



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SOUTHWESTERN DIVISION
1100 COMMERCE STREET
DALLAS, TX 75242-1317

17 MAY 2019

CESWD-PDP

MEMORANDUM FOR Commander, Galveston District

SUBJECT: SWD Continuing Authorities Program (CAP) Section 14 Model Review Plan, City of Columbus, Texas – Review Plan Approval

1. References:

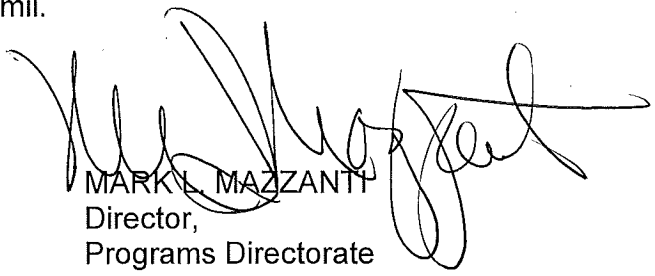
- a. E-mail: CESWF-PEC-P, 30 April 2019, subject: City of Columbus Review Plan (encl 1).
- b. EC 1165-2-217, Review Policy for Civil Works, 20 February 2018.
- c. Memorandum, CESWD-RBT, 4 March 2019, subject: Delegation of Authority for Review Plans for Civil Works Projects.

2. In accordance with references 1.b and 1.c., and based on review by my staff, I hereby approve the submitted Review Plan (RP) (encl 2) for subject referenced CAP Section 14 study.

3. Please post the approved RP with a copy of this memorandum to the District's public internet website and provide the internet address to the POC as indicated. Prior to posting the RP, the names of USACE employees listed in the RP shall be removed.

4. The SWD point of contact for this action is Mr. Sean P. Mickal, CESWD-PD, at (469) 487-7063 or sean.p.mickal@usace.army.mil.

2 Encls


MARK L. MAZZANTI
Director,
Programs Directorate

Continuing Authorities Program
Emergency Streambank and Shoreline Protection for the City of
Columbus Bank Erosion, Texas
Section 14 Project

U.S. Army Corps of Engineers
Galveston District
April 2019
MSC Approval Date:

PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of peer review for the Streambank and Shoreline Erosion Protection for the City of Columbus, Texas, Feasibility Report and Environmental Assessment. The study authority is Section 14 of the Flood Control Act of 1946, as amended.

Section 14 of the Flood Control Act of 1946, as amended, authorizes the US Army Corps of Engineers (USACE) to study, design and construct emergency streambank and shoreline works to protect public services including (but not limited to) streets, bridges, schools, water and sewer lines, National Register sites, and churches from damage or loss by natural erosion. This is a Continuing Authorities Program (CAP) which focuses on water resource related projects of relatively smaller scope, cost and complexity. Unlike traditional USACE civil works projects that are of wider scope and complexity, the CAP is a delegated authority to plan, design, and construct certain types of water resource and environmental restoration projects without specific Congressional authorization.

b. Applicability. This review plan is based on a Model Review Plan for Section 14, 107, 111, 204, 206, 208, or 1135 Projects or Programs directed by guidance to follow CAP processes, which is applicable to projects that do not require Independent External Peer Review (IEPR), as defined by the mandatory Type I IEPR triggers contained in EC 1165-2-217, Civil Works Review Policy.

c. References

- (1) Engineering Circular (EC) 1165-2-217, Civil Works Review, 20 February 2018;
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 March 2013;
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 September 2006;
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix F, CAP, Amendment #2, 31 January 07;
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 November 2007;
- (6) Director of Civil Works' Policy Memorandum #1, Subject: CAP Planning Process Improvements, dated 19 January 2011;
- (7) City of Columbus Bank Erosion Branch, Texas, Project Management Plan February 2018; and
- (8) Southwestern Division MSC and District Quality Management Plans.

d. Requirements. This plan was developed under EC 1165-2-217, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products. It provides 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 (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these reviews, decision documents are subject to cost engineering review and certification (per EC 1165-2-217) and planning model certification/approval (per EC 1105-2-412).

