

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

2 6 NOV 2012

MEMORANDUM FOR COMMANDER, JACKSONVILLE DISTRICT (CESAJ-EN-QC/

SUBJECT: Approval of Review Plan for Plans and Specifications for Periodic Renourishment for Dade County Beach Erosion Control and Hurricane Protection Project, Contract G, Dade County, Florida

1. References:

CESAD-RBT

a. Memorandum, CESAJ-EN-QC, 26 September 2012, Subject: Approval of Review Plan for Periodic Renourishment for Dade County Beach Erosion Control and Hurricane Protection Project Contract G, Dade County, Florida (Enclosure).

b. EC 1165-2-209, Civil Works Review Policy, 31 January 2010.

2. The enclosed Review Plan for the Plans and Specifications for Periodic Renourishment for Dade County Beach Erosion Control and Hurricane Protection Project, Contract G, Dade County, Florida has been reviewed by this office. As a result of this review, minor changes were coordinated with your staff. The enclosed Review Plan with the coordinated changes incorporated is hereby approved in accordance with references 1.b above.

3. We concur with the conclusion of the District Chief of Engineering that Type II Independent External Peer Review (Type II IEPR) is not required for this periodic renourishment of the Dade County Beach Erosion Control and Hurricane Protection Project. The primary basis for our concurrence that a Type II IEPR is not required is that the failure or loses of the beach fill does not pose a significant threat to human life. We also concur with the conclusion that Agency Technical Review (ATR) is not required on this periodic nourishment effort since the design duplicates previous editions of the Plans and Specification that have been successfully used in the past.

4. The District should take steps to post the Review Plan 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 Review Plan, should they become necessary, will require new written approval from this office.

5. The SAD point of contact is Encl Encl DONALD E. JACKSON, JR. COL, EN Commanding



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS P.O. BOX 4970 JACKSONVILLE, FLORIDA 32232-0019

CESAJ-EN-QC

REPLY TO ATTENTION OF

26 September 2012

MEMORANDUM FOR Commander, South Atlantic Division (CESAD-RBT)

SUBJECT: Approval of Review Plan for Periodic Renourishment for Dade County Beach Erosion Control and Hurricane Protection Project Contract G, Dade County, Florida

1. References.

a. EC 1165-2-209, Civil Works Review Policy, 31 January 2010

b. WRDA 2007 H. R. 1495 Public Law 110-114, 08 Nov 07

2. I hereby request approval of the enclosed Review Plan and concurrence with the conclusion that Type II Independent External Peer Review (IEPR) and Agency Technical Review (ATR) of this project are not required. The related determination is based on the EC 1165-2-209 Risk Informed Decision Process as presented in the Review Plan. Approval of this plan is for periodic renourishment. The Review Plan complies with applicable policy and has been coordinated with 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 CESAD for its use. Names of Corps/Army employees are withheld from the posted version, in accordance with guidance.

FOR THE COMMANDER:



Encl

REVIEW PLAN

For

Bal Harbour Renourishment Plans and Specifications with Design Documentation Report

For

Dade County Beach Erosion Control and Hurricane Protection Project

Miami-Dade County, Florida

Jacksonville District

26 September 2012

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



TABLE OF CONTENTS

1.	PURPOSE AND REQUIREMENTS	2
2.	PROJECT INFORMATION AND BACKGROUND	2
3.	DISTRICT QUALITY CONTROL	3
4.	AGENCY TECHNICAL REVIEW	3
5.	INDEPENDENT EXTERNAL PEER REVIEW	5
6.	MODEL CERTIFICATION AND APPROVAL	5
7.	BUDGET AND SCHEDULE	5
8.	POINTS OF CONTACT	6

1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of review activities for the Dade County Beach Erosion Control and Hurricane Protection Project. The review activities consist of a District Quality Control (DQC) effort. An Agency Technical Review (ATR) and an Independent External Peer Review (IEPR) are excluded from this review plan since the project has been previously constructed with the same means and methods with a low risk of failure. The project is in the Periodic Nourishment Phase and the related documents of Plans and Specifications (P&S) and a Design Documentation Report (DDR) are considered routine. The scope of work consists of the renourishment of a previously successful project. Upon approval, this review plan will be included into the Project Management Plan as an appendix to the Quality Management Plan.

b. References.

