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

21 March 2020

MEMORANDUM FOR Commander, Jacksonville District, 701 San Marco Boulevard, Jacksonville, Florida 32207

SUBJECT: Approval of the Review Plan for the Shore Protection Project Segment II, Broward County, Florida

1. References:

a. Memorandum, CESAJ-EN-Q, 27 FEB 2020, 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 enclosed Review Plan (RP) for the Shore Protection Project Segment II in Broward County, Florida submitted by the Jacksonville District via reference 1.a. noted above has been reviewed by South Atlantic Division (SAD). The RP is hereby approved in accordance with reference 1.b.

3. The South Atlantic Division Office shall be the Review Management Organization (RMO) 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.

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 [redacted], CESAD-RBT, [redacted].

[redacted]

Major General, USA
Commanding

Encl

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

27 FEB 2020

CESAJ-EN-Q

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

SUBJECT: Approval of Review Plan for the Shore Protection Project Segment II, Broward County, Florida

1. References:

a. Engineering Circular (EC) 1165-2-217, Review Policy for Civil Works, 20 Feb 18.

b. Flood Control Act of 1946, Public Law 79-526, 24 Jul 46.

2. I hereby request approval of the enclosed Review Plan for the Shore Protection Project Segment II, Broward County, Florida and concurrence with the conclusion that a Type II Independent External Peer Review (IEPR) of the subject project is not required. The recommendation not to perform a Type II IEPR is based on the EC 1165-2-217 Risk Informed Decision Process as presented in the Review Plan. The Review Plan complies with applicable policy, provides for Agency Technical 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 [redacted], Engineering Review Manager, [redacted].

[redacted]
Colonel, EN
Commanding

Encl

PROJECT REVIEW PLAN

For

Preconstruction, Engineering and Design Phase

Implementation Documents

For

Shore Protection Project
Segment II

Broward County, Florida

Project P2 number: 113072

Jacksonville District

February 2020

US Army Corps of Engineers ®

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS

a. Purpose

This Review Plan (RP) for the Broward County, Florida Shore Protection Project – Segment II, will help ensure a quality engineering project is developed by the U.S. Army Corps of Engineers (USACE) in accordance with EC 1165-2-217, "Review Policy for Civil Works." As part of the Project Management Plan (PMP), this RP establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products and lays out a value added process and describes the scope of review for the current phase of work. The EC outlines five general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review, Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. This RP will be provided to the Project Delivery Team (PDT), and the DQC, ATR, and BCOES Teams. The technical review efforts addressed in this RP, DQC and ATR, are to augment and complement the policy review processes. The District Chief of Engineering has assessed that the life safety risk of this project is not significant; therefore, a Type II IEPR/Safety Assurance Review (SAR) will not be required, see Paragraph 6. Any levels of review not performed in accordance with EC 1165-2-217 will require documentation in the RP of the risk-informed decision not to undertake that level of review.

b. Requirements

(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 1165-2-217, Review Policy for Civil Works, 20 February 2018

(4). ER 415-1-11, Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review, 1 January 2013

(5). 02611-SAJ Quality Control of In-House Products: Civil Works PED, 4 December 2017

(6). 08550-SAJ, 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). Final General Revaluation Report II and Supplemental Environmental Impact Statement Broward County, Florida Shore Protection Project – Segment II, Broward County, Florida May 2004

(10). Chief of Engineers Report, Broward County, Florida Shore Protection Project – Segment II, 15 June 1964

(11). Project Management Plan, Broward County, Florida Shore Protection Project – Segment II, 113072

c. Requirements

This RP was developed in accordance with EC 1165-2-217, 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 USACE decision, implementation, and operations and maintenance documents and other work products.

d. Review Plan Approval and Updates

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

e. Review Management Organization (RMO)

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

2. PROJECT INFORMATION

a. Project Location and Name

Broward County is located in the southeast Atlantic Coast of Florida (**Figure 1**). The county is bounded to the north by Palm Beach County and to the south by Miami-Dade County. The segment of the Federal project for Broward County consists of 11.3 miles of Atlantic Ocean shoreline from Hillsboro Inlet south to Port Everglades Inlet. The segment is located on a barrier island entirely within Broward County. The project is split into four reaches: Reach 1 (R-25 to R-36), Reach 2 (R-36 to R-41.3), Reach 3 (R-41.3 to R51) and Reach 4 (R-51 to R-72).