REVIEW PLAN

Project Name: Emergency Stream Bank and Shoreline Protection for City of Columbus Bank Erosion, Colorado County, Texas

P2 Number: 460404

Decision Document Type: Integrated Environmental Assessment and Planning Design Report

Project Type: Continuing Authority Program Section 14 Emergency Streambank and Shoreline Protection

District: Galveston

Major Subordinate Command (MSC): Southwestern Division

Review Management Organization (RMO): Southwestern Division

Key Review Plan Dates

<u>Date of RMO Endorsement of Review Plan:</u>	<i>Pending</i>
<u>Date of MSC Approval of Review Plan:</u>	<i>Pending</i>
<u>Date of IEPR Exclusion Approval:</u>	<i>Pending</i>
<u>Has the Review Plan changed since PCX Endorsement?</u>	<i>No</i>
<u>Date of Last Review Plan Revision:</u>	<i>2019-04-10</i>
<u>Date of Review Plan Web Posting:</u>	<i>Pending</i>
<u>Date of Congressional Notifications:</u>	<i>Pending</i>

Milestone Schedule

	<u>Scheduled</u>	<u>Actual</u>	<u>Complete</u>
<u>MSC Decision Milestone:</u>		10-25-2018	Yes
<u>Chief's Report or Director's Report:</u>		Pending	No

Project Fact Sheet
April 2019

Project Name: Emergency Stream Bank and Shoreline Protection for City of Columbus, Texas, Sec.14

Location: City of Columbus, Texas

Authority: Section 14 of the Flood Control Act of 1946, as amended, authorizes the US Army Corps of Engineers (USACE) to study, design and construct emergency streambank and shoreline works to protect public services including (but not limited to) streets, bridges, schools, water and sewer lines, National Register sites, and churches from damage or loss by natural erosion. This is a Continuing Authorities Program (CAP) which focuses on water resource related projects of relatively smaller scope, cost and complexity. Unlike traditional USACE civil works projects that are of wider scope and complexity, the CAP is a delegated authority to plan, design, and construct certain types of water resource and environmental restoration projects without specific Congressional authorization. USACE Continuing Authorities Program, Section 14 of the Flood Control Act of 1946, as amended, which provides for the USACE to provide emergency stream bank protection for public facilities and services.

Sponsor: City of Columbus

Type of Study: Continuing Authority Program Section 14 Emergency Streambank and Shoreline Protection

SMART Planning Status: CAP study compliant

Project Area: The Project Area is a streambank of the Colorado River located adjacent to the McCormick Wastewater Treatment Plant in the City of Columbus, approximately 74 miles west of Houston.

Problem Statement: Erosion and slope failure on the riverbank of the Colorado River have degraded the vegetative land adjacent to the river and are threatening the McCormick Wastewater Treatment Plant.

Federal Interest: The erosion induced slope instability problem demonstrates a need to investigate the opportunities and alternatives further to offer emergency streambank protection.

Risk Identification: Based on the Continuing Authority Program Risk and Consequence Matrix, developed by Mr. Steven Coke, this project has rating of 1. This means that the project is in Consequence Category A and has a Risk Level of A. The Project meets the following criteria to be included in Category A: The erosion directly threatens a facility critical to public health, safety, and welfare. A Risk Level of A indicates that the undesirable event is most likely to occur within the next 0-2 years.

Study Area: Figure 1 and Figure 2 depict the project area. The area is located in Colorado County In southeastern Texas, approximately 74 miles west of Houston, along the right descending bank of the Colorado River.