- (1). ER 1110-2-1150, Engineering and Design for Civil Works Projects, 31 Aug 1999
- (2). ER 1110-1-12, Engineering and Design Quality Management, 21 Jul 2006
- (3). FCA 1968, WRDA 1974, and WRDA of 1986 (Project Authorization)
- (4). EC 1165-2-209, Civil Works Review Policy, 31 January 2010
- (5) Project Management Plan, Dade County BEC, 113170

c. Requirements. This review plan was developed in accordance with EC 1165-2-209, 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 three levels of review: District Quality Control, Agency Technical Review, and Independent External Peer Review. Refer to the EC for the definitions and procedures for the three levels of review.

d. Review Management Organization (RMO). The South Atlantic Division is designated as the RMO.

2. PROJECT INFORMATION AND BACKGROUND

Dade County is located along the southeast coast of Florida and contains the city of Miami. Broward County (Ft. Lauderdale) lies to the north and Monroe County (Florida Keys) lies to the south of Dade County. The Dade County shoreline extends along two barrier island segments and three islands each of which is separated from the mainland and the city of Miami by Biscayne Bay. The barrier islands vary in width from about 0.2 to 1.5 miles, with an average width of about 0.5 miles. Each of the three islands to the south is approximately 1 mile wide. Elevations along the entire coastal region (and much of the mainland) are low, generally less than 10 feet. Along the coastal region elevations are generally the highest along the coastline, sloping gradually downward toward the bay.

The project, as originally authorized, provided for the placement of beach fill along the 9.3-mile reach of shoreline extending from Bakers Haulover Inlet to Government Cut and along the 1.2-mile length of Haulover Beach Park located immediately north of Bakers Haulover Inlet. The 2.4-mile length of Sunny Isles was added to the project in 1985 under a separate authorization. Work on the project, as originally authorized, was begun in 1975 and completed in January 1982 at a total contract cost of approximately \$48 million. Due to the length of shoreline involved, the project was constructed in several phases with each phase being administered under a separate contract. There have been periodic nourishments of the project. In addition, there have been other project-related construction efforts such as the modifications to the adjacent navigation jetties at Bakers Haulover Inlet and Government Cut, construction of a series of detached

breakwaters at Sunny Isles, and the construction of shore-connected breakwaters at Miami Beach.

In July 1975, initial construction of the Bal Harbour segment began with the placement of 1,625,000 cubic yards of beach fill along the 0.85-mile length of shoreline. The limits of the project extended from the south jetty of Bakers Haulover Inlet to the north city limit of Surfside (96th Street). The construction berm width was 240 feet from the erosion control line (ECL) at an elevation of +9 feet mlw. The construction included an authorized dune feature. There have been approximately three other periodic nourishments of this area which have occurred during the years of 1990, 1998, and 2003. Maintenance dredging has also been used to supplement project fill requirements in 1995 and 2010.

There are three contracts being prepared over the next two years. This Review Plan is only for the upcoming contract--Beach Renourishment 2013, Contract G--Bal Harbour. Construction of the first project, Contract E, will be completed by the end of October 2012. Engineering and Design (E&D) is continuing for completion of plans and specifications for this renourishment contract (Contract G) which will exhaust the remaining offshore sand sources along Dade County. Completion of a regional sand management study was completed during Fall 2009 and will serve as part of an Addendum to the recent Letter Report documenting the best use of remaining economic domestic sand sources along the southeast coast of Florida. The third contract is being prepared as a Section 227 project. This project will be constructed along 63rd Street in Miami Beach under the National Shoreline Erosion Control Development and Demonstration Program (ERDC initiative). The project consists of constructing a nearshore breakwater following the completion of Contract E. As the scope of the 227 Demonstration project is developed and finalized, a Review Plan will be developed and published for that effort.

Current Project

The Contract G Beach Renourishment Project, Dade County Beach Erosion Control and Hurricane Protection Project, FL consists of placing sand on the coast of Bal Harbour using the ebb shoal of Bakers Haulover Inlet as the source of material. For this project, an estimated 300,000 cubic yards of sand will be placed on approximately 4,700 feet of beach. The ebb shoal is located at its closest point approximately 1,350 feet and at its farthest point approximately 7,800 feet to the northeast of Bal Harbour. A pipeline corridor is established between the shore and shoal for access between the beach and the borrow area. In 2003, this project was completed using the same ebb shoal. The means and methods employed in this earlier effort proved successful and no revisions to the current project are anticipated.

3. DISTRICT QUALITY CONTROL

District Quality Control and Quality Assurance activities for the project documents (DDRs and P&S) are stipulated in ER 1110-1-12, Engineering & Design Quality Management. The subject project DDR and P&S will be prepared by the Jacksonville District using ER 1110-1-12 procedures and undergo DQC. Since the project documents of the previous project are being used to execute the current project, DQC Certification is deemed an effective means to verify quality control.

