Sadat Associates, Inc.

Project History

Brownfield Redevelopment

Project Name

Landfill Redevelopment Plan

Client

Seaboard Development, L.L.C. (initial redeveloper) K. Hovnanian Cos. (end use developer)

Services Provided

- Landfill Disruption and Closure Plan
- Site Investigation and Remedial Investigation
- Remedial Action Workplan
- Geotechnical Investigation
- Site Engineering Design
- Local Planning Board Approval of Site Plan
- Engineering Drawings for CAFRA Application
- Treatment Works Approval
- Water Connection Permit
- Soil Erosion and Sediment Control Plan
- Air Permit
- Construction Oversight
- Follow up Monitoring



Project Description

The Anglesea Beach Colony Landfill, North Wildwood, NJ, was an approximately 20-acre inactive sanitary landfill that had not received waste material since the mid-1960s. The site had previously received a Landfill Closure Plan approval and CAFRA permit for construction of a minor league baseball stadium. This project lost funding and the City of North Wildwood auctioned the property. Seaboard Development purchased the property and retained SAI. The site was ultimately redeveloped by end-use developer K. Hovnanian Cos. as The Tides at Seaboard, a 96-unit luxury resort community.

Approach

The development includes four 5-story steel frame residential buildings, as well as a recreational area and parking lots. The geotechnical services included evaluation of the subsurface soil conditions, and testing of shear strength and compressibility of different soils. SAI performed the design of deep foundation system for the buildings and clubhouse and the piles and pile caps to support the utilities. SAI performed settlement analyses for the anticipated settlement due to raising site elevations to proposed final grades. The geotechnical report included recommendations to reduce post construction settlement through surcharging the site and soil improvement. SAI also performed pavement design for the road leading to the development as well as driveways and parking areas. SAI performed construction oversight of pile driving operations, excavation, placement/compaction of fill material, testing of materials physical and mechanical properties and settlement monitoring/evaluation due to surcharge loads.

SAI prepared engineering drawings for Landfill Disruption/Closure Plan and CAFRA Permit applications, which were both submitted to NJDEP. SAI also represented the Client for Site Plan approval. SAI com-



pleted a site investigation and remedial investigation and prepared a Remedial Action Workplan (RAW), which was approved by NJDEP. The RAW included components of the approved Landfill Closure Plan and institutional and engineering controls (some of which is stabilized dredge material). SAI also obtained a Treatment Works Approval and Water Connection Permit for the project.

SAI performed construction oversight of pile driving operations, excavation, placement/compaction of fill material, testing of materials physical and mechanical properties and settlement monitoring/evaluation due to surcharge loads.

The project was awarded the 2003 Award for Excellence in the environmental category from the New Jersey Business & Industry Association.

SAI performed follow up monitoring services.



The attached submission to the New Jersey Business and Industry Association provides the basis for the award.

NJBIA Awards for Excellence Environmental Quality Award

1. Describe the type of business and its principal products or services. If the nominee is a manufacturer, describe the manufacturing process as well.

SADAT ASSOCIATES, INC. ("SAI") is a full-service firm with expertise in brownfields redevelopment of abandoned private and public landfills and other distressed properties. In addition we provide expert testimony and litigation support services, and have extensive capabilities in the areas of solid and hazardous waste, wastewater, groundwater, air quality, regulatory compliance and risk assessment.

Even before the rise of "Smart Growth" goals in New Jersey, SAI has been on the ground floor of redeveloping contaminated sites, often from properties considered worthless or un-permittable by others. Well recognized for our project development efforts related to Jersey Gardens Mall in Elizabeth, NJ SAI continues to seek creative redevelopment options for these neglected sites. A particular area of expertise is our engineering and redevelopment of abandoned landfill sites, long considered worthless pieces of property.

SAI performed the duties of Environmental Engineer for the project development stage of the Seaboard Development Project

The law firm of **COOPER LEVENSON**, Attorneys at Law, was founded in Atlantic City in 1954 and since grown to include sixty attorneys, five New Jersey offices and a client list that spans not only the region, but the globe. A full service firm, Cooper Levenson has large practice groups in such areas as banking & financial services, environmental law, real estate, employment, defense litigation, tax and business and commercial litigation, as well as a formidable casino law department. The firm handles a significant amount of transactional work for developers, real estate brokers and banks, among others.

