



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

CESAM-EN

18 March 2020

MEMORANDUM FOR Commander, South Atlantic Division (CESAD-RBT), 60 Forsyth Street SW, Room 10M15, Atlanta, GA 30303

SUBJECT: Approval of the Review Plan for the Rehabilitation efforts for the Panama City Beaches Coastal Storm Risk Management Project, Panama City, Florida

1. References:

- a. Water Resources Development Act of 1986, Public Law 99-662
- b. Engineering Circular (EC) 1165-2-217, Water Resources Policies and Authorities Review Policy for Civil Works, 20 February 2018.

2. I hereby request approval of the enclosed Review Plan for the Rehabilitation efforts for the Panama City Beaches Coastal Storm Risk Management Project and concurrence with the conclusion that a Safety Assurance Review/Type II Independent External Peer Review (IEPR) of the subject project is not required. The Review Plan complies with applicable policy, provides for District Quality Control (DOC), Agency Technical Review (ATR), Biddability, Constructability, Operability, Environmental and Sustainability (BCOES) Review, and has been coordinated with the SAD. It is my understanding that non-substantive changes to this Review Plan, should they become necessary, are authorized by SAD.

3. The district will post the approved Review Plan to its website and provide a link to the SAD for its use. Names of Corps/Army employees will be withheld from the posted version, in accordance with guidance.

4. Point of Contact is John E. Bass, Engineering Technical Lead, CESAM-EN, (251) 690-3259 or John.E.Bass@usace.army.mil

SEBASTIEN P. JOLY
Colonel, Engineer
Commanding

REVIEW PLAN

REHABILITATION EFFORT FOR THE PANAMA CITY BEACHES COASTAL STORM RISK MANAGEMENT PROJECT PANAMA CITY, FL

Mobile District

March 2020

THE INFORMATION CONTAINED IN THIS REVIEW PLAN IS DISTRIBUTED SOLELY FOR THE PURPOSE OF PRE-DISSEMINATION PEER REVIEW UNDER APPLICABLE INFORMATION QUALITY GUIDELINES. IT HAS NOT BEEN FORMALLY DISSEMINATED BY THE U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT. IT DOES NOT REPRESENT AND SHOULD NOT BE CONSTRUED TO REPRESENT ANY AGENCY DETERMINATION OR POLICY.



**US Army Corps
of Engineers®
Mobile District**

REVIEW PLAN

REHABILITATION EFFORT FOR THE PANAMA CITY BEACHES COASTAL STORM RISK MANAGEMENT PROJECT PANAMA CITY, FL

TABLE OF CONTENTS

1. PURPOSE AND NEED	1
2. DESCRIPTION OF PROJECT.....	1
3. DESCRIPTION OF WORK FOR REVIEW	3
4. BACKGROUND.....	3
5. PROJECT DELIVERY TEAM.....	3
6. LEVELS OF REVIEW.....	3
7. DISTRICT QUALITY CONTROL	3
8. AGENCY TECHNICAL REVIEW	4
9. BIDDABILITY, CONSTRUCTABILITY, OPERABILITY, ENVIRONMENTAL, AND SUSTAINABILITY REVIEW	5
10. INDEPENDENT EXTERNAL PEER REVIEW	5
11. REVIEW MANAGEMENT ORGANIZATION.....	6
12. POLICY AND LEGAL COMPLIANCE.....	6
13. MODEL CERTIFICATION AND APPROVAL	6
14. REVIEW SCHEDULE AND COSTS	6
15. PUBLIC PARTICIPATION	7
16. MAJOR SUBORDINATE COMMAND (MSC) APPROVAL.....	7

LIST OF ATTACHMENTS

- ATTACHMENT 1 – TEAM ROSTER
- ATTACHMENT 2 – APPROVED REVIEW PLAN REVISIONS
- ATTACHMENT 3 – ACRONYMS AND ABBREVIATIONS

REHABILITATION EFFORT FOR THE PANAMA CITY BEACHES COASTAL STORM RISK MANAGEMENT PROJECT PANAMA CITY, FL

1. PURPOSE AND NEED

This Review Plan defines the scope and level of review activities for the Rehabilitation Efforts for the Panama City Beaches Coastal Storm Risk Management Project, Panama City, Florida. Review activities consist of District Quality Control (DQC) and Agency Technical Review (ATR). The project is in the Pre-Construction, Engineering, and Design (PED) Phase. The related documents for review consist of Plans and Specifications (P&S) and the Design Documentation Report (DDR). The Review Management Organization (RMO) is the South Atlantic Division.

