



REPLY TO  
ATTENTION OF

CENWD-PDD

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

31 MAR 2016

MEMORANDUM FOR Commander, Kansas City District (CENWK-PM-PF)

SUBJECT: Review Plan (RP) Approval for Lincoln Draw, City of Hays, Kansas, Section 205 Project

1. Reference EC 1165-2-214, Civil Works Review, 15 December 2012.
2. The enclosed RP for the Lincoln Draw, City of Hays, Kansas, Section 205 Project has been prepared in accordance with the reference guidance.
3. The RP follows the NWD Model Review Plan for Continuing Authorities Program (CAP) Section 103, 205 and projects directed by guidance to use CAP procedures.
4. I hereby approve this RP, which is subject to change as study circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this RP or its execution will require review by CENWD-PDD and approval by this office.
5. The RP should be posted to the internet and available for public comment.
6. Please contact Jeremy Weber, at 503-808-3858, if you have further questions regarding this matter.

SCOTT A. SPELLMON  
BG, USA  
Commanding

CF:  
CENWK-PM-PF, Lynn

**Lincoln Draw  
City of Hays, Kansas**

**Feasibility Report and Environmental Assessment  
Review Plan**

Continuing Authorities Program  
Section 205 of the Flood Control Act of 1948

Northwestern Division  
Kansas City District

P2 Project Number: 335090

Original: 15 January 2016  
MSC Approval Date: 31 March 2016



**US Army Corps  
of Engineers** ®

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**REVIEW PLAN**

**Lincoln Draw Feasibility Report and Environmental Assessment  
Hays, Kansas**

**TABLE OF CONTENTS**

**1. PURPOSE AND REQUIREMENTS ..... 1**

**2. REVIEW MANAGEMENT ORGANIZATION COORDINATION..... 1**

**3. PROJECT INFORMATION..... 2**

**4. DISTRICT QUALITY CONTROL (DQC) ..... 3**

**5. AGENCY TECHNICAL REVIEW (ATR)..... 3**

**6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR) ..... 5**

**7. POLICY AND LEGAL COMPLIANCE REVIEW ..... 8**

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

**9. MODEL CERTIFICATION AND APPROVAL..... 8**

**10. REVIEW SCHEDULES AND COSTS..... 9**

**11. PUBLIC PARTICIPATION ..... 10**

**12. REVIEW PLAN APPROVAL AND UPDATES ..... 10**

**13. REVIEW PLAN POINTS OF CONTACT..... 10**

**ATTACHMENT 1: TEAM ROSTERS ..... 11**

**ATTACHMENT 2: STATEMENT OF TECHNICAL REVIEW FOR DECISION  
DOCUMENTS..... 12**

**ATTACHMENT 3: REVIEW PLAN REVISIONS..... 13**

**ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS ..... 14**

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## REVIEW PLAN

### Lincoln Draw Feasibility Report and Environmental Assessment Hays, Kansas

#### 1. PURPOSE AND REQUIREMENTS

- a. Purpose and Authority.** This Review Plan defines the scope and level of peer review for the Lincoln Draw Feasibility Report and Environmental Assessment, Hays, Kansas.

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 Amendment #2.

- b. Applicability.** This review plan is based on the Northwestern Division (NWD) Model Review Plan for Section 103, 205, and authorities directed by guidance to follow CAP procedures, which is applicable to projects that do not require an EIS.

**c. References**

- (1) Engineering Circular (EC) 1165-2-214, Civil Works Review Policy (Expired)
- (2) EC 1105-2-412, Assuring Quality of Planning Model (Expired)
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 21 July 2006
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 Jan 2007
- (5) 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 COORDINATION

The Review Management Organization (RMO) is responsible for managing the overall peer review effort described in this review plan. The RMO for Section 205 is the Northwestern Division (NWD). NWD will coordinate and approve the review plan and manage the Agency Technical Review (ATR). Kansas City District will post the approved review plan on its public website and provide the appropriate NWD District Support Planner with the link. 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. PROJECT INFORMATION

- a. **Decision Document.** The Lincoln Draw Feasibility Report and Environmental Assessment will be prepared in accordance with ER 1105-2-100, Appendix F Amendment #2. The approval level of the decision document is NWD. An Integrated report will be prepared.
- b. **Study/Project Description.** Lincoln Draw is a small left bank tributary of Big Creek, located in Ellis County, Kansas. The Lincoln Draw watershed is approximately 4.26 square miles. The upper portion of the watershed contains several significant road embankments with storm culverts that act as dry detention dams during heavy rains, although they were not specifically designed for this purpose. In the lower portion of the watershed, Lincoln Draw is contained within an underground tunnel through the urban area of the City of Hays. During large rain events there is potential for the capacity of the tunnel to be exceeded and the downtown area of Hays to experience flooding.
- c. **Alternatives Descriptions.** Structural flood mitigation measures reduce flood risk by reducing the frequency of the flooding hazard and/or the exposure of people and property to damaging floodwaters. These typically include levees, floodwalls, detention structures, etc.

