DEPARTMENT OF THE ARMY
PACIFIC OCEAN DIVISION, U.S. ARMY CORPS OF ENGINEERS
FORT SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF

6 Dec 12

CEPOD-PDC

MEMORANDUM FOR COMMANDER HONOLULU ENGINEER DISTRICT (CEPOH-PP-C/CINDY BARGER), BUILDING 230, FORT SHAFTER, HI 96858-5440

SUBJECT: Review Plan Approval for the Kawainui Marsh Continuing Authorities Program Section 1135 Plans and Specifications Package, Island of Oahu, Hawaii, Ecosystem Restoration Project

1. References:

a. Engineering Circular 1165-2-209, Civil Works Review Policy, 31 January 2010, and Change 1, 31 January 2012.

b. Policy Memorandum #1, HQ USACE, CECW-P, 19 January 2011, subject: Continuing Authority Program Planning Process Improvements.

c. Review Plan for the Kawainui Marsh Section 1135 Plans and Specifications Package, Island of Oahu, Hawaii, Honolulu District, U.S. Army Corps of Engineers.

2. The enclosed Review Plan (reference 1.c.) for the Kawainui Marsh, Island of Oahu, Hawaii, ecosystem restoration plans and specifications package was prepared IAW references 1.a. and 1.b. The Pacific Ocean Division Civil Works Division is the lead office to execute this Review Plan. This plan does not include Type II Independent External Peer Review.

3. I approve this Review Plan. It is subject to change as circumstances require, consistent with project development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office.

4. The point of contact for this memorandum is Mr. Russell Iwamura, Senior Economist, Civil Works Integration Division, at 808-835-4625 or email Russell.K.Iwamura@usace.army.mil.

Encl

GREGORY J. GUNTER
Colonel, EN
Acting Commander

REVIEW PLAN

Kawainui Marsh Environmental Restoration
Island of Oahu, Hawaii

Plans and Specifications Package
Continuing Authorities Program (CAP)
Section 1135 Projects

U.S. Army Corps of Engineers, Honolulu District

MSC Approval Date: 6 December 2012
Last Revision Date: 21 November 2012

US Army Corps of Engineers ®

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REVIEW PLAN
Kawainui Marsh Ecosystem Restoration Project, Island of Oahu, Hawaii
Plans and Specifications Package
FOR CAP SECTION 1135 PROJECTS

TABLE OF CONTENTS

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1. PURPOSE AND REQUIREMENTS

a. Purpose. The purpose of this Review Plan is to document the scope and level of peer review for the Kawainui Marsh Ecosystem Restoration Project, Oahu, Hawaii, Section 1135 plans and specifications package. This project is currently under construction.

Section 1135 of the Water Resources Development Act of 1986, Public Law 99-662, is one of the legislative authorities within the Continuing Authorities Program (CAP) under which the Secretary of the Army, acting through the Chief of Engineers, is authorized to plan, design, and implement certain types of water resources projects without additional project specific congressional authorization. CAP projects are water resource related projects of smaller scope, cost, and complexity than typical U.S. Army Corps of Engineers (USACE) civil works projects which require specific authorization by Congress. Under the delegated authority of Section 1135, USACE is authorized to plan, design and construct projects to restore the environment and construct new projects to restore areas degraded by USACE projects without project specific congressional authorization. Projects must have the objective of restoring degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition considering the ecosystem's natural integrity, productivity, stability and biological diversity.

Additional Information on this program can be found in Engineer Regulation (ER) 1105-2-100, Planning Guidance Notebook, Appendix F, Amendment #2, 31 January 2007.

b. Applicability. This review plan was developed following the USACE Pacific Ocean Division (POD) Model Review Plan (MRP), dated May 2011. The POD MRP is applicable to those Section 1135 project documents that do not require an Independent External Peer Review (IEPR).

c. References

(1) Engineer Circular (EC) 1165-2-209, Civil Works Review Policy, 31 January 2010 and Change 1, 31 January 2012.

(2) Director of Civil Works Policy Memorandum #1, Continuing Authority Program Planning Process Improvements, 19 January 2011.

(3) EC 1105-2-412, Assuring Quality of Planning Models, 31 March 2010.

