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

REPLY TO
ATTENTION OF

11 Aug 14

CESAD-PDP

MEMORANDUM FOR Commander, Charleston District

SUBJECT: Review Plan, Continuing Authorities Program (CAP), Section 206 Aquatic Ecosystem Restoration Feasibility Study, Polk Swamp, Dorchester County, SC

1. References:

a. Memorandum, CESAC-PM-PL, 13 June 2014, subject as above.

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

2. The enclosed Review Plan has been prepared in accordance with Engineer Circular (EC) 1165-2-214. The Federal Interest Determination for the subject study was approved by the South Atlantic Division (SAD) on 9 May 2013. The Review Plan has been coordinated within SAD, which is the Review Management Organization for this Section 206 of the Continuing Authorities Program Feasibility Report. This decision document is so limited in scope or impact that it would not significantly benefit from a Type I Independent External Peer Review (IEPR). I approve the exclusion from the Type I IEPR based upon the risk informed decision presented in this Review Plan. The timing and the appropriate expertise requirements for a Type II IEPR Panel for the Design and Construction of the proposed project must be assessed and submitted for my approval in an updated Review Plan prior to initiation of the design and implementation phase of this project.

3. This Review Plan is subject to change as circumstances require consistent with study development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office. The District shall post the approved Review Plan and a copy of this approval memorandum to the District public internet website and provide a link to SAD for our use. Before posting to the website, the names of Corps employees should be removed.

CESAD-PDP
SUBJECT: Review Plan, Continuing Authorities Program (CAP), Section 206 Aquatic Ecosystem Restoration Feasibility Study, Polk Swamp, Dorchester County, SC

4. The point of contact for this action is Mr. Patrick O'Donnell at (404) 562-5226.

Encl

C. DAVID TURNER
Brigadier General, USA
Commanding

CF: B. Walters

DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A HAGOOD AVENUE
CHARLESTON, SOUTH CAROLINA 29403-5107

REPLY TO
ATTENTION OF

CESAC-PM-PL

13 June 2014

MEMORANDUM FOR COMMANDER, USACE, South Atlantic Division,
ATTN: CESAD-PDS/Paynes, 60 Forsyth Street, SW, Room 10M15, Atlanta, Georgia 30303-8801

SUBJECT: Review Plan, Continuing Authorities Program (CAP), Section 206 Aquatic Ecosystem Restoration Feasibility Study, Polk Swamp, Dorchester County, SC.

1. In accordance with the SAD Program Management Plan for the Continuing Authorities Program, the Charleston District is submitting, for approval, the Polk Swamp Review Plan.

2. If any additional information is needed, please contact the undersigned at 843-329-8160 or email dudley.patrick@usace.army.mil, or you may contact Mr. Bret Walters, Chief Planning & Environmental Branch at 843-329-8050 or email bret.l.walters@usace.army.mil.

Dudley Patrick
Project Manager

Encl
Review Plan

Review Plan

Continuing Authorities Program (CAP)
Section 206
Aquatic Ecosystem Restoration

Polk Swamp
Dorchester County, South Carolina

US Army Corps of Engineers
Charleston District

Initial: 10 June 2014

Encl

CHARLESTON DISTRICT RECORD OF SUBMITTAL

I concur with this initial submittal of the Polk Swamp, Dorchester County, South Carolina, Continuing Authorities Program (CAP) Section 206 Aquatic Ecosystem Restoration Review Plan (RP).

Prepared by:

6/13/14

DUDLEY PATRICK
Project Manager
Programs & Civil Projects Division

Date

Concurred by:

6/13/14

BRET WALTERS
Chief
Planning & Environmental Branch

Date

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1.0 PURPOSE AND REQUIREMENTS

Purpose. This Review Plan defines the scope and level of peer review for the Continuing Authorities Program (CAP), Section 206 Aquatic Ecosystem Restoration Feasibility Study for Polk Swamp, Dorchester County, South Carolina.

References

- Engineering Circular (EC) 1165-2-214, Civil Works Review Policy, 15 Dec 2012
- EC 1105-2-412, Assuring Quality of Planning Models, 31 March 2012
- Engineering Regulation (ER) 1110-1-12, Quality Management, 21 July 2006
- ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- Project Management Plan, Continuing Authorities Program (CAP), Section 206, Aquatic Ecosystem Restoration, Polk Swamp, Dorchester County, South Carolina

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 outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-214) and planning model certification/approval (per EC 1105-2-412).

District Quality Control/Quality Assurance (DQC). All work products and reports, evaluations, and assessments shall undergo necessary and appropriate District Quality Control/Quality Assurance (DQC). DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home Major Subordinate Command (MSC).

