DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DIVISION, GREAT LAKES AND OHIO RIVER
CORPS OF ENGINEERS
550 MAIN STREET
CINCINNATI, OH 45202-3222

CELRD-PDO

26 Dec 12

MEMORANDUM FOR Commander, U.S. Army Engineer District, Huntington, Attention, Amy Jo Riffee (CELRH-EC-Q), Huntington District, Corps of Engineers, 502 Eighth Street, Huntington, WV 25701

SUBJECT: Review Plan for Buchanan County, Virginia, Section 202 Nonstructural Flood Damage Reduction Project

1. The attached Review Plan (RP) for Buchanan County, Virginia, Section 202 Nonstructural Flood Damage Reduction Project was presented to the Great Lakes and Ohio River Division for approval in accordance with EC 1165-2-209 "Civil Works Review" dated 31 January 2010.

2. The Buchanan County, VA project area includes the entire county except for the Grundy project area. Buchanan County, VA has been devastated by recurring flooding. In particular, the April 1977 flood, which was approximately equivalent to a 100-year flood event within the project area, caused extensive damages to residential and nonresidential structures. Congress passed the Energy and Water Development Appropriations Act of 1981 (PL 96-367) authorizing the development of flood-protection measures for the Levisa and Tug Forks of the Big Sandy River Basin. Section 202 of this legislation directed the Secretary of the Army to initiate design and construction of flood damage reduction measures in those areas affected by the 1977 flood. Further, Section 105 of PL 104-206 (September 1996) added that "nonstructural flood control measures implemented under Section 202 of PL 96-367 shall prevent future losses that would occur from a flood equal in magnitude to the April 1977 flood by providing protection from the April 1977 flood level or the 100-year frequency event, whichever is greater."

3. The nonstructural measures evaluated for the project area include flood proofing, permanent flood plain evacuation, dry flood proofing or relocation of two schools, implementation of a Flood Warning and Emergency Evacuation Plan (FWEEP), and flood insurance/flood plain zoning. The Chief of the Policy Planning Division for the Directorate of Civil Works approved the Detail Project Report (DPR) on 14 August 2003. The DPR authorized a nonstructural project that would include voluntary flood proofing, flood plain evacuation, dry flood proofing or relocation of two schools, continued participation in the National Flood Insurance Program (NFIP), and FWEEP as components of a comprehensive flood damage reduction plan.

4. The RP defines the scope and level of peer review for the activities to be performed for the subject project. The USACE LRD Review Management Organization (RMO) has reviewed the attached RP and concurs that it describes the scope of review for work phases and addresses all appropriate levels of review consistent with the requirements described in EC 1165-2-209.

5. I concur with the recommendations of the RMO and approve the enclosed RP for the Buchanan County, VA, Section 202 Nonstructural Flood Damage Reduction Project.

6. The District is requested to post the RP to its website. Prior to posting, the names of all individuals identified in the RP should be removed.

7. If you have any questions please contact Dr. Hank Jarboe, CELRD-PDS-P, at (513) 684-6050.

Margaret W. Burcham
MARGARET W. BURCHAM
Brigadier General, USA
Commanding

Encl
1. Memo from John Bock, 15 November 2012
2. Review Plan

DEPARTMENT OF THE ARMY
HUNTINGTON DISTRICT, CORPS OF ENGINEERS
502 EIGHTH STREET
HUNTINGTON, WV 25701

REPLY TO
ATTENTION OF

CELRH-EC

15 November 2012

MEMORANDUM FOR CELRD-PDS-H (Robert Iseli), Great Lakes & Ohio River Division, 550 Main Street #10032, Cincinnati Oh 45202-3222

SUBJECT: Review Plan for Buchanan County, Virginia, Section 202 Nonstructural Flood Damage Reduction Project

1. In Accordance with EC 1165-2-209, attached is the initial submission of the Review Plan for Buchanan County, Virginia, Section 202 Nonstructural Flood Damage Reduction Project for your approval. The review plan does not include Agency Technical Review (ATR) outside of the District because ATR is not required for any of the products addressed in this review plan. Independent External Peer Review (IEPR) is not recommended since this project is nonstructural in nature and does not contain the typical risk associated with traditional flood damage reduction projects.

