



Reply to  
Attention of:

CESWD-PDS-P

**DEPARTMENT OF THE ARMY**  
SOUTHWESTERN DIVISION, CORPS OF ENGINEERS  
1100 COMMERCE STREET  
DALLAS, TEXAS 75242-0216

12 SEP 2007

MEMORANDUM FOR Commander, Galveston District

SUBJECT: Review Plan Approval for the Freeport Harbor, Texas Feasibility Report

1. References:

- a. EC 1105-2-408, 31 May 2005, subject: Peer Review of Decision Documents.
- b. Memorandum, CECW-CP, 30 March 2007, subject: Peer Review Process.

2. The enclosed Review Plan for the Freeport Harbor, Texas Feasibility Report has been prepared in accordance with referenced guidance.

3. This plan has been made available for public comment, and the comments received have been incorporated. It has been coordinated with the Deep Draft Navigation Planning Center of Expertise of the South Atlantic Division which is the lead office to execute the plan. The Review Plan includes External Peer Review.

4. I hereby approve this Review Plan, which is subject to change as study circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this plan or its execution will require new written approval from this office. For further information on this issue please contact Lanora Wright, CESWD-PDS at (469) 487-7032.

A handwritten signature in black ink, appearing to be "K. Cox", written over a horizontal line.

Encl

KENDALL P. Cox  
Colonel, EN  
Commanding

**PROJECT REVIEW PLAN  
INDEPENDENT TECHNICAL REVIEW AND EXTERNAL PEER REVIEW**

**FREEPORT HARBOR CHANNEL IMPROVEMENT PROJECT  
BRAZORIA COUNTY, TEXAS  
PORT FREEPORT/GALVESTON DISTRICT-USACE**

1. Purpose.

This document presents the process that assures quality products for the Freeport Harbor Channel, Brazoria County, Texas, Feasibility Report. This QC/ITR Plan defines the responsibilities and roles of members of the study and technical review team. This ITR plan is governed by the Galveston District (SWG) Quality Assurance (QA) Plan. The basic for the QA Plan is the SWG Quality Management Plan. The QA Plan will be followed in verifying that the QC process operates as planned.

2. Applicability.

This document provides the QC Plan for the Feasibility Study. It identifies quality control processes and independent technical review for all work to be conducted under this study authority, including in-house, sponsor and contract work.

3. References.

- EC 1105-2-408 "Peer Review of Decision Documents", dated May 31, 2005
- ER 1105-2-100 "Planning Guidance Notebook & Appendices D, F, G and H"
- Galveston District Quality Management Plan, dated ---

4. General.

The existing Freeport Harbor Channel is a deep-draft navigation project, which connects harbor facilities in the Freeport area with the Gulf of Mexico. The project provides for a 47-foot deep, 400-foot wide entrance channel; a 45-foot deep, 400-foot wide main channel; a 45-foot deep, 1,000 foot diameter turning basin; a 36-foot, 200-foot wide Brazos Harbor Channel; and a 36-foot deep, 750-foot wide Brazos Harbor turning basin. The Freeport area is about 40 miles southwest of Galveston, Texas, on the mid to upper Texas coast. The local sponsor for the project is Port Freeport.

A reconnaissance study was undertaken to determine whether commercial navigation benefits produced by enlarging the Freeport Harbor Channel are sufficient to offset the costs and environmental consequences of the enlargement. The reconnaissance study (Section 905(b) Analysis, October 2002) concluded that there is sufficient Federal interest in channel enlargement to conduct more detailed, feasibility-level studies.

The feasibility study was undertaken to determine whether commercial navigation benefits produced by widening and deepening the Freeport Harbor Channel are sufficient to offset the costs and environmental consequences of the enlargement. During feasibility study efforts, close coordination has been maintained with resource agencies, interested parties, and local interests. Periodic public meetings have been scheduled.

5. Review Requirements.

Pursuant to EC 1105-2-408, this draft Feasibility Report will need to have a peer review team assigned by the Planning Center of Expertise (PCX) for Deep Draft Navigation Projects. It is

anticipated that this team will be assigned by Ken Claseman of CESAM-PD-FE. It is further anticipated that an External Peer Review (EPR) be conducted based on the scale of costs and benefits for the project. As a result, the peer review will focus on:

- Review of the planning process and criteria applied.
- Review of the methods of preliminary analysis and design.
- Compliance with client, program and NEPA requirements.
- Completeness of preliminary design and support documents.
- Spot checks for interdisciplinary coordination.

