



REPLY TO
ATTENTION OF

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

13 JUN 2013

CESAD-RBT

MEMORANDUM FOR COMMANDER, JACKSONVILLE DISTRICT (CESAJ-EN-QC/
LAUREEN A. BOROCHANER)

SUBJECT: Approval of the Review Plan for Treasure Island and Long Keys Segments of the Pinellas County Hurricane and Storm Damage Reduction Project and the Captiva Island Segment of the Lee County Shore Protection Project, Florida

1. References:

a. Memorandum, CESAJ-EN-QC, 1 May 2013, subject: Approval of the Review Plan for Treasure Island and Long Keys Segments of the Pinellas County Hurricane and Storm Damage Reduction (HSDR) Project and the Captiva Island Segment of the Lee County Shore Protection Project, Florida (Enclosure).

b. EC 1165-2-214, Civil Works Review, 15 December 2012.

2. The enclosed Review Plan for the Treasure Island and Long Keys Segments of the Pinellas County Hurricane and Storm Damage Reduction Project and the Captiva Island Segment of the Lee County Shore Protection Project, Florida submitted by reference 1.a, has been reviewed by this office and is approved in accordance with reference 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 either of these beach renourishment efforts. The primary basis for the concurrence that a Type II IEPR is not required is the determination that the failure or loss of these beach nourishment efforts does not pose a significant threat to human life. We also concur with the conclusion that Agency Technical Review (ATR) is not required on Captiva Island Segment of the Lee County Shore Protection Project since the current 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 Mr. James Truelove, CESAD-RBT, 404-562-5121.

DONALD E. JACKSON, JR.
COL (P), EN
Commanding

Encl



REPLY TO
ATTENTION OF

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

CESAJ-EN-QC

1 May 2013

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

SUBJECT: Approval of Review Plan for Treasure Island and Long Key Segments of the Pinellas County Hurricane and Storm Damage Reduction (HSDR) Project and Captiva Island Segment of the Lee County Shore Protection Project, Florida


1. References.

- a. EC 1165-2-214, Civil Works Review Policy, 15 December 2012
- b. WRDA 2007 H. R. 1495 Public Law 110-114, 08 November 2007

2. I hereby request approval of the enclosed Review Plan and concurrence with the conclusion that Type II Independent External Peer Review (IEPR) of the subject projects is not required. The recommendation to exclude Type II IEPR is based on the EC 1165-2-214 Risk Informed Decision Process as presented in the Review Plan. The Review Plan complies with applicable policy, provides Agency Technical Review for the Treasure Island and Long Key Segments and has been coordinated with the CESAD. An Agency Technical Review for the Captiva Island Segment of the Lee County Shore Protection Project is not recommended because the project is routine and considered to be an "other work product" as defined by EC 1165-2-214. 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 will be withheld from the posted version, in accordance with guidance.

FOR THE COMMANDER:


LAUREEN A. BOROCHANER, P.E.
Acting Chief, Engineering Division

Encl

PROJECT REVIEW PLAN

**Treasure Island and Long Key Segments of the Pinellas
County Hurricane Storm Damage Reduction Project**

and

**Captiva Island Segment of the Lee County
Shore Protection Project**

PINELLAS & LEE COUNTY, FLORIDA

Jacksonville District

May 2013

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 Treasure Island and Long Key Segments of the Pinellas County Hurricane and Storm Damage Reduction (HSDR) Project and Captiva Island Segment of the Lee County Shore Protection Project. The review activities consist of a District Quality Control (DQC) effort and an Agency Technical Review (ATR) for the Treasure Island and Long Key Segments and a DQC effort for the Captiva Island Segment. An Independent External Peer Review (IEPR) is not recommended in this review plan since these failure of these projects do not pose a significant threat to human life. The projects are in the Periodic Nourishment Phase and the related documents including Plans and Specifications (P&S) and a Design Documentation Report (DDR) are considered routine. The scope of work consists of the renourishment of previously successful projects. Treasure Island and Long Key were last renourished by the Corps in 2012 and Captiva Island was last renourished by the Corps in 2005, with an emergency rehabilitation performed by the Corps in 2009. Upon approval, this review plan will be included into the Project Management Plan for each of these projects as an appendix to the Quality Management Plan.