2. Please direct any question or comments to Amy Jo Riffee at 304-399-5544. After your approval, the Review Plan will be posted to the CELRH Intranet.

for Margaret W Wilson

Encl

JOHN R. BOCK, P.E.
Chief, Engineering and Construction Division
Huntington District Dam Safety Officer

CF:
CELRH-EC-Q
CELRH-PM-PP-P

REVIEW PLAN

BUCHANAN COUNTY, VIRGINIA
SECTION 202 NONSTRUCTURAL
FLOOD DAMAGE REDUCTION PROJECT

Design and Construction Activities

Huntington District

MSC Approval Date: *Pending*
Last Revision Date: *None*

US Army Corps
of Engineers ®

REVIEW PLAN

BUCHANAN COUNTY, VIRGINIA
SECTION 202 NONSTRUCTURAL
FLOOD DAMAGE REDUCTION PROJECT
Design and Construction Activities

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS 3
2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION 3
3. PROJECT INFORMATION 4
4. DISTRICT QUALITY CONTROL (DQC) 6
5. AGENCY TECHNICAL REVIEW (ATR) 7
6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR) 8
7. POLICY AND LEGAL COMPLIANCE REVIEW 9
8. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION 9
9. REVIEW SCHEDULES AND COSTS 10
10. PUBLIC PARTICIPATION 10
11. REVIEW PLAN APPROVAL AND UPDATES 10
12. REVIEW PLAN POINTS OF CONTACT 11

ATTACHMENT 1: TEAM ROSTERS 12
ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW 13
ATTACHMENT 3: REVIEW PLAN REVISIONS 14

1. PURPOSE AND REQUIREMENTS

a. **Purpose.** This Review Plan (RP) defines the scope and level of peer review for the design and construction activities to be performed for the Buchanan County, Virginia, Section 202 Nonstructural Flood Damage Reduction Project. This RP addresses all project elements except floodproofing of Hurley High School and the Buchanan County Career Technology Center. Funding has not been received nor have decisions been made as to how these structures will be floodproofed. The RP will be revised in the future to address those structures. The general location of Buchanan County is shown in Figure 1 below.

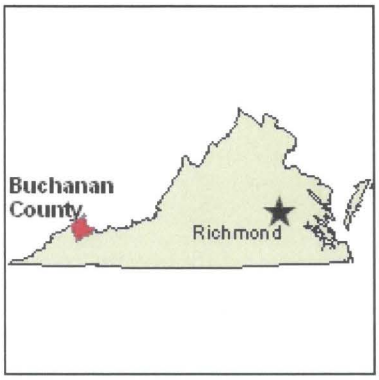


Figure 1 – General location of Buchanan County, Virginia

b. **References**

(1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010.
(2) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006.
(3) Buchanan County, Section 202 Nonstructural, Flood Damage Reduction Project, Project Management Plan.
(4) Buchanan County Nonstructural Project, Detailed Project Report, Appendix U, Section 202 General Plan, Jan 2002.

c. **Requirements.** This RP 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. The EC outlines four general levels of review: District Quality Control (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review.

