



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SOUTH ATLANTIC DIVISION
60 FORSYTH STREET SW, ROOM 10M15
ATLANTA, GA 30303-8801

CESAD-RBT

24 September 2019

MEMORANDUM FOR Commander, Mobile District, P.O. Box 2288, Mobile, Alabama
36628-0001

SUBJECT: Approval of the Review Plan for the Panama City Harbor Improvements to Bay Harbor Channel, Panama City, Florida

1. References:

- a. Memorandum, CESAM-PD-FP (1105), subject as above.
 - b. Engineering Circular (EC) 1165-2-217, Water Resources Policies and Authorities Review Policy for Civil Works, 20 February 2018.
2. The Review Plan (RP) for the Panama City Harbor Improvements to Bay Harbor Channel submitted by the Mobile District via reference 1.a. noted above has been reviewed by South Atlantic Division (SAD) and is hereby approved in accordance with reference 1.b.
3. The South Atlantic Division Office shall be the Review Management Organization for this project.
4. SAD concurs with the District's RP recommendation that outlines the requirements for District Quality Control (DQC), Agency Technical Review (ATR), and Biddability, Constructability, Operability, Environmental and Sustainability (BCOES) Review and the conclusion that a Safety Assurance Review/Type II Independent External Peer Review is not required. Documents to be reviewed include the final version of the Plans and Specifications and the Design Documentation Report (DDR).
5. The District should take steps to post the approved RP to its website and provide a link to CESAD-RBT. Before posting to the website, the names of Corps/Army employees should be removed. Subsequent significant changes to this RP, such as scope or level of review changes, should they become necessary, will require new written approval from this office.
6. The SAD point of contact is Ms. Shannon L. Geoly, CESAD-RBT, (404) 562-5121.

**Diana M.
Holland**
DIANA M. HOLLAND
Major General, USA
Commanding

Digitally signed by
Diana M. Holland
Date: 2019.09.24
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REVIEW PLAN

PANAMA CITY HARBOR IMPROVEMENTS TO BAY HARBOR CHANNEL PANAMA CITY, FL

Mobile District

AUGUST 2019

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

REVIEW PLAN

PANAMA CITY HARBOR IMPROVEMENTS TO BAY HARBOR CHANNEL PANAMA CITY, FL

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PANAMA CITY HARBOR IMPROVEMENTS TO BAY HARBOR CHANNEL PANAMA CITY, FL

1. PURPOSE AND NEED

This Review Plan defines the scope and level of review activities for the Panama City Harbor Improvements to Bay Harbor Channel, 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

Panama City Harbor is located on St. Andrew Bay, an arm of the Gulf of Mexico, about 105 miles east of Pensacola, Florida and 230 miles northwest of Tampa, Florida. The existing navigation project at Panama City Harbor, Florida was authorized by the River and Harbor Act of 1948 (House Document 559, 80th Congress). Project improvements to Bay Harbor Channel were authorized by Section 201 of the Flood Control Act of 1965 (House Document 196, 92nd Congress, 2nd Session) and by resolutions of the House Public Works Committee on June 14, 1972, and the Senate Public Works Committee on June 21, 1972.

In 2013, the Panama City Port Authority requested the USACE to study deepening the channel within its authorization to 36 feet in order to provide access for larger vessels entering the Bay Harbor Terminal. The results of this effort can be found in the Panama City Harbor Improvements to Bay Harbor Channel Limited Reevaluation Report (LRR) with Integrated Environmental Assessment Panama City, Florida, dated May, 2016 and approved by the Division Commander for the South Atlantic Division on May 25, 2016. The PCPA has maximized their port operations at their current location, Dyers Point, and has developed a Port Master Plan which describes its future vision. In accordance with this master plan, the Port has acquired the necessary real estate interest from WestRock Paper Mill in order to gain deep water access and expand PCPA facilities at Bay Harbor Terminal.

Bay Harbor Channel improvements will ensure future port growth and more efficient operations by eliminating the need to double rotate. The Bay Harbor Channel improvements will provide the following:

- Retaining and accommodating recent and anticipated growth in cargo and vessel traffic;
- Improving the efficiency of vessel operations.

Globalization and large increases in commodity trade are significantly increasing shipping demands around the world. Technological advances have accelerated trends towards producing larger ships to meet these economic pressures. The proposed project will improve operating

conditions and efficiency in the channel and harbor by providing adequate depth for the current fleet to access the Bay Harbor Terminal. This will also allow for expansion of existing and new products for import and export.

