

CHICKAMAUGA LOCK REPLACEMENT PROJECT

INLAND WATERWAYS USERS BOARD MEETING NO. 102

ELIZABETH M. BURKS, P.E., PMP, LSS-BB
CHIEF OF INTEGRATED PROJECT OFFICE
U.S. ARMY CORPS OF ENGINEERS
NASHVILLE DISTRICT
11 APRIL 2024



U.S. ARMY



US Army Corps
of Engineers®





CHICKAMAUGA LOCK - OVERVIEW

Authorization:

- Energy and Water Appropriations Act of 2003
- Reauthorized in America's Infrastructure Act of 2018

Purpose/Description:

Construction of a new 110' x 600' lock replacement for Chickamauga Lock on TN River Mile 471 in Chattanooga, Tennessee. Construction of a new lock is required due to Alkali Aggregate Reaction (AAR), which threatens the stability and operability of the existing lock. Chickamauga passes approximately 1M tons annually and the new lock would reduce commercial transit times by 80%. In addition, the lock is the most active lock on the TN River for recreation vessels (~3,500 vessel lockages annually).

Schedule:

DESCRIPTION	ORIGINAL	CURRENT
Lock Operational (Online)	2024	2026
Project Completion Date (Base Schedule)	2025	2028

Cost:

- Total Project Cost Estimate: \$ 954,396,000 (Oct 2022 P.L.); Certified 16 Mar 2023
- Section 902 Limit = \$1,116,000,000 (FY22)
- June 2024 non-certified TPCS and March 2025 certified TPCS will be updated with contractor bids/schedule.



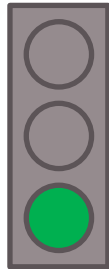
CHICKAMAUGA LOCK - SCOPE





CHICKAMAUGA LOCK – BLUF STATUS / DASHBOARD

PROJECT SAFETY



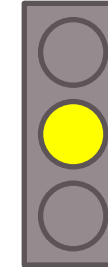
Hours/Rate	Lock Chamber
Exp Hours	3,088,429
PDART	1.2
Hours/Rate	USAW
Exp Hours	80,612
PDART	0.00

PROJECT STATUS SUMMARY



Schedule:	<u>Original</u>	<u>Last</u>	<u>Current</u>
Operational	Apr-24	Nov-26	Nov-26
Completion	Nov-25	Sep-28	Sep-28
Note: Orig. and Last Completion Dates from 2020 TPCS; Last Completion Date from 2023 TPCS			
Next Major Contract Award(s):			
• Approach Walls, Decommissioning & Site Restoration September 2024			

FINANCIAL STATUS SUMMARY



Planned	(BCWS)	\$564.9 M
Earned	(BCWP)	\$436.4 M
Actual	(ACWP)	\$469.5 M

BCWP: Reports the value (based on % Complete) of work performed to date (12MAR24)

Target: Actual as compared to Planned:

.(<1% = green) (>1% and <3% = Yellow and (>3% = Red)

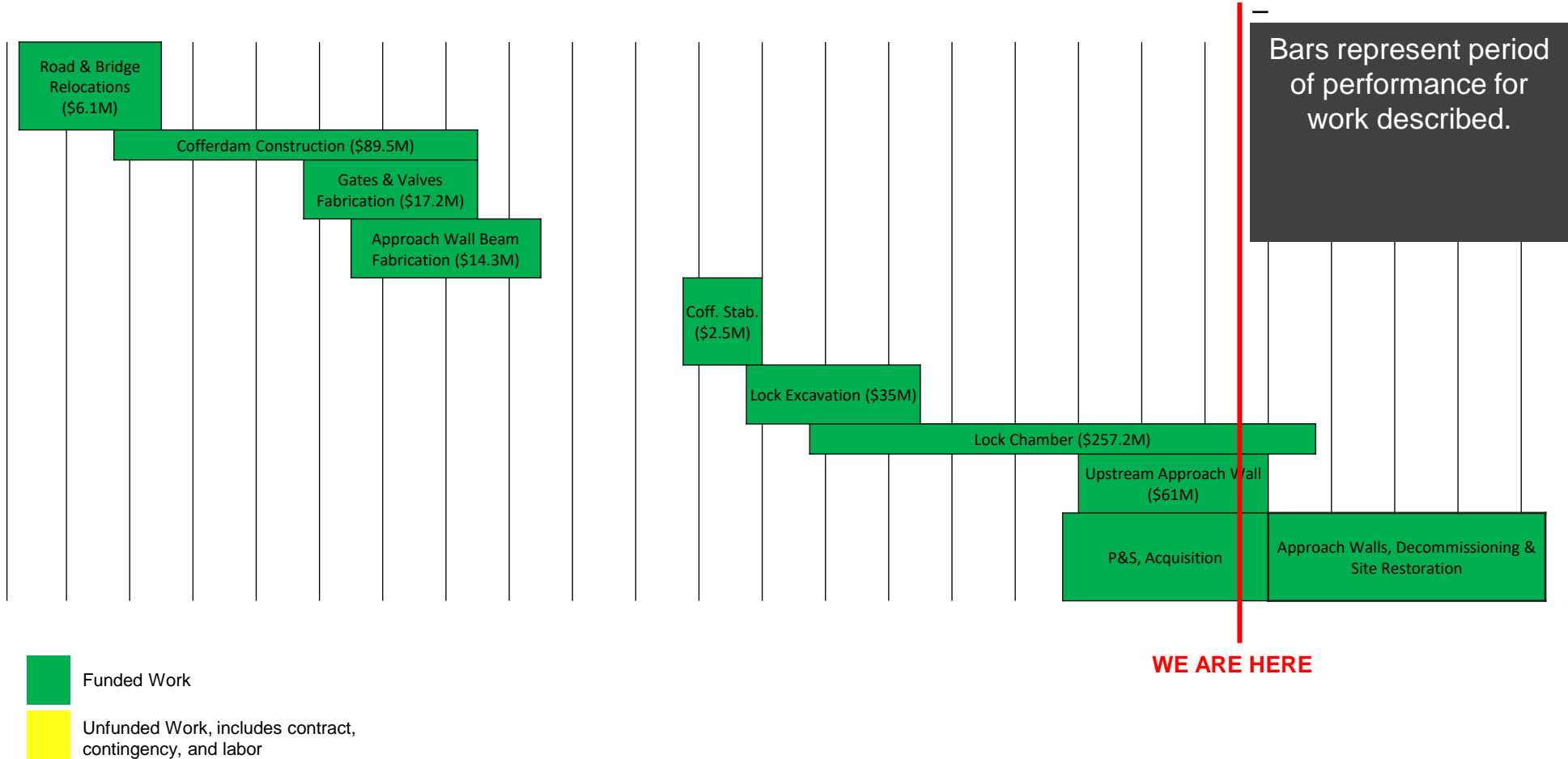
EXECUTIVE SUMMARY:

