two Sample of Door, indicating Door Construction									
08310			Access Doors & Panels									
1.3	001		Shop Drawings indicating Exact Position of Access Door Units									
	002		Product Data including Literature indicating Sizes, Types, Finishes, Hardware, Scheduled Locations, Fire Resistance Listings, & Details of Adjoining Work									
	003		Manufacturer's Installation Instructions									
1.4	004		Project Record Documents indicating Actual Locations of Access Units									
08333			Overhead Coiling Doors									
1.5	001		Shop Drawings indicating Pertinent Dimensioning, Anchorage Methods, Hardware Locations, & Installation Details									
	002		Product Data detailing General Construction, Component Connections & Details, Wiring Diagram & Electrical Equipment									
	003		Manufacturer's Installation Instruction									
1.6	004		Operation & Maintenance Data including Lubrication Requirements & Frequency, & Periodic Adjustments Required									
08410			Metal-Framed Storefronts									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:	
1	Reviewed, no exceptions taken
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4	Rejected, resubmit as specified
5	Cancelled

Date:	
CM Project Manager: Paul Baron	
Job Number : 04052.09002	
Project Number: SMWD-09-02	

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>	<i>Status</i>	<i>Required Start</i>	<i>Required Finish</i>	<i>Date Received</i>	<i>Date Latest Sent</i>	<i>Date Returned</i>	<i>Date Forwarded</i>	<i>Originator</i>	<i>Originator's Submittal</i>
1.5	001		Shop Drawings indicating System Dimensions, Framed Opening Requirements & Tolerances, Affected Related Work & Expansion & Contraction Joint Location & Details									
	002		Product Data detailing Component Dimensions, Description of Components within Assembly, Anchorage & Fasteners, Glass & in-fill, Door Hardware, & Internal Drainage Details									
	003		Design Data indicating Framing Member Structural & Physical Characteristics, Calculations, Dimensional Limitations									
	004		Manufacturer's Certificate									
08520			Aluminum Windows									
1.5	001		Shop Drawings indicating Opening Dimensions, Framed Opening Tolerances, Affected Related Work, & Installation Requirements									
	002		Product Data detailing Component Dimensions, Anchorage & Fasteners, Glass, Internal Drainage, & Typical Details									
	003		Manufacturer's Certificates									
08710			Door Hardware									
1.4	001		Shop Drawings indicating Locations & Mounting Heights of each type of Hardware, Schedules, Catalog Cuts, including Manufacturer's Parts Lists, & Templates									
	002		Manufacturer's Installation Instructions									
1.5	003		Project Record Documents indicating Actual Locations of Installed Cylinders & their Master Key Code									
	004		Operation & Maintenance Data on Operating Hardware, Lubrication Requirements, & Inspection Procedures related to Preventative Maintenance									
	005		Keys delivered with ID Tags to Owner by Security Shipment direct from Hardware Supplier									
08800			Glazing									
1.4	001		Product Data for Glass including Structural, Physical & Environmental Characteristics, Size Limitations, Special Handling or Installation Requirements									
	002		Product Data for Glazing Sealants, Compounds & Accessories including Chemical, Functional & Environmental Characteristics, Limitations, Special Application Requirement, & identify available Colors where exposed									
	003		Manufacturer's Certificates									
09220			Portland Cement Plaster									
1.3	001		Product Data on Plaster Materials, Characteristics & Limitations of Products Specified									
	002		Two 12"x12" Sized Samples illustrating Finish Color & Texture									
09260			Gypsum Board Assemblies									
1.4	001		Product Data on Metal Framing, Gypsum Board, Joint Compound & Tape									
09300			Ceramic Tile									
1.3	001		Shop Drawings of Custom Tile Mural & Tile inset of Northern Mariana Islands showing Tile Layout & Colors									
	002		Product Data including a Color Chart & Instructions for using Adhesives & Grouts									
	003		Initial Installation of Section of Tile Work to be reviewed & approved prior to Continuation of Work									
	004		Manufacturer's Certificate									
1.4	005		Recommended Cleaning methods, Cleaning Materials, Stain Removal Methods, & Polishes & Waxes									
09510			Acoustical Ceiling									
1.4	001		Product Data on Metal Grid System Components & Acoustic Units									
	002		Manufacturer's Installation Instructions									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:	
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4	Rejected, resubmit as specified
5	Cancelled

Date:	
CM Project Manager: Paul Baron	
Job Number : 04052.09002	
Project Number: SMWD-09-02	

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
09650			Resilient Flooring									
1.3	001		Product Data describing Physical & Performance Characteristics, including Sizes, Patterns, Colors Available, & Installation Instructions									
	002		Manufacturer's Complete Set of Color Samples for Initial Selection									
1.4	003		Maintenance Procedures, Recommended Maintenance Materials, & Suggested Schedule for Cleaning, Stripping, & Re-Waxing									
09900			Paints & Coatings									
1.4	001		Product Data on Finishing Products									
	002		Special Surface Preparation Procedures, & Substrate Conditions Requiring Special Attention									
	003		Manufacturer's Samples of Paint Colors									
1.5	004		Data on Cleaning, Touch-up, & Repair of Painted & Coated Surfaces									
10171			Solid Phonetic Toilet Compartments									
1.3	001		Shop Drawings indicating Partition Plan, Elevation Views, Dimensions, Details of Wall, Ceiling Supports, & Door Swings									
	002		Product Data on Panel Construction, Hardware, & Accessories									
	003		Two 6"x6" Sized Samples illustrating Panel Finish, Color, & Sheen									
	004		Special Procedures, Perimeter Conditions Requiring Special Attention									
10440			Signs									
1.3	001		Shop Drawings indicating Sign Styles, Letting Font, Foreground & Background Colors, Locations, Overall Dimensions of each sign									
	002		Installation Template & Attachment Devices									
10500			Lockers									
1.3	001		Shop Drawings indicating Locker Plan Layout & Numbering Plan									
	002		Product Data on Locker Types, Sizes & Accessories									
	003		Two 3"x6" Sized Samples of each Color Selected, Applied to Specified Base Metal									
	004		Installation Template & Attachment Devices									
10523			Fire Extinguishers & Cabinets									
1.4	001		Extinguisher Operational Features, Color & Finish, & Anchorage Details									
	002		Special Criteria & Wall Opening Coordination Requirements									
1.5	003		Test, Refill or Recharge Schedules & Re-Certification Requirements									
10716			Typhoon Shutters									
1.4	001		Shop Drawings coordinated with Window Schedule, Elevations of Shutter Units, Half-Sized Sections, Thickness & Gages of Materials, Fastenings, Method of Anchorage, Size & Spacing of Anchors, & Location of Hardware									
	002		Shop Drawings of Schedule of Shutters									
	003		Product Data for Accordion Shutters									
1.8	004		Manufacturer's Operation & Maintenance Data									
10800			Toilet Accessories									
1.3	001		Product Data on Accessories describing Size, Finish, Details of Function, Attachment Methods									
	002		Special Procedures, Conditions Requiring Special Attention									
13211			Ground Level Steel (Potable) Water, Leachate & Subdrain Storage Tanks									
1.3	001		Fabrication and/or Erection Drawings including Construction Details & Materials of Construction									
	002		Product Technical Data including Acknowledgement that Products Submitted meet Requirements of Standards Referenced, Manufacturer's Installation Instructions, Design Data, Manufacturer's List of Five Similar Sized Reservoirs, & Cathodic Protection System Design & Details									
	003		Test Reports									
	004		Operation & Maintenance Manuals									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:	
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5	Cancelled

Date:	
CM Project Manager: Paul Baron	
Job Number : 04052.09002	
Project Number: SMWD-09-02	

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
	005		One 12"x12" Glass-Fused-to-Steel Reservoir Sample showing Actual Color prior to Fabrication of Reservoirs									
15010			Basic Mechanical Requirements									
1.6	001		Shop Drawings including Floor Plans, Sectional Views, Wiring Diagrams, & Installation Details of Equipment, & Equipment Spaces identifying & indicating Proposed Location, Layout & Arrangement of Items of Equipment, Control Panels, Accessories, & Piping Ductwork.									
	002		Descriptive Literature of Cataloged Products, Equipment Drawings, Diagrams, Performance & Characteristic Curves, & Catalog Cuts									
	003		Proof of Conformance with ANSI, ASTM, NEMA, & UL									
	004		Certificates of Conformance or Compliance from the Manufacturer attesting that Materials & Equipment to be furnished for this Project comply with Requirements of Specifications									
15121			Piping Expansion Compensation									
1.3	001		Details of Flexible Pipe Connectors indicating Maximum Temperature & Pressure Rating, Face-to-Face Length, Live Length, Hose Wall Thickness, Hose Convolutions per Foot (Meter) & per Assembly, Fundamental Frequency of Assembly, Braid Structure, Total Number of Wires in Braid, & Adjustment Instructions									
	002		Manufacturer's Installation Instructions indicating Special Procedures & External Controls									
15140			Supports & Anchors									
1.4	001		Manufacturer's Catalog Data detailing Load Capacity									
	002		Manufacturer's Installation Instructions indicating Special Procedures & Assembly of Components									
	003		Support & Bracing Shop Drawings including Plans, Sections, Details, Schedules & other Information necessary to describe Supports, Hangers & Seismic Bracing for all Mechanical Systems, Equipment, Piping & Ductwork (Indicate Location & Type of all Hangers, Supports, & Seismic Bracing)									
	004		Maintenance Data & Parts List for each Type of Support & Anchor									
15170			Motors									
1.4	001		Wiring Diagrams with Electrical Characteristics & Connection Requirements									
	002		Test Reports indicating Test Results verifying Nominal Efficiency & Power Factor for Three-Phase Motors larger than 5 Horsepower									
	003		Manufacturer's Installation Instructions indicating Setting, Mechanical Connections, Lubrication, & Wiring Instructions									
15190			Mechanical Identification									
1.4	001		Wording, Symbols, Letter Size, & Color Coding for Mechanical Identification									
	002		Valve Chart & Schedule, including Valve Tag Number, Location, Function, & Valve Manufacturer's Name & Model Number									
	003		Manufacturer's Catalog Literature for each Product Required									
	004		Two Samples for each Product									
	005		Manufacturer's Installation Instructions indicating Special Procedures & Installation									
15245			Vibration Isolation									
1.4	001		Shop Drawings indicating Inertia Bases, Location of Vibration Isolators & Seismic Restraint, including Details of Suspension for Ceiling-Hung Equipment									
	002		Catalog Cuts of Vibration Isolators & Seismic Restraints									
	003		Manufacturer's Installation Instructions indicating Special Procedures & Setting Dimensions									
	004		Seismic Certification & Analysis									
	005		Code Requirements									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:	
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Date:
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
15260			Piping Insulation									
1.4	001		Product Description, Thermal Characteristics, List of Materials & Thickness for each Service, & Locations									
1.5	002		Installation Procedures									
15290			Ductwork Insulation									
1.4	001		Product Description, Thermal Characteristics, List of Materials & Thickness for each Service, & Locations									
	002		Two Samples of any Representative Size illustrating each Insulation Type									
1.5	003		Installation Procedures									
15320			Fire Pump									
1.6	001		Manufacturer's Literature including General Assembly, Pump Curves showing Performance Characteristics with Pump & System, Operating Point indicated, NPSH Curve, Controls, Wiring Diagrams, & Service Connections									
	002		Shop Drawings indicating Layout, General Assembly, Components, Dimensions, Weights, Clearances, & Methods of Assembly									
1.7	003		Results of Hydrostatic Test & Field Acceptance Tests performed									
			Manufacturer's Instructions indicating Support Details & Connection Requirements for Fire Pump System									
1.8	004		Project Record Documents indicating Actual Locations of Components & Accessories									
	005		Certificates for Pump along with Summary & Results of Shop Tests performed									
	006		Operation Data including Manufacturer's Instructions, Start-up Data, & Troubleshooting Checklists for Pumps, Drivers, & Controllers									
	007		Manufacturer's Literature detailing Cleaning Procedures, Replacement Parts Lists, & Repair Data for Pump, Driver & Controller									
15410			Plumbing Piping									
1.4	001		Product Data on Pipe Materials, Pipe Fittings, Valves, Accessories, & Manufacturer's Catalog Information (Indicate Valve Data & Ratings)									
	002		Complete Installation Shop Drawings indicating all Locations & Invert Elevations of Plumbing Piping									
1.5	003		Project Record Documents indicating Actual Locations of Valves									
15430			Plumbing Specialties									
1.4	001		Product Data detailing Component Sizes, Rough-in Requirements, Service Sizes, & Finishes									
	002		Shop Drawings indicating Dimensions, Weights, & Placement of Openings & Holes									
1.5	003		Project Record Documents indicating Actual Locations of Equipment, Cleanouts, Backflow Preventers, & Water Hammer Arrestors									
15440			Plumbing Fixtures									
1.3	001		Catalog illustrations of Fixtures, Sizes, Rough-in Dimensions, Utility Sizes, Trim, & Finishes									
1.4	002		Manufacturer's Instructions indicating Installation Methods & Procedures									
1.5	003		Maintenance Data including Fixture Trim Exploded View & Replacement Parts List									
15450			Plumbing Equipment									
1.4	001		Dimension Drawings of Water Heaters indicating Components, Connections to other Equipment & Piping, Electrical Characteristics, & Connection Requirements									
	002		Operation & Maintenance Data including Operation, Maintenance & Inspection Data, Replacement Part Numbers & Availability, & Service Depot Location & Telephone Number									
15481			Compressed Air System									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:	
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4	Rejected, resubmit as specified
5	Cancelled

Date:
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
1.4	001		Manufacturer's Catalog Literature with Capacity, Weight, & Electrical Characteristics & Connection Requirements									
	002		Shop Drawings indicating Piping System Schematic with Electrical Characteristics & Connection Requirements									
1.5	003		Inspector's Certificate for Air Receiver for Including in Operating & Maintenance Manuals									
	004		Manufacturer's Installation Instructions, Hoisting & Setting Requirements, Starting Procedures									
1.6	005		Project Record Documents indicating Actual Locations of Equipment & Components (Modify Shop Drawings to indicate Final Locations)									
	006		Operation Data for Air Compressor, Air Receiver & Accessories, Aftercooler, Refrigerated Air Dryer, & Pressure Reducing Station									
	007		Maintenance Data for Air Compressor, Air Receiver & Accessories, Aftercooler, & Pressure Reducing Station									
	008		Manufacturer's Warranty									
15484			Fuel Lube Oil Piping System									
1.4	001		Product Data on Pipe Materials, Pipe Fittings, Valves & Accessories, & Manufacturer's Catalog Information (Indicate Valve Data & Ratings)									
	002		Shop Drawings indicating Tanks, System Layout, Pipe Sizes, Location, & Elevations (For Fuel Oil Tanks, indicate Dimensions & Accessories including Manholes & Hold Down Straps)									
1.5	003		Project Record Documents indicating Actual Locations of Piping System, Storage Tanks, & System Components									
			Maintenance Data including Installation Instructions, Spare Parts List, Exploded Assembly Views									
	004		Manufacturer's Warranty									
15530			Leachate Sump Pumps									
1.4	001		Complete Manufacturer's Data including Details of Electric Motors & Pump Curve									
	002		Shop Drawings for Pump Installation including Mechanical & Electric Schematics									
15535			Refrigerant Piping & Specialties									
1.5	001		Shop Drawings indicating Schematic Layout of System including Equipment, Critical Dimensions & Sizes (Include Double Hot Gas Risers if recommended by Chiller Manufacturer to return Oil to Compressors)									
	002		Manufacturer's Catalog Information including Load Capacity									
	003		Results of Leak Test & Acid Test									
	004		Manufacturer's Installation Instructions indicating Support, Connection Requirements, & Isolation for Servicing									
	005		Welders Certification									
1.6	006		Project Record Documents indicating Exact Locations of Equipment & Refrigeration Accessories on Record Drawings									
1.7	007		Instructions for Changing Cartridges, Assembly Views, & Spare Parts Lists									
15540			Liquid Level Pressure Sensor									
1.4	001		Complete Manufacturer's Specifications									
	002		Shop Drawings for Pump Installation including Mechanical & Electric Schematics									
15545			Three-Point Level Sensor									
1.4	001		Complete Manufacturer's Specifications									
	002		Shop Drawings for Pump & Controls Installation including Mechanical & Electric Schematics									
15550			Pump Control Panel									
1.4	001		Complete Manufacturer's Specifications for Panels & Related Equipment									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
Status code:				Date:								
1	Reviewed, no exceptions taken			CM Project Manager: Paul Baron								
2	Make corrections noted			Job Number : 04052.09002								
3	Revise as noted, resubmit			Project Number: SMWD-09-02								
4	Rejected, resubmit as specified											
5	Cancelled											
	002		Narrative Description & Logic Diagram for Control System									
	003		Electrical Schematic & Single-Line Diagram									
15560			Leachate Flow Meters									
1.4	001		Complete Manufacturer's Specifications for Flow Meters & Related Equipment									
	002		Shop Drawings for Installation of Sensors & Display Units									
	003		Electrical Schematic & Single-Line Diagram									
	004		Operation & Maintenance Manual For Flow Meter									
Section			Breakout Junction Box									
1.4	001		Complete Manufacturer's Specifications for Breakout Junction Box									
	002		Shop Drawings for Installation of Pumps & Controls									
	003		Electrical Schematic & Single-Line Diagram									
15671			Air-Cooled Condensing Units									
1.4	001		Shop Drawings indicating Components, Assembly, Dimensions, Weights & Loadings, Required Clearances, & Location & Size of Field Connections (Include Layouts showing Condensing Units, Cooling Coils, Refrigerant Piping, & Accessories Required for Complete System)									
	002		Rated Capacities, Weights Specialties & Accessories, Electrical Name Plate Data, & Wiring Diagrams (Submission with Air Handling Units should refer to Section 15855)									
1.5	003		Design Data indicating Pipe Sizing									
			Manufacturer's Installation Instructions									
1.6	004		Operation & Maintenance Data including Start-up Instructions, Maintenance Instructions, Parts Lists, Controls, & Accessories									
1.9	005		Manufacturer's Warranty									
15855			Air Handling Units									
1.4	001		Published Literature, & Data for Filters, Fans, Sound Power Level, & Electrical Requirements									
	002		Shop Drawings indicating Assembly, Unit Dimensions, Weight Loading, Required Clearances, Construction Details, Field Connection Details, & Electrical Characteristics & Connection Requirements									
	003		Manufacturer's Instructions									
			Maintenance Data including Instructions for Lubrication, Filter Replacement, Motor & Drive Replacement, Spare Parts Lists, & Wiring Diagrams									
15890			Ductwork Accessories									
1.5	001		Shop Drawings indicating Duct Fittings, Particulars such as Gages, Sizes, Welds, & Configuration prior to Start of Work (Include Duct Supports with Sway Braces)									
	002		Product Data for Duct Materials									
1.6	003		Project Record Documents indicating Actual Locations of Ducts & Duct Fittings									
15910			Ductwork Accessories									
1.4	001		Manufacturer's Installation Instructions indicating Fire Dampers & Combination Fire & Smoke Dampers									
	002		Project Record Documents indicating Actual Locations of Test Holes									
15940			Air Outlets & Inlets									
1.4	001		Product Data for Equipment required for this Project & Schedule of Outlets & Inlets showing Type, Size, Location, Application, & Noise Level									
1.5	002		Project Record Documents indicating Actual Locations of Air Outlets & Inlets									
15990			Testing, Adjusting, & Balancing									
1.3	001		Test Reports									
	002		Name & Qualification of Adjusting & Balancing Agency									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:

1	Reviewed, no exceptions taken
2	Make corrections noted
3	Revise as noted, resubmit
4	Rejected, resubmit as specified
5	Cancelled

Date:

CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-02

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
	003		Field Reports indicating Deficiencies in System that would prevent Proper Testing, Adjusting, & Balancing of Systems & Equipment to achieve specified Performance									
	004		Draft Reports indicating Adjusting, Balancing, & Equipment Data Required									
	005		Draft Copies of Report for Review									
	006		Draft Report Indication Adjusting, Balancing, & Equipment Data.									
1.4	007		Project Record Documents indicating Actual Locations of Flow Measuring Stations Balancing Valves & Rough Setting									
16050			Basic Electrical Materials & Methods									
1.5.1	001		Manufacturer's Catalog Data									
1.5.2	002		Drawings including Wiring Diagrams & Installation Details of Equipment									
1.5.3	003		Manufacturer's Instructions									
1.5.4	004		Manufacturer's Certificates									
1.5.4.1	005		Reference Standard Compliance									
1.5.4.2	006		Independent Testing Organization Certificate									
1.5.5	007		Operation & Maintenance Manuals									
1.5.5.1	008		Operating Instructions									
16302			Underground Transmission & Distribution									
1.3	001		Megger Test Reports for all 600-Volt Wire & Cable Tests									
2.0	002		Heat Fusion Work Plan									
	003		Pipe Joint Test Methods, Procedures, & Apparatus									
	004		Product Data for Piping Materials									
	005		Product Data for Fusion Equipment									
	006		Test Reports for Heat Fusion Daily Logs									
	007		Test Reports for Bent Strap Testing									
	008		Test Reports for Ultrasonic Testing									
	009		Certificate for Fusion Equipment Experience Requirements									
	010		Certificate for Experience Requirements									
	011		Certification for NDE Technician									
	012		Pipe Manufacturer Material Certificate									
	013		Mechanical Coupling Manufacturer Certificate									
	014		Certification for Heat Fusion Technician									
2.4	015		Primary/Secondary and Communication Handhole Hardwares									
16402			Interior Distribution System									
1.3.1	001		Shop Drawings of Panel Boards & Wireways									
	002		Product Data for Receptacles, Circuit Breakers, Switches, Enclosed Circuit Breakers, Manual Motor Starters, CATV Outlets, Grounding Block									
1.3.2												
1.3.3	003		Test Reports for 600-Volt Wiring Test, Grounding System Test, Ground-Fault Receptacle Test									
1.5.1	004		Operation & Maintenance Manuals for Electrical Systems including Single-Line Diagram of the "As-Built" Building Electrical System, & Schematic Diagram of Electrical Control System									
16510			Interior Lighting									
1.4.1	001		Product Data for Fluorescent Lighting Fixtures, Electronic Ballasts & Lamps, Incandescent Lighting Fixtures & Lamps, Dimmer Switch, Lighting Contactor, Time Switch, Photocell Switch, Exit Signs, Emergency Lighting Equipment, Occupancy Sensors, Electronic Dimming Ballast, & Dimming Ballast Controls									
1.4.2	002		Samples of Lighting Fixtures, complete with Lamps & Ballasts									
1.4.3	003		Operating Test Reports									
1.4.4	004		Operation & Maintenance Data showing all Control Modules, Control Zones, Occupancy Sensors, Light Fixtures, & all Interconnecting Control Wire, Conduit, & Associated Hardware									

SUBMITTAL CONTROL LOG



Layon Municipal Sanitary Landfill
Entrance Area and Facilities and Cells #1 and #2

Status code:	
1	Reviewed, no exceptions taken
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4	Rejected, resubmit as specified
5	Cancelled

Date:	
CM Project Manager: Paul Baron	
Job Number : 04052.09002	
Project Number: SMWD-09-02	

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>	<i>Status</i>	<i>Required Start</i>	<i>Required Finish</i>	<i>Date Received</i>	<i>Date Latest Sent</i>	<i>Date Returned</i>	<i>Date Forwarded</i>	<i>Originator</i>	<i>Originator's Submittal</i>
1.4.5	005		Information Card									
16520			Exterior Lighting									
1.4	001		Luminaire Drawings including Poles									
	002		Product Data on Luminaires, Lamps, Ballasts, Lighting Contactor, Time Switch, Photocell Switch, Concrete Poles, & Brackets									
	003		Operating Test Reports for Luminaires									
16612			Emergency Power System									
1.0	001		Manufacturer's Brochures describing Equipment Ratings, Performances, Specification & Construction									
	002		Shop Drawings of Layout to Scale giving Dimensions, Schematic & Wiring Diagrams, & Interconnection Diagrams									
	003		Manufacturer's Warranty									
16721			Fire Alarm System									
	001		Technical Data, Wiring Diagrams, & Installation & Maintenance Instructions									

