Appendix A

Exhibits
KEY NOTES

1. CONTRACTOR WORK LIMITS
   THE CONTRACTOR SHALL REMOVE ALL DEBRIS, RESTORE THE SURFACE, MOWER, NAILED, AND ESTABLISH VEGETATION PRIOR TO FINAL INSPECTION.

2. LIMITED WORK LIMITS
   B. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS FOR WORK WITHIN THE KYTC RIGHT-OF-WAY AND THE ICE PLANT HOLLOW ROAD RIGHT-OF-WAY.
FEMA's National Flood Hazard Layer (Official)

LOMRs
- Effective
- LOMAs

FIRM Panels

PLSS

River Mile Markers

Cross-Sections

Coastal Transects

Base Flood Elevations

Profile Baselines

Transect Baselines

Limit of Moderate Wave Action

Coastal Barrier Resources System Area

Political Jurisdictions

Levees

Data from Flood Insurance Rate Maps (FIRMs) where available digitally. New NFHL FIRMette Print app available:
http://tinyurl.com/j4xwp5e

USGS The National Map: Orthoimagery | National Geospatial-Intelligence Agency (NGA); Delta State University; Esri | Print here instead:
http://tinyurl.com/j4xwp5e Support: FEMAMapSpecialist@riskmapcds.com | Commonwealth of Virginia, USDA FSA, Microsoft
FEMA’s National Flood Hazard Layer (Official)

Data from Flood Insurance Rate Maps (FIRMs) where available digitally. New NFHL FIRMette Print app available:
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http://tinyurl.com/j4xwp5e Support: FEMAMapSpecialist@riskmapcds.com | Commonwealth of Virginia, Microsoft
Appendix B
Agency Correspondence
January 10, 2018

United States Army Corps of Engineers
ATTN: Ms. Rebecca Rutherford
Chief, Environmental Analysis Section
502 Eighth Street
Huntington, WV 25701-2070

Re: Parker-Teague Cemetery, Town of Martin, Floyd County, Kentucky

Dear Ms. Rutherford:

Thank you for your letter concerning the relocation of the Parker-Teague Cemetery. This cemetery was described in Donald Hoyer’s 1999 archaeological survey report, *An Archaeological Survey for the Proposed Town of Martin Fire Station Hillside Project, Floyd County, Kentucky*. At that time, the cemetery was not assigned a resource number by either the Office of State Archaeology or the Kentucky Heritage Council. Your letter provides information concerning the relocation of the interments at the Parker-Teague Cemetery to the Mayo Cemetery in Prestonsburg, Kentucky.

Because this cultural resource location is no longer extant, we feel that it is not appropriate to request a site number from the OSA or KHC. However, I will forward your letter to the Office of State Archaeology so that the information can be appended to Hoyer’s original survey.

Thank you for sending this information. Should you have any questions, feel free to contact Chris Gunn of my staff at (502) 564-7005, extension 4450 or chris.gunn@ky.gov.

Sincerely,

Craig A. Potts,
Executive Director and
State Historic Preservation Officer
United States Army Corps of Engineers

ATTN: Ms. Ashley Taylor
502 Eighth Street
Huntington, WV 25701-2070


Dear Ms. Taylor:

Thank you for your letter concerning the abovementioned project, received November 13, 2017. The enclosed report provides additional information concerning a previous submission to our office, received June 23, 2017. Based on that initial submission, we indicated that additional information was needed for the project review, and that we understood that the City of Martin had already begun work on this undertaking. For the last reason, we indicated our belief that we had been precluded from comment on the effect of the proposed project on cultural resources.

We met with cultural and environmental resources staff from the Huntington District on November 3, 2017, and they provided clarification on the project. Likewise, the enclosed report provides better documentation on the scope of the proposed project and the investigations performed by Corps archaeological staff. During their field visit, they documented that the project area had been heavily modified by previous activity in the area, including substantial deposition of fill. Based on these results, the Corps determined that the proposed undertaking would result in No Effect to Historic Properties. After review of the report, we concur with the Corps’ determination.

