**Problem Assessment**

Originally opened in 1905 as a clay mining location for material for the National Brick Company, the land that is Centennial Park has been a part of the community since its incorporation on July 1, 1907. The area became a landfill after the strip mining openings were utilized conveniently for refuse and the disposal of construction debris. The Brick Company closed its business in the mid 1960s and in 1967 the Town recognized the site as a brownfield. A portion of the site (140 acres) was purchased in 1968 and continued to operate as a sanitary landfill by the Town until 2004. The Town acquired the remaining 80 acres in 1992. The total site includes two water areas; the larger one is just less than 45 acres. The Town Council along with the Parks and Recreation Board continued to evolve a recreational end use plans for the facility beginning as far back as 1975.

In 1994 the Town set in place a final ten year plan that would maximize the remaining cell areas and establish a closing date for the acceptance of waste by mid-2004. The final planning process for the end use was put in place with extensive community input.

Prior to the closure in 2004, the Town made the final decision to create Centennial Park with a 9-hole golf course, clubhouse, banquet facility and dozens of other amenities. The closure plan for the landfill meets all requirements of the Indiana Department of Environmental Management and provided a significant amount of additional work for the park. We were the first landfill in Indiana to propose and receive approval to construct a golf course over a closed landfill.

**Program Implementation & Costs**

The final plan required funding of $20 million for the construction of this multi-purpose recreational facility. Partially working from existing surplus revenues of the landfill operation and a contribution from the sewer utility to upgrade and reshape the regional stormwater retention area known as Maynard Lake, the park began to take shape during the closure and final grading of the landfill operation. Town employees exceeded IDEM’s closure requirements and left the space at the grades required for its final usage as the Park and golf course. To complete construction, the sale of $14 million of Munster Municipal Corporation (MMC) Mortgage Bonds ensured there would be adequate funding for the necessary improvements. The sale of this bond issue was planned for the same time that existing debt expired on previous MMC Mortgage Bonds, creating no increase in taxes for Munster residents.

Tom DeGiulio, Munster’s Town Manager and Jim Mandon, the Town’s Engineer have often explained the park is a “laboratory for environmental improvements in construction and design and an outstanding example of brownfield reuse.” The project used several Best Management Practices to meet MS4 standards for storm runoff and retention. Incorporated within the design of the park are rain gardens within the parking lot medians, green roofs, the stormwater retention pond is utilized for the irrigation system for the entire area, and the use of various permeable surfaces throughout the park reduce overall runoff from the developed areas. The park goes far to attain environmental standards as well. The clubhouse has been awarded a US Green Building LEED (Leadership in Energy and Environmental Design) certification for New Construction 2.1. The park incorporates many other green building technologies, which will show other developers of the possibility and practicality of “building green.” Included within the green design is the capture of sunlight within the clubhouse to curb unnecessary lighting, the use of recycled building and finishing materials throughout including its faux slate roof, and planting of hundreds of trees and greenery throughout the entire park space. Furthermore, many residents will not be required to hop into their vehicles in order to visit the space because it lies along an abandoned railroad corridor that the Town has acquired for a regional bike path which connects to its existing routes.

One of the most exciting of the environmental technologies utilized is the incorporation of methane for energy cogeneration. In 1990, pipes were installed to collect the methane byproduct of the landfill. This gas is being collected and converted by two microturbines into electricity for use for the irrigation system and to operate the Clubhouse. The remainder is flared off. Future plans include the installation of more microturbines or generators in order to provide additional energy for sale into the utility grid.

The Park’s Maintenance Facility includes an area for Centennial Fire Station. This facility provides the location of a fully equipped station south of the busy Canadian National Railroad which separates the growing south end of Town from the other two stations. The station, built at a fraction of the cost of a stand alone station, saved tax payers hundreds of thousands of dollars. There is an on-going program of sponsorships for trees, benches, bricks, etc. to help raise revenue to support future improvements to the park.

