DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NORTHWESTERN DIVISION
PO BOX 2870
PORTLAND OR 97208-2870

REPLY TO
ATTENTION OF

CENWD-RBT

16 NOV 2012

MEMORANDUM FOR Commander, Kansas City District (CENWK-PM-CJ/Seth Laliberty)

SUBJECT: Review Plan Approval for Cora Island MRRP Review Plan, Kansas City District

1. The enclosed review plan for the Cora Island MRRP project is approved.

2. This review plan has been prepared in accordance with EC 1165-2-209. The project does not require or include independent external peer review. The Business Technical Division of the Northwestern Division will serve as the Review Management Organization for execution of this plan.

3. Any revisions to this review plan will require new written approval from this office. For further information please contact Mr. Steve Bredthauer at (503) 808-4053.

Encl

ANTHONY C. FUNKHOUSER, P.E.
COL, EN
Commanding

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CLASSIFICATION: UNCLASSIFIED

CENWK STAFF SUMMARY SHEET

ACTION:	_____ FOR INFORMATION	_____ FOR GUIDANCE	CONTROL NUM:
	_____ FOR APPROVAL	_____ OTHER	SUSPENSE DATE: 20 SEP 11
	✓ FOR SIGNATURE		

OFFICE SYMBOL: CENWK-PM-CJ DATE: 13-Sep-11

PURPOSE: To gain the approval of the review plan from the Chief of Engineering

BACKGROUND/DISCUSSION:

The Cora Island MRRP project review plan is attached for staffing, comment, and approval. The project is in the implementation phase and doesn't meet the risk requirements for IEPR, therefore only DQC and ATR reviews are recommended. The ATR team members are TBD, but an ATR leader from MVS is identified. When the ATR members are identified, they will be listed in the review plan.

RECOMMENDATION: Approval of the review plan.

COORDINATION

OFC SYMBOL	ACTION	CONCUR	NONCONCUR	SIGNATURE	DATE	PHONE
Quality Program Manager/Mathews						
PM-CJ/Bishop		✓			9/14/11	3719
PM-C/Holm		✓			9/14/11	3111
PM-P/Combs		✓			9/14/11	3110
ED/Goodnight						

INITIALS/DATE		INITIALS/DATE	
	SECTION CHIEF	N/A	DEPUTY FOR PM
	BRANCH CHIEF	N/A	EXECUTIVE ASSISTANT
	DIVISION/OFFICE CHIEF	N/A	DEPUTY COMMANDER
		N/A	COMMANDER
ACTION OFFICER (Name, Grade, Phone, Signature)		CALL FOR PICK UP: (Name, Phone) Seth LaLiberty, x3023	
Seth LaLiberty, x3023		NOTIFIED READY: (Name, Date)	

NWK FORM 02/11 (Rev.) 1530 PREVIOUS EDITION OBSOLETE

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, KANSAS CITY DISTRICT
635 FEDERAL BUILDING
601 E 12TH STREET
KANSAS CITY MO 64106-2824

REPLY TO
ATTENTION OF

CENWK-ED

13 September 2011

MEMORANDUM FOR Commander, Northwestern Division, USACE, ATTN: Mr. Kevin Crum

SUBJECT: Cora Island MRRP Project Review Plan (P2#320352)

1. The review plan for the Cora Island MRRP project is attached for Northwestern Division's review and approval. The review plan was prepared in accordance with EC 1165-2-209 and uses Northwestern Division's review plan template for ATR for implementation documents and other work products in accordance with the policy memo dated 24 May 2011.

2. The Cora Island MRRP project is currently in the implementation phase.

3. The point of contact for this memorandum is the project manager, Seth LaLiberty at (816) 389-3023.

for REX G. GOODNIGHT, P.E.
Chief, Engineering Division
Kansas City District

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PROJECT REVIEW PLAN

ATR Review Plan for
Implementation Documents and Other Work Products
Northwestern Division (NWD)

Project Name: Cora Island MRRP
Project Location: St. Charles County, MO
Project P2 Number: 320351
Project Manager or POC Name: Seth LaLiberty
NWD Original Approval Date: TBD
NWD Revision N/A Approval Date: N/A

General Document Information

The first two pages of this document are the Cover sheet and the Table of Contents and are not numbered.

