



DEPARTMENT OF THE ARMY

MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS
P.O. BOX 80
VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO
ATTENTION OF:

CEMVD-PD-KM

31 January 2013

MEMORANDUM FOR Commander, Memphis District, ATTN: CEMVM-PM-P

SUBJECT: Review Plan for Lower Cache River, Arkansas, Section 1135 (P2# 13022)

1. References:

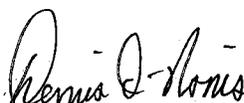
- a. Memorandum, CEMVM-DE, 17 December 2012, subject as above (encl 1).
- b. Memorandum, CEMVD-RB-T, 24 January 2013, subject as above (encl 2).
- c. EC 1165-2-214, Civil Works Review, 15 December 2012.

2. MVD staff has reviewed the Review Plan (RP) and related documents for the subject project. The RP was also reviewed and endorsed by the Review Management Organization (encl 2). The RP was developed in accordance with reference 1.c., 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.

3. The subject RP is hereby approved. Please post the approved RP to your web page.

4. The MVD point of contact for this action is Ms. Sarah Palmer, CEMVD-PD-KM, (601) 634-5910.

2 Encls


DENNIS O. NORRIS, P.E.
Chief, Regional and Middle District Support
Team, Vicksburg and Memphis



Reply to
Attention of:

DEPARTMENT OF THE ARMY
MEMPHIS DISTRICT CORPS OF ENGINEERS
167 NORTH MAIN STREET B-202
MEMPHIS, TENNESSEE 38103-1894

CEMVM-PM-P

17 December 2012

MEMORANDUM FOR: Commander, Mississippi Valley Division (ATTN: CEMVD-RB-T,
Mr. Robert Fitzgerald)

SUBJECT: Review Plan for Lower Cache River, Arkansas, Section 1135 (P# 130022)

1. The review plan for the Lower Cache River, Arkansas located near Clarendon, AR is attached for Mississippi Valley Division's review and approval. The review plan was prepared in accordance with EC 1165-2-209.
2. The Lower Cache River, Arkansas Project is currently in the implementation phase. As required by EC 1165-2-209, request review and approval of the Review Plan.
3. MVM Points of Contract are: Mr. Jason Dickard, Project Manager, (901) 544-0730 or Ms. Jackie Whitlock, CAP Program Manager, (901) 544-3832.

A handwritten signature in black ink that reads "Thomas L. Minyard".

THOMAS L. MINYARD, P.E.
Chief, Engineering & Construction Division

Encl

Encl 1

**Review Plan
Using the MVD Model Review Plan**

*Lower Cache River, Arkansas
Section 1135 Project*

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REVIEW PLAN
Lower Cache River, Arkansas

b. Study/Project Description. *The Lower Cache River, Arkansas project is located in Monroe County partially within the boundaries of the Cache River National Wildlife Refuge. The Cache River is a tributary to the White River and the confluence of the two rivers is approximately 1.5 miles north of Clarendon, Arkansas and is listed on the Ramsar List of Wetlands of International Importance as of 21 November 1989. In the early 1970's, approximately 7 miles of the Cache River were channelized from the mouth of Bayou DeView to the White River that resulted in the isolation of several naturally occurring meanders. Earthen plugs were constructed to keep the flow within the channelized section of the Cache River that changed the meanders from a flowing river into standing backwater. The purpose of this Section 1135 project is to restore the original riverine flow to the upper three meanders and improve aquatic habitat to the Cache River. The estimated cost of the project is \$5 million that includes the removal of (3) earthen plugs, construction of (3) weirs, and construction of (1) cross-ditch closure structure. The non-Federal Sponsor for this project is the City of Clarendon, Arkansas.*

c. Factors Affecting the Scope and level of Review. *Factors that affected the scope and level of review included accessibility, environmental conditions, and constructability. Due to limited access, the project can only be constructed from water access. Land access is not available from the west side of the Cache River and the east side of the project is surrounded by wetlands. Based upon these limiting factors, the project sites are only accessible by the Cache River. The water level of the Cache River fluctuates with backwater from the White River. This directly impacts the number of days that accommodate water access to the project sites for equipment, material, and personnel.*

Local residents, the City of Clarendon, AR, The Nature Conservancy, the Arkansas Natural Heritage Commission, the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency are all in support of the project and the Cache River/Bayou DeView Improvement District does not have concerns.