(4) ER 1110-1-12, Quality Management, 30 September 2006.

(5) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 January 2007.

(6) Kawainui Marsh Environmental Restoration Project Management Plan (PMP), December 2010.

(7) USACE POD Quality Management Plan, December 2010.

(8) USACE Honolulu District (POH) Civil Works Review Policy (ISO CEPOH-C_12203), 1 November 2010.

d. Requirements. This review plan was developed in accordance with EC 1165-2-209, 31 January 2010 and Director of Civil Works Policy Memorandum #1, 19 January 2011, which establishes an accountable, comprehensive, and life-cycle review strategy for Civil Works Continuing Authorities Program (CAP) products by providing a seamless process for review of all Civil Works projects. The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), IEPR, and Policy and Legal Compliance Review. In addition to these levels of review, CAP implementation documents are subject to cost engineering review and certification (per EC 1165-2-209) and the Director of Civil Works Policy Memorandum #1 and the Value Management Plan requirements in the Project Management Business Process Reference 8023G and the ER 11-1-321, Change 1.

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this review plan. The RMO for this Section 1135 plans and specifications package is POD. POD will coordinate and approve the review plan.

Upon approval by POD, POH will post the approved review plan on its public website. A copy of the approved review plan (and any updates) will be provided to the Ecosystem Restoration (ECO) Planning Center of Expertise (PCX) to keep the PCX apprised of requirements and review schedules.

3. STUDY INFORMATION

a. Implementation Documents. The Kawainui Marsh Ecosystem Restoration Project, Oahu, Hawaii Section 1135 Limited Re-evaluation Report (LRR), Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) were prepared in accordance with ER 1105-2-100, Appendix F, Amendment #2, 31 January 2007. The LRR, EA and FONSI were approved by the POD Commander in December 2010. This review plan addresses the plans and specifications package that followed the approval of the LRR, EA and FONSI.

b. Project Sponsor. The non-Federal Sponsor for the project is the State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife.

c. Study/Project Description. The Kawainui Marsh is located in Kailua, Oahu, Hawaii and is adjacent to and affected by the Kawainui Marsh Flood Control Project, which is a POH authorized and constructed facility originally completed in 1966 and later modified in 1997.

Kawainui Marsh is the largest remaining wetland in Hawaii, estimated at more than 800 acres. The marsh also has cultural significance for the community with several remaining cultural sites

still intact. It was identified by the U.S. Fish and Wildlife Service's *Hawaiian Waterbirds Recovery Plan,* as the primary habitat for several endemic and endangered birds. The site was designated as a wetland of international importance by the Ramsar Convention on Wetlands of International Importance in 2005.

The purpose of the project is to restore habitat suitable for endangered Hawaiian waterfowl; *aeo* (stilt), *alae ula* (moorhen), *alae keokeo* (coot) and *koloa maoli* (duck). The project will be located in the upper reaches of the marsh, encompassing nearly 40 acres. Project features include 11 terraced shallow ponds with an earthen berm and water supply system (solar-powered well pumps and water level control structures). See Figure 1 for the project design.

d. Construction Cost. The cost for construction of this project is $3.9 Million.

e. In-Kind Contributions. Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC and ATR, similar to any products developed by USACE. No in-kind services were provided as part of this project.

4. DISTRICT QUALITY CONTROL (DQC)

All implementation documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. DQC is an internal review process of basic science and engineering work products, focused on fulfilling the project quality requirements defined in the PMP. POH shall manage the DQC process. Documentation of DQC activities is required and should be in accordance with the Quality Manuals of POH and POD.

a. Documentation of DQC. Consistent with the POH Quality Manual, DQC was documented using the POH DQC review table. When all comments were addressed and back checked, the DQC lead signed a DQC certification in compliance with the POH Quality Manual. A copy of the DQC certificate is maintained in the project files.