Non-structural flood mitigation measures reduce flood risk by limiting the consequences (economic damages and life loss) caused by the flood hazard. These can include: structure acquisition and demolition/relocation, structure elevation, flood proofing, flood warning and emergency preparedness systems, and floodplain regulation. If an implementable fully non-structural alternative does not emerge, these actions will be evaluated for potential combination with a structural alternative and may also be identified for potential future action in a Floodplain Management Plan to be prepared by the project sponsor.

A past USACE investigation of Lincoln Draw resulted in a proposed project to increase the capacity of the existing upstream detention areas, but no project was constructed. Current preliminary investigation has indicated that this previous alternative is still technically and economically feasible and there is a Federal Interest in a reevaluation and update of this alternative applying current planning and design criteria and standards. Additional alternatives will only be formulated and evaluated if the previous Recommended Plan is shown to be unsupportable.

- d. **In-Kind Contributions.** The City of Hays will provide the following information and products to this study as in-kind contributions:
  - (1) Surveys. The City will contract directly with a local surveyor to provide current topographic and boundary surveys of the project areas.
  - (2) Soil Data. The City will contract directly with a local geotechnical contractor to collect soil samples and provide laboratory testing.
  - (3) NEPA data. The City will collect and provide all available local information and documentation necessary to complete the existing and future without project conditions portions of the required NEPA documentation.

#### 4. DISTRICT QUALITY ASSURANCE/CONTROL

All decision documents and products produced by the Sponsor, AE contractors, and the in-house Project Delivery Team (PDT), including supporting data, analyses, environmental compliance documents, etc., shall undergo District Quality Control (DQC) prior to Agency Technical Review (ATR). The Kansas City district shall manage DQC in accordance with the project Quality Management Plan. The DQC process shall include peer reviews by reviewers outside the PDT from each discipline and interdisciplinary reviews of all significant products by the complete PDT. A roster of the DQC peer reviewers is included in Attachment 1.

It is suggested that DQC review comments employ the same four part comment structure required for ATR (See Section 5.c) It is also suggested that DQC comments be documented in the DR Checks system.

The DQC process will result in preparation of a DQC Summary Report, summarizing the comments and highlighting the significant issues of review concern and their resolution. The DQC Summary Report will be provided to the ATR team at the time of their Draft Report review.

#### 5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). ATR is overseen by NWD and is conducted by a qualified team from outside the Kansas City district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel.

- a. Required ATR Team Expertise.** The ATR review team requires experienced reviewers in the appropriate disciplines listed below. Disciplines can be combined under a single reviewer if that reviewer meets the expertise required in both areas. All ATR team members shall be approved and certified to perform ATR according to the requirements established by the applicable Community of Practice or Center of Expertise. All ATR members in engineering disciplines shall have a Professional Engineer license.

ATR Team Members/Disciplines	Expertise Required
ATR Lead ( <i>May be combined with one of the disciplines below</i> )	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.
Planning/Plan Formulation	The Planning reviewer should be a senior water resources planner with experience in plan formulation for small flood risk management projects and be familiar with Continuing Authorities Program guidance and processes.
Economics	Economics reviewer should have extensive experience with socioeconomic studies for flood risk management studies and

	a thorough understanding of HEC-FDA and HEC-FIA.
Environmental Resources (NEPA)	Team member will be familiar with environmental laws, policies, requirements and procedures, habitat assessment, and the potential impacts typical of flood risk management features on the natural environment.
Hydrology and Hydraulic Engineering	Team member will need extensive H&H experience (15 years or more) and must be considered an expert in both hydrology and hydraulics. The reviewer must be familiar with watershed hydrology modeling, discharge-frequency evaluation, and the geometry and layout of urban flood risk management systems. This team member must have experience in the application, evaluation, and modeling of both structural and nonstructural flood risk management measures; and must have experience in both computer modeling using HEC-RAS and the necessary H&H contributions to HEC-FDA risk and uncertainty evaluation.
Geotechnical Engineering	Team member will have extensive experience in urban flood risk management design and performance evaluation. Experience with slope stability and underseepage analyses is essential. Familiarity with common slope stability and underseepage programs is recommended. This is a critical ATR team member, and should have a minimum of 15 years experience.
Civil Engineering	Team member will have experience in utility relocations, positive closure requirements, and internal drainage for flood risk management projects.
Cost Estimating	Cost DX Staff or Cost DX Pre-Certified Professional with experience preparing cost estimates for small flood risk management projects.
Real Estate	Team member shall be an experienced real estate reviewer with at least 10 years of similar experience including knowledge in Federal Property Acquisition Regulations, requirements for qualification of Lands, Easements, Rights-of-Ways, Relocations and Disposal areas for crediting cost sharing, and experienced with complex acquisitions and relocations. The reviewer must be familiar with USACE regulations and standards.