b. Project Authorization

Table 1 lists the authorizations and construction events for this project. **Figure 2** displays the fill locations associated with the authorized project. The Broward County Beach Erosion Control and Hillsboro Inlet Navigation Project was initially authorized by Congress in Section 2 of the Rivers and Harbors Act of July 3, 1930. The cooperative study was initiated by the Broward County Board of County Commissioners on March 14, 1960, and was approved by the Chief of Engineers on April 6, 1960. The authorization includes initial construction and periodic renourishment for 15.6 miles of the shoreline of Broward County (Segments II and III, R-25 to R-128) and navigation improvements at Hillsboro Inlet. The authorized project limits run from Hillsboro Inlet to Port Everglades (R-25 to R-85); however, only R-25 to R-72 have been constructed to date. Segment II was initially constructed in 1970 (R-32 to R-49) and renourished in 1983 (R-25 to R-53). Section 506(a)(1) of the Water Resources Development Act of 1996, Public Law 104-33, provided for the Secretary of the Army to carry out periodic beach nourishment for the project for a period of fifty (50) years from the date of initial construction. Section 311 of the 1999 Water Resources Development Act, Public Law 106-53, modified Segment II to authorize the Secretary, on execution of a contract to construct the project, to reimburse non-Federal interest for the Federal share of the cost of pre-construction planning and design for the project if the secretary determines that the work is compatible with and integral to the project. A General Reevaluation Report (GRR) was approved in May 2004 and provides for periodic nourishment for Broward County Segment II from R-25 to R-53. To repair damages from Hurricane Sandy in 2012, an authorized Flood Control and Coastal Emergency (FCCE) nourishment was performed from Nov 2013 to Feb 2014 (R-26 to R-49). A Limited Reevaluation Report (LRR) was completed in 2015 to develop the next nourishment. A one-time periodic nourishment (R-36 to R-41.3 and R-51 to R-53) and initial placement (R-53 to R-72) was completed in 2016.