Dr. Checks[sm] was used to monitor and track review comments and subsequent actions from the design review and biddability, constructability, operability, and environmental (BCOE) review of the plans and specifications package. A BCOE certification document signed by the POH Chief of Engineering and Construction Division and the Chief of Construction Branch was forwarded to the Contracting Officer and a copy furnished to the Project Manager (PM).

b. Products to Undergo DQC. The following products were reviewed during DQC:

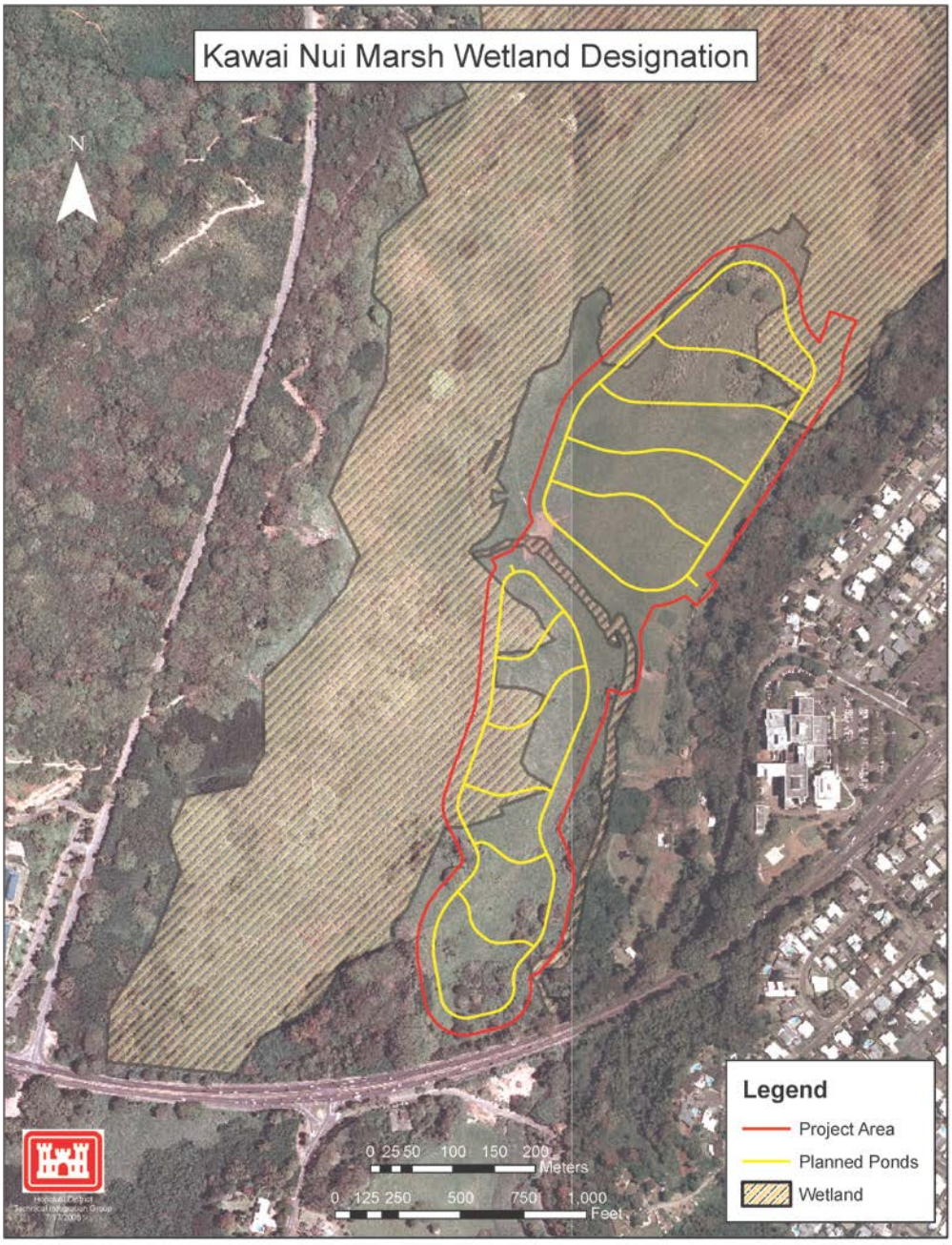
- Plans and Specifications Package; and,
- Environmental permits.

c. Required DQC Expertise. The following expertise were involved in the DQC:

- Environmental Protection Specialist;

- Real Estate Specialist;
- Cost Engineer;
- Hydrology and Hydraulic Engineer;
- Geotechnical Engineer; and
- Civil/Structural Engineer.

