



Inner Harbor Navigation Canal (IHNC) Hurricane Protection Program Management New Orleans, LA

Detail of surge barrier wall

PROJECT HIGHLIGHTS:

- Concrete floodwall with navigation gates at Bayou Bienvenue and the GIWW
- Navigation gate at Seabrook vicinity
- Marsh enhancement with dredged organic material
- Increased safety

SERVICES PROVIDED:

- Program management
- Construction management
- Development of RFP for construction contractor

Project Completion: 2011
Entire Project Cost:
\$1.3 Billion

Reference:
U.S. Army Corps of Engineers
Hurricane Protection Office
New Orleans, LA

The Challenge - Bioengineering Group (BioGroup) was contracted by the U.S. Army Corps of Engineers (USACE) Hurricane Protection Office to perform all program and construction management services required to complete the **largest civil works design-build project ever undertaken by the USACE to improve the Greater New Orleans hurricane protection infrastructure** following the impacts of Hurricane Katrina. Additionally BioGroup was tasked to perform engineering of key infrastructure elements, including developing the RFP for the construction contractor. Design and construction will exceed **\$1.3 billion** when the project is completed by June 2011. The mandate to increase safety from hurricane damage on a stringent timeline presented major challenges, which led to the decision for the first ever large-scale federal civil works design-build project.

The Interdisciplinary

Approach - BioGroup assembled a team of seasoned program managers and construction managers, as well as design engineers and regulatory specialists. This integrated approach allowed USACE to utilize all assets available to manage and perform a broad array of key functions on this massive project. Daily interaction allowed USACE and its construction contractor team to maintain progress in the face of many changes to design while conforming to budget and schedule. In order to coordinate the myriad of design and construction activities, the design, regulatory process, and construction were performed simultaneously. Major program management support resources were demanded in order to address the innovations in procurement approach, engineering and construction methods. In addition to management of the engineering, regulatory, and construction processes, BioGroup personnel played additional roles critical to the success of the program, including coordinating with interest groups and the media, facilitating technical brainstorming sessions, and leading partnering sessions with the construction industry to allow early resolution or avoidance of potential implementation problems. Portions of Program Management work were performed through embedment of BioGroup personnel within USACE offices and independent assignments.



Aerial view of Inner Harbor Navigation Canal Project

The Sustainable Result - The IHNC project benefited from a capable and creative Program and Construction Management team to successfully adhere to Congressionally mandated timelines while utilizing novel and ambitious methods under extremely close scrutiny from an array of critics. A surge barrier, similar to a floodwall but much larger, is sited near the confluence of the Gulf Intracoastal Waterway (GIWW) and the Mississippi River Gulf Outlet (MRGO). Navigation gates are located where the barrier crosses the GIWW and Bayou Bienvenue to reduce the risk of storm surge coming from Lake Borgne and/or the Gulf of Mexico. This project provides a 100-year level of risk reduction by 2011 to Greater New Orleans in the area affected most by the Katrina storm surge near Lake Borgne.