The Cache River project has already been advertised twice. The first advertisement concluded on 9 August 2012 with only (1) bidder that submitted a non-awardable bid. The second advertisement is in progress with the evaluation of proposals.

d. In-Kind Contributions. *Products and analyses provided by non-Federal sponsors as in-kind services are subject to District Quality Control (DQC) and ATR, similar to any products developed by USACE. The non-Federal Sponsor has agreed to perform approximately \$10,000 of in-kind services during the construction of the project by installing vegetative dikes.*

4. District Quality Control (DQC).

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC prior to ATR. 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 in accordance with MVD and district Quality Management Plan. Any discrepancies between a reviewer and a Project Delivery Team (PDT) member will be resolved face-to-face. If a concern cannot be satisfactorily resolved between the DQC team and the PDT, it will be elevated to the section supervisor for further resolution.

Detailed Project Report. *The Detailed Project Report was approved in February 2011.*

Plans and Specifications. *The DQC review of Plans and Specifications for the Lower Cache River project occurred 9-24 March 2012. The backcheck of all comments was closed by 30 May 2012. Biddability, Constructability, Operability, Environmental (BCOE) review of the Plans and Specifications occurred 25 April to 4 May 2012 and the Certification Memorandum was signed on 1 June 2012. All comments for both the DQC and the BCOE were submitted, answered, and backchecked via DrChecks.*

REVIEW PLAN
Lower Cache River, Arkansas

7. 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 at <https://kme.usace.army.mil/EC/cost/CostAttr/default.aspx>. 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.

8. 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. EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue 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).

Planning and Engineering Models. The following models are anticipated to be used in the development of the decision document: *Micro Model and HEC-RAS Model*

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study
<i>Micro Model</i>	<i>The Micro Model is an empirically based approach where adjustments to the model are made until prototype bathymetry data are reproduced. The micro model was selected to complement other numerical model techniques and provided a visual demonstration of potential bed development within the canal and restored meander segments of the project area.</i>
<i>HEC-RAS Model HEC-1 (1988)</i>	<i>The Authorized Project flow computed from the drainage equation was the focus of modeling. The calculated discharge provided the baseline condition used for comparing alternatives. Additional steady flow discharges were used in the HEC-RAS models. The annual frequency flow values were taken from the calibrated HEC-1 model developed for the Cache River and Bayou DeView basins in 1988.</i>

9. Review Schedule And Cost.

- Detailed Project Report approved February 2011*
- District Quality Control (DQC) Review – Completed May 2012*
- Agency Technical Review (ATR) – Completed May 2012*
- Biddability, Constructability, Operability, and Environmental (BCOE) Review – Completed June 2012*
- Industry Day – Completed September 2012*
- Value Engineering Study – Completed September 2012*
- Plans and Specifications for Solicitation #2 – Completed October 2012*

REVIEW PLAN
Lower Cache River, Arkansas

ATR Schedule and Cost.

ATR Activity	Product	Duration	Schedule Dates
ATRT Review & Comment	Initial Comments	7 days	10-16 April 2012
PDT Evaluations	Responses	7 days	17-23 April 2012
ATRT Back check	Comment Resolution/Close Comments	4 days	24-27 April 2012
Resolution Conference Call	(only if needed)	As needed	
ATRT Lead Certification Report	Comments Closure/Resolution Status	6 days	30 April - 7 May 2012

The actual cost for the ATR of the Lower Cache River, Arkansas project Plans and Specifications was \$21,100.00.

10. 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. *A Public Notice of the availability of the Environmental Assessment (EA) and Draft Feasibility Report was sent out on 10 December 2010. The Memphis District received four letters in response to the Public Notice. The Arkansas Natural Heritage Commission, U.S. Fish and Wildlife Service, and U.S. Environmental Protection Agency are in support of the project. The Cache River/Bayou DeView Improvement District does not have any concerns with the project. These letters were documented and included in the Lower Cache Detailed Project Report dated February 2011.*

11. Review Plan Approval And Updates.

The MVD DST Chief is responsible for approving this review plan and ensuring that use of the MVD 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 home district is responsible for keeping the review plan up to date. Minor changes to the review plan since the last MVD approval are documented in Attachment 2. Significant changes to the review plan (such as changes to the scope and/or level of review) should be reapproved by MVD following the process used for initially approving the plan. Significant changes may result in MVD determining that use of the MVD Model 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. The latest version of the review plan, along with the MVD approval memorandum, will be posted on the home district's webpage.