Review Plan Template. Information provided in **PAGES 3-8** is Review Plan Template information for ATR for Implementation Documents and Other Work Products. **Do not alter**. The controlled (approved) version of this template will be maintained on the NWD SharePoint site. Districts must use the most current version from the NWD SharePoint site and avoid shared versions outside of the NWD SharePoint. See the footer information in the template for document location.

Attachment 1 provides the review plan Review Plan Specifics that supplement the RP Template. These specifics are prepared by the District team and as coordinated with the NWD.

Attachment 2 provides acronyms and abbreviations for the document and may be altered as necessary.

Review Plan approval memorandums shall be documented with the RP and the dates recorded on the cover sheet.

US Army Corps of Engineers ®

Approved Version: 31 May 2011. Printed Copies are for "Information Only". The controlled version resides on the shared documents folder of the NWD SharePoint site at:
https://kme.usace.army.mil/NWD/RPP/default.aspx

PROJECT REVIEW PLAN

ATR Review Plan for
Implementation Documents and Other Work Products
Northwestern Division (NWD)

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ATR Review Plan for
Implementation Documents and Other Work Products

1. PURPOSE AND REQUIREMENTS.

a. Purpose. This ATR Review Plan (RP) Template and attachments describe requirements for the project identified on the cover sheet of this document. This RP describes Agency Technical Review (**ATR**) associated with implementation documents, or other work products. The RP Template and the completed RP Specifics attachment together describe the risks considered and the review plan proposed for this project or product.

b. General Process. The PDT considers the project risks and selects an appropriate RP Template based on the risks per EC 209. The risk consideration process is determined by Districts as appropriate to develop a risk informed review plan strategy.

1) When the District has considered the project risks and determined the applicability of this template, the PM/PDT prepares the "RP Specific" information in Attachment 1 and submits with the RP Template to NWD for approval. The RP Specifics provide the essential elements of the RP such as the scope, project cost, the review team and capabilities, review schedules and budgets and points of contacts.

2) The RP Specifics are coordinated with the appropriate levels of management in the District and the NWD. Potentially the RP may also need to be coordinated with the Risk Management Center (RMC) and others such as the relevant Planning Center of Expertise (PCX) if required. This may be necessary in cases where there is debate on the project risks, required review levels, the review team composition and areas of responsibility.

3) The approved RP Specifics and RP Template information together shall describe the project scope, review plan, schedule and budget in sufficient detail to allow review and approval for the RP. The RP information is a component of the Quality Management Plan within the Project Management Plan. Once approved, the RP is documented in the project PMP/QMP and project files and also placed on the District Website for a minimum of 30 days.

c. Applicability. Applicability of the review plan template is determined by NWD. Refer to the criteria provided below. This review plan template is applicable, ONLY, for projects that;

- Are agreed to require ATR review based on risk-informed decision process.
- Are agreed to NOT require Independent External Peer Review (IEPR) or Safety Assurance Review (SAR) based on a risk-informed decision process.
- Do NOT require an Environmental Impact Statement (EIS) for the project.
- And, the project for this review plan is NOT producing decision documents.

d. References

Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 Jan 2007
ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO for **ATR** is Northwestern Division (NWD) unless determined otherwise. The USACE Risk Management Center (RMC) shall serve as the RMO for Dam Safety Modification projects and Levee Safety Modification projects. NWD will coordinate and approve the review plan. The home District will post the approved review plan on its public website.

3. REVIEW FUNDAMENTALS

a. The USACE review process is based on a few simple but fundamental principles:

- Peer review is key to improving the quality of work in planning, design and construction;
- Reviews shall be scalable, deliberate, life cycle and concurrent with normal business processes;
- A review performed outside the home district shall be completed on all decision and implementation documents. For other products, a risk informed decision as described in EC 209 will be made whether to perform such a review.

b. The EC 209 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.