Figure 1 - Project location

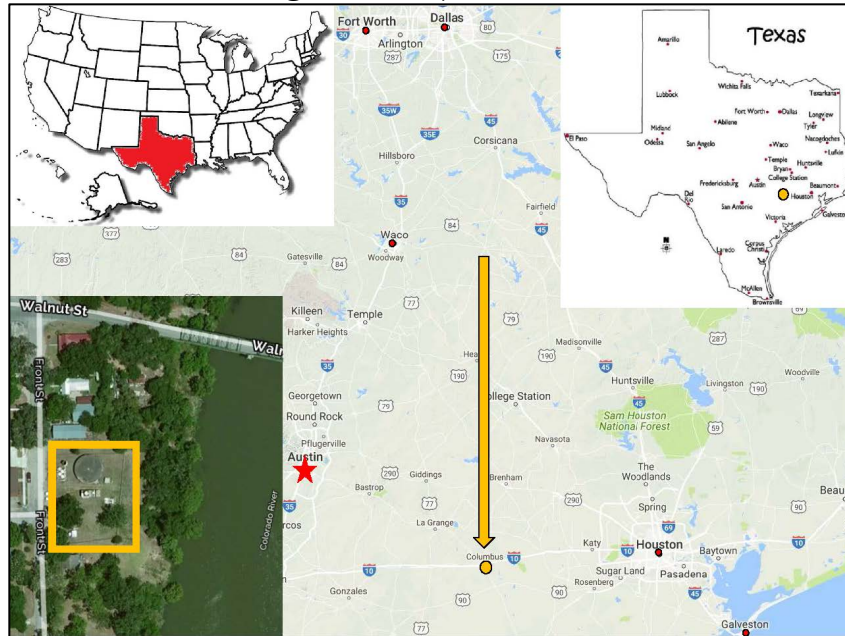
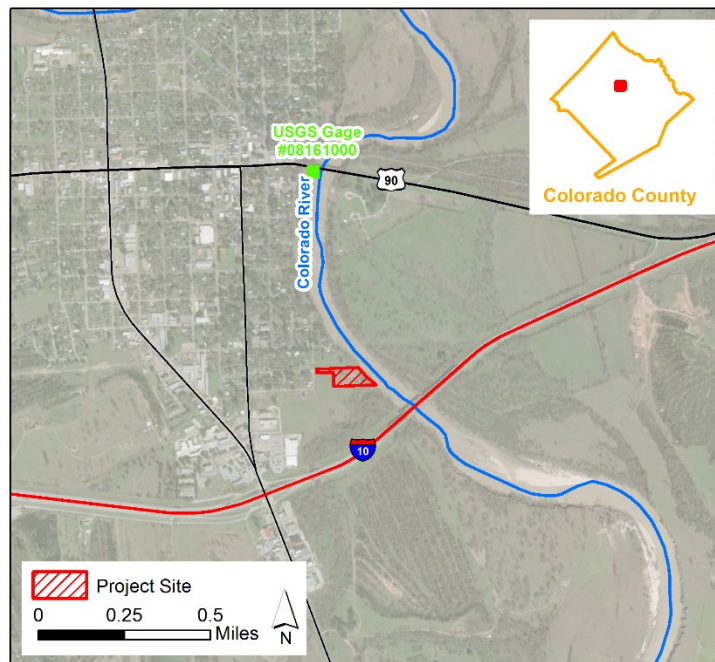


Figure 2 - Project location



1. FACTORS AFFECTING THE LEVELS OF REVIEW

Scope of Review

- Will the study likely be challenging?

The study will not be challenging. The design will be standard with none of the designs considered to be innovative, precedent-setting, unduly complicated, or vulnerable. The study does not meet the level of complexity to warrant an IEPR.

- Provide a preliminary assessment of where the project risks are likely to occur and assess the magnitude of those risks.

There are no significant decision risks identified for this study. This study has a rating of 1 on the CAP Risk and Consequence Matrix. The project is in Consequence Category A and has a Risk Level of A meaning the erosion directly threatens a facility critical to public health, safety, and welfare and the undesirable event is most likely to occur within the next 0-2 years.

- Is the project likely to be justified by life safety or is the study or project likely to involve significant life safety issues?

This study has a rating of 1 on the CAP Risk and Consequence Matrix. The project is in Consequence Category A and has a Risk Level of A meaning the erosion directly threatens a facility critical to public health, safety, and welfare and the undesirable event is most likely to occur within the next 0-2 years.

- Has the Governor of an affected state requested a peer review by independent experts?

No. The governor of Texas, Mr. Greg Abbot, has not requested a peer review by independent experts.

- Will it likely involve significant public dispute as to the project's size, nature, or effects?

The project is expected to be simple and limited in scope. There is not an expectation for significant public dispute as to the project's size, nature, or effects.

- Is the project/study likely to involve significant public dispute as to the economic or environmental cost or benefit of the project?

The project is expected to be simple and limited in scope. There is not an expectation for significant public dispute as to the economic or environmental cost or benefit of the project.

- Is the information in the decision document or anticipated project design likely to be based on novel methods, involve innovative materials or techniques, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices?

The design will be standard with none of the design considered to be innovative, precedent setting, unduly complicated, or vulnerable.

- Does the project design require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design/construction schedule?

The design will be standard and is not expected to require redundancy, resiliency, robustness, unique construction sequencing, or a reduced or overlapping design/construction schedule.

- Is the estimated total cost of the project greater than \$200 million?

It is not anticipated that the total project cost of the project will be greater than \$200 million.

- Will an Environmental Impact Statement be prepared as part of the study?

An Environmental Impact Statement will not be prepared as part of the study. An environmental assessment will be prepared for this study.

- Is the project expected to have more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources?

The project is not expected to have any adverse impacts on scarce or unique tribal, cultural, or historic resources.

- Is the project expected to have substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures?

The project is not expected to have any substantial impacts on fish or wildlife species and their habitat prior to the implementation of mitigation measures. The study area is highly urbanized and wildlife habitat within the watershed is limited.

- Is the project expected to have, before mitigation measures, more than a negligible adverse impact on an endangered or threatened species or their designated critical habitat?

