IMPLEMENTATION DOCUMENT REVIEW PLAN

USING THE PROGRAMMATIC REVIEW PLAN MODEL

for

Continuing Authorities Program
Section 103 and 205 Projects

Feather Creek, Clinton, IN
Section 205 Project

Louisville District

MSC Approval Date: Approved
Last Revision Date: 21 Aug 2012

US Army Corps
of Engineers ®

DECISION DOCUMENT REVIEW PLAN
USING THE PROGRAMMATIC REVIEW PLAN MODEL

Feather Creek, Clinton, IN
Section 205 Project

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1. PURPOSE AND REQUIREMENTS

Purpose. This Review Plan defines the scope and level of peer review in accordance with EC 1165-2-209, for the Feather Creek, Clinton, IN, Section 205 project life cycle, including the previously completed decision document and the design and implementation of the project.

Section 205 of the Flood Control Act of 1948, as amended, authorizes USACE to study, design and construct flood risk management projects. It is a Continuing Authorities Program (CAP) which focuses on water resource related projects of relatively smaller scope, cost and complexity. Traditional USACE civil works projects are of wider scope and complexity and are specifically authorized by Congress. The Continuing Authorities Program is a delegated authority to plan, design, and construct certain types of water resource and environmental restoration projects without specific Congressional authorization.

Additional Information on this program can be found in Engineering Regulation 1105-2-100, Planning Guidance Notebook, Appendix F.

a. Applicability. This review plan is based on the model Programmatic Review Plan for Section 103 and 205 project decision documents, which is applicable to projects that do not require an EIS. If an EIS is required, the model Programmatic Review Plan is not applicable and a study specific review plan must be prepared by the home district, coordinated with the appropriate Planning Center of Expertise (PCX) and approved by the home Major Subordinate Command (MSC) in accordance with EC 1165-2-209.

Applicability of the model Programmatic Review Plan for a specific project is determined by the home MSC. If the MSC determines that the model plan is applicable for a specific study, the MSC Commander may approve the plan (including exclusion from IEPR if warranted) without additional coordination with a PCX or Headquarters, USACE. The initial decision as to the applicability of the model plan should be made no later than the Federal Interest Determination (FID) milestone (as defined in Appendix F of ER 1105-2-100, F-10.e.1) during the feasibility phase of the project. A review plan for the project will subsequently be developed and approved prior to execution of the Feasibility Cost Sharing Agreement (FCSA) for the study. In addition, per EC 1165-2-209, the home district and MSC should assess at the Alternatives Formulation Briefing (AFB) whether the initial decision on Type I IEPR is still valid based on new information. If the decision on Type I IEPR has changed, the District and MSC should begin coordination with the appropriate PCX immediately.

b. References

(1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
(2) Director of Civil Works' Policy Memorandum #1, Jan 19, 2011
(3) EC 1105-2-412, Assuring Quality of Plannig Models, 31 Mar 2010
(4) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
(5) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 Jan 2007
(6) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007

c. **Requirements.** This programmatic review plan was developed in accordance with EC 1165-2-209, 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 1165-2-209) and ensuring that planning models and analysis 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 (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this review plan. The RMO for Section 205 decision documents and IEPR decisions is the home MSC. The MSC will coordinate and approve the review plan. The Louisville District will post the approved review plan on its public website. A copy of the approved review plan (and any updates) will be provided to the FRM-PCX to keep the PCX apprised of requirements and review schedules.

3. STUDY INFORMATION

a. **Decision Document.** The Feather Creek, Clinton, Indiana decision document (Detailed Project Report) was completed in 1990 and concluded that there was a Federal interest in the project. The primary focus of alternatives consisted of channel modification of Feather Creek. An Environmental Assessment (EA) was prepared along with the decision document and a FONSI was signed on 1 March 1990.

Following the completion of the DPR, plans and specifications commenced but were delayed for many years due to funding issues. As such, a Limited Reevaluation Report (LRR) was completed in April 2002. Between 2002 and 2010, there was another project delay awaiting real estate acquisition by the sponsor. In response to this delay, the Louisville District is currently updating the environmental and economic documentation from the 1990 DPR and 2002 LRR. The environmental documentation will be circulated to the resource agencies and an updated EA has been prepared. A FONSI was signed on 24 July 2012. The approval level of the updates/LRR (if policy compliant) is the home MSC.

