

# DEPARTMENT OF THE ARMY

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

CESAD-RBT 21 May 2012

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

SUBJECT: Approval of the Review Plan for Three Forks Marsh Conservation Area (Remaining Features) and Historical Site Preservation Implementation Documents, Upper St. Johns River Basin, Brevard County, Florida

#### 1. References:

- a. Memorandum, CESAJ-EN-QC, 2 April 2012, Approval of Review Plan for Three Forks Marsh Conservation Area (Remaining Features) and Historical Site Preservation Implementation Documents, Upper St. Johns River Basin, Brevard County, Florida (Enclosure).
  - b. EC 1165-2-209, Civil Works Review Policy, 31 January 2010.
- 2. The enclosed Review Plan for the Three Forks Marsh Conservation Area (Remaining Features) and Historical Site Preservation Implementation Documents dated 2 April 2012 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 is not required on this project. The primary basis for this concurrence is the determination that failure of the project would not pose a significant threat to human life. 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

FOR THE COMMANDER:

Encl

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



# DEPARTMENT OF THE ARMY

# JACKSONVILLE DISTRICT CORPS OF ENGINEERS P.O. BOX 4970 JACKSONVILLE, FLORIDA 32232-0019

**CESAJ-EN-QC** 

2 April 2012

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

SUBJECT: Approval of Review Plan for Three Forks Marsh Conservation Area (Remaining Features) and Historical Site Preservation Implementation Documents, Upper St. Johns River Basin, Brevard 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 project is not required. The Type II IEPR 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 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:

Encl



# **REVIEW PLAN**

For

Preconstruction, Engineering and Design Phase

Implementation Documents

For

Three Forks Marsh Conservation Area (Remaining Features) and Historical Site Preservation

**Upper St. Johns River Basin** 

Brevard County, Florida

Jacksonville District

2 April 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.



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## 1. PURPOSE AND REQUIREMENTS

**a. Purpose.** This Review Plan defines the scope of review activities for the Three Forks Marsh Conservation Area remaining Features and Historical Site Preservation, Brevard County, Florida. Review activities consist of the District Quality Control (DQC). The project is in the Preconstruction, Engineering and Design (PED) Phase. The related project documents are Implementation Documents that consist of Plans and Specifications (P&S). Upon approval, this review plan will be included into the Project Management Plan as an appendix to the Quality Management Plan.

#### b. References.

- (1). EC 1165-2-209, Civil Works Review Policy, 31 January 2010
- (2). ER 1110-2-1150, Engineering and Design for Civil Works Projects, 31 Aug 1999
- (3). ER 1110-1-12, Engineering and Design Quality Management, 21 Jul 2006
- (4). 14520 Project Management Plan, Upper St. Johns River Basin (Remaining Features) is currently being updated to reflect updated costs and a revised schedule.
- 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

The Three Forks Marsh Conservation Area project was authorized by the Flood Control Act of 1954 which authorized the remainder of the Comprehensive Plan for the Central and Southern Florida (C&SF) Project.

The Flood Control Act of 1954

IN GENERAL.—The 1954 Act authorized the remainder of the Comprehensive Plan for the C&SF Project. This included flood control, water conservation, and navigation in the Upper St. Johns and Kissimmee River Basins; an increase in the outlet capacity of the Caloosahatchee River from Lake Okeechobee; the remainder of protective levees for the Everglades agricultural area and the water conservation areas; and the remaining salinity barrier in south Dade County. The 1954 authorization is contained in P.L. 780 (83<sup>rd</sup> Congress, 2d Session, approved September 3, 1954).

Construction of the Three Forks Marsh Conservation Area modifications to Project Features and Construction of S-257 took place in 2007. This project included the construction of S-257, the plugging and degradation of S-256 and S-255 flow ways, and the construction of the L-74 flow way and its berm. Due to unforeseen Archaeological findings the project was canceled for convenience and some of the features e.g. S-256 flow way were not modified. The Archaeological survey revealed Historical burial grounds within the Three Forks Marsh Conservation Area and a determination was made to protect two of these sites. The new protection measure includes ring levees around two burial sites equipped with solar pumping systems. The ring levee sites will be approximately 12 acres. Other work to be included is the plugging of S-256 canal, degrading the adjacent spoils of S-256 canal, and removing the S-257 cofferdam.