The project is not expected to have adverse impacts on endangered or threatened species or their designated critical habitat.

2. REVIEW EXECUTION PLAN

This section describes each level of review to be conducted. Based upon the factors discussed in Section 1, this study will undergo the following types of reviews:

District Quality Control. All decision documents (including data, analyses, environmental compliance documents, etc.) undergo DQC. This internal review process covers basic science and engineering work products. It fulfils the project quality requirements of the Project Management Plan.

Agency Technical Review. ATR is performed by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. These teams will be comprised of certified USACE personnel. The ATR team lead will be from outside the home MSC. If significant life safety issues are involved in a study or project a safety assurance review should be conducted during ATR.

Independent External Peer Review. Type I IEPR is not required for decision documents in this circumstance. This is the most independent level of review, and is applied in cases that meet criteria where the risk and magnitude of the project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision is made as to whether Type I IEPR is appropriate. Since this project assesses the most cost effective approach to streambank repair, IEPR is not advisable.

Cost Engineering Review. All decision documents shall be coordinated with the Cost Engineering Mandatory of Expertise (MCX). The MCX will assist in determining the expertise needed on the ATR and IEPR teams. The MCX will provide the Cost Engineering certification. The RMO is responsible for coordinating with the MCX for the reviews. These reviews typically occur as part of ATR.

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

Policy and Legal Review. All decision documents will be reviewed for compliance with law and policy. ER 1105-2-100, Appendix H provides guidance on policy and legal compliance reviews. These reviews culminate in determinations that report recommendations and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander. These reviews are not further detailed in this section of the Review Plan.

Table 1 provides the schedules and costs for reviews. The specific expertise required for the teams are identified in later subsections covering each review. These subsections also identify requirements, special reporting provisions, and sources of more information.

Table 1: Levels of Review

Product(s) to undergo Review	Review Level	Start Date	End Date	Cost	Complete
<i><u>Integrated EA and Planning Design Report</u></i>	<i><u>District Quality Control</u></i>	<i><u>MO/DA/YR</u></i>	<i><u>MO/DA/YR</u></i>	<i><u>\$750</u></i>	Yes
<i><u>Integrated EA and Planning Design Report</u></i>	<i><u>Agency Technical Review</u></i>	<i><u>MO/DA/YR</u></i>	<i><u>MO/DA/YR</u></i>	<i><u>\$1200</u></i>	Yes

a. DISTRICT QUALITY CONTROL

The home district shall manage DQC and will appoint a DQC Lead to manage the local review (see EC 1165-2-217, section 8.a.1). The DQC Lead should prepare a DQC Plan and provide it to the RMO and MSC prior to starting DQC reviews. Table 2 identifies the required expertise for the DQC team.

Table 2: Required DQC Expertise

DQC Team Disciplines	Expertise Required
Economics	The reviewer should be a senior professional with experience in Section 14 Project development review.
Civil Engineering	The reviewer should be a senior professional, carry a Professional Engineer’s license, and have experience in the design and of plans and specifications for USACE Section 14 project development and review.
Cost Engineering	The reviewer should be familiar with cost estimating for similar projects in MCACES. Reviewer should also have experience in the application of scientific principles and techniques to problems of cost estimating, cost control, business planning and management science, profitability analysis, and project management.
Real Estate	Team member should have experience developing real estate plans for CAP projects. Such projects would include acquisition of multiple interests and estates.

Documentation of DQC. Quality Control should be performed continuously throughout the study. A specific certification of DQC completion is required at the draft and final report stages. Documentation of DQC should follow the District Quality Manual and the MSC Quality Management Plan. An example DQC Certification statement is provided in EC 1165-2-217, on page 19 (see Figure F).

Documentation of completed DQC should be provided to the MSC, RMO and ATR Team leader prior to initiating an ATR. The ATR team will examine DQC records and comment in the ATR report on the adequacy of the DQC effort. Missing or inadequate DQC documentation can result in delays to the start of other reviews (see EC 1165-2-217, section 9).

b. AGENCY TECHNICAL REVIEW

The ATR will assess whether the analyses are technically correct and comply with guidance, and that documents explain the analyses and results in a clear manner. An RMO manages ATR. The review is conducted by an ATR Team whose members are certified to perform reviews. Lists of certified reviewers are maintained by the various technical Communities of Practice (see EC 1165-2-217, section 9(h)(1)). Table 3 identifies the disciplines and required expertise for this ATR Team.

