



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

18 APR 2017

CESAD-RBT

MEMORANDUM FOR COMMANDER, JACKSONVILLE DISTRICT

SUBJECT: Approval of the Review Plan for the Sunny Isles Shore Protection Beach Renourishment Project, Miami-Dade County, Florida

1. References:

a. Memorandum, CESAJ-EN-Q, 21 February 2016, Subject: Approval of the Review Plan for Sunny Isles Shore Protection Beach Renourishment Project, Miami-Dade County, Florida (Encl 1).

b. EC 1165-2-214, Civil Works Review, 15 December 2012.

2. The Review Plan (RP) for the Sunny Isles Shore Protection Beach Renourishment Project submitted by the Jacksonville District via reference 1.a, has been reviewed by this office and is hereby approved.

3. As indicated in the RP, the Sunny Isles Renourishment Project is within the authorized permitted and previously constructed template limits and also follows the same means and methods of the nearby recently completed "Hotspots" Project. Therefore, the South Atlantic Division Office concurs with the District's RP recommendation that Agency Technical Review is not needed on this design effort.

4. The District should take steps to post the approved RP to its web site and provide a link to CESAD-RBT. Before posting to the web site, 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.

5. The SAD point of contact is [REDACTED]

Encl

[REDACTED]
[REDACTED]
Brigadier General, USA
Commanding

CF:

[REDACTED]



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207

REPLY TO
ATTENTION OF

21 FEB 2017

CESAJ-EN-Q

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

SUBJECT: Approval of Review Plan for Sunny Isles Shore Protection Beach Renourishment Project, Miami-Dade County, Florida

1. References:

- a. EC 1165-2-214, Civil Works Review, 15 Dec 12.
- b. WRDA 1986, PL 99-662, 17 Nov 86 (Project Authorization).

2. I hereby request approval of the enclosed Review Plan and concurrence with the conclusion that a Type II Independent External Peer Review (IEPR) of the subject project is not required. The recommendation to exclude Type II IEPR is based on the EC 1165-2-214 Risk Informed Decision Process as presented in the Review Plan. Documents to be reviewed include the plans, specifications, and design documentation report. The Review Plan complies with applicable policy and has been coordinated with the CESAD. It is my understanding that non-substantive changes to this Review Plan, should they become necessary, are authorized by CESAD.

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

4. If you have any questions regarding the information in this letter, please feel free to contact me or you may contact [REDACTED]

Encl

[REDACTED]
Colonel, EN
Commanding

PROJECT REVIEW PLAN

For

Preconstruction, Engineering and Design Phase Implementation Documents

For

Sunny Isles Shore Protection Beach Renourishment Project

Miami-Dade County, Florida

Project P2 Number: 113082

Jacksonville District

January 2017



**US Army Corps
of Engineers**®

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TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS	1
a. Purpose	1
b. References	1
c. Requirements.....	1
d. Review Plan Approval and Updates	2
e. Review Management Organization	2
2. PROJECT INFORMATION	2
a. Project Background.....	2
b. Project Authorization	3
c. Current Project Description	4
d. Sand Source	4
e. Public Participation	5
f. Civil Works Cost Engineering Mandatory Center of Expertise Certification	5
3. DISTRICT QUALITY CONTROL	5
a. Requirements.....	5
b. Documentation.....	5
4. AGENCY TECHNICAL REVIEW	6
5. BIDDABILITY, CONSTRUCTABILITY, OPERABILITY, ENVIRONMENTAL, AND SUSTAINABILITY REVIEW	6
6. INDEPENDENT EXTERNAL PEER REVIEW	6
a. General.....	6
b. Type I Independent External Peer Review Determination.	6
c. Type II Independent External Peer Review Determination.	7
7. POLICY AND LEGAL COMPLIANCE	7
8. MODEL CERTIFICATION AND APPROVAL	7
9. PROJECT DELIVERY TEAM DISCIPLINES.....	7
10. SCHEDULE	8