SUBMITTAL CONTROL LOG

Layon Municipal Sanitary Landfill
Access Road and Sewer System



Status code:	
1	Reviewed, no exceptions taken
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5	Cancelled

Date:
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>	<i>Status</i>	<i>Required Start</i>	<i>Required Finish</i>	<i>Date Received</i>	<i>Date Latest Sent</i>	<i>Date Returned</i>	<i>Date Forwarded</i>	<i>Originator</i>	<i>Originator's Submittal</i>
102			Bid, Award, & Execution of Contract									
102.01	001		Bid, Award, & Execution of the Contract are Governed by the Guam Administrative Rules and Regulation, Volume 1, Title 2, Division 4, Procurement Regulations									
102.07	002		Consideration of Proposals									
104			Control of Work									
104.03	001		Contract Plans & Specifications including special Contract Requirements									
105			Control of Material									
105.1	001		Source of Supply & Quality Requirements									
106			Acceptance of Work									
106.03	001		Submit Certifications to the Contracting Officer when requested									
107			Legal Relations & Responsibility to the Public									
107.06	001		Claim for Compensation with Supporting Documents regarding the Incurred Expenses									
108			Prosecution & Progress									
108.02	001		SF 1413 with Part I completed (Complete Part II if Subcontracts involve on-site Labor)									
	002		Statement of Cumulative Amount of all on-site Subcontracts to date									
109			Measurement & Payment									
109.01	001		Measurement Notes									
	002a		Lump Sum Item Documentation supporting Invoiced Progress Payment 1									
	002b		Lump Sum Item Documentation supporting Invoiced Progress Payment 2									
	002c		Lump Sum Item Documentation supporting Invoiced Progress Payment 3									
	002d		Lump Sum Item Documentation supporting Invoiced Progress Payment 4									
	002e		Lump Sum Item Documentation supporting Invoiced Progress Payment 5									
	002f		Lump Sum Item Documentation supporting Invoiced Progress Payment 6									
	002g		Lump Sum Item Documentation supporting Invoiced Progress Payment 7									
	002h		Lump Sum Item Documentation supporting Invoiced Progress Payment 8									
	002i		Lump Sum Item Documentation supporting Invoiced Progress Payment 9									
	002j		Lump Sum Item Documentation supporting Invoiced Progress Payment 10									
	002k		Lump Sum Item Documentation supporting Invoiced Progress Payment 11									
	002l		Lump Sum Item Documentation supporting Invoiced Progress Payment 12									
	002m		Lump Sum Item Documentation supporting Invoiced Progress Payment 13									
	002n		Lump Sum Item Documentation supporting Invoiced Progress Payment 14									
	002o		Lump Sum Item Documentation supporting Invoiced Progress Payment 15									
	002p		Lump Sum Item Documentation supporting Invoiced Progress Payment 16									
	002q		Lump Sum Item Documentation supporting Invoiced Progress Payment 17									
152			Construction Survey & Staking									
152.02	001		Construction Schedule including Staking Activities									
	002		Data relating to Horizontal & Vertical Alignment, Theoretical Slope Stake Catchpoints, & other Design Data									
152.03	003		Plotted Field-Design Cross-Section of Final Culvert Length & Alignment									
153			Contractor Quality Control									
153.02	001		Quality Control Plan									
153.03	002		Detailed list of Sampling & Testing to be performed for Quality Control & Quality Assurance									
153.04	003		Qualifications of Quality Manager									
	004		Testing & Inspection Records by Pay Item Number									
153.05	005		Qualifications of Inspectors, Testers, & Company or Companies providing Quality Control									
	006		Chart of Quality Control Inspections including Definable Features, Inspectors responsible, & Inspection Frequency of work									

SUBMITTAL CONTROL LOG

Layon Municipal Sanitary Landfill
Access Road and Sewer System



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Date:
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>	<i>Status</i>	<i>Required Start</i>	<i>Required Finish</i>	<i>Date Received</i>	<i>Date Latest Sent</i>	<i>Date Returned</i>	<i>Date Forwarded</i>	<i>Originator</i>	<i>Originator's Submittal</i>
	007		Procedures for Managing Reports, Documents, Charts, Certifications, & Submittals									
153.06	008		Qualifications of Individuals & Company or Companies providing Quality Assurance									
153.08	009		Notification of Completion of Work									
	010		Construction Operations Report									
	011		Quality Control & Assurance Report									
	012		Control Charts									
	013		Pay Item Measurement Notes (FHWA 17348 Pay Item Record)									
	014		Quality Control & Quality Assurance Test Results									
155			Schedules for Construction Contract									
155.02	001		Preliminary Construction Schedule									
155.06	002a		Updated Construction Schedule 1									
	002b		Updated Construction Schedule 2									
	002c		Updated Construction Schedule 3									
	002d		Updated Construction Schedule 4									
	002e		Updated Construction Schedule 5									
	002f		Updated Construction Schedule 6									
	002g		Updated Construction Schedule 7									
	002h		Updated Construction Schedule 8									
	002i		Updated Construction Schedule 9									
156			Public Traffic									
156.03	001		Alternate Traffic Control Proposal									
156.07	002		Night Lighting System Proposal									
157			Soil Erosion Control									
157.01	001		Environmental Protection Plan (EPP), Erosion Control Plan (ECP), & Stormwater									
157.03	002		Alternate Erosion Control Plan Proposal with all Necessary Permits									
203			Removal of Structures & Observation									
203.01	001		Action Plan for the relocation of Existing School Bus Shelters									
213			Subgrade Stabilization									
213.03	001		Subgrade Stabilization Mix Design including Minimum Compressive Strengths									
253			Gabions & Revet Mattresses									
253.03	001		Installation Drawings									
257			Alternate Retaining Walls									
257.04	001		Proposal for Utilization of Gabions, Revet Mattresses, Crib Walls, or Mechanically-Stabilized Earth Walls									
	002		Design Calculations									
258			Reinforced Concrete Retaining Walls									
258.03	001		Forms & Falsework Drawings									
258.04	002		Order Lists & Bending Diagrams									
301			Untreated Aggregate Courses									
301.03	001		Proposed Target Values for the Appropriate Sieve Sizes along with a Representative 300-pound Sample									
302			Treated Aggregate Courses									
302.03	001		Treated Aggregate Course Mix Design									
304			Aggregate Stabilization									
304.03	001		Mix Design									
	002a		Source of each Component of .bb-Mix Formula									
	002b		Results of Applicable Tests of each .bb-Mix Formula									

SUBMITTAL CONTROL LOG

Layon Municipal Sanitary Landfill
Access Road and Sewer System



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1	Reviewed, no exceptions taken
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5	Cancelled

Date:
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>	<i>Status</i>	<i>Required Start</i>	<i>Required Finish</i>	<i>Date Received</i>	<i>Date Latest Sent</i>	<i>Date Returned</i>	<i>Date Forwarded</i>	<i>Originator</i>	<i>Originator's Submittal</i>
	002c		Target Values for Each Aggregate Sieve Size Specified & Stabilizing Agent for each Job-Mix Formula									
	003a		200-Pound Sample of Aggregate									
	003b		50-Pound Sample of Fly Ash									
	003c		25-Pound Sample of Lime									
	003d		25-Pound Sample of Portland & Cement									
	003e		5-Pound Sample of Retarder or Other Admixtures									
309			Emulsified Asphalt-Treated Base Course									
309.03	001		Proposed Target Values for the Appropriate Sieve Sizes Along with a Representative 300-Pound Sample									
402			Hot Asphalt Concrete Pavement by HVEEM or Marshall Mix Design Method									
402.03	001		Written Job-Mix Formulas with Form FHWA 1607 (HVEEM) or Form FHWA 1608 (Marshall)									
	002		Laboratory Certification for Proposed Job-Mix Formula including Acceptance & Payment for each Job Mix									
403			Hot Asphalt Concrete Pavement									
403.03	001		Aggregate Quality, Gradation Requirements, & Mixture Criteria for the Asphalt Concrete Mix									
	002		Written Job-Mix Formulas including the Location of all Commercial Mixing Plants to be used & a Separate Job-Mix Formula for each Plant									
	003		Target Values for Percent Passing Each Sieve Size for the Aggregate Blend & each Stockpile, Stockpile Blend Ratios, Target Asphalt Binder Content, & Maximum Density Value									
	004		Aggregate Sources									
	005		Stockpile Gradations									
	006		Representative Samples									
	007		Results of Aggregate Quality Tests for Contractor Selected Sources									
	008		Asphalt Binder Information									
	009		Antistrip Additives information									
	010		Recycled Asphalt Pavement Material information									
403.12	011		Proposed Schedule of Paving Operations									
	012		List of All Equipment & Personnel used in the Production & Construction of the Work									
	013		Proposed Traffic Control Plan for Paving Operations including Provisions for Pavement Drop-offs & Moving Operations									
	014		Contractor Quality Control Plan for Paving & Sampling & Testing									
	015		Compacting, & Smoothness Procedures									
	016		Acceptance Procedures									
404			Minor Hot Asphalt Concrete									
404.02	001		Strength, Quality, & Gradation Specifications for Asphalt Concrete Mix including Copies of Laboratory Test Reports									
	002		Results of AASHTO T 209 for Maximum Specific Gravity of the Mix									
405			Open-Graded Asphalt Friction Course									
	001		Written Job-Mix Formula									
	002a		Target Values for Percent Passing each Sieve Size for the Aggregate Blend & Designate Target Values within the Gradation B & Specified for the Nominal Maximum Size Aggregate Grading									
	002b		Source & Percentage of each Aggregate Stockpile to be used									
	002c		Average Gradation of each Aggregate Stockpile									

SUBMITTAL CONTROL LOG

Layon Municipal Sanitary Landfill
Access Road and Sewer System



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1	Reviewed, no exceptions taken
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5	Cancelled

Date:
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-03

Spec Section	Submittal	Rev	Title	Status	Required Start	Required Finish	Date Received	Date Latest Sent	Date Returned	Date Forwarded	Originator	Originator's Submittal
	002d		Representative Samples from each Aggregate Stockpile (800-Pounds of Aggregates Proportioned by Stockpile, 20-Pounds of Bag House Fines if Proposed in the Mix, & 20-Pounds of Mineral Filler if Proposed in the Mix)									
	002e		Results of Aggregate Quality Tests									
	003a		Target Asphalt Binder Content									
	003b		Five 1-Gallon Samples of the Asphalt Binder to be used in the Mix									
	003c		Recent Test Results from the Manufacturer for the Asphalt Binder including a Temperature-Viscosity Curve									
	003d		Material Safety Data Sheets									
	003e		Mixing Temperature Range & Minimum Compaction Temperature for the Performance Grade Asphalt to be used in the Mix									
	004a		1-Pint of Liquid Antistrip Additive or 10-Pounds of Cement, Fly Ash, or Lime Antistrip Additive									
	004b		Name of the Product									
	004c		Manufacturer's Data Sheets & Placement Procedures									
	004d		Material Safety Data Sheet									
	004e		Dosage Rate									
	005a		Source & Percentage of Recycled Asphalt Pavement Material									
	005b		Average Gradation of the Recycled Asphalt Pavement Material									
	005c		Percent Asphalt Binder in the Recycled Asphalt Pavement									
	005d		Target Value for the Asphalt Binder Content & the Percent New Asphalt Binder									
	005e		200-Pounds Representative Sample of Recycled Asphalt Pavement Material									
	005f		One-Gallon of Recycling Agent									
563			Painting									
563.03	001a		Environment, Public, Adjacent Property, & Workers									
	001b		Manufacturer's Material Safety Data Sheets & Product Data Sheets									
	001c		Detailed Containment Plan for Removed Material, Cleaning Products, & Paint Debris									
	001d		Detailed Disposal Plan for Removed Material, Cleaning Products, & Paint Debris									
	001e		Specific Safety Measures to protect Workers from Site Hazards									
	001f		Emergency Spill Procedures									
	001g		Qualifications of Quality Control Personnel									
601			Minor Concrete Structures									
601.02	001		Concrete Test Results									
601.02	002		Certified Mix Design Test Reports for Admixtures (If any)									
601.03	003		Test Results of 7-Day & 28-Day Compressive Strength of Concrete Samples									
611			Water Systems									
611.03	001		Certified Cost Breakdown of the Individual Items involved in the Lump Sum Item for use in making Progress Payments & Price Adjustments									
612			Sanitary Sewer System									
612.03	001		Certified Cost Breakdown of the Individual Items involved in the Lump Sum Item for use in making Progress Payments & Price Adjustments									
	002		Product Data indicating Pipe Material used & Pipe Accessories									
	003		Sewer Manhole Shop Drawing									
612A			Wastewater Pumping Stations (Pump #3,#4)									
1.7	001a		Guide Rail System									
	001b		Miscellaneous Metal Fabrications									
	001c		Pump Performance Curves									
	001d		Wiring Diagram									
	001e		Pump Outline Drawing									

SUBMITTAL CONTROL LOG

Layon Municipal Sanitary Landfill
Access Road and Sewer System



Status code:	
1	Reviewed, no exceptions taken
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5	Cancelled

Date:
CM Project Manager: Paul Baron
Job Number : 04052.09002
Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>	<i>Status</i>	<i>Required Start</i>	<i>Required Finish</i>	<i>Date Received</i>	<i>Date Latest Sent</i>	<i>Date Returned</i>	<i>Date Forwarded</i>	<i>Originator</i>	<i>Originator's Submittal</i>
	001f		Motor Data									
	001g		Control Drawing & Data									
	001h		Operations & Maintenance Data									
	002		Shop Drawings including Layout for both Leachate Sump Collection Pumps									
	003		Catalog Data for Basin, Cover, Hinged Door, Side Rail Assembly, Discharge Piping, Valves, Junction Box, Level Controls, & Control Panel									
	004		Pump Catalog Data, Performance Curve, Breakaway Fittings Data, & Access Frame Data									
	005		Control Panel & Panel Wiring Schematic									
	006		Factory Pump Inspections & Tests									
	007		Manufacturer's Published Installation Instructions for Basin, Pump, & Panel System Procedures									
	008		Manufacturer's Certificate									
	009		Manufacturer's Field Reports									
1.8	010		Requirements for Submittals									
	011		Actual Locations of Packaged Pumping Stations including Basins & Control Panel									
	012		Executed Certification of Pumping Stations after Performance Testing									
	013		Spare Parts List & Rebuild Kits									
	014		Operations & Maintenance Manual for Pumping Station & Schedule of Recommended Maintenance									
617			Guardrail									
617.05			Drawings from the Manufacturer for the Terminals									
622			Rental Equipment									
622.02	001		Model Number & Serial Number for each piece of Equipment before use									
	002		Records along with Certified Copies of the Payroll									
623			General Labor									
	001		Records along with Certified Copies of the Payroll									
626			Plants, Trees, Shrubs, Vines, & Groundcovers									
626.04	001		Commercial Certifications & Complete Written Information concerning the Source of Supply for all Plant Material									
626.06	002		Planting Locations & Methods of Planting									
632			Power Facilities Relocation									
632.05	001		Request to the Manager, GPA T&D Department & Navy Dispatcher									
633			Permanent Traffic Control									
633.03	001		Sign List									
636			Signal, Lighting, & Electrical Systems									
636.04	001		Certified Cost Breakdown of Items Involved in the Lump Sum for use in making Progress Payments & Price Adjustments									
	002		List of Proposed Equipment & Material including Manufacturer's Name, Size, & Identification Number of each item									
636.07	003		Readings & Test Equipment Data									
636.09	004		As-Built Drawings Showing all Detail Changes from the Original Plans									
701			Hydraulic Cement									
701.01	001		AASHTO M85 Test Results for Portland & Cement									
725			Miscellaneous Material									
725.22	001a		Current Material Certifications for the Hydraulic Cement, Fine Aggregate, Expansive Admixture, & other Grout Additives									
	001b		Independent Laboratory Test Results for 1-Day, 3-Day, and 7-Day Strengths, Flow Cone Times, Shrinkage and Expansion Observed, & Time of Initial Set									
16302			Underground Transmission & Distribution									
2.01	001		Conduits & Fittings									

SUBMITTAL CONTROL LOG

Layon Municipal Sanitary Landfill
Access Road and Sewer System



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Date:
CM Project Manager: Paul Baron
Job Number : 04052.09002
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<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>	<i>Status</i>	<i>Required Start</i>	<i>Required Finish</i>	<i>Date Received</i>	<i>Date Latest Sent</i>	<i>Date Returned</i>	<i>Date Forwarded</i>	<i>Originator</i>	<i>Originator's Submittal</i>
2.02	002		Insulated Wire & Cable, Low Voltage									
2.03	003		Underground Cable 15KV Extruded Insulation with Concentric Neutral									
2.00*	004		Wire & Cable Identification Tags									
2.01*	005		Conductor & Cable Terminating Devices									
2.02*	006		Grounding									
2.03*	007		Oxide Inhibiting Paste									
2.04	008		Connectors, 600 Volt Sealed Insulated Underground									
2.05	009		High Pressure Sodium Luminaires & Mast Arms									
2.06	010		Transformers: Single Phase, Padmounted, Distribution									
2.07	011		Transformers: Three Phase, Padmounted, Deadfront Construction Distribution									
2.08	012		Medium Voltage Cable Joints (Splices)									
C1.1?	013		Primary Electrical Manhole Shop Drawing									
16402			Interior Distribution System									
2.1	001		Materials & Equipment									
2.2.1	002		Rigid Metallic Conduit									
2.2.2	003		Rigid Nonmetallic Conduit									
2.2.3	004		Intermediate Metal Conduit									
2.2.4	005		Electrical Metallic Tubing									
2.2.5	006		Plastic-Coated Rigid Steel & IMC Conduit									
2.2.6	007		Flexible Metal Conduit									
2.2.7	008		Fittings for Metal Conduit, BMT, & Flexible Metal Conduit									
2.2.8	009		Fittings & Rigid Nonmetallic Conduit									
2.2.9	010		Liquid-Tight Flexible Nonmetallic Conduit									
2.3	011		Outlet Boxes & Covers									
2.4	012		Cabinets, Junction Boxes, & Pull Boxes									
2.5	013		Wires & Cables									
2.7	014		Splices & Termination Components									
2.8	015		Device Plates									
2.9	016		Switches									
2.10	017		Receptacles									
2.11	018		Panelboards									
2.12	019		Enclosed Circuit Breakers									
2.13	020		Manual Motor Starters (Motor Rated Switches)									
2.14	021		Telephone System									
2.15	022		Community Antenna Television System									
2.16	023		Grounding & Bonding Equipment									
2.17	024		Nameplates									
2.18	025		Wireways									
16510			Interior Lighting									
2.1	001		Fluorescent Lighting Fixtures									
2.2	002		Incandescent Lighting Fixtures									
2.3	003		Recess- & Flush-Mounted Fixtures									
2.4	004		Suspended Fixtures									
2.5	005		Time Switch									
2.6	006		Photocell Switch									
2.7	007		Exit Signs									
2.8	008		Emergency Lighting Equipment									
2.9	009		Support Hangers for Lighting Fixtures in Suspended Ceilings									
16520			Exterior Lighting									
2.2	001		Luminaires									
2.4	002		Time Switch									
2.5	003		Photocell Switch									

SUBMITTAL CONTROL LOG

Layon Municipal Sanitary Landfill
Access Road and Sewer System



Status code:	
1	Reviewed, no exceptions taken
2	Make corrections noted
3	Revise as noted, resubmit
4	Rejected, resubmit as specified
5	Cancelled

Date:
 CM Project Manager: Paul Baron
 Job Number : 04052.09002
 Project Number: SMWD-09-03

<i>Spec Section</i>	<i>Submittal</i>	<i>Rev</i>	<i>Title</i>	<i>Status</i>	<i>Required Start</i>	<i>Required Finish</i>	<i>Date Received</i>	<i>Date Latest Sent</i>	<i>Date Returned</i>	<i>Date Forwarded</i>	<i>Originator</i>	<i>Originator's Submittal</i>
2.6	004		Poles									
2.7	005		Brackets & Supports									
2.8	006		Pole Foundations									

CHANGE ORDER REQUEST (PROPOSAL)

Project: _____ Change Order Request Number: _____

From (Contractor): _____
To: _____ Date: _____

A/E Project Number: _____
Re: _____ Contract For: _____

This Change Order Request (C.O.R.) contains an itemized quotation for changes in the Contract Sum or Contract Time in response to proposed modifications to the Contract Documents based on Proposal Request No. _____

Description of Proposed Change:

Attached supporting information from: Subcontractor Supplier _____ _____

Reason For Change:

Does Proposed Change involve a change in Contract Sum? No Yes [Increase] [Decrease] _____ \$
Does Proposed Change involve a change in Contract Time? No Yes [Increase] [Decrease] _____ days.

Attached pages: Proposal Worksheet Summary: _____
 Proposal Worksheet Detail(s): _____

Signed by: _____ Date: _____

Copies: Owner Consultants _____ _____ _____ _____ _____
File

**NONCONFORMING
WORK NOTICE**

Project: _____ Report Number: _____

From: _____
To: _____ Date Observed: _____ Date Reported: _____

A/E Project Number: _____
Re: _____ Contract For: _____

Specification Section: Paragraph: Drawing Reference: Detail:

Nature of Nonconformance:

Signed by: _____ Date: _____ Date Response Needed: _____

Proposed Correction (Response):

Amount of Time for Correction:

Attachments

Response From:	To:	Date	Rec'd:
Date Ret'd:			

Signed by: _____ Date: _____

Copies: Owner A/E Consultants _____ _____ _____ File

**CONSTRUCTION QUALITY ASSURANCE
IMPLEMENTATION PLAN
for the
CELLS 1 AND 2 LINER SYSTEM
at the
LAYON LANDFILL**

Prepared for:

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Prepared by:

VECTOR
ENGINEERING, INC.

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(530) 272-2448**

**Project No. 101601.00
March 2010**

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1.0 CONSTRUCTION QUALITY ASSURANCE

1.1 Introduction and Scope

This CQA Implementation Plan (Plan) describes the tasks involved with the construction quality assurance (CQA) for the Layon Landfill. CQA refers to the duties of a third party CQA Consultant to monitor, observe, and evaluate materials and workmanship during construction.

The CQA activities document the compliance of the Contractor with the Drawings and Specifications for the construction. For the purposes of this Plan, the term Contractor refers to the company or individual that is responsible for performing the specific work item being examined to complete the excavation and liner construction at the site. This includes but is not limited to the earthwork contractor(s), geosynthetic installer(s), or their subcontractor(s).

The overall goal of this Plan is to assure that proper construction techniques and procedures are used and that the project is built in accordance with the project Construction Drawings and Specifications. The intent is to identify and define problems that may occur during construction and to observe that these problems are corrected before construction is complete. A written final report prepared by the CQA Consultant will be prepared summarizing the construction activities and observing that the installation was performed in general accordance with the Project Construction Drawings and Specifications. Where discrepancies between this document and the Specifications exist, the Specifications shall govern the Contractor.

1.2 Duties of CQA Personnel

It is the duty and responsibility of the CQA Consultant to implement the elements of this Plan in order to ensure that the construction and installation of the composite liner system at the Project Site is performed in accordance with the Construction Drawings and Specifications and the appropriate Regulations specified to govern this work. CQA duties for this project will be in accordance with Title 27 of the California Code of

Regulations. The CQA personnel shall make every effort to communicate in an efficient and effective manner to the Contractor's representatives on issues concerning testing and observation procedures and results of materials or *in situ* tests performed. The CQA personnel shall attend all preconstruction meetings for the work covered by this plan.