Table 3: Required ATR Team Expertise

ATR Team Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with experience in preparing Section 14 decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. Typically, the ATR lead will also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc). The ATR Lead MUST be from outside Galveston District.
Planning	The Planning reviewer should be a senior water resources planner with experience in plan formulation as it pertains to Section 14 projects.
Economics	The Economics reviewer should be a senior economist with experience in Section 14 Project development and review.
Cost Engineering	Team member should be familiar with cost estimating for similar projects in MCACES. Review includes construction schedules and contingencies. As the Cost Engineering Directory of Expertise, Walla Walla District will assign this team member as part of a separate effort coordinated by the ATR team lead in conjunction with the geographic district’s project manager. For CAP projects, ATR of the cost estimate will be conducted by pre-certified district cost personnel within the region. The pre-certified list of cost personnel has been established and is maintained by the Cost DX. The cost ATR member will coordinate with the Cost DX for execution of cost ATR and cost certification. The Cost DX will be responsible for final cost certification and may be delegated at the discretion of the Cost DX. (Reference CAP Planning Process Improvements Memorandum 19 January 2011).
Civil Design	The Civil Engineering reviewer should be an engineer with experience in Section 14 Project development and review.

Documentation of ATR. DrChecks will be used to document all ATR comments, responses and resolutions. Comments should be limited to those needed to ensure product adequacy. If a concern cannot be resolved by the ATR team and PDT, it will be elevated to the vertical team for resolution using the EC 1165-2-217 issue resolution process. Concerns can be closed in DrChecks by noting the concern has been elevated for resolution. The ATR Lead will prepare a Statement of Technical Review (see EC 1165-2-217, Section 9), for the draft and final reports, certifying that review issues have been resolved or elevated. ATR may be certified when all concerns are resolved or referred to the vertical team and the ATR documentation is complete.

c. INDEPENDENT EXTERNAL PEER REVIEW

(i) Type I IEPR.

Type I IEPR is managed outside of the USACE and conducted on 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.

Decision on Type I IEPR. 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, as discussed below. Exclusions for Type I IEPR for Section 205 and Section 103 projects will be approved on a case by case basis by the MSC Commander, based upon a risk informed decision process and may not be delegated. Since this is a Section 14 Study, Type I IEPR is not required.

The consequences of non-performance will have no impacts on the economics, social well-being, public safety, or social justice. The streambank protection is limited in scope and no unique practices will be implemented.

(i) Type II IEPR.

The second kind of IEPR is Type II IEPR. These Safety Assurance Reviews are managed outside of the USACE and are conducted on design and construction for hurricane, storm and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. A Type II IEPR Panel will be convened to review the design and construction activities before construction begins, and until construction activities are completed, and periodically thereafter on a regular schedule.

Decision on Type II IEPR. This CAP project does not meet any of the mandatory triggers for the requirement of conducting an IEPR. While the project would not benefit from Type I or Type II during the feasibility phase of project development, an evaluation will be performed on the need, if any, for a Type II (SAR) during scoping and development of the Project Management Plan (PMP) for the preconstruction, engineering and design phase.

d. MODEL CERTIFICATION OR 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. Planning models are any models and analytical tools used 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.

In accordance with Director of Civil Works Policy Memorandum #1, dated 19 January 2011, Subject: Continuing Authority Program Planning Process Improvements, “Approval of planning models under EC 1105-2-412 is not required for CAP projects. MSC commanders remain responsible for assuring the quality of the analyses 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.”

Table 5: Planning Models.

There are no economic models anticipated in the development of this decision document. Pursuant to ER 1105-2-100 Appendix F-23 (d), “the least cost alternative plan is considered to be justified if the total costs of the proposed alternative is less than the costs to relocate the threatened facility.”

Due to simplicity of the array of alternatives, through coordination with resource agencies and the anticipated lack of significant environmental impacts, the environmental models to be utilized are qualitative based on expert judgment of the PDT. The decision document will capture the critical decision criteria utilized.

EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue. The professional practice of documenting the application of the software and modeling results will be followed. The USACE Scientific and Engineering Technology Initiative has identified many engineering models as preferred or acceptable for use in studies. These models should be used when 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.

Table 6: Engineering Models.

No engineering models are anticipated to be used in the development of the decision document.

e. POLICY AND LEGAL REVIEW

Policy and legal compliance reviews for draft and final planning decision documents are delegated to the MSC (see Director’s Policy Memorandum 2018-05, paragraph 9).

(i) Policy and Legal 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 home MSC Commander. 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.