3. DESCRIPTION OF WORK FOR REVIEW

PED Phase shall consist of developing plans and specifications for the improved Federal navigation channel to Bay Harbor Terminal. This includes deepening the channel from the existing depth of -32 feet mean lower low water (MLLW) to -36 feet MLLW, which will allow the current vessel fleet calling at the PCPA to enter and exit at a deeper draft. The final Bay Harbor Channel will be approximately 3.5 miles long with a depth of 36 feet, a width of 300 feet, and a turning basin with a length of 1,700 feet and a width of 1,100 feet., as generally described in the Panama City Harbor Improvements to Bay Harbor Channel Limited Reevaluation Report (LRR) with Integrated Environmental Assessment Panama City, Florida,.

4. BACKGROUND

Globalization and large increases in commodity trade are significantly increasing shipping demands around the world. Technological advances have accelerated trends towards producing larger ships to meet these economic pressures. The proposed project will improve operating conditions and efficiency in the channel and harbor by providing adequate depth for the current fleet to access the Bay Harbor Terminal. This will also allow for expansion of existing and new products for import and export.

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), and Independent External Peer Review (IEPR).

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, PDT reviews, and Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) reviews required by ER-1110-1-12. The DQC review will be completed prior to submitting documents for ATR. Documentation of the DQC review as contained in DrChecks will be certified during the ATR that DQC activities were sufficient and documented.

8. 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. Biddability, constructability, operability, environmental, and sustainability requirements must be emphasized throughout the planning and design processes for all programs and projects, including during planning and design. 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).

9. 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, constructible, environmentally sustainable, operable, and maintainable. The ATR will also ensure that the P&S, DDR, and supporting Supplemental Environmental Impact Statement are consistent with the approved/authorized plan.

The ATR team will consist of the 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 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.

Disciplines Required for Review. At a minimum, the following disciplines should be represented on the ATR team, with the exception being the reviews for the turbidity barrier contracts for Ship and Cat Islands (no geotechnical engineer/geologist reviewer will be required). 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 team member should have minimum 3 to 5 years experience having led prior ATRs, etc. The ATR lead may also serve as one of the review disciplines in addition to team leader duties.
Coastal Hydraulics	The team member should have 3 to 5 years experience in navigation design.
Civil Engineer (Operations/Construction)	The team member should have 3 to 5 years experience with administration of contracts for dredging
Geotechnical Engineer/Geologist	The team member should have 3 to 5 years experience in the geotechnical evaluation of boring logs and test data.
Environmental Specialist	The team member should have 3 to 5 years 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. Familiarity with navigation projects is also beneficial.

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 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 development of the “charge.” The purpose of agency reviews throughout the project life cycle, including ATR, 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 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.

13. MODEL CERTIFICATION AND APPROVAL

The models used for this project that have been approved for use include: EFDC, ADCIRC, and ShipSim.

14. REVIEW SCHEDULE AND COSTS

The total cost for DQC review is estimated to be \$24,000. The total cost for the ATR is estimated to be approximately \$39,000. The documents to be reviewed and scheduled dates for reviews are as follows:

Milestone	Review	Schedule Dates
100% Unreviewed P&S and DDR for Panama City Harbor, FL	DQC	September 27, 2019
Final P&S and DDR for Panama City Harbor, FL	ATR	October 30, 2019

15. PUBLIC PARTICIPATION

The review plan 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 review plan 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 document. Like the PMP, the review plan is a living document and may change as the project progresses. Changes in the review plan 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	David Newell	CESAM-PM-CM
Engineering Technical Lead (ETL)	Micah Wiggins	CESAM-EN-HH
Hydraulic/Coastal Engineer	Micah Wiggins	CESAM-EN-HH
Geologist/Geotechnical Engineer	Mike FitzHarris	CESAM-EN-GG
Cost Estimators	Allan Annaert	CESAM-EN-E
Environmental Specialists	Matthew Lang	CESAM-PD-EC
Specifications Engineer	Marie Klusman	CESAM-EN-DW
Civil Engineer (Operations/Construction)	Waylon Register	CESAM-OP
Sponsor	Wayne Stubbs	Panama City Port Authority

ATTACHMENT 2 - 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