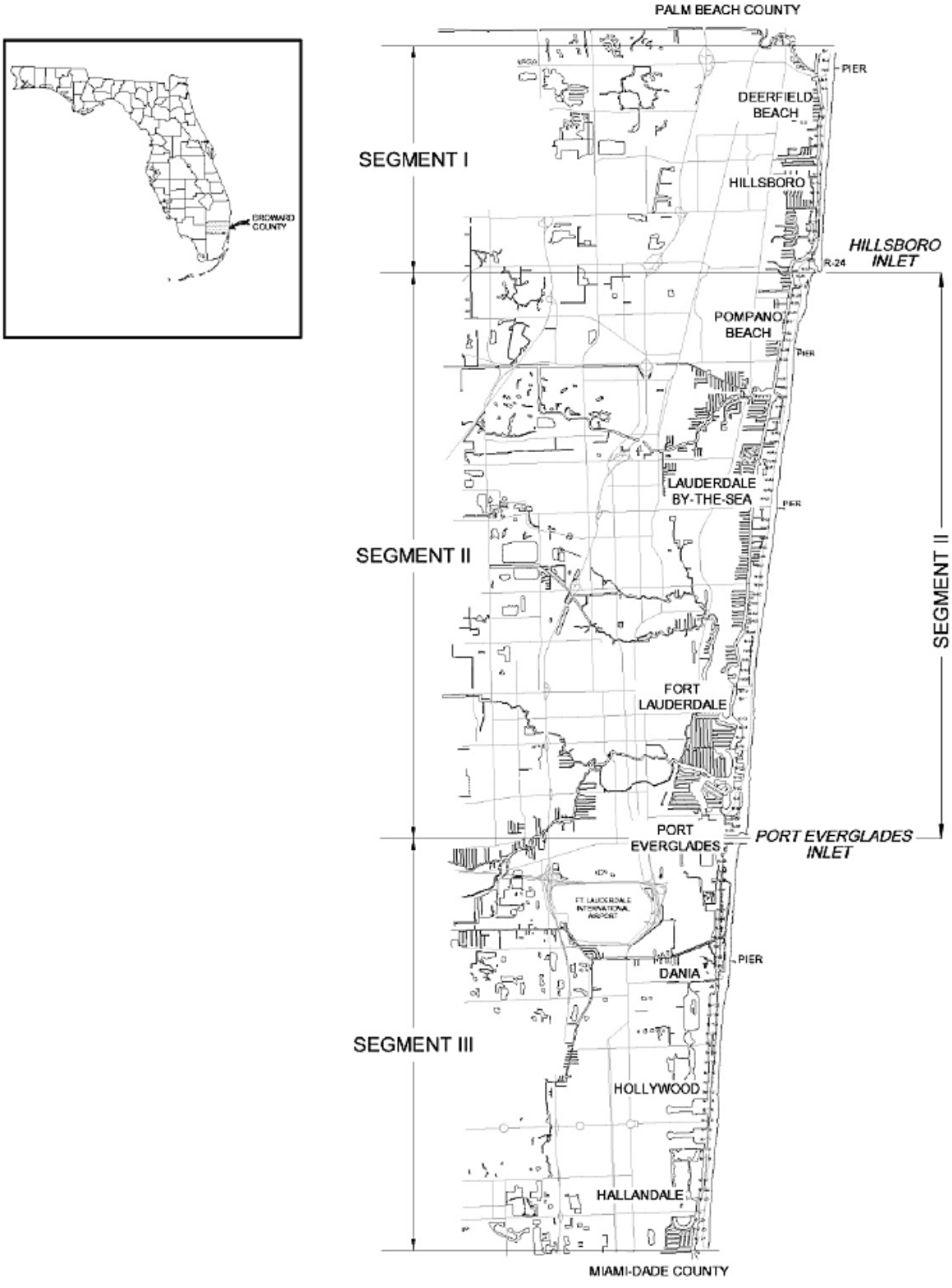

Figure 1: Project Location

1930	Initial authorization of this project by Congress in Section 2 of the Rivers and Harbors Act of July 3, 1930
1960	Cooperative study initiated by the Broward County Board of County Commissioners on March 14, 1960, titled Broward County Beach Erosion Control and Hillsboro Inlet Navigation Report.
1960	Broward County Beach Erosion Control and Hillsboro Inlet Navigation Report approved by the Chief of Engineers on April 6, 1960.
1965	Congress authorized the Broward County, Florida, Beach Erosion Control and Navigation Project in Section 301 of the River and Harbor Act of 1965, Public Law 89-298. Project authorized for construction by local interests with reimbursement for Federal share of cost. Federal participation limited to the first 10 years of project life. (R25 to
1970	Initial construction. Sand placement occurred along 3.2 miles of shoreline (R32-R49).
1976	WRDA 1976 provided for extension of the project life to 15 years after initial construction for Federal participation.
1981	General Design Memorandum (GDM) that identified a selected plan for the first renourishment.
1983	Renourishment and expansion of project. Sand Placement occurred along 5.3 miles of shoreline (R25-R53).
1996	Section 506(a)(1) of WRDA 1996, Public Law 104-33 extended authorized project life to 50 years from date of initial construction.
1999	Section 311 of WRDA 1999, Public Law 106-53 authorized reimbursement for Federal share for pre-construction engineering and design.
2004	General Revaluation Report (GRR) was prepared to identify/confirm NED plan. Segment II project consisted of renourishment of previously constructed project (R25-R53) and ~4.0 mile extension of project from R53 to R71, including a southern taper. GRR approved in May 2004. Project was not constructed due to regulatory concerns.
2012	Hurricane Sandy impacts the Broward County coastline in October 2012. FDOT sand placement of approximately 20K cy between R-65 and R-67 as emergency protection to AIA.
2013 - 2014	An authorized Flood Control and Coastal Emergency (FCCE) nourishment was performed from Nov 2013 to Feb 2014. Sand placement occurred along 5.1 miles of shoreline (R26-R49).
2015	Limited Reevaluation Report (LRR) prepared to update/confirm NED project dimensions and economics identified in the 2004 GRR and incorporate measures to address prior regulatory concerns.
2016	Renourishment and expansion of the project. Sand placement occurred along 5.0 miles of shoreline (R36-R41.3 & R51-R72) from Jan to Apr 2016 and Nov to Dec 2016.
2017	Hurricane Irma impacts the Broward County coastline in September 2017.
2018	Project Information Report completed in March 2018 documenting the damages from Hurricane Irma.