If the project design or boundaries change, this office should be consulted to determine the nature and extent of additional documentation that may be needed. In the event of the unanticipated discovery of an archaeological site or object of antiquity, the discovery should be reported to the Kentucky Heritage Council and to the Kentucky Office of State Archaeology in the Anthropology Department at the University of Kentucky in accordance with KRS 164.730. In the event that human remains are encountered during project activities, all work should be immediately stopped in the area and the area cordoned off, and in accordance with KRS 72.020 the county coroner and local law enforcement must be contacted immediately. Upon confirmation that the human remains are not of forensic interest, the unanticipated discovery must be reported to the Kentucky Heritage Council.

Should you have any questions, feel free to contact Chris Gunn of my staff at 502.564.7005, extension 4450 or chris.gunn@ky.gov.

Sincerely,

Craig A. Potts, Executive Director and State Historic Preservation Officer

KentuckyUnbridledSpirit.com An Equal Opportunity Employer M/F/D
RE: §401 Water Quality Certification

Project Name: Town of Martin – Access Road

AI #:135010

Project Coordinates: 37.571634N, 82.755149W

USACE – Huntington District,

The KY Division of Water, Water Quality Certification Section has reviewed the Combined Application for Permit to Construct Across or Along a Stream and/or Water Quality Certification received August 22, 2017 for Town of Martin – Access Road in Unnamed Tributary to Beaver Creek in Floyd County. The Water Quality Certification Section has determined that this project is covered under the KY General Certification of the Nationwide Permit 14 for Linear Transportation Projects provided that this project has received the appropriate Nationwide Permit from the U.S. Army Corps of Engineers and all conditions of the enclosed General Water Quality Certification are met. Please carefully review the enclosed General Water Quality Certification conditions.

Please contact our office if the scope of the project or plans change, as this may change the type of certification that is required. Additional information regarding the KY Division of Water, Water Quality Certification can be found at our website: Blockedhttp://water.ky.gov/permitting/Pages/KYWaterQualityCertProg.aspx

Other permits from the Division of Water may be required. If this activity occurs within a floodplain, a Floodplain Construction Permit may be required. Please contact the Floodplains Section Supervisor (502-564-3410) for more information. If the project will disturb one acre or more of land, or is part of a larger common plan of development or sale that will ultimately disturb one acre or more of land, a Kentucky Pollution Discharge Elimination System (KPDES) Stormwater Permit shall be required. Please contact the Surface Water Permits Branch (502-564-3410 or SWPBSDemand@ky.gov <mailto:SWPBSDemand@ky.gov>) for more information.

Please note that the reference number for this project is AI No. 135010. Please contact me by phone at (502) 782-6995 or email at Samantha.Vogeler@ky.gov if you have any questions.

Thank you,
Samantha (Kaiser) Vogeler

Environmental Biologist Consultant

Water Quality Section

Division of Water

300 Sower Blvd.

Frankfort, KY 40601

502-782-6995
Appendix C

Identification of Waters Report
Identification of Waters Report  
U.S. Army Corps of Engineers  
Town of Martin Section 202 Emergency Access Road  
Martin, Kentucky  
August 2017

Introduction

Background - The Town of Martin Nonstructural Project resulted from the April 1977 flood in the Levisa Fork Basin. As a direct result of millions of damages and losses from this flood, the Energy and Water Development Appropriations Act of 1981 (Public Law 96-367) provided authorization for development of flood protection measures for the Levisa and Tug Forks of the Big Sandy River Basin. Section 202 of that legislation directed the Secretary of the Army, acting through the Chief of Engineers, to design and construct, flood damage reduction measures in those areas implemented by the flood. Based upon the Section 202 legislation, the U.S. Army Corps of Engineers (Corps) submitted its proposed plans for flood damage reduction measures but the plan did not recommend specific measures. Subsequent to the authorizing legislation, another major flood occurred in the Tug Fork Basin in May 1984 resulting in millions of damages. As a result of the May 1984 flooding, legislation (Public Law 98-332) was passed directing implementation of features of the General Plan with funding specifically authorized. The new legislation directed the Chief of Engineers to “implement immediately nonstructural flood control measures such as relocation sites, floodproofing and floodplain evacuation as described in the General Plan…”