- b. Charge Document.** The District will prepare the charge document which clearly identifies the review requirements. This document must be completed prior to requesting an ATR team.
- 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, quality, or completeness 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 be 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.

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 may include 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:

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

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

## **6. 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. If determined needed, the IEPR panel 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 NWD Model 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 National 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 NWD Commander. Additional factors the NWD Commander might consider 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 type I IEPR will not be conducted for this project.** The project proposes the modification of existing embankments to improve their performance capability. Lift safety risks of non-performance will not be greater than in the existing condition.

Type II IEPR is not anticipated during the design and implementation phase based on the criteria for conducting Type II IEPR described in Paragraph 2 of Appendix E of EC 1165-2-209. Documentation for the waiver to this requirement will be presented upon completion of the engineering analysis and will address each of the following criteria:

- if the Federal action is justified by life safety or
- if failure of the project would pose a significant threat to human life;
- if 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;

- if the project design requires redundancy, resiliency, and/or robustness; and/or
- if the project has unique construction sequencing or a reduced or overlapping design construction schedule.

**b. Products to Undergo Type I IEPR.** None.

**c. Required Type I IEPR Panel Expertise.** An IEPR panel is not necessary for this study.

**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 NWD 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.

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

For CAP projects, ATR of the costs may be conducted by pre-certified district cost personnel within the region or by the Walla Walla Cost DX. 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.

## **9. MODEL CERTIFICATION AND APPROVAL**

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.

**a. EC 1105-2-412.** This EC does not cover engineering models used in planning. 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).

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

<b>Model Name and Version</b>	<b>Brief Description of the Model and How It Will Be Applied in the Study</b>	
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 has been used to evaluate and compare the future without- and with-project plans aid in the selection of a recommended plan to manage flood risk.	Approved
HEC-HMS (Version 3.3)	The HEC-HMS model was used to simulate the existing conditions run-off hydrographs resulting from rainfalls corresponding to the 1-, 2-, 5-, 10-, 25-, 50-, 100-, 250- and 500-year return periods.	Approved
HEC-RAS (Version 4.0)	Hydraulic modeling was developed using HEC-RAS 4.0 steady state option. The model was used to develop water surface profiles for the 1-, 2-, 5-, 10-, 25-, 50-, 100-, 250-, and 500 –year storm events. Model parameters were developed using ArcGIS, HEC-GeoRAS in conjunction with GIS data; and, where applicable, manual input.	Approved
HEC-FIA	The HEC-FIA (Flood Impact Analysis) software package analyzes the consequences from a flood event. It calculates damages to structures and contents, losses to agriculture, and estimates the potential for life loss. HEC-FIA can also assist Corps Planning studies by looking at single events deterministically to support the OSE account with Life Loss and population at risk, or through helping to determine the impacts to agriculture for typical events for the study region.	Approved
MCACES/MII for Cost Estimating - Current Version	Corps required software system for cost estimating.	Approved

## 10. REVIEW SCHEDULES AND COSTS

**a. ATR Schedule and Cost.** It is anticipated that completion of the ATR for the Draft and Final Report, and limited intermediate analyses, including the District responses to ATR comments, will cost approximately \$50K.

**b. Type I IEPR Schedule and Cost.** Not applicable.

## **11. PUBLIC PARTICIPATION**

A public meeting will be held early in the plan formulation process. State and Federal resource agencies with regulatory review responsibilities will be contacted for coordination as required by applicable laws and procedures. The City will present results of the study process to the City Council for the City of Topeka once the integrated report is completed. Upon completion of the ATR, the draft integrated report will be shared and the public will be afforded an opportunity to review and comment.

## **12. REVIEW PLAN APPROVAL AND UPDATES**

The NWD Commander is responsible for approving this review plan and ensuring that use of the NWD Model 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 Kansas City District is responsible for keeping the review plan up to date. Minor changes to the review plan since the last approval are documented in Attachment 3.