4. DISTRICT QUALITY CONTROL (DQC)

The RMO for DQC is the home District. In accordance with EC 209 all work products and reports, evaluations, and assessments shall undergo necessary and appropriate District Quality Control (DQC).

DQC is the internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the project Quality Management Plan (QMP) of the Project Management Plan (PMP).

The DQC is the internal quality control process performed by the supervisors, senior staff, peers and the PDT within the home District and is managed by the home District. DQC consists of:

a. Quality Checks and reviews. These are routine checks and reviews carried out during the development process by peers not responsible for the original work. These are performed by staff such as supervisors, team leaders or other senior designated to perform internal peer reviews.
b. PDT reviews. These are reviews by the production team responsible for the original work to ensure consistency and coordination across all project disciplines.

DQC will be performed on the products in accordance with the QMP within the PMP.

5. AGENCY TECHNICAL REVIEW (ATR)

A risk informed process was completed for this project in accordance with EC 209. **See paragraph 7, RISK INFORMED DECISIONS.**

ATR Review Plan for
Implementation Documents and Other Work Products

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, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers.

ATR will be conducted by a qualified team from outside the home District that is not involved with 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 the home MSC. In limited cases, when appropriate and independent expertise can be secured from Centers or Laboratories or when proper expertise cannot be secured otherwise, NWD may approve exceptions.

6. REVIEW DOCUMENTATION

a) 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:

(1) The review concern – identify the product's information deficiency or incorrect application of policy, guidance, or procedures;
(2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not been properly followed;
(3) 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; and;
(4) Where appropriate, provide a suggested action needed to resolve the comment or concern.

In some situations, especially addressing incomplete or unclear information, comments 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 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 1110-2-12 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.

ATR shall 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).

7. RISK INFORMED DECISIONS

ATR Review Plan for
Implementation Documents and Other Work Products

a. **ATR:** (Source: EC 209, paragraph 15). The process and methods used to develop and document the risk-informed decisions are at the discretion of the District but must be appropriate for the risk and complexity of the project. The following questions and additional appropriate questions were considered;

1. Does it include any design (structural, mechanical, hydraulic, etc)?
2. Does it evaluate alternatives?
3. Does it include a recommendation?
4. Does it have a formal cost estimate?
5. Does it have or will it require a NEPA document?
6. Does it impact a structure or feature of a structure whose performance involves potential life safety risks?
7. What are the consequences of non-performance?
8. Does it support a significant investment of public monies?
9. Does it support a budget request?
10. Does it change the operation of the project?
11. Does it involve ground disturbances?
12. Does it affect any special features, such as cultural resources, historic properties, survey markers, etc, that should be protected or avoided?
13. Does it involve activities that trigger regulatory permitting such as Section 404 or stormwater/NPDES related actions?
14. Does it involve activities that could potentially generate hazardous wastes and/or disposal of materials such as lead based paints or asbestos?
15. Does it reference use of or reliance on manufacturers' engineers and specifications for items such as prefabricated buildings, playground equipment, etc?
16. Does it reference reliance on local authorities for inspection/certification of utility systems like wastewater, stormwater, electrical, etc?
17. Is there or is there expected to be any controversy surrounding the Federal action associated with the work product?

*Note: A "yes" answer to questions above does not necessarily indicate ATR is required, rather it indicates an area where reasoned thought and judgment should be applied and documented in the recommendation.

Decision on ATR: The District considered the risks and determined that **ATR is required** considering the project risks. ATR will be performed on the products in accordance with the District QMP and this RP. **See Attachment 1** for RP Specifics.

b. **INDEPENDENT EXTERNAL PEER REVIEW (IEPR).** The District considered risks and risk triggers for Type I IEPR and Type II IEPR, also referred as a Safety Assurance Review (SAR) as described in EC 1165-2-209.