The CQA Consultant is not in a position to direct construction activities, but is encouraged to give advice to the Contractor, Winzler & Kelly (Project CM), or Gershman, Brickner & Bratton, Inc. (GBB), (Receiver) on items which may improve the quality or speed progress of the construction. The CQA Consultant and its representatives shall make every effort to furnish test results to the Contractor in a prompt manner. The representatives of the CQA Consultant shall report to the Project CM and Owner any nonconformance items, which cannot be resolved promptly.

The specific definition and duties of the organizations and personnel associated with the CQA activities are described in the following sections.

1.2.1 Soil Quality Assurance Consultant

The Soil Quality Assurance Consultant (Soil QAC) is the firm which observes and documents activities related to the quality assurance of the installation of the soil components of the lining system on behalf of the Owner. The Soil QAC and Geosynthetic QAC may be the same party.

The Soil QAC is responsible for observing and documenting activities related to the quality assurance of the construction of the soil components of the lining systems. The Soil QAC is responsible for the implementation of the project QAP prepared by the Project Manager. The Soil QAC is also responsible for issuing a final Quality Assurance Report, sealed by a qualified Professional Engineer. Other duties of the Soil QAC shall include overseeing the soil laboratory testing.

1.2.2 Soil Quality Assurance Engineer (QAE)

The term Soil Quality Assurance Engineer (Soil QAE) refers to the engineer employed by the QAC who is personally in charge of the quality assurance work. Duties of the Soil QAE included the following.

1. Reviews all project plans and specifications.
2. Reviews other site-specific documentation.
3. Develops site-specific addenda for quality assurance of soil components with the assistance of the Project Manager as necessary.
4. Administers the soil portions of the QAP, including assigning and managing all soil quality assurance personnel, reviews all field reports, and provides engineering review of all quality assurance related issues.
5. Familiarizes himself with all applicable changes to project plans and specifications as issued by the Designer.
6. Acts as on-site (resident) representative of the Soil QAC.
7. Familiarizes all Soil QA Monitors with the site and the project QAP.
8. Assigns Soil QA Monitors to observe and document all activities requiring monitoring.
9. Attends all quality assurance related meetings, including resolution, pre-construction, daily, weekly meetings.
10. Reviews the calibration certification of the on-site soil testing equipment.
11. Manages the preparation of the record drawings.
12. Reviews the Soil QA Monitors' daily reports, logs, and photographs.
13. Notes any on-site activities that could result in damage to the installed soil components.
14. Reports to the Project Manager, and logs in the daily report, any relevant observations reported by the Soil QA Monitors.
15. Prepares his own daily report.
16. Prepares a daily summary of the soil component quantities estimates installed each day of construction activity.

17. Prepares a weekly summary of soil quality assurance activities at the end of each week of the construction activity.
18. Oversees marking, packaging and shipping of all laboratory test samples.
19. Reviews the results of laboratory testing and makes appropriate recommendations.
20. Recommends the approval of the final soils acceptance to the Project Manager.
21. Designates a Soil QA Monitor to represent the QAE whenever he is absent from the site while operations are ongoing.
22. Reports any unapproved deviations from the QAP to the Project Manager.
23. Maintains field files of all logs and reports.
24. Maintains qualifications of all personnel and calibration of equipment.
25. Prepares the final Quality Assurance Report.

1.2.3 The Soil CQA Monitor:

The personnel of the Soil QAC also include Soil Construction Quality Assurance Monitors (Soil CQA Monitors) who are located at the site for construction observation and documentation. Duties of the Soil CQA Monitors included the following.

1. Monitors, logs, photographs and/or documents all soil component installation operations. Photographs shall be taken routinely and in critical areas of the installation sequence. These duties shall be assigned by the Soil QAE.
2. Monitors and documents the following operations for all soil components:
 - Material delivery
 - Unloading and on-site transport and storage
 - Sampling and conformance testing
 - Deployment operations
 - Condition of the soil components as placed
 - Visual observation, by walkover, of the finished soil components
 - Sampling and field testing of the finished soil components
 - Repair operations, if and when necessary

3. Conducts soil sampling and testing.
4. Documents any on-site activities that could result in damage to the constructed soil components. Any problems notes shall be reported as soon as possible to the Soil QAE.

1.2.4 Geosynthetic Quality Assurance Consultant

The Geosynthetic Quality Assurance Consultant (Geosynthetic QAC) is the firm which observes and documents activities related to the quality assurance of the production and installation of the geosynthetic components of the lining systems on behalf of the Owner. The Geosynthetic QAC and Soil QAC may be the same party.

The Geosynthetic QAC is responsible for observing and documenting activities related to the quality assurance of the production and installation of the geosynthetic components of the lining systems. The Geosynthetic QAC is responsible for reviewing work products of the Geosynthetic Quality Assurance Laboratory. The Geosynthetic QAC is also responsible for issuing a final Quality Assurance Report, sealed by a Professional Engineer.

1.2.5 The Geosynthetic QAE

The term Geosynthetic Quality Assurance Engineer (Geosynthetic QAE) shall be used to designate the engineer working for the Geosynthetic QAC in charge of the quality assurance work. Duties of the Geosynthetic QAE included the following.

1. Familiarizes himself with all project plans and specifications.
2. Reviews other site-specific documentation, including proposed layouts, and manufacturer's and installer's literature.
3. Develops site-specific addenda for quality assurance of geosynthetics with the assistance of the Project Manager, as necessary.
4. Administers the geosynthetic portions of the QAP, including assigning and managing all geosynthetic quality assurance personnel, reviewing all field reports, and providing engineering review of all quality assurance related issues.

5. Reviews for familiarity all appropriate changes to design drawings and project specifications as issued by the Designer.
6. Acts as the on-site (resident) representative of the Geosynthetic QAC.
7. Familiarizes all Geosynthetic Quality Assurance Monitors with the site and the project QAP.
8. Assigns Geosynthetic Quality Assurance personnel to observe and document geosynthetic installation activities requiring certification.
9. Attends all quality assurance related meetings, including resolution, pre-construction, daily, weekly.
10. Reviews all manufacturer and Installer certifications and documentation and makes appropriate recommendations.
11. Reviews the Installer's personnel qualifications for conformance with those qualifications pre-approved for work on site.
12. Manages the preparation of the record drawings.
13. Reviews the calibration certification of the on-site testing equipment, as required.
14. Reviews all Geosynthetic Quality Assurance Monitor's daily reports, logs and photographs.
15. Notes any on-site activities that could result in damage to the geosynthetics.
16. Reports to the Project Manager, and logs in the daily report, any relevant observations reported by the Geosynthetic Quality Assurance Monitors.
17. Prepares his own daily report.
18. Prepares a daily summary of the quantities estimates of geosynthetics installed that day.
19. Prepares the weekly summary of geosynthetic quality assurance activities.
20. Oversees the marking, packaging and shipping of all laboratory test samples.
21. Reviews the results of laboratory testing and makes appropriate

recommendations.

22. Recommends the approval of the final liner acceptance to the Project Manager.
23. Designates a Geosynthetic Quality Assurance Monitor to represent the QAE whenever he is absent from the site while operations are ongoing.
24. Reports any unapproved deviations from the QAP immediately to the Project Manager.
25. Prepares the final Quality Assurance Report.

1.2.6 Geosynthetic Construction Quality Assurance Monitor

Duties of the Geosynthetic Construction Quality Assurance (CQA Monitor) include the following.

1. Monitors, logs, photographs and/or documents all geosynthetic installation operations. Photographs shall be taken routinely and in critical areas of the installation. These duties shall be assigned by the Geosynthetic QAE.
2. Monitors the following operations for all geosynthetics:
 - Material delivery, as required
 - Unloading and on-site transport and storage
 - Sampling for conformance testing
 - Deployment operations
 - Joining and/or seaming operations
 - Condition of panels as placed
 - Visual inspection by walkover
 - Repair operations
3. Monitors and documents the geomembrane seaming operations, including:
 - Trial seams
 - Seam preparation
 - Seaming
 - Nondestructive seam testing
 - Destructive seam testing

- Field tensiometer testing
- Laboratory sample marking
- Repair operations
- Measurements of uninstalled quantities
- Documents and on-site activities that could result in damage to the geosynthetics. Any problems noted shall be reported as soon as possible to the Geosynthetic QAE.

1.2.7 Soil Quality Assurance Laboratory

The Soil Quality Assurance Laboratory (Soil QAL) is the firm which conducts tests on soil samples taken from the site. The Soil QAL and Geosynthetic QAL may be the same party. The Soil QAL is responsible for conducting the appropriate laboratory tests as directed by the Soil QAE. The test procedures shall be done in accordance with the test methods outlined in these specifications.

1.2.8 Geosynthetic Quality Assurance Laboratory

The Geosynthetic Quality Assurance laboratory (Geosynthetic QAL) is the firm which conducts tests on samples of geosynthetics taken from the site. The Geosynthetic QAL and the Soil QAL may be the same party.

The Geosynthetic QAL is responsible for conducting the appropriate laboratory tests as directed by the Geosynthetic QAE. The test procedures shall be done in accordance with the test methods outlined in these specifications.

2.0 EARTHWORK

2.1 General

This section outlines the requirements for earthwork operations for the construction of Cells 1 and 2 at the Layon Liner Landfill. Earthwork includes, but is not limited to:

4. Preparation of Subgrade;
5. Placement of soil material over subdrain geocomposite;
6. Placement of low permeability soil layer;
7. Excavation and backfill of the synthetic liner anchor trenches;
8. Placement of the LCRS gravel, pipe, and geotextile materials;
9. LCRS sump construction;
10. Installation of landfill gas collection system;
11. Protective cover layer material placement; and
12. Installation of surface water drainage structures.

Specifically excluded from this section are the geomembrane, geocomposite drainage layer and geotextile installation which are addressed within Sections 3, 4, and 5 of this CQA Implementation Plan.

2.2 Soil over Subdrain Geocomposite

The soil layer over the subdrain geocomposite will consist of 12-inches of general fill placed; moisture conditioned and compacted to 95% of the maximum dry density as determined by standard Proctor (D698).

The CQA activities on the soil placed over the subdrain geocomposite will consist of but will not be limited to, the following:

1. Proctor laboratory testing of soil material per Table 1;
2. Field moisture and density testing using nuclear gauge per Table 1;
3. Monitoring of moisture conditioning, mixing, blending, and processing for uniformity of material and moisture content; and

4. General observation of placement procedure to ensure that:
 - Folding does not occur in the geocomposite, and
 - Geocomposite and underlying materials are not damaged, minimal slippage occurs between the geocomposite and underlying materials, excessive stresses are not produced in the geocomposite.

**TABLE 1
COMPACTED SOIL OVER GEOCOMPOSITE**

MATERIAL	QUANTITY	TEST DESIGNATION	SPECIFIED FREQUENCY	NO. REQ'D	SPEC
Compacted Soil Over Geocomposite	40,000 cy	Standard Proctor (D698)	1/5,000 cy	8	N/A
		Moisture/Density –Nuclear Method (D2922/D3017)	1/1,000 cy	40	95% max dry density- +3% of opt. moist of D698.
		Moisture Content -Oven (D2216)	1/1,000 cy	40	+3% of opt. moist.

2.3 Low Permeability Soil

2.3.1 General

The low permeability layer will consist of 24-inches of soil material placed, moisture conditioned and compacted to 95% of maximum dry density at +3% of optimum as determined by standard Proctor (ASTM D698).

The CQA Consultant's shall observe the activities associated with construction of the low permeability soil layer. These activities have been divided into preconstruction, construction, and post-construction activities. Testing shall be performed as detailed in the Specifications.

2.3.2 Preconstruction

Preconstruction activities must be performed to provide an understanding of the work activities, design and construction requirements, material properties, and construction

methods that will meet the design requirements prior to full production of the low permeability soil layer. Low permeability soil materials will be tested and evaluated for performance properties and construction procedures will be established with the goal of meeting or exceeding the design requirements.

Preconstruction activities include:

1. Review all design criteria, Construction Drawings, and Specifications associated with construction of the low permeability soil layer.
2. Inspect the soil stockpile for uniformity and the presence of non-suitable materials.
3. Review evaluation testing performed by the Contractor.
4. Review and approve the Contractor's proposed construction methods and equipment to be used for placement of the low permeability soil test fill.
5. Review all test and construction results and determine the acceptability of the construction procedures in meeting the performance goals of the Specifications. If necessary, an additional test fill will be constructed and tested using modified construction procedures.

2.3.3 Construction

The CQA Monitor shall follow the guidelines set forth within the Specifications for the low permeability soil layer.

The construction inspection activities of the CQA Monitors to be performed during low permeability layer placement to help meet the design objectives are as follows:

1. Laboratory testing of low permeability layer material including soil classifications, particle size analyses, Atterberg limits, flex-wall permeability tests and Proctor tests per Table 2.
2. Field moisture and density testing using a nuclear gauge per Table 2.
3. Field hydraulic conductivity tests per Table 2.
4. Monitoring of moisture conditioning, mixing, blending, and processing for uniformity of material and moisture content.
5. General observation of placement procedures including scarification depth, lift thickness placement, compaction equipment usage, and

- number of passes with equipment.
6. Detection and removal of oversized material or deleterious material.
 7. Visually inspect the low permeability material characteristics such as gradation, clod size, excessive organic material, and other characteristics that do not meet the Specifications.
 8. Measure compacted lift thickness. This thickness must not exceed the thickness required in the Specifications.
 9. Record any damage to the compacted low permeability soil layer resulting from the operation of equipment.
 10. Observe that all cracks, depressions, and irregularities in the low permeability soil layer are filled in and compacted to the specified moisture content and relative compaction.
 11. Identify any changes in material used in constructing the low permeability soil layer.
 12. Observe all phases of the construction and document the Contractor's compliance or noncompliance with the Construction Drawings and Specifications.

**TABLE 2
LOW PERMEABILITY MATERIAL TESTING REQUIREMENTS**

MATERIAL	QUANTITY	TEST DESIGNATION	SPECIFIED FREQUENCY	NO. REQ'D	SPEC
Low Permeability Layer	80,000 cy	Standard Proctor (D698)	1/5,000 cy	16	N/A
		Atterberg Limits (D4318)	1/5,000 cy	16	SC, CL or CH
		Particle Size Analysis (D422)	1/5,000 cy	16	<u>% Passing</u> <u>Sieve No</u> 100 ½" 30 No. 200
		Moisture/Density - Nuclear Method (D2922/D3017)	1/1,000 cy	80	95% max dry density- +3% of opt. moist.
		Moisture Content - Oven (D2216)	1/1,000 cy	80	+3% of opt. moist.
		Flex-Wall Permeability Test (D5084)	1/5,000 cy	16	< 1.0 x 10 ⁻⁶ cm/sec
		BAT Permeability/ Boutwell Method Falling Head Permeability	1/15,000 cy	6	< 1.0 x 10 ⁻⁶ cm/sec
		Moisture/Density - Sand Cone Method (D1556)	1/15,000 cy	6	95% max dry density- +3% of opt. moist.

2.3.4 Post-Construction

Upon completion of the low permeability soil layer, a post-construction inspection shall be conducted by the CQA Officer and Monitor. The purpose of this inspection will be to identify those areas that require corrective action by the Contractor. This will occur prior to placement of the geomembrane over the low permeability soil layer. All areas that pass the inspection will immediately be approved for covering with the geomembrane to minimize exposure of the low permeability soil layer.

The CQA Monitor will inspect the low permeability soil layer for the following:

1. Low spots or depressions that would cause water to pond on the low permeability soil layer or geomembrane;
2. Areas that are damaged or improperly mixed or compacted.;
3. Areas that have been excessively eroded by rainfall during the construction period or as a result of construction activities;
4. Large irregularities or protrusions resulting from rocks, sticks, grade stakes, cracks, and excess material placement that would damage the geomembrane or make placing of geosynthetics difficult;
5. Desiccation of the low permeability soil layer; and
6. Unrepaired damage from density tests, field permeability tests, or laboratory permeability tests.

2.4 Anchor Trench Excavation and Backfilling

The CQA Consultant's CQA Monitor shall observe that the anchor trenches are excavated to the approximate lines and grades shown on the Construction Drawings. The CQA Consultant's CQA Monitor shall observe the trench excavation to ensure it has been excavated only the distance required to carry out the synthetic liner installation in an expeditious manner. The CQA Consultant's CQA Monitor shall observe that the following anchor trench conditions are met.

1. The leading edge of the anchor trench is rounded to minimize sharp bends in the liner material;
2. The anchor trench is adequately drained to prevent ponding or otherwise softening of the adjacent soils while the trench is open;
3. No loose soil is underlying the geomembrane in the anchor trenches; and
4. The geomembrane is seamed completely to the end of the panels to minimize the potential of tear propagation along the seam.

In addition, the CQA Consultant's CQA Monitor shall observe the placement and compaction techniques employed by the Contractor to ensure that damage to the liner is prevented or kept to a minimum. Any damage to the synthetic materials shall be immediately repaired in accordance with the Specifications.

2.5 Subdrain and Leachate Collection and Removal System (LCRS)

2.5.1 General

This section sets forth the requirements for the CQA testing and observation requirements for installing the subdrain and LCRS components (with the exception of the geocomposite and geotextile materials) detailed on the Construction Drawings and Specifications. This work includes the materials for the leachate collection laterals, the sump, and subdrain. The Contractor shall furnish submittals in compliance with the Specifications and conditions of warranty prior to construction for review by the CQA Officer and CQA Monitor. The Contractor shall also prepare and submit a time schedule for installation, including complete testing and acceptance of materials prior to construction.

2.5.2 Granular Drainage Material

Granular drainage material is utilized in the trenches and sump as part of the subdrain and LCRS systems (both primary and secondary). The Contractor shall provide a copy of the certificate of compliance and the QC testing data to the CQA Consultants.

The CQA activities on the granular drainage material will consist of, but will not be limited, to the following:

1. Observing that the Contractor places the material during cooler parts of the day (or night, if necessary) in the event of warm weather in order to avoid placement of materials when the liner is wrinkled;
2. Observing that only low ground pressure wide-tracked bulldozers are used for placement, spreading, and final grading operations and that no damage occurs to the geosynthetics; and
3. Review laboratory testing including particle size analyses and hydraulic conductivity testing of aggregate material performed by Contractor.

2.5.3 Subdrain and Leachate Collection Piping

2.5.3.1 Pre-Construction

The CQA Consultant's CQA Monitor will inspect the HDPE pipe and pipe fittings upon delivery for compliance with the requirements of the specifications. The CQA Consultant's CQA Monitor will check the quantity of piping and pipe fittings delivered to assure that the required amount is onsite to complete construction of the pipeline.

The CQA Consultant's CQA Monitor and Contractor will select a storage location in which the HDPE pipe and pipe fittings are protected from excessive heat and cold, construction traffic, hazardous chemicals, solvents, and theft. If the HDPE pipe and pipe fittings are stored at a location with other construction materials, the CQA Consultant's CQA Monitor will assure that stacking or insertion of the other construction materials onto or into the HDPE pipe and pipe fittings is prohibited. The installer will arrange the storage area to provide access for easy inspection. The CQA Consultant's CQA Monitor must periodically inspect to assure HDPE pipe and pipe fittings are undamaged and have been protected as stated above. Neither the CQA Monitor, Installer, nor others will remove HDPE pipe and pipe fittings from shipping package until construction of the force main is initiated.

2.5.3.2 Construction

Upon transporting HDPE pipe and pipe fittings from the storage location to the construction site, all contractors handling the pipe are to wear gloves and use pliable straps, slings, or rope to lift the pipe. Do not use steel cables or chains to transport pipe. The CQA Consultant's CQA Monitor will assure that any pipe greater than 20 feet in length will be lifted with two support points spaced 15 feet apart. The installer will not drop, impact, or bump the pipe, especially at the pipe ends. Pipe and fitting ends must be cleaned of all dirt, debris, oil, or other contaminant that may prohibit making a sound joint.

Out-of-round pipe cannot be properly joined and will be placed in an unstressed position and given time to normally round out.

The installer will construct the HDPE pipeline in a properly graded and sloped trench as is specified. All underground segments of the HDPE pipeline will be installed per the installation guidelines specified by the manufacturer. The installer will join the HDPE pipe into continuous lengths using the butt fusion method. The butt fusion welding will be performed in strict accordance with the manufacturer's recommendations. The CQA Consultant's CQA Monitor will inspect the butt fusion equipment during construction. Inspection will ensure that the joining procedures can meet all the conditions recommended by the pipe manufacturer, including but not limited to, temperature requirements, and alignment and fusion pressures. Before laying the pipe into a trench or on supports, the CQA Consultant's CQA Monitor will conduct a visual inspection of each fusion weld to ensure a proper double roll-back-bead has formed.

2.6 Protective Soils (Operations) Layer

The protective soil layer consists of a 36- inch layer of general fill material placed over the primary geocomposite.

The CQA Consultant's CQA Monitor and CQA Officer shall review the Contractor's list of proposed equipment and Contractor's description of the construction methods to place the protective operations layer over the geosynthetic materials in accordance with the Specifications.

The CQA Consultant's CQA Monitor shall be present during placement and spreading of the protective operations layer material. The CQA Consultant's CQA Monitor will observe placement so that no materials are placed over wrinkles in the underlying geosynthetics and to ensure that the liner and leachate collection system is not damaged. In addition, the CQA Consultant's CQA Monitor will observe that the spreading of the material will be in the direction of the overlap.

The CQA activities on the operations layer will consist of by will not be limited to the following:

1. Perform particle size analyses testing of soil material per Table 3;
2. Observe that the Contractor places the material during cooler parts of the day (or night, if necessary) in the event of warm weather in order to avoid placement of materials when the liner is wrinkled;
3. Observe that the Contractor constructs thick haul roads, turnouts, staging, and dump areas for all rubber tired transport vehicles and loaders;
4. Observe that only low ground pressure wide-tracked bulldozers are used for placement, spreading, and final grading operations; and
5. Observe that the Contractor does not make tight radius turns with track-mounted or rubber-tired equipment.

All observed damage shall be recorded by the CQA Consultant's CQA Monitor, promptly reported to the Contractor, and the location clearly marked for scheduled repair. The Contractor shall promptly repair the underlying geosynthetics in accordance with the Specifications.

**TABLE 3
PROTECTIVE SOIL TESTING REQUIREMENTS**

MATERIAL	QUANTITY	TEST DESIGNATION	SPECIFIED FREQUENCY	NO. REQ'D	SPEC
Protective Soil Cover	97,000 cy	Particle Analysis	1 / 20,000 cy	5	<p style="text-align: center;">Sideslope</p> <p style="text-align: center;"><u>% Passing</u> <u>Sieve No</u> 100 1"</p> <p style="text-align: center;">Cell Floor</p> <p style="text-align: center;"><u>% Passing</u> <u>Sieve No</u> 100 2"</p>

2.7 Surface Water Drainage Structures

The CQA Consultant's CQA Monitor shall observe the installation of the surface water drainage structures for the proposed work in accordance with the Specifications and Construction Drawings. Surface water drainage structures may include, but would not be limited to, drainage channels, ponds, culverts, and diversion berms. The CQA Consultant's CQA Monitor shall review the test data for materials to be supplied by the

Contractor in accordance with the Specifications.

2.8 Landfill Gas Collection System

A landfill gas collection system consisting of slotted HDPE pipe placed within a granular trench encapsulated with geotextile will be installed in the protective soil layer as shown on the construction drawings. The CQA Consultant's CQA Monitor shall observe that the installation of the landfill gas collection system is in accordance with the Specifications and Construction Drawings. CQA activities for the geotextile component and granular drainage material will be similar to the activities described in Sections 5.5 and 3.5.2, respectively.