Study/Project Description. Headwater flooding occurs along Feather Creek in Clinton, Indiana. According to the DPR, there are approximately 165 structures in the 500 year floodplain of Feather Creek. The recommended plan consisted of widening the existing channel of Feather Creek to a design bottom width of 24 feet, at the existing grade, from the downstream North Street Bridge (Mile 1.37) to the railroad bridge located upstream at Mile 1.95, a total length of 3,300 feet. The plan included a flood warning and evacuation plan. During the 2002 limited revaluation report, two additional types of alternatives were considered separately or in combination. The alternatives included new railroad openings, detention structures and channel modification. The plan that provided the most net benefits consists of channel modification of about 3,300 feet of Feather Creek from North Street (Sta. 73+30) to the CSX property (Sta. 106+30). Channel widening would primarily be on one stream bank only accept for areas where there is too much restriction to allow

work on one bank only. The recommended plan would provide a 38% reduction in flood damages. The recommended plan would not provide sufficient flood protection to remove structures from the "100 year floodplain". It would not provide an exceedance probability of 1%. Flood reductions would occur primarily for the more frequent flood events. With implementation of the plan, average annual benefits would be $125,000. Excavated material would be disposed of and spread resulting in positive drainage at the City of Clinton's designated disposal site located approximately one mile from the project. The LRR underwent the Internal Technical Review (ITR) process in March 2002 and the LRR was approved by the MSC on 6 May 2002.

A project cooperation agreement was executed in 2002, following review and approval of the LRR. The total estimated cost for the recommended plan in 2002 was estimated at $1,067,000. The Federal share was estimated at $802,250 and the nonfederal share was estimated at $266,750 (25). The non-federal share is less than 35% since the channel modification plan was approved in the Detailed Project Report dated 1990. Average annual costs were estimated at $78,000 and average annual benefits are estimated at $125,000. The resulting benefit-cost-ratio was 1.6 with the net average annual benefits for the plan being $47,000. Economic data has been updated and took into account the updated hydrologic data. With implementation of the plan, average annual costs are estimated at $75,000 and average annual benefits are estimated to be $353,000, the resulting benefit-to-cost ratio is 4.7. Net average annual benefits for the recommended plan are $278,000.

b. Factors Affecting the Scope and Level of Review. The scope of review the Feather Creek project is affected by the life cycle duration of the project. The feasibility decision document was completed in 1990 and a Limited Reevaluation Report was completed in 2002 and included ITR. The Project Cooperation Agreement was executed in 2002. The project was temporarily suspended between 2002 and 2010 awaiting the acquisition of real estate by the local sponsor. Now that all real estate has been acquired, various project components are being updated including economic and environmental documentation as well as the project plans and specifications. H&H models and data have also been updated to document current conditions and any changes that may have occurred. The project is not expected to have a life safety issue and there is not expected to be any public dispute based on public involvement from the initial decision document, the LRR, and the current updates. Project risks have been identified and are listed in the project risk register in Attachment 6.

c. In-Kind Contributions. Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC and ATR, similar to any products developed by USACE. No in-kind products were used for the DPR nor the LRR. Additionally, no in-kind products are anticipated as part of the design and implementation phase.

4. DISTRICT QUALITY CONTROL (DQC)

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the 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 MSC.

Both the 1990 DPR and the 2002 LRR were reviewed internally by the Louisville District, resulting in the preparation of an executed Planning Chief's Certification. Current updates to the economic and

environmental documentation will be reviewed and approved by the Louisville District Planning Chief prior to submittal for approval to the LRD. Submittal of the updates to LRD is expected to occur in late June 2012.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision and implementation documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO 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 team lead will be from outside the home District but within the MSC. The completion of the DPR and the LRR preceded the commencement of ATR for decision documents. At the time of these reports, ITR was the means for ensuring technical compliance with established policies. ITR was completed on the 2002 LRR in March of 2002.

In light of the current guidance and the update of the project plans and specifications, the final design plans and specifications will undergo ATR review in July 2012. The MSC will serve as the RMO for the final design ATR team.