ATTACHMENT A - Approved Review Plan Revisions

ATTACHMENT B - Partial List of Acronyms and Abbreviations

1. PURPOSE AND REQUIREMENTS

a. Purpose

This Review Plan defines the scope and level of review activities for the Sunny Isles Shore Protection Beach Renourishment Project in Miami-Dade County, Florida. As discussed below, the review activities consist of a District Quality Control (DQC) effort and a Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review. Also as discussed below, an Independent External Peer Review (IEPR) and an Agency Technical Review (ATR) are not recommended. The project is in the Pre-Construction, Engineering and Design (PED) phase. The implementation documents to be reviewed are Plans and Specifications (P&S) and a Design Documentation Report (DDR). Upon approval, this Review Plan will be included into the Project Management Plan (PMP) for this project as an appendix to the Quality Management Plan (QMP).

b. References

- (1). ER 1110-2-1150, "Engineering and Design for Civil Works Projects", 31 August 1999
- (2). ER 1110-1-12, "Engineering and Design Quality Management", 31 March 2011
- (3). EC 1165-2-214, "Civil Works Review", 15 December 2012
- (4). ER 415-1-11, "Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review", 1 January 2013
- (5). SAJ EN QMS 02611, "SAJ Quality Control of In-House Products: Civil Works PED", 21 November 2011
- (6). SAJ EN QMS 08550, "BCOES Reviews", 21 September 2011
- (7). Enterprise Standard (ES) 08025, "Government Construction Quality Assurance Plan and Project/Contract Supplements"
- (8). Enterprise Standard (ES) 08026, "Three Phase Quality Control System"
- (9). Project Management Plan, Sunny Isles Shore Protection Beach Renourishment Project Miami-Dade County, Florida, P2 Number 113082

c. Requirements

This Review Plan was developed in accordance with EC 1165-2-214, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and Operation, Maintenance, Repair, Replacement and Rehabilitation (OMRR&R). The EC provides the procedures for ensuring the quality and credibility of U.S. Army Corps of Engineers (USACE) decision, implementation, and operations and maintenance documents and other work products. The EC outlines five levels of review: District Quality Control (DQC), Agency Technical Review (ATR), and an Independent External Peer Review (IEPR), Policy and Legal Review, and a Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review.

d. Review Plan Approval and Updates

The South Atlantic Division Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving district, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review. Like the PMP, the Review Plan is a living document and may change as the project progresses. The Jacksonville District is responsible for keeping the Review Plan up to date. Minor changes to the Review Plan since the last MSC Commander approval are documented in Attachment A. Significant changes to the Review Plan (such as changes to the scope and/or level of review) will be re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commanders' approval memorandum, will be posted on the Jacksonville District's webpage. The latest Review Plan will be provided to the RMO and home MSC.

e. Review Management Organization

The South Atlantic Division (SAD) is designated as the Review Management Organization (RMO). The RMO, in cooperation of the vertical team, will approve the ATR team members. CESAJ will assist SAD with management of the ATR and development of the charge to reviewers.

2. PROJECT INFORMATION

a. Project Background

Miami-Dade County, commonly referred to as "Dade County", is located along the southeast coast of Florida and contains the city of Miami. Dade County lies between Broward County (north of Dade) and Monroe County (south of Dade). The Dade County shoreline extends along two barrier island segments separated from the mainland by Biscayne Bay. The barrier islands vary in width from about 0.2 to 1.5 miles, with an average width of approximately 0.5 miles. Elevations along the entire coastal region (and much of the mainland) are low, as they are generally less than 10 feet. Elevations along the barrier islands are generally the highest along the Atlantic Ocean shorefront and slope gradually downward toward the bay. All distances referenced within this report are in statute miles.

The authorized project contains two segments, the Sunny Isles Segment and the Main Segment, each with differing periods of Federal participation. Figure 1 provides a map of the project. The Sunny Isles Segment, which this renourishment will focus on, is comprised of the 2.5 miles of shore extending north from Haulover Beach Park. The segment was initially constructed in 1988, and covers the area between Florida Department of Environmental Protection (FDEP) Range monuments R-7 to R-19.3.

