

Project Factsheet for: Lock & Dam 11, Mississippi River, Iowa (Rehabilitation and Major Maintenance)

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Project Location Information

Location: Dubuque, Iowa
River Basin(s): Mississippi
State(s): IA , IL
Congressional District(s): IA-1 , IL-16 , WI-3

Status

The Stage II contract was awarded in July 2005 and will be substantially complete in January 2009. The contract includes rehabilitating the lock and replacing the dam electrical system. Two winter closures took place to repair the upper and lower guide walls and install lock chamber bulkhead slots. A third lock closure took place from December 15, 2007 to March 15, 2008 and the lock chamber was dewatered, mechanical and electrical systems replaced along with installing pre-cast concrete panels in the lock chamber. Structural Maintenance crews also rehabilitated and re-installed the four lock chamber miter gates during CY2008. The contractor started replacing the dam electrical system during the summer of 2008. Work is progressing as scheduled and the contractor is expected to complete the dam electrical work in January 2009. The remaining dam rehabilitation work has been split into two smaller contracts. The Stage III-A contract was awarded in September 2008 and includes repalcing tainter gate chains, rehabilitating roller gate chains, rehabilitating dam gate motors, and replacing the service bridge decking. The contractor is expeced to start work in the spring of 2009 and complete work in the summer of 2010. the Stage III-B contract will include concrete repairs on the dam. The project design is on hold due to insufficient funding. A lock chamber bulkhead procurement contract was awarded in FY2007. The contract will procure 9 bulkheads with delivery currently scheduled for the summer of 2009. The bulkheads will be used regionally on the upper Mississippi River.

Description

Lock and Dam 11 is located at River Mile 583.0, in the town of Dubuque, Iowa. The structure was placed in operation 14 September 1937. The lock chamber is 600 feet long by 110 feet wide and has a maximum lift of 11 feet. An auxiliary lock is located adjacent to the Iowa side of the channel. The dam is 5,018 feet long and consists of a 1,278-foot gated section, a 200-foot long storage yard, and a 3,540-foot non-overflow earth dike. Breakdowns of mechanical and electrical equipment had become more frequent with resultant delays and loss of revenue to commercial waterway users. The electrical system presents safety concerns due to its age and insulation deterioration. The lock and dam rehab project first received funding by a Congressional add in FY02 and will be completed in three stages.

- Stage I, Dam Scour Protection, involved placing additon scour protection upstream and downstream of the dam. The construction contract was awarded in July 2002 and completed in August 2003.
- Stage II, Lock, involves the rehabilitation of the navigation lock chamber and associated appurtenances. Major work items include resurfacing the lock chamber, replacing the original lock machinery and electrical systems, bulkhead slots, repairing guidewall concrete, repairing tainter valves, and replacing the dam electrical system. Work is scheduled to be complete in January 2009.
- Stage III, Dam, involves the rehabilitation of the navigation dam. Major work includes the replacement of the tainter gate chains, rehabilitating the roller gate chains, repairing dam machinery motors and seals, and removal and replacement of deteriorated concrete on the dam piers. Insufficient funds to fully fund the Stage III contract will likely delay construction completion to FY2012.

Summarized Financial Data

	Rehabilitation	Major Maintenance
Estimated Federal Cost	\$47,400,000	\$24,700,000
Estimated Non-Federal Cost		
Estimated Total Cost	\$47,400,000	\$24,700,000

Allocations through FY 2008	\$40,512,000	\$7,249,000
Allocations for FY 2009	\$2,750,000	\$4,153,500
Budget Request for FY 2010	TBD	\$0
Balance to Complete after FY 2009	\$4,138,000	\$13,298,000

Major Work Item (This Fiscal Year)

FY 2009: Funds will be used to support the remainder of the lock rehabilitation and bulkhead procurement contracts including EDC, S&A, and contract closeout. The funds would also be used for the Stage III-A contract option and support the contract with EDC and S&A. Additional funds in FY2009 could be used to prepare plans and specifications and award Stage III-B dam concrete repairs contract.

Major Work Item (Next Fiscal Year)

FY 2010: Funds will be used to support the Stage III-A contract including EDC and S&A. Funds would also be used to complete plans and specifications and award the Stage III-B (dam concrete repairs) contract.

Authority

CG - Construction General -- River and Harbor Act of 1930, S.D. #126/71/2.

Additional Information

The Rock Island District's Construction General (CG), Inland Waterway Trust Fund (IWTF) and Operations & Maintenance (O&M) Mississippi River Lock and dam 11 lack of funds delayed the scheduled rehabilitation construction closures in 2003 and 2005. Stage III (Dam) major rehab work consists of replacing the tainter gate chains, installing pocket wheels and repairing severely deteriorated concrete on the dam structure. FY 2008 funding was insufficient to fully fund all of the work identified for dam repairs. As a result, the dam rehab will be completed with two contracts. Stage III-A will include the tainter gate chain replacement for the 13 tainter gates and concrete repair in two badly needed areas. The FY2008 funding was not sufficient to complete the 13 tainter gates and as a result work for only 8 of the 13 tainter gates will be included in the base contract. The contract will include an option for the remaining 5 tainter gates and FY2009 were used to award the option work and complete the tainter gate chain replacement for the dam. Additional funds in FY2009 could be used to prepare planned and specifications and award Stage III-B for the remaining dam concrete repairs.

Project Manager Information

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