Products to Undergo ATR. ATR will be performed on the final plans and specifications. Even though the project design has not changed significantly from the original design prepared in 2002 which underwent ITR, the plans and specifications will undergo an ATR review by three team members outside the home District.

b. Required ATR Team Expertise.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional preferably with experience in preparing Section 205 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 will be from outside the home District but within the MSC.
Hydraulic Engineering	The hydraulic engineering reviewer will be an expert in the field of hydraulics and hydrology and have a thorough understanding of open channel dynamics and/or computer modeling techniques that will be used such as HEC-RAS.
Geotechnical Engineering	The geotechnical engineering reviewer will be an expert in the field of soils and stability and have a thorough understanding of policy related to construction and excavation in varying soil types.

c. 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) 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, 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 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 1110-2-12 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.

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 prior to the District Commander signing the final report. A sample Statement of Technical Review is included in Attachment 4.

6. 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 1165-2-209, 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 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 biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all underlying engineering, economics, and environmental work, not just one aspect of the study. 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 1165-2-209.

  For Section 103 and 205 decision documents prepared under the model Programmatic Review Plan, Type I IEPR may or may not be required.

- 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.

  For Section 103 and 205 decision documents prepared under the model Programmatic Review Plan, Type II IEPR may or may not be anticipated to be required in the design and implementation phase. The decision on whether Type II IEPR is required will be verified and documented in the review plan prepared for the design and implementation phase of the project.

a. Decision on IEPR. It is the policy of USACE that Section 205 project decision documents should undergo Type I IEPR unless ALL of the following criteria are met:

- Federal action is not justified by life safety or failure of the project would not pose a significant threat to human life;
- Life safety consequences and risk of non-performance of a project are not greater than under existing conditions;
- There is no request by the Governor of an affected state for a peer review by independent experts;

- The project does not require an EIS;
- The project/study is not likely to involve significant public dispute as to the size, nature, or effects of the project;
- The project/study is not likely to involve significant public dispute as to the economic or environmental cost or benefit of the project;
- The information in the decision document or anticipated project design is not likely to be based on novel methods, involve the use of 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 project design is not anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule; and
- There are no other circumstances where the Chief of Engineers or Director of Civil Works determines Type I IEPR is warranted.

Further, if Type I IEPR will not be performed:

- Risks of non-performance and residual flooding must be fully disclosed in the decision document and in a public forum prior to final approval of the decision document;
- The non-Federal sponsor must develop a Floodplain Management Plan, including a risk management plan and flood response plan (and evacuation plan if appropriate for the conditions), during the feasibility phase; and
- The non-Federal sponsor must explicitly acknowledge the risks and responsibilities in writing in a letter or other document (such as the Floodplain Management Plan) submitted to the Corps of Engineers along with the final decision document.

The decision on whether the above criteria are met (and a Type I IEPR exclusion is appropriate) is the responsibility of the MSC Commander. Additional factors the MSC Commander might consider include in deciding if an exclusion is appropriate include, but are not limited to: Hydrograph / period of flooding, warning time, depth of flooding, velocity of flooding, nature of area protected, and population protected.

The project decision document (DPR) was completed in 1990 and a Limited Reevaluation Report updating the DPR was completed in 2002. Both of these documents were approved prior to the execution of EC 1165-2-209. As such, a Type I IEPR is not required.

In regards to a Type II IEPR, failure of the project would not pose any increase in the threat to human life. The Federal action is justified by a positive BCR and damages prevented. While there is always a life safety risk for FRM projects, the City of Clinton, IN currently has a notification plan in place to deal with flood conditions. It is the recommendation of the Louisville District Chief of Engineering (Levee Safety Officer) that the criteria would not trigger an SAR. There are no innovative materials or techniques to be used on the project. This is a standard stream widening and some minor bank protection and does not trigger an SAR. The project does not require redundancy, resiliency, or robustness as the project only involves channel excavation/widening. This criterion would not trigger an SAR. The project does not have unique construction sequencing and overlapping schedules. As such, this criterion would not trigger an SAR.

b. Products to Undergo Type I IEPR. None

c. Required Type I IEPR Panel Expertise. Not Applicable.

d. Documentation of Type I IEPR. Not applicable.