Under the Section 202 authority, the Corps evaluated alternative flood damage reduction measures for the Town of Martin. Initially the project consisted of three phases. However, due to availability of funding, only portions of the flood damage reduction measures have been constructed. A redevelopment site was created in 2006. A 401 Water Quality Certification (WQC) was received for this action (attached). Since that time, relocation of the fire station was completed in 2013, the Town Hall/Police Station was completed in 2017, and currently construction of an Alternative School is underway at the redevelopment site. The Corps is currently reevaluating the initial construction phases identified and is in the process of reworking construction sequencing. Currently, the Corps, at this time, is proposing to construct an emergency access road off of the redevelopment site to connect to Ice Plant Hollow Road and for future access to the completed redevelopment site and the subject of this 401 WQC application.

The Town of Martin emergency access road will provide a direct route from the redevelopment site to Ice Plant Hollow Road, which is connected to KY 1428. The proposed road, which will be approximately 520 feet in length, will begin at the roadway section constructed adjacent to the Town Hall. The roadway will feature two 12 feet lanes with two feet paved shoulders. Lane widening will be incorporated to address larger off-tracking vehicles. A curb and gutter roadway section will be utilized at the beginning of the project to tie into the existing redevelopment site. This curb and gutter roadway section will transition into a standard roadway typical section with roadside ditches. This proposed project will require roadway embankment, roadway excavation, borrow excavation, and rock excavation. The project would spoil and dispose of material from at the Mayo Hollow site. During construction, the contractor may need to utilize a temporary stream crossing to handle the loads of heavy construction equipment at the proposed emergency access site.

On May 19, 2017, the Corps Planning and Engineering staff, performed a site visit to the Town of Martin redevelopment Site for the proposed emergency access road. This site visit was conducted to identify waters on-site and potential impacts. Below is a summary of the waters within the proposed project area.
Figure 1: Project Location with Watershed Boundaries
Figure 2: Emergency Access Road Construction Work Limits
Figure 3: Mayo Hollow Construction Work Limits (CWL)
Identification of Waters

During the May 2017 site visit as mentioned above, Corps staff identified waters at the location of the proposed Emergency Access Road and Mayo Hollow spoil/borrow site. An identification of waters including Wetland 1, Wetland 2 (referred to as Area 2 on the mapping), Unnamed Tributary to Beaver Creek (Intermittent Stream), Ephemeral Stream, and Mayo Hollow Intermittent Stream are explained in this section. The following National Wetland Inventory and Identification of Waters maps are shown below.

Figure 4: National Wetland Inventory
Figure 5: Identification of Waters at the proposed Emergency Access Road
Figure 6: Identification of Waters at Mayo Hollow
One small wetland was observed at the toe of the slope at the location of the proposed Emergency Access Road. The wetland area was comprised of herbaceous vegetation consisting of *Impatiens capensis*, *Typha latifolia*, *Carex sp.* Soils were hydric and standing water was present. Wetland 1 measures approximately 30 feet by 10 feet and is less than 0.01 acre.
Figure 8: Photo of Wetland 1, May 17, 2017
Wetland 2 (Area 2)

In the footprint of the proposed Emergency Access Road where the town cleared trees there was an area showing recent disturbance with some standing water. Soils were disturbed within this area. At the time of the May 2017 site visit, _Juncus effusus_, and _Carex sp._ was starting to emerge but was not the dominant vegetation. A subsequent site investigation was conducted on August 16, 2017. Photos from both site visits are included below. The area measured approximately 30 feet by 15 feet (0.01 acres).

