

Get the 411 on This Emergency Tie Up Project

In 2001, the Canal Authority of Panama entered into a design for an emergency tie up station for canal traffic. These types of structures require unique engineering considerations. Designers with the authority determined that a cellular cofferdam would be the most cost effective design solution for this marine structure.



Template construction for cellular coffer dam



Final phase of dock construction



Completed tie up structure

► Problem

Cellular cofferdams were the original sheet pile application. These designs have been in use for over 100 years. It is a conventional gravity marine structure with very demanding installation tolerances. Just as important to the design of these circular cells, the contractor's installation expertise is the bridge from theory to application. The Panama market has many quality pile driving contractors, but they lacked cellular construction experience. In addition, the location of the site presented unusual and difficult conditions.

► Solution

The Canal Authority turned to the Skyline Steel experts. Our engineering group was able to offer design support on material grade and section to extend the service design life of the structure. They also provided construction guidance to assure the installation

was performed properly. Our sales professionals closed the Skyline value added service loop by supplying the material specified at a cost lower than the engineering estimates while meeting a demanding delivery schedule.

► Result

Due to material lengths and project location, Land delivery methods were nearly impossible. Our commercial and sales personnel coordinated material transfer from ocean going vessels to construction barges. Because of the long term relationship established, they were also able to offer open payment terms. Upon material delivery, Skyline's engineering professionals educated the contractor and made site visits to assure installation. Lastly the Canal Authority saved money through Skyline's value engineering.

► Project Details

4,000 NT of AS500/12.0
ASTM A-572 Gr. 50 Flat Web
Sheet Piles