7. 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 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.

The decision document and subsequent LRR were both submitted and approved with a Planning Chief's Certification and a legal certification. The final design plans will contain an engineering certification following completion of ATR. The project will also undergo BCOE certification in accordance with ER 415-1-11.

8. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION

All decision documents shall be coordinated with the Cost Engineering DX, located in the Walla Walla District. For decision documents prepared under the model Programmatic Review Plan, Regional cost personnel that are pre-certified by the DX will conduct the cost engineering ATR. The DX will provide the Cost Engineering DX certification. The RMO will coordinate with the Cost Engineering DX on the selection of the cost engineering ATR team member. The decision document and subsequent LRR were completed in 1990 and 2002, respectively. As such, certification of the cost estimate is not required. The updated cost estimate will be reviewed by a Cost DX Pre-Certified Professional with experience preparing cost estimates for Section 205 channel widening project.

9. MODEL REVIEW

The approval of planning models under EC 1105-2-412 is not required for CAP projects. MSC Commanders are responsible for assuring models for all planning activities are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Therefore, the use of a certified/approved planning model is highly recommended should be used whenever appropriate. Planning models are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative,

many engineering models have been identified as preferred or acceptable for use on Corps studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

a. Planning Models. The following planning models are anticipated to be used in the development of the decision document:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Certification / Approval Status
Example: HEC-FDA 1.2.4 (Flood Damage Analysis)	The Hydrologic Engineering Center's Flood Damage Reduction Analysis (HEC-FDA) program provides the capability for integrated hydrologic engineering and economic analysis for formulating and evaluating flood risk management plans using risk-based analysis methods. The program will be used to evaluate and compare the future without- and with-project plans along the Wild River near River City to aid in the selection of a recommended plan to manage flood risk.	Certified

b. Engineering Models. The following engineering models are anticipated to be used in the development of the decision document:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
HEC-RAS 4.0 (River Analysis System)	The Hydrologic Engineering Center's River Analysis System (HEC-RAS) program provides the capability to perform one-dimensional steady and unsteady flow river hydraulics calculations. The program will be used for steady flow analysis to evaluate the future without- and with-project conditions along the Wild River and its tributaries. [For a particular study the model could be used for unsteady flow analysis or both steady and unsteady flow analysis. The review plan should indicate how the model will be used for a particular study.]	HH&C CoP Preferred Model
Microstation InRoads - civil site model	The model develops the proposed surface and computes earthwork quantities based on the existing and proposed surfaces (topography). It also provides the cross sections.	Approved

10. REVIEW SCHEDULES AND COSTS

a. ATR Schedule and Cost. ATR of plans and specifications will commence on 11 June 2012 and extend through 11 July 2012. The estimated cost for ATR is $8,000.

b. Type I IEPR Schedule and Cost. Not Applicable.

c. Model Review Schedule and Cost. Only approved models will be used for this project.

11. PUBLIC PARTICIPATION

State and Federal resource agencies may be invited to participate in the study covered by this review plan as partner agencies or as technical members of the PDT, as appropriate. Agencies with regulatory review responsibilities will be contacted for coordination as required by applicable laws and procedures. The ATR team will be provided copies of public and agency comments.

Throughout the original plans and specification phase, meetings were held with local officials who supported the recommended plan. The public expressed support for the project as well. A public meeting was held in March 1999, after a new Mayor took office in January 1999. The meeting's purpose was to discuss the recommended plan as changed as result of the resource agency recommendations made the previous summer. The public was overwhelming for the project at the meeting. At least 70 people attended the meeting. The public's primary concern was when the project would be built.

The study was originally coordinated with the U.S. Fish and Wildlife Service pursuant to the requirements of the Fish and Wildlife Coordination Act. A representative of the U.S. Fish and Wildlife participated in an interagency tree marking effort in 1998 when a new Section 401 Water Quality Certification was issued and an IDNR construction permit was issued.

