

Milwaukee looks to the future

CH2M HILL, in partnership with HNTB, a U.S. transportation infrastructure firm, was selected to plan and design the reconstruction and extension of Canal Street in the highly visible Menomonee Valley area of Milwaukee.

The project was not just about improving one of the city's transportation corridors,

though. The roadway alignment work led to the need for environmental services. CH2M HILL's Environmental Services and Transportation Business Groups saw the opportunity for a sole-source environmental contract. Based on the firm's full-service offerings, the CH2M HILL/HNTB partnership (Milwaukee Transportation Partners or MTP), was selected to perform site remediation and redevelopment of the adjacent Shops Site. It is a 140-acre, 150-year-old former railroad locomotive

construction and maintenance facility owned by the city.

In the fall of 2003, MTP began work at the site. Remediation costs were originally thought to be too high relative to the estimated future property value, but MTP developed an innovative and cost-effective approach to streamline site closure and redevelopment, using cross-business group resources.

CH2M HILL currently serves as program manager, while also providing site assessment; remedial planning and design; design and construction management of a recreation park; and design and construction management of commercial redevelopment. Remediation and redevelopment are ongoing, with completion expected in 2006. The project

is currently under budget and one year ahead of schedule.

Implementing an innovative and cost-effective remedial action plan positions Milwaukee to attract new development to a once-blighted area. The transformation of 140 acres of unusable property to light commercial/industrial and office space, as well as 70 acres of green space, is well under way.

MTP has completed demolition and environmental restoration of the old railroad facility, filled 80 percent of the site to grade, constructed soccer fields and interior parks, and initiated recreational and ecological riverbank restoration. What was thought to be unusable land will now bring nearly 2,000 jobs to Milwaukee and a roughly \$100 million increase in recreational, aesthetic and ecological value. ^{UN} Ltd

Hope for the future, in more ways than one

The MTP team extended its reach to the people and businesses potentially affected by the Shops Site project. One of the team subcontractors, a woman-owned enterprise, benefited from mentorship with the city's prime contractor. Previously a \$500,000 company, it is now a \$2.5 million firm with more visibility in the local construction market. Overall, the Shops Site project team has included approximately 45 percent participation from emerging business enterprises, surpassing the city's goal of 30 percent.

During the course of the project, CH2M HILL hired three interns; as a result of construction site experience, one is pursuing an engineering degree at the University of Wisconsin, Milwaukee.

A fourth intern's role was expanded into a site inspector position, providing the student with valuable engineering experience. This intern was provided through Milwaukee County's Encompass Program, which was established to address shortage and diversity issues in the engineering profession.

Milwaukee's plans for the property include 50 percent green space. Soccer fields, tennis courts, and bike and pedestrian trails and bridges are all intended to serve the community. Riverbank improvements, including river widening, will not only accommodate the loss of a floodplain area but also bring canoeing, fishing and other river activities to the community along with the added access to the river.

This aerial view of the Shops Site shows the potential for future development of the area.



One cost-saving solution includes the onsite stabilization and encapsulation of environmentally impacted and asbestos-containing materials. By successfully developing and negotiating a first-of-its-kind onsite management plan with regulatory agencies, MTP saved the project more than \$15 million in offsite transportation and disposal costs.

By creatively developing technically beneficial and financially rewarding reuse applications for another project's waste materials (i.e., excess soil and demolished concrete), MTP reduced the overall project cost by more than \$2 million. MTP facilitated the development of a memorandum of understanding between the City of Milwaukee and the Wisconsin Department of Transportation. The memorandum allowed MTP to use more than 600,000 cubic yards of fill from a nearby MTP interchange project to remove the site from the floodplain, providing an engineered condition more suitable for redevelopment while achieving stormwater management objectives.