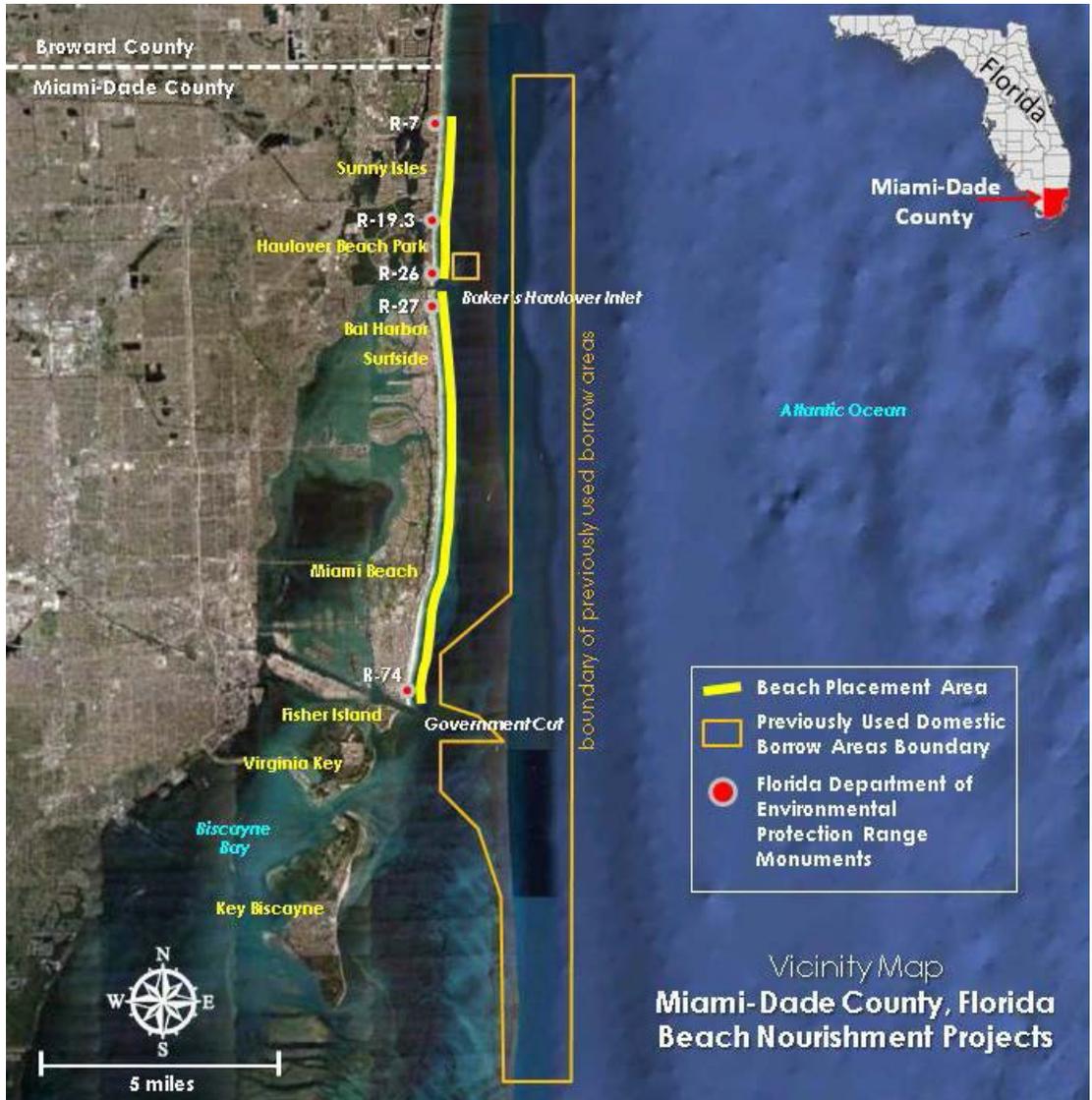


Figure 1: Dade County Project Map

b. Project Authorization

The original Beach Erosion Control and Hurricane Protection report for Miami-Dade County, Florida was authorized by the Rivers and Harbors Act on July 3, 1930. An extension of restudy to include all of the Miami-Dade County north of Government Cut was approved by the Chief of Engineers in January 1961 (USACE 1965), and subsequently authorized by the Flood Control Act of 1968. In addition, Section 69 of the 1974 Water Resources Development Act (Public Law 93-251) included the authorization for initial construction by non-Federal interests of the 0.85 mile segment along Bal Harbour Village, immediately south of Bakers Haulover Inlet.