Figure 9: Left photo of Area 2 on May 17, 2017 and right photo of Area 2 on August 16, 2017
Unnamed Tributary

This stream is an unnamed tributary (Intermittent Stream) to Beaver Creek. This tributary runs adjacent and within the construction area of the proposed access route (Ice Plant Hollow Rd). It is anticipated the existing crossing (approximately 20 linear feet) would be removed and replaced with a permanent box culvert for approximately 60 linear feet. In addition, a temporary stream crossing is anticipated downstream of the proposed permanent culvert. The approximate location of the temporary culvert is illustrated in Figures 2 and 12. The length of this proposed culvert would be approximately 30 linear feet and would be removed upon completion of construction. For the emergency access road, one ditch will be constructed on each side of the road to handle stormwater. These ditches will convey water directly to the unnamed tributary of Beaver Creek.

Figure 10: Unnamed Tributary May 17, 2017
Figure 12: Approx. Location of Temporary Stream Crossing, May 17, 2017
**Ephemeral Stream**

The ephemeral stream traverses through the proposed emergency access road location from the adjacent hillside and continues down the slope until it reaches the unnamed intermittent stream. This area would be filled and re-graded as part of the access road construction. It is anticipated that approximately 460 linear feet of this tributary would be permanently filled.

Figure 10: The photo on the left is the upstream area of the Ephemeral Stream and the photo on the right is the downstream area, May 17, 2017. Both pictures were taken on the existing slope where the proposed emergency access road would be located.
Mayo Hollow Unnamed Tributary

This area was part of the original 401 WQC for construction of the redevelopment site. A 401 WQC certification application and permit information is attached this application. The existing 401 WQC for Mayo Hollow is expired. Special conditions in the existing permit have not yet been fulfilled because the Corps did not receive funding to construct the subsequent phases of the project. Recently, some funding has been allocated to the Town of Martin 202 project to pursue efforts on portions of the originally identified project. As discussed in our June 2017 pre-application meeting, KY Division of Water indicated after review of the application, a collaborative path forward would be determined on how to proceed with the previous WQC and the proposed action.

The new proposed emergency access road action would require spoil and borrow at Mayo Hollow. Figures 3 and 6 show the proposed work limits and identification of waters. As illustrated on those figures, an intermittent unnamed tributary flows through the site. In addition, the downstream portion of the property contains an open water area (sediment pond). A wetland area is located immediately upstream of the sediment pond and includes a fringe around the pond. However, for this proposed action, spoil and borrow activities would be limited to the upstream portion of the property. No permanent impacts are anticipated for this action. However, it is anticipated minor disturbance/temporary impact (i.e. minor grading/repair of the channel for spoil and borrow area) would occur since approximately 390 linear feet of the unnamed tributary is located within the proposed construction work limits.

Figure 11: The open water area/sediment pond, May 11, 2017
Figure 15: The open water area/sediment pond, May 11, 2017
Figure 16: Unnamed Tributary (Intermittent Stream) Upstream Section at Mayo Hollow, May 17, 2017
Table 1: Summary of Waters within the Project Area

<table>
<thead>
<tr>
<th>Type of Water</th>
<th>Length / Area on Site</th>
<th>Permanent Impact</th>
<th>Temporary Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 1</td>
<td>0.01 acres</td>
<td>0.01 acres</td>
<td>0 acres</td>
</tr>
<tr>
<td>Wetland 2 (Area 2)</td>
<td>0.01 acres</td>
<td>0.01 acres</td>
<td>0 acres</td>
</tr>
<tr>
<td>Unnamed Tributary (Intermittent Stream)</td>
<td>315 linear feet</td>
<td>60 linear feet</td>
<td>30 linear feet</td>
</tr>
<tr>
<td>Ephemeral Stream</td>
<td>460 linear feet</td>
<td>460 linear feet</td>
<td>0 linear feet</td>
</tr>
<tr>
<td>Mayo Hollow Site Unnamed Tributary</td>
<td>1600 linear feet</td>
<td>No permanent impacts</td>
<td>390 linear feet</td>
</tr>
</tbody>
</table>