Figure 1: Project Design



5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all implementation documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses

presented are technically correct and comply with published USACE guidance. Additionally, the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by POD as the designated RMO, and is conducted by a qualified team from outside POH that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside POD.

a. Factors Considered in Determining ATR Review. ATR was not conducted on the plans and specifications for this project due to the following factors as outlines in EC 1165-2-209:

- A thorough ATR was conducted on the LRR, EA and FONSI prior to the completion of the plans and specifications package. The plans and specifications package followed the requirements of the LRR, EA and FONSI.

- As an ecosystem restoration project, there are no potential life safety issues associated with the design and construction of this project.

- There were no alternatives evaluated as part of the plans and specifications package.

- The design work was conducted under a contract. Therefore an independent government estimate was developed as part of the contract action.

- The National Environmental Policy Act (NEPA) documentation was conducted as part of the LRR. No NEPA documentation was done during the development of the plans and specifications package.

- The project does not impact a structure or feature of a structure whose performance involves potential life safety risks.

- The consequence of non-performance is reduced ecosystem benefits for the targeted species and wetland habitat.

- This package does not support a budget request and is a moderate investment of public monies.

- This project changes the operations of the wetland area by expanding the wetland habitat.

- Ground disturbance is involved in creating the wetland ponds within the project area. However, the ground disturbance has minimal impact on the surrounding area.

- There are special features, such as cultural resources, in the study area to be protected and avoided. Archaeological monitoring is being conducted during construction. The designs were closely reviewed and approved by the State Historic Preservation Office.

- The activities required a Clean Water Act Section 401 Water Quality Certification (WQC) and a Section 402 National Pollutant Discharge Eliminations Systems (NPDES) permit. The LRR included coordination letters and a conditional WQC from the State of Hawaii. The BCOE confirmed that all permits were in place and were acceptable.

- The project does not involve activities that could potentially generate hazardous wastes and/or disposal of materials such as lead based paints or asbestos.

- The project does not reference use of or reliance on manufacturers' engineers and specifications for items such as prefabricated buildings, playgrounds, etc.

- The project did not rely on local authorities for inspection/certification of utility systems.

- The project is not controversial.

b. Products to Undergo ATR. Not applicable.

c. Required ATR Team Expertise. Not applicable.

d. Documentation of ATR. Not Applicable.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

IEPR may be required for decision and implementation documents under certain circumstances. IEPR is the most independent level of review and is applied where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-209, is made to assess whether an IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines. The IEPR panel will represent a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR:

- Type I IEPR. Type I IEPR reviews are managed outside the USACE by an Outside Eligible Organization (OEO) and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all underlying engineering, economics, and environmental work, not just one aspect of the study.

All CAP projects are excluded from Type I IEPR except Section 205 and Section 103 or those projects that include an EIS or meet the mandatory triggers for Type I IEPR as stated in EC 1165-2-209. Exclusions from Type I IEPR for Section 205 and Section 103 projects will be approved on a case by case basis by the POD Commander, based upon a risk informed decision process as outlined in EC 1165-2-209 and may not be delegated.

- Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), is managed by the Risk Management Center (RMC) and is conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

In accordance with the Director of Civil Works Memorandum #1, Type II IEPR is required for those CAP projects where life safety risks are significant. The ATR and subsequent POD approval of the LRR and EA verified that there are no significant life safety risks associated with this project and a Type II IEPR was not required for the design and implementation phase of the project.

Neither Type I nor Type II IEPRs were conducted for this project in accordance with the above exclusions.

7. POLICY AND LEGAL COMPLIANCE REVIEW

All documents will be reviewed throughout the process for their compliance with law and policy. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings.

8. COST ENGINEERING MANDATORY CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION

For CAP projects, ATR of the costs may be conducted by pre-certified district cost personnel within the region or by the Walla Walla Cost MCX. The pre-certified list of cost personnel has been established and is maintained by the Cost MCX at: https://kme.usace.army.mil/EC/cost/CostAtr/default.aspx. The cost ATR member for the LRR/EA/FONSI coordinated with the Cost MCX for execution of cost ATR and cost certification in 2009. The Cost MCX was responsible for final cost certification.