Since so much time has elapsed since the original public and agency coordination, additional coordination has been and will be conducted. The Louisville District has held numerous meetings with the local sponsor to reaffirm their interest in the project. The District also conducted a public meeting on 10 January 2012 with approximately 200 residents in attendance. The residents were overwhelmingly in support of the project. As part of the updates to the environmental documentation, a revised environmental assessment will be circulated to the appropriate resource agencies and to the general public for review and comment. Additionally, each of the permits previously obtained will be updated with the appropriate agency.

12. REVIEW PLAN APPROVAL AND UPDATES

The home MSC Commander is responsible for approving this review plan and ensuring that use of the Model Programmatic Review Plan is appropriate for the specific project covered by the plan. 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 8. 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. Significant changes may result in the MSC Commander determining that use of the Model Programmatic Review Plan is no longer appropriate. In these cases, a project specific review plan will be prepared and approved in accordance with EC 1165-2-209 and Director of Civil Works' Policy Memorandum #1. The latest version of the review plan, along with the Commanders' approval memorandum, will be posted on the home district's webpage.

13. REVIEW PLAN POINTS OF CONTACT

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

- Project Manager, (502) 315-6894
- Chief Plan Formulation Section, Planning Branch, (502) 315-6880
- Senior Regional Engineer, Great Lakes and Ohio River, Engineering Division, (513) 684-3018

ATTACHMENT 1: PDT TEAM ROSTER

Team Member	Area of Expertise	Contact Information
	Project Manager	502-315-6894
	Project Engineer	502-315-6424
	Geotechnical Engineer	502-315-6287
	H&H Engineer	502-315-6456
	Cost Estimating	502-315-2621
	Office of Counsel	502-315-6658
	Real Estate	502-315-6956
	Construction	502-772-3492 x7481
	Contracting	502-315-6190

ATTACHMENT 2: DQC TEAM ROSTER

Team Member	Area of Expertise	Contact Information
	Geotechnical Engineer	502-315-6330
	Civil Engineer	502-315-6433
	H&H Engineer	502-315-6380

ATTACHMENT 3: ATR TEAM ROSTER

Team Member	Area of Expertise	Contact Information
	ATR Lead/Civil Engineer	412-395-7111
	Geotechnical Engineer	816-389-3652
	H&H Engineer	412-395-7346

ATTACHMENT 4: STATEMENT OF TECHNICAL REVIEW FOR PLANS AND SPECIFICATIONS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for plans and specifications for the Feather Creek, Clinton, Indiana CAP Section 205 project. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-209 and Director of Civil Works' Policy Memorandum #1. 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].

/s/ 13 August 2012
Date

ATR Team Leader
Civil Engineer

/s/ 16 August 2012
Date

Geotechnical Engineer

/s/ 16 August 2012
Date

Hydraulic Engineer

/s/ 16 August 2012
Date

Senior Regional Engineer, CELRD
RMO

ATTACHMENT 5: STATEMENT OF RISK INFORMED DECISION MAKING

CERTIFICATION OF RISK INFORMED DECISION FOR TYPE II IEPR

In accordance with Appendix E of EC 1165-2-209, the flood risk management project was evaluated for life safety risks. There are no innovative materials or techniques to be used on the stream-widening project. The project does not require redundancy, resiliency, or robustness as the project only involves channel excavation/widening. The project does not have unique construction sequencing and overlapping schedules. In light of the risk-informed decision making process, I have determined that a Type II IEPR (Safety Assurance Review) is not required for this project.