- **Lock Chamber Contract:**
 - **Schedule:** Required contract completion is 17 January 2026; Contractor is on schedule following 779 non-compensable days awarded.
 - **Certified Claim:** USACE is no longer pursuing ADR following DCAA audit.
 - **Concrete Placements:** Contractor currently averaging 4,000 CY per month, 220K of 250K CY complete.
 - **Gate installation:** Start in Fall 2024, critical path activities will then transition to electrical work for the operations building.
- **Upstream Approach Wall Contract:**
 - **Schedule:** Required contract completion revised to 4 March 2025
 - **Construction Status:** Ten of fourteen shaft have been drilled and concrete placed
 - **GFE Approach Wall Beams:** Being removed from TVA Watts Bar in September 2024 for installation.
- **Approach Walls and Decommissioning Contract:**
 - Contract out for solicitation. Proposals due in May 2024, award is schedule for September 2024.
 - Contract will require project labor agreements signed and in place as part of contractor proposals.



CHICKAMAUGA LOCK – SCHEDULE & FUNDING

FY2005 FY2006 FY2007 FY2008 FY2009 FY2010 FY2011 FY2012 FY2013 FY2014 FY2015 FY2016 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 FY2023 FY2024 FY2025 FY2026 FY2027 FY2028 FY2029



Schedule comments:

- The March 2023 certified Total Project Cost and Schedule update estimated baseline project completion in September 2028 (80% confident completion by August 2030).
- The new lock will become operational during the Approach Wall, Decommissioning, and Site Restoration contract.



CHICKAMAUGA LOCK – FUNDING SUMMARY

ALLOCATIONS	INVESTIGATION (M)	CG (M)	IWTF (M)	ARRA (M)	TOTAL (M)
Prior to FY 20	\$3.3	\$215.9	\$156.4	\$49.2	\$424.9
FY20	\$0	\$66.1	\$35.6	\$0	\$101.7
FY21	\$0	\$124.2	\$66.9	\$0	\$191
FY22	\$0	\$0	\$0	\$0	\$0
FY23	\$0	\$0	\$0	\$0	\$0
FY24	\$0	\$153.92	\$82.88	\$0	\$236.8
Total to Date:	\$3.3	\$560.12	\$341.78	\$49.2	\$954.4
Remaining TPC Balance:					\$ 0

Total Project Cost (TPC)	\$954.4 M	FY22 Price
Authorized Cost:	\$717.6 M	WRDA 2020
Escalated Cost:	\$854.2 M	FY23 Price
902 Limit:	\$1,116 M	FY22
PED Cost:	\$72.5M	1 Mar 2024
S&A Cost:	\$30.8 M	1 Mar 2024

Fiscal Year Funding Capabilities:

FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	TOTAL
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Commentary:

- The project was funded to the 2023 TPCS price level, \$954.4M
- The FY2023 Total Project Cost and Schedule update has been certified as of 16 March 2023.
- Follow on contracts for site remediation at Watts Bar and Muscle Shoals will be required in 2027
- Project Labor Agreement (PLA) was not factored in to 2023 TPCS, may result in higher than anticipated bids.
 - Contingency is expected to absorb the cost impacts.



CHICKAMAUGA LOCK – ISSUES/CHALLENGES

- The Lock Chamber contractor was awarded 779 non-compensable days and is currently on schedule. Completion is expected in January 2026.
- The Lock Chamber Certified Claim alleges cost and schedule impacts due to a variety of items, most notably COVID-19. USACE is no longer pursuing ADR. DCAA audit completed in November 2023.
- Further delays in active contracts will impact full mobilization of Approach Wall and Decommissioning contractor due to site limitations.
 - Concrete Batch Plant Mobilization is critical path for the project
 - June 2024 non-certified TPCS and March 2025 certified TPCS will be updated with AWD contractor bids and schedule that will reflect impacts of Project Labor Agreements.



THANK YOU

Point of Contact:
CPT Joseph Cotton, PMP
Project Manager – Integrated Project Office
Email: joseph.r.cotton@usace.army.mil
Cell: 630-461-2415