I. **Type I IEPR** is required for decision documents under most circumstances. This project does not involve the production of decision documents.

Decision on Type I IEPR: The District considered these risks and determined that **Type I IEPR is not required.**

II. **Type II IEPR (SAR).** 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.

- Any project addressing **hurricane and storm** risk management and **flood risk** management or;
- any other project where Federal action is justified by **life safety** or;
- the failure of the project would pose a **significant threat to human life.**
- This applies to new projects and to the major repair, rehabilitation, replacement, or modification of existing facilities (based on identified risks and threats).

Other Factors to consider for Type II IEPR (SAR) review of a project, or components of a project;

- The project involves the use of innovative materials or techniques where the engineering is based on novel methods, presents complex challenges for interpretations, contains precedent-setting methods or models, or presents conclusions that are likely to change prevailing practices
- The project design requires redundancy, resiliency, and robustness.
- The project has unique construction sequencing or a reduced or overlapping design and construction schedule; for example, significant project features accomplished using the Design-Build or Early Contractor Involvement (ECI) delivery systems.

Decision on Type II IEPR: Based on the information and analysis provided in the preceding paragraphs of this review plan, the project covered under this plan is excluded from IEPR because it does not meet the mandatory IEPR triggers and does not warrant IEPR based on a risk-informed analysis. The District considered these risks and determined that **Type II IEPR (SAR) is not required** considering the risks triggers.

8. POLICY AND LEGAL COMPLIANCE REVIEW

All documents will be reviewed throughout the process for their compliance with law and policy. 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.

This review plan template is not intended to describe requirements and processes to conduct policy and legal compliance review, or legal sufficiency reviews.

9. TEMPLATE APPROVAL

NWD is responsible for maintaining the current version of this Review Plan template and ensuring the information accurately describes the criteria and considerations necessary to arrive at a risk informed decision. The review plan template is a living document and is subject to change.

The home District is responsible to complete the Review Plan Template Cover page, adjust the Table of Contents and the complete Review Plan specifics in **Attachment 1.** Significant changes to the review plan specifics (such as changes to the scope and/or level of review) should be re-approved by NWD. The completed Template information and the Attachment 1 will be submitted to the NWD for coordination and approval.

END OF TEMPLATE INFORMATION

ATR Review Plan for
Implementation Documents and Other Work Products

ATTACHMENT 1 – REVIEW PLAN SPECIFICS

The information in this attachment is prepared by the District PM/PDT for the project specific information required for this review plan. The DQC is managed by the District and is described in the PMP/QMP. This document should be attached or included in the PMP/QMP to document the ATR.

A-1. PROJECT INFORMATION

a. **Project Description.** The Cora Island project is in the implementation phase as a project under the Missouri River Recovery Program (MRRP). The project is currently in the Project Implementation Report (PIR) development stage which, when reviewed and approved, will be followed by construction. It is not anticipated that this project will need a separate environmental impact statement (EIS) as the project is covered by an earlier approved EIS. The Corps prepared a *Feasibility Report and Environmental Impact Statement* (Corps 1981) on the original Mitigation Program of 48,100 acres. After Congress modified the Mitigation Program in the Water Resources Development Act (WRDA) of 1999, the Corps initiated a *Supplemental Environmental Impact Statement* (SEIS; Corps 2003) in September 2001 for the additional 118,650 acres. The SEIS was completed in early 2003 and the *Record of Decision* (ROD) was signed in June 2003.

b. The project serves two purposes: 1. to mitigate the loss of fish and wildlife habitat due to the Bank Stabilization and Navigation Project (BSNP) which began in 1912 and has evolved into authorization for a 9-foot deep, 300-foot wide channel along the lower 735 miles of the Missouri River; and 2. to meet shallow water habitat (SWH) development goals of the (MRRP) as required by the Biological Opinion issued by the US Fish and Wildlife Service (USFWS) in their 2003 Amended Biological Opinion on the Corps Operation of the Missouri River Mainstem Reservoir System (BiOP), by creating more shallow water habitat (SWH) which includes creating chutes, scour holes, structure modifications, backwaters, and/or increasing floodplain connectivity to improve SWH for the endangered Pallid Sturgeon .