*Total proposed permanent intermittent stream impacts are 60 linear feet*
*Total proposed temporary intermittent stream impacts are 420 linear feet*
*Total proposed permanent ephemeral stream impacts are 460 linear feet*
*Total proposed permanent wetland impacts are 0.02 acres*
Appendix D
Mailing List
# Federal Agencies and Officials

- The Honorable Mitch McConnell  
  United States Senate  
  771 Corporate Drive  
  Lexington, Kentucky 40503

- The Honorable Rand Paul  
  United States Senate  
  1029 State Street  
  Bowling Green, Kentucky 42101

- The Honorable Harold Rogers  
  United States House of Representatives  
  110 Resource Court, Suite A  
  Prestonsburg, Kentucky 41653

- Mr. Steve Blanford  
  NRCS KY State Soil Scientist  
  771 Corporate Drive, Suite 205  
  Lexington, KY 40503-5438

- Ms. Carrie Allison  
  United States Fish and Wildlife Service  
  Kentucky Field Office  
  330 West Broadway, Suite 265  
  Frankfort, Kentucky 40601

- U.S. Environmental Protection Agency  
  Region 4  
  Sam Nunn Atlanta Federal Center  
  61 Forsyth Street, SW  
  Atlanta, GA 30303

# State Agencies and Officials

- The Honorable Matt Bevin  
  Governor of Kentucky  
  700 Capitol Avenue, Suite 100  
  Frankfort, Kentucky 40601

- Kentucky Department of Fish and Wildlife Resources  
  #1 Sportsmen’s Lane  
  Frankfort, Kentucky 40601

- Mr. Craig Potts  
  Kentucky Heritage Council  
  300 Washington Street  
  Frankfort, Kentucky 40601

- Ms. Samantha Vogeler  
  Kentucky 401 Water Quality Certification Section Division of Water  
  300 Sower Boulevard  
  Frankfort, Kentucky 40601

# County Agencies and Officials

- Floyd County Public Library  
  161 N Arnold Ave  
  Prestonsburg, KY 41653

- Lon May  
  Floodplain Coordinator  
  313 Westminster Street  
  Prestonsburg, Kentucky 41653
SECTION 404(b) (1) EVALUATION
TOWN OF MARTIN FLOOD PROTECTION PROJECT
FLOYD COUNTY, KENTUCKY

This report concerning and fill activities is submitted in accordance with Section 404 of the Clean Water Act (CWA) of 1977, (Public Law 95-217)

1. PROJECT DESCRIPTION

Phase I of the proposed project would consist of the relocation of the volunteer fire department building and excavation of the Fire Station Housing and Commercial Development (H&CD) site. The H&CD site would require the excavation of a redevelopment site on the hillside adjacent to, and including the Martin fire station. Approximately one million cubic yards of spoil material would be excavated to create the H&CD site. The excavated material would be spoiled at the Mayo Hollow disposal area (a reclaimed coal refuse area). Spoil placement would require the construction of a 70 foot high by 570 foot fill, thereby affecting approximately 17.5 acres. Upon completion of Phase I, some of the stored spoil would then be removed from the disposal area and used to construct an engineered fill in the downtown area in order to raise elevation of the 100-year floodplain or the 77 flood profile, whichever is greater.