REVIEW PLAN
Lower Cache River, Arkansas

Attachment 1: Team Rosters

MEMPHIS PDT ROSTER

<u>Role</u>	<u>PDT Member</u>	<u>Telephone</u>	<u>Email</u>
Project Management	Jason Dickard	901-544-0730	Jason.E.Dickard@usace.army.mil
Project Management	Clyde Hunt	901-544-3115	Clyde.E.Hunt@usace.army.mil
Civil Design	Carter Bagley	901-544-0661	Carter.B.Bagley@usace.army.mil
Civil Design	Jamie Nabakowski	901-544-3433	James.Nabakowski@usace.army.mil
Hydrology & Hydraulic	Andy Gaines	901-544-3392	Roger.A.Gaines@usace.army.mil
Cost Engineering	Richard Hurst	901-544-0886	Richard.H.Hurst@usace.army.mil
Geotechnical	Norman Newman	901-544-3815	Norman.E.Newman@usace.army.mil
Environmental	Mark Smith	901-544-0670	Mark.R.Smith@usace.army.mil
Environmental	Marsha Raus	901-544-3455	Marsha.L.Raus@usace.army.mil
Real Estate	Douglas Young	901-544-3154	Douglas.B.Young@usace.army.mil
Construction	Tom Morgan	901-544-3114	Thomas.P.Morgan@usace.army.mil
Construction	John Holloway	901-544-0763	John.R.Holloway@usace.army.mil
Area Office	Loy Hamilton	870-238-7983	Loy.A.Hamilton@usace.army.mil
Contracting	Monica Moody	901-544-0838	Monica.A.Moody@usace.army.mil

Non-Federal Sponsor

<u>Role</u>	<u>Name</u>	<u>Telephone</u>	<u>Email</u>
Mayor Clarendon, AR	James Stinson, III	870-747-3802	clarendoncityhall@centurytel.net
City of Clarendon POC	Roger Mangham	501-663-6699	Rmangham@tnc.org

MVD (DST)

<u>Role</u>	<u>Name</u>	<u>Telephone</u>	<u>Email</u>
MVD	Brian Chewning	601-634-5836	Brian.Chewning@usace.army.mil

ATR TEAM ROSTER

<u>Role</u>	<u>Name</u>	<u>Telephone</u>	<u>Email</u>
ATR Lead/H&H	Peter Russell	314-331-8371	Peter.M.Russell@usace.army.mil
Environmental	Brian LaBarre	601-631-5437	Brian.E.LaBarre@usace.army.mil
Civil	Carol Kreutzer	314-331-8335	Carol.A.Kreutzer@usace.army.mil
Cost Engineering	Michael McGill	918-669-4308	Michael.J.McGill@usace.army.mil
Geotechnical	Charles Bishop	309-794-5561	Charles.E.Bishop@usace.army.mil
Real Estate	Michelle Marceaux	504-862-1190	Michelle.S.Marceaux@usace.army.mil
Construction	David Bell	662-873-8123	David.Bell@usace.army.mil

REVIEW PLAN
Lower Cache River, Arkansas

MVD CAP Review Plan Checklist

Date:	17 December 2012
Originating District:	Memphis District (MVM)
Project/Study Title:	Lower Cache River, Arkansas
P2# and AMSCO#:	P2: 130022 AMSCO: 130022
District POC:	Jason Dickard (901)544-0730
MSC Reviewer:	
CAP Authority:	Section 1135
Other Program Directed to follow CAP Processes:	

Please fill out this checklist and submit with the draft Review Plan when coordinating with the MSC. Any evaluation boxes checked "No" may indicate the project may not be able to use the MVD Model Review Plan. Further explanation may be needed or a project specific review plan may be required. Additional coordination and issue resolution may be required prior to MSC approval of the Review Plan. Checklist may be limited to Section I or Section II or Both, depending on content of review plan (or subsequent amendments).