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

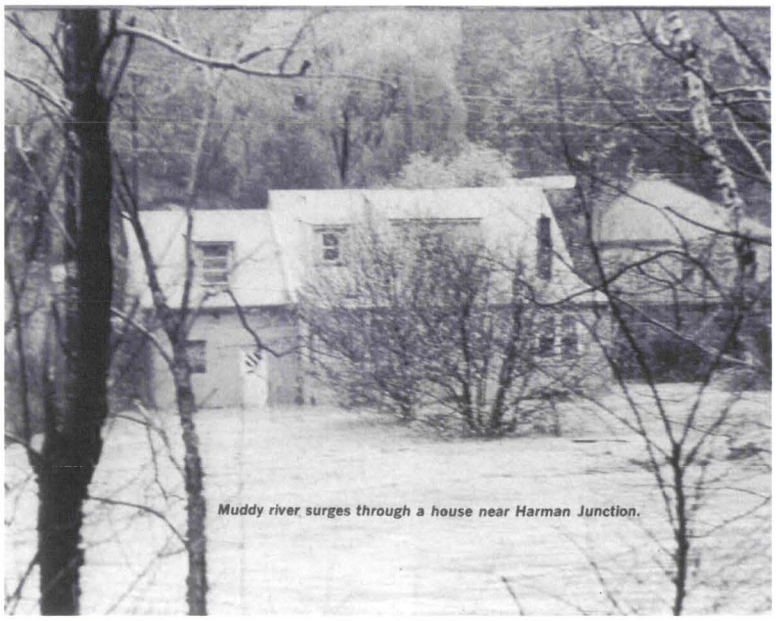
The RMO is responsible for managing the overall peer review effort described in this RP. The RMO for implementation documents is typically either a Major Subordinate Command (MSC) or the Risk Management Center (RMC). The RMO for the peer review effort described in this RP is the Great Lakes and Ohio River Division (LRD).

The Flood Risk Management Planning Center of Expertise (PCX), Ecosystem Restoration PCX, and the Cost Engineering Directory of Expertise (DX) were not involved in the development or review of the Detailed Project Report (DPR). The DPR was completed in 2002, prior to the requirements for PCX and DX involvement. Since this RP is for the design and construction activities, the Flood Risk Management PCX and Ecosystem Restoration PCX will not review this RP.

The RMO will coordinate with the Cost Engineering DX to ensure the appropriate expertise is included on the ATR teams to assess the adequacy of cost estimates, construction schedules, and contingencies.

3. PROJECT INFORMATION

a. **Project Description.** Buchanan County is located in the southwestern portion of Virginia. It is bordered by Dickenson County, Virginia, to the southwest; Russell County, Virginia, to the south; Tazewell County, Virginia, to the southeast; McDowell County, West Virginia, to the northeast; Mingo County, West Virginia, to the north; and Pike County, Kentucky, to the northwest. The total land area in Buchanan County encompasses 508 square miles. The population of Buchanan County was 24,098 in 2010. The county seat of Buchanan County is the Town of Grundy. The Buchanan County project area includes the entire county except for the Grundy project area.



Buchanan County house flooded in April 1977 flood

The project area has been devastated by recurring flooding. In particular, the April 1977 flood, which was approximately equivalent to a 100-year flood event within the project area, caused extensive damages to residential and nonresidential structures. Homes and businesses were completely inundated, causing severe financial losses to the residents. The flood damage depicted in the photograph above is from the April 1977 flood. This flood event graphically demonstrates the extent of flood damage endured by the community on a recurring basis. The April 1977 flood is the flood of record for Buchanan County.

In a direct response to the 1977 flood, Congress passed the Energy and Water Development Appropriations Act of 1981 (PL 96-367). This act authorized the development of flood-protection measures for the Levisa and Tug Forks of the Big Sandy River Basin. Section 202 of this legislation directed the Secretary of the Army to initiate design and construction of flood damage reduction measures in those areas affected by the 1977 flood. Further, Section 105 of PL 104-206 (September 1996) added that "nonstructural flood control measures implemented under Section 202 of PL 96-367 shall prevent future losses that would occur from a flood equal in magnitude to the April 1977 flood by providing protection from the April 1977 flood level or the 100-year frequency event, whichever is greater."