/s/ 11 June 2012

Date

Chief, Engineering Division
CELRL-ED

ATTACHMENT 6: PROJECT RISK REGISTER

P2 Number: 112519
Project Name: Feather Creek Clinton, IN CAP 205

CIVIL WORKS
RISK REGISTER

Project Phase: Design/Implememtation
Date Modified: 26 April 2012

Risk Event	Risk Description	Trigger	Probability of Occurrence	Severity of Occurrence	Risk Decision Level of Review	Risk Owner	Risk Response	Risk Response Description	Issue
Communication with sponsor	multiple parties involved, inconsistent communication	Changes in project schedule or funding. Media interest.	Occassional	Marginal	Program Manager(Chief PM-P/PM-C)	Project Manager	Mitigation	Have one key contact at both USACE and the sponsor to relay messages. Conducts FTF meetings with all parties.	X
Congressional interest	Sen. Lugar and Rep. Bucshon sent letters to HQS/ASA. Also interest by Sen. Coats staff.	Changes in project schedule or funding.	Occassional	Marginal	Program Manager	LRL Senior Leaders	Mitigation	Maintain contact with interested parties. Be proactive not reactive with communication. Keep HQS involved in necessary communications.	X
Federal appropriations	Lack of Federal funds to complete design and award construction contract	Lack of allocation of funds. No FY12 Federal budget or reprogramming authorization	Frequent	Catastrophic	LRL Commander	Project Manager	Mitigation	Maintain capability in CAP database. Respond to HQS data calls. Respond to congressional RFIs.	X
Non-fed appropriations	NF funds in jeopardy of being lost in Dec 2011	New IN governor takes office in Jan 2013 and may decide CDBG funds should be used for another project.	Likely	Catastrophic	DPM	Sponsor	Transference	Sponsor is responsible to obtain funds. Work with sponsor to find other sources of funding.	
Real estate appraisals	Possible need to acquire additional real estate	Possible change in channel alignments may require acquisition of additional RE	Seldom	Critical	Program Manager(Chief PM-P/PM-C)	Sponsor	Transference	Sponsor is responsible for RE acquisition.	
Team member availability/consistency	Availability/timliness if Federal funds become available	Timing of allocation of Federal funds	Seldom	Marginal	Project Manager	Project Manager	Acceptance	Will adapt schedule, available PDT members id conflicts arise.	
External peer review (ATR/IEPR/CWRB)	SAR is first CAP SAR in LRD - unsure of cost/time requirements	SAR required for design and construction on CAP 205.	Likely	Critical	DPM	Project Manager	Mitigation	Working with MSC to streamline process for CAP projects.	
Utilities	Relocation of gas, sewer, cable may require addl RE	Relocations that need tobe located outside of existing utility ROW	Occassional	Marginal	Program Manager(Chief PM-P/PM-C)	Sponsor	Transference	Sponsor and utility companies will relocate within the ROW where possible. Other relocations that require RE acquistion will be handled by the sponsor and coordinated with USACE RE staff.	
Utilities	Relocation of gas, sewer, cable may delay RTA	Relocations not completed or scheduled before RTA	Seldom	Critical	Program Manager(Chief PM-P/PM-C)	Sponsor	Mitigation	Scheduled date of relocations will be include in bid specs and plans so contractors can apply this risk to bid estimates.	
Real estate appraisals	Compensability determination for relocations	Additional relocations necessary due to utility issues	Occassional	Marginal	Program Manager(Chief PM-P/PM-C)	Office of Counsel	Acceptance	OC is aware of possible needs for determination and has agreed to one week turn around from receipt of information from RE	
Real estate appraisals	Acquistion of additional easements by sponsor	Utility relocation located outside of existing easements	Occassional	Marginal	Program Manager(Chief PM-P/PM-C)	Real Estate	Acceptance	RE is aware of possible needs for determination and has agreed to one week turn around from receipt of easement information from sponsor.	
Construction Requirements	Building pier in channel to be widened. Risk of compromising piers and building foundation during construction.	Construction activities in the vicinity of the pier.	Occassional	Critical	DPM	Contractor	Transference	Bid specs and plans will be updated to specify that channel work near the pier be completed from the opposite bank, thereby avoiding pier. If pier is compromised during construction, repair is the responsibility of the contractor rather than USACE.	
Division level review	MSC review timeframes for updates, PRP will not be timely	Submittal of documents to MSC for review.	Occassional	Marginal	Program Manager(Chief PM-P/PM-C)	Project Manager	Mitigation	Early discussioins with MSC regarding need for review within 30 days of submittal. Schedule allows for 45 days.	
Internal review timelines	OC review of EA, FONSI	Submittal of documents to OC for review	Occassional	Marginal	Program Manager(Chief PM-P/PM-C)	Project Manager	Mitigation	Discussions with PD and OC leadership committing to one week turn around on draft EA	

ATTACHMENT 7: ACRONYMS AND ABBREVIATIONS

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

ATTACHMENT 8: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number
5 June 2012	Updates responding to SAW and LRD comments	Multiple
2 Aug 2012	Updates to LRD comments	multiple