2. DESCRIPTION OF PROJECT

The Panama City Beaches, Florida, Beach Erosion Control and Storm Damage Reduction Project, hereinafter referred to as the Panama City Beaches Coastal Storm Risk Management (CSRМ) Project, is located on northwestern Florida's Gulf of Mexico shoreline, approximately 70 miles west of Tallahassee, Florida, and 150 miles east of Mobile, Alabama. Panama City Beach's gulf front extends roughly 18.5 miles from Philips Inlet easterly to the St. Andrews State Recreation Area (just west of the St. Andrews Bay entrance). The Panama City Beaches CSRМ Project is approximately 17.5 miles in length and runs between Florida Department of Environmental Protection (FDEP) monuments R-1 and R-91.

The Panama City Beaches CSRМ Project was authorized by the Water Resources Development Act of 1986 (P.L. 99 – 662, Ninety-ninth Congress, Second Session), Section 501(a), for the construction of initial fill and periodic nourishment in accordance with the Report of the Chief of Engineers, dated 8 July 1977, House Document Numbered 96-65 and reauthorized by Section 318(a) of WRDA 1996 (P.L. 104-303).

The plan federally authorized by the Water Resources Development Act (WRDA) of 1986 provided for a dune top width of 30 feet at an elevation of 15 feet-National Geodetic Vertical Datum of 1929 (NGVD29) (14.5 feet National American Vertical Datum of 1988 [NAVD88]), a 25-foot wide storm berm at 7 feet-NGVD29 (6.5 feet NAVD88), and a 10-foot wide berm at 4 feet-NGVD29 (3.5 NAVD88) sloping down to the natural bottom of the Gulf of Mexico at 1-foot vertical to 18-feet horizontal. The plan also authorized stabilization of the dune top with vegetation. A 1996 General Reevaluation Report (GRR) was completed that modified the project based on a storm protection benefit analysis according to the National Economic Development (NED) standard. The modified project adjusted the fill template and included a terminal groin near Philips Inlet; the groin was not constructed. The locally preferred plan (LPP) was implemented under recommendations of the 1996 GRR, which consisted of a 7-foot berm landward of the erosion control line with a 50-foot top width from FDEP monuments R-91 to R-

17 and a 30-foot top width from monuments R-17 to R-5 with no terminal groin feature. The LPP was constructed between 1998 and 1999. The 2009 Limited Reevaluation Report (LRR) extended the project approximately 1 mile to the West, continuing with the 30-foot berm top width from FDEP monuments R-5 to R-1. The project was last renourished in 2017.