Emergency and recovery costs from the recurring flooding drain the already limited county and state revenues. Loss of structures and businesses due to flooding erodes the meager tax base of the county, making recovery more difficult with each event. In addition to the severe financial losses incurred due to the frequent flooding in the area, there is an adverse psychological effect on the population. The prospect of future flooding discourages proper maintenance and repair of structures. This in turn causes early deterioration of dwellings and business structures and accounts for a large number of floodplain structures.

The nonstructural measures evaluated for the project area include floodproofing, permanent floodplain evacuation, dry floodproofing or relocation of two schools, implementation of a ~~a~~ Flood Warning and Emergency Evacuation Plan (FWEEP), and flood insurance/floodplain zoning. These measures have proven to be very effective flood damage reduction measures in areas where scattered and low-density flood prone development prevails over extensive reaches of the floodplain, such as found in the project area. These measures have been effectively implemented by the Corps in the Tug Fork areas of Williamson, Matewan, Upper Mingo County, Lower Mingo County, Wayne County, and McDowell County, West Virginia; Martin, South Williamson, Martin County, and Pike County, Kentucky; and Grundy, Virginia.

Extensive evaluations showed that traditional flood protection solutions, such as upstream impoundments, floodwalls/levees, and channel modification, were not a viable solution for Buchanan County. These alternatives are environmentally-damaging and are not effective measures to provide protection within the project area. The DPR, completed in January 2002, authorized a nonstructural project that would include voluntary floodproofing, floodplain evacuation, dry floodproofing or relocation of two schools, continued participation in the National Flood Insurance Program (NFIP), and FWEEP as components of a comprehensive flood damage reduction plan. An Independent Technical Review of the DPR was completed in April 2002. The Chief of the Policy Planning Division for the Directorate of Civil Works approved the DPR on 14 August 2003.

b. **Floodproofing, Permanent Floodplain Evacuation, and Emergency Evacuation Plan.** The following paragraphs indicate the current status of each project feature at the time of preparation of this RP:

(1) **Floodproofing.** Due to lack of funding, the floodproofing portion of the project has not begun. Applications for floodproofing have not yet been solicited.

(2) **Permanent floodplain evacuation.** As with floodproofing, due to lack of funding the acquisition portion of the project has not begun. Applications for acquisition have not yet been solicited.

(3) **Dry floodproofing or relocation of schools.** Hurley High School and the Buchanan County Technology and Career Center were flooded in 1977. Ringwalls may be constructed around

these schools to accomplish dry floodproofing or the schools may be relocated to flood-safe areas. The selected remedy will determine the level of review. However, since the decision has not yet been made, the schools will not be addressed further in this RP. The RP will be updated when that decision has been made and funding has been received in order to proceed with that component of the project.

(4) **FWEEP.** The Project Cooperation Agreement (PCA), executed on 29 April 2005, authorized an Emergency Evacuation Plan (EEP) instead of the FWEEP that was described in the DPR. The EEP is currently being prepared by the Huntington District.

(5) **Flood insurance/floodplain zoning.** Buchanan County participates in the NFIP. Flood insurance is available for purchase by those living in the project area. The county is responsible for enforcing floodplain zoning.

This RP covers the EEP that is currently being prepared and future deliverables related to floodproofing and permanent floodplain acquisition.

c. Factors Affecting the Scope and Level of Review.

The Buchanan County project is a nonstructural project that does not include any impoundments, flood walls, or levees. In the future, it could include a ringwall(s); if it does, then the RP will be modified to address the ringwall(s).

From a life safety perspective, there is minimum risk. Raising-in-place of structures is not challenging, from a design perspective. This project is a nonstructural project and the threat to human life is not significant.

d. In-Kind Contributions. The Non-Federal Cost Share Sponsor for this project is the Buchanan County Board of Supervisors, Buchanan County, Virginia. There are no in-kind services anticipated as part of the cost share. The projected total project cost is $119 million. Since completion of the DPR, the Corps has received $517,776 in Federal funds for implementation of the project, including $75,000 in FY13.