Table 1: History of Authorizations and Construction Events

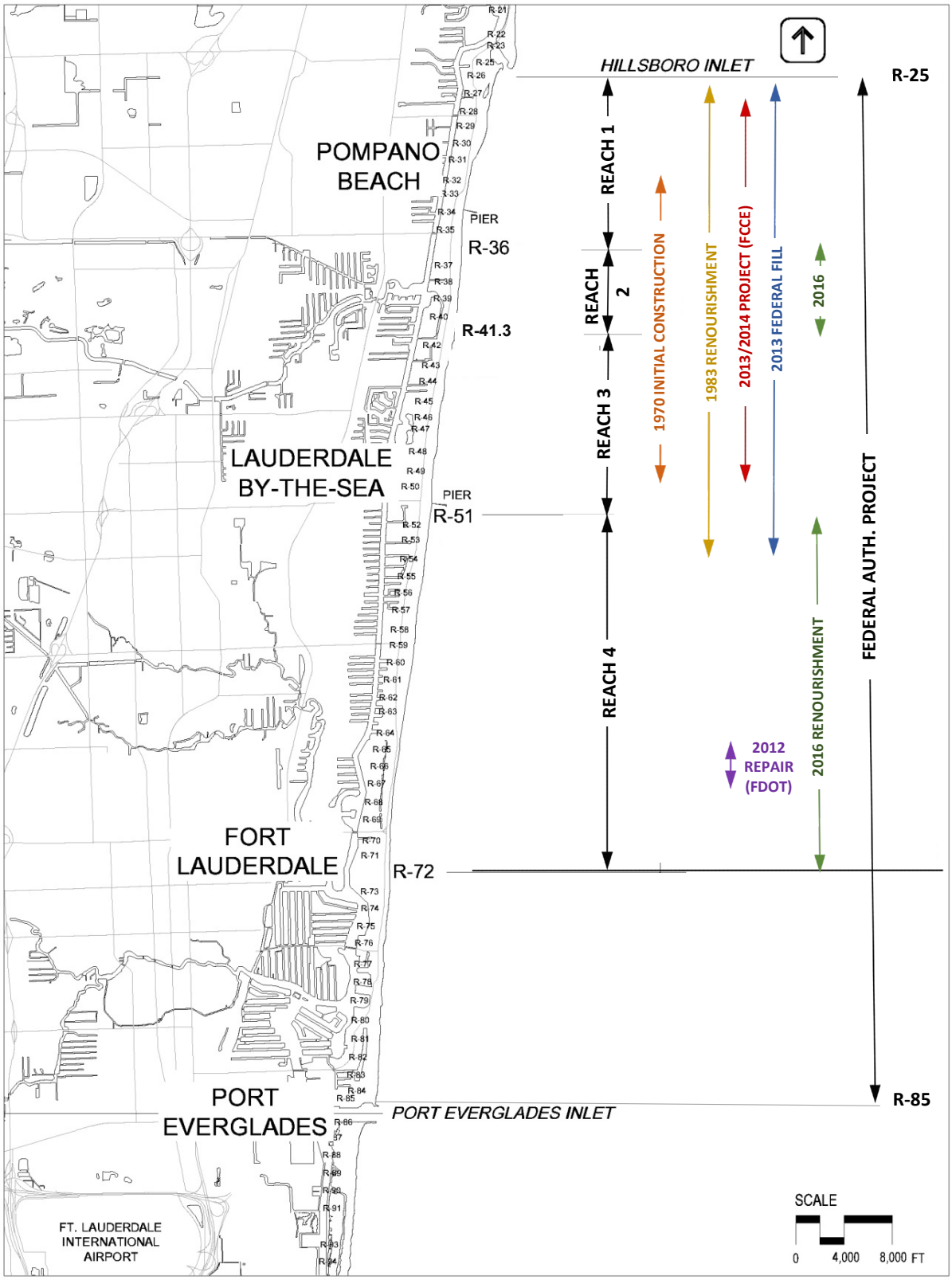

Figure 2: Placement Areas of the Authorized Project

c. Current Project Description

This project was designed to provide protection against historical storms experienced in the area. The project area is a highly developed urban beach with many condominiums and hotels encroaching on the beach in the northern portion and is adjacent to State Road A1A south of R-64.