## 3. DISTRICT QUALITY CONTROL

District Quality Control and Quality Assurance activities for implementation documents (P&S) are stipulated in ER 1110-1-12, Engineering & Design Quality Management. The subject project P&S will be prepared by the Jacksonville District using the SAJ procedures and will undergo DQC.

#### 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 final submittals.

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 will be 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 will be comprised of the following disciplines; knowledge, skills and abilities; and experience levels.

Civil Engineering. The team member should be a registered professional engineer with 5 years minimum experience in civil/site work that encompasses embankment, road design. Related construction experience is also desired.

Mechanical and Electrical Engineering. The team member should be a registered professional engineer with 5 years minimum experience in small pump stations and related electrical works. Related construction experience is also desired.

Geotechnical Engineering. The team member should be a registered professional engineer with 5 years minimum experience that encompasses embankment and channel design. Related construction experience is also desired.

Hydrology and Hydraulics. The H&H team member should be a registered professional with a minimum of 5 years experience that encompasses floodplain protection modeling and design.

NEPA Compliance. The team member should have experience in reviewing environmental documents and environmental permit compliance activities for civil works projects. The team member should also have experience cultural resources compliance activities and requirements.

ATR Team Leader. The ATR Team Leader will be from outside SAD and should have experience with civil works projects. ATR Team Leader may also serve as a co-duty to one of the review disciplines.

#### 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 (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 (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 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.

Failure of the project would not pose a threat to human life. The Forks Marsh Conservation Area remaining Features and Historical Site Preservation project is on lands that are only utilized for restoration of the Upper St. Johns River Basin. There are no communities residing along or near project works. There is no failure mode that would cause any risk 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 these project works.

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

This project does not have or pose unique sequencing or a reduced or overlapping design. Similar construction methods and procedures have been used successfully for other projects. This project is non-complex, routine earthwork construction.

#### 6. MODEL CERTIFICATION AND APPROVAL

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

# 7. SCHEDULE AND COST ESTIMATE

#### a. Schedule.

| EN8180 | ATR/sponsor Review                                   | 15 days | 23-Jan-13 | 12-Feb-13 |
|--------|--|---------|-----------|-----------|
|        | ATR/sponsor Review Comment Evaluation                | 5 days  | 13-Feb-13 | 20-Feb-13 |
|        | ATR/sponsor Review Comment Backcheck / Close         | 5 days  | 21-Feb-13 | 27-Feb-13 |
|        | Incorporate ATR/Sponsor Comments                     | 10 days | 28-Feb-13 | 13-Mar-13 |
|        | ATR Package Submitted and Reviewed for Certification | 3 days  | 14-Mar-13 | 18-Mar-13 |
| EN8185 | ATR CERTIFIED  | 0 days  | 18-Mar-13 | 18-Mar-13 |

**b. Cost Estimate.** Funds are available to execute ATR and schedule as outlined above. It is envisioned that each reviewer will be afforded 16 hours for ATR plus 8 hours for coordination. The ATR Team Leader will be afforded and additional 16 hours for team leader duties. The estimated cost range will range \$14,000 to \$18,000.

# 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:      | (Names   | were | removed | prior   | to | posting) |
|----------------------------------|----------|------|---------|---------|----|----------|
| Review Plan, ATR and QM Process: |          |      |         |         |    |          |
|                                  |          |      |         |         |    |          |
| Project Information:             |          |      |         |         |    |          |
|                                  |          |      |         |         |    |          |
|                                  |          |      |         |         |    |          |
|                                  | <u> </u> |      |         |         |    |          |
| Project Manager:                 |          |      |         |         |    |          |
|                                  |          |      |         | <u></u> |    |          |