



Geosyntec's reinforced retaining wall design resulted in a 60% increase in disposal capacity over a more conventional design, significantly increasing the facility's value

Client: Hampton Roads Recovery Center, Inc.

Services Provided:

- ✓ Market survey
- ✓ Infrastructure Investment Valuation
- ✓ P3 Modeling and Negotiation Support
- ✓ Valuation using DNPV and stochastic modeling of the operating landfill cash flows
- ✓ Revenue optimization using state-of-the-art engineering techniques
- ✓ Design and permitting

Project Objective

Hampton Roads Recovery Center, Inc. (HRRC) was considering investing in an 80-acre real estate parcel with the purpose of designing and permitting a construction and demolition debris (CDD) disposal landfill facility in the City of Virginia Beach. Because the project would involve developing a landfill facility on a relatively small footprint, HRRC sought an innovative design to maximize the disposal capacity and hence their financial results. HRRC retained Geosyntec to develop an optimal design upon which to value their future landfill operation.

Geosyntec's Scope of Services

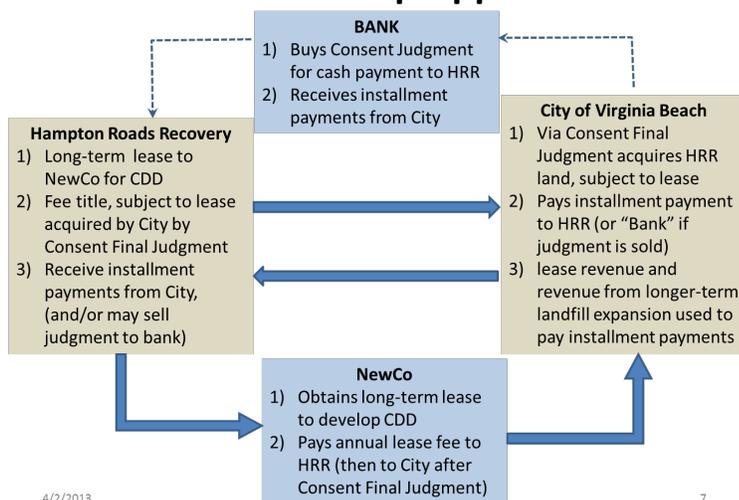
Geosyntec's valuation services in support of the financial transaction for the facility included a market survey of competing facilities in the vicinity of the proposed location (based on waste type, tonnage, available remaining capacity, and tipping fees) as well as a construction cost estimate for the optimal landfill design. We developed a projected cash flow analysis, estimated the net present value (NPV) using standard financial analysis, and performed a deterministic and stochastic market valuation using Crystal Ball. Based on Geosyntec's valuation report, HRRC was able to secure a \$15 million loan to develop the CDD landfill.

Subsequently, because of the landfill's direct proximity to the City's municipal solid waste (MSW) landfill, which was nearly out of capacity, the City became interested in acquiring the property to expand their MSW landfill operation. Geosyntec prepared a financial model for a friendly condemnation proceeding for HRRC's facility. The proposed acquisition would be performed via a private public partnership (P3) arrangement consisting of the City acquiring the facility subject to a 20-year ground lease and receiving payments from a new special purpose entity established to operate the facility. Geosyntec also performed a post-operational valuation of the facility to facilitate ongoing negotiations between the City and HRRC for a cashless acquisition of the facility under a P3. To this end, Geosyntec used a state of the art valuation methodology named decoupled net present value (DNPV). The DNPV method allows direct integration of technical due diligence into a project valuation.

Notable Accomplishments

Geosyntec combined its financial insight with its landfill design expertise to provide a design that resulted in a net 60% increase in disposal volume over a more conventional design at little additional construction cost, significantly enhancing HRRC's leverage in securing loans and its negotiating position with the City.

P3 Partnership Approach



4/2/2013

7