4. DISTRICT QUALITY CONTROL (DQC)

All implementation documents 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 Huntington District shall manage DQC. Documentation of DQC activities is required and shall be in accordance with the Quality Manual of the District and LRD as managed in Qualtrax.

DQC is completed in accordance with the LRD Regional Business Processes Manual (the Regions Quality Management Plan). The LRD Regional Business Processes Manual is an ISO 9001-certified Quality Management System. DQC includes Quality Production, Internal Quality Checks and Reviews, Design Checks, and Project Delivery Team (PDT) Reviews as described in procedure 08504 LRD - QC / QA Procedures for Civil Works.

a. **Documentation of DQC.** In accordance with 08504 LRD - QC / QA Procedures for Civil Works, all drawings, computations, quantity estimates, and analyses provided to the DQC team for review will be annotated to show the initials of the designer and the checker and the date of the action.

b. **Products to Undergo DQC.** All Detailed Design Reports (DDRs), Plans & Specifications (P&S), and the EEP will undergo DQC in accordance with 08504 LRD - QC / QA Procedures for Civil Works.

c. **Required DQC Expertise.** In accordance with 08504 LRD - QC / QA Procedures for Civil Works, anyone conducting design checks and reviews will be qualified to originate the design that they are checking. The disciplines involved in the DQC review will depend on the project feature being designed but will generally follow those presented in Table 2 of Attachment 1.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all implementation documents per EC 1165-2-209 (note that DDRs and P&S produced before the implementation of EC 1165-2-206, 31 January 2010, underwent Independent Technical Review in accordance with the quality control requirements in effect at the time). 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 MSC.

a. **Products to Undergo ATR.**
   (1) **Floodproofing.** USACE does not prepare P&S for raising-in-place of individual structures. General guide plans are prepared and provided to participating landowners who hire their own contractors to accomplish the necessary work. Neither the general guide plans nor the homeowner-acquired plans will undergo ATR.
   (2) **Permanent floodplain evacuation.** If a structure cannot be floodproofed, then USACE may acquire the structure in the name of the sponsor, vacate it, and demolish it. A simple scope of work is prepared describing how the demolition is to be performed. The demolition scopes of work will not undergo ATR.
   (3) **Dry floodproofing or relocation of schools.** The DDR and P&S for the floodproofing or relocation of schools will undergo ATR. However, an ATR for a ringwall would be much different than an ATR for relocation of schools. Therefore, this component of the project will not be further discussed in this version of the RP. The RP will be updated when that decision has been made and funding has been received in order to proceed with that component of the project.
   (4) **EEP.** Because the EEP is merely an evacuation plan, it will not undergo ATR.
   (5) **Flood insurance/floodplain zoning.** There is no deliverable produced, therefore ATR will not be performed for this component of the project.

b. **Required ATR Team Expertise.** Since ATR is not required for any of the current phases of the project, no team members are required at this time.

c. **Documentation of ATR.** Since ATR is not required for any of the current phases of the project, no documentation of ATR is required at this time.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

IEPR may be required for implementation 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.

- Type II IEPR. Type II IEPR, or 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.

a. **Decision on IEPR.** No IEPR review is recommended for the Buchanan County project. Although this project will reduce flood impacts to the town, the solution does not contain the typical risk associated with traditional flood damage reduction projects and does not pose a significant threat to human life. The Buchanan County project is nonstructural in nature. There are no floodwalls, levees, impoundments, or dams. Since the project does not impound or control floodwater in any way, there are no downstream life safety impacts. The project has a very low design and construction risk. Consequently, an IEPR is not warranted.

Major risk factors considered include the following:

(1) This project does not meet the intent of the "innovative materials or techniques" factor. It primarily includes routine raising-in-place of individual structures, which CELRH has performed numerous times as a means of flood risk management.

(2) The project design does not require redundancy, resiliency, or robustness.