The authorization provides for restoration of the protective berm along 8.9 miles of shoreline between Pompano Beach and Fort Lauderdale (R-25 to R-72). The project beach includes a turtle-friendly design with a flat upper berm elevation of +7.9 ft NAVD88, sloping down at 1V:20H to a flat lower berm elevation of +5.9 ft NAVD88 (Figure 3). The upper berm crest extends landward to tie-in with the existing grade or structure. The lower berm has a crest width ranging from 12 to 50 feet. The seaward limit of the lower berm slopes down at 1V:10H to the existing grade. The beach template described above includes a +0.5-foot vertical tolerance allowance.

- Number of Nourishment Events: 1 initial construction event, 4 nourishment events
- Periodic Nourishment Interval: 6 years (average)
- Volume of Initial Construction: 1,100,000 cubic yards (approximate)
- Volume of Each Periodic Nourishment: 428,000 cubic yards (approximate)
- Volume of 2020/2021 FCCE Project: 387,000 cubic yards (approximate)

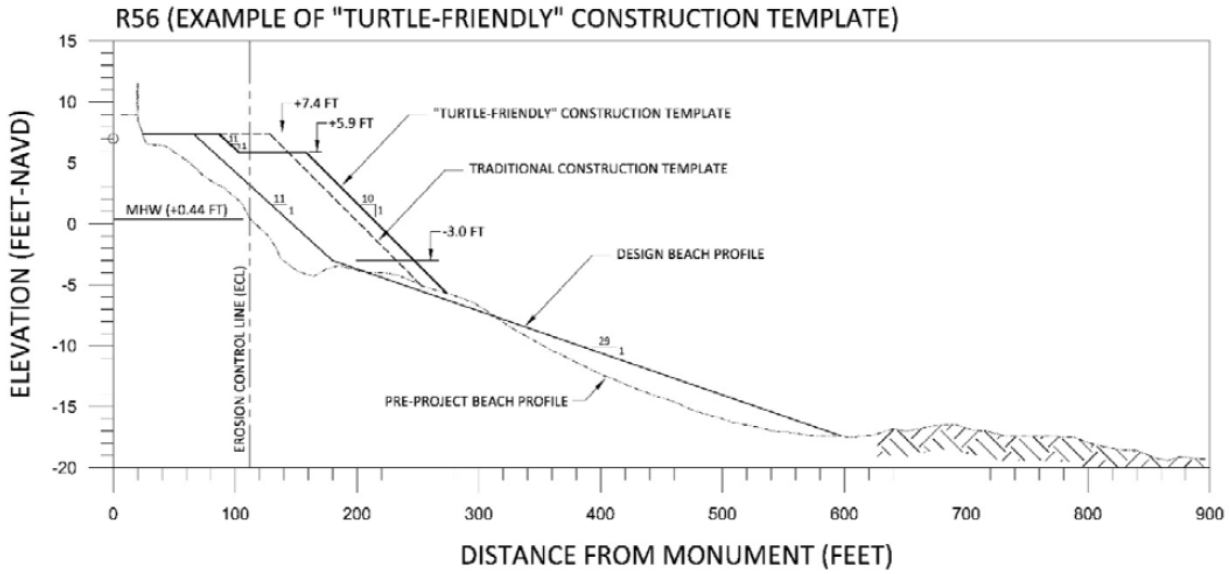

Figure 2: Example of turtle-friendly construction template relative to traditional construction template (Olsen, 2015)

d. Public Participation

The SAJ's Corporate Communications Office continually keeps the public informed on SAJ projects and activities. There are no controversial concerns, planned activities, public participation meetings, or workshops that could generate issues needing provision to review teams. The project RP will be posted on the SAJ's webpage. Any comments or questions regarding the RP will be addressed by SAJ.

e. In-Kind-Contributions by Project Sponsor

There are no required additional in-kind sponsor contributions related to the P&S and DDR that could affect this RP or related reviews.