Project risks are assumed to be relatively low since there is virtually no public controversy, potential for failure, or uncertainties of predictions and outcomes.

The PCX shall furnish all personnel, equipment, materials, and supplies necessary to perform independent technical review (ITR) for the on-going feasibility study being preformed for the proposed widening and deepening of the Freeport Harbor Channel. The PCX will also manage the EPR.

The PCX will provide technical and policy review and assistance to ensure successful execution of the quality control process for the products developed during the formulation study phase. The following disciplines will be required:

- Plan Formulator
- Economist
- Coastal Environmentalist
- Engineers – General, Cost Estimator, H&H, GeoTech
- Real Estate

The following tasks will be performed:

A. Team Leader and one to two team members will meet with District staff and local sponsor and their contractor to review project and discuss major assumptions, analyses, and calculations

B. Team Leader and one to two members will attend one Project Delivery Team (PDT) meeting at District. PDTs are developed for projects being evaluated during feasibility analysis and made up of a multi-disciplinary group. This group includes members from all disciplines within the District, a representative of the project sponsor, and others, as necessary. It is the goal of this team to insure expedient and open communication between all team members and disciplines to insure timely completion of the study. The PCX representative will attend one PDT meeting to discuss major assumptions, analyses, and calculations to avoid significant comments later that could adversely affect project schedules and costs. Subsequent attendance of PDT meetings can be by teleconference.

C. Review PDT meeting minutes. PDT meeting minutes will be provided electronically on a monthly basis. Review the minutes and provide comments citing appropriate Corps of Engineers regulations for issues that are not in compliance with established Corps policies and regulations. Identify any other potential errors, omissions, or issues of a technical or policy nature.

D. Conduct ITR (scheduled for November 07) for advance draft Feasibility Report for Alternative Formulation Briefing tentatively scheduled for February 08. Perform a review of the read-ahead information. Provide written comments citing appropriate Corps of Engineers regulations for

issues that are not in compliance with established Corps policies and regulations. Identify any other potential errors, omissions, or issues of a technical or policy nature.

District will be responsible for all legal reviews of Feasibility Report.

Points of Contact: Robert Van Hook, Planning Lead, Galveston District – 409/766-3024  
Ken Claseman, -- , Mobile District – 251/694-3840  
Mike Bragg, Project Manager, Galveston District – 409/766-3979

6. Review Process.

It is anticipated that the Team Review Process will begin after the ITR Team has been assigned and will cover drafts of the Feasibility Report, Engineering Appendix, Economic Appendix, Cost Appendix, and Environmental Impact Statement.

7. Review Cost.

The cost of the ITR is estimated to be about \$50,000; cost of the EPR is estimated at \$200,000.

8. Review Schedule.

Review schedule is as follows:

<u>Task</u>	<u>Start Date</u>	<u>Finish Date</u>
Develop ITR Plan	Nov 07	Dec 07
PCX Approves ITR Plan or Assigns ITR Team	Dec 07	Jan 08
ITR Review of Documents	Jan 08	Feb 08
Coordination of Comments	Feb 08	Mar 08
ITR Certification		Mar 08

9. Peer Review Plan.

The components of the Peer Review Plan were developed pursuant to the requirements of EC 1105-2-408.

A. Basic Information

The decision documents that will be the focus of the peer review process are the drafts of the Feasibility Report, Engineering Appendix, Economic Appendix, Cost Appendix, and Environmental Impact Statement for the MSC. The purpose of the documents will be to begin the approval process leading to assumption of maintenance of the channel improvements constructed by the local sponsor.