A. Location.

The Town of Martin Flood Protection Project is located in Floyd County, Kentucky, along the waters of Beaver Creek a tributary of Levisa Fork of the Big Sandy River. The project is located about 5.5 miles above the mouth of Beaver Creek and about 70.5 above the mouth of the Big Sandy River. The disposal/storage site (Mayo Hollow) is located on an unnamed tributary approximately 1200 feet upstream from its confluence with Beaver Creek, approximately one mile from the Town of Martin. Note: Mayo Hollow has been used by C. Reiss Coal Company under Permit No. 836-9015 as a mining and disposal site. (Attachment 1) The District will spoil for storage on the existing fill and landscape and seed the area with forbs and grasses of known wildlife value after project completion.

B. Description of the Proposed Work.

The proposed Corps of Engineers, Huntington District “Town of Martin Flood Protection” project would provide flood protection for approximately 213 structures (124 residential and 89 nonresidential) along Beaver Creek and its associated tributaries in the project area. Approximately 28% of the Town of Martin is located in the statutory floodway and 66% is located in the 100-year floodplain. Over the past 100 years, the proposed project area has been affected by numerous flood events. In particular, the January 1957, April
1977 and May 1984 floods have significantly affected this project area. Section 202 of Public Law 96-367 specifies that the project area would be protected against the recurrence of the April 1977 flood as a minimum level of protection.

Phase I of the proposed project would consist of the relocation of the volunteer fire department building and excavation of the Fire Station Housing and Commercial Development (H&CD) site. The H&CD site would require the excavation of a redevelopment site on the hillside adjacent to, and including the Martin fire station. The excavated material would be spoiled at the Mayo Hollow disposal area (a reclaimed coal refuse area). Spoil placement would require the construction of a 70 foot high by 570 foot long fill, thereby affecting approximately 17.5 acres. Upon completion of Phase I approximately 500 thousand cubic yards of the stored spoil would then be removed from the disposal area and used to construct an engineered fill in the downtown area in order to raise the elevation of the 100-year floodplain of the 77 profile, whichever is greater.

C. Authority and Purpose.

Authority for the Town of Martin Flood Protection Project is contained in Section 202 of Public Law 96-367 (October 1980) which authorizes the design and construction, at Full Federal expenses, of flood control measures as the Chief of Engineers determines necessary and advisable, affording a level of protection sufficient to prevent any future losses to the community from a recurrence of a flood such as the April 1977 flood. Additional authority for the action is contained in Senate Report 97-673, dated 6 December 1982, of the FT 1983, Energy and Water Development Appropriations Act. The Civil Works Information System (CWIS) number for the Town of Martin Project is 075395.

D. Distribution of Materials.

The majority of materials to be excavated consist of rock, gravel, sands, clays and silts typically found within the Levisa Fork basin. No contaminated materials will be distributed with the excavation and construction of the project.

E. Description of Proposed Discharge.

1. Location. The location will be the same as described in I.A. above.
2. Size. The size of the project area to be affected is described in I.B. above.

3. Type of fill site and habitat. The area directly affected by the proposed fill has been disturbed and is composed of aquatic, riparian and upland habitat comprised of birch, willow, elm and sycamore with more widely distributed yellow poplar. Fill material used in the construction of the project will result in permanent inundation of the intermittent stream for a total distance of 1500 lineal feet.

4. Timing and Duration of Discharge. The proposed construction of the project is expected to require approximately 10 years, beginning in 2003 and continuing through 2013. Construction will be performed on a year-round basis, but may be temporarily curtailed by periodic flood events or other weather conditions.

5. Description of Disposal Method. Development of the H&CD site will require both overburden and rock excavation. Excavated material will be spoiled over coal refuse fill that has been placed in a hollow about 2 miles downstream of the relocation site. After clearing the existing fill surface, spoil material will be dumped, spread, and lightly compacted. The entire spoil area will be kept as level as practicable during filling to prevent ponding of rain water during construction. The final spoil area surface will be sloped to drain to the outer edge, where ditches will transport runoff to an existing storm sewer inlet at the base of the original coal refuse fill. Transport of spoil material from the proposed H&CD site to the spoil area will be done via county roads and existing access roads.