ATTACHMENT 1: TEAM ROSTERS

		Position
	Galveston	CAP Program Manager/Project Manager
	Galveston	Environmental Resource Planner
	Fort Worth	Cultural Resources
	Galveston	Plan Formulation
	Fort Worth	Economist
	Galveston	Geotech and Civil Design
	Galveston	Cost Engineering
	Galveston	Real Estate
	City of Columbus	Non-Federal Sponsor

DISTRICT QUALITY CONTROL TEAM		
Name	Office	Position
	Fort Worth	Economics
	Fort Worth	Environmental
	Galveston	Civil Design
	Galveston	Real Estate
	Galveston	Cost Engineering

AGENCY TECHNICAL REVIEW TEAM		
Name	Office	Position
	Fort Worth	Team Leader, Planner/Economist

VERTICAL TEAM		
Name	Office	Position
	SWD	Chief of Planning, MSC
	SWD	Senior Plan Formulator, MSC

Review Plan Checklist

**U.S. Army Corps of Engineers
Galveston District
April 2019**

Review Plan Checklist for Decision Documents

Date:	11 April 2019
Originating District:	Galveston District
Project/Study Title:	Emergency Streambank and Shoreline Protection for the City of Columbus, Texas, Sec. 14
PWI #:	
District POC:	
PCX Reviewer:	

Please fill out this checklist and submit with the draft Review Plan when coordinating with the appropriate RMO. Any evaluation boxes checked 'No' indicate the RP possibly may not comply with EC 1165-2-217 and should be explained. Additional coordination and issue resolution may be required prior to MSC approval of the Review Plan.

REQUIREMENT	REFERENCE	EVALUATION	
1. Is the Review Plan (RP) a standalone document?		Yes	
a. Does it include a cover page identifying it as a RP and listing the project/study title, originating district or office, and date of the plan?		Yes	
b. Is the purpose of the RP clearly stated and EC 1165-2-217 referenced?		Yes	
c. Does it reference the Project Management Plan (PMP) of which the RP is a component?	EC 1165-2-217 Section 7.a	Yes	
d. Does it succinctly describe the three levels of peer review: District Quality Control (DQC), Agency Technical Review (ATR), and Independent External Peer Review (IEPR)?	EC 1165-2-217, Sections 8, 9 and 10.	Yes	
e. Does it identify the title, subject, and purpose of the decision document to be reviewed?	EC 1165-2-217, Section 7.e.(1)	Yes	
f. Does it list the names and disciplines of the Project Delivery Team (PDT)?*	EC 1165-2-217, Section 7.e.(1)	Yes	
<i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated. Also note that rosters should be removed or redacted to protect Personally Identifiable Information prior to posting the Review Plan on the internet.</i>			
2. Is the RP detailed enough to assess the necessary level and focus of peer review?	EC 1165-2-217, Section 3.a	Yes	
a. Does it indicate which parts of the study will likely be challenging?	EC 1165-2-217, Section 7.a.(1)	Yes	
b. Does it provide a preliminary assessment of where the project risks are likely to occur and what the magnitude of those risks might be?	EC 1165-2-217, Section 7.a.(1)	Yes	

REQUIREMENT	REFERENCE	EVALUATION	
c. Does it indicate if the project/study will require an environmental impact statement (EIS)?	EC 1165-2-217, Section 11.d.(1).b	Yes	
<i>Will an EIS be prepared?</i>			No
<i>If yes, IEPR is required.</i>			
d. Does it address if the project report is likely to contain influential scientific information or be a highly influential scientific assessment?	EC 1165-2-217, Section 15.d	Yes	
<i>Is it likely to contain influential scientific information? If yes, IEPR is required.</i>			No
e. Does it address if the project is likely to have significant economic, environmental, and social affects to the nation, such as (but not limited to):	EC 1165-2-217, Section 11.a.	Yes	
* more than negligible adverse impacts on scarce or unique cultural, historic, or tribal resources?	EC 1165-2-217, Section 11.d.(4), a.		No
* substantial adverse impacts on fish and wildlife species or their habitat, prior to implementation of mitigation?	EC 1165-2-217, Section 11.d.(4),a.		No
* more than negligible adverse impact on species listed as endangered or threatened, or to the designated critical habitat of such species, under the Endangered Species Act, prior to implementation of mitigation?	EC 1165-2-217, Section 11,.d.(4),a.		No
<i>Is it likely? If yes, IEPR is required.</i>			No