Cooper Levenson was instrumental in the development of the original project concept and facilitated communications with local and State officials key to project success.

BALLARD SPAHR ANDREWS & INGERSOLL, LLP was founded in 1886. Throughout the firm's history, Ballard Spahr has been committed to excellence in the practice of law. They have grown to be one of the 100 largest law firms in the country, with over 450 lawyers and seven offices located throughout the mid-Atlantic corridor and the western United States. As a large, multi-office, multi-regional law firm, they are able to combine a national scope of practice with strong local market knowledge to represent companies, individuals, and other entities in virtually every state and around the world. Ballard Spahr's

Environmental Group advises clients across the U.S. in environmental regulatory, litigation, and transactional matters. The firm's environmental lawyers represent clients faced with problems that are not routine, and they approach each matter creatively, avoiding rote solutions, in an effort to achieve success effectively and efficiently. The Environmental Group's integration with other practice groups allows us to involve other lawyers with related concentrations in environmental problems, which we find beneficial.

Ballard Spahr provided legal counsel throughout the complex permitting efforts.

LOMAX MOREY CONSULTING, established in 1975, was founded to provide professional environmental consulting services to the public and private sectors. Located in Cape May Court House, New Jersey, the firm offers technical and project management services designed to address Environmental Concerns and to aid in the best land use/management decisions.

In addition to these firms which are members in good standing with the New Jersey Business and Industry Association and proposed as recipients of this award, there were other key team members involved in the successful development of this project. Mr. Mark Robinson is President of Seaboard Development. Mr. Robinson's vision was the starting point for the project proposed for this award. In addition to SAI, Cooper Levenson and Ballard Spahr, Mr. Robinson's team of professionals consisted of:

- John J. Oliveri, P.A. Architects and Land Planners Collingswood, NJ
- The HOK Planning Group New York, New York

2. Describe the program that you wish to be considered for the award and why the project was undertaken

The Seaboard Project is a 96-unit high-end residential community planned for development on an abandoned landfill site in the northern end of the shore community of North Wildwood, New Jersey. The project was undertaken to allow the contract purchaser, Seaboard Development, to successfully acquire all necessary permits and approvals to close this landfill and respond to the demand for new housing in the shore community.

Seaboard Development had a vision but needed the services of a creative and knowledgeable team to secure approvals and permits for both landfill closure and coastal area redevelopment. The evolution of this project, from an abandoned, uncontrolled landfill offered at a land auction by the Town of North Wildwood to a permitted high end residential community proposed to provide 63 units with ocean/bay views, recreational areas including swimming pools and tennis along

side a protected area for endangered birds is an important story to tell. It could only have been done in the short time frame with a talented, creative and well-organized team, knowledgeable of the rules and the strategies for site remediation critical habitat management and landfill closure. We believe this project is the finest example of "Smart Growth" where, without public funds, an uncontrolled site is on its way to becoming a productive property with a strong commitment to ecological management.

3. Describe the baseline conditions, the starting point from which the project benefits are measured.

This site was a former landfill owned by the City of North Wildwood. This site has been inactive for over 30 years and had never undergone an engineered closure. Waste material was visible on the surface and posed both a health hazard as well as an esthetic eyesore. Nevertheless, it was a 20 acre vacant site on the shore with unobstructed views of both the Ocean and the Bay.

Originally targeted as the site of a minor league baseball stadium, in 1998, the City lost State funding for the project. To recoup financial losses, the City auctioned the property. Instead of seeing an abandoned landfill, Seaboard Development had the vision to see this site as an opportunity to respond to the constant demand for residential properties near the Shore by providing luxury living community and a magnificent view of the water.

Seaboard sought the services of a team experienced in the various issues related to this landfill redevelopment project, and first sought guidance from Cooper Levenson. Together with Seaboard, representatives of the firm visited the site to evaluate it and its potential for development. They then served as conduits for meetings and communications between Seaboard and government officials, both in the municipality and in the governor's office, to address the concerns and needs of all parties involved, discuss issues related to zoning and the environment, outline the potential benefit to the community, and set the framework for the project.

Contact was made with the firms originally involved in the previous minor league ball park project in order to capitalize on the body of knowledge already available. The firm of Lomax Morey Consulting and the law firm of Ballard, Spahr Andrews and Ingersoll were incorporated into the project team.

At this point, Cooper Levenson introduced Seaboard to SAI, who was selected because of its reputation and experience in closing and redeveloping complex environmentally challenged sites, particularly landfill related redevelopment.

