

SCOPE OF SERVICES

Task 1 – Minor Permit Modification for Phasing and liner design

CONSULTANT shall prepare the Georgia EPD Solid Waste Minor Permit Modification Application package for the Landfill to adjust the existing construction phasing of Phase 2. Phasing shall be adjusted to prioritize air space availability and life during the next cell construction more than is expected from the existing Cell 3. As part of the adjustment to the construction, phasing the CONSULTANT will investigate changes to the following:

- Leachate collection system
- Stormwater drainage
- Internal berms
- Liner profile and design
- Cell phasing
- Minor base grading alternatives

CONSULTANT shall perform the following services to complete the minor permit modification:

- Prepare and update Phase 2 Cell leachate collection drawings, grading plans and liner profiles
- Perform updated Hydrologic Evaluation of Landfill Performance (HELP) Model and leachate sewer calculations corresponding to the changes planned for new cell
- Prepare the Georgia EPD required application forms in accordance with EPD guidelines and solid waste permit 069-015D(MSWL).
- Submit a DRAFT application and updated drawings to the CLIENT for review and comments prior to submission to the Georgia EPD.

Task 2A – Phase 2 New Cell Pre-Design Services

The pre-design phase services include the following subtasks:

- CONSULTANT will retain a Georgia licensed surveyor to conduct a topographic survey of the entire Phase 2 waste body and expansion cells.
- CONSULTANT will conduct a test pit investigation for the purposes of characterizing subsurface materials, obtaining project design information, and determining the groundwater conditions beneath Cells 3 and 4.
- CONSULTANT will request CLIENT's landfill personnel make localized cuts and/or grade ground surface as necessary prior to mobilization for investigation to allow for test pit field activities.
- CONSULTANT will request CLIENT's on-site operator to excavate approximately twelve (12) test pits within the project area to allow for characterization of subsurface materials, identification of piedmont soils and bedrock interface, and measurement of the uppermost apparent groundwater levels. Samples will be tested for proctor moisture and density, particle size, soil classification, Atterberg limits and permeability.

Task 2B – Phase 2 Cell Construction Issue for Bid Design Documents

Using the permit modification design, the CONSULTANT will create new construction documents for a new landfill cell. The Bid Design Documents services include the following:

1. CONSULTANT shall prepare drawings, specifications bid documents for the Phase 2 new cell construction activities. The construction documents will be based on the existing permit drawings and updated drawings from the minor permit modification.

CONSULTANT will submit 90% design documents to CLIENT for review. After CLIENT review, CONSULTANT will conduct an in-person design meeting to discuss design changes and CLIENT comments. CONSULTANT will incorporate all applicable comments into a final Issued for Bid (IFB) package.

a) Anticipated construction drawings include:

- Cover-Index
- General Notes, Legend, and Abbreviations
- Existing Conditions and Construction Laydown Areas
- Cell Base Grading Plan and Under Liner Drainage
- Cell Base Grading Plan and Under Liner
- Cell Under Liner Drainage Profile
- Cell Leachate Collection System
- Cross Sections
- Erosion and Sediment Control Plan
- Construction Details

b) Anticipated specifications include:

- Contractual front-end documents: Invitation to bid, Bidder's Qualifications Statement, Instruction to Bidders, Bid Form (Lump Sum with Unit Price Adjustment), Agreement Between Owner and Contractor, Notice of Award, Notice to Proceed, Performance Bond, Labor and Material Payment Bond, and General Conditions.
- General Project Requirements: Summary of Work, Project Coordination and Meetings, Submittals, Definitions and Standards, Field Offices and Sheds, Temporary Barriers and Controls, Temporary Utilities and Facilities, Equipment and Materials, Construction Layout and Surveying, Safety and Emergency Response, Contract Closeout, and Warranties.
- Project Technical Specifications: Geotextile, Geocomposite, Geomembrane Liner (FML), Site Preparation and Earthworks, Compacted Soil Liner, Pre-Cast Concrete, and HDPE pipework.

2. CONSULTANT shall prepare an opinion of probable construction costs for the bid package. The estimated budget is not a guaranteed maximum based on potential changes for the minor permit modification. An amendment will be prepared to address the cost for responding to comments if it exceeds the assumed value.

Task 3 – Major Permit Modification Feasibility Review of Phase 2 Cell 2 Stormwater Bench Regrading

Based on EPD discussion, a major permit modification for the Phase 2 Cell 2 Stormwater Bench and Drainage Regrading and Redesign would require a minimum of 24 months for approval. Upgrades to the 20 ft vertical spacings on the stormwater benches likely require tack on berms instead of regrading the waste terraces. Prior to starting the process of creating a major permit modification application, the CONSULTANT shall create a feasibility estimate for the cost and benefit of adjustments to final grading including:

- Regrading all existing and future berms such that waste terraces are at 50-ft vertical spacings with intermediate tack on berms.
- Only regrading future berms across the eastern half of Phase 2 with larger vertical spacing and tack on berms.
- Potential for vertical expansions.
- Preliminary soil loss calculations of alternate berm and/or terrace spacings.

Task 4 – Bid Administration Support

CONSULTANT will provide bidding services, including answering bidders' questions, facilitating and attending one on-site pre-bid meeting, issuing required addenda, and assisting the CLIENT with contractor selection.

Task 5 – Financial Analysis Support for Allen Creek Landfill

CONSULTANT will provide professional consulting services and financial review of the estimates of probable costs of the Allen Creek Landfill remediation and new landfill construction.

Task 6 – Meetings with Regulators for Allen Creek Landfill

CONSULTANT shall contact Georgia Department of Natural Resources (DNR) to discuss the impacts of seeking a new solid waste permit and the agency's understanding of the siting rules limiting solid waste permits within a 2-mile radius of the new Allen Creek Landfill. CONSULTANT shall organize a virtual meeting with DNR to discuss the potential siting variance of Allen Creek. CONSULTANT shall also continue discussions with Georgia EPD to discuss the agency's requirements for the new solid waste permit and remediation plan.