REQUIREMENT	REFERENCE	EVALUATION	
f. Does it address if the project/study is likely to have significant interagency interest?	EC 1165-2-217, Section 1,b.,(4) and Section 7.f.(1)	Yes	
<i>Is it likely? If yes, IEPR is required.</i>			No
g. Does it address if the project/study likely involves significant threat to human life (safety assurance)?	EC 1165-2-217, Section 1,b.,(1)	Yes	
<i>Is it likely? If yes, IEPR is required.</i>			No
h. Does it provide an estimated total project cost?	EC 1165-2-217, Section 1.b.(2)	Yes	
<i>What is the estimated cost:</i>			
<i>(best current estimate; may be a range)</i>			
<i>Is it > \$200million? <input type="checkbox"/> If yes, IEPR is required.</i>	WRDA 2014, Sec. 1044.		No
i. Does it address if the project/study will likely be highly controversial, such as if there will be a significant public dispute as to the size, nature, or effects of the project or to the economic or environmental costs or benefits of the project?	EC 1165-2-217, Section 11.d.(1),d.	Yes	
<i>Is it likely? If yes, IEPR is required.</i>			No
j. Does it address if the information in the decision document will likely be based on novel methods, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices?	EC 1165-2-217, Section 1,b.,(7)	Yes	
<i>Is it likely? If yes, IEPR is required.</i>			No
3. Does the RP define the appropriate level of peer review for the project/study?	EC 1165-2-217, Section 8.a.	Yes	
a. Does it state that DQC will be managed by the home district in accordance with the Major Subordinate Command (MSC) and district Quality Management Plans?	EC 1165-2-217, Section 8.a.	Yes	
b. Does it state that ATR will be conducted or managed by the lead PCX?	EC 1165-2-217, Section 9.c.(1)	Yes	

REQUIREMENT	REFERENCE	EVALUATION	
c. Does it state whether IEPR will be performed?	EC 1165-2-217, Section 4.b.	Yes	
<i>Will an IEPR be performed?</i>			No
d. Does it provide a defensible rationale for the decision on IEPR?	EC 1165-2-217, Section 11.d.	Yes	
e. Does it state that IEPR will be managed by an Outside Eligible Organization, external to the Corps of Engineers?	EC 1165-2-217, Section 11.c.		No
4. Does the RP explain how ATR will be accomplished?	EC 1165-2-217, Section 7	Yes	
a. Does it identify the anticipated number of reviewers?	EC 1165-2-217, Section 7	Yes	
b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)?	EC 1165-2-217, Section 7	Yes	
c. Does it indicate that ATR team members will be from outside the home district?	EC 1165-2-217, Section 9.c.(1).a.	Yes	
d. Does it indicate that the ATR team leader will be from outside the home MSC?	EC 1165-2-217, Section 9.c.	Yes	
e. Does the RP state that the lead PCX is responsible for identifying the ATR team members and indicate if candidates will be nominated by the home district/MS?	EC 1165-2-217, Section 7	Yes	
f. If the reviewers are listed by name, does the RP describe the qualifications and years of relevant experience of the ATR team members?*	EC 1165-2-217, Section 7	Yes	
<i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i>			
5. Does the RP explain how IEPR will be accomplished?	EC 1165-2-217, Section 11		No
a. Does it identify the anticipated number of reviewers?	EC 1165-2-217, Section 11		No
b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)?	EC 1165-2-217, Section 11		No

REQUIREMENT	REFERENCE	EVALUATION	
c. Does it indicate that the IEPR reviewers will be selected by an Outside Eligible Organization?	EC 1165-2-217, Section 4.k.(1) & Section 2.a.		No
d. Does it indicate the IEPR will address all the underlying planning, safety assurance, engineering, economic, and environmental analyses, not just one aspect of the project?	EC 1165-2-217, Section 7.c		No
6. Does the RP address peer review of sponsor in-kind contributions?		Yes	
a. Does the RP list the expected in-kind contributions to be provided by the sponsor?	EC 1165-2-217, Section 7.e.(9)	Yes	
b. Does it explain how peer review will be accomplished for those in-kind contributions?	EC 1165-2-217, Section 8.a	Yes	
7. Does the RP address how the peer review will be documented?			
a. Does the RP address the requirement to document ATR and IEPR comments using DrChecks?	EC 1165-2-217, Section 7.d.(1)	Yes	
b. Does the RP explain how the IEPR will be documented in a Review Report?	EC 1165-2-217, Section 11	Yes	
c. Does the RP document how written responses to the IEPR Review Report will be prepared?	EC 1165-2-217, Section 7.e.(15)		No
d. Does the RP detail how the district/PCX will disseminate the final IEPR Review Report, USACE response, and all other materials related to the IEPR on the internet and include them in the applicable decision document?	EC 1165-2-217, Section 7.d.(2).a		No
8. Does the RP address Policy Compliance and Legal Review?	EC 1165-2-217, Section 7,a., (2),c.	Yes	
9. Does the RP present the tasks, timing and sequence (including deferrals), and costs of reviews?	EC 1165-2-217, Section 7, e., (11)	Yes	
a. Does it provide a schedule for ATR of the draft and final reports and other supporting materials?	EC 1165-2-217, Section 3.g	Yes	
b. Does it include interim ATR reviews for key technical products?	EC 1165-2-217, Section 3.g	Yes	
c. Does it present the timing and sequencing for IEPR?	EC 1165-2-217, Section 4.c.	Yes	
d. Does it include cost estimates for the peer reviews?	EC 1165-2-217, Section 7.a.(2)	Yes	