 Aside from continuing the environmental focus, the park delivers a space in which the community convenes and recreates for both active and passive activities year-round. Centennial Park is now finished and includes a 9-hole golf course, a clubhouse with full-service restaurant, banquet facility, botanical gardens, driving range, amphitheater, playground, soccer fields, dog park, and multiple shelters. There are walking paths throughout the park that include a stroll along the growing sculpture garden. In the winter, there is sledding at the park as well. The Park was dedicated on July 1, 2007 with a concert attended by over 6,000. This was the 100th Anniversary of the incorporation. The park opened the Clubhouse for business in 2008. The golf course opened for its first season in 2009. The anticipated fall opening in 2008 was postponed due to a devastating flood that impacted both the north side of Town and areas of Centennial Park.

**Tangible results or measurable outcomes**

Centennial Park is, by all measures, a success. The park is constantly filled with individuals doing everything from eating in the restaurant to going to the dog park to participating in various events at the Park. The golf course opened in July 2009 and the partial season had 6,333 rounds of golf played. There were approximately 7,000 uses of the driving range. About 30,000 people either attended an event or meeting or participated in a program at the Clubhouse and park shelters. Over 250 dogs and their owners joined the dog park; and approximately 21,200 people ate in the restaurant at the Clubhouse. Insomuch as special events at the Park are concerned, last year approximately 25,000 people attended an event ranging from Easter egg hunts, Independence Day fireworks and concert, a three day music festival and other smaller events.

 Overall, Centennial Park’s use has exceeded expectations. Year round members of the community have found a home at the Park and are continuing to find new uses for the various activities and programs that are offered there.

 To help sustain the revenues we have started a community group called the Friends of Centennial Park. They are doing special events to raise awareness and money to support the park.

 In addition to the public’s use of the entire park, the biggest external benefit to the surrounding community as a result of the facility, is the re-use of the land. The 225 acre landfill and now park is surrounded by upper end homes and businesses that include numerous medical related offices. The estimate is that within a half mile radius there is nearly $1.0 billion in private investment. The landfill operated from 1978 to 2004 with residential developments on its east and south borders. The Town is currently negotiating with a private developer to improve the industrial area to the north to a mixed use development. The $20 million investment is small when compared to the private investment surrounding the Park. The Town clearly delivered on its promise to the community to restore this brownfield into a productive land use and community jewel. These efforts have been recognized by the Indiana Association of Cities and Towns and the Governor’s Office of Indiana with significant awards.

**Lessons learned during the planning, implementation, and analysis of the program**

During the process of creating Centennial Park, the Town of Munster learned a number of lessons that should be passed on to anyone engaging in a similar project. First, we learned that it is extremely difficult to design and construct on a site that has been completely disturbed by human intervention. Between the fill that has been added (over 750,000 cubic yards) and the garbage on the site, no part of the park was the way it would be found in nature. This fact continues to be problematic as the Town installs new additions to the park. Recently, when adding a sculpture to the sculpture garden, the foundation had to be installed below grade 16’ which was further complicated by the fact that there was inconsistent fill material and garbage below the surface.

 During the process, we also learned about the acidity of leachate. The leachate from the landfill caused multiple pumps and controls to rust quickly. We needed to add budgetary dollars to the early replacement of these items.

 The Town of Munster listened to our constituency groups. We had multiple meetings with various stakeholders and listened to what they said they wanted. This allowed us to receive a lot of buy-in from the community and increased appreciation for the Park once it open, contributing to the successful use of the facility.

 We used similar meetings during landfill operations to balance the needs of the immediate neighbors and the greater community.

 During construction, Munster worked with multiple prime contractors, one on the golf course and one for the clubhouse and remainder of the park and two architects to try to use each firm’s specialty to our advantage. In the long run, this proved problematic because of difficulties with gaps and overlaps in jurisdiction during construction. Unfortunately there was little we could do to achieve the excellent design of the golf course and the remainder of the park.