9. MODEL CERTIFICATION AND APPROVAL

a. Planning Models. The approval of planning models under EC 1105-2-412 is not required for CAP projects. The POD Commander is responsible for assuring models for all

planning activities are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

No planning models were used in the development of the plans and specifications package.

b. Engineering Models. The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on Corps studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

No engineering models were used in the development of the plans and specifications package.

10. REVIEW SCHEDULES AND COSTS

a. ATR Schedule and Cost. Not applicable.

b. Model Review Schedule and Cost. Not applicable.

11. PUBLIC PARTICIPATION

During the preparation of the Plans and Specifications, no formal public meetings were scheduled to be held. However, POH and the State of Hawaii participated in several community events and public information meetings to keep the key stakeholders updated on the activities of the project.

12. REVIEW PLAN APPROVAL AND UPDATES

The POD Commander is responsible for approving this review plan and ensuring that use of the POD CAP MRP is appropriate for the specific project covered by the plan. The review plan is a living document and may change as the study progresses. POH is responsible for keeping the review plan up to date. Minor changes to the review plan since the last POD approval are documented in Attachment 3. Significant changes to the review plan (such as changes to the scope and/or level of review) should be re-approved by POD following the process used for initially approving the plan. Significant changes may result in POD determining that use of the POD CAP MRP is no longer appropriate. In these cases, a project specific review plan will be prepared and approved in accordance with EC 1165-2-209 and Director of Civil Works Policy

Memorandum #1. The latest version of the review plan, along with POD's approval memorandum, will be posted on the POH webpage.

13. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this review plan can be directed to the following points of contact:

Honolulu District
Nani Shimabuku
Project Manager
Civil and Public Works Branch
Programs and Project Management Division
U.S. Army Corps of Engineers, Honolulu District
Building 230, CEPOH-PP-C
Fort Shafter, HI 96858
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Review Management Organization/Pacific Ocean Division
Mr. Russell Iwamura
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Telephone: (808) 835-4625

ATTACHMENT 2: REVIEW PLAN REVISIONS

Table 2: Review Plan Revisions

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 3: ACRONYMS AND ABBREVIATIONS

Table 3: Standard Acronyms and Abbreviations

Term	Definition	Term	Definition
AFB	Alternative Formulation Briefing	NER	National Ecosystem Restoration
ASA(CW)	Assistant Secretary of the Army for Civil Works	NEPA	National Environmental Policy Act
ATR	Agency Technical Review	O&M	Operation and maintenance
CSDR	Coastal Storm Damage Reduction	OMB	Office and Management and Budget
CWA	Clean Water Act	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DPR	Detailed Project Report	OEO	Outside Eligible Organization
DQC	District Quality Control/Quality Assurance	OSE	Other Social Effects
EA	Environmental Assessment	PAC	Post Authorization Change
EC	Engineer Circular	PCX	Planning Center of Expertise
EIS	Environmental Impact Statement	PDT	Project Delivery Team
EO	Executive Order	PMP	Project Management Plan
ER	Engineer Regulation	PL	Public Law
FDR	Flood Damage Reduction	POD	U.S. Army Corps of Engineers, Pacific Ocean Division
FEMA	Federal Emergency Management Agency	POH	U.S. Army Corps of Engineers, Honolulu District
FRM	Flood Risk Management	QMP	Quality Management Plan
FSM	Feasibility Scoping Meeting	QA	Quality Assurance
GRR	General Reevaluation Report	QC	Quality Control
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RED	Regional Economic Development
IEPR	Independent External Peer Review	RMC	Risk Management Center
ITR	Independent Technical Review	RMO	Review Management Organization
LRR	Limited Reevaluation Report	RTS	Regional Technical Specialist
MCX	Mandatory Center of Expertise	SAR	Safety Assurance Review
MSC	Major Subordinate Command	USACE	U.S. Army Corps of Engineers
NED	National Economic Development	WRDA	Water Resources Development Act