3. DISTRICT QUALITY CONTROL

a. Requirements

All implementation documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo a DQC. A DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the PMP. DQC will be performed on P&S and DDR in accordance with SAJ's Engineering Division Quality Management System (EN QMS). The EN QMS 02611 defines DQC as the sum of two reviews, Discipline Quality Check and Review (DQCR) and Product Quality Control Review (PQCR).

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. Certification of the DQCR is signed by the Branch Chief certifying that all design analyses and products have been completed in accordance with the EN QMS process prior to release from the Branch.

The PQCR shall ensure consistency and effective coordination across all disciplines and shall assure the overall coherence and integrity of the products. Review comments and responses for this review will be documented in DrChecks^{sm}. The PQCR shall be QC certified by the Engineering Technical Lead (ETL), all applicable Section and Branch Chiefs, and the Division Chief. This PQCR certification signifies that all DQCR Certifications are complete, as well as the PQCR.

4. AGENCY TECHNICAL REVIEW

a. Risk Informed Decision on Appropriate Level of Review

PED phase implementation documents are being prepared for the project. Therefore, an ATR of the pre-final P&S and DDR documents will be required.

b. Agency Technical Review Scope.

Agency Technical Review (ATR) is undertaken to "ensure the quality and credibility of the government's scientific information" in accordance with EC 1165-2-217 and ER 1110-1-12.

ATR will be conducted by individuals and organizations that are external to SAJ. The ATR Team Leader will be a USACE employee outside SAD. The required disciplines and experience are described below.

ATR comments are documented in the DrChecks^{sm} model review documentation database. DrChecks^{sm} is a module in the ProjNet^{sm} suite of tools developed and operated at ERDC-CERL (www.projnet.org). At the conclusion of the ATR, the ATR Team Leader will prepare an ATR Review Report that summarizes the review. An outline for an ATR Review Report is in Attachment C. The report will include at a minimum the Charge to Reviewers, ATR Certification Form from EC 1165-2-217, and the DrChecks^{sm} printout of the comments.

c. ATR Disciplines.

As stipulated ER 1110-1-12, ATR members will be sought from the following sources: regional technical specialists (RTS); subject matter experts (SME) certified in CERCAP; senior level experts from other districts; Center of Expertise staff; experts from other USACE commands; contractors; academic or other technical experts; or a combination of the above. The ATR Team will be comprised of the following disciplines; knowledge, skills and abilities; and experience levels.

ATR Team Leader. The ATR Team Leader will be from outside SAD and should have a minimum of 7 years of experience with shore protection projects and have performed ATR Team Leader duties in the past. ATR Team Leader may also serve as a co-duty to one of the review disciplines.

Civil Engineering. The team member shall be a registered professional engineer with at least 5 years of civil/site work project experience that includes shore protection projects.

Construction Management. The team member should have 5 years of construction management experience with shore protection projects.

5. BIDDABILITY, CONSTRUCTABILITY, OPERABILITY, ENVIRONMENTAL, AND SUSTAINABILITY (BCOES) 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 review 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. Requirements and further details are stipulated in ER 1110-1-12, ER 415-1-11, and 08550-SAJ, BCOES Reviews.

6. INDEPENDENT EXTERNAL PEER REVIEW

a. General.

EC 1165-2-217 provides guidance for the implementation of IEPR according to 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 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 (IEPR) Determination.

A Type I IEPR is associated with decision documents. No decision documents are addressed/covered by this RP. Therefore, a Type I IEPR is not applicable to the implementation documents covered by this RP.

c. Type II Independent External Peer Review (IEPR) Determination (Section 2035).

This project does not trigger WRDA 2007 Section 2035 factors for Safety Assurance Review (termed Type II IEPR in EC 1165-2-217). 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 the applicability statements for this RP are as follows:

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

This project consists of placement of sand along eroded beaches and failure of the project would not pose a significant 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 U.S. Army Corps of Engineers, Jacksonville District, has successfully designed dozens of projects of similar scope throughout the coast of Florida

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

This project's construction sequence and schedule have been used successfully by the Corps of Engineers on other similar works. Construction schedules do not have unique sequencing and activities are not reduced or overlapped.

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 SAJ's 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. Once approved, SAJ will post the approved RP on the SAJ web site for viewing by the public.