The Main Segment, as described in the 1968 Chief's Report for the project, provided for the construction of a protective and recreational beach and a protective dune for 9.3 miles of shoreline between Government Cut and Bakers Haulover Inlet (encompassing Miami Beach,

Surfside, and Bal Harbour) and for the construction of a protective and recreational beach along 1.2 miles of shoreline at Haulover Beach Park (Figure 1).

The Sunny Isles portion of the project was added in 1985. Specifically, the BEC&HP Project for Dade County, Florida, north of Haulover Beach Park was authorized by the Supplemental Appropriations Act of 1985 and the Water Resources Development Act (WRDA) of 1986 (Public Law 99-662). However, only the authority of the Supplemental Appropriations Act of 1985 has been implemented through the execution of a local cost sharing agreement. This authorization provides for modification of the authorized 1968 Beach Erosion Control and Hurricane Protection Project for Dade County, Florida, to provide for the following:

- The construction of a protective beach along a reach of shore extending 2.5 miles through Sunny Isles, and for periodic nourishment of this area.
- The extension of the period of Federal participation in the cost of nourishing the existing Dade County Beach Erosion Control and Hurricane Protection Project from 10 years to the life of the project.

The Chief of Engineers' Report from December 1983 ("Dade County, North of Haulover Beach Park, Florida") provides more details on the Sunny Isles segment of the project.

Although the 1985 Supplemental Appropriations Act which authorized the Sunny Isles segment and extended the period of Federal participation of the existing Dade County (BEC & HP) Project did not specify a time limit for Federal participation, Section 156 of WRDA 1976, as amended by Section 934 of WRDA 1986, limits the period of Federal participation to 50 years from the date of initiation of construction.

The authorized design berm for the Sunny Isles Segment of the Dade County BEC&HP Project provides for a 20-foot design berm seaward of the Erosion Control Line (ECL), with front slopes of 1 vertical to 10 horizontal from berm crest to mean low water (MLW), then 1 vertical on 25 horizontal to the existing bottom. The authorized renourishment volume was 715,000 cubic yards every 10 years. The beach fill extends along the 2.5 mile length of Sunny Isles and is bordered on the south end by the Main Segment (50 foot berm width) and to the north by the town of Golden Beach, which is not a part of the Dade County BEC&HP.

c. Current Project Description

This project will renourish the shoreline of Sunny Isles Beach within the Federally Authorized limits between Florida Department of Environmental Protection (FDEP) Range Monuments R-7 to R-19.3. The project has a berm elevation of +6.1 to +6.8 feet, NAVD88. The estimated total volume to be placed is 160,000 cubic yards. The sand source for the project will be an upland source, and material will be truck hauled to the project location. The upland source will be selected by the Contractor meeting criteria required in specifications. Project work also includes vibration control and monitoring, environmental species monitoring, and turbidity monitoring.

d. Sand Source

Miami-Dade County's traditional offshore sand sources for beach renourishment have been depleted. Figure 1 depicts the limits of previously used domestic offshore sand sources (borrow areas). The recently completed Limited Reevaluation Report (LRR) approved on March 24, 2016, details the sand source investigations and authorizes the use of upland sand sources as

well as borrow sources located in Federal waters offshore of Martin and St. Lucie Counties. The sand source for this renourishment of Sunny Isles will be upland, similar to the ongoing Miami Beach Hotspots contract which underwent ATR in FY16. Due to non-Federal funding limitations, the proposed project is not able to construct the full projected need of 547,330 CY outlined in the LRR, as well as documented by recent surveys. As also evaluated with the Miami beach hotspot contract, available funding ranges between \$12,000,000 to \$15,000,000 falling below the threshold which would make the offshore sources identified in the LRR cost effective (threshold begins at >200,000 CY). The offshore borrow areas identified in the LRR also have not been permitted for use yet, and therefore cannot be utilized in time to execute this project.