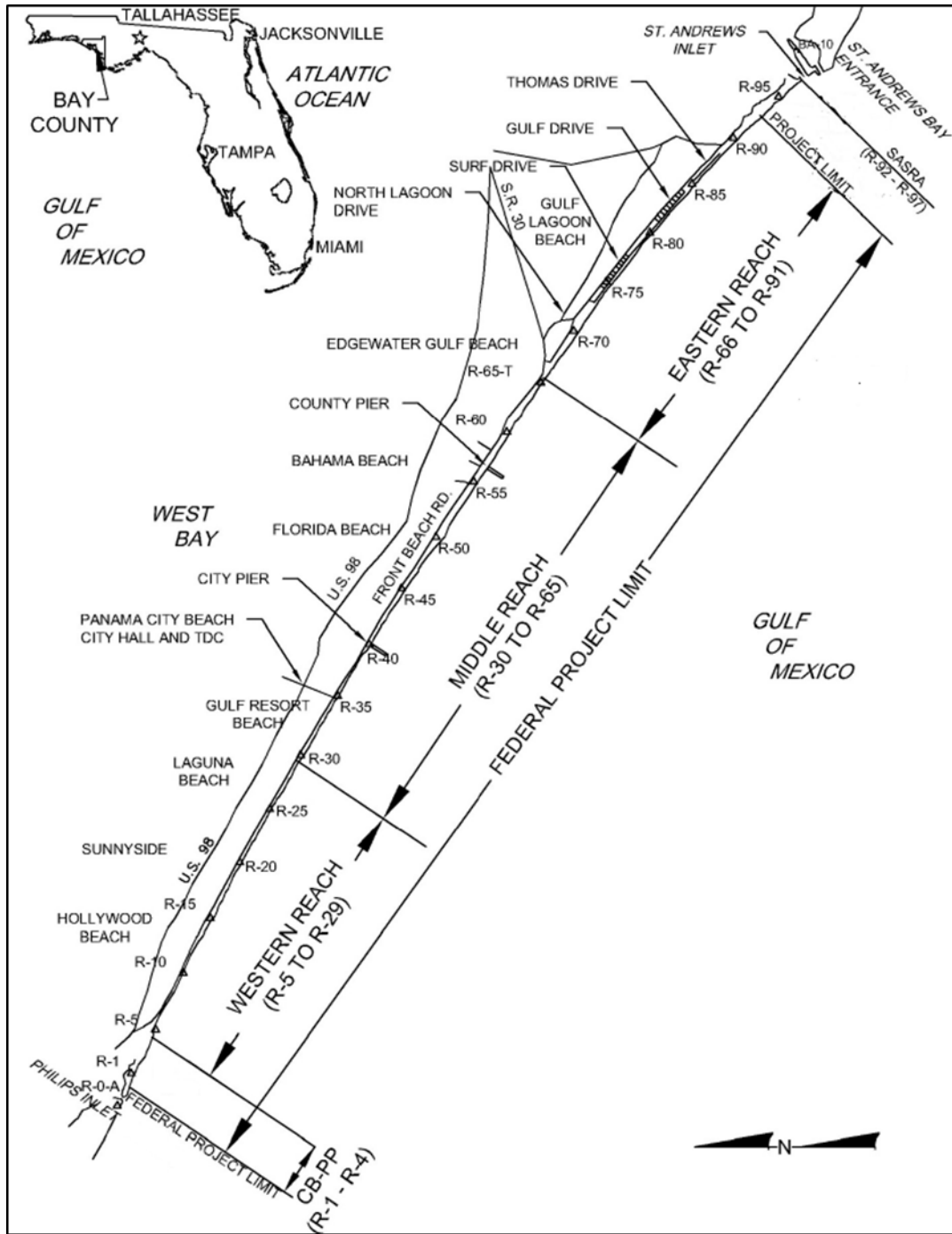


Figure 1: Panama City Beaches Project Location (Source: APTMI, 2018)

3. DESCRIPTION OF WORK FOR REVIEW

PED Phase shall consist of developing plans and specifications for the restoration of the Panama City Beaches CSRM Project. As discussed in the Project Information Report (PIR), dated April 2019, this project, as the selected alternative (Alternative 2), will restore the project to the full design template condition. The volume of material necessary to restore the project to its full project profile condition is estimated at 1.4 million cubic yards.

4. BACKGROUND

On 9 October 2018, Hurricane Michael peaked as a high-end Category 4 hurricane on the Saffir-Simpson scale. As the storm approached the Florida Panhandle, Hurricane Michael reached peak winds of 155 mph (250 km/h) as it made landfall near Mexico Beach, Florida (near Tyndall Air Force Base), on 10 October 2018. Panama City Beach, Florida, experienced major flooding along with storm surge as well as extreme wind and waves as a direct result of Hurricane Michael. Governor Rick Scott of the State of Florida declared a State of Emergency for 35 counties in the State of Florida on 8 October 2018 followed by the federal declaration of disaster (DR-4399) on 9 October 2018. Public Notices were sent to the Project Sponsor on 18 October 2018 requesting all Project Sponsors to submit their Requests for Rehabilitation Assistance by 10 November 2018. The Bay County Tourist Development Council submitted their Request for Rehabilitation Assistance for the Panama City Beaches CSRM Project to the Mobile District Headquarters on 24 October 2018.

Hurricane Michael caused “significant amounts of damage” to the Panama City Beaches CSRM Project, and the proposed work will restore the Panama City Beaches CSRM Project to the full construction template.

5. PROJECT DELIVERY TEAM

The Project Delivery Team (PDT) is comprised of those individuals involved directly in the development of the implementation documents. The individual contact information and disciplines of the District PDT are included in Attachment 1 of this document.

6. LEVELS OF REVIEW

This Review Plan (RP) describes the levels of review and the anticipated review process for the various documents to be produced. All levels of review are addressed in this RP: District Quality Control (DQC), Agency Technical Review (ATR), Biddability, Constructability, Operability Environmental, and Sustainability (BCOES), Independent External Peer Review (IEPR), and policy and legal compliance.

7. DISTRICT QUALITY CONTROL

All documents to be produced will undergo District Quality Control (DQC). DQC is the review of basic science and engineering work products focused on fulfilling the project quality

requirements defined in the PMP. DQC will be managed by Mobile District (SAM) in accordance with ER 1110-1-12, Engineering & Design Quality Management; ECB 2016-9, Civil Works Review; EC 1165-2-217, Civil Works Review Policy; and the District Quality Management Plan. The DQC will include quality checks and reviews, supervisory reviews, and PDT reviews. The DQC review will be completed prior to submitting documents for ATR. Documentation of the DQC review as contained in DrChecks will be certified prior to the ATR that DQC activities were sufficient and documented.