3.0 GEOMEMBRANE QUALITY ASSURANCE

3.1 General

This section sets forth the requirements for the CQA testing and observation requirements for installing the geomembrane materials detailed on the Construction Drawings and Specifications. This work includes the examination of the Manufacturer's and Contractor's QC testing, conformance testing, shipping and handling, deployment, seaming, repairs, and non-destructive and destructive testing of the geomembrane liner. The CQA Consultant's CQA Monitor and the CQA Officer shall review the submittals furnished by the Contractor to ensure their compliance with the Specifications and conditions of warranty prior to construction. They shall also review the time schedule for installation submitted by the Contractor prior to construction.

3.2 Shipping and Handling

The Contractor shall provide a copy of the QC certificates for production of each geomembrane roll manufactured for this Project prior to construction for review by the CQA Consultant's CQA Monitor and CQA Officer. Materials shall be delivered to the site only after the CQA Consultant's CQA Monitor receives and approves the required submittals.

The Contractor is responsible for the transportation, off-loading, and storage of the geomembrane. The materials shall be packaged and shipped by appropriate means so that no damage is caused and shall be delivered to the site only after the CQA Consultant's CQA Monitor receives and approves the required submittals. Off-loading shall be performed in the presence of the CQA Consultant's CQA Monitor to ensure that damage, if any, during off-loading is properly documented. The CQA Consultant's CQA Monitor shall keep a log of all geomembrane delivered to the Project Site on the appropriate form for review by the CQA Officer.

The CQA Consultant's CQA Monitor shall observe that damaged materials are separated from undamaged materials until proper disposition of the material is determined by the Owner or CQA Officer. Final authority on the determination of damage shall be the CQA Monitor.

3.3 Geomembrane Conformance Testing

After production, the geomembrane shall be sampled for conformance. Sampling shall be performed at the manufacturing plant prior to shipment. One geomembrane sample shall be obtained for every 100,000 square feet produced. The CQA Officer shall review all test results and report any non-conformance test results to the Contractor and the CQA Consultant's CQA Monitor.

The conformance testing shall include the following parameters:

1. Thickness (ASTM D-5994);
2. Sheet Density (ASTM D-1505);
3. Tensile Properties (ASTM D-6693);
4. Carbon Black (ASTM D-1603); and
5. Carbon Dispersion (ASTM D-5596).

3.4 HDPE Geomembrane Placement

Prior to placing the secondary geomembrane panels, the Contractor and CQA Consultant's CQA Monitor shall observe that the low permeability layer has been properly placed and accepted. Once the low permeability liner has been approved by the CQA Monitor, deployment of the secondary geomembrane may begin. For the primary geomembrane, the Contractor and CQA Consultant's CQA Monitor shall observe that the underlying geosynthetics have been properly placed and accepted. Once each layer of material has been approved by the CQA Monitor, deployment of the primary geomembrane may begin.

The CQA Consultant's CQA Monitor shall observe that the Contractor's QC Technician has given each panel an identification number that shall be used by all parties. The CQA Consultant's CQA Monitor shall record the placement of each panel on a geomembrane panel deployment log form to be reviewed by the CQA Officer. As the geomembrane panels are deployed in the field, the CQA Consultant's CQA Monitor shall observe the following:

1. That the low permeability layer has not deteriorated between acceptance and placement of the secondary geomembrane liner;
2. That any underlying geosynthetics have been repaired and approved as necessary;
3. That the equipment used to transport and deploy the geomembrane does not damage it or the low permeability soils;
4. That there are no significant defects present in the sheet. Small defects shall be marked, along with the type of repair required (extrudate, patch, etc.);
5. That the sheet is not deployed under adverse weather conditions such as fog, rain, or high winds;
6. That the equipment and deployment methods do not cause excessive wrinkling of the geomembrane and that the sheet is not dragged along a rough surface. If the liner is dragged, the CQA Consultant's CQA Monitor shall inspect the underside of the material for damage;
7. That personnel do not engage in activities that could damage the geomembrane; and
8. That the Contractor's QC personnel properly record identification information including roll number, panel number, seam number, date, etc.

The CQA Consultant's CQA Monitor shall record all of the above information in daily reports and log sheets and shall inform all parties of any deviations.

3.5 HDPE Geomembrane Test Welds

The CQA Consultant's CQA Monitor shall observe that the Contractor conducts test welds on pieces of scrap liner to observe seam strength prior to field production at the following frequency:

1. At the start of the seaming period;
2. Once every five (5) hours of seaming;
3. Once for every seaming device used; and
4. If the welding machine has been out of service for more than 30 minutes.

The CQA Consultant's CQA Monitor shall record the peel test results for the test weld coupons on a geomembrane start-up trial weld log form. The Contractor shall not begin welding of field seams unless the CQA Consultant's CQA Monitor has observed that the trial welds are acceptable. The CQA Consultant's CQA Monitor shall observe that once a welding technician has been approved on a specific welding apparatus, he does not change machines without first passing a test weld on the new equipment.

3.6 Seaming of the HDPE Geomembrane

The CQA Consultant's CQA Monitor shall observe that the HDPE liner is seamed between the ambient temperatures described within the Specifications. The CQA Consultant's CQA Monitor shall measure and record the temperature 6 inches above the liner surface on an hourly basis. If ambient temperatures are below the project-specified value, then the liner must be preheated prior to seaming. No seaming shall be performed outside of the specified temperature range without written authorization. The CQA Consultant's CQA Monitor shall observe that the geomembrane is not being deployed during precipitation, in the presence of excessive moisture, in areas of ponded water, or in the presence of excessive winds.

The Contractor's QC Technician and the CQA Consultant's CQA Monitor shall observe that the geomembrane seams are oriented parallel to the maximum slope direction and that a seam numbering system compatible with the panel numbering system is used. The CQA Consultant's CQA Monitor shall observe that the Contractor has taken the following steps prior to seaming the HDPE liner:

1. That the liner surface has been cleaned of all foreign material including dirt, dust, debris, moisture, or oil;

2. That a disc grinder has been used perpendicular to seams to remove the oxidation surface in accordance with the project specifications before seaming on extrusion welds.
3. That areas where the sheet thickness has been significantly reduced from grinding are patched by the Contractor;
4. That any bead grooves are covered with single extrudate;
5. That wrinkles and fishmouths are cut out and the edges overlapped. Where the overlap is less than the project specifications, the area shall be patched;
6. That all seaming takes place over a firm, dry surface;
7. That when the ambient temperature is below the specified value, a hot air device is used for preheating in front of the welder;
8. That the approved type and quantity of welding devices are used on the job;
9. That extrusion welders are purged of heat degraded material prior to use;
10. That for cross or tee seams, the edge of the seam is ground to a smooth incline; and
11. That the seam numbering system and welding procedures agreed upon at the preconstruction meeting are strictly followed.

The CQA Consultant's CQA Monitor shall record the above information in his daily reports along with panel placement and seaming log forms to be reviewed by the CQA Officer and promptly notify all parties of any deviations from requirements.

3.7 Extrusion Welding

For extrusion welding, the CQA Consultant's CQA Monitor shall observe that the welding devices are being purged of heat-degraded extrudate, as necessary, before welding following all work stoppages longer than specified. The CQA Consultant's CQA Monitor shall observe that all purged extrudate is disposed of off the liner. The CQA Consultant's CQA Monitor shall observe that no equipment is allowed to begin welding until the test weld, made by that equipment, passes the weld test. All test weld results shall be reviewed and recorded by the CQA Monitor.

3.8 Hot Wedge (Fusion) Welding

For hot wedge (fusion) welding, the CQA Consultant's CQA Monitor shall observe that the welding devices are automated, vehicular mounted, and equipped with gauges giving applicable speed and temperatures. The CQA Consultant's CQA Monitor shall observe that the speed, temperature, and pressure of the welding device is adjusted appropriately during the test welding conducted prior to seaming of the panels. In the event that field conditions require adjustment to the device, the CQA Consultant's CQA Monitor shall observe that additional test welds are performed prior to resuming activities.

3.9 Nondestructive Testing of Geomembrane Seams

3.9.1 General

Prior to the start of construction, the CQA Consultant's CQA Monitor and the CQA Officer shall observe that the Contractor has submitted his QC program manual that describes the procedure for nondestructive testing of all field seams. When the seaming begins in the field, the CQA Consultant's CQA Monitor shall record the results of the geomembrane QC conducted by the Contractor on a geomembrane installer's field QC log form.

3.9.2 Vacuum Box Testing

For nondestructive seam testing, all extrusion welded field seams shall be tested over their full length using vacuum box test units. The vacuum testing shall be performed by the Contractor's QC Technician under the observation of the CQA Monitor. The CQA Consultant's CQA Monitor shall observe that the tests are conducted concurrently with the field seaming and that the vacuum box assembly consists of a rigid box with a transparent viewing window and a vacuum gage. The CQA Consultant's CQA Monitor shall observe that the Contractor's procedure for vacuum testing is as follows:

1. Clean window, gasket surfaces, and check box for leaks;
2. Energize vacuum pump and reduce pressure to the specified value;

3. Place soapy solution on section of seam to be tested;
4. Place box over wetted area and press down;
5. Close bleed valve, open vacuum valve, and ensure that a leak tight seal is created;
6. Examine the length of weld through the viewing window for bubbles for the specified time period;
7. If no bubbles appear, the vacuum valve should be closed, the bleed valve opened, and the box should be moved to the next adjoining area with the specified overlap; and
8. Areas where soap bubbles are detected shall be marked, repaired, and retested.

3.9.3 Air Pressure Testing

If the double hot wedge seaming system is employed, air pressure testing shall be used. The CQA Consultant's CQA Monitor shall observe that air pressure testing is conducted by the Contractor as follows:

1. Seal both ends of the seam to be tested;
2. Insert a hollow needle or other approved pressure feed device into the tunnel created by the double hot wedge and insert a protective cushion between the air pump and geomembrane;
3. Energize the air pump to the specified pressure, close the valve, and sustain the pressure for the specified time limit;
4. Check the entire seam being tested for indications that it has been fully pressurized. This shall be accomplished by opening the air channel at the opposite end of the seam and observing a loss of pressure;
5. If a loss of pressure exceeds the specified value, or does not stabilize, locate the faulty area and repair; and
6. Remove the approved pressure feed device and seal.

Should a loss of pressure be detected along a seam, the faulty area shall be identified, repaired, and re-tested as provided within the Specifications. If blockage occurs along the seam, the area shall also be identified, repaired and re-tested. The Contractor shall be responsible for all costs associated with the seam repair. The results of both vacuum

box and air pressure testing shall be recorded on the seam and panel QC form by the CQA Consultant's CQA Monitor for review by the CQA Officer.

3.10 Destructive Testing of Geomembrane Seams

The location of all destructive tests shall be determined by the CQA Monitor. A minimum of one sample per 500 feet of seam shall be obtained by the Contractor's QC Technician. The Contractor shall repair any suspicious looking welds before release of a seam for destructive sampling. Destructive samples shall be cut by the Contractor as the installation progresses and not at the completion of the project. Destructive samples shall be marked by the CQA Consultant's CQA Monitor with consecutive numbers, the seam number, the date, time, seaming technician, apparatus, and temperature.

Destructive samples shall be cut by the Contractor's QC Technician at locations selected by the CQA Monitor. The CQA Consultant's CQA Monitor shall:

1. Mark each sample with the seam number, and the adjoining panel numbers;
2. Record the sample location on the geomembrane panel deployment log form and the geomembrane field seaming log form;
3. Record the sample location and reason for taking the sample (random sample, poor welding, etc.); and
4. Record the results of the testing on the appropriate form.

A log of the destructive testing shall be kept by the CQA Consultant's CQA Monitor with the date, time, location, seaming technician, apparatus, temperature, and pass or fail criteria. The CQA Consultant's CQA Monitor shall determine that the results of the seam testing meet the project specifications. The CQA Consultant's CQA Monitor shall observe that destructive sample holes are repaired immediately by the Contractor.

3.11 Repairs to the Geomembrane

For final seaming inspection, the CQA Consultant's CQA Monitor and Contractor shall check the seams and surface of the geomembrane for defects, holes, blisters, undispersed raw materials, or signs of contamination by foreign matter. If dirt inhibits inspections, the Contractor shall brush, blow, or wash the geomembrane surface as required. The CQA Consultant's CQA Monitor shall decide if cleaning the geomembrane surface and welds is needed to facilitate inspection. Repair areas shall be distinctively marked with a description of the required type of repair.

The CQA Consultant's CQA Monitor shall observe that identified holes, tears, blisters, undispersed raw materials, and contamination by foreign matter is patched. The CQA Consultant's CQA Monitor shall observe that patches are not cut with the repair sheet in contact with the geomembrane and that the patches are extrusion welded to the geomembrane and then vacuum tested. The result of the vacuum test for the repair shall be marked by the Contractor's QC Technician with the date of the test and name of the tester on the sheet. Holes shall be repaired as described in the Specifications. Repair areas shall be recorded on the repair log form by the CQA Monitor.

3.12 Geomembrane Final Walk-through

The Contractor shall be responsible for maintaining the geomembrane (or portions thereof) until final acceptance by the CQA Monitor. The CQA Consultant's CQA Monitor shall recommend final acceptance only when all seams have passed destructive testing, the Contractor has supplied all documentation, and all field and laboratory testing is complete and satisfactory. Prior to final acceptance, the Contractor, QA Engineer, CQA Monitor shall complete a field review of the installation of the geomembrane (or portions thereof) for completeness. Any areas that are found to deviate from the intended design, are incomplete, or in need of repair shall be recorded by the CQA Consultant's CQA Monitor for correction by the Contractor. When the repairs have been completed, the CQA Consultant's CQA Monitor shall release the

geomembrane (or portions thereof) for installation of overlying materials. The Contractor shall retain ownership of the liner throughout the installation of overlying materials as defined within the Contractor's scope of work.

4.0 GEOCOMPOSITE QUALITY ASSURANCE

4.1 General

This section sets forth the requirements for the CQA testing and observation requirements for installing the geocomposite materials detailed on the Construction Drawings and Specifications. This work includes the examination of the Manufacturer's and Contractor's QC testing, conformance testing, shipping and handling, and deployment, seaming, and repairs of the geocomposite. The CQA Consultant's CQA Monitor and CQA Officer shall review the submittals furnished by the Contractor to ensure their compliance with this program and conditions of warranty prior to construction. They shall also review the time schedule for installation submitted by the Contractor prior to construction.

4.2 Shipping and Handling

Materials shall be delivered to the site only after the CQA Consultant's CQA Monitor receives and approves the required submittals. The Contractor is responsible for the transportation, off-loading, and storage of the geocomposite. The materials shall be packaged and shipped by appropriate means so that no damage is caused and shall be delivered to the Project Site only after the CQA Consultant's CQA Monitor receives and approves the required submittals. Off-loading shall be performed in the presence of the CQA Consultant's CQA Monitor to ensure that any damage during off-loading is properly documented. The CQA Consultant's CQA Monitor shall keep a log of all geocomposite delivered to the site on the appropriate form

The CQA Consultant's CQA Monitor shall observe that damaged materials are separated from undamaged materials until proper disposition of the material is determined by the Owner or CQA Officer. Final authority on the determination of damage shall be the CQA Monitor.

4.3 Geocomposite Conformance Testing

After production, the geocomposite shall be sampled for conformance testing. Sampling shall be performed at the manufacturing plant. One geocomposite sample shall be obtained for every 100,000 square feet produced. The CQA Officer shall review all test results and report any non-conformance test results to the Contractor and the CQA Monitor.

The conformance testing of the geocomposite shall include the following parameters:

1. Transmissivity (ASTM D4716);
2. Peel Strength (GRI GC7).

4.4 Geocomposite Installation

Prior to geocomposite installation, the CQA Consultant's CQA Monitor shall observe that all underlying materials have been repaired, tested, and approved in accordance with the Construction Drawings and Specifications. During geocomposite placement, the CQA Consultant's CQA Monitor shall:

1. Observe the geocomposite as it is deployed and record all defects and disposition of the defects (panel rejected, patch installed, etc.);
2. Observe that equipment used does not damage the geocomposite;
3. Observe that people working on the geocomposite do not engage in activities that could damage it;
4. Observe that the geocomposite is anchored to prevent movement by the wind (the Contractor is responsible for any damage resulting to or from wind blown geocomposite);
5. Observe that the seams are overlapped in accordance with the project Specifications;
6. Observe that the Contractor has repaired any holes or tears in the geocomposite; and
7. Observe that the materials and methods used to fasten the panels together meet the Specification requirements.

The CQA Consultant's CQA Monitor shall record all of the above information on log sheets and in daily reports.

5.0 GEOTEXTILE QUALITY ASSURANCE

5.1 Geotextile Quality Control, Shipping, and Handling

The Manufacturer shall provide a copy of the certificate of compliance and the QC certificates for production of each geotextile roll manufactured for this project prior to construction for review. The Manufacturer's QC shall include visual inspection of the geotextile materials for foreign matter and needles. The Manufacturer's QC shall also provide proof that he has performed detection for broken needles at the manufacturing plant using magnets and continuous metal detectors permanently installed on-line at the factory. Materials shall be delivered to the site only after the CQA Consultant's CQA Monitor receives and approves the required submittals.

The CQA Consultant's CQA Monitor shall ensure that the materials were packaged and shipped by appropriate means so that no damage was caused to the materials delivered to the Project Site. Off-loading shall be done in the presence of the CQA Consultant's CQA Monitor and any damage during off-loading shall be documented by the CQA Consultant's CQA Monitor and the Contractor. The CQA Consultant's CQA Monitor shall keep a log of all geotextile delivered to the site on a log of geotextile received form.

Damaged materials shall be separated from undamaged materials until proper disposition of material is determined by the CQA Monitor. Final authority on the determination of damage shall be the CQA Monitor. The Contractor shall replace damaged or unacceptable material at no cost to the Owner.

The geotextile shall be stored on a prepared surface approved by the CQA Consultant's CQA Monitor and shall be protected from puncture, precipitation, dirt, grease, water, mechanical abrasions, ultraviolet light exposure or other damage. The CQA Consultant's CQA Monitor shall observe that the Contractor uses appropriate handling

equipment to load, move or deploy the material to ensure that no damage is caused to the materials during handling of the geotextile.

5.2 Geotextile Conformance Testing

After production, the geotextile shall be sampled for conformance testing. Sampling shall be performed at the manufacturing plant. One geotextile sample shall be obtained for every 100,000 square feet produced. The QA Engineer shall review all test results and report any non-conformance test results to the Contractor and the CQA Monitor.

The geosynthetics laboratory shall conduct the following conformance tests on the geotextile:

1. Mass per Unit Area (ASTM D-5261);
2. Grab Tensile (ASTM D-4632);
3. Puncture Resistance (ASTM D-4833); and
4. Tear Resistance (ASTM D-4533).

5.3 Geotextile Installation

The CQA Consultant's CQA Monitor shall not allow installation of the geotextile wrap until all conformance testing has been completed and adequate results have been obtained. During geotextile placement, the CQA Consultant's CQA Monitor shall:

1. Observe the geotextile as it is deployed and record all defects and disposition of the defects (panel rejected, patch installed, etc.);
2. Observe that equipment used does not damage the geotextile;
3. Observe that people working on the geotextile do not engage in activities that could damage it;
4. Observe that the geotextiles are anchored to prevent movement by the wind (the Contractor is responsible for any damage resulting to or from windblown geotextiles);
5. Observe that the seams are overlapped in accordance with the project Specifications;
6. Observe that the Geosynthetic Contractor has repaired any holes or tears in the geotextile; and

7. Observe that the thread used to sew the panels together meets the specification requirements.

During installation, the Contractor and CQA Consultant's CQA Monitor shall inspect the geotextile as it is deployed for the presence of foreign materials and needles. If any needles or other materials which the CQA Consultant's CQA Monitor feels may be detrimental to the underlying synthetic liner are present within the geotextile, the roll shall be rejected and not used and the Contractor shall replace any rejected material at no additional cost to the Owner. The CQA Consultant's CQA Monitor shall notify the Contractor of any problem areas and observe and inspect the repair. The CQA Consultant's CQA Monitor shall record all of the above information on log sheets and in daily reports.

6.0 WORK DEFICIENCIES

When deficiencies are discovered, the CQA Consultant's CQA Monitor shall immediately determine the nature and extent of the problem, notify the Contractor of the problem, and complete the required documentation. The CQA Consultant's CQA Monitor shall notify the Contractor within a 1/2 hour of discovering any deficiency. If the deficiency will cause significant construction delays or require substantial rework, the CQA Consultant's CQA Monitor shall notify the CM and the QA Engineer.

The Contractor shall correct the deficiency to the satisfaction of the CQA Monitor. If the Contractor is unable to correct the problem, the CQA Consultant's CQA Monitor shall be asked to develop and recommend a solution to the QA Engineer for his approval.

The corrected deficiency shall be retested before additional work is performed by the Contractor. All retests and the steps taken to correct the problem shall be documented by the CQA Consultant's CQA Monitor on a field construction inspection report and on construction problem and solution data sheet forms.

7.0 DOCUMENTATION

7.1 Daily Records

At a minimum, daily records shall consist of field notes, a summary of the daily construction activities, associated testing activities, and observation and data sheets. All project records shall be maintained in a well organized hardcopy and electronic project file at the job site and shall be available for review. PDF's of all project records shall be routinely created for storage in the electronic project file. The CQA Monitor's daily summary report shall include at a minimum the following information:

1. Date, project name, and location;
2. Weather data;
3. A description of on-going construction;
4. A summary of test results identified as passing, failing, or in the event of a failed test, retests;
5. Off-site materials received, including geosynthetics or drainage materials, plus status of certificates or off-site testing for the materials;
6. A listing of all deviations from required procedures, methods, and/or techniques for any and all worked performed;
7. A summary of decisions regarding acceptance of the work and/or corrective actions taken; and
8. The signature or initials of the CQA Monitor.

7.2 Observation and Test Data Sheets

The CQA Consultant's CQA Monitor shall prepare observation and data sheets during all phases of construction. Copies of Field Forms are included in Appendix A. Observation and data sheets for this project may include, but would not be limited to the following:

1. Nuclear Density Data Sheets
3. Field Density Summary
4. Moisture Density Curve Data Sheets
5. Oven Moisture Content/Drive Tube Density Data Sheets
6. Sand Cone Density Data Sheets

7. Sieve Analysis and Atterberg Limits Data Sheets
8. Acceptance of Prepared Subgrade Forms
9. Geomembrane Received Log
10. Geotextile Received Log
11. Geocomposite Received Log
12. Geomembrane Panel Deployment Log
16. Geomembrane Start-up Trial Weld Log
17. Geomembrane Field Seaming and Nondestructive Testing Log
18. Geomembrane Repair Log
19. Geomembrane Seam Strength Destructive Test Results
20. Photograph Log

Additional observation and data sheets may be required. All entries shall be clear and legible. All documentation should be dated and signed or initialed clearly by the CQA Monitor.

7.3 Certification/CQA Final Documentation Report

At the completion of the Project, the CQA Consultant shall prepare a CQA Final Documentation Report to be submitted to the Owner, GBB as the Owner's Representative, and the Project CM. . The final report will consist of a summary of the CQA operations, construction, results and observations of conformance testing, and any actions taken to resolve construction problems. The conformance testing data will be provided in table form with a minimum - maximum range as well as an arithmetic mean provided in the text of the report.

In addition, the report will include a construction summary, as-built details, field notes, and a detailed discussion of the CQA activities for the liner earthworks and geosynthetic components. All observations, findings, and test results will be discussed in a technically sound manner and will be presented in appendices to the report . The report will be signed and sealed by a Registered Engineer observing that the project

was constructed in general accordance with the Construction Drawings, Specifications, and CQA Implementation Plan.