Agency Technical Review (ATR). ATR is mandatory for all decision 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 US Army Corps of Engineers (USACE) guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR for the Continuing Authorities Program (CAP) for is managed within the MSC and is conducted by a qualified team from outside the home district 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 lead will be from a district outside of South Atlantic Division.

Independent External Peer Review (IEPR). IEPR may be required for decision documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria 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 1165-2-214, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR: Type I is generally for decision documents and Type II is generally for implementation products.

Type I IEPR. Type I IEPR reviews are managed outside the USACE 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 an biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all the underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-214. No IEPR is anticipated for this project.

Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), are managed outside the USACE and are 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. No IEPR is anticipated for this project.

Policy and Legal Compliance Review. All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the Chief of Engineers. 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 in decision documents.

Cost Engineering Review and Certification. All decision documents shall be coordinated with the Cost Engineering Directory of Expertise (DX), located in the Walla Walla District. The DX, or in some circumstances regional cost personnel that are pre-certified by the DX, will conduct the cost ATR. The DX will provide certification of the final total project cost.

Model Certification/Approval. EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions.

Per the Director of Civil Works Policy Memorandum #1 (CECW-P memorandum, Subject: Continuing Authority Program Planning Process Improvements), 19 Jan 2011, approval of planning models is not required for CAP projects. MSC commanders remain responsible for assuring the quality of the analysis used in these projects. ATR will be used to ensure that models and analyses are compliant with Corps policy, theoretically sound, computationally accurate, transparent, described to address any limitations of the model or its use, and documented in study reports.

EC 1105-2-412 does not cover engineering models used in planning. The process the Hydrology, Hydraulics and Coastal Community of Practice (HH&C CoP) of USACE follows to validate engineering software for use in planning studies and to satisfy the requirements of the Corps' Scientific and Engineering Technology (SET) initiative is provided in Enterprise Standard (ES)-08101 Software Validation for the Hydrology, Hydraulics and Coastal Community of Practice. 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).

2.0 REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO for decision documents generated under CAP is the MSC. The RMO for the peer review effort described in this Review Plan is the South Atlantic Division. SAD will seek advice from the Planning Centers of Expertise (PCXs) as needed.

ATR of the cost estimate may be conducted by pre-certified district cost personnel within the region as designated by the Walla Walla Cost MCX. The precertified list of cost personnel has been established and is maintained by the Cost MCX. The cost ATR member will coordinate with the Cost MCX for execution of cost ATR and cost certification. The Cost MCX will be responsible for final cost certification and may be delegated at the discretion of the Cost MCX.

3.0 STUDY INFORMATION

Decision Document. The purpose of the decision document, "Polk Swamp, South Carolina, Feasibility Study" is to present the results of a feasibility study undertaken to restore the Polk Swamp ecosystem. This report provides planning, engineering, and implementation details of

the recommended restoration plan to allow final design and construction to proceed subsequent to the approval. The study is expected to utilize an Environmental Assessment (EA) to meet National Environmental Policy Act (NEPA) documentation requirements.

Study/Project Description. The project area is Polk Swamp, located entirely in Dorchester County. The project area is situated between the bridge crossing at St. Mark Bowman Road (County Road S-18-16) near the Town of Reevesville, and the bridge crossing at historic Wire Road near Polk Swamp's confluence with the Edisto River. The Polk Swamp watershed is a tributary of the Edisto River located within Dorchester County (and Orangeburg County) in the Lower Coastal Plain region of South Carolina (HUC 030502060203). The primary land uses in the Polk Swamp watershed are row crops, evergreen forest, woody wetlands, and mixed forest. It is significant to note that the Edisto River is the longest completely undammed or unleveed blackwater river in North America at 206 miles (from *An Assessment of the Edisto Subbasin, US Departure of Agriculture – National Resources Conservation Service, May 17, 2010*).

Factors Affecting the Scope and Level of Review. Based on the available information we do not anticipate the study being unusually challenging. The possible alternatives should be simple and not controversial. The alternatives will be defined in greater detail as the project proceeds. As this is an ecosystem restoration study, no significant adverse environmental impacts or mitigation are anticipated. Also, this project is not expected to generate any significant economic, environment and/or social effects to the Nation, or any significant threat to human life/safety assurances. It is not anticipated that significant interagency interest will occur from this project other than the normal coordination with other state and federal agencies when conducting an ecosystem restoration project. At this time it has been determined that the project will not involve influential scientific information neither will the project design be based on novels methods, nor will it require redundancy, resiliency and or robustness or unique construction sequencing. However, as the project is scoped and design alternatives are reviewed these factors may change. At that time the peer review plan will be updated to annotate the possible differences to these factors.