8. AGENCY TECHNICAL REVIEW

All documents produced as part of this effort will undergo Agency Technical Review (ATR) to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published Corps guidance, and that design P&S and supporting DDR are clear, constructable, environmentally sustainable, operable, and maintainable. The ATR will also ensure that the P&S and DDR are consistent with the approved/authorized plan.

The ATR team will consist of individuals that represent the significant disciplines involved in the accomplishment of the work. ATR will be managed within the Corps and conducted by senior USACE personnel outside of the SAM that are not involved in the day to day production of the project. DrChecks review software will be used to document all ATR comments, responses, and associated resolutions accomplished throughout the review process. The documents to be reviewed are the Final version of the P&S and DDR. The PDT will evaluate comments in DrChecks and revise materials as necessary. The ATR leader will be from outside the MSC and must complete a statement of technical review for all final products and final documents. By signing the ATR certification, the district leadership certifies policy compliance of the document and that the DQC activities were sufficient and documented.

An ATR team site visit will not be required. Photographs and requested additional project information will be provided in order to ensure a thorough and complete ATR of the project is performed.

Disciplines Required for Review. At a minimum, the following disciplines will be represented on the ATR team. All technical engineering ATR members shall be certified in the Corps of Engineers Reviewer Certification and Access Program (CERCAP) system.

Discipline	Required Expertise
ATR Lead	The ATR Team Leader shall be a professional outside SAD with experience in preparing Civil Works documents and conducting ATRs and shall have a minimum of 5 years of experience with shore protection projects. The ATR lead may also serve as one of the review disciplines in addition to the team leader duties.
Coastal Hydraulics	The team member should have a minimum of 5 years' experience in coastal beach renourishment and erosion control design.

Geotechnical Engineer/Geologist	The team member should have a minimum of 5 years' experience in the geotechnical evaluation of boring logs and test data for coastal renourishment projects.
Environmental Specialist	The team member should have a minimum of 5 years' experience with environmental evaluation and compliance requirements, pursuant to national environmental statutes (NEPA), section 404 of the Clean Water Act (CWA), applicable executive orders and other Federal planning requirements. Experience with coastal projects and State of Florida environmental requirements is also beneficial.

9. BIDDABILITY, CONSTRUCTABILITY, OPERABILITY, ENVIRONMENTAL, AND SUSTAINABILITY REVIEW

The value of a BCOES review is based on minimizing problems during the construction phase through effective checks performed by knowledgeable, experienced personnel prior to advertising for a contract. BCOES requirements must be emphasized throughout the planning and design processes for all programs and projects. This will help to ensure that the government's contract requirements are clear, executable, and readily understandable by private sector bidders or proposers. It will also help ensure that the construction may be done efficiently and in an environmentally sound manner, and that the construction activities and projects are sufficiently sustainable. Effective BCOES reviews of design and contract documents will reduce risks of cost and time growth, unnecessary changes and claims, as well as support safe, efficient, sustainable operations and maintenance by the facility users and maintenance organization after construction is complete. A BCOES Review will be conducted for this project at the Final Design Phase. BCOES will be managed by the Mobile District with team members from Mobile District (SAM).

10. INDEPENDENT EXTERNAL PEER REVIEW

Independent External Peer Review (IEPR) is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of the USACE is warranted. This project is in the implementation phase; thus, the Type I IEPR is not required.

Based on criteria contained in EC 1165-2-217, the District Chief of Engineering, as the Engineer-In-Responsible-Charge, does not recommend a Type II IEPR Safety Assurance Review (SAR). The nature of the rehabilitation is to place sand back on the beach, commensurate with prior re-nourishments. Paragraph 12.h.3.f of the EC states that “a beach re-nourishment project that does not affect life safety does not require a SAR.” The Federal action is not justified by life

safety, and project failure would not pose a significant threat to human life. Innovative materials or novel engineering methods will not be used. Redundancy, resiliency, or robustness are not required for design. Also, the project has no unique construction sequencing, or a reduced or overlapping design construction schedule.

11. REVIEW MANAGEMENT ORGANIZATION

It is the responsibility of the Review Management Organization (RMO) to develop and prepare a “charge” to the reviewer. SAD is the RMO for this project, and SAM will assist with the development of the “charge.” The purpose of agency reviews throughout the project life cycle, including ATR and policy compliance and legal reviews, generally, is to ensure that the appropriate problems and opportunities are addressed as well as assure that accurate cost, scheduling, and associated risks are presented.

