

FOR IMMEDIATE RELEASE

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Chickamauga Lock Cofferdam Awarded to C. J. Mahan Construction Company, LLC

The Nashville District of the Army Corps of Engineers has awarded the first phase of the Chickamauga Lock replacement to C. J. Mahan Construction Company, LLC.

This \$82,991,785.30 was bid on August 25, 2006 and is the first of several contracts for the eventual replacement of the existing lock. The project is on the Tennessee River in Chattanooga, Tennessee and is located at Mile 471.0. The existing dam also serves as a hydro-electric power plant and the existing lock has a size of 60' x 360'. The new lock will have a size of 110' x 600'. The existing lock is deteriorating rapidly due to aggregate degradation in the original concrete that causes "concrete growth". The ACOE has spent several million dollars to drill anchors through the existing lock walls to keep the lock from moving and cracking. Studies show that the lock could become inoperable as soon as 2010.

This project consists of constructing a cofferdam system that will eventually be dewatered to allow for construction of the future lock in a separate contract. The cofferdam is constructed with aggregate filled sheet pile cellular cofferdams along with a precast concrete box system that eventually becomes a part of the permanent lock wall.

There are 23 each 50.16' diameter aggregate filled sheet pile cellular cofferdams with 24 each connecting cells. These cells are founded on rock which is at or very near the surface of the river bottom. In some of the cells remediation work will be required to remove bentonite (clay) cavities. There is also a 45.96' diameter cofferdam protection cell of similar construction.

The permanent precast cells are founded on 73 each 74" diameter drilled shafts that vary in length 35' to 56' in overall length. Of these lengths, 27' to 50' are in rock with the remainder in sticking up above the river bottom. The precast cells are generally constructed of four precast concrete panels and are then assembled, set onto the drilled shafts and filled with concrete. Formed concrete is then poured on top of the segments for the final lock wall shape.

The project also has several other notable features including a cellular pier protection system to protect river traffic from damaging a downstream railroad bridge, an aggregate training dike, vertical tension anchors, pressure grouting for a grout curtain cut-off wall, and a cofferdam dewatering system.