II. FACTUAL DETERMINATIONS.

A. Physical Substrate Determinations.

1. Substrate, Elevation and Slope. The streambed of the intermittent stream consists of rock, sand and gravel. The stream originates at elevation 258 feet.

2. Sediment Type. The stream under normal conditions is dry and has no flow, but can become quite turbid during storm events. The flows transport suspended particulates composed of sand, clay and silt. The sediment load is the result of poor land-use practices, porous soil and steep slopes.
3. **Dredged/Fill Material Movement.** No movement of any fill materials is expected to occur. A Sediment Control Plan has been prepared and will be implemented.

4. **Physical Effects on Benthos.** Benthic populations and habitat will not be significantly impacted as they only occur during temporary storm conditions.

5. **Other Effects.** No other effects are known.

6. **Action Taken to Minimize Impacts.** Appropriate erosion and sediment control measures (Sediment Control Plan) will be installed to prevent the unplanned introduction of materials into the streams.

**B. Water Circulation, Fluctuation, and Sanitary Determination.**

1. **Water**
   
a. **Salinity.** Not applicable.
   b. **Water Chemistry.** During major storm events, runoff from the disposal sites may introduce some suspended solids into the streams. The fill materials themselves are no sources of chemical pollution and these potential additions would coincide with and contribute little to the existing storm water load and can be considered insignificant.

2. **Clarity.** Only short-term increases in turbidity are expected during storm events. A Sediment Control Plan has been prepared and will be implemented.

**C. Color.** See B2 above.

**D. Odor.** No Significant Impact (NSI)

**E. Taste.** NSI

**F. Dissolved Gas Levels.** NSI

**G. Nutrients.** NSI

**H. Eutrophication.** NSI

1. **Current Patterns and Circulation.**
a. Current Patterns and Flow NSI
b. Velocity. NSI
d. Hydrologic Regime. NSI

2. Normal Water Level Fluctuations. The severity or frequency of water level fluctuations will not be significantly impacted.


4. Actions Taken to Minimize Impacts. Appropriate measures will be taken to minimize impacts of the project.

I. Suspended Particulate/Turbidity Determination.

1. Expected changes in suspended particulates and turbidity levels in vicinity of disposal site. NSI

2. Effects on chemical and physical properties of the water column.

   a. Light Penetration. No Significant Impact (NSI)

   b. Dissolved Oxygen. NSI

   c. Toxic Materials. NSI Fill materials will be tested before placement.

   d. Pathogens. NSI

   e. Aesthetics. Placement of fill materials will adversely impact the aesthetics of the site, especially during construction. The disposal sites will be reclaimed during and after construction activities.

3. Effects on Biota.


   b. Suspension/Filter Feeders. NSI
c. Sight Feeders. NSI

4. Actions to Minimize Impacts. An Erosion Control Plan has been prepared and will be implemented. The disposal sites will be reclaimed during and after construction activities.

J. Contaminant Determination. See I.1, I.2, c. above

K. Aquatic Ecosystem and Organism Determinations.

1. Effects on Plankton. Resources not present.

2. Effects on Benthos. No Significant Impact (NSI)

3. Effects on Nekton. NSI

4. Effects on Aquatic Food Web. NSI

5. Effects on Special Aquatic Sites


d. Threatened and Endangered Species. U.S. Fish and Wildlife Services (USFWS) and Elkins, West Virginia offices consultation with the Cookeville, Tennessee. Review of Federal listings from the Region IV Red Book USFWS indicates three mammals: gray bat (Myotis grisescens), Indiana bat (Myotis sodalis), and the Easter cougar (Fleis concolor). Five birds: bald eagle (Haliaetus leucocephalus), American peregrine falcon (Falco peregrinus), Kirtlands’ warbler (Dendroica kirtlandii), and the red-cockaded woodpecker (Picoides borealis) may be found in the project area. None of these species, however, would