4. AGENCY TECHNICAL REVIEW

a. Risk Informed Decision on Appropriate Level of Review

The EC 1165-2-209 for review policy directs the Project Delivery Team (PDT) to make a risk informed decision regarding the effectiveness of an ATR (Para 15). Review of the answers to the following questions from Para 15.b indicate that an ATR is not warranted since the same project

area has been restored using material dredged from the same borrow source in the past with the same methods and means as envisioned for the subject P&S and the project design has performed as anticipated between renourishment cycles.

1) Does it include any design (structural, mechanical, hydraulic, etc)? Yes. The design duplicates a previous edition of P&S that has been used successfully in the past.

2) Does it evaluate alternatives? No.

3) Does it include a recommendation? No.

4) Does it have a formal cost estimate? Yes, an Independent Government Estimate for the contract has been developed.

5) Does it have or will it require a NEPA document? Yes. The project uses an existing Environmental Assessment and requires a State of Florida Water Quality Certificate.

6) Does it impact a structure or feature of a structure whose performance involves potential life safety risks? No. There is no life safety risk associated with this dredging project.

7) What are the consequences of non-performance? The renourishment beach fill is a sacrificial fill section. Failure or non-performance of the nourishment would not in itself pose any safety issues as project monitoring triggers its replacement such that the project function is maintained.

8) Does it support a significant investment of public monies? Yes.

9) Does it support a budget request? No. The project implements appropriated funds.

10) Does it change the operation of the project? No.

11) Does it involve ground disturbances? Yes, dredging and beach placement are in areas that have been disturbed in accordance with authorized purposes in the past.

12) Does it affect any special features, such as cultural resources, historic properties, survey markers, etc, that should be protected or avoided? No. All project areas have appropriate clearances.

13) Does it involve activities that trigger regulatory permitting such as Section 404 or stormwater/NPDES related actions? Yes, however the project uses an existing Environmental Assessment and we are obtaining the Water Quality Certificate.

14) Does it involve activities that could potentially generate hazardous wastes and/or disposal of materials such as lead based paints or asbestos? No.

15) Does it reference use of or reliance on manufacturers' engineers and specifications for items such as prefabricated buildings, playground equipment, etc? No.

16) Does it reference reliance on local authorities for inspection/certification of utility systems like wastewater, stormwater, electrical, etc? No.

17) Is there or was there expected to be any controversy surrounding the Federal action associated with the work product? No.

5. INDEPENDENT EXTERNAL PEER REVIEW

a. General. EC 1165-2-209 provides implementation guidance for both Sections 2034 and 2035 of the Water Resources Development Act (WRDA) of 2007 (Public Law 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 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 associated with decision documents. No decision documents are addressed or covered by this Review Plan. A Type I IEPR is not applicable to the documents covered by this Review Plan.

c. Type II Independent External Peer Review Determination. This shore protection project does not trigger WRDA 2007 Section 2035 factors for Safety Assurance Review (termed Type II IEPR in EC 1165-2-209). Therefore, a Type II IEPR review under Section 2035 and/or EC 1165-2-209 is not required. The factors in determining whether a review of design and construction activities of a project is necessary as stated under Section 2035 and EC 1165-2-209, along with the applicability statement of this review plan, follow:

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

This project will perform a periodic nourishment that will re-establish a beach. The beach is designed to protect structures through its sacrificial nature and is continually monitored and renourished in accordance with program requirements and constraints. Failure or loss of the beach fill will not pose a significant threat to human life.

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

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

(3) The project design lacks redundancy.

The beach fill design is in accordance with the USACE Coastal Engineering Manual. The manual does not employee the concept of redundancy for beach fill design.

(4) The project has a 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 installation sequence and schedule has been used successfully by the Corps of Engineers on other similar works.

6. MODEL CERTIFICATION AND APPROVAL

This shore protection project does not use any engineering models that have not been approved for use by USACE.

7. BUDGET AND SCHEDULE

a. Project Milestones.

Complete Pre-Final Submittals: 04 Sep 2012

District Quality Control: 05 Sep 2012 - 04 Oct 2012

BCOE: 08 Feb - 02 Apr 2013

Advertisement: 10 Apr 2013

b. ATR Estimated Cost. An ATR is not anticipated.

8. POINTS OF CONTACT

Per guidance, the names of the following individuals will not be posted on the Internet with the Review Plan. Their titles and responsibilities are listed below.

Jacksonville District POCs:

Review Plan, ATR and QM Process,

Project Information (PM) & (ETL),



South Atlantic Division,