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

19 May 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 III, Broward County, Florida

1. References:

a. Memorandum, CESAJ-EN-Q, 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 III for Broward County and reference 1.a. noted above have been reviewed by South Atlantic Division (SAD). SAD concurs with the conclusion that a Type II Independent External Peer Review (IEPR) of the subject project is not required. The RP is hereby approved in accordance with reference 1.b.

3. 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. The Safety Assurance Review/Type II Independent External Peer Review is not required. Documents to be reviewed include the pre-final Plans and Specifications and the Design Documentation Report (DDR).

4. The South Atlantic Division Office shall be the Review Management Organization for this project.

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

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 III 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 III 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] or [redacted].

[redacted]
COL, EN
Commanding

PROJECT REVIEW PLAN

For

Preconstruction, Engineering and Design Phase

Implementation Documents

For

Shore Protection Project
Segment III

Broward County, Florida
Project P2 number: 113072

Jacksonville District
April 2020

US Army Corps of Engineers ®

Table of Contents

1. PURPOSE AND REQUIREMENTS

a. Purpose

This Review Plan (RP) for the Shore Protection Project – Segment III, Broward County, Florida, 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 III, Broward County, Florida May 2004
10) Chief of Engineers Report, Broward County, Florida Shore Protection Project – Segment III, 15 June 1964
11) Project Management Plan, Broward County, Florida Shore Protection Project – Segment III, 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 on the lower east coast of Florida about 300 miles south of Jacksonville and 30 miles north of Miami, adjoining Palm Beach County to the north and Dade County to the south. The Intracoastal Waterway divides the barrier island and the mainland for the full distance of the county. The Atlantic coastline borders the east side of the barrier island and consists of a natural sand beach (see Figure 1 and Figure 2). Segment III is the southernmost portion of the Broward County Atlantic Ocean coastline between the Port Everglades south jetty (FDEP Reference monument ~R-85.7) and the Dade County line (R-128). The segment is 8.1 miles (42,800 feet) in length, and encompasses the entities listed below. The Segment III shoreline is located immediately downdrift of Port Everglades Inlet, where no natural sand bypassing occurs. Due to the direct and indirect influence of Port Everglades Inlet, its jetties, and the Federal Navigation Channel, the northern Segment III shoreline has some of the highest sand loss rates in Broward County.

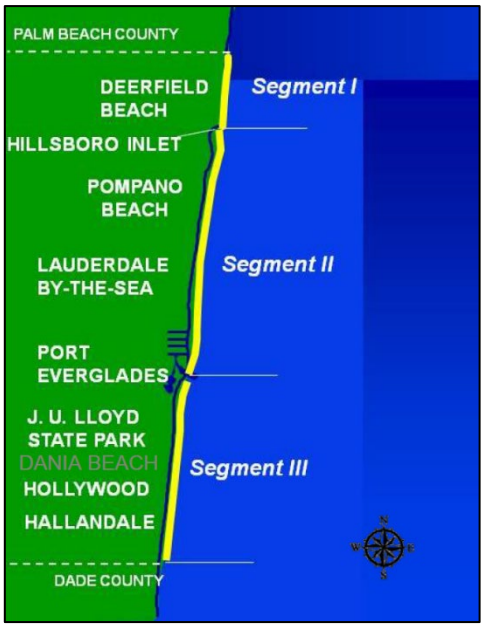

Figure 1 - Project Vicinity

- U.S. Naval Surface Warfare Center (300 ft; R-85.7 – R-86.1)
- Mizell-Eula Johnson State Park (11,850 ft; R-86.1 – R-98.3)
- City of Dania Beach (2,300 ft; R-98.3 – R-100.3)
- City of Hollywood (24,000 ft; R-100.3 – R-124)
- City of Hallandale Beach (4,350 ft; R-124 – R-128)