(i) This project is not "redundant" in nature. Each individual structure will be acquired and removed, raised in place, or replaced on-site above the flood elevation. Performing two or more of these for a structure is not an option.

(ii) The project does not have any operational features in which to instill "resiliency." There are no ringwalls, floodwalls, levees, or flood gates.

(iii) This project is not "robust" in nature. A perceived failure would occur during a flood greater than the 100-year event. However, this failure would not be due to the design or construction of the project, but due to its limiting legislative authorization.

(3) This project does not have a unique construction sequencing or a reduced or overlapping design construction schedule. Individual structures will be floodproofed as funding is available.

Further, an incomplete project, which could result from a lack of project funding, does not contain more risk to human life or life safety than the without-project condition. Structures may be floodproofed on an individual basis as funding is received, which will cause no increase in the risk to life safety. At the time of this RP, funding has been obtained to prepare the EEP.

b. **Products to Undergo Type I IEPR.** Not applicable. The DPR was completed in 2002 prior to the requirements of EC 1165-2-209.

c. **Products to Undergo Type II IEPR SAR.** Not Applicable. A Type II IEPR is not recommended for the Buchanan County project.

7. POLICY AND LEGAL COMPLIANCE REVIEW

All decision documents have been reviewed throughout the study process for compliance with the 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 DPR, completed in 2002, authorized a nonstructural project that would include voluntary floodproofing, floodplain evacuation, dry floodproofing or relocation of two schools, continued participation in the NFIP, and FWEEP as components of a comprehensive flood damage reduction plan. An ITR of the DPR was completed in April 2002. The Chief of the Policy Planning Division for the Directorate of Civil Works approved the DPR on 14 August 2003.

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. The DX will assist in determining the expertise needed on the ATR team and Type I IEPR team (if required) and in the development of the review charge(s). The DX will also provide the Cost Engineering DX certification. The RMO is responsible for coordination with the Cost Engineering DX.

The DPR, completed in 2002, authorized a nonstructural project that would include voluntary floodproofing, floodplain evacuation, dry floodproofing or relocation of two schools, continued participation in the NFIP, and a Flood Warning and Emergency FWEEP as components of a comprehensive

flood damage reduction plan. The DPR was not coordinated with the Cost Engineering DX. As stated above, the DPR was completed in 2002, prior to the requirement for Cost Engineering DX involvement.

The RMO will coordinate with the Cost Engineering DX to ensure the appropriate expertise is included on the ATR teams to assess the adequacy of cost estimates, construction schedules and contingencies.

9. REVIEW SCHEDULES AND COSTS

a. **ATR Schedule.** At this time there are no established schedules for ATR because ATR is not required for any of the products addressed in this RP.

b. **ATR Cost.** Since ATR is not required for any of the current phases of the project, no costs have been calculated at this time.

10. PUBLIC PARTICIPATION

As part of the peer review, opportunities were and will continue to be provided for the public to comment on the study and decision documents that are to be reviewed. CELRH made the draft Buchanan County DPR and Environmental Assessment (EA) document available to the public for comment and sponsored several public meetings and workshops prior to its approval. Several National Environmental Policy Act (NEPA) public scoping meetings were held presenting information at various stages during the feasibility study to receive input from the public. Information obtained during public meetings was used to assist in plan formulation and to complete the draft environmental documents necessary to meet both Federal and State requirements. This includes State and Federal agency reviews as well. Additional public meetings will be conducted, as necessary, throughout the project phases. Information will also be conveyed to the public through the use of press releases and media interviews as necessary and through the use of posting information to the Huntington District's web site. There is no formal public review for the DDR, P&S, and construction phases. However, the cost share partner, the Buchanan County Board of Supervisors, will have opportunities to review the DDR, P&S, and construction phases as part of the PDT. Public facility owners will also have opportunities for review per the relocation contracts. Upon MSC approval of this RP, the RP will be posted on the Huntington District Internet for Public Review: (http://www.lrh.usace.army.mil/approved_review_plans_rps).