The District Project Delivery (PDT) will be comprised of:

<u>Name, Org, &amp; Discipline</u>	<u>Phone</u>	<u>E-Mail</u>
Mike Bragg Project Manager CESWG-PM-J	(409) 766-3979	<a href="mailto:john.m.bragg@swg02.usace.army.mil">john.m.bragg@swg02.usace.army.mil</a>
Robert Van Hook Planning Lead	(409) 766-3024	<a href="mailto:robert.c.vanhook@swg02.usace.army.mil">robert.c.vanhook@swg02.usace.army.mil</a>

CESWG-PE-PL

Shirley Fanuiel (409) 766-3125 [shirely.a.fanuiel@swg02.usace.army.mil](mailto:shirely.a.fanuiel@swg02.usace.army.mil)  
Economist  
CESWG-PE-PL

George Dabney (409) 766-6345 [george.v.dabney@swg02.usace.army.mil](mailto:george.v.dabney@swg02.usace.army.mil)  
Environmental Lead  
CESWG-PE-PR

Jack Otis (409) 766-3157 [john.j.otis@swg02.usace.army.mil](mailto:john.j.otis@swg02.usace.army.mil)  
Design Project Engineer  
CESWG-EC-EP

Carlos Tate (409) 766-3819 [carlos.d.tate@swg02.usace.army.mil](mailto:carlos.d.tate@swg02.usace.army.mil)  
General Engineer  
CESWG-EC-EG

Jackie Lockhart (409) 766-3053 [jacqueline.f.lockhart@swg02.usace.army.mil](mailto:jacqueline.f.lockhart@swg02.usace.army.mil)  
Cost Engineer  
CESWG-EC-E

Lynn Vera (409) 766-6370 [laura.l.vera@swg02.usace.army.mil](mailto:laura.l.vera@swg02.usace.army.mil)  
Hydraulic Engineer  
CESWG-EC-EH

Ryan Brown (409) 766-3118 [ryan.t.brown@swg02.usace.army.mil](mailto:ryan.t.brown@swg02.usace.army.mil)  
Geotechnical Engineer  
CESWG-EC-ES

Sal Arcidiacono (409) 766-3803 [salvatore.j.arcidiacono@swg02.usace.army.mil](mailto:salvatore.j.arcidiacono@swg02.usace.army.mil)  
Real Estate  
CESWG-RE-A

The ITR Team will be comprised of:

<u>Name, Org. &amp; Discipline</u>	<u>Phone</u>	<u>E-Mail</u>
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Planning		
Economics		
Coastal Environmental		
General Engineering		
Cost Engineering		
H&H Engineering		
Geotechnical		
Real Estate		

B. Scientific Information

It is anticipated that the Feasibility Report will contain no influential scientific information.

C. Timing

The Peer Review process is envisioned to begin in November 07 timeframe with a meeting of

the review team with District staff and review of pertinent information/data.

D. EPR Process

External Peer Review process is envisioned at this time.

E. Public Comment

Public involvement program has been established.

F. Dissemination of Public Comment

No formal public comments are anticipated.

G. Reviewers

It is anticipated that four to seven reviewers total should be available in the following disciplines:

- 1) Planning
- 2) Economics
- 3) Coastal Environment
- 4) General Engineering
- 5) Cost Engineering
- 6) Hydrology and Hydraulic Engineering
- 7) Geotechnical
- 8) Real Estate

H. Review Disciplines

The expertise that should be brought to the review team includes the following:

- 1) Planning – The reviewer should have recent experience in reviewing Plan Formulation processes for multi-objective studies and be able to draw on “lessons learned” in advising of best practices.
- 2) Economics – The reviewer should have a solid understanding of Economic Models and their application to deep draft navigation.
- 3) Coastal Environment – The reviewer should have a solid background in coastal environmental ecology and issues.
- 4) General Engineering – The reviewer should have solid knowledge of ship channel design.
- 5) Cost Engineering – The reviewer should have extensive knowledge of cost estimating and Mii cost estimates.
- 6) Hydrology and Hydraulic Engineering – The reviewer should have extensive knowledge of ship simulation modeling and coastal hydrology.
- 7) Geotechnical – The reviewer should have extensive knowledge of coastal geomorphology.
- 8) Real Estate – The reviewer should have extensive knowledge of real estate requirements for navigation projects.

I. EPR Selection

An External Peer Review is anticipated for this study concurrent with ITR.

J. Public Peer Review

While no formal Public Peer Review is included in the current schedule and budget, it is likely that the study will receive review from interested parties and user in the Freeport Harbor

Channel area. Their input and comments will be welcome.