DEPARTMENT OF THE ARMY

SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS ROOM 9M15, 60 FORSYTH ST., S.W. ATLANTA, GEORGIA 30303-8801

REPLY TO ATTENTION OF CESAD-PDS-P

19 December 2007

MEMORANDUM FOR Commander, Jacksonville District (CESAJ-PD-P/Marie G. Burns)

SUBJECT: Approval of Peer Review Plan (PRP) for Port Everglades Harbor, Florida; Feasibility Study

1. References:

- a. Memorandum, CESAJ-PD, subject: Approval of Peer Review Plan (PRP) for Port Everglades Harbor, Florida; Feasibility Study, dated 5 December 2007.
 - b. EC 1105-2-408; "Peer Review of Decision Documents", 31 May 2005.
- c. Supplemental Information on the "Peer Review Process"; memorandum dated 30 March 2007.
- 2. This memorandum serves as conditional approval of the subject PRP, subject to the holding of an issue Resolution Conference (IRC), to be held with SAJ, SAD, and HQ staff, prior to initiation of EPR. The IRC would focus on continuing environmental and economic issues related to initigation of the tentatively selected plan, and economic justification of the final array of alternatives, respectively. The results of the IRC will function as a policy review and approval action, for the purposes of ensuring adequacy of plan selection before release of the draft final report for External Peer Review.
- 3. Any questions on this action should be directed to Mr. Elden Gatwood, at (404) 562-5226.

WILBERT V. PAYNES

Chief, Planning and Policy Community

of Practice

PORT EVERGLADES HARBOR, FLORIDA FEASIBILITY STUDY PEER REVIEW PLAN OCTOBER 2007 Updated MAY 2010

For questions or comments regarding this Peer Review Plan, please forward your comments to:

Title	Telephone	Email
Project Manager	904-232-1671	Click here to email the Project Manager

THE INFORMATION CONTAINED IN THIS PEER 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.

PORT EVERGLADES HARBOR, FLORIDA FEASIBILITY STUDY PEER REVIEW PLAN OCTOBER 2007 Updated MAY 2010

The approved review plan was revised to update project manager, reference current guidance and update the consolidated schedule. Changes are non-substantive, in that they do not alter quality control review commitments.

1. PURPOSE

The Peer Review Plan (PRP) for the Port Everglades Feasibility Study provides a technical peer review mechanism ensuring quality products are developed during the course of the study by the Jacksonville District (SAJ). All processes, quality control, quality assurance, and policy review will be done to complement each other producing a review process that identifies and resolves technical and policy issues during the course of the study and not during the final study stages.

The PRP is intended to describe the processes that will be implemented to independently (of the Project Team) evaluate the technical sufficiency of the planning study. The PRP is a collaborative product of the Project Delivery Team (PDT) and the National Deep Draft Navigation Planning Center of Expertise (DDNPCX). The DDNPCX shall manage the peer review processes, which for this study includes an Independent Technical Review (ITR) and an External Peer Review (EPR).

ITR is a critical examination by a qualified person or team, predominantly within the Corps of Engineers (Corps), which was not involved in the day-to-day technical work that supports a decision document. ITR is intended to confirm that such work was done in accordance with clearly established professional principles, practices, codes and criteria informed by Engineering Regulation (ER) 1105-2-100.

EPR is in addition to ITR, and is added to the Corps existing review process in special cases where the risk and magnitude of the proposed project are such that a critical examination by a qualified person or team outside of the Corps and not involved in the day-to-day production of a technical product is necessary. EPR will similarly be added in cases where information is based on novel methods, presents complex challenges for interpretation, contains precedent-setting methods or modes, presents conclusions that are likely to change prevailing practices, or is likely to affect policy decisions that have a significant impact. In the absence of the above-described criteria, high project cost may, by itself, necessitate EPR.

2. REFERENCES

ER 1105-2-100, "Planning Guidance Notebook EC1165-2-209, "Civil Works Review Policy", dated 31 January 2010 EC 1105-2-410, "Review of Decision Documents", dated August 22, 2008

EC 1105-2-408, "Peer Review of Decision Documents", dated May 31, 2005 CECW-CP Memorandum, "Peer Review Process", dated March 30, 2007 CECW-CP Memorandum, "Initiatives to Improve Accuracy of Total Project Costs in Civil Works Feasibility Studies Requiring Congressional Authorization", dated September 19, 2007.

Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies, Chapter II - (National Economic Development NED) Benefit Evaluation Procedures (March 10, 1983).

