

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

REPLY TO ATTENTION OF:

CESAD-RBT

15 August 2011

### MEMORANDUM FOR COMMANDER, JACKSONVILLE DISTRICT (CESAJ-EN-T/ STEPHEN C. DUBA)

SUBJECT: Approval of the Review Plan for Miami Harbor Deepening and Widening Project (Phase III), Dade County, Florida

1. References:

a. Memorandum, CESAJ-EN-T, 28 July 2011, Subject: Approval of the Review Plan for Miami Harbor Deepening and Widening Project (Phase III), Dade County, Florida (Enclosure).

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

c. WRDA 2007 H. R. 1495 Public Law 110-114, 8 November 2007.

2. The enclosed Review Plan for the Miami Harbor Deepening and Widening Project (Phase III), Dade County, Florida dated 28 July 2011 submitted by reference 1.a, has been reviewed by this office and is approved in accordance with reference 1.b.

3. The South Atlantic Division concurs with the determination that a Type II Independent External Peer Review (IEPR) is not required on this project. The primary basis for the concurrence that a Type II IEPR is not required is the determination that no life safety concerns have been identified on this navigation dredging project. Non-substantive changes to this RP do not require further approval.

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.

5. The SAD point of contact is Mr. James Truelove, CESAD-RBT, 404-562-5121.

FOR THE COMMANDER:

Br &

CHRISTOPHER T. SMITH, P.E. Chief, Business Technical Division

Encl



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

CESAJ-EN-T

REPLY TO ATTENTION OF

28 July 2011

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

SUBJECT: Approval of Review Plan for Miami Harbor Deepening and Widening Project (Phase III), 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) of this navigation project is not required. The Type II IEPR determination is based on the EC 1165-2-209 determination process as presented in the Review Plan. Approval of this plan is for the Preconstruction, Engineering and Design Phase Implementation Documents. The Review Plan complies with applicable policy, provides Agency Technical Review 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 are withheld from the posted version, in accordance with guidance.

FOR THE COMMANDER:

DUBA, P.E. STEI Chief, Engineering Division

Encl

# **REVIEW PLAN**

### For

### Miami Harbor Deepening and Widening Project (Phase III)

### Dade County, Florida

Jacksonville District

28 July 2011

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.



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#### 1. PURPOSE AND REQUIREMENTS

**a. Purpose.** This Review Plan defines the scope and level of review activities for The Miami Harbor Phase III Deepening and Widening Project. Review activities consist of District Quality Control (DQC) and Agency Technical Review (ATR). The project is in the Pre-Construction, Engineering and Design (PED) Phase. The related documents are Implementation Documents that consist of Plans and Specifications (P&S) and a Design Documentation Report (DDR). Upon approval, this review plan will be included into the Project Management Plan as an appendix to the Quality Management Plan. The Review Management Organization is the South Atlantic Division.

#### b. References.

- (1). EC 1165-2-209, Civil Works Review Policy, 31 January 2010
- (2). ER 1110-1-12, Engineering and Design Quality Management, 21 Jul 2006
- (3). Project Management Plan, Miami Harbor, 113105, to be updated Summer 2011.

**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. The RMO is responsible for managing the review activities described in this Review Plan.

#### 2. PROJECT INFORMATION AND BACKGROUND

The Miami Harbor Deepening and Widening Project (Phase III) was evaluated and authorized by a General Reevaluation Report (GRR), and Final Environmental Impact Statement, Chief of Engineers Report dated 25 April 2005. The GRR was authorized by the Water Resources Development Act of 2007 (WRDA 2007). The Miami Harbor Deepening and Widening Project was specifically authorized by Section 1001(17) of WRDA 2007.

The purpose the Miami Harbor Deepening and Widening Project is to allow for a more efficient and safer flow of vessel traffic in and out of the Port of Miami including accommodation of the larger Post Panamax container vessels. The project has a \$14,740,000 annual benefit to the nation upon construction.

The project work consists of construction dredging to provide for the Federally authorized project improvements and Local Sponsor Berthing Areas of Miami Harbor, Florida. To facilitate the authorized project, the Phase 3 deepening contract will dredge the following features: (1) Cut-1 to a depth of 52 feet MLLW plus one foot allowable overdepth, including the widening of the outer portion of the cut from 500 feet to 800 feet; (2) Cut-2 to a depth of 52 feet MLLW plus one foot allowable overdepth; (3) Cut-3 to a depth of 50 feet MLLW plus one foot allowable overdepth; (3) Cut-3 to a depth of 50 feet MLLW plus one foot allowable overdepth, including a new turn widener at the intersection of Cut-3 and the Fisher Island Turning Basin; (4) Fisher Island Turning Basin to a depth of 50 feet MLLW plus one foot allowable overdepth, including an expansion of the turning basin from 1200 feet to approximately 1500 feet; (5) Fisherman's Channel to a depth of 50 feet MLLW plus one foot allowable overdepth, including a shift of the channel by 60 feet to the south and the widening of the channel by 40 feet to south from 400 feet to 440 feet; (6) Lummus Island Turning Basin to a depth of 50 feet MLLW plus one foot allowable overdepth, including a reduction of the turning basin from 1600 feet to

approximately 1500 feet; and (7) Port of Miami Berthing Areas along Fisherman's Channel to a depth of 50 feet MLLW plus one foot allowable overdepth, including an expansion of the berthing areas by 60 feet south into the existing Federal channel. Total quantity to be dredged from the Federal Channel is approximately 5 million cubic yards (cy) and from the Berthing Areas is approximately 170,000 cy. All dredged material will be placed in the ODMDS located an average of 4.5 statute miles from the dredging location, the Julia Tuttle Seagrass Mitigation Area located an average of 7.0 statute miles from the dredging location, and the two Offshore Artificial Reef Areas located an average of 2.4 statute miles from the dredging location.