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Scope of Work

**Task 1 - RCRA Facility Investigation and
Corrective Measures Study**

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Task 1 RCRA Facility Investigation and Corrective Measures Study

Scope of Work:

- Develop a Resource Conservation and Recovery Act (RCRA) Corrective Action Plan (CAP) strategy
- Prepare plans and associated RCRA project documents sufficient to conduct a comprehensive RCRA Facility Investigation (RFI) for the Ordot Dump – Work Plan Documents Sub-Task.
- Conduct fieldwork, sampling, and analysis associated with the RFI – RFI Field Work Sub-Task.
- Prepare an RFI Report that presents, discusses, and assesses the site data – RFI Report and Hydrogeologic Model Sub-Task.
- Evaluate and screen the site data to determine the nature and extent of contaminants that has been released from the site – Part of the RFI Report and Hydrogeologic Model, and Quarterly Groundwater Monitoring Sub-Tasks.
- Construct a comprehensive Site Hydrogeologic Model to guide and support the RFI findings and conclusions – Part of the RFI Report and Hydrogeologic Model Sub-Tasks.

Given the disposition of the site, and what is qualitatively known about its condition, it can be presumed that the following will also be necessary:

- Interim/Stabilization Measures (ISMs)
- Conduct a Corrective Measures Study (CMS)
- Corrective Measures Implementation (CMI) Plan

Selected ISMs could be implemented as an early phase of site closure work following the initial phase of the RFI work. An example ISMs might be the installation of a leachate collection system at the southern toe of the dump, though, only the CMS has been specifically included in this Scope of Work.

Technical Approach and Key Issues:

- Develop a CAP that has an integrated approach to the RCRA closure process.

Optimize schedule, expenditures, and quality through use of presumed remedy approach for components common to closure design elements.

- The RFI nature and extent of data, Ecological Screening Levels, Regional Screening Levels, and Guam specific numerical values, will be used in conjunction with the Hydrogeologic Model to assess the need for a CMS and any associated potential CMI Plan.
- CAP Strategy – RFI through CMI to be conducted in direct coordination with closure design team. ISMs to be coordinated with planned closure measures, and are not included in this portion of the work but, may be early completion tasks of the design closure team. The steps below outline initial preparatory work through CMS. CMI Plan specifics are not included or estimated as they haven't been developed at this time.

In support of preparing plans, and in preparation for conducting the RFI field work, the following initial site work elements will be undertaken:

Initial Preparatory Work:

- Contact, meet and hold discussions with GEPA, EPA and SWMD operations personnel as appropriate.
- Review Site Conceptual Model.
- Review Data Coverage and data quality for all potentially impacted site media.
- Review Background Determination.
- Revisit Chemicals of Potential Concerns (COPCs) determination.
- Assess Existing Data for qualitative use.
- Assess existing site specific, and surrounding, geology and hydrogeology information to develop a limited conceptual Site Hydrogeologic model for planning purposes.
- Review previously note “data gaps” to ensure that such concerns are fully addressed in the RFI Work Plan and subsequent investigation.
- Review existing site monitoring network to maximize the use of existing monitoring points.
- Perform an in depth review of all available site reports, and plans.
- Perform an initial site visit to assess and document initial site conditions, including access limitations, and other special needs.
- Attempt to locate monitoring wells that are not currently in use.

- Provide regular reporting to Receiver and regulatory agencies as required.
- Prepare a brief CAP.

Following completion of the tasks above, the information and knowledge collected will be combined with professional judgement and expertise to prepare the following plans (project deliverables):

RFI Planning Documents:

- RCRA Facility Investigation Work Plan (RFI Work Plan).
- Field Sampling & Analysis Plan (SAP) this plan includes the Field Sampling Plan (FSP) and the Quality Assurance Project Plan (QAPP).
- Site Specific Health and Safety Plan (HASP) for all site activities conducted by Consultant or its subcontractors.

Upon approval of the final plans, Consultant will begin the investigative phase of the RFI effort. The steps that are anticipated to be approved for that effort are listed below:

RCRA Facility Investigation:

- Site Preparation – Construct roadways and drill pads around the perimeter of the Dump to allow clear access for investigation crews. Construct roadways with minimum 8 inches to 2' lift of crushed coral.
- Collect Geologic Data and Hydrogeologic Data from the site and surrounds that will lead to the construction of a comprehensive Site Geologic and Hydrogeologic Model.

The following subtasks are planned in support of this effort:

- Drilling of 12 soil borings through the saprolite, to depths of 30 feet, at various locations around the dump and general vicinity to assess the depth to competent rock, distribution and thickness of site soils, physical properties of the soils, and extent of contamination within the soils.
- At selected locations, Consultant will also drill and install 15 shallow monitoring wells, up to 30 feet deep into the saturated portions of these soils in order to collect hydrogeologic information that will aid in the calculation of groundwater flow into and out of the dump. These monitoring points, through subsequent sampling, will also provide data that will be used to assess contaminant concentrations, and associated transport in the shallow groundwater. Soil borings and monitoring well points will be co-located whenever possible – to facilitate cost savings.
- At selected other locations around the dump, Consultant will drill 5 deeper monitoring well points into the competent volcanic bedrock (estimated depth 100 ft.,

- likely using a conductor casing technology to prevent cross contamination from shallow groundwater in the saprolite). These samples from the competent bedrock are intended to assess the water quality in that underlying bedrock, and demonstrate whether or not the porous flow pathway (through volcanic bedrock) can generally be removed from further remedial consideration.
- Somewhat to the northeast of the dump (less than 500 feet), there is a large fault that bisects nearly the entire island of Guam. The volcanic rock along the eastern side of the fault is likely to be heavily fractured in the near vicinity of the fault. Groundwater flow in the fractures in the vicinity of the fault may affect the transport of site contaminants. An analysis of fracture flow will be completed. At selected locations, 8 deeper monitoring wells will be installed (estimated depth 100 ft.) to delineate contaminant concentrations in groundwater within the fractured zone.
 - A seismic survey will be conducted to delineate the location and extent of the fractured bedrock zone associated with the fault.
 - Delineate the nature and extent of site contaminants in soil, groundwater, and soil gas. In support of that objective, Consultant will collect samples of various site media (Soil, Rock, Groundwater, Surface Water, Landfill Gas, and Sediment) as follows:
 - This effort will include collection of 45 surface soil samples, 45 intermediate depth soil samples (estimated depth 2-2.5 ft), and 25 deeper soil samples and selected rock samples (estimated depths – up to 30 feet). These samples will typically be collected via a soil boring, but, selected samples may also be collected from test pits or rock core holes. Analytical testing for the listed site Constituents of Potential Concern (COPCs) will be performed on each of these samples.
 - Twelve sediment samples will be collected from the Lonfit River at locations upstream, adjacent, and down-stream from the Ordot Dump site. Analytical testing will be performed on each of these samples.
 - Fifty samples of soil or water will be collected from two wetlands areas (25 locations in each wetlands area) in an attempt to assess leachate impact within the wetlands. Analytical testing will be performed on each of these samples.
 - Eight surface water samples will be collected from various selected drainage stream areas of the site (both those thought to be impacted by leachate, and those areas that may not be impacted by leachate). In a related, but separate effort, 8 stream samples from the Lonfit River will be collected at locations both up-stream and down-stream of the dump location. Analytical testing will be performed on each of these samples.
 - Initial groundwater samples will be collected from the 15 shallow monitoring wells screened at the water table and screened at depths near the soil rock interface. Initial groundwater samples will also be collected from the 5 deeper monitoring wells screened in bedrock. Eight groundwater samples will also be collected from the deeper monitoring wells in the fractured bedrock areas. Analytical testing will be

- performed on each of these samples.
- The existing groundwater monitoring wells (assume 7 are located), will be video surveyed, refurbished to the extent possible, re-developed, and sampled. Seven samples will be obtained from these wells.
 - A network of 20 landfill gas monitoring wells will be installed around the perimeter of the dump. A network of 12 wells will be installed (3 on each side of the dump) – and 2 step-out monitoring well points will be installed along each side of the dump. Analytical testing will be performed on each of these samples.
- Collection of physical parameters. Consultant will collect, measure, and test various portions of the site media that require quantification for complete design. To complete this objective, Consultant will perform the following tests:
 - Twelve wells will be slug tested (6 in the fractured zone, and 6 in the general dump area) in order to collect in-situ hydraulic conductivity data.
 - Two selected wells will be pump tested to provide groundwater flow information for modeling, and leachate collections system design. One pump test will be conducted in the fractured zone, and one pump test will be conducted in the general vicinity of the dump.
 - Six soil samples will be tested for physical soil properties such as grain size distribution, strength, unit weight, permeability, plasticity.
 - Assess the usability of Existing Site Monitoring Wells – including a video survey, land survey, and redevelopment.
 - Biotic Survey – identify the Biota of the site and surrounds to ascertain that remedial actions do not have a detrimental effect on the biotic species.
 - Perform Quality Assurance/Quality Control (QA/QC) sampling as appropriate throughout the program (typically at a frequency of 10%). This 10% frequency has been calculated into the costs provided.
 - Validate environmental data as appropriate to support closure decisions.
 - Create and maintain a project data management system to store and manage environmental data collected under this effort.

At the conclusion of the data collection and validation efforts, these data will be analyzed and evaluated, culminating in an RFI Report and Hydrogeologic Model (project deliverable).

RFI Report:

- RFI Report per RCRA Guidance. Includes Draft, Draft Final, and Final versions as well as responses to Agency Comments. Includes method discussions, data presentation, analysis, findings, and conclusions. A Hydrogeologic Model including 3D visualizations will also be part of the effort.

Groundwater Monitoring:

- Groundwater Monitoring and reporting will be conducted on a quarterly basis for the period of 1 year following the initial installation and sampling of wells. Twenty-seven monitoring wells will be sampled each quarter (the 15 shallow wells, 5 deeper wells, and the 7 existing monitoring wells). The 8 deeper wells associated with the fracture zone study will not be sampled as part of this effort.

Corrective Measures Study:

- A CMS will be prepared to evaluate a range of remedial options available to address the site contaminants. The CMS will borrow heavily from the closure efforts that are currently being planned so as to optimize operational efficiency.

GBB Deliverables/Responsibilities:

- GBB to provide access, permissions, and all right-of-ways necessary to conduct field work and associated project activities.
- GBB to continue to supply Consultant with existing documents as are available.
- GBB to supply existing laboratory data as is available.
- GBB will assist in obtaining letters of regulatory concurrence for each version of project documents.

Assumptions:

- Consultant take lead in regulatory review and will obtain letter of regulatory concurrence for each version of project documents
- Some of the existing environmental data are useful for qualitative purposes only.
- None of the existing analytical data are useful for analytical purposes.
- The maximum depth to bedrock is no more than 30 feet from the natural ground surface.

- Initial groundwater encountered at depths of 20 ft. or less below the natural ground surface.
- Fractured bedrock investigation will not require drilling in the dump footprint or the waste.
- Monitoring wells and/or piezometers will not be required to be installed within the dump foot print, or in the waste.
- Unexploded Ordnance (UXO) and Munitions and Explosives of Concern (MEC), will not be encountered in any field activity. Only UXO avoidance practices will be required.
- Should groundwater contamination exist along the north or east sides of the land fill, this scope of work does not account for the probability that site contaminants have impacted limestone aquifer on the eastern side of the fault. Should that probability arise, such an investigation would be scoped separately in a phased manner, and is not currently included in this scope of work.
- The large fault northeast of the dump (Adelup-Pago Fault) will not require site specific seismic hazard evaluation as part of the RFI or RCRA Closure.
- The presence and proximity of the Adelup-Pago Fault will not require extraordinary design or construction considerations or measures.
- Since securing the RCRA Closure letter will be dependent upon final closure construction activities of the dump, it is assumed that the RCRA closure will be granted at the completion of the entire project and not tied to the RFI.
- Ambient Air will not be a component of the RFI, as the final remedy will include a full cap, and any potential exposure pathways will be eliminated or controlled.
- The regulators will require site clean-up to address all contaminants detected above Ecological Screening Levels, Regional Screening Levels, and Guam Numerical Values. Risk based approaches are not included in this scope of work, however, if found to be locally supported, will be included in this scope of work.
- Water generated from the pump tests and well development efforts can not be used on the dump for dust control, however does not require treatment, or off-site disposal.
- RFI and associated efforts will require meeting with the regulators approximately once per month.
- Groundwater monitoring efforts for the RFI are anticipated to require only 1 year of quarterly monitoring.

- Abandonment of monitoring wells has not been included in the scope of this work – as the duration of their need cannot be assessed at this time.
- Quarterly monitoring report will be posted as standalone documents supporting the RFI. The RFI can be finalized before the quarterly monitoring is completed.
- A wetlands access permit and property access authorizations will be obtained by the Consultant and assisted by GBB.
- Regulatory reviews of documents will be completed in accordance with the approved schedule.
- Letters of regulatory concurrence for each version of the project documents will be obtained by the Consultant.

Consultant Deliverables:

- RCRA Facility Investigation Work Plan (RFI Work Plan)
- SAP for the RFI WP (includes the FSP and the QAPP).
- All electronic workable files generated for analysis and reporting of work
- Site Specific Health and Safety Plan
- RFI Report (Includes a Hydrogeologic Model)
- Site CAD electronic files
- Quarterly Groundwater Monitoring Reports (4)
- RCRA CMS

Contract Payments by Payee - ETD

1/6/2009 through 3/31/2010

3/31/2010

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Date	Account	Memo	Amount
OUTFLOWS			-10,924,157.24
Alpine Technology Corporation			-144,237.69
8/20/2009	Citibank Primary Account	Invoice # 1803	-30,000.00
10/13/2009	Citibank Construction Subaccount	Invoice # 1807	-47,777.50
12/17/2009	Citibank Construction Subaccount	Invoice # 1828	-23,625.75
1/8/2010	Citibank Construction Subaccount	Invoice # 1836	-1,812.50
1/12/2010	Citibank Construction Subaccount	Invoice # 1835	-20,324.91
3/29/2010	Citibank Construction Subaccount	Invoice # 1856	-20,697.03
Black Construction Corporation			-459,605.24
3/8/2010	Citibank Construction Subaccount	Progress Billing #1	-459,605.24
Core Tech International			-300,424.92
2/2/2010	Citibank Construction Subaccount	Payment Application #1	-154,752.30
3/11/2010	Citibank Construction Subaccount	Payment Application #2	-145,672.62
Far East Equipment Co.			-1,615,641.04
7/13/2009	Citibank Primary Account	Invoice # FEEC 190-2009	-54,550.00
8/14/2009	Citibank Primary Account	FEEC 205&206 and FEEC 209-222	-639,450.00
8/14/2009	Citibank Primary Account	Invoice # FEEC 191-2009	-70,106.28
11/24/2009	Citibank Construction Subaccount	Invoice # FEEC 289-2009	-12,600.00
11/30/2009	Citibank Construction Subaccount	Invoice # FEEC 288-2009	-142,337.76
2/25/2010	Citibank Construction Subaccount	Invoice # FEEC 339-2010	-696,597.00
G4 Security Services (Guam), Inc			-16,904.38
12/24/2009	Citibank Primary Account	Invoices 12722 and 12809	-9,309.63
3/11/2010	Citibank Primary Account	Invoice 12910	-7,594.75
Maeda Pacific Corporation			-7,281,673.56
5/13/2009	Citibank Primary Account	Progress payment #1	-179,015.31
6/16/2009	Citibank Primary Account	Progress payment #2	-1,247,831.10
7/6/2009	Citibank Primary Account	Progress Payment #3	-943,771.37
8/13/2009	Citibank Primary Account	Progress payment #4	-1,105,287.61
9/11/2009	Citibank Construction Subaccount	Progress payment #5	-450,607.05
10/15/2009	Citibank Construction Subaccount	Progress payment #6	-260,372.70
11/12/2009	Citibank Construction Subaccount	Progress payment #7	-297,032.85
12/14/2009	Citibank Construction Subaccount	Progress Billing #8	-262,480.50
1/19/2010	Citibank Construction Subaccount	Progress payment #9	-828,009.18
2/22/2010	Citibank Construction Subaccount	Progress payment #10	-808,339.05
3/31/2010	Citibank Construction Subaccount	Progress Billing #11	-898,926.84
Pacific Human Resource Services, Inc.			-160,988.60
11/12/2009	Citibank Primary Account	Invoice #15218	-2,699.06

Contract Payments by Payee - ETD

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Date	Account	Memo	Amount
11/12/2009	Citibank Primary Account	Invoices #15211 and 15215	-2,572.48
11/24/2009	Citibank Primary Account	Invoices #15220	-2,795.52
11/30/2009	Citibank Primary Account	Invoices #15230	-3,576.18
12/1/2009	Citibank Primary Account	Invoices #15230	-4,622.42
12/17/2009	Citibank Primary Account	Invoices #15245	-7,199.80
12/24/2009	Citibank Primary Account	Invoices #15249	-4,792.02
12/29/2009	Citibank Primary Account	Invoices #15241	-5,020.74
12/31/2009	Citibank Primary Account	Invoices #15251	-7,290.30
1/25/2010	Citibank Primary Account	Invoice 152561	-6,216.08
1/25/2010	Citibank Primary Account	Invoices 15258 and 15263	-15,560.48
2/4/2010	Citibank Primary Account	Invoices #15268	-10,473.84
2/5/2010	Citibank Primary Account	Invoices #15273	-12,260.04
2/12/2010	Citibank Primary Account	Invoice 15277	-9,687.60
2/17/2010	Citibank Primary Account	Invoice 15281	-7,860.84
2/25/2010	Citibank Primary Account	Invoice 15284	-7,465.26
3/4/2010	Citibank Primary Account	Invoice 15285	-11,050.45
3/11/2010	Citibank Primary Account	Invoice 15286	-11,558.70
3/18/2010	Citibank Primary Account	Invoice 15292	-11,652.33
3/24/2010	Citibank Primary Account	Invoice 15295	-9,283.48
3/31/2010	Citibank Primary Account	Invoice 15298	-7,350.98
Pacific Island Security Agency			-12,796.00
3/9/2010	Citibank Primary Account	Invoice 6094	-6,398.00
3/11/2010	Citibank Primary Account	Invoice 6107	-6,398.00
TG Engineers, PC			-931,885.81
4/22/2009	Citibank Primary Account	Task Order #1	-36,841.60
7/27/2009	Citibank Primary Account	Invoice Nos. 09-037-01 and 09-058-01	-169,411.86
9/3/2009	Citibank Primary Account	Invoice Nos. 09-037-02 and 09-037-03	-96,702.87
9/22/2009	Citibank Construction Subaccount	Invoices 09-037-04, 09-037-05 and 09-058-02	-168,229.20
11/12/2009	Citibank Construction Subaccount	Invoices 09-21-02, 09-58-03, 09-58-04, 09-37-06	-137,055.33
12/17/2009	Citibank Construction Subaccount	Invoice 09-105-01	-22,770.98
1/25/2010	Citibank Construction Subaccount	Invoices 09-105-02 and 09-058-05	-12,838.97
2/2/2010	Citibank Construction Subaccount	Invoices 09-100-01 and 09-099-01	-288,035.00
OVERALL TOTAL			-10,924,157.24

Citibank Primary Account - ETD:3

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Date	Account	Description	Amount
BALANCE 1/5/2009			0.00
1/6/2009	Citibank Primary Account	Deposit By The Government Of Guam	20,000,000.00
1/30/2009	Citibank Primary Account	Interest Earned	21,380.84
2/13/2009	Citibank Primary Account	Greshman, Brickner & Bratton, Inc	-64,828.25
2/27/2009	Citibank Primary Account	Interest Earned	23,008.45
3/23/2009	Citibank Primary Account	Deposit By The Government Of Guam	3,974,800.00
3/30/2009	Citibank Primary Account	Deposit By The Government Of Guam	993,700.00
3/31/2009	Citibank Primary Account	Interest Earned	26,816.92
4/6/2009	Citibank Primary Account	Deposit By The Government Of Guam	993,700.00
4/13/2009	Citibank Primary Account	Deposit By The Government Of Guam	993,700.00
4/22/2009	Citibank Primary Account	TG Engineers, PC	-36,841.60
4/30/2009	Citibank Primary Account	Interest Earned	32,469.17
5/6/2009	Citibank Primary Account	District Court Account At The Bank Of Hawaii	-993,700.00
5/13/2009	Citibank Primary Account	Maeda Pacific Corporation	-179,015.31
5/29/2009	Citibank Primary Account	Interest Earned	33,162.67
6/16/2009	Citibank Primary Account	Maeda Pacific Corporation	-1,247,831.10
6/30/2009	Citibank Primary Account	Interest Earned	31,080.39
7/6/2009	Citibank Primary Account	Maeda Pacific Corporation	-943,771.37
7/13/2009	Citibank Primary Account	Far East Equipment Co.	-54,550.00
7/27/2009	Citibank Primary Account	TG Engineers, PC	-169,411.86
7/31/2009	Citibank Primary Account	Interest Earned	30,274.74
8/13/2009	Citibank Primary Account	Maeda Pacific Corporation	-1,105,287.61
8/14/2009	Citibank Primary Account	Far East Equipment Co.	-639,450.00
8/14/2009	Citibank Primary Account	Far East Equipment Co.	-70,106.28
8/20/2009	Citibank Primary Account	Alpine Technology Corporation	-30,000.00
8/21/2009	Citibank Primary Account	Citibank Construction Subaccount	-15,523,734.87
8/28/2009	Citibank Primary Account	Linda J. Ibanez	-7,766.67
8/31/2009	Citibank Primary Account	Interest Earned	21,487.60
9/3/2009	Citibank Primary Account	TG Engineers, PC	-96,702.87
9/24/2009	Citibank Primary Account	Citibank Construction Subaccount	96,702.87
9/28/2009	Citibank Primary Account	linda J. Ibanez	-7,766.67
9/30/2009	Citibank Primary Account	Interest Earned	7,452.01
10/21/2009	Citibank Primary Account	District Court Account At The Bank Of Hawaii	-1,000,000.00
10/29/2009	Citibank Primary Account	Linda J. Ibanez	-7,766.67
10/30/2009	Citibank Primary Account	Interest Earned	7,087.64
11/12/2009	Citibank Primary Account	Pacific Human Resource Services, Inc.	-2,699.06
11/12/2009	Citibank Primary Account	Depo Resources	-1,015.00

Citibank Primary Account - ETD:3

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Date	Account	Description	Amount
11/12/2009	Citibank Primary Account	Shimbros	-350.00
11/12/2009	Citibank Primary Account	Pacific Human Resource Services, Inc.	-2,572.48
11/24/2009	Citibank Primary Account	Pacific Human Resource Services, Inc.	-2,795.52
11/25/2009	Citibank Primary Account	Linda J. Ibanez	-7,804.17
11/30/2009	Citibank Primary Account	Pacific Human Resource Services, Inc.	-3,576.18
11/30/2009	Citibank Primary Account	Interest Earned	6,293.70
12/1/2009	Citibank Primary Account	Pacific Human Resource Services, Inc.	-4,622.42
12/17/2009	Citibank Primary Account	Pacific Human Resource Services, Inc.	-7,199.80
12/24/2009	Citibank Primary Account	Pacific Human Resource Services, Inc.	-4,792.02
12/24/2009	Citibank Primary Account	G4 Security Services (Guam), Inc	-9,309.63
12/29/2009	Citibank Primary Account	Linda J. Ibanez	-7,766.67
12/29/2009	Citibank Primary Account	Pacific Human Resource Services, Inc.	-5,020.74
12/31/2009	Citibank Primary Account	Pacific Human Resource Services, Inc.	-7,290.30
12/31/2009	Citibank Primary Account	Interest Earned	1,254.99
1/6/2010	Citibank Primary Account	Interest Earned	5,221.49
1/25/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-6,216.08
1/25/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-15,560.48
1/27/2010	Citibank Primary Account	Linda J. Ibanez	-7,886.67
1/29/2010	Citibank Primary Account	Interest Earned	6,435.06
2/4/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-10,473.84
2/5/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-12,260.04
2/12/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-9,687.60
2/17/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-7,860.84
2/19/2010	Citibank Primary Account	District Court Account At The Bank Of Hawaii	-1,000,000.00
2/25/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-7,465.26
2/26/2010	Citibank Primary Account	Linda J. Ibanez	-7,766.67
2/26/2010	Citibank Primary Account	Interest Earned	5,345.60
3/4/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-11,050.45
3/9/2010	Citibank Primary Account	Pacific Island Security Agency	-6,398.00
3/11/2010	Citibank Primary Account	Pacific Island Security Agency	-6,398.00
3/11/2010	Citibank Primary Account	G4 Security Services (Guam), Inc	-7,594.75
3/11/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-11,558.70
3/18/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-11,652.33
3/24/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-9,283.48
3/29/2010	Citibank Primary Account	Linda J. Ibanez	-7,766.67
3/31/2010	Citibank Primary Account	Pacific Human Resource Services, Inc.	-7,350.98
3/31/2010	Citibank Primary Account	Interest Earned	5,022.77
1/6/2009 - 3/31/2010			3,906,820.95