c. The Cora Island Fish and Wildlife Mitigation Site consists of 1,236 total acres of land with 3.5 miles of river frontage and is owned by the Corps of Engineers. Existing habitat components include agricultural fields, a narrow band of riparian forest, two overflow channels, scour holes, ephemeral wetlands, field roads and a ringed levee. In general the site is undeveloped. The project is currently in the early design stage but is expected to enter the construction phase in late FY12 or early FY13. Project features will include construction of SWH chutes, development of wetlands, and reconnection of the floodplain to the river via levee breaches.

d. **Current Total Project Cost.** Estimated total project cost is $10 million, which does not include the cost of real estate.

e. **Required ATR Team Expertise.**

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with experience in major river systems and conducting ATR. The lead should also

ATR Team Members/Disciplines	Expertise Required
	have the necessary skills and experience to lead a virtual team through the ATR process.
Environmental/Biological	The environmental/biological reviewer should be a senior environmental scientist or biologist with experience in river and riparian aquatic and terrestrial ecosystems, cultural surveys, and biological surveys.
Planning	The planning reviewer should be a senior planner with experience in the development of Project Implementation Report (PIR) documents.
Hydraulics/River Engineering	This reviewer should be a senior hydraulic engineer or river engineer with experience in large river systems, channel morphology, and dredging.
Geotechnical	This reviewer should be a senior geotechnical engineer with experience in levee underseepage, chute construction, and exploratory drilling.

A-2. REVIEW SCHEDULES AND COSTS

a. ATR Schedule.

Review Milestone	Review Products	Date Planned
95% ATR review	Draft PIR	December 2011
95% backcheck	Draft PIR	January 2012
65% ATR review	65% Plans, Specs and O&M manual	April 2012
65% backcheck	65% Plans, Specs and O&M manual	May 2012
95% ATR review	95% Plans, Specs and O&M manual	July 2012
95% backcheck	95% Plans, Specs and O&M manual	July 2012
ATR Certification		August 2012

b. ATR COSTS - Labor/Expenses.

Review Milestone	#reviewers/total hours	Approximate cost/hr	Totals
65% PIR ATR review	4/50	$110	$5500
65% PIR backcheck	4/16	$110	$1760
95% ATR review	4/50	$110	$5500
95% backcheck	4/16	$110	$1760
ATR Certification	4/30	$110	$3300
ATR Expenses (travel etc)	$0	$0	$ 0
Total ATR costs			$17,820

c. Engineering Models. The following engineering models are anticipated to be used in the development of the implementation documents or other work products:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
HEC-RAS (Hydrologic Engineering Center-River Analysis System), http://www.hec.usace.army.mil/software/hec-ras/index.html	HEC-RAS is designed to perform one-dimensional hydraulic calculations for a full network of natural and constructed channels. The HEC-RAS system contains four one-dimensional river analysis components for: (1) steady flow water surface profile computations; (2) unsteady flow simulation; (3) movable boundary sediment transport computations; and (4) water quality analysis. A key element is that all four components use a common geometric data representation and common geometric and hydraulic computation routines. For this project, HEC-RAS will be used to model the flow capability and characteristics of the chute design.	Certified

A-3. REVIEW PLAN POINTS OF CONTACT

The Review Management Organization for ATR will be NWD unless noted otherwise.

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

Contact	Role	Title	Office/District/Division	Phone
Seth LaLiberty	Project Manager	Project Manager	CENWK-PM-CJ/ Kansas City District/ Northwestern Division, US Army Corps of Engineers	816-389-3023
Kevin Crum	RMO - Point of contact	Senior Planner	Northwestern Division, US Army Corps of Engineers	509-527-7557

A-4. PROJECT DELIVERY TEAM (PDT) ROSTER.
Before posting to websites for public disclosure of the RP, it may be necessary to remove names and contact information for Corps employees to comply with security policies.