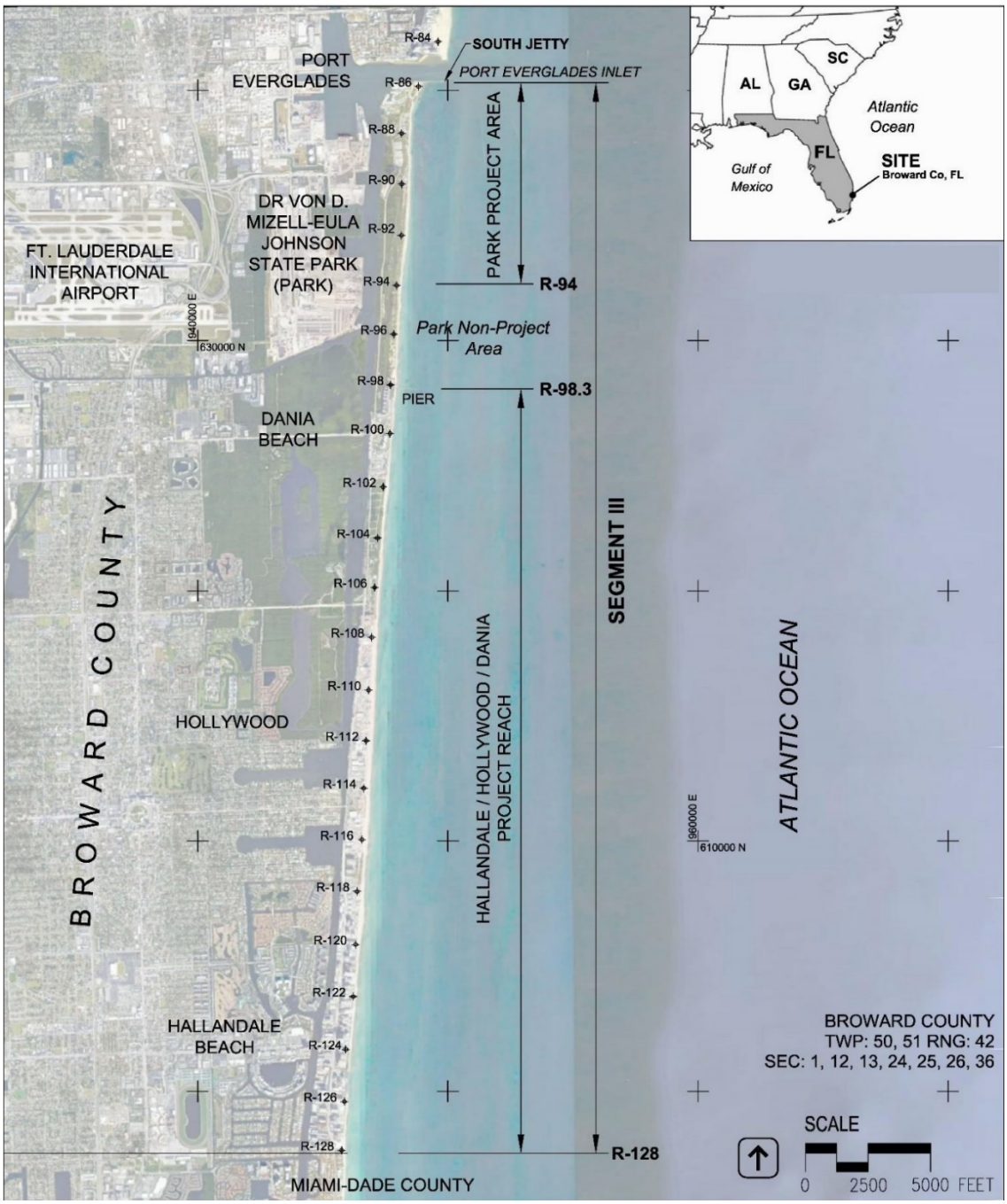

Figure 2 – Segment III Project Location

b. Project Authorization

The Broward County, Florida, Shore Protection Project was authorized by Section 301 of the River and Harbor Act of 1965 (P.L. 89-298). The project was authorized in accordance with the report of the Chief of Engineers dated 15 June 1964 and is described in House Document 91, 89th Congress. The project was to be constructed in three separable segments. These three segments are: Segment I begins at the north county line to Palm Beach County (R-1) and extend southward to Hillsboro Inlet (R-24); Segment II begins at the southern Hillsboro Inlet (R-25) and extends down to Port Everglades (R-85); and, lastly, Segment III is from Port Everglades Inlet (R-86) to the south county line (R-128).

Each of the three segments was authorized to be constructed independently of each other as three separate projects. Federal participation was limited to the first 10 years of project life. The project was authorized for construction by local interests, with subsequent reimbursement of the Federal share of project costs. Section 506 of the Water Resources Development Act of 1996 (P.L. 104-33) authorizes periodic nourishments for 50 years from the date of initial construction for Segment III. Initial construction within Segment III occurred in 1976/1977; therefore, Federal participation for Segment III expires in 2026.

A General Reevaluation Report (GRR) approved May 2004 modified the authorized project for the remainder of the project life for Segment III. The 2004 GRR optimized renourishment at 780,000cy every six years. The authorized project, as modified by the 2004 GRR, provides for restoration of the protective berm along 6.8 miles of shoreline starting at the Park at R-86 through R-92 and R-99 to R-128.

c. Project History

Previous beach restoration projects implemented along the Segment III shoreline are shown in listed in the following table, and the Federal Shore Protection Projects are summarized below.