In-Kind Contributions. Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. The in-kind products and analyses to be provided by the non-Federal sponsor include hydrographic and topographic surveys.

4.0 DISTRICT QUALITY CONTROL (DQC)

Documentation of DQC. Quality checks and reviews will occur throughout the development process and carried out as a routine management practice. Quality checks may be performed by staff responsible for the work, such as supervisors, work leaders, team leaders, designated individuals from the senior staff, or other qualified personnel. However, DQC will not be performed by the same people who performed the original work, including managing/reviewing the work in the case of contracted efforts. Project Delivery Team (PDT) reviews will be performed by members of the PDT to ensure consistency and effective coordination across all project disciplines. Additionally, the PDT is responsible for a complete reading of any reports and accompanying appendices prepared by or for the PDT to assure the overall coherence and integrity of the report, technical appendices, and the recommendations before approval by the

District Commander. DQC efforts will include the necessary expertise to address compliance with published Corps policy. When policy and/or legal concerns arise during DQC efforts that are not readily and mutually resolved by the PDT and the reviewers, the district will seek immediate issue resolution support from the MSC and HQUSACE in accordance with the procedures. Documentation will vary depending on the product but a DQC certification and a description of the DQC review and finding will be provided by the Project Manager and each resource manager responsible for significant products produced for the study. Attachment 1 provides a roster of the Corps PDT, Resource Managers, Non-Federal Sponsor, and Contractors required for this study.

5.0 AGENCY TECHNICAL REVIEW (ATR)

Products to Undergo ATR. It is anticipated that the following documents will undergo ATR review by the ATR team:

- Draft Report to include EA
- Final Report to include EA

Required ATR Team Expertise. The ATR will be comprised of individuals who have not been involved in the development of the decision document or interim work products and will be chosen based on expertise, experience, and/or skills. The members will roughly mirror the composition of the PDT. This Review Plan will be updated to include the ATR members, their disciplines, and other relevant information once members are designated.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with extensive experience in preparing Civil Works decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc).
Planning	The Planning reviewer should be a senior water resources planner with experience in reviewing Plan Formulation policies and processes for aquatic ecosystem restoration studies and be able to draw on "lessons learned" in advising the PDT of best practices.
Economics	The reviewer should have a solid understanding of environmental resources, aquatic ecosystem restoration, cost effectiveness/incremental cost analysis (CE/ICA), and have a minimum of five years experience.
Environmental Resources	The reviewer should have a solid background in wetland and stream channel restoration and understand the factors that influence the reestablishment of native species of plants and animals. The reviewer should also understand

	cost effectiveness/incremental cost analysis (CE/ICA). This person must have recent experience in compliance with environmental laws (NEPA, Clean Water Act, Endangered Species Act, National Historic Preservation Act, etc.) and must have a minimum of 5 years of experience.
Hydraulic Engineering	The reviewer(s) should have extensive knowledge of HEC-RAS modeling, including the use of Geographic Information System (GIS) inputs to the model. The reviewer(s) should also have a solid understanding of the geomorphology of alluvial rivers, be a certified Professional Engineer (P.E.) and have a minimum of five years experience.
Geotechnical Engineering	The reviewer should have a thorough understanding of soils and soils analysis, be a certified Professional Engineer (P.E.) and have a minimum of five years experience. The soils in the study area are generally fined grained silts.
Cost Engineering	The reviewer should have a solid background in cost engineering and MCACES cost estimating procedures and be pre-certified to conduct ATR by the Cost Engineering Mandatory Center of Expertise (MCX) at the Walla Walla District.
Real Estate	The Real Estate reviewer is to have expertise in the real estate planning process for cost shared and full federal civil works projects, relocations, report preparation and acquisition of real estate interests including ecosystem restoration projects. The reviewer must have a full working knowledge of EC 405-2-12, Real Estate Planning and Acquisition Responsibilities for Civil Works Projects and Public Law 91-646. The reviewer must be able to identify areas of the Real Estate Plan that are not in compliance with the guidance set forth in EC 405-2-12 and will make recommendations for bringing the report into compliance. All estates suggested for use will be reviewed to assure they are sufficient to allow project construction and the real estate cost estimate will be validated as being adequate to allow for real estate acquisition.

Documentation of ATR. DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

- **The review concern.** Identify the product's information deficiency or incorrect application of policy, guidance, or procedures.
- **The basis for the concern**. Cite the appropriate law, policy, guidance, or procedure that has not been properly followed.
- **The significance of the concern.** Indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability.
- **The probable specific action needed to resolve the concern.** Identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, commenters may seek clarification in order to then assess whether further specific concerns may exist.

