

20 May 2025

Mr. Himanshu Mehta, P.E.
Managing Director
Solid Waste Disposal District
Indian River County
1325 74th Avenue Southwest
Vero Beach, Florida 32968

**Subject: Project Management & Completion Report
IRC Segment 3 Cell 3 Liner Construction
IRC Work Authorization No. 1, Amendments 1, 2 & 3
Indian River County Landfill Facility
Vero Beach, Florida**

Dear Mr. Mehta:

INTRODUCTION

Geosyntec Consultants, Inc. (Geosyntec) is pleased to present to you this project management and completion report for Geosyntec's Project No. FL9363B: Segment 3 Cell 3 Liner Construction for the Indian River County Landfill Facility. This project was completed under Work Order No. 1 Amendments 1, 2, & 3, authorized on April 4, 2023, under the Engineering Consulting Services for Landfill Closure, Landfill Gas System Expansion, and Cell Construction (collectively referred to as the "Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and Geosyntec ("CONSULTANT"). This report has been prepared as a supplement to our final invoice No. 620311, dated 20 May 2025.

SCOPE OF WORK

The scope of work authorized under Work Order No. 1 was divided into eight phases: (i) General Consulting/Meeting Support/Project Management, (ii) Preparation of Issued-for-Construction (IFC) Documents, (iii) QA/QC Services, (iv) Construction Management, (v) Resident Engineering and Certification Services, (vi) Installation of Groundwater Monitoring Wells, (vii) Financial Assurance Cost Estimate, (viii) Miscellaneous Engineering Support Services. The following is a phase-by-phase summary of the work that was performed under this work order .

Phase 1: General Consulting/Meeting Support/Project Management

Under this phase, Geosyntec performed general consulting, meeting support, and project management. Geosyntec provided SWDD with consulting services necessary to initiate the project and prepared presentation graphics, engineering drawings, and other documents required to support the Project's meetings and coordination activities.

Phase 2 – Preparation of IFC Documents

During the bidding process several addenda were issued in response to bidders' questions. The addenda included revisions to the Issued-for-Bid (IFB) documents. Geosyntec updated all the construction documents to incorporate the applicable addenda and complete IFC Documents for the selected contractor. Geosyntec prepared a signed and sealed copy of the IFC Documents by a professional engineer licensed in the State of Florida and submitted the same to the Florida Department of Environmental Protection (FDEP) as part of notification of Cell 3 Phase 2 construction.

Phase 3: QA/QC Services

Geosyntec provided QA/QC services throughout the construction phase to ensure that the landfill cell is constructed in accordance with the design approved by FDEP to the highest construction quality standards. QA/QC services were performed in four components including - field monitoring QA/QC services, geotechnical CQA laboratory services, geosynthetic CQA laboratory services, and surveying CQA services.

Phase 4 – Construction Management

Geosyntec provided construction management (CM) services throughout the duration of construction, which included conducting pre-construction and weekly construction progress meetings with the Contractor and its subcontractor(s), preparing and distributing meeting minutes, assisting the Contractor and SWDD in identifying critical construction phases and material procurement activities, reviewing the Contractor's construction schedule for evaluating construction progress, providing assistance to the Contractor in formulating plans to regain the project schedule in case of unforeseen delays, reviewing Contractor payment requests and verifying quantities and conformance with the plans and specifications, and providing contract administration to include construction-related correspondence with the Contractor and SWDD.

Phase 5: Resident Engineering and Certification Services

Geosyntec provided resident engineering services throughout the duration of construction, which consisted of Construction Drawings and Technical Specifications interpretation or clarification, an evaluation of any changed conditions, and engineering analyses for any design changes or improvisations. Geosyntec also provided support to SWDD in the preparation/modification of the IFC Drawings, Technical Specifications and CQA Plan, evaluated Contractor's change proposals, assisted SWDD in the review and approval process for submittals. As part of the Resident Engineering phase, Geosyntec prepared a final QA/QC certification report with as-built record drawings for the Project, a narrative describing, in detail, the aspects of field activities associated with the Phase 2 construction, specifically with reference to the activities identified in this proposal, a summary of all conformance and performance tests conducted, testing frequencies, and test results showing compliance with the Technical Specifications and the CQA Plan, the documentation of construction activities (presented on daily summary reports, monitoring logs, test data sheets, nonconformance identification and corrective measures reports, and design change records), and the as-built record drawings. Peavey prepared the as-built drawings, and performed the signing and sealing by a licensed land surveyor in the State of Florida. Geosyntec coordinated and reviewed drafts of the as-built record drawings to ensure compliance with the Project and permit requirements. Geosyntec submitted the final QA/QC certification report, signed and sealed by a licensed professional engineer in the State of Florida to FDEP for approval and SWDD.

Phase 6: Installation of Groundwater Monitoring Wells

Four groundwater monitoring well clusters (MW-25S/I, MW-39S/I, MW-47S/I and MW-48S/I) and piezometer PZ-2 were installed prior to certification of construction completion and approval of Cell 3 by FDEP for waste placement. A Geosyntec hydrogeologist or equivalent was on-site to observe the well installations. Upon completion of the well installations, the wells were developed prior to sampling. The locations of the wells were surveyed and a well completion report was prepared and submitted to FDEP in accordance with the requirements of the Water Quality Monitoring Plan of the Class I Landfill permit. Additionally, in accordance with previous well installations at the site, the soil cuttings from the well installations were drummed for disposal at the Class I Landfill.

Phase 7: Financial Assurance Cost Estimate

For Phase 7, Geosyntec updated the Financial Assurance Cost Estimate (FACE) for Cells 1 and 2 of the Segment 3 Expansion at the Indian River County Landfill to include the proposed Cell 3 in accordance with the permit requirements. Geosyntec provided one electronic copy of the draft documents to SWDD for review and comments. Geosyntec also implemented one round of revisions to finalize. Geosyntec submitted the final signed and sealed FACE to FDEP and SWDD in electronic format.

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Phase 8: Miscellaneous Engineering Support Services

In this phase, Geosyntec addressed two primary issues associated with the operation of the Class I Landfill including: (i) re-design and replacement of the Sligo pump in Cell 1; and (ii) remedial design to address leachate seeps from Cell 2. Geosyntec evaluated the replacement of the Cell 1 pump station. Geosyntec evaluated the current Sligo pump station design and prepared construction drawings and specifications for the installation of a new pump station. Also, several leachate seeps have been observed on the east and north portions of active Cell 2 that potentially discharge into the perimeter stormwater ditches. Geosyntec evaluated the seeps and prepared construction drawings and specifications to remediate the problems.

BUDGET

The approved budget for Work Order No. 1 Amendments 1, 2, & 3, including the changes from Amendment 1, 2 & 3 was \$937,532.42. The total invoiced amount, including the final invoice, is \$937,513.16. Therefore, Geosyntec completed this project within the approved budget.

CLOSURE

Geosyntec appreciates the opportunity to provide this proposal to Indian River County. Should you have any questions or need additional information, please do not hesitate to contact us. We are looking forward to assisting you on this project.

Sincerely



Timothy R Copeland, Ph.D., P.E.
Project Engineer