Citibank Primary Account - ETD:3

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Date	Account	Description	Amount
BALANCE 3/31/2010			3,906,820.95
TOTAL INFLOWS			27,316,396.91
TOTAL OUTFLOWS			-23,409,575.96
NET TOTAL			3,906,820.95

Citibank Construction Subaccount - ETD

7/31/2009 through 3/31/2010

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Date	Description	Memo	Amount
BALANCE 7/30/2009			0.00
7/31/2009	Opening Balance		0.00
8/21/2009	Citibank Construction Subaccount	Court order of 8-11-2009	15,523,734.87
8/31/2009	Interest Earned		1,169.64
9/1/2009	Interest Earned		5,850.82
9/11/2009	Maeda Pacific Corporation	Progress payment #5	-450,607.05
9/22/2009	TG Engineers, PC	Invoices 09-037-04, 09-037-05 and 09-058-02	-168,229.20
9/24/2009	Citibank Construction Subaccount	Letter of 9-23-09	-96,702.87
9/30/2009	Interest Earned		18,698.40
10/13/2009	Alpine Technology Corporation	Invoice # 1807	-47,777.50
10/15/2009	Maeda Pacific Corporation	Progress payment #6	-260,372.70
10/19/2009	Treasurer Of Guam	GEPA permit fee	-4,548.29
10/30/2009	Interest Earned		18,687.94
11/12/2009	TG Engineers, PC	Invoices 09-21-02, 09-58-03, 09-58-04, 09-37-06	-137,055.33
11/12/2009	Maeda Pacific Corporation	Progress payment #7	-297,032.85
11/24/2009	Treasurer Of Guam	GEPA permit fee	-2,544.76
11/24/2009	Far East Equipment Co.	Invoice # FEEC 289-2009	-12,600.00
11/30/2009	far East Equipment Co.	Invoice # FEEC 288-2009	-142,337.76
11/30/2009	Interest Earned		17,587.32
12/14/2009	Maeda Pacific Corporation	Progress Billing #8	-262,480.50
12/17/2009	Alpine Technology Corporation	Invoice # 1828	-23,625.75
12/17/2009	TG Engineers, PC	Invoice 09-105-01	-22,770.98
12/31/2009	Interest Earned		3,444.01
1/6/2010	Interest Earned	Additional interest earnings for 12/31/09	14,136.32
1/8/2010	Alpine Technology Corporation	Invoice # 1836	-1,812.50
1/12/2010	Alpine Technology Corporation	Invoice # 1835	-20,324.91
1/19/2010	Maeda Pacific Corporation	Progress payment #9	-828,009.18
1/25/2010	TG Engineers, PC	Invoices 09-105-02 and 09-058-05	-12,838.97
1/29/2010	Interest Earned		16,967.17
2/2/2010	Treasurer Of Guam	GEPA permit fee	-9,685.32
2/2/2010	Core Tech International	Payment Application #1	-154,752.30
2/2/2010	Tg Engineers, PC	Invoices 09-100-01 and 09-099-01	-288,035.00
2/22/2010	Maeda Pacific Corporation	Progress payment #10	-808,339.05
2/25/2010	Far East Equipment Co.	Invoice # FEEC 339-2010	-696,597.00
2/26/2010	Interest Earned		13,920.47
3/8/2010	Black Construction Corporation	Progress Billing #1	-459,605.24
3/11/2010	Core Tech International	Payment Application #2	-145,672.62

Citibank Construction Subaccount - ETD

7/31/2009 through 3/31/2010

3/31/2010

Page 2

Date	Description	Memo	Amount
3/29/2010	Alpine Technology Corporation	Invoice # 1856	-20,697.03
3/31/2010	Maeda Pacific Corporation	Progress Billing #11	-898,926.84
3/31/2010	Interest Earned		13,257.11
7/31/2009 - 3/31/2010			9,373,472.57
BALANCE 3/31/2010			9,373,472.57
TOTAL INFLOWS			15,647,454.07
TOTAL OUTFLOWS			-6,273,981.50
NET TOTAL			9,373,472.57



February 2, 2010

Mr. Anthony C. Blaz
Administrator
Guam Economic Development Authority
ITC Building, Suite 511
590 South Marine Corps Drive
Tamuning, Guam 96913

Dear Mr. Blaz:

Thank you for sharing your memo dated January 12, 2009, addressing the Issues raised by the Receiver in our October 21, 2009 Quarterly Report to the District Court. Your memo also acknowledges the additional issues outlined in our January 14, 2010 Quarterly Report and comments on them, as well. We appreciate your work to address these issues and your efforts to work with us to understand our concerns.

We have reviewed your memo and want to share with you additional comments with respect to your responses. For the purpose of this letter, we will summarize the aspects of your response upon which we wish to provide additional comment, after which we will state our additional comment.

Receiver Issue 1: *Refinancing.* GEDA states that Sandi Boughton of USDA has verbally clarified that the USDA did not consider the Section 30 bonds issued for the landfill portion of the project as being on "reasonable rates and terms" because USDA determined that tipping fees could not be collected at rates sufficient to pay landfill operating expenses and debt service on the Section 30 bonds. It is also noted that USDA stated in a letter dated November 27, 2009 that the "tax-exempt bonds obtained by GovGuam was not at reasonable rates and terms"

Additional Receiver Comment: While the somewhat lower interest rate and the grant will reduce the cost of the landfill to its customers, it should be noted that the rates which have been set and are presently being collected, are sufficient to pay the operating expense and debt service of the bonds.

Receiver Issue 2: *Applicant Contributions.* GEDA states in its response that it understands that all applicant funding must be disbursed prior to any funding from USDA. GEDA further states that \$39,874,646 "has been identified and is available for immediate drawdown to fund the Consent Decree projects". GEDA also states that the parties have "verbally agreed to the process and the timing involved" for drawdown of the funds. It is also noted that USDA "may" accept the projects existing A/E contracts subsequent to a cursory review.

Government of Guam
Department of Public Works, Solid Waste Management Division
542 North Marine Corps Drive, Tamuning, Guam 96913
Phone: (671) 646-4379, Ext. 201 or 212
www.GuamSolidWasteReceiver.org
www.gbbinc.com

Additional Receiver Comment: The Receiver does not understand the source of the applicant contributions nor have the differences noted in the Court approved capital budget and the USDA project budget been explained. We assume that the source of applicant funding must be the Section 30 bonds that the USDA loan seeks to replace, but this has never been confirmed. We need confirmation of the source of these funds and an explanation of the differences between the Court approved capital budget and the USDA approved project budget. The verbal agreement mentioned on the drawdown of funds must be put into writing. With respect to the contract issue, more than the A/E contracts are involved. Construction contracts are the primary concern and assurance is needed that the contracts are acceptable, not just that they "may" be acceptable.

Receiver Issue 3: *Interim Construction Financing.* GEDA cites a verbal agreement reached on a conference call with respect to this issue.

Additional Receiver Comment: The agreement with USDA described by GEDA must be put in writing before it can be reasonably evaluated by the Receiver.

Receiver Issue 4: *Disbursement Procedures.* GEDA cites a verbal agreement with respect to this issue.

Additional Receiver Comment: The agreement described by GEDA must be put in writing before it can be reasonably evaluated by the Receiver.

Receiver Issue 5: *Section 30 Security.* GEDA states that USDA has agreed to a 5th position lien on Section 30 funds and that this is already authorized by law.

Additional Receiver Comment: The agreement with USDA described by GEDA must be put in writing before it can be reasonably evaluated by the Receiver. The Attorney General will need to confirm that existing law authorizes such a lien.

Receiver Issue 6: *Reserves.* GEDA cites written clarification for two of the three reserves but describes a verbal agreement with respect to the third reserve.

Additional Receiver Comment: The agreement concerning the Interim Financing Interest Reserve described by GEDA must also be put in writing

Receiver Issue 7: *Required Customers.* GEDA cites written clarification on this issue that is sufficient from the Receiver's perspective.

Additional Receiver Comment: It is clear from the comments made by USDA that they expect the Military to be the "large volume user" of the system. The only way to assure that this is accomplished is to enter a binding agreement with the Government prior to the closing of the USDA loan. Clarification is needed about the USDA's position on this matter.

It is also clear that representations have been made to USDA that all of Guam's waste, other than that which is recycled using traditional means of recycling, will go to the Layon Landfill. The Government of Guam, however, has taken no steps to implement the control of all waste within its jurisdiction (i.e. known as flow control) to assure that this representation is effective. Does USDA understand this and do they expect the Government to exert its authority to assure that all of Guam's waste goes to the Layon Landfill? What is the timing of any such requirement?

Receiver Issue 8: *Third Party Management.* GEDA states that an RFP is in the development stage for third party management and cites written communication from the USDA stating that the Receiver may participate in the bidding.

Additional Receiver Comment: This evidences a serious misunderstanding by GEDA and USDA of the Receivership. The Order creating the Receivership states:

"IT IS FURTHER ORDERED that the Receiver shall have the authority required or necessary for the complete management and control of the Consent Decree projects, including but not limited to:

- (a) The supervision of all of Government of Guam's employees associated with the Consent Decree projects;*
- (b) The performance of existing contracts;*
- (c) The entering into future contracts deemed necessary. In awarding any future contracts, the Receiver shall follow the procedures required in Guam's statutes and regulations, unless, in the best judgment of the Receiver, such compliance would unreasonably delay the progress in meeting the mandates of the Consent Decree;"*

The above provisions of the Court's Order placing the Solid Waste Management Division into Receivership places it under the "complete management and control" of the Receiver. The Court explicitly places the performance of existing contracts and entering into future contracts under the authority of the Receiver. Under the Order, the Receiver is the responsible authority for entering into contracts. As such, neither GEDA nor any other entity has the authority to enter into a contract for third party management of the new landfill independent of the Receiver. Since the Receiver is responsible for the procurement of any contracts relative to solid waste, the Receiver cannot possibly bid on such a contract.

Receiver Issue 9: *Operating Budget and Rate Analysis.* GEDA states that USDA is to provide acknowledgement documenting that this requirement cannot be complied with until 2011 at the earliest and that non-compliance would not be subject to a default of the loan conditions. GEDA also notes that USDA is currently reviewing the executed contracts for compliance with their requirements, including modifications needed for compliance with the ARRA and Davis-Bacon prevailing wage requirements. It also states that these requirements will be incorporated as needed via amendments to contracts.

Additional Receiver Comment: The described acknowledgement must be provided in writing. In addition, it should be understood that neither the

Mr. Anthony C. Blaz
February 2, 2010
Page 4

Receiver nor the Government of Guam are in a position to force the contractors to accept contract amendments since these contractors already have valid and binding contracts. Retroactive amendments of this complexity are difficult to effectuate. This is especially true with respect to the Maeda contract, since most of the work under this contract has already been completed.

Receiver Issue 10: *Real Property Insurance.* GEDA states that USDA will provide the Government of Guam with the amount and type of insurance required.

Additional Receiver Comment: Written confirmation needs to be provided.

Receiver Issue 11: *Audit Agreement.* GEDA states that these audit services will be the responsibility of the Department of Administration in coordination with the Office of the Public Auditor.

Additional Receiver Comment: This issue is resolved from the Receiver's perspective.

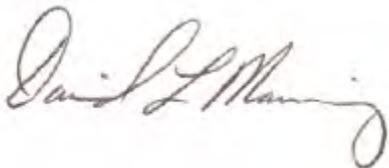
Receiver Recommendations: GEDA accurately describes the Receiver's recommendations and discussions with GEDA concerning these recommendations and other issues, including the timing of the loan, the Buy American and Davis Bacon requirements, the USDA prohibition of free service and the our concern about GEDA's consideration of financing for a private company to build a landfill and waste to energy plant on Guam.

Additional Receiver Comment: We have no additional comments other than those contained in this letter and our Quarterly Report to the District Court dated January 14, 2009.

We look forward to continuing our work with you to assist the Government of Guam in achieving its goals with respect to the USDA Loan/Grant without compromising the vital work of achieving full compliance with the Consent Decree.

Thank you.

Sincerely,



David L. Manning
GBB's Receiver Representative

c.c.

The Honorable Felix P. Camacho, Governor of Guam
The Honorable Alicia G. Limtiaco, Attorney General of Guam

Government of Guam
Department of Public Works, Solid Waste Management Division
542 North Marine Corps Drive, Tamuning, Guam 96913
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Solid Waste Management Division Projected Financial Results

100 Percent Section 30 Backed Bond Financed

(Excluding the Military as a Customer)

Program Cost	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Estimated Program Cost and Reserves										
Disposal Services	\$ 4,228,206	\$ 4,355,052	\$ 4,485,704	\$ 4,620,275	\$ 4,758,883	\$ 4,901,650	\$ 5,048,699	\$ 5,200,160	\$ 5,356,165	\$ 5,516,850
Residential Services	\$ 1,411,110	\$ 1,453,443	\$ 1,497,046	\$ 1,541,958	\$ 1,588,217	\$ 1,635,863	\$ 1,684,939	\$ 1,735,487	\$ 1,787,552	\$ 1,841,178
Support Services	\$ 881,466	\$ 907,910	\$ 935,147	\$ 963,201	\$ 992,097	\$ 1,021,860	\$ 1,052,516	\$ 1,084,092	\$ 1,116,614	\$ 1,150,113
Debt Service	\$ 4,363,374	\$ 4,363,374	\$ 9,584,540	\$ 9,584,311	\$ 9,582,859	\$ 9,582,859	\$ 9,582,546	\$ 9,584,056	\$ 9,582,913	\$ 9,584,158
Reserve for Equipment Replacement	\$ 1,886,492	\$ 1,943,087	\$ 2,001,380	\$ 2,061,421	\$ 2,123,264	\$ 2,186,962	\$ 2,252,571	\$ 2,320,148	\$ 2,389,752	\$ 2,461,445
Reserve for Closure	\$ 677,682	\$ 677,682	\$ 698,012	\$ 718,953	\$ 740,521	\$ 762,737	\$ 785,619	\$ 561,188	\$ 578,023	\$ 595,364
Reserve for Post Closure Care	\$ 480,911	\$ 480,911	\$ 495,338	\$ 510,198	\$ 525,504	\$ 541,269	\$ 557,507	\$ 574,233	\$ 591,459	\$ 609,203
Reserve for Future Cell Development	\$ 4,112,000	\$ 4,112,000	\$ 4,235,360	\$ 4,362,421	\$ 4,493,293	\$ 4,628,092	\$ 2,374,935	\$ 2,446,183	\$ 2,519,569	\$ 2,595,156
Total Cost and Reserves	\$ 18,041,240	\$ 18,293,459	\$ 23,932,528	\$ 24,362,738	\$ 24,804,638	\$ 25,261,292	\$ 23,339,332	\$ 23,505,545	\$ 23,922,047	\$ 24,353,467
Estimated Revenue										
Tipping Fee Revenue	\$ 15,179,109	\$ 17,127,579	\$ 18,231,618	\$ 19,350,907	\$ 17,957,899	\$ 15,834,484	\$ 15,252,672	\$ 15,524,351	\$ 15,829,438	\$ 16,112,093
Residential Collection Revenue	\$ 5,759,463	\$ 5,759,463	\$ 5,759,463	\$ 5,759,463	\$ 5,759,463	\$ 5,759,463	\$ 5,759,463	\$ 5,759,463	\$ 5,759,463	\$ 5,759,463
Transfer Stations (non-commercial)	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Total Revenue	\$ 21,238,572	\$ 23,187,042	\$ 24,291,081	\$ 25,410,370	\$ 24,017,362	\$ 21,893,947	\$ 21,312,135	\$ 21,583,814	\$ 21,888,901	\$ 22,171,556
Surplus/(Deficit)	\$ 3,197,331	\$ 4,893,583	\$ 358,553	\$ 1,047,632	\$ (787,277)	\$ (3,367,345)	\$ (2,027,197)	\$ (1,921,731)	\$ (2,033,146)	\$ (2,181,911)
Fund Balance										
Beginning Fund Balance	\$ 3,267,933	\$ 6,465,265	\$ 11,358,848	\$ 11,717,401	\$ 12,765,033	\$ 11,977,757	\$ 8,610,411	\$ 6,583,215	\$ 4,661,484	\$ 2,628,338
Ending Fund Balance	\$ 6,465,265	\$ 11,358,848	\$ 11,717,401	\$ 12,765,033	\$ 11,977,757	\$ 8,610,411	\$ 6,583,215	\$ 4,661,484	\$ 2,628,338	\$ 446,427
Fees										
Commercial Tipping Fees	\$165.53	\$165.53	\$165.53	\$165.53	\$165.53	\$165.53	\$165.53	\$165.53	\$165.53	\$165.53
Residential Collection Fees	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00
Transfer Stations (non-commercial)	various	various	various	various	various	various	various	various	various	various

Solid Waste Management Division Projected Financial Results

100 Percent Section 30 Backed Bond Financed

(Including the Military as a Customer)

Program Cost	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Estimated Program Cost and Reserves										
Disposal Services	\$ 4,228,206	\$ 4,355,052	\$ 4,485,704	\$ 4,620,275	\$ 4,758,883	\$ 4,901,650	\$ 5,048,699	\$ 5,200,160	\$ 5,356,165	\$ 5,516,850
Residential Services	\$ 1,411,110	\$ 1,453,443	\$ 1,497,046	\$ 1,541,958	\$ 1,588,217	\$ 1,635,863	\$ 1,684,939	\$ 1,735,487	\$ 1,787,552	\$ 1,841,178
Support Services	\$ 881,466	\$ 907,910	\$ 935,147	\$ 963,201	\$ 992,097	\$ 1,021,860	\$ 1,052,516	\$ 1,084,092	\$ 1,116,614	\$ 1,150,113
Debt Service	\$ 4,363,374	\$ 4,363,374	\$ 9,584,540	\$ 9,584,311	\$ 9,582,859	\$ 9,582,859	\$ 9,582,546	\$ 9,584,056	\$ 9,582,913	\$ 9,584,158
Reserve for Equipment Replacement	\$ 1,886,492	\$ 1,943,087	\$ 2,001,380	\$ 2,061,421	\$ 2,123,264	\$ 2,186,962	\$ 2,252,571	\$ 2,320,148	\$ 2,389,752	\$ 2,461,445
Reserve for Closure	\$ 806,705	\$ 806,705	\$ 830,906	\$ 855,833	\$ 881,508	\$ 907,953	\$ 706,692	\$ 727,892	\$ 749,729	\$ 772,221
Reserve for Post Closure Care	\$ 480,911	\$ 480,911	\$ 495,338	\$ 510,198	\$ 525,504	\$ 541,269	\$ 557,507	\$ 574,233	\$ 591,459	\$ 609,203
Reserve for Future Cell Development	\$ 5,114,000	\$ 5,114,000	\$ 5,267,420	\$ 5,425,443	\$ 5,588,206	\$ 3,196,852	\$ 3,064,258	\$ 3,156,185	\$ 3,250,871	\$ 3,348,397
Total Cost and Reserves	\$ 19,172,263	\$ 19,424,481	\$ 25,097,481	\$ 25,562,640	\$ 26,040,537	\$ 23,975,268	\$ 23,949,727	\$ 24,382,252	\$ 24,825,055	\$ 25,283,565
Estimated Revenue										
Tipping Fee Revenue	\$ 11,933,312	\$ 16,303,872	\$ 17,183,074	\$ 20,436,705	\$ 20,590,458	\$ 18,921,100	\$ 18,463,699	\$ 18,677,284	\$ 18,917,133	\$ 19,139,347
Residential Collection Revenue	\$ 5,184,071	\$ 5,184,071	\$ 5,184,071	\$ 5,184,071	\$ 5,184,071	\$ 5,184,071	\$ 5,184,071	\$ 5,184,071	\$ 5,184,071	\$ 5,184,071
Transfer Stations (non-commercial)	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Total Revenue	\$ 17,417,383	\$ 21,787,943	\$ 22,667,146	\$ 25,920,777	\$ 26,074,530	\$ 24,405,171	\$ 23,947,770	\$ 24,161,355	\$ 24,401,205	\$ 24,623,418
Surplus/(Deficit)	\$ (1,754,880)	\$ 2,363,462	\$ (2,430,335)	\$ 358,137	\$ 33,992	\$ 429,903	\$ (1,957)	\$ (220,897)	\$ (423,851)	\$ (660,147)
Fund Balance										
Beginning Fund Balance	\$ 3,267,933	\$ 1,513,054	\$ 3,876,515	\$ 1,446,180	\$ 1,804,316	\$ 1,838,309	\$ 2,268,212	\$ 2,266,255	\$ 2,045,358	\$ 1,621,507
Ending Fund Balance	\$ 1,513,054	\$ 3,876,515	\$ 1,446,180	\$ 1,804,316	\$ 1,838,309	\$ 2,268,212	\$ 2,266,255	\$ 2,045,358	\$ 1,621,507	\$ 961,360
Fees										
Commercial Tipping Fees	\$130.14	\$130.14	\$130.14	\$130.14	\$130.14	\$130.14	\$130.14	\$130.14	\$130.14	\$130.14
Residential Collection Fees	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00
Transfer Stations (non-commercial)	various	various	various	various	various	various	various	various	various	various

Solid Waste Management Division Projected Financial Results

USDA and Section 30 Backed Bond Financed

(Excluding the Military as a Customer)