Section I - Decision Documents

REQUIREMENT	EVALUATION
1. Is the Review Plan (RP) for a Continuing Authorities Project Or Other Program Directed to follow CAP Processes?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
a. Does it include a cover page identifying it as following the Model RP and listing the project/study title, originating district or office, and date of the plan?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does it include a table of contents?	b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
c. Is the purpose of the RP clearly stated?	c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
d. Does it reference the Project Management Plan (PMP) of which the RP is a component?	d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
e. Does it succinctly describe the levels of review: District Quality Control (DQC), Agency Technical Review (ATR), and Independent External Peer Review (IEPR) if applicable for Sec 103 or Sec 205?	e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
f. Does it include a paragraph stating the title, subject, and purpose of the decision document to be reviewed?	f. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
g. Does it list the names and disciplines of the Project Delivery Team (PDT)?*	g. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p><i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i></p> <p>Comments:</p>	

REVIEW PLAN
Lower Cache River, Arkansas

7. Does the RP address how the review will be documented?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does the RP address the requirement to document ATR and IEPR comments using Dr Checks?</p> <p>b. Does the RP explain how the IEPR will be documented in a Review Report?</p> <p>c. Does the RP document how written responses to the IEPR Review Report will be prepared?</p> <p>c. Does the RP detail how the district will disseminate the final IEPR Review Report, USACE response, and all other materials related to the IEPR on the internet and include them in the applicable decision document?</p> <p>Comments:</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>d. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p>
8. Does the RP address Policy Compliance and Legal Review?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
9. Does the RP present the tasks, timing and sequence (including deferrals), and costs of reviews?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it provide a schedule for ATR including review of the Alternative Formulation Briefing (AFB) materials and final report?</p> <p>b. Does it present the timing and sequencing for IEPR?</p> <p>c. Does it include cost estimates for the reviews?</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>10. Does the RP indicate the study will address Safety Assurance factors? Factors to be considered include:</p> <ul style="list-style-type: none"> ● Where failure leads to significant threat to human life ● Novel methods\complexity\ precedent-setting models\policy changing conclusions ● Innovative materials or techniques ● Design lacks redundancy, resiliency of robustness ● Unique construction sequence or acquisition plans ● Reduced\overlapping design construction schedule 	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments:</p>
11. Does the RP address opportunities for public participation?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
12. Does the RP indicate ATR of cost estimates will be conducted by pre-certified district cost personnel who will coordinate with the Walla Walla Cost DX?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
13. Has the approval memorandum been prepared and does it accompany the RP?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

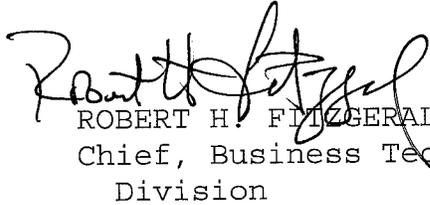
REVIEW PLAN
Lower Cache River, Arkansas

<p>7. Does the RP explain how the reviews will be documented?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does the RP address the requirement to document ATR comments using Dr Checks and Type II IEPR published comments and responses pertaining to the design and construction activities summarized in a report reviewed and approved by the MSC and posted on the home district website?</p> <p>b. Does the RP explain how the Type II IEPR will be documented in a Review Report?</p> <p>c. Does the RP document how written responses to the Type II IEPR Review Report will be prepared?</p> <p>d. Does the RP detail how the district/MVD will disseminate the final Type II IEPR Review Report, USACE response, and all other materials related to the Type II IEPR on the internet?</p> <p>Comments: Type II IEPR not required</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>d. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p>
<p>8. Has the approval memorandum been prepared and does it accompany the RP?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

MEMORANDUM FOR CEMVD-PD-KM (Dennis Norris)

SUBJECT: Review Plan for Lower Cache River, Arkansas,
Section 1135 (P2#130022)

1. Reference memorandum, CEMVM-PM-P, 17 December 2012, subject as above.
2. This office concurs with subject Review Plan recommendations, however, future submissions should not list Agency Technical Review team members. The task of assigning these team members is reserved for the MSC staff.
3. The RB-T point of contact is Mr. Will Bradley, 601-634-5644.


ROBERT H. FITZGERALD, P.E.
Chief, Business Technical
Division