In addition to dredging, the work involves drilling and blasting (includes protected species observers, fish-kill monitoring, dolphin/manatee watch plan activities, and vibration monitoring/control activities), turbidity/sedimentation monitoring (includes pre- and during construction environmental monitoring of adjacent seagrass beds and hardbottom communities for direct and indirect impacts associated with construction activities), endangered species observers (hopper dredges only), manatee observers (clamshell dredges only), and seagrass and artificial reef mitigation areas construction.

#### 3. DISTRICT QUALITY CONTROL

District Quality Control and Quality Assurance activities for implementation 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 the SAJ procedures and will undergo DQC. DQC Certification will be verified by the Agency Technical Review Team.

#### 4. AGENCY TECHNICAL REVIEW

**a. Scope.** Agency Technical Review (ATR) is undertaken to "ensure the quality and credibility of the government's scientific information" in accordance with EC 1165-2-209 and ER 1110-1-12. An ATR will be performed on the P&S and DDR pre-final submittal.

ATR will be conducted by individuals and organizations that are external to the Jacksonville District. The ATR Team Leader is a Corps of Engineers employee outside the South Atlantic Division. The required disciplines and experience are described below.

ATR comments are documented in the DrChecks<sup>sm</sup> model review documentation database. DrChecks<sup>sm</sup> is a module in the ProjNet<sup>sm</sup> suite of tools developed and operated at ERDC-CERL (<u>www.projnet.org</u>).

At the conclusion of ATR, the ATR Team Leader will prepare a Review Report that summarizes the review. The report will consist of the ATR Certification Form from EC 1165-2-209 and the DrChecks<sup>sm</sup> printout of the closed comments.

**b. ATR Disciplines.** As stipulated ER 1110-1-12, ATR members were sought from the following sources: regional technical specialists (RTS); appointed subject matter experts (SME) from other districts; 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 is comprised of the following disciplines; knowledge, skills and abilities; and experience levels.

Geotechnical Engineering and Engineering Geology. The team member should be a registered professional. Experience needs to encompass geologic and geotechnical analyses that are used to support the development of Plans and Specifications for navigation and shore protection projects to include blasting and blast plans.

Civil Engineering. The team member should be a registered professional engineer with civil/site work project experience that includes dredging and disposal operations, embankments, channels, revetments and shore protection project features.

Cost Engineering. The team member should have demonstrated in the preparation of cost estimates, cost risk analyses and cost engineering. Experience is needed for dredging projects to include navigation and shore protection projects. The cost engineering review will be on the PED Phase current working estimate and total project cost summary and not the IGE. The cost engineering review will be conducted as part of the ATR for the P&S final submittal.

NEPA Compliance. The team member should have experience in NEPA compliance activities and preparation of Environmental Assessments and Environmental Impact Statements for navigation or shore protection projects. Experience with navigation projects that involve blasting and blast plans is required. Artificial reef and sea grass construction experience are desired. (This position may require more than one team member).

ATR Team Leader. The ATR Team Leader should have experience with Navigation and/or Shore Protection Projects and have performed ATR Team Leader duties. ATR Team Leader can also serve as a co-duty to one of the review disciplines.

## 5. TYPE II INDEPENDENT EXTERNAL PEER REVIEW (WRDA 2007 Section 2035 Safety Assurance 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 (P.L.) 110-114). The EC addresses review procedures for both the Planning and the Design and Construction (PED) phases and incorporates requirements for conduct of Type II Independent External Peer Review/Safety Assurance Review. 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 (Section 2034).** A Type I IEPR is associated with decision documents. No decision documents are addressed by this Review Plan.

**c. Type II Independent External Peer Review (IEPR) Determination (Section 2035).** This navigation project does not trigger WRDA 2007 Section 2035 factors for Safety Assurance Review (termed Type II IEPR in EC 1165-2-209) 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 is necessary as stated under Section 2035 along with this review plans applicability statement follow.

(1) The failure of the project would pose a significant threat to human life. This project consists of channel dredging and failure of the navigation channel will 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 concept of redundancy is not applicable to channel dredging projects. (4) The project has a 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.

#### 6. MODEL CERTIFICATION AND APPROVAL

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

#### 7. BUDGET AND SCHEDULE

#### a. Project Milestones.

Completion of Final Submittal – Sept11

District Quality Control - Oct11

Agency Technical Review – Oct11

BCOE/Owner Review – Dec 11

Advertisement – Jan 12

**b. ATR Schedule and Cost.** The ATR will be conducted Oct11 to Nov11. It is envisioned that each reviewer will be afforded 28 hours review plus 4 hours for coordination. The estimated cost range is \$10-15,000.

#### 8. POINTS OF CONTACT

Per guidance, the names of the following individual 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,	Jimmy D. Matthews 904-232-2087 Jimmy.D.Matthews@usace.army.mil
Project Information (PM) & (ETL),	Laurel Reichold 904-232-1458 Laurel.p.Reichold@usace.army.mil
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