Program Cost	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Estimated Program Cost and Reserves										
Disposal Services	\$ 4,228,206	\$ 4,355,052	\$ 4,485,704	\$ 4,620,275	\$ 4,758,883	\$ 4,901,650	\$ 5,048,699	\$ 5,200,160	\$ 5,356,165	\$ 5,516,850
Residential Services	\$ 1,411,110	\$ 1,453,443	\$ 1,497,046	\$ 1,541,958	\$ 1,588,217	\$ 1,635,863	\$ 1,684,939	\$ 1,735,487	\$ 1,787,552	\$ 1,841,178
Support Services	\$ 881,466	\$ 907,910	\$ 935,147	\$ 963,201	\$ 992,097	\$ 1,021,860	\$ 1,052,516	\$ 1,084,092	\$ 1,116,614	\$ 1,150,113
Debt Service	\$ 1,213,052	\$ 1,213,052	\$ 7,187,179	\$ 7,102,693	\$ 7,017,867	\$ 6,933,445	\$ 6,848,936	\$ 6,764,934	\$ 6,680,195	\$ 6,596,119
Reserve for Equipment Replacement	\$ 1,886,492	\$ 1,943,087	\$ 2,001,380	\$ 2,061,421	\$ 2,123,264	\$ 2,186,962	\$ 2,252,571	\$ 2,320,148	\$ 2,389,752	\$ 2,461,445
Reserve for Closure	\$ 677,682	\$ 677,682	\$ 698,012	\$ 718,953	\$ 740,521	\$ 762,737	\$ 785,619	\$ 561,188	\$ 578,023	\$ 595,364
Reserve for Post Closure Care	\$ 480,911	\$ 480,911	\$ 495,338	\$ 510,198	\$ 525,504	\$ 541,269	\$ 557,507	\$ 574,233	\$ 591,459	\$ 609,203
Reserve for Future Cell Development	\$ 4,112,000	\$ 4,112,000	\$ 4,235,360	\$ 4,362,421	\$ 4,493,293	\$ 4,628,092	\$ 2,374,935	\$ 2,446,183	\$ 2,519,569	\$ 2,595,156
Total Cost and Reserves	\$ 14,890,919	\$ 15,143,137	\$ 21,535,166	\$ 21,881,120	\$ 22,239,647	\$ 22,611,878	\$ 20,605,722	\$ 20,686,424	\$ 21,019,329	\$ 21,365,427
Estimated Revenue										
Tipping Fee Revenue	\$ 13,149,363	\$ 14,837,284	\$ 15,793,692	\$ 16,763,310	\$ 15,556,574	\$ 13,717,102	\$ 13,213,090	\$ 13,448,440	\$ 13,712,731	\$ 13,957,589
Residential Collection Revenue	\$ 5,191,766	\$ 5,191,766	\$ 5,191,766	\$ 5,191,766	\$ 5,191,766	\$ 5,191,766	\$ 5,191,766	\$ 5,191,766	\$ 5,191,766	\$ 5,191,766
Transfer Stations (non-commercial)	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Total Revenue	\$ 18,641,129	\$ 20,329,050	\$ 21,285,458	\$ 22,255,076	\$ 21,048,340	\$ 19,208,867	\$ 18,704,856	\$ 18,940,206	\$ 19,204,497	\$ 19,449,355
Surplus/(Deficit)	\$ 3,750,211	\$ 5,185,914	\$ (249,708)	\$ 373,956	\$ (1,191,307)	\$ (3,403,011)	\$ (1,900,867)	\$ (1,746,218)	\$ (1,814,832)	\$ (1,916,073)
Fund Balance										
Beginning Fund Balance	\$ 3,267,933	\$ 7,018,144	\$ 12,204,058	\$ 11,954,349	\$ 12,328,306	\$ 11,136,999	\$ 7,733,988	\$ 5,833,121	\$ 4,086,903	\$ 2,272,071
Ending Fund Balance	\$ 7,018,144	\$ 12,204,058	\$ 11,954,349	\$ 12,328,306	\$ 11,136,999	\$ 7,733,988	\$ 5,833,121	\$ 4,086,903	\$ 2,272,071	\$ 355,998
Fees										
Commercial Tipping Fees	\$143.40	\$143.40	\$143.40	\$143.40	\$143.40	\$143.40	\$143.40	\$143.40	\$143.40	\$143.40
Residential Collection Fees	\$27.04	\$27.04	\$27.04	\$27.04	\$27.04	\$27.04	\$27.04	\$27.04	\$27.04	\$27.04
Transfer Stations (non-commercial)	various	various	various	various	various	various	various	various	various	various

Solid Waste Management Division Projected Financial Results

USDA and Section 30 Backed Bond Financed

(Including the Military as a Customer)

Program Cost	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Estimated Program Cost and Reserves										
Disposal Services	\$ 4,228,206	\$ 4,355,052	\$ 4,485,704	\$ 4,620,275	\$ 4,758,883	\$ 4,901,650	\$ 5,048,699	\$ 5,200,160	\$ 5,356,165	\$ 5,516,850
Residential Services	\$ 1,411,110	\$ 1,453,443	\$ 1,497,046	\$ 1,541,958	\$ 1,588,217	\$ 1,635,863	\$ 1,684,939	\$ 1,735,487	\$ 1,787,552	\$ 1,841,178
Support Services	\$ 881,466	\$ 907,910	\$ 935,147	\$ 963,201	\$ 992,097	\$ 1,021,860	\$ 1,052,516	\$ 1,084,092	\$ 1,116,614	\$ 1,150,113
Debt Service	\$ 1,213,052	\$ 1,213,052	\$ 7,187,179	\$ 7,102,693	\$ 7,017,867	\$ 6,933,445	\$ 6,848,936	\$ 6,764,934	\$ 6,680,195	\$ 6,596,119
Reserve for Equipment Replacement	\$ 1,886,492	\$ 1,943,087	\$ 2,001,380	\$ 2,061,421	\$ 2,123,264	\$ 2,186,962	\$ 2,252,571	\$ 2,320,148	\$ 2,389,752	\$ 2,461,445
Reserve for Closure	\$ 806,705	\$ 806,705	\$ 830,906	\$ 855,833	\$ 881,508	\$ 907,953	\$ 706,692	\$ 727,892	\$ 749,729	\$ 772,221
Reserve for Post Closure Care	\$ 480,911	\$ 480,911	\$ 495,338	\$ 510,198	\$ 525,504	\$ 541,269	\$ 557,507	\$ 574,233	\$ 591,459	\$ 609,203
Reserve for Future Cell Development	\$ 5,114,000	\$ 5,114,000	\$ 5,267,420	\$ 5,425,443	\$ 5,588,206	\$ 3,196,852	\$ 3,064,258	\$ 3,156,185	\$ 3,250,871	\$ 3,348,397
Total Cost and Reserves	\$ 16,021,941	\$ 16,274,159	\$ 22,700,119	\$ 23,081,022	\$ 23,475,546	\$ 21,325,854	\$ 21,216,118	\$ 21,563,131	\$ 21,922,337	\$ 22,295,526
Estimated Revenue										
Tipping Fee Revenue	\$ 10,364,119	\$ 14,159,964	\$ 14,923,554	\$ 17,749,343	\$ 17,882,878	\$ 16,433,034	\$ 16,035,780	\$ 16,221,279	\$ 16,429,590	\$ 16,622,583
Residential Collection Revenue	\$ 4,734,776	\$ 4,734,776	\$ 4,734,776	\$ 4,734,776	\$ 4,734,776	\$ 4,734,776	\$ 4,734,776	\$ 4,734,776	\$ 4,734,776	\$ 4,734,776
Transfer Stations (non-commercial)	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Total Revenue	\$ 15,398,895	\$ 19,194,739	\$ 19,958,330	\$ 22,784,118	\$ 22,917,653	\$ 21,467,810	\$ 21,070,556	\$ 21,256,055	\$ 21,464,365	\$ 21,657,358
Surplus/(Deficit)	\$ (623,047)	\$ 2,920,580	\$ (2,741,790)	\$ (296,903)	\$ (557,893)	\$ 141,956	\$ (145,562)	\$ (307,076)	\$ (457,972)	\$ (638,168)
Fund Balance										
Beginning Fund Balance	\$ 3,267,933	\$ 2,644,887	\$ 5,565,467	\$ 2,823,677	\$ 2,526,774	\$ 1,968,881	\$ 2,110,837	\$ 1,965,275	\$ 1,658,199	\$ 1,200,227
Ending Fund Balance	\$ 2,644,887	\$ 5,565,467	\$ 2,823,677	\$ 2,526,774	\$ 1,968,881	\$ 2,110,837	\$ 1,965,275	\$ 1,658,199	\$ 1,200,227	\$ 562,059
Fees										
Commercial Tipping Fees	\$113.02	\$113.02	\$113.02	\$113.02	\$113.02	\$113.02	\$113.02	\$113.02	\$113.02	\$113.02
Residential Collection Fees	\$24.66	\$24.66	\$24.66	\$24.66	\$24.66	\$24.66	\$24.66	\$24.66	\$24.66	\$24.66
Transfer Stations (non-commercial)	various	various	various	various	various	various	various	various	various	various

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	<u>6/1 to 6/6</u>	<u>6/8 to 6/13</u>	<u>6/15 to 6/20</u>	<u>6/22 to 6/27</u>	<u>6/29 to 7/4</u>
	Net Wt.				
Commercial Solid Waste (Compacted)	752,751 lb	564,860 lb	816,460 lb	714,580 lb	638,700 lb
Commercial Solid Waste (Non-Compacted)	1,045,520 lb	963,420 lb	1,167,760 lb	1,170,940 lb	1,198,000 lb
Agat Transfer Station (Non-Compacted)	24,160 lb	25,300 lb	25,960 lb	25,460 lb	29,780 lb
Dededo Transfer Station (Non-Compacted)	61,760 lb	89,120 lb	79,960 lb	75,360 lb	70,880 lb
Malojloj Transfer Station (Non-Compacted)	22,720 lb	11,300 lb	19,780 lb	20,800 lb	13,260 lb
Ordot Transfer Station (Non-Compacted)	43,020 lb	43,840 lb	35,700 lb	43,720 lb	56,900 lb
Mayors' Solid Waste (Non-Compacted)	47,740 lb	33,080 lb	63,640 lb	49,540 lb	55,620 lb
GovGuam Solid Waste (Non-Compacted)	240,240 lb	60,560 lb	104,840 lb	160,780 lb	116,440 lb
Residential Packer Trucks SWMD	703,980 lb	655,940 lb	711,000 lb	721,640 lb	709,360 lb
Grand Total:	2,941,891 lb	2,447,420 lb	3,025,100 lb	2,982,820 lb	2,888,940 lb
Weekly Tons of MSW	1,471	1,224	1,513	1,491	1,444
Average Daily Tons of MSW	245	204	252	249	241
Projected Annual Tons of MSW	76,489	63,633	78,653	77,553	75,112
Cover Material-DPW	2,604,449 lb	2,286,220 lb	2,337,260 lb	2,214,620 lb	2,119,420 lb
Non DPW Cover Material	405,920 lb	382,740 lb	833,780 lb	719,960 lb	1,220,100 lb
Total Cover material	3,010,369 lb	2,668,960 lb	3,171,040 lb	2,934,580 lb	3,339,520 lb
Cover % of MSW	102%	109%	105%	98%	116%
Grand Total	5,952,260 lb	5,116,380 lb	6,196,140 lb	5,917,400 lb	6,228,460 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	<u>7/6 to 7/11</u>	<u>7/13 to 7/18</u>	<u>7/20 to 7/25</u>	<u>7/27 to 8/1</u>	<u>8/3 to 8/8</u>
	Net Wt.				
Commercial Solid Waste (Compacted)	706,680 lb	677,520 lb	697,119 lb	726,600 lb	775,840 lb
Commercial Solid Waste (Non-Compacted)	1,299,080 lb	1,315,380 lb	1,236,846 lb	1,351,040 lb	1,485,080 lb
Agat Transfer Station (Non-Compacted)	26,760 lb	35,600 lb	31,660 lb	34,260 lb	32,940 lb
Dededo Transfer Station (Non-Compacted)	78,900 lb	96,500 lb	90,840 lb	72,400 lb	99,540 lb
Malojloj Transfer Station (Non-Compacted)	22,340 lb	24,900 lb	20,600 lb	24,420 lb	22,740 lb
Ordot Transfer Station (Non-Compacted)	60,300 lb	61,260 lb	55,520 lb	55,260 lb	59,020 lb
Mayors' Solid Waste (Non-Compacted)	74,460 lb	71,280 lb	52,260 lb	51,480 lb	87,280 lb
GovGuam Solid Waste (Non-Compacted)	40,000 lb	28,520 lb	60,360 lb	42,400 lb	47,360 lb
Residential Packer Trucks SWMD	768,300 lb	778,460 lb	753,220 lb	765,960 lb	830,540 lb
Grand Total:	3,076,820 lb	3,089,420 lb	2,998,425 lb	3,123,820 lb	3,440,340 lb
Weekly Tons of MSW	1,538	1,545	1,499	1,562	1,720
Average Daily Tons of MSW	256	257	250	260	287
Projected Annual Tons of MSW	79,997	80,325	77,959	81,219	89,449
Cover Material-DPW	2,935,660	2,396,460 lb	1,341,420 lb	1,296,140 lb	1,987,340 lb
Non DPW Cover Material	578,640	266,420 lb	448,860 lb	1,458,180 lb	271,680 lb
Total Cover material	3,514,300	2,662,880 lb	1,790,280 lb	2,754,320 lb	2,259,020 lb
Cover % of MSW	114%	86%	60%	88%	66%
Grand Total	6,591,120	5,752,300 lb	4,788,705 lb	5,878,140 lb	5,699,360 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	8/10 to 8/15	8/17 to 8/22	8/24 to 8/29	8/31 to 9/5	9/7 to 9/12
	Net Wt.				
Commercial Solid Waste (Compacted)	861,760 lb	792,640 lb	766,880 lb	684,300 lb	736,120 lb
Commercial Solid Waste (Non-Compacted)	1,393,060 lb	1,425,220 lb	1,344,520 lb	1,291,420 lb	1,306,520 lb
Agat Transfer Station (Non-Compacted)	39,260 lb	24,560 lb	31,440 lb	32,220 lb	27,700 lb
Dededo Transfer Station (Non-Compacted)	89,540 lb	98,100 lb	93,160 lb	86,660 lb	78,020 lb
Malojloj Transfer Station (Non-Compacted)	28,220 lb	18,520 lb	32,960 lb	30,940 lb	22,220 lb
Ordot Transfer Station (Non-Compacted)	70,040 lb	82,480 lb	65,300 lb	71,700 lb	46,140 lb
Mayors' Solid Waste (Non-Compacted)	63,340 lb	61,800 lb	64,320 lb	54,440 lb	89,000 lb
GovGuam Solid Waste (Non-Compacted)	64,200 lb	44,640 lb	77,480 lb	51,300 lb	78,460 lb
Residential Packer Trucks SWMD	797,680 lb	767,680 lb	759,260 lb	748,300 lb	753,380 lb
Grand Total:	3,407,100 lb	3,315,640 lb	3,235,320 lb	3,051,280 lb	3,137,560 lb
Weekly Tons of MSW	1,704	1,658	1,618	1,526	1,569
Average Daily Tons of MSW	284	276	270	254	261
Projected Annual Tons of MSW	88,585	86,207	84,118	79,333	81,577
Cover Material-DPW	1,954,780 lb	2,020,020 lb	2,890,160 lb	2,892,300 lb	1,793,517 lb
Non DPW Cover Material	577,660 lb	177,340 lb	64,960 lb	121,580 lb	0 lb
Total Cover material	2,532,440 lb	2,197,360 lb	2,955,120 lb	3,013,880 lb	1,793,517 lb
Cover % of MSW	74%	66%	91%	99%	57%
Grand Total	5,939,540 lb	5,513,000 lb	6,190,440 lb	6,065,160 lb	4,931,077 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	9/14 to 9/19	9/21 to 9/26	9/28 to 10/03	10/5 to 10/10	10/12 to 10/17
	Net Wt.				
Commercial Solid Waste (Compacted)	689,900 lb	748,400 lb	758,760 lb	783,020 lb	703,060 lb
Commercial Solid Waste (Non-Compacted)	1,190,560 lb	1,389,900 lb	1,395,100 lb	1,303,540 lb	1,142,420 lb
Agat Transfer Station (Non-Compacted)	25,960 lb	27,340 lb	36,380 lb	30,920 lb	31,440 lb
Dededo Transfer Station (Non-Compacted)	100,520 lb	83,500 lb	119,020 lb	91,940 lb	86,820 lb
Malojloj Transfer Station (Non-Compacted)	26,960 lb	25,960 lb	24,980 lb	24,360 lb	23,360 lb
Ordot Transfer Station (Non-Compacted)	55,860 lb	65,020 lb	84,740 lb	61,440 lb	63,720 lb
Mayors' Solid Waste (Non-Compacted)	68,800 lb	55,980 lb	57,660 lb	46,540 lb	63,500 lb
GovGuam Solid Waste (Non-Compacted)	38,300 lb	73,380 lb	61,740 lb	79,180 lb	51,560 lb
Residential Packer Trucks SWMD	727,080 lb	765,900 lb	755,860 lb	801,040 lb	657,620 lb
Grand Total:	2,923,940 lb	3,235,380 lb	3,294,240 lb	3,221,980 lb	2,823,500 lb
Weekly Tons of MSW	1,462	1,618	1,647	1,611	1,412
Average Daily Tons of MSW	244	270	275	268	235
Projected Annual Tons of MSW	76,022	84,120	85,650	83,771	73,411
Cover Material-DPW	1,962,140 lb	4,368,680 lb	2,476,380 lb	2,521,880 lb	2263320 lb
Non DPW Cover Material	0 lb	- lb	176,540 lb	578,420 lb	469260 lb
Total Cover material	1,962,140 lb	4,368,680 lb	2,652,920 lb	3,100,300 lb	2,732,580 lb
Cover % of MSW	67%	135%	81%	96%	97%
Grand Total	4,886,080 lb	7,604,060 lb	5,947,160 lb	6,322,280 lb	5,556,080 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	10/19 to 10/24	10/26 to 10/31	11/2 to 11/7	11/9 to 11/14	11/16 to 11/21
	Net Wt.				
Commercial Solid Waste (Compacted)	763,560 lb	781,360 lb	732,840 lb	715,760 lb	713,300 lb
Commercial Solid Waste (Non-Compacted)	1,293,420 lb	1,343,900 lb	1,321,340 lb	1,248,900 lb	1,223,580 lb
Agat Transfer Station (Non-Compacted)	32,820 lb	27,160 lb	31,460 lb	32,600 lb	23,480 lb
Dededo Transfer Station (Non-Compacted)	87,440 lb	89,580 lb	99,340 lb	84,460 lb	80,460 lb
Malojloj Transfer Station (Non-Compacted)	27,300 lb	20,780 lb	31,160 lb	16,080 lb	21,160 lb
Ordot Transfer Station (Non-Compacted)	51,160 lb	60,960 lb	72,100 lb	55,020 lb	59,600 lb
Mayors' Solid Waste (Non-Compacted)	52,400 lb	68,860 lb	56,320 lb	35,140 lb	57,640 lb
GovGuam Solid Waste (Non-Compacted)	65,680 lb	5,500 lb	54,860 lb	64,280 lb	117,720 lb
Residential Packer Trucks SWMD	744,360 lb	741,480 lb	788,120 lb	722,200 lb	740,680 lb
Grand Total:	3,118,140 lb	3,139,580 lb	3,187,540 lb	2,974,440 lb	3,037,620 lb
Weekly Tons of MSW	1,559	1,570	1,594	1,487	1,519
Average Daily Tons of MSW	260	262	266	248	253
Projected Annual Tons of MSW	81,072	81,629	82,876	77,335	78,978
Cover Material-DPW	2,643,220 lb	2,789,640 lb	2,380,200 lb	2,167,820 lb	3,143,420 lb
Non DPW Cover Material	0 lb	- lb	298,640 lb	67,120 lb	35,100 lb
Total Cover material	2,643,220 lb	2,789,640 lb	2,678,840 lb	2,234,940 lb	3,178,520 lb
Cover % of MSW	85%	89%	84%	75%	105%
Grand Total	5,761,360 lb	5,929,220 lb	5,866,380 lb	5,209,380 lb	6,216,140 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	<u>11/23 to 11/28</u>	<u>11/30 to 12/5</u>	<u>12/7 to 12/12</u>	<u>12/14 to 12/19</u>	<u>12/21 to 12/26</u>
	<u>Net Wt.</u>	<u>Net Wt.</u>	<u>Net Wt.</u>	<u>Net Wt.</u>	<u>Net Wt.</u>
Commercial Solid Waste (Compacted)	641,880 lb	881,060 lb	777,260 lb	736,420 lb	611,120 lb
Commercial Solid Waste (Non-Compacted)	1,298,900 lb	1,402,740 lb	1,301,800 lb	1,244,040 lb	1,291,940 lb
Agat Transfer Station (Non-Compacted)	29,520 lb	35,660 lb	32,440 lb	27,380 lb	30,280 lb
Dededo Transfer Station (Non-Compacted)	86,320 lb	111,120 lb	78,700 lb	115,000 lb	90,600 lb
Malojloj Transfer Station (Non-Compacted)	17,580 lb	42,460 lb	24,520 lb	18,960 lb	29,820 lb
Ordot Transfer Station (Non-Compacted)	45,280 lb	73,680 lb	65,320 lb	52,820 lb	57,340 lb
Mayors' Solid Waste (Non-Compacted)	58,420 lb	46,900 lb	44,540 lb	64,800 lb	48,720 lb
GovGuam Solid Waste (Non-Compacted)	149,220 lb	57,120 lb	106,300 lb	181,480 lb	77,120 lb
Residential Packer Trucks SWMD	696,840 lb	885,840 lb	788,660 lb	763,860 lb	733,860 lb
Grand Total:	3,023,960 lb	3,536,580 lb	3,219,540 lb	3,204,760 lb	2,970,800 lb
Weekly Tons of MSW	1,512	1,768	1,610	1,602	1,485
Average Daily Tons of MSW	252	295	268	267	248
Projected Annual Tons of MSW	78,623	91,951	83,708	83,324	77,241
Cover Material-DPW	2,456,080 lb	2,813,920 lb	2,252,400 lb	3,023,960 lb	2,033,240 lb
Non DPW Cover Material	70,420 lb	- lb	- lb	- lb	- lb
Total Cover material	2,526,500 lb	2,813,920 lb	2,252,400 lb	3,023,960 lb	2,033,240 lb
Cover % of MSW	84%	80%	70%	94%	68%
Grand Total	5,550,460 lb	6,350,500 lb	5,471,940 lb	6,228,720 lb	5,004,040 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	<u>12/28 to 1/2</u>	<u>1/4 to 1/9</u>	<u>1/18 to 1/23</u>	<u>1/11 to 1/16</u>	<u>1/25 to 1/30</u>
	Net Wt.				
Commercial Solid Waste (Compacted)	766,040 lb	783,080 lb	754,320 lb	797,160 lb	731,860 lb
Commercial Solid Waste (Non-Compacted)	1,391,860 lb	1,354,360 lb	1,328,880 lb	1,339,540 lb	1,300,440 lb
Agat Transfer Station (Non-Compacted)	41,780 lb	46,820 lb	29,100 lb	36,820 lb	30,460 lb
Dededo Transfer Station (Non-Compacted)	92,640 lb	80,540 lb	98,180 lb	93,160 lb	100,740 lb
Malojloj Transfer Station (Non-Compacted)	43,520 lb	22,800 lb	17,860 lb	23,940 lb	22,820 lb
Ordot Transfer Station (Non-Compacted)	93,320 lb	60,700 lb	54,360 lb	50,940 lb	55,620 lb
Mayors' Solid Waste (Non-Compacted)	52,880 lb	48,620 lb	47,440 lb	37,280 lb	47,620 lb
GovGuam Solid Waste (Non-Compacted)	82,760 lb	107,840 lb	24,360 lb	8,740 lb	41,880 lb
Residential Packer Trucks SWMD	903,240 lb	867,700 lb	770,920 lb	762,080 lb	744,840 lb
Grand Total:	3,468,040 lb	3,372,460 lb	3,125,420 lb	3,149,660 lb	3,076,280 lb
Weekly Tons of MSW	1,734	1,686	1,563	1,575	1,538
Average Daily Tons of MSW	289	281	260	262	256
Projected Annual Tons of MSW	90,169	87,684	81,261	81,891	79,983
Cover Material-DPW	1,259,660 lb	1,442,360 lb	2,027,080 lb	2,027,080 lb	2,581,020 lb
Non DPW Cover Material	20,220 lb	- lb	- lb	- lb	- lb
Total Cover material	1,279,880 lb	1,442,360 lb	2,027,080 lb	2,027,080 lb	2,581,020 lb
Cover % of MSW	37%	43%	65%	64%	84%
Grand Total	4,747,920 lb	4,814,820 lb	5,152,500 lb	5,176,740 lb	5,657,300 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	<u>2/1 to 2/6</u>	<u>2/8 to 2/13</u>	<u>2/15 to 2/20</u>	<u>2/22 to 2/27</u>	<u>3/1 to 3/6</u>
	Net Wt.				
Commercial Solid Waste (Compacted)	702,460 lb	677,220 lb	714,260 lb	681,000 lb	729,640 lb
Commercial Solid Waste (Non-Compacted)	1,248,140 lb	1,246,760 lb	1,259,080 lb	1,265,720 lb	1,271,100 lb
Agat Transfer Station (Non-Compacted)	22,800 lb	29,580 lb	22,440 lb	28,580 lb	24,280 lb
Dededo Transfer Station (Non-Compacted)	78,760 lb	74,480 lb	89,460 lb	80,100 lb	79,600 lb
Malojloj Transfer Station (Non-Compacted)	20,620 lb	25,100 lb	24,560 lb	26,180 lb	21,260 lb
Ordot Transfer Station (Non-Compacted)	46,740 lb	46,100 lb	45,760 lb	40,960 lb	51,200 lb
Mayors' Solid Waste (Non-Compacted)	39,940 lb	41,800 lb	43,340 lb	45,440 lb	31,920 lb
GovGuam Solid Waste (Non-Compacted)	186,500 lb	166,620 lb	371,820 lb	182,360 lb	160,140 lb
Residential Packer Trucks SWMD	747,800 lb	712,980 lb	697,680 lb	710,140 lb	738,340 lb
Grand Total:	3,093,760 lb	3,020,640 lb	3,268,400 lb	3,060,480 lb	3,107,480 lb
Weekly Tons of MSW	1,547	1,510	1,634	1,530	1,554
Average Daily Tons of MSW	258	252	272	255	259
Projected Annual Tons of MSW	80,438	78,537	84,978	79,572	80,794
Cover Material-DPW	2,680,720 lb	2,590,720 lb	2,005,500 lb	2,100,820 lb	2,078,200 lb
Non DPW Cover Material	- lb	- lb	lb	lb	lb
Total Cover material	2,680,720 lb	2,590,720 lb	2,005,500 lb	2,100,820 lb	2,078,200 lb
Cover % of MSW	87%	86%	61%	69%	67%
Grand Total	5,774,480 lb	5,611,360 lb	5,273,900 lb	5,161,300 lb	5,185,680 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	<u>3/8 to 3/13</u>	<u>3/15 to 3/20</u>	<u>3/22 to 3/27</u>	<u>Weekly Average</u>
	Net Wt.	Net Wt.	Net Wt.	Net Wt.
Commercial Solid Waste (Compacted)	681,160 lb	723,560 lb	740,240 lb	730,989 lb
Commercial Solid Waste (Non-Compacted)	1,286,580 lb	1,318,120 lb	1,312,460 lb	1,286,254 lb
Agat Transfer Station (Non-Compacted)	29,180 lb	26,280 lb	23,080 lb	30,072 lb
Dededo Transfer Station (Non-Compacted)	74,660 lb	73,420 lb	86,400 lb	87,621 lb
Malojloj Transfer Station (Non-Compacted)	19,080 lb	21,400 lb	22,600 lb	23,788 lb
Ordot Transfer Station (Non-Compacted)	38,760 lb	39,500 lb	59,160 lb	57,148 lb
Mayors' Solid Waste (Non-Compacted)	57,200 lb	51,600 lb	44,340 lb	54,300 lb
GovGuam Solid Waste (Non-Compacted)	249,260 lb	132,140 lb	91,480 lb	97,835 lb
Residential Packer Trucks SWMD	721,500 lb	719,400 lb	721,280 lb	752,465 lb
Grand Total:	3,157,380 lb	3,105,420 lb	3,101,040 lb	3,120,473 lb
Weekly Tons of MSW	1,579	1,553	1,551	1,560
Average Daily Tons of MSW	263	259	258	260
Projected Annual Tons of MSW	82,092	80,741	80,627	81,132
Cover Material-DPW	2,211,400 lb	2,254,080 lb	1,415,580 lb	2,303,262 lb
Non DPW Cover Material	lb	lb	lb	214,966 lb
Total Cover material	2,211,400 lb	2,254,080 lb	1,415,580 lb	2,518,229 lb
Cover % of MSW	70%	73%	46%	81%
Grand Total	5,368,780 lb	5,359,500 lb	4,516,620 lb	5,638,702 lb