REQUIREMENT	REFERENCE	EVALUATION	
10. Does the RP indicate the study will address Safety Assurance factors?	EC 1165-2-217, Section 12	Yes	
Factors to be considered include:			
Where failure leads to significant threat to human life	EC 1165-2-217, Section 12.h.(1).(c)	Yes	
Novel methods\complexity\ precedent-setting models\policy changing conclusions	EC 1165-2-217, Section 12.i.(1)	Yes	
Innovative materials or techniques	EC 1165-2-217, Section 12.i.(3)	Yes	
Design lacks redundancy, resiliency of robustness	EC 1165-2-217, Section 12.i.(2)	Yes	
Unique construction sequence or acquisition plans	EC 1165-2-217, Section 12.i.(3)	Yes	
Reduced\overlapping design construction schedule	EC 1165-2-217, Section 12.i.(3)	Yes	
11. Does the RP address model certification requirements?	EC 1105-2-412	Yes	
a. Does it list the models and data anticipated to be used in developing recommendations (including mitigation models)?	EC 1165-2-217, 7.e.(2).(b).(7)	Yes	
b. Does it indicate the certification/approval status of those models and if certification or approval of any model(s) will be needed?	EC 1165-2-217, 7.e.(2).(b).(7)	Yes	
c. If needed, does the RP propose the appropriate level of certification/approval for the model(s) and how it will be accomplished?	EC 1105-2-412 and EC 1165-2-217, 7.e.(2).(b).(7).	Yes	
12. Does the RP address opportunities for public participation?		Yes	
a. Does it indicate how and when there will be opportunities for public comment on the decision document?	EC 1105-2-410, Section 7.a.(2).(d)	Yes	
b. Does it indicate when significant and relevant public comments will be provided to reviewers before they conduct their review?	EC 1165-2-217, Section 7.e.(4)	Yes	
c. Does it address whether the public, including scientific or professional societies, will be asked to nominate potential external peer reviewers?	EC 1165-2-217, Section 7.e.(2).(b).(7).	Yes	

REQUIREMENT	REFERENCE	EVALUATION	
d. Does the RP list points of contact at the home district and the lead PCX for inquiries about the RP?	EC 1165-2-217, Section 7.e.(1)	Yes	
13. Does the RP address coordination with the appropriate Planning Center(s) of Expertise?	EC 1165-2-217, Section 9.c.(1)	Yes	
a. Does it state if the project is single or multi-purpose? Single Δ Multi Δ	EC 1165-2-217, Section 9.c.(1)	Yes	
List purpose(s):			
b. Does it identify the lead PCX for peer review? Lead PCX:	EC 1165-2-217, Section 9.c.(1)	Yes	
c. If multi-purpose, has the lead PCX coordinated the review of the RP with the other PCXs as appropriate?	EC 1165-2-217, Section. 9.c.(1), b.	Yes	
14. Does the RP address coordination with the Cost Engineering Mandatory Center of Expertise (MCX) in Walla Walla District for ATR of cost estimates, construction schedules and contingencies for all documents requiring Congressional authorization?	EC 1165-2-217, Section. 9.c.(1), d.	Yes	
a. Does it state if the decision document will require Congressional authorization?			No
b. If Congressional authorization is required, does the plan state that coordination will occur with the Cost Engineering DX?	EC 1165-2-217, Section 7.i.(3).b		No
15. Other Considerations: This checklist highlights the minimum requirements for an RP based on EC 1165-2-217. Additional factors to consider in the RP include, but may not be limited to:			
a. Is there a request from a State Governor or the head of a Federal or state agency to conduct IEPR likely?	EC 1165-2-217, Section 11.d.(1).(c)		No
b. Is the home district expecting to submit a request to exclude the project study from IEPR?	EC 1165-2-217, Section 7.f.(1) and Section 11.d		No
c. Are there additional Peer Review requirements specific to the home MSC or district (as described in the Quality Management Plan for the MSC or district)?			No
d. Are there additional Peer Review needs unique to the project study?			No