11. REVIEW PLAN APPROVAL AND UPDATES

The MSC Commander is responsible for approving this RP. The Commander's approval reflects vertical team input (involving district, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the project. Like the PMP, the RP is a living document and may change as the study progresses. CELRH is responsible for keeping the RP up to date. Minor changes to the RP since the last MSC Commander approval will be documented in Attachment 3. Significant changes to the RP (such as changes to the scope and/or level of review) shall be re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the RP, along with the Commanders' approval memorandum, will be posted on CELRH's webpage. The latest RP will also be provided to the RMO and MSC.

12. REVIEW PLAN POINTS OF CONTACT

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

- *Ken Woodard, CELRH, Project Manager, 304-399-5322*
- *Brian Ball, CELRH, Lead Engineer, 304-399-5345*
- *Melissa Boyd, CELRH, EC Quality Manager, 304-399-5129*
- *Roger Zemba, CELRD, MSC/RMO POC, 513-684-3018*
- *TBD, RMC, RMC POC, 720-215-xxxx*

ATTACHMENT 1: TEAM ROSTERS

TABLE 1: Product Delivery Team		
Functional Area	**Name**	**Office**
Project Manager	Kenneth Woodard, PE, PMP	CELRH
Lead Engineer / Civil Design / Relocations	Brian Ball, PE	CELRH
Planning	Dan Bailey, CFM	CELRH
Real Estate	Elizabeth Cooper	CELRH
Contracting	Cheryl Fitzwater, CAP	CELRH
Legal	Bradley Stark	CELRH
Public Affairs	Charles R. Minsker	CELRH
Architecture	Evan Dailey, RA	CELRH
Structural	John Clarkson, PE	CELRH
Surveys	Earnest McCarty, Jr, PS	CELRH
Hydrology and Hydraulics	Christopher Lopez, PE	CELRH
Geotechnical (Soils)	Kevin Davis	CELRH
Cost Engineering	Stephen Wallington	CELRH
HTRW	Jean Read	CELRH
Construction	Kurt Baden	CELRH
Specifications	Rebecca Fulks	CELRH
Environmental	Michael McComas, CFM	CELRH

TABLE 2: District Quality Control Team		
Functional Area	**Name**	**Office**
DQC Lead / Civil Design / Relocations	Terry Shilley, PE	CELRH
Planning	Stephen Harris, CFM	CELRH
Real Estate	Gary Walker, PS	CELRH
Contracting	Ginny Morgan, CAP	CELRH
Architecture	Todd Mitchell, AIA	CELRH
Structural	Rick Rutherford, PE	CELRH
Surveys	Paul Dean, PS	CELRH
Hydrology and Hydraulics	Belinda Weikle, PE	CELRH
Geotechnical (Soils)	Erich Guy, PhD, PG	CELRH
Cost Engineering	Brian Clouse	CELRH
HTRW	Janet Wolfe	CELRH
Construction	Kristina Goff	CELRH
Specifications	Alicia Scruggs	CELRH
Environmental	Mitch Strain	CELRH

TABLE 3: Agency Technical Review Team		
NAME	**DISCIPLINE**	**OFFICE**
TBD	None at this time	TBD

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) of the *<type of product>* for the *<Project Feature>* for the Buchanan County, Virginia, Section 202 Nonstructural Project has been completed. 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 the following: 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].

SIGNATURE _____ _____

Name Date
ATR Team Leader
Office Symbol/Company

SIGNATURE _____ _____

Kenneth L. Woodard, PE, PMP Date
Project Manager
CELRH-PM-PP-P

SIGNATURE _____ _____

TBD Date
Title TBD
CELRD-RBT

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.

SIGNATURE _____ _____

John R. Bock, PE Date
Chief, Engineering & Construction Division
CELRH-EC

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: COMPLETED ATR REVIEW REPORTS