3. PROJECT/STUDY BACKGROUND

The Port Everglades Harbor Federal Navigation Channel is located in the southeastern portion of Broward County at the adjoining city limits of Fort Lauderdale, Hollywood, and Dania Beach. It is located 24 miles north of Miami and 323 miles south of Jacksonville (Attachment 1, Project Location).

The Port Everglades Feasibility Study is authorized through House Document 126, 103rd Congress, 1st Session, and House Document 144, 93rd Congress, 1st Session and other pertinent documents. The scope of the original feasibility study has now been amended twice. The present scope investigates widening and deepening the major channels and basins within the port, expanding the Port into the Dania Cutoff Canal, and to include a turning basin at the end of the Southport Channel. An Alternative Formulation Briefing was conducted in 2002 and 2005. The project team is currently in the advanced stages of completing an updated draft report.

Problems

- •Channel and offshore currents
- •Channel configurations, width, depths that may not be optional for commerce

Engineering Considerations

- •Civil design
- •Hydrology and hydraulics analysis
- •Geotechnical analysis
- •Coastal analysis

Environmental Considerations

- •Opportunities to enhance the environment
- •Avoid or minimize environmental impacts
- •Mitigate unavoidable impacts

Measures Considered

Structural and non-structural alternatives, including deepening and widening.

Model Studies (H&H Branch)

- (a) Hydraulic Modeling.
- (b) Coast Guard Basin Oscillation Model.
- (c) Ship Simulation Model.
- (d) Model Approach. Visual scene, channel, and radar databases will be developed for existing and proposed conditions.

Economic Studies

The commercial navigation benefit study conducted during the feasibility study phase will evaluate the transportation benefits for potential modifications to the Federal deep-draft navigation project at Port Everglades. The methods for assessing benefits are documented in the Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies, Chapter II - (National Economic Development NED) Benefit Evaluation Procedures (March 10, 1983). The adopted procedures for USACE studies, associated with deep-draft navigation features of water resources plans and projects consist of Section VII of Engineering Regulation (ER) 1105-2-100.

The Project Delivery Team

Project Manager	Civil Engineer	Jacksonville District
Planning Technical Lead	Civil Engineer	Jacksonville District
Engineering Technical Lead	Civil Engineer	Jacksonville District
Geotechnical Analysis	Geologist	Jacksonville District
Cost Engineering	Cost Engineer	Jacksonville District
Hydrodynamic Modeling	Hydraulic Engineer	Jacksonville District
Environmental Analysis	Biologist	Jacksonville District
	Real Estate	Jacksonville District
Real Estate Evaluation	Specialist	
Economic Analysis	Economist	Jacksonville District
Construction/Operations	Civil Engineer	Jacksonville District
Legal Evaluation	Attorney	Jacksonville District

4. INDEPENDENT TECHNICAL REVIEW PLAN

ITR is performed at key points in the study process to ensure the proper application of appropriate regulations and professional procedures. Skilled and experienced personnel who have not been associated with the development of the study products perform the ITR. ITR team members may be employees of U.S. Army Corps of Engineer Districts, other Federal agencies, state or local government agencies, universities, private contractors or other institutions. The key factor is extensive, expert knowledge in their field of expertise. DrChecks document review and comment software will be used to document the ITRs.

The relevant National Planning Center of Expertise, in this case for Deep Draft Navigation (DDNPCX), has ultimate responsibility for accomplishing ITR. The DDNPCX is requested to form an ITR Team, and to conduct ITR of the Draft and Final Reports. Previous ITR conducted in 2002 and 2005 were performed by in-house Jacksonville District personnel. ITR of the updated draft report will be conducted outside the Jacksonville District.

Also, a Cost Estimating Directory of Expertise (Cost Dx) has been established, at the Corps Walla Walla District (NWW). The completed draft report cost estimate may require review by the Cost Dx. The DDNPCX is requested, herein, to coordinate cost estimation review with the Cost Dx. The working assumption is that the DDNPCX would secure Cost Dx approval of the proposed cost estimating reviewer, and that the Draft Report review would apply the proper Cost Dx-provided checklist. The completed checklist would be returned to the Cost Dx for approval.