Upland Sand Sources identified in the LRR to meet material and NEPA requirements

- 1) Witherspoon – adequate volume for project needs, 120 miles from project area
- 2) Ortona – adequate volume for project needs, 120 miles from project area
- 3) ACI Homestead – adequate volume for project needs, 35 miles from project area

e. Public Participation

The Jacksonville District Corporate Communications Office continually keeps the affected public informed on Jacksonville District projects and activities. There are no planned activities, public participation meetings or workshops that could generate issues needing provision to review teams. The approved Review Plan will be posted on the Jacksonville District Internet. Any comments or questions regarding the Review Plan will be addressed by the Jacksonville District.

f. Civil Works Cost Engineering Mandatory Center of Expertise Certification

The cost related documents associated with the P&S and DDR and the associated contract do not require external peer review or certification by the Cost Engineering Mandatory Center of Expertise (MCX).

3. DISTRICT QUALITY CONTROL

a. Requirements

District Quality Control and Quality Assurance activities for DDRs and P&S are stipulated in ER 1110-1-12, Engineering & Design Quality Management and SAJ EN QMS 02611. The subject project DDR and P&S will be prepared by the Jacksonville District using ER 1110-1-12 procedures and will undergo District Quality Control by Jacksonville District personnel. SAJ EN QMS 02611 defines DQC as the sum of two reviews, Discipline Quality Control Review (DQCR) and Product Quality Control Review (PQCR). Product Quality Control Review Certification is the DQC Certification and will precede ATR.

b. Documentation

DQCRs occur during the design development process and are carried out as a routine management practice by each discipline. Checklists are utilized by each discipline to facilitate the review and to document the DQCR review comments. Certifications of the Discipline Quality Check and Review are signed by the Engineering Division Branch Chiefs certifying that the DQCR on all design analyses and products have been completed in accordance with the EN QMS process prior to release from their Branch.

The PQCR shall ensure consistency and effective coordination across all disciplines and to assure the overall coherence and integrity of the products. Review comments and responses

for this review will be documented in DrChecks. The Product Quality Control Review shall be QC certified by the Lead Engineer and all applicable Engineering Division Section and Branch Chiefs. This PQCR certification signifies that all Discipline Specific Quality Checks and Review Certification are complete, as well as the Product Quality Control Reviews.

4. AGENCY TECHNICAL REVIEW

An ATR review is not recommended since this renourishment of Sunny Isles mirrors that of the Miami Beach “Hotspots” contract which had an ATR performed in FY16 and is currently under construction. The Sunny Isles project is located approximately 6.5 miles north of the construction limits of the Miami Beach “Hotspots” contract and will be constructed using the same means and methods as the “Hotspots” contract since the material to be placed will be limited to upland sources for the reasons described previously herein. The Sunny Isles beach template itself did not change in any way as a result of the LRR (e.g. berm width, elevation, alongshore limits, etc). As a result, the scope of the Sunny Isles project is within the authorized, permitted, and previously constructed template limits and follows the same means, methods and sediment source methodology as the “Hotspots” contract that completed ATR in March 2016; therefore, no ATR review is recommended.

5. 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. Multiple BCOES Reviews will be conducted for this project. Requirements and further details are stipulated in ER 1110-1-12, ER 415-1-11, and SAJ EN QMS 08550.

6. INDEPENDENT EXTERNAL PEER REVIEW

a. General.

EC 1165-2-214 provides implementation guidance for both Sections 2034 and 2035 of the Water Resources Development Act (WRDA) of 2007 (Public Law (P.L.) 110-114). The EC addresses review procedures for both the Planning and the Design and Construction Phases (also referred to in USACE guidance as the Feasibility and the Pre-construction, Engineering and Design and Construction Phases). The EC defines Section 2035 Safety Assurance Review (SAR), Type II Independent External Peer Review (IEPR). The EC also requires Type II IEPR be managed and conducted outside the Corps of Engineers.

b. Type I Independent External Peer Review Determination.

A Type I IEPR is primarily associated with decision documents. A Type I IEPR is not applicable to the implementation documents covered by this Review Plan.

c. Type II Independent External Peer Review Determination.

This project does not trigger WRDA 2007 Section 2035 factors for Safety Assurance Review (termed Type II IEPR in EC 1165-2-214), and therefore, a review under Section 2035 is not required. The factors in determining whether a review of design and construction activities of a project are necessary as stated under Section 2035 along with this Review Plan’s applicability statements follow.

