

EPIC INITIATIVE Phase I Overview

Dock 615 Emergency Repair

Total Cost = \$3,529,297.98

Project Timeline = March 26, 2022 to November 28, 2022

Description: Dock 615 wall collapsed into the river after a rain event. Tiebacks for the wall failed. Luckily the even occurred during non-working hours. No injury to personnel or equipment damage.

Issues:

- 1. Mass excavation to exposed damaged tie back plates.
- 2. Whaler system was damaged.
- 3. Remove the damaged dock wall sheets.
- 4. In ground obstructions.
- 5. Installing new infrastructure around existing to support new dock wall.
- 6. Maintain rail movement through the dock area to avoid impact to coal handling within the terminal.
- 7. Critical timeline impacts ability to focus on value engineering.

Benefits:

- 1. Improved support for the dock wall.
- 2. Improved drainage for erosion control/mitigation.
- 3. Returned the dock back to operations for barge loading and unloading.

4. Better securement of barges.

Dock 614 Replacement and Dock 615 Improvements:

Total Estimated Cost = \$6,016,845.50

Construction Timeline = July 15, 2023 to April 30, 2024

Description: Discovered sink holes and evidence of degradation of the front wall for dock 614. We recognized the need for further investment into Dock 615 following the emergency repairs for improved protection of the asset and personnel.

- Replaced dock 614 front wall.
- Installed a new tie back system for front wall support.
- Installed a jet filter drainage system for improved water management.

- Removed and rebuilt the existing on dock rail at dock 614.
- Installed new fendering system on docks 614 and 615.
- Installed new barge winching systems on docks 614 and 615.

Issues:

1. Corp of Engineers Permit timeline was March 23, 2023 to August 30, 2023. Permit expires March 15, 2026.

2. Discovered a leaking Warrior River Water Authority main waterline that was causing advanced erosion and flooding in ground around the dock's backwall. October 31, 2023 to December 1, 2023. This required additional stabilization and materials used.

3. In ground concrete obstructions between the existing on dock crane pilings required drilling for toe back rods.

Benefits:

1. Improved site drainage.

2. Engineered Dock 614 for the capacity of locomotive and railcars to support the on dock rail and cargo handling crane.

3. Installed fenders, mooring, and winch systems to improve barge

handling and better protect the dock walls.

4. Improved surface stability and condition for equipment and personnel.

5. Installed new ladders for safer barge access.

Pre-Construction Efforts for Dock 617

Total Estimated Cost = \$647,661.15

Pre-Construction Timeline = February 2022 to March 2024

Description: Discovered sink holes and evidence of degradation of the front wall for dock 617. Signs of settlement at the truck dumping ramp for barge loading operations. Design efforts associated with rebuilding the dock 617 wall and supporting infrastructure. This includes the rebuild of the truck dumping equipment.

Issues:

1. High construction cost associated with original design has driven the needs for more value engineering efforts.

Benefits:

1. Time to evaluate value engineering options along with the cost and timeline associated.