The landfill covered approximately nine acres of the 20 acre tract, but this was not the only environmental hurdle to overcome. Added to the challenges already posed by construction on a landfill was the fact that two protected bird species, the Yellow-Crowned and Black-Crowned Night Herons were using a portion of the site for nesting. When the team began, the site was not adequately investigated to determine existing environmental problems. The landfill had not been adequately "closed" according to regulatory standards and garbage and debris was evident at the surface. While considered the best use for land in this area, the question of both agency and public approval of residential development a landfill was still unanswered. The ecological impacts of contamination at the site were not investigated, and the means of closing the portion of the landfill used by the herons, without disturbing the herons, was unknown. Over the course of the next 1.5 years, each of these issues were addressed, creatively resolved allowing for successful permitting of a complex redevelopment project.

4. Describe the environmental benefits of the project. Quantify those benefits to the extent they can be quantified.

The remediation and closure of the landfill incorporates engineering controls to mitigate environmental problems associated with the site. Clean dredged material will be used to achieve the final grade of the site and serve as low-permeability cover to close the landfill. The use of this clean dredge serves two purposes. This material is currently staged at a facility that needs to make space available to accommodate new material from future dredging operations. Further, the cost of obtaining this material is significantly less than acquiring virgin clean soil, which will result in cost savings for the developer. Development features, including building foundations, paved areas and landscaped areas will complete the final landfill cover system and serve as the engineering control to contain the solid waste material on-site, prevent exposure to humans, and save disposal space at offsite disposal facilities. With the proper remediation and closure of the landfill, it will no longer be a source of air, groundwater or surface water contamination.

To protect the heron-nesting habitat, additional suitable habitat is being created and when this new habitat is properly established, the team will implement the remediation and closure plan for the portion of the landfill currently used by the herons, and restore the area. The entire 3.6 acre avian preserve has been separated from the development portion of the site. Passive walkways adjacent to the avian preserve will allow residents to view this unique ecosystem without disturbing the herons and their habitat within.

The development will consist of four low-rise buildings with a total of 96 residential condominium units, with both covered and open parking areas. The development will include a pool, multi-purpose courts and a clubhouse. Only 24% of the total land area will be developed. The remainder will be open space consisting of landscaped areas, wetlands, wetlands buffers and the avian preserve. The original concept for the site – the minor league baseball team, would have resulted in significantly less open space and no preservation of the endangered bird species.

In effect, this project, the first of its kind in the history of the state of New Jersey, not only achieves a more productive use of the land (converting a landfill into a ratable for its municipality), but affords the surrounding community a significant improvement to its overall appearance, meets the present administration's goals for smart growth, and turns what may have once been considered 'wasted space' into a premier spot in its community, and sets a shining example of how municipalities and private business can work together for the greater good.

5. How does the project go beyond normal regulatory requirements?

The redevelopment of a landfill in a coastal area is possible under current regulatory programs provided a clear understanding of the objectives and limitations of the regulations are accounted for. The Project Team worked closely with the regulatory agencies involved making certain that all critical environmental issues were properly addressed. The project team also worked closely with the City of North Wildwood, which fully supported the project.

Methods to close a landfill by a private developer were incorporated into the project so that the City of North Wildwood would not need to use public dollars to absorb the cost of environmental remediation. In creating methods that are cost-effective for the developer, the Team helped create a profitable project that resulted in the closing and development of the landfill without the use of public dollars. In so doing, the project will result in:

- 1. a closed, secured landfill;
- 2. the enhancement and protection of protected animal species
- 3. the creation of a valuable eco-experience
- 4. the beneficial reuse of a waste material (dredged material) for site closure, resulting in cost savings for the developer; and
- 5. the mitigation of sources of environmental contaminants which could impact air, ground and surface water, and soil.

Describe any awards or recognition the company may have received for this project

In two years, the project moved from an innovative, visionary idea to a permitted project. Purchased in early 2003 by K. Hovnanian Companies of Edison, NJ the project will now move forward with landfill closure and site remediation efforts as well as local site planning efforts. Groundbreaking is anticipated for spring 2004. While the NJBIA Award would be, if presented, the first award and special recognition for this project, we anticipate that it will continue to be recognized in the future as an outstanding example of smart growth, creative resource management and sound planning and resource protection.