- (1) The failure of the project would pose a significant threat to human life.

This project will renourish portions of Sunny Isles Beach. Failure will not pose a threat to human life.

- (2) The project involves the use of innovative materials or techniques.

This project will utilize methods and procedures used by the Corps of Engineers on other similar works.

- (3) The project design lacks redundancy.

The project features are not complex in nature and do not employ the concept of redundancy.

- (4) The project has unique construction sequencing or a reduced or overlapping design construction schedule.

This project’s construction does not have unique sequencing or a reduced or overlapping design. The construction sequence and schedule has been used successfully by the Corps of Engineers on other similar works.

Based on the discussion above, the District Chief of Engineering, as the Engineer-In-Responsible-Charge, does not recommend a Type II IEPR Safety Assurance Review of the P&S and DDR.

7. POLICY AND LEGAL COMPLIANCE

The Jacksonville District 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.

8. MODEL CERTIFICATION AND APPROVAL

This project will not use any engineering models that have not been approved for use by USACE.

9. PROJECT DELIVERY TEAM DISCIPLINES

PDT Disciplines
Civil/Dredge Engineering
Construction Management
Coastal Geology

10. SCHEDULE

Milestone	Task	Start Date	End Date
CW310	Draft P&S Complete	16-AUG-2016	12-OCT-2016
	DQCR	13-OCT-2016	20-OCT-2016
	PQCR/DQC*	21-OCT-2016	2-FEB-2017
	BCOES Review	3-FEB-2017	24-FEB-2017
CW320	BCOES Certification	24-MAR-2017	24-MAR-2017
CW400	Advertisement	4-APR-2017	15-MAY-2017

* SAJ EN QMS 02611 defines DQC as the sum of DQCR and PQCR. Schedule adjusted during PQCR to ensure receipt of permitting modification for southerly limit received prior to advertisement.

ATTACHMENT A: APPROVED REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT B: PARTIAL LIST OF ACRONYMS AND ABBREVIATIONS

<u>Acronyms</u>	<u>Defined</u>
AFB	Alternatives Formulation Briefing
ATR	Agency Technical Review
BCOES	Biddability, Constructability, Operability, Environmental, and Sustainability Review
CAP	Continuing Authorities Program
CERCAP	Corps of Engineers Reviewer Certification and Access Program
CY	Cubic Yards
DDR	Design Documentation Report
DQC	District Quality Control
DQCR	Discipline Quality Control Review
EC	Engineering Circular
EA	Environmental Assessment
ER	Engineering Regulation
ERDC-CERL	Engineer Research and Development Center – Construction Engineering Research Laboratory
ESA	Endangered Species Act
ETL	Engineering Technical Lead
FDEP	Florida Department of Environmental Protection
FONSI	Findings of No Significant Impacts
FSCA	Feasibility and Cost Sharing Agreement
FY	Fiscal Year
GRR	General Reevaluation Report
IEPR	Independent External Peer Review
LPP	Locally Preferred Plan
MCX	Mandatory Center of Expertise
MLLW	Mean Low Low Water
MSC	Major Subordinate Command
NAS	National Academy of Sciences
NEPA	National Environmental Policy Act
ODMDS	Ocean Dredged Material Disposal Site
OMB	Office of Management and Budget
OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
P&S	Plans and Specifications
PED	Preconstruction Engineering and Design
PDT	Project Delivery Team
PM	Project Manager
PMP	Project Management Plan

<u>Acronyms</u>	<u>Defined</u>
PPA	Project Partnering Agreement
PQCR	Product Quality Control Review
QA	Quality Assurance
QCP	Quality Control Plan
QMP	Quality Management Plan
QMS	Quality Management System
RMC	Risk Management Center
RMO	Review Management Organization
RP	Review Plan
RTS	Regional Technical Specialist
SAJ	South Atlantic Jacksonville District Office
SAD	South Atlantic Division Office
SAR	Safety Assurance Review (also referred as Type II IEPR)
SME	Subject Matter Expert
USACE	U.S. Army Corps of Engineers
WRDA	Water Resources and Development Act