The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed, based on work reviewed to date, for the AFB, draft report, and final report. A sample Statement of Technical Review is included in Attachment 2.

6.0 INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

Decision on IEPR. Per paragraph 2.a.(1) of Appendix G, EC 1165-2-214, all CAP projects are excluded from Type I Independent External Peer Review (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 Appendix D. This proposed project meets none of the mandatory triggers for Type I IEPR as stated in Appendix D of EC 1165-2-214, and is so limited in scope or impact that it would not significantly benefit from an independent peer review. Therefore, Type I IEPR will not be conducted.

7.0 MODEL CERTIFICATION AND APPROVAL

Planning Models. Approval of planning models is not required for CAP projects. However, the following planning models are anticipated to be used in the development of the decision document:

- Hydro-Geomorphic Classification of Wetlands Model
- Aquatic Habitat Evaluation Procedures (HEP)
- Terrestrial HEP
- HEC-FDA
- IWR-PLAN

Engineering Models. EC 1105-2-412 does not cover engineering models used in planning. The process the Hydrology, Hydraulics and Coastal Community of Practice (HH&C CoP) of USACE follows to validate engineering software for use in planning studies and to satisfy the requirements of the Corps' Scientific and Engineering Technology (SET) initiative is provided in Enterprise Standard (ES)-08101 Software Validation for the Hydrology, Hydraulics and Coastal Community of Practice. 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). However, the following engineering models are anticipated to be used in the development of the decision document:

- GEO-Hydrologic Modeling System
- Geo-HecRaz
- Hydrologic Modeling System

8.0 REVIEW SCHEDULES AND COSTS

ATR Schedule and Cost.

Work Product to be Reviewed	Schedule	Estimated Cost
Draft Feasibility Report	2nd Qtr FY15	$15,000
Feasibility Report	4th Qtr FY15	$3,000

9.0 PUBLIC PARTICIPATION

Public review of the document will occur after issuance of the AFB policy guidance memorandum and concurrent with ATR of the draft feasibility report. The period will last at least 30 days. Significant public comments that result in changes to the formulation will require a new ATR.

Upon completion of the review period, comments will be consolidated and addressed, if needed. A comment resolution meeting will take place, if needed, to decide upon the best resolution of comments. A summary of the comments and resolutions will be included in the final document.

10.0 REVIEW PLAN APPROVAL AND UPDATES

The SAD Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving district, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the decision document. Like the PMP, the Review Plan is a living document and may change as the study progresses. The home district is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last MSC Commander 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 the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commanders' approval memorandum, should be posted on the Home District's webpage. The latest Review Plan should also be provided to the RMO and home MSC.

11.0 REVIEW PLAN POINTS OF CONTACT

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

- Project Manager, Charleston District (843) 329-8160
- South Atlantic Division (404) 562-5226

ATTACHMENT 1: TEAM ROSTER

Corps Project Delivery Team (PDT)

Name	Role
Colt Bowles	*Plan Formulator/Environmental
Sara Brown	Hydraulic & Hydrologic Engineer
Annie McCartney	Civil Engineer
Jeff Fersner	Cost Engineer
John Hinely	Real Estate (SAS)
Caleb Brewer	GIS Specialist
Brian Nutter	Office of Counsel
Mary Creese	Program Analyst
Dudley Patrick	Project Manager

*Study Lead

Resource Managers

Name	Role
Jon Jellema	Chief, Office of Counsel
Bret Walters	Chief, Planning & Environmental Branch
Brian Williams	Chief, Programs & Civil Projects
Carole Works	Chief, Engineering Division

Non-Federal Sponsor (NFS)

Name	Role
Jason Ward	County Administrator, Dorchester County
Mike Goldston	Interim County Engineer, Dorchester County

Contractors

Name	Role
TBD	Land & Hydrographic Survey
TBD	Construction

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the Feasibility Report for Polk Swamp, Dorchester County, SC. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrChecks[sm].

SIGNATURE _____ Date

Name
ATR Team Leader
Office Symbol/Company

SIGNATURE _____ Date

Dudley Patrick
Project Manager
CESAC-PM

SIGNATURE _____ Date

Name
Architect-Engineer Project Manager[1]
Company, location

SIGNATURE _____ Date

Name
Review Management Office Representative
Office Symbol

[1] Only needed if some portion of the ATR was contracted

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: *Describe the major technical concerns and their resolution.*

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

SIGNATURE _____ _____

Name Date
Chief, Engineering Division
Office Symbol

SIGNATURE _____ _____

Name Date
Chief, Planning & Environmental Branch
Office Symbol