Year	Project Area	Project Limits	Volume	Sand Source	Description
1971	Hallandale	R-124 to R-128	350,000 cy	Offshore	Local (City of Hallandale Beach)
1976/1977	John U. Lloyd Park	Jetty to R-93	1,090,000 cy	Offshore	Federal SPP
1979	Hollywood/Hallandale	R-101 to R-128	1,980,000 cy	Offshore	Federal SPP
1989	John U. Lloyd Park	Jetty to R-93	603,000 cy	Offshore	Federal SPP
1991	Hollywood/Hallandale	R-101 to R-128	1,110,000 cy	Offshore	Federal SPP
2001	Hollywood (Diplomat)	R-121 – R-123	25,000 cy	Upland	Local (City of Hollywood)
2005/2006	John U. Lloyd Park Hollywood/Hallandale/Dania	Jetty to R-92 & R-98 to R-128	1,920,000 cy	Offshore	Federal SPP / FCCE
2012	Southern Hollywood	R-119 to R-124	69,000 cy	Upland	Local (City of Hollywood)
2013	John U. Lloyd Park	R-87 to R-90	116,000 cy	Port Ev. Inlet	Port Everglades O&M Disposal
2019	Mizell-Eula Johnson Park Hollywood/Hallandale/Dania	Jetty to R-92 & R-99 to R-128	132,000 cy	Upland	Federal SPP / FCCE

In 1976/1977, the Mizell-Eula Johnson State Park (the Park; R-86 - R-93; originally named John U. Lloyd State Park) was initially constructed with the approximately 1.09 million cubic yards (mcy) being placed along 1.5 miles of shoreline. The Hollywood and Hallandale section (H-H section; R-101 – R-128) was initially constructed in November 1979 with 2 mcy being placed along 5.25 miles of shoreline. The first renourishment of the Park took place in 1989, with approximately 603,000 cy being placed. The first renourishment of the H-H section took place in 1991, with approximately 1.1 mcy being placed. In 2005/2006, the second renourishment took place, with approximately 550,000 cy of sand placed along the Park (R-86 – R-92) and 1.3 mcy along the H-H section including Dania Beach (R-98 – R-128). In 2019, the FCCE project placed 132,231 cy between R-86 to R-94 and 300 feet south of R-98 to the County Line (R-128). The width of the FCCE project was controlled between the pre-project mean high water (MHW) shoreline and the Erosion Control Line (ECL).

d. Current Project Description

Project work will renourish 7.2 miles of critically eroded shoreline immediately south of Port Everglades Inlet in Segment III along two placement areas. A 1.5 mile long segment within the Mitzel-Eula Johnson State Park (Park; south jetty - R94) and a 5.8 mile long segment within the cities of Dania, Hollywood, and Hallandale (HHD; R-98.3 to R-128). The width of the renourished area is similar to that filled in the 2005/2006 renourishment project. The sand source for the project will come from an upland source(s) and will be truck hauled to the placement locations. Segment III involves 840,000 cubic yards (cy) of material, of which 500,000 will be placed in the Park and 340,000 will be placed along the HHD shoreline. This volume represents the volume deficit between the current condition and the condition following the 2005/2006 project.

e. 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.

f. 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 shall 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. The ATR Team Leader may be a co-duty with one of the other 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 shall have 5 years of construction management experience that includes 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

Work conducted uses Bentley MicroStation in combination of InRoads line of products to develop the set of plans shown.

9. PROJECT DELIVERY TEAM

Table 1: Project Delivery Team and Disciplines

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]

10. BUDGET AND SCHEDULE

a. Project Milestones.

Table 2: Project Schedule Milestones (Subject to change)

TASK	START DATE	END DATE
Draft P&S complete	April 2020	5/22/2020
DQCR	5/22/2020	6/5/2020
PQCR	6/5/2020	7/2/2020
ATR	7/2/2020	8/13/2020
BCOES	8/14/2020	10/09/2020
Contract Advertised	10/23/2020	11/24/2020
Contract Award	n/a	1/5/2021

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

Table 3: Review Plan Points of Contact

TITLE	ORGANIZATION	PHONE
Quality Manager	CESAD-RBT	[redacted]
Review Manager	CESAJ-EN-Q	[redacted]

ATTACHMENT A: APPROVED REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT B: PARTIAL LIST OF ACRONYMS AND ABBREVIATIONS

Table 4: 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

Acronyms	Defined
PDT	Project Delivery Team
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 Development Act

ATTACHMENT C: ATR REPORT OUTLINE AND CERTIFICATION

Broward County, Florida
Shore Protection Project – Segment III
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- Segment III, 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