b. References

- (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). Lee County, Captiva: Section 201 PL 89-298; Section 215 PL90-483; Section 314 and 506 of WRDA 1996; Section 312 WRDA 1999. (Project Authorization)
- (4). Pinellas County, Treasure Island and Long Key: Section 101 Rivers and Harbors Act of 1966; Section 156 WRDA 1976 PL94-587; Section 501(b) WRDA 1986 PL 99-662. (Project Authorization)
- (5). EC 1165-2-214, "Civil Works Review", 15 December 2012
- (6). Project Management Plan, Pinellas County SPP, 116684
- (7). Project Management Plan, Lee County SPP, 113085

c. Requirements

This review plan was developed in accordance with EC 1165-2-214, 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

a. Project Location and Name

Treasure Island and Long Key Segments of the Pinellas County Hurricane and Storm Damage Reduction (HSDR) Project, Pinellas County, Florida. Pinellas County extends northerly about 39 miles from the main entrance to Tampa Bay to the vicinity of the mouth of the Anclote River. The project is located on 2 barrier islands offshore of the mainland portion of St. Petersburg along the Gulf coast of Florida. These segments of the Federal project for Pinellas County consist of approximately 7.6 miles of Gulf Coast shoreline.

Captiva Island Segment of the Lee County Shore Protection Project, Lee County, Florida. Captiva Island is located in Lee County about 90 miles south of the entrance to Tampa Bay, on the Gulf of Mexico coast of Florida. This segment of the Federal project for Lee County consists of 4.8 miles of Gulf Coast shoreline. Captiva Island is bounded on the north by Redfish Pass and by Blind Pass on the south.

Locations for both project sites are shown in Figure 1.

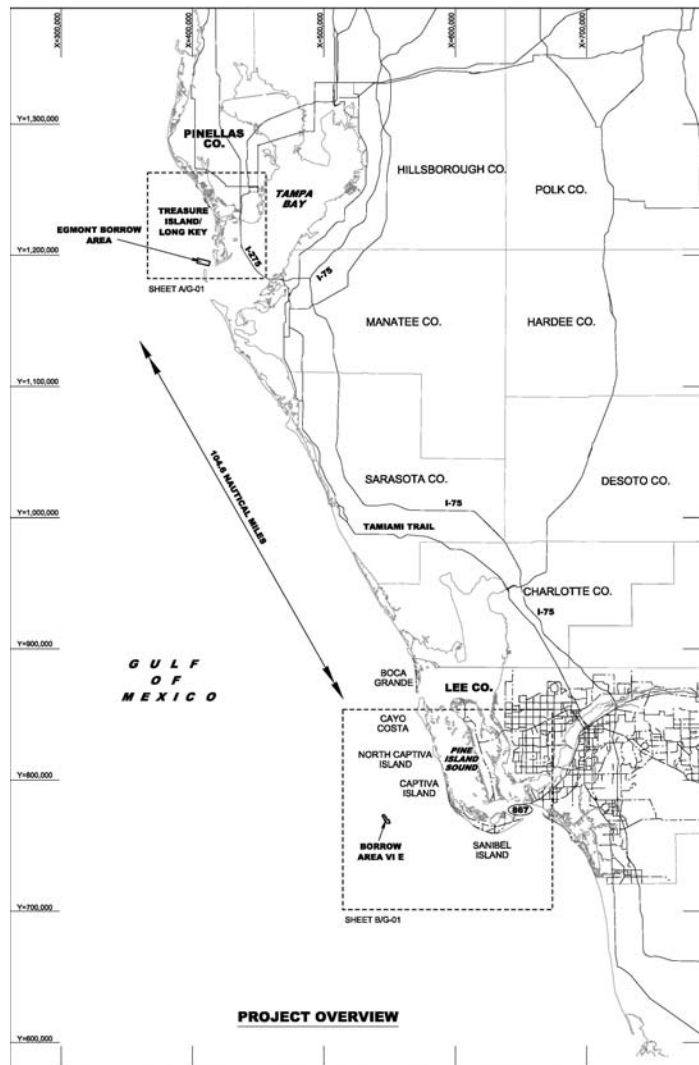


Figure 1 – Project Location

b. Project Authorization

(1). Pinellas County, Treasure Island and Long Key:

The project was authorized by Section 101 of the Rivers and Harbors Act of 1966, Public Law (PL) (89-789), in accordance with the Chief of Engineers Report dated 14 September 1966. The original authorization allowed for improvements for beach erosion control for Clearwater Beach Island, Sand Key, Treasure Island, and Long Key by beach restoration, periodic nourishment, and revetments. Provisions of Section 156 of Water Resources Development Act (WRDA) 76 (PL 94-587) extended the period of Federal participation from 10 years to 15 years. The project authority was further amended by Section 501(b) of the WRDA of 1986 (PL 99-662) which authorized, subject to a favorable Chief's Report, the construction of the recommendations of the report of the Board of Engineers for Rivers and Harbors, dated April 23, 1985. A favorable Chiefs Report was signed on July 27, 1987 recommending the project plan as formulated except that Federal participation in periodic nourishment should be limited to the 50-year economic life of the project.