## **13. REVIEW PLAN POINTS OF CONTACT**

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

- Eric Lynn, Planner/Project Manager, [eric.s.lynn@usace.army.mil](mailto:eric.s.lynn@usace.army.mil), 816 389 3258
- John Grothaus, Chief, Plan Formulation Section, [john.j.grothaus@usace.army.mil](mailto:john.j.grothaus@usace.army.mil), 816-389-3110
- Jeremy Weber, NWD Planner, [Jeremy.j.weber@usace.army.mil](mailto:Jeremy.j.weber@usace.army.mil), 503-808-3858

**ATTACHMENT 1: TEAM ROSTERS****PRODUCT DELIVERY TEAM (PDT)**

<b>Discipline</b>	<b>Name</b>	<b>Office Symbol/Agency</b>	<b>Telephone Number</b>
Planner/PM		CENWK-PM-PF	
Technical Lead			
Economics		CENWK-PM-PF	
Hydrology & Hydraulics		CENWK-ED-HH	
Civil Design		CENWK-ED-GC	
Geotechnical		CENWK-ED-GD	
Structural		CENWK-ED-DS	
Geology		CENWK-ED-GG	
Cost Estimating		CENWK-ED-DC	
Environmental Resources		CENWK-PM-PR	
Cultural Resources		CENWK-PM-PR	
Real Estate		CENWK-RE-C	
GIS		CENWK-ED-S	

**DISTRICT QUALITY CONTROL (DQC) PEER REVIEW TEAM**

<b>Discipline</b>	<b>Name</b>	<b>Office Symbol/Agency</b>	<b>Telephone Number</b>
Plan Formulation		PM-PF	
Economics		PM-PF	
Hydrology and Hydraulics		ED-HH	
Civil Design		ED-GC	
Geotechnical		ED-GD	
Structural		ED-DS	
Geology		ED-GG	
Cost Estimating		ED-DC	
Environmental/Cultural Resources		PM-PR	
Real Estate		RE	

**ATR TEAM**

<b>Discipline</b>	<b>Name</b>	<b>Office Symbol/Agency</b>	<b>Telephone Number</b>
ATR Lead & Planning	TBD		
Environmental Resources	TBD		
Civil Engineering	TBD		
Geotechnical	TBD		
Hydrology & Hydraulic Engineering	TBD		
Real Estate	TBD		
Cost Estimating	TBD	Cost MCX - NWW	
Economics	TBD		

**ATTACHMENT 2: STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS****COMPLETION OF AGENCY TECHNICAL REVIEW**

The Agency Technical Review (ATR) has been completed for the Lincoln Draw, Hays, KS Section 205 Feasibility Study and Environmental Assessment. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-209. 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™.

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*TBD*  
ATR Team Leader

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Date

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*Eric S. Lynn*  
Project Manager , *CENWK*

---

Date

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*Jeremy Weber*  
Review Management Office, *CENWD*

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Date

**CERTIFICATION OF AGENCY TECHNICAL REVIEW**

Significant concerns and the explanation of the resolution are as follows: *Describe the major technical concerns and their resolution.* As noted above, all concerns resulting from the ATR of the project have been fully resolved.

---

*John J. Grothaus*  
Continuing Authorities Program Manager  
*CENWK-PM-P*

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Date

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*Jennifer L. Switzer*  
Chief, Planning Branch  
*CENWK-PM-P*

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Date

**ATTACHMENT 3: REVIEW PLAN REVISIONS**

<b>Revision Date</b>	<b>Description of Change</b>	<b>Page / Paragraph Number</b>

**ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS**

<b><u>Term</u></b>	<b><u>Definition</u></b>	<b><u>Term</u></b>	<b><u>Definition</u></b>
AFB	Alternative Formulation Briefing	NER	National Ecosystem Restoration
ASA(CW)	Assistant Secretary of the Army for Civil Works	NEPA	National Environmental Policy Act
ATR	Agency Technical Review	NHPA	National Historic Preservation Act
CSDR	Coastal Storm Damage Reduction	O&M	Operation and maintenance
CWA	Clean Water Act	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	Engineer Regulation	PL	Public Law
FDR	Flood Damage Reduction	POH	U.S. Army Corps of Engineers, Honolulu District
FEMA	Federal Emergency Management Agency	POD	U.S. Army Corps of Engineers, Pacific Ocean Division
FRM	Flood Risk Management	QMP	Quality Management Plan
FSM	Feasibility Scoping Meeting	QA	Quality Assurance
GRR	General Reevaluation Report	QC	Quality Control
HEP	Habitat Equivalency Protocol	RED	Regional Economic Development
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMC	Risk Management Center
IEPR	Independent External Peer Review	RMO	Review Management Organization
ITR	Independent Technical Review	RTS	Regional Technical Specialist
IWR	Institute of Water Resources	SAR	Safety Assurance Review
MSC	Major Subordinate Command	USACE	U.S. Army Corps of Engineers
NED	National Economic Development	WRDA	Water Resources Development Act