12. POLICY AND LEGAL COMPLIANCE

The National Environmental Policy Act (NEPA) compliance is required for the construction of this project. This includes consideration of no adverse impacts to the environment. NEPA documentation will be prepared and coordinated prior to the preparation of P&S. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents. The SAM Office of Counsel reviews all contract actions for legal sufficiency in accordance with Engineer Federal Acquisition Regulation Supplement 1.602-2 responsibilities. The subject implementation documents and supporting environmental documents will be reviewed for legal sufficiency prior to advertisement.

13. MODEL CERTIFICATION AND APPROVAL

The models used for this project that have been approved for use include: Coastal Engineering Design and Analysis System (CEDAS).

14. REVIEW SCHEDULE AND COSTS

The total cost for DQC review is estimated to be \$15,000. The total cost for the ATR is estimated to be approximately \$24,000. The documents to be reviewed and scheduled dates for reviews are as follows:

Milestone	Review	Schedule Dates
100% Unreviewed P&S and DDR	DQC	28 February 2020
Final P&S and DDR	ATR	07 April 2020

15. PUBLIC PARTICIPATION

The RP will be made accessible to the public through the Mobile District website link <http://www.sam.usace.army.mil/>.

16. MAJOR SUBORDINATE COMMAND (MSC) APPROVAL

The MSC (Division Commander) is responsible for approving the RP as prepared by the Mobile District. Approval is provided by the MSC Commander. The Commander's approval reflects team input as to the appropriate scope and level of review for the implementation documents. Like the PMP, the RP is a living document and may change as the project progresses. Changes in the RP should be approved by following the process used for initially approving the plan. In all cases, the MSC will review decisions on the level of review and any changes made in updates to the project.

ATTACHMENT 1 – TEAM ROSTER

Product Delivery Team Members

Discipline (POC)	Name	Office/Agency
Project Manager	Patrick O'Connor	CESAM-PM-CM
Engineering Technical Lead (ETL)	John Bass	CESAM-EN-H
Hydraulic/Coastal Engineer	Marshall Hayden	CESAM-EN-HH
Geologist/Geotechnical Engineer	Marcus Shekouh	CESAM-EN-GG
Cost Estimators	Jay Caldwell	CESAM-EN-E
Environmental Specialists	Kathleen McConnell	CESAM-PD-EC
Specifications Engineer	Marie Klusman	CESAM-EN-DW
Civil Engineer (Operations/Construction)	Waylon Register	CESAM-OP
Sponsor	Dan Rowe	Executive Director, Bay County Tourist Development Council, Panama City, FL
Sponsor	Lisa Armbruster	Consultant for Bay County Tourist Development Council, Panama City, FL

ATTACHMENT 3 - ACRONYMS AND ABBREVIATIONS

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
AFB	Alternative Formulation Briefing	NED	National Economic Development
ASA(CW)	Assistant Secretary of the Army for Civil Works	NER	National Ecosystem Restoration
ATR	Agency Technical Review	NEPA	National Environmental Policy Act
BCOES	Biddability, Constructability, Operability Environmental, and Sustainability	O&M	Operation and maintenance
CAP	Continuing Authorities Program	OMB	Office and Management and Budget
CSDR	Coastal Storm Damage Reduction	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DPR	Detailed Project Report	OEO	Outside Eligible Organization
DQC	District Quality Control/Quality Assurance	OSE	Other Social Effects
DX	Directory of Expertise	PCX	Planning Center of Expertise
EA	Environmental Assessment	PDT	Project Delivery Team
EC	Engineer Circular	PAC	Post Authorization Change
EIS	Environmental Impact Statement	PMP	Project Management Plan
EO	Executive Order	PL	Public Law
ER	Ecosystem Restoration	QMP	Quality Management Plan
FDR	Flood Damage Reduction	QA	Quality Assurance
FEMA	Federal Emergency Management Agency	QC	Quality Control
FRM	Flood Risk Management	RED	Regional Economic Development
FSM	Feasibility Scoping Meeting	RMC	Risk Management Center
GRR	General Reevaluation Report	RMO	Review Management Organization
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RTS	Regional Technical Specialist
IEPR	Independent External Peer Review	SAR	Safety Assurance Review
ITR	Independent Technical Review	SEIS	Supplemental Environmental Impact Statement
LRR	Limited Reevaluation Report	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act