(2). Lee County, Captiva:

The non-Federal Sponsor initially constructed the Project for Lee County, Florida in 1989 and performed a renourishment in 1996, with reimbursement of the federal share, pursuant to Section 201 of the Flood Control Act of 1965 and Section 215 of the Flood Control Act of 1968. Section 506(b)(3)(A) of the Water Resources Development Act of 1996 provided that if the Secretary of the Army determined that periodic beach nourishment is necessary for the project, the Secretary of the Army shall carry out periodic beach nourishment for the project for a period of fifty (50) years from the date of initiation of construction, which began on August 17, 1988. The Design Memorandum (DM) approved in 1996, is the authorizing document for this project, and provides for restoration and periodic nourishment as needed on 4.6 miles of shoreline on Captiva Island. The project limits run from Florida Department of Environmental Protection (FDEP) monument R-85 to R-109.

c. Current Project Description

(1). Pinellas County, Treasure Island and Long Key:

Treasure Island has two segments requiring nourishment of beach quality sediment. Sunshine Beach, on the northern portion, will be renourished between Department of Natural Resources (DNR) Range Monuments R-126C and 200 feet south of R-128. Farther south, at Sunset Beach, the project beach shall be constructed between DNR Range monuments R-136 and 700 feet south of R-140. Long Key has two segments requiring nourishment of beach quality sediment. Upham Beach, on the northern portion, will be renourished between DNR Monuments R-144 and R-148. Farther south, at Pass-A-Grille Beach, the project beach shall be constructed between DNR monuments R-160 and R-165. Borrow material for Treasure Island and Long Key will be obtained from Egmont Borrow Area approximately 8.2 nautical miles southwest of the project fill area. Work for Treasure Island and Long Key will also includes beach tilling, turbidity monitoring, and construction vibration monitoring.

(2). Lee County, Captiva:

The proposed work will restore the design berm of 4.8 feet and provide sufficient advance fill for 4.6 miles of critically eroded shoreline between Department of Natural Resources (DNR) Range Monuments R-85 to R-109. Beach Quality Sediment has been located at a previously used borrow area, Borrow Area VI E, located approximately 9.4 nautical miles west of Captiva Island with an average depth of -35', NAVD88. Work for Captiva also includes endangered species monitoring (hopper dredge only), relocation trawling (hopper dredge only), beach tilling, turbidity monitoring, and construction vibration monitoring.

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.

4. AGENCY TECHNICAL REVIEW

a. Risk Informed Decision on Appropriate Level of Review – Treasure Island and Long Key

Renourishment of the Treasure Island and Long Key Segments differs from previous renourishment events in that beach fill material is coming from a borrow area not previously used and the beach fill template is reduced from what was previously restored in 2012. The use of a borrow area not previously used requires additional design and analysis over what was previously performed. Therefore, an ATR of this implementing construction contract is determined to be warranted based upon the following responses to the risk-informed decision questions from EC 1165-2-214, Para 15.

- (1). Does it include any design (structural, mechanical, hydraulic, etc)?
Yes. A new borrow area will be used resulting in additional design and analysis over what was previously performed. The beach fill template is reduced from what was previously restored in 2012 and requires no new design or analysis.
- (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 will be developed.
- (5). Does it have or will it require a NEPA document?
Yes. The project uses an existing Environmental Assessment but requires additional NEPA coordination associated with Essential Fish Habitat.
- (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 renourishment 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. The project is cost shared between the Government and local sponsor.*
- (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. Equipment will be used to place material to design grade and perform beach tilling, as in past contracts.
- (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 from cultural and environmental resources.

- (13). Does it involve activities that trigger regulatory permitting such as Section 404 or stormwater/NPDES related actions?
Yes, the current Environmental Assessment will be revised. The State Water Quality Certificate has been obtained.
- (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.*

b. Risk Informed Decision on Appropriate Level of Review – Captiva

Renourishment will be performed as previously constructed by SAJ in 2005 and 2009 with material obtained from the same borrow source and the beach template constructed to previous design grade using the same means and methods. Based on the responses to the risk-informed decision questions from EC 1165-2-214, Para 15, as shown below, it is recommended that an ATR for Captiva renourishment is not warranted.

- (1). Does it include any design (structural, mechanical, hydraulic, etc)?
Yes. The design duplicates previous editions of P&S that have been used successfully in past renourishments. No changes will be made to beach template or borrow areas and the method of construction is expected to occur as before.
- (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 will be developed.
- (5). Does it have or will it require a NEPA document? *No.*
- (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 renourishment 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. The project is cost shared between the Government and local sponsor.*
- (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. Equipment will be used to place material to design grade and perform beach tilling, as in past contracts.