8. MODEL CERTIFICATION AND APPROVAL

The project does not use any engineering models that have not been approved for use by USACE.

9. PROJECT DELIVERY TEAM

TITLE	BRANCH/SECTION	MEMBER
Technical Lead	Waterways Section (EN-DW)	[redacted]
Program/Project Manager	Water Resources Section (PM-WF)	[redacted]
Survey	Geomatics Section (EN-DG)	[redacted]
Geologist	Geology & Exploration Section (EN-GG)	[redacted]
Cost Engineer	Cost Engineering Section (EN-TC)	[redacted]
Coastal Engineer	Coastal Design Section (EN-WC)	[redacted]
Specifications	Specifications Section (EN-DC)	[redacted]
Environmental Scientist	Water Quality & Compliance Section (PD-EQ)	[redacted]
Environmental Scientist	Water Quality & Compliance Section (PD-EC)	[redacted]

Table 2: PDT Disciplines

10. BUDGET AND SCHEDULE

a. Project Milestones.

Task	Start Date	End Date
Draft P&S complete	Sep 2019	17 Feb 2020
DQCR	18 Feb 2020	2 March 2020
PQCR	2 Mar 2020	30 Mar 2020
ATR	30 Mar 2020	12 May 2020
BCOES	12 May 2020	8 Jul 2020
Contract Advertised	21 Jul 2020	18 Aug 2020

Table 3: Project Schedule Milestones (Subject to change)

b . ATR Cost.

Funds will be budgeted to execute ATR and schedule as outlined above. It is envisioned that each reviewer will be afforded 20 hours review plus 8 hours for coordination. ATR Leader will be funded for 20 hours. The estimated cost range is $25,000 - $30,000.

11. POINTS OF CONTACT

Title	Organization	Phone
Quality Manager	CESAD-RBT	[redacted]
Review Manager	CESAJ-EN-Q	[redacted]

Table 4: Review Plan Point of Contacts

ATTACHMENT A: APPROVED REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

Table 5: Review Plan Revisions

ATTACHMENT B: PARTIAL LIST OF ACRONYMS AND ABBREVIATIONS

Acronyms	Defined
AFB	Alternatives Formulation Briefing
ATR	Agency Technical Review
BCOES	Biddability, Constructability, Operability, Environmental, and Sustainability Review
BFWC	Big Fishweir Creek
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
EA	Environmental Assessment
EC	Engineering Circular
ER	Engineering Regulation
ERDC-CERL	Engineer Research and Development Center – Construction Engineering Research Laboratory
ESA	Endangered Species Act
ETL	Engineering Technical Lead
EV	Emergent Vegetation
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

Acronyms	Defined
PM	Project Manager
PMP	Project Management Plan
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
SAD	South Atlantic Division Office
SAJ	South Atlantic Jacksonville District Office
SAR	Safety Assurance Review (also referred as Type II IEPR)
SAV	Submerged Aquatic Vegetation
SME	Subject Matter Expert
USACE	U.S. Army Corps of Engineers
WRDA	Water Resources and Development Act

Table 6: Abbreviations

ATTACHMENT C: ATR REPORT OUTLINE AND CERTIFICATION

Broward County, Florida
Shore Protection Project – Segment II
Broward County, Florida

Review of Plans and Specifications (P&S) and the Design Documentation Report (DDR)

ATR REPORT OUTLINE:

1. **Introduction:**
2. **Project Description:**
3. **ATR Team Members:**

   ATR Team Leader.

   Civil Engineering.

   Construction Management.
4. **ATR Objective:**
5. **Documents Reviewed:**
6. **Findings and Conclusions:**
7. **Unresolved Issues:**

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the Preconstruction, Engineering and Design Phase Implementation for Shore Protection Project, Broward County, Florida, including the design documents, plans and specifications, and DDR. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-217 and ER 1110-1-12. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrChecks[sm].

_____ _____

NAME
ATR Team Leader

Date

_____ _____

[redacted]
Engineering Technical Lead
CESAJ-EN-DW

Date

_____ _____

[redacted]
Review Management Office Representative
CESAD-RBT

Date

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: *Describe the major technical concerns and their resolution.*

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

_____ _____

[redacted]
Chief, Engineering Division
SAJ-EN

Date