Nomination of Cottrell Contracting Corporation for the Nanticoke River Maintenance Dredging

WEDA Navigation Dredging Excellence Award
2013
Introduction

Cottrell Contracting, and their subcontractor, completed the dike construction and maintenance dredging in the Nanticoke River ahead of schedule. Cottrell Contracting carefully structured their schedule and planned their work to ensure maximum safety and efficiency while executing the work and ensuring ample flexibility. The contract was challenging due to the location and the regulatory agencies not familiar with dredging. The quality of construction and the attention given to environmental concerns was a major factor in reassuring the local sponsor and the environmental agencies. The dredge operators and lead equipment operator were recognized for their skill, quality, and safety by several US Army Corps of Engineers employees. This skilled and efficient management team was perfectly suited for the project needs and brought a strong commitment to partnership and cooperation. Cottrell Contracting completed the project in time to allow transport and dredging of another critical channel with tight time constraints.

The Nanticoke River federal channel initiates in the Chesapeake Bay and terminates at Seaford Delaware. The channel has been shoaling for years, reducing the amount of commerce to/from Seaford from over one million tons per year to fewer than 600,000 tons per year. One major problem with the project was the identification of an environmentally acceptable placement site for the material. After over 10 years of searching a suitable upland placement area was found. The area was an old executive golf course near the Nanticoke River and nestled in a small community. The town of Seaford bought all 42 acres of the property and allowed 21 acres to be used for placement. The remaining 21 acres would be turned into a park for the community.

The dredging at Susquehanna River, and the creation of Battery Island, was accomplished immediately after the Nanticoke River Dredging in Seaford, Delaware

Environmental Benefits

While no distinct environmental benefits came from the completion of the project, many environmental aspects were included in the planning and execution. From the beginning, this project was subjected to a high degree of scrutiny from the Delaware environmental groups (state and local). A plethora of water and sediment testing was performed and negotiations were numerous. Instead of allowing the effluent from the weir in the upland placement site to flow into an existing stream, the effluent needed to be pumped back to the Nanticoke; one mile away. This called for double the amount of pipeline (one to bring the slurry to the site and one line to send the effluent back). In addition, since the material to be dredged was very fine a flocculent was needed to meet the water quality standards.

Cottrell worked with the Corps when placing the pipeline to avoid an archeological site located in the pathway.
Innovation

Due to the sensitivity of the project additional monitoring had to be performed to meet expectations of the regulatory agencies. This included continual monitoring of the flocculent, at the weir box and at the point of discharge back into the river and the mixing zone.

Economical Benefits

The town of Seaford will experience the most economic benefit from this project. With the federal channel cleared of shoaling, more, and heavier loaded, vessels will be able to reach the port and distribute good. The shoaling had reduced the amount of commerce to/from Seaford from over one million tons per year to fewer than 600,000 tons per year. The Congressional support and outstanding work completed by Cottrell Contracting allowed this project to be completed efficiently and in a timely manner.

Transferability

This project is a great demonstration of partnership between the local sponsor, the Corps and the contractor. All three entities worked together during the construction of the upland placement site, and during the dredging to allow the project to run as smoothly as possible. Cottrell Contracting and the Corps were willing to provide any information to the local sponsor and the state environmental employees to better explain the process of dredging and the rationale behind some of the decisions.

Cottrell Contracting, Inc. did a superb job maneuvering in a sensitive area; not to damage any personal property. The pipelines needed to extend from the river, go through private property, under a road and across private driveways, to get to the site. Cottrell Contracting did a professional job while maintaining a good relationship with the affected citizens. Cottrell Contracting went one step beyond to please all homeowners and to replace and/or repair and disturbance to their property.

During preparation of the site for dike construction Cottrell Contracting worked with the locals by clearing the area of trees and stacking them, as requested by the local sponsor. In addition, when abandoned irrigation pipes were located within the placement site (for watering the greens) Cottrell Contracting removed the pipes without any delay or expectations. There were also houses surrounding the placement and Cottrell established a harmonious relationship with the owners and no issues were encountered.

Outreach and Education

Since the Nanticoke Channel in Seaford had not been dredged in over 20 years, many of the state and local employees had not witness a dredging contract first hand. The excellent rapport between Cottrell Contracting, and the local employees proved to be a great education tool in providing an understanding of the dredging process.
Nanticoke River Maintenance Dredging

**Prime Contractor:** B.G. Cottrell & J.M. Cottrell Owners; Franklin Hall - Project Manager; Eiford Clemmons – General Superintendent; Eddie Bellamy – Captain Dredge Lexington; Andy Clemmons, Taylor Farley and Randy Stanley – Quality Control Managers; Ricky Fulford – Lead Equipment Operator

**State of Delaware, Sussex County:** Mr. Mike Izzo, County Engineer, Julie Wheatly, Director Sussex County Economic Development, Mr. Tom Ferris, Sussex County QA/QC

**Delaware Environmental:** Dr. Green, Melanie Tynes

**U.S. Fish and Wildlife:** Mr. George Ruddy Team Member

**Baltimore District Corps of Engineers:** Mr. Robert Blama, Ms Danielle Szimanski, co-project managers; Mr. Jeff Price, Corps Inspector. Ms. Cheryl Montgomery, Risk Analyzer.
ke Dredge Project
binary Pipeline
Alignment

Pipeine to
Dredge Site

Created By: Buddy Lynch