- (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 from cultural and environmental resources.
- (13). Does it involve activities that trigger regulatory permitting such as Section 404 or stormwater/NPDES related actions?
Yes, the project uses an existing Environmental Assessment and 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.*

c. 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 1165-2-214 and ER 1110-1-12. An ATR will be performed on the P&S pre-final submittals.

ATR will be conducted on the Treasure Island and Long Key Segments of the Pinellas County Hurricane and Storm Damage Reduction (HSDR) Project 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 DrCheckssm model review documentation database. DrCheckssm is a module in the ProjNetsm suite of tools developed and operated at ERDC-CERL (www.projnet.org). 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 1165-2-214 and the DrCheckssm printout of the closed comments.

d. 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 and Construction team members may be combined if a qualified individual is available.

ATR Team Leader. The ATR Team Leader will be from outside SAD and should have a minimum of 15 years of experience with Navigation and/or Shore Protection Projects. ATR Team Leader may be a co-duty to one of the review disciplines.

Coastal Engineering/Dredging Operations. The team member should be a registered professional engineer with 7 years of dredging operations, coastal engineering, and/or civil/site work project experience that includes dredging and disposal operations, embankments, groins, channels, revetments and shore protection project features.

Engineering Geology. The team member should be a registered professional. Team Member needs to possess a minimum of 7 years experience with geologic analyses that are used to support the development of Plans and Specifications for navigation and shore protection projects with rock structures.

5. INDEPENDENT EXTERNAL PEER REVIEW

a. General.

EC 1165-2-214 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.

A Type I IEPR is associated with decision documents. A Type I IEPR is not applicable to the implementation documents covered by this Review Plan.

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

Neither the Treasure Island and Long Key Segments of the Pinellas County HSDR Project nor the Captiva Island Segment of the Lee County Shore Protection Project trigger WRDA 2007 Section 2035 factors for Safety Assurance Review and, therefore, the District Engineering Chief does not recommend a Type II IEPR review under Section 2035 and/or EC 1165-2-214 be performed for either of these projects. The factors, as stated under Section 2035 and EC 1165-2-214, are used in determining whether a Safety Assurance Review of design and construction activities is warranted. These factors and their applicability to these projects are as follows:

- (1). The failure of the project would pose a significant threat to human life.
Both of these projects will perform periodic nourishment that will re-establish an authorized beach section. 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.
In addition, the prevention of loss of life within the project area from hurricanes and severe storms is via public education about the risks, warning of potential threats and evacuations before hurricane landfall.
- (2). The project involves the use of innovative materials or techniques.
Both of these projects will utilize standard methods and procedures used by the Corps of Engineers on other similar works.
- (3). The project design lacks redundancy.
The beach fill design for these projects is in accordance with the USACE Coastal Engineering Manual. The manual does not employ the concept of redundancy for beach fill design.
- (4). The project has unique construction sequencing, or a reduced, or overlapping design construction schedule.
Both of these projects will be designed under an expedited schedule in order to execute emergency funding this FY. However, standard design and quality control procedures are not compromised and previous renourishment design activities benefit the production of these contract documents. Construction schedules do not have unique

sequencing and activities are not reduced or overlapped. The construction methods associated with these renourishment contracts have been used successfully by the Corps of Engineers on other similar projects.

6. MODEL CERTIFICATION AND APPROVAL

These projects do not use any engineering models that have not been approved for use by USACE.

7. BUDGET AND SCHEDULE

a. Pinellas County, Treasure Island and Long Key

- (1). Project Milestones.
 - Complete Pre-Final Submittals: *7 June 2013*
 - District Quality Control: *10 June 2013 – 14 June 2013*
 - ATR Review: *17 June 2013 – 21 June 2013*
 - BCOE Review: *10 July 2013 – 17 July 2013*
 - Advertisement: *19 July 2013*
- (2). ATR Estimated Cost. \$10,000 - \$14,000

b. Lee County, Captiva

- (1). Project Milestones.
 - Complete Pre-Final Submittals: *26 Apr 2013*
 - District Quality Control: *29 Apr 2013 – 6 May 2013*
 - BCOE Review: *9 May 2013 – 21 May 2013*
 - Advertisement: *15 May 2013*
- (2). ATR Estimated Cost. N/A

8. POINTS OF CONTACT

Jacksonville District points of contact names, titles, and responsibilities are listed below. Per guidance, the names of the following individual points of contacts will not be posted on the Internet with the Review Plan.