DRAFT AGREEMENT

For

Provision of Solid Waste Disposal Services
By Guam Government to the US Navy

THIS SOLID WASTE DISPOSAL "AGREEMENT" made and entered into this xx day of XXXX, 201X, (the "Effective Date"), and is made by and between the COMMANDER NAVFAC REGION M MARIANAS (COMNAVRED), NAVAL FACILITIES ENGINEERING COMMAND MARIANAS, (NAVFAC). GERSHMAN, BRICKNER & BRATTON, INC. FOR THE DISTRICT COURT OF GUAM, TERRITORY OF GUAM (RECEIVER) and the GOVERNMENT OF GUAM (GOVGUAM).

SECTION 1. INTRODUCTION

The purpose of this AGREEMENT is to establish the terms for waste disposal by NAVFAC and associated U.S. Department of Defense organizations in the Layon Municipal Solid Waste Landfill ("LMSWL") or Transfer Station ("TS") and to establish a frame-work for mutual cooperation in the management of waste as defined in this AGREEMENT.

Prior Agreement. On July 17, 2009, the parties signed a LETTER OF INTENT ("LOI") in which they formalized their intention to develop this AGREEMENT; once executed, this AGREEMENT will replace the LOI.

SECTION 2. DEFINITIONS

1. Definitions of Waste –
 - a. Acceptable Waste - The following types of waste are acceptable for disposal under this AGREEMENT:
 - i. Non-hazardous Solid Waste, and
 - ii. Special Wasteas defined in Attachment A- Permit to Operate the LMSWL issued by GUAM Environmental Protection Agency ("GUAM EPA"), and Attachment B - Book 4, Operations Plan, Appendix B, as well as any other waste material described in the Permit to Operate issued by the GUAM EPA.
 - b. Unacceptable Waste - Regulated hazardous waste, polychlorinated biphenyls (PCB), and any other material described in the current version of the Permit to Operate as defined in Attachment A- Permit to Operate the LMSWL issued by GUAM EPA, and Attachment B - Book 4, Operations Plan, Appendix B. GOVGUAM and NAVFAC agree to separately operate programs to enforce the exclusion of Unacceptable Waste from their respective collection systems so as to minimize the potential for disposal of Unacceptable Waste in the LMSWL.
2. Other Definitions.
 - a. Closure - Actions taken by the owner or operator of a Solid Waste facility to cease accepting waste at the site in its entirety or in some portion of the site and to close in conformance with applicable regulations at the time for such closures and to prepare the site, or portion of the site for the post-closure period.

- b. Commercial Solid Waste - Solid Waste generated by retail and commercial facilities, offices, restaurants, warehouses, residential dwellings of five or more units, hotels and other facilities for temporary housing, crew quarters, camp grounds, picnic areas, day use recreation areas, other non-manufacturing activities, and institutions including schools, colleges, and other governmental functions of various types.
- c. Construction and Demolition Waste – Waste consisting of building materials, packaging, and rubble resulting from construction, remodeling, repair, and demolition operations of houses, buildings, factories, institutions, and other structures.
- d. Disposal- The placing for final disposition of any Solid Waste into the LMSWL in accordance with conditions of the Permit to Operate issued by Guam EPA shall be considered acceptable disposal. Placing for final disposition Solid Waste in any other facility (other than those operated by the NAVFAC) shall not be considered acceptable disposal and will not meet the terms of this AGREEMENT.
- e. Guam Public Utilities Commission (PUC) – The independent regulatory commission, which regulates the rate and rates impacting procurements of the Guam Power Authority, Guam Waterworks Authority, the Department of Public Works' Division of Solid Waste Management and the Guam municipal golf course.
- f. Household Hazardous Waste (HHW) - Waste products which exhibit characteristics for reactivity, ignitability, corrosivity, or toxicity, as defined by the Resource Conservation and Recovery Act (RCRA), as amended, as hazardous waste, but are generated by households. Examples include, but are not limited to, drain cleaners, latex and oil paint, motor oil, antifreeze, fuel, poisons, pesticides, herbicides and rodenticides, fluorescent lamps, lamp ballasts, smoke detectors, medical waste, some types of cleaning chemicals, and consumer electronics (such as televisions, computers, and cell phones). HHW may be disposed of in the LMSWL if such disposal is in compliance with the requirements of the RCRA.
- g. Household Waste - Any Solid Waste (including garbage, trash, and sanitary waste in septic tanks) generated by households of single- and multiple-residences of up to four units.
- h. Industrial Solid Waste - Solid Waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of the RCRA or Guam's Hazardous Waste Management regulations.
- i. Integrated Solid Waste Management Plan (Plan) - The set of objectives and approaches to reach them regarding solid waste management and recycling authorized by Guam Law and promulgated by the Guam EPA.
- j. Municipal Solid Waste Landfill (MSWLF) unit - A discrete area of land or an excavation that receives Household Waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as

those terms are defined in 40 CFR 257.2. A Municipal Solid Waste landfill may also receive other types of RCRA Subtitle D wastes, such as Commercial Solid Waste, nonhazardous sludge, and Industrial Solid Waste.

- k. Post-Closure Care – Activities of monitoring and management of a MSWLF after closure has been completed to ensure environmental safety for at least a 30- year period after closure has occurred or such period as applicable law and regulations shall require.
- l. Recycled Material- A material that is used in the place of a primary, raw or virgin material in manufacturing a product
- m. Recycling - The process by which materials are recovered from Solid Waste for use in new products and materials.
- n. Reuse- The use of a material or item for a second or subsequent use similar to that for which the material or item was originally intended.
- o. Scavenging - The action of a person or person(s) removing materials from loads of Acceptable Waste delivered to the LMSWL or TS for their own personal benefit, on an informal basis and not as a contracted or organized activity at the LMSWL or TS.
- p. Solid Waste - Any garbage, refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges that are point sources subject to permit under 33 US.C. 1342, or source, special nuclear, or by-product materials as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923)
- q. Solid Waste Management - The systematic administration of activities that provide for the collection, source separation, storage, transportation, transfer, processing, treatment, and disposal of Solid Waste, including the recovery and recycling of materials from Solid Waste.
- r. Tipping Fees - Fees charged to dispose of or deposit Solid Waste in a LMSWLF unit or TS. The tipping fee under this AGREEMENT shall be assessed and calculated on a per ton basis.
- s. Transfer Station - An intermediate waste facility in which Solid Waste collected from any source is temporarily deposited and stored while awaiting transportation to another Solid Waste Management facility for Disposal.
- t. Waste Reduction – The act of reducing the amount or type of waste generated.

SECTION 3. COMMODITY AND SERVICES

1. **Responsible Agency.** GOVGUAM agrees to pursue development and implementation of an Authority that will function to plan, manage, finance, and operate or cause to be operated the LMSWLF or TS, and all other elements of the Solid Waste disposal system under the control of the Receiver as of January 1, 2010. The Authority shall be governed in substantially the same manner as the Guam Water Works Authority and shall have its rates governed by the Guam Public Utilities Commission. GOVGUAM agrees, upon the creation and commencement of operation of the Authority, to assign and convey all rights for fixed and non-fixed assets used to provide Solid Waste Management services including the LMSWLF, TS, and all other proposed and actual elements of the Solid Waste Management system to the Authority.
2. **Services To Be Provided.**
 - a. **Disposal Services.** GOVGUAM, acting through the Authority created pursuant to Section 3, Item 1 and the RECEIVER agree to provide for NAVFAC disposal of Acceptable Waste in the LSMLF under the Terms of this AGREEMENT. Materials not meeting the definition and terms of Acceptable Waste may not be delivered to the LMSWL.
 - b. **Transfer Station.** GOVGUAM, acting through the Authority created pursuant to Section 3, Item 1 and the RECEIVER agree to provide access to a properly constructed and permitted TS, and NAVFAC shall have rights to deliver its Acceptable Waste to this TS.
3. **Operational Schedule.** GOVGUAM, acting through the Authority created pursuant to Section 3, Item 1 and the RECEIVER agree to develop and implement an operational schedule that will allow deliveries of Acceptable Waste at the LMSWL consistent with Operations Plan, Book 4, including Section 5.1 and 7.0, and at the TS during business hours of a minimum of 8:00 am to 4:00 pm, Monday through Friday, holidays excepted. Holidays and other conditions that will provide for closing of the LMSWL shall also apply and cause the closing of the TS.
4. **No Scavenging Policy.** GOVGUAM, acting through the Authority created pursuant to Section 3, Item 1 and the RECEIVER agree to develop, implement, and enforce a policy to prohibit Scavenging at the LMSWL and at the TS. Such requirements shall be included in any contract with any private contractor(s) engaged to operate either of the LMSWL or the TS and shall apply to GOVGUAM's and contractors' employees, agents, and subcontractors, and also shall apply to all other persons.
5. **Method of Delivery of Waste.** All Solid Waste shall be consolidated prior to delivery to the LMSWL. GOVGUAM, acting through the Authority created pursuant to Section 3, Item 1 and the RECEIVER may, in their sole discretion, allow vehicles direct access to the LMSWL if such direct access is determined to be in the best interests of maintaining an effective and efficient Solid Waste Management system. Any Special Waste for which acceptance program(s) are implemented shall be delivered in accordance with adopted operating procedures of the LMSWL and/or the TS.
6. **Other Programs .** GOVGUAM, acting through the Authority created pursuant to Section 3, Item 1 and the RECEIVER agrees to develop and implement, on an

ongoing basis, appropriate Waste Reduction, Reuse, and Recycling programs. GOVGUAM and NAVFAC agree to explore participation by NAVFAC in these programs but acknowledge that participation by NAVFAC in such programs is not required.

7. Rights to Military Programs. GOVGUAM shall not have any rights or control over material recovery facilities, Waste Reduction or Reuse programs, Recycling programs, waste collection programs, or ancillary programs operated by NAVFAC and the costs and revenues associated with them.
8. Construction and Demolition Waste. GOVGUAM agrees that NAVFAC shall maintain control over disposal of Construction and Demolition Waste generated by military installations on Guam and associated Solid Waste landfills operated by military installations during the Term of this AGREEMENT. GOVGUAM, acting through the Authority created pursuant to Section 3, Item 1 and the RECEIVER and NAVFAC agree to explore, Reuse, Recycling, or other alternate uses or disposal options for certain Construction and Demolition Waste or materials.

SECTION 4. SCOPE AND DURATION OF AGREEMENT

1. Agreement Term. The Initial Term ("Initial Term") of this AGREEMENT shall be _____ years (the maximum time permitted under applicable DOD regulations) from the date Acceptable Waste is first accepted for disposal at the LMSWL or TS. GOVGUAM, acting through the Authority created pursuant to Section 3, Item 1 and the RECEIVER agree to provide disposal services to NAVFAC and NAVFAC agrees to utilize these services in accordance with the applicable Tipping Fees, rules, and regulations as approved by the applicable governing regulatory body and as set forth in this AGREEMENT. Notwithstanding the foregoing, if GOVGUAM has not established and implemented the Authority described in Section 3, item 1 of this AGREEMENT at the time the Receivership is terminated by the District Court of Guam, NAVFAC shall have the right to terminate this AGREEMENT with thirty (30) days' written notice.
2. Agreement Extension. All other conditions of this AGREEMENT must be met during the Initial Term as a condition to execute an extension as described in this AGREEMENT. AGREEMENT extension periods will be for no less than ___ years in duration (the maximum time permitted under applicable DOD regulations), and will become effective automatically unless either GOVGUAM or NAVFAC notifies the other party no less than 180 days prior to the renewal date of its intention not to extend the AGREEMENT.
3. Maintenance of Existing Military Landfills. NAVFAC intends to maintain its current waste disposal facilities in open status for disposal services to be used for disposal of Construction and Demolition Waste or Acceptable Waste if the LMSWL is unavailable due to a Force Majeure event or if GOVGUAM fails to meet all requirements in this AGREEMENT.
4. It is expressly understood that neither GOVGUAM nor NAVFAC is under any obligation to continue any service under the terms and conditions of this AGREEMENT beyond the expiration date.

5. GOVGUAM agrees to provide NAVFAC, through certified mail service with the USPS or by hand delivery to NAVFAC's designated Contract Officer, one complete set of rates, terms, and conditions of service which are in effect as of the date of this AGREEMENT and any subsequently approved rates as the Guam Public Utilities Commission may authorize, and GOVGUAM agrees to continue furnishing service under this AGREEMENT in accordance with the amended tariff, and NAVFAC agrees to pay for such service at authorized rates as of the date when such rates are made effective.
6. Starting Date of Services Under This AGREEMENT. The start date of disposal services shall be no later than 60 days after the LMSWL commences commercial operation. GOVGUAM shall provide NAVFAC written notice of the specific start date.
7. Default By GOVGUAM. GOVGUAM will be in default of this AGREEMENT for suspension of disposal services, unless suspension is the result of a Force Majeure event as defined by this AGREEMENT. NAVFAC agrees to notify GOVGUAM if any incident of default occurs and to allow GOVGUAM 30 days to provide a cure for default or demonstration of a plan to cure with a schedule mutually agreed upon by GOVGUAM and NAVFAC.
8. Fees. Fees for disposal services will be as set by the Guam Public Utilities Commission and remain in effect until revised pursuant to the regulatory process of the Guam Public Utilities Commission.
 - a. Disposal fees charged NAVFAC pursuant to this AGREEMENT and set by the Guam Public Utilities will be the same as fees charged to commercial customers of the LMSWL or TS.
 - b. GOVGUAM agrees to give NAVFAC written notice of (1) the filing of an application for change in rates or terms and conditions of service concurrently with the filing of the application and (2) any changes pending with the Guam Public Utilities Commission as of the date of this AGREEMENT.
 - c. In the event that a regulatory body promulgates any regulation concerning matters other than rates which affects this AGREEMENT, upon becoming aware of such regulation GOVGUAM shall promptly provide a copy to NAVFAC. NAVFAC shall not be bound to accept any new regulation inconsistent with applicable laws or regulations.
 - d. In the event NAVFAC delivers Unacceptable Waste to GOVGUAM, GOVGUAM or its contractor will separate out such waste and dispose of it in appropriate facilities or return it to NAVFAC. NAVFAC agrees to pay GOVGUAM's cost of the separation, return and/or disposal of such Unacceptable Waste.
9. LMSWL or TS Contractor. GOVGUAM agrees to conduct a competitive procurement process(es) to select the fully qualified contractor(s) for operation of the LMSWL and of the TS, and further, to impose requirements on said contractor(s) to ensure the environmental and technical compliance

with the LMSWL and TS permits issued by GUAM EPA, operated in accordance with applicable Guam and federal laws, regulations, and permit requirements, and to enter into contract(s) with the selected contractor(s). Prior to expiration of the initial contract(s) entered into for this purpose, GOVGUAM agrees to conduct a competitive procurement(s) for a replacement contractor(s) for operation of the LMSWL and of the TS. This procurement process will be repeated as needed to ensure qualified private contract operations of the LMSWL and TS during the Initial Term of this AGREEMENT, including all extensions beyond the Initial Term of this AGREEMENT.

10. Access for Compliance Observation. GOVGUAM agrees to, and will include in each contract for the operation of the LMSWL and TS, complete access by GOVGUAM, the RECEIVER, and NAVFAC to observe operations of the contractor without notice to ensure compliance with the contract and with this AGREEMENT.
11. Scale House. GOVGUAM shall retain ownership and operation of the scale house at the LMSWL and TS and such operation(s) shall be subject to an annual audit conducted by an independent third party. GOVGUAM agrees to provide for routine scale certification at the LMSWL and TS, the latter when implemented, in compliance with Guam regulation and in addition, to provide for one additional certification by a third party at the same frequency required by Guam regulations. If the scales are not working properly or are being tested, GOVGUAM shall estimate the quantity of waste delivered on the basis of truck volumes and historical information about NAVFAC or its designated Haulers. These estimates shall take the place of actual weighing records during the scale outage and will be the basis of NAVFAC's payment for waste delivered to the LMSWL or TS during the outages.
12. Revenue Fund. GOVGUAM agrees to set up a fund to receive all revenue (the "Revenue Fund") from Solid Waste Management services provided to NAVFAC, other customers, and GOVGUAM. GOVGUAM agrees to appoint a trustee organization that meets fiduciary requirements of GOVGUAM to manage and maintain the Revenue Fund. Should this provision be determined by bond counsel to be in conflict with the terms of any applicable bond indenture, the terms of the applicable bond indenture shall be controlling.
13. Reserve Fund. GOVGUAM and the RECEIVER agree to set up a fund to receive monies budgeted for reserves (the "Reserve Fund") for equipment replacement, closure of cells and of the entire LMSWL, Post-Closure Care to respond to regulatory requirements, and any cell construction costs to be funded from the operating budget. This Reserve Fund shall be managed by the same trustee managing the Revenue Fund. Should this provision be determined by bond counsel to be in conflict with the terms of any applicable bond indenture, the terms of the applicable bond indenture shall be controlling.
14. Force Majeure. No party shall be liable for any failure to perform its obligations under this AGREEMENT where such failure is as a result of Acts of Nature (including fire, flood, earthquake, storm, typhoon or other natural disaster), war, invasion, act of foreign enemies, hostilities (whether war is declared or not), civil war, rebellion, revolution, insurrection, military or usurped power or confiscation, terrorist activities, nationalization, government

sanction, blockage, embargo, labor dispute, strike, lockout or interruption or failure of electricity, and no party will have a right to terminate this AGREEMENT under Clause (Termination) in such circumstances.

Any party asserting Force Majeure as an excuse shall have the burden of proving that reasonable steps were taken (under the circumstances) to minimize delay or damages caused by foreseeable events, that all non-excused obligations were substantially fulfilled, and that the other party was timely notified of the likelihood or actual occurrence which would justify such an assertion, so that other prudent precautions could be taken.

SECTION 5. GENERAL CONDITIONS

1. Compliance with Applicable Laws and Regulations. GOVGUAM agrees to maintain the LMSWL and TS in full compliance with all applicable United States and GOVGUAM laws and regulations.
2. Exclusive Use. NAVFAC agrees to use GOVGUAM's LMSWL or TS for all Acceptable Waste requiring disposal during all times when GOVGUAM's LMSWL and TS are accepting waste and in compliance with this AGREEMENT. Placing for final disposition of Solid Waste in any other facility (other than those operated by the NAVFAC) will not meet the terms of this AGREEMENT.
3. Ownership of Waste. Acceptable Waste being delivered to the LMSWL or TS, shall become the property of GOVGUAM once it is delivered and accepted by the LMSWL or TS operator.
4. Notices. The respective addresses for each party to receive any notice required under this AGREEMENT are:
 - a. GOVGUAM:
 - b. NAVFAC:
 - c. RECEIVER: Gershman, Brickner & Bratton, Inc., 8550 Arlington Boulevard, Suite 304, Arlington, Virginia 22031

Any party may specify a different address or contact by serving notice of such change to the other parties.

5. Conflicts. The terms of this AGREEMENT shall prevail over any inconsistent or conflicting terms of any exhibit or attachment to this AGREEMENT.
6. Headings or Titles. The headings or titles preceding each Section or Paragraph or Subparagraph are for identification purposes only. They shall not be construed as conferring any substantive contract right or duty on any party
7. Applicable Law. This is a Federal AGREEMENT. It shall be interpreted and enforced under the rules, regulations, laws and policies of the United States only. This AGREEMENT is subject to federal court jurisdiction only.
8. No Joint Venture. Nothing in this AGREEMENT will make, or be construed to make, the parties hereto partners or joint venturers. Nothing in this AGREEMENT

shall render, or be construed to render, any of the parties liable to any third party for debts or obligations of the other parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT, as of the day and year first above written.

COMNAVREG

Date: _____

RECEIVER

Date: _____

NAVFAC

Date: _____

FELIX P. CAMACHO
Governor of Guam

Date: _____

DRAFT