Technical disciplines determined to be appropriate for ITR review of the draft and final reports, at a minimum, include: plan formulation, economics, environmental/NEPA compliance, hydraulics and hydrology, geotechnical engineering, cost engineering, and real estate. SAJ and the DDNPCX will collaborate to produce detailed scopes of work prior to each review. All should be well-versed in conduct of deep draft navigation studies that potentially include both the deepening and widening of channels and all associated activities. Suggested issues to inform the review include:

- a. Plan formulation adequacy and comprehensiveness
- b. Economic evaluation appropriateness of analytical methods and employment thereof
- c. Environmental Analysis, General whether or not all pertinent issues were adequately addressed
- d. NEPA Compliance whether or not all NEPA requirements were, or will be met.
- e. Relic reef terrace habitat whether or not existing and future-without-project conditions and with-project predicted impact analysis is reasonable.
- f. Geotechnical engineering whether or not analyses and conclusions are reasonable
- g. Hydraulic engineering evaluations whether or not analyses and conclusions are reasonable
- h. Mitigation models
- i. Cost engineering
- i. Real Estate issues

The DDNPCX will be responsible for organizing and employing a qualified team. A detailed scope of work and cost estimate will be agreed to between the project District and the DDNPCX prior to each review.

5. DDNPCX CERTIFICATION OF PLANNING MODELS

The DDNPCX is in the process of reviewing and approving economic models employed in evaluating study alternatives.

6. EXTERNAL PEER REVIEW PLAN (EPR)

In order to determine if external peer review is warranted for this particular project, an evaluation was conducted of the risk and magnitude of the proposed project, including consideration of whether or not study conclusions were based on novel methods, present complex challenges for interpretation, contain precedent-setting methods or modes, present conclusions that are likely to change prevailing practices, or are likely to affect policy decisions that have a significant impact, as called for in EC 1105-2-408, Section 4.b.

External Peer Review Requirement Determination

It was concluded that external peer review is required for this project for two reasons. First, is the potential for controversy regarding potential impacts to relic reef-terrace habitat. Second, is the magnitude of the project since the cost will be in excess of \$45M (WRDA 2007 total project cost trigger).

External Peer Review General Scope

"External peer review may be conducted to identify, explain, and comment upon assumptions that underlie economic, engineering, and environmental analyses, as well as to evaluate the soundness of models and planning methods. Panels should also be able to evaluate whether the interpretations of analysis and conclusions based on analysis are reasonable. To provide effective review, in terms of both usefulness of results and of credibility, review panels should be given the flexibility to bring important issues to the attention of decision makers. However, review panels should be instructed to not make a recommendation on whether a particular alternative should be implemented, as the Chief of Engineers is ultimately responsible for the final decision on a planning or reoperations study." (National Research Council, 2002, page 63, quoted in EC 1105-2-408, item 4.b). External panels may, however, offer their opinions as to whether there are sufficient analyses upon which to base a recommendation for construction, authorization, or funding (EC 1105-2-408, item 4.b).

The DDNPCX is responsible for conduct of the external peer review, in consultation with the South Atlantic Division (SAD) and SAJ. SAJ and the DDNPCX will collaborate to

produce detailed scopes of work prior to each review. The DDNPCX will also coordinate with the National Ecosystem Restoration Planning Center of Expertise (ECO-PCX) since a major issue involves potential impacts upon relic reef terrace habitat.

The External Peer Review of the science, models, and background information related to the environmental impacts and mitigation may be conducted upon completion of the mitigation plan. External Peer Review which may be determined appropriate of the other disciplines including economic evaluation, engineering analysis, or plan formulation would be conducted concurrent to usual public review.

7. ADDITIONAL REVIEW CONSIDERATIONS

Public and Agency Comment and Dissemination

Extensive resource agency, stakeholder and public coordination has been conducted throughout the preparation of the Decision Document. Coordination meetings were conducted to inform other federal and state agencies, stakeholders and the general public, of the status of the project and alternatives being considered and workshops to address technical issues. At a minimum, future review will be conducted as part of the National Environment Policy Act (NEPA) compliance process, including public review period of the Draft Environmental Impact Statement. Public comments will be listed and responded to in the Final Environmental Impact Statement. As well, the public may comment on the Final EIS and Record of Decision.

8. CONSOLIDATED SCHEDULE

- ITR of FSM Package (completed)
- ITR of AFB Package (completed February 2005)
- ITR of economic modeling deliverables (continuous through October 2007)
- ITR of Draft Report, January 2011
- ETR of Environmental Analysis, July 2010
- Public and Agency review of Draft Report, July 2011
- ETR of Draft Report, July 2011
- ITR of Final Report, September 2012
- Final Report, October 2012

9. POINTS OF CONTACT

Due to confidentiality law requirements with posting documents on websites for public review, only the Project Manager is listed as the point of contact for any questions concerning this Peer Review Plan and qualifications of members of the PDT team:

Title	Telephone	Email

Project Manager	904-232-1671	Click here to email the Project
		<u>Manager</u>

Attachment 1, Project Location

