



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-0001

CESAM-EN-QC

1 May 2023

MEMORANDUM FOR Commander, U.S. Army Engineer Division, South Atlantic
(CESAD-DE), 60 Forsyth Street, Room 10M15, Atlanta, Georgia 30303

SUBJECT: Approval of the Review Plan for Coast-wide Beach and Dune Ecosystem
Restoration, Jackson County, Mississippi

1. References:

- a. ER 1110-2-1150, "Engineering and Design for Civil Works Projects," dated 31 August 1999.
- b. ER 1110-1-12, "Engineering and Design Quality Management," dated 31 March 2011.
- c. ER 1165-2-217, "Civil Works Review Policy," dated 1 May 2021.
- d. ER 415-1-11, "Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review," dated 1 January 201 Sustainability (BCOES) Review," dated 1 January 2013.

2. I hereby request approval of the enclosed Review Plan for the Coast-wide Beach and Dune Ecosystem Restoration, Jackson County, Mississippi project. The Review Plan complies with applicable policy, provides for Agency Technical Review, and has been coordinated with the SAD. Significant changes to this Review Plan, such as scope or level of review changes, should they become necessary, will require written approval from SAD.

3. The POC for this action is Valerie Morrow, Project Technical Lead, (251) 370-8805.

Encls


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CHAPMAN, JEREMY, JIGGS.118
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Date: 2023.05.01 16:58:11 -0500
JEREMY J. CHAPMAN, P.E.
COL, EN
Commanding

REVIEW PLAN

MISSISSIPPI COASTAL IMPROVEMENTS PROGRAM COASTWIDE BEACH AND DUNE ECOSYSTEM RESTORATION

P2 # 321370

JACKSON COUNTY, MISSISSIPPI

U.S. Army Corps of Engineers

Mobile District

South Atlantic Division

21 March 2023



**US Army Corps
of Engineers**
Mobile District

Review Plan for Coast-wide Beach and Dune Ecosystem Restoration, Jackson County, Mississippi Project Implementation Documents

Refer to ER 1165-3-217, *Civil Works Review Policy*, May 2021, regarding the requirements for executing this plan.

1. **Date:** 21 March 2023
2. **Review plan revision, if applicable:** N/A
3. **Project name:** Coast-wide Beach and Dune Ecosystem Restoration, Jackson County, Mississippi Project
4. **Project location:** Jackson County, Mississippi
5. **Project P2 number:** 321370
6. **Review Management Organization (RMO):** South Atlantic Division
7. **Review plan POCs:**
 - a. **District:** Engineering Technical Lead, 251-690-2484
 - b. **SAD:** Implementation Quality Manager, 404-562-5210
8. **Expected in-kind contributions/services to be provided by the non-Federal sponsor:** \$350,000 for topographic surveys and CADD services.
9. **Target construction contract award date:** October 2025
10. **Estimated construction contract value(s) (range):** \$5M - \$10M
11. **Project description:** This project includes construction of a new berm and dune system along approximately 4 miles of the existing mainland coast, with the landward toe of the dune approximately 50 feet seaward of existing seawalls. The project will provide habitat for shorebirds including the Least Tern and Piping Plover, as well as incidental coastal storm damage reduction.
12. **Documents to be reviewed:** Construction plans and specifications, Design Documentation Report (DDR)
13. **Required reviews:**
 - a. District Quality Control Review
 - b. Agency Technical Review (ATR)
 - c. Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review

14. Site visits by review teams: Not Required

15. Justification to waive ATR, if applicable: N/A

16. ATR team disciplines and qualifications:

Team Member Discipline	Minimum Qualifications
Team Lead	A senior professional, external to SAD, with extensive experience in preparing Civil Works implementation documents and conducting ATR, and with the necessary skills and experience to lead a virtual team through the ATR process. May be combined with another review role.
Hydrology and Hydraulic (Coastal) Engineer	A licensed professional engineer with expertise in coastal engineering including hydraulic and hydrologic modeling techniques for sediment transport and morphologic change, and expertise in the design of beach nourishment projects.
Geotechnical Engineer	A licensed professional engineer with expertise in geotechnical investigations, including soil classification, beach nourishment compatibility analysis, and borrow area design.
Environmental Scientist (Coastal)	Shall have experience in the influence of beach nourishment on coastal ecosystems and other coastal features, and the National Environmental Protection Act (NEPA) process. Should also be experienced in the National Historic Preservation Act (NHPA) Section 106 process and tribal coordination.

17. Considerations regarding the need for a SAR:

- a. **Could project failure result in flooding-related loss of human life?** No.
- b. **If so, what is the population at risk?** N/A
- c. **Will the design of water impoundment or training features deviate from USACE guidance or be based on uncommon analytical methods?** No.
- d. **If modifying an existing project, could the probability of project failure be temporarily increased during construction?** N/A

18. Determination regarding the need for a SAR: Based on the information presented above, the District Chief of Engineering, as the Engineer-In-Responsible-Charge, has determined that a SAR is not warranted.

19. Numerical models to be utilized:

Model Name	Model Description	Approval Status
ArcGIS and Desktop	Geospatial data mapping tool.	HH&C Scientific & Engineering Technology (SET) allowed for use
Sediment Budget Analysis System (SBAS)	Tool used in developing sediment budgets	SET allowed for use
GenCade	A 1-D model used to calculate shoreline change, wave-induced long-shore sand transport, and morphology change	SET allowed for use
CSHORE/SBEACH	A 1-D nearshore model for predicting hydrodynamics and profile change.	SET allowed for use
Microcomputer Aided Cost Engineering System (MCACES), MII	Cost estimating software used to prepare Civil Works cost estimates.	Civil Works Cost Engineering MCX mandatory
Cost Engineering Dredge Estimating Program (CEDEP)	Required for dredging estimates using floating plants.	Civil Works Cost Engineering MCX mandatory

20. Schedule and cost of reviews:

Submittal	Reviews	Schedule	Cost
65% Submittal	DQC, ATR	May - Jun 2024	\$ 55,000
Final	DQC, ATR (completion), BCOES	Sept - Oct 2024	\$ 55,000