PDT Roster				
Name	Discipline/Role	District/Agency	Email	Phone

PDT Roster				
Name	**Discipline/Role**	**District/Agency**	**Email**	**Phone**
[redacted]	Project Manager	Kansas City District/USACE	[redacted]	[redacted]
	CENWK-ED-HR, River Engineering Section	Kansas City District/USACE		
	CENWK-PM-PR, Environmental Resources Section	Kansas City District/USACE		
	CENWK-PM-PR, Environmental Resources Section	Kansas City District/USACE		
	CEMVS-PM-E, Planning and Environmental Branch	St. Louis District/USACE		
	CENWK-ED-GD, Geotechnical Design And Dam Safety	Kansas City District/USACE		
	CENWK-CD-C, Construction Branch	Kansas City District/USACE		
	CENWK-ED-DC, Cost Estimating	Kansas City District/USACE		
	CENWK-ED-GC, Civil Design Section	Kansas City District/USACE		
	CENWK-RE-C, Real Estate, Civil Branch	Kansas City District/USACE		
	CEMVS-EC-Z, Cultural Resources	St. Louis District/USACE		

*Technical Lead

A-5. ATR TEAM ROSTER

Before posting to websites for public disclosure of the RP, it may be necessary to remove names and contact information for Corps employees to comply with security policies.

Agency Technical Review (ATR) Team				
Name	**Discipline/Role**	**District/ Agency**	**email**	**Phone**

Agency Technical Review (ATR) Team				
Name	Discipline/Role	District/ Agency	email	Phone
[redacted]	Environmental/ATR Lead	St. Louis District/ USACE	[redacted]	[redacted]
	Planning			
	Hydraulics/River Engineering			
	Geotechnical			

A-6. REVIEW PLAN SPECIFICS - APPROVAL

The information provided in the Review Plan Template and the Review Plan Specifics in **Attachment 1** are hereby submitted for approval.

NWD will review this plan and route by NWD staffing sheet. If the plan is complete and appropriate for the risk and complexity of the project/products, the NWD will recommend approval by the appropriate Senior Executive Service (SES) in NWD. The NWD approval memorandum will be sent to the District PM responsible for the plan. The NWD approval memorandum shall be documented with the review plan, and the approval date should be noted on the cover sheet of this document.

Approved revisions should be recorded in the A-7 block below.

A-7 REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number	Date Approved
Original			TBD

ATTACHMENT 2 - ACRONYMS AND ABBREVIATIONS

B-1. ACRONYMS AND ABBREVIATIONS

Acronym	Definition
ATR	Agency Technical Review
BiOP	2003 Amended Biological Opinion on the Corps Operation of the Missouri River Mainstem Reservoir System
BSNP	Bank Stability and Navigation Program
CAP	Continuing Authorities Program
DCW	Director of Civil Works
DQC	District Quality Control
EC	Engineering Circular
ECI	Early Contractor Involvement
EIS	Environmental Impact Statement
ER	Engineering Regulation
FAQ's	Frequently Asked Questions
HEC-RAS	Hydrologic Engineering Center- River Analysis System
HQUSACE	Headquarters, U.S. Army Corps of Engineers
IEPR	Independent External Peer Review
NWD	Northwestern Division
MSC	Major Subordinate Command
MRRP	Missouri River Recovery Program
PCX	Planning Center of Expertise
PDT	Project Delivery Team
PMP	Project Management Plan
QA	Quality Assurance
QMP	Quality Management Plan
QMS	Quality Management System
RIT	Regional Integration Team
RMC	Risk Management Center
RMO	Review Management Organization
RP	Review Plan
SES	Senior Executive Service
SAR	Safety Assurance Review (also referred as Type I IEPR)
SEIS	Supplemental Environmental Impact Statement
SWH	Shallow Water Habitat
TBD	To Be Determined
USACE	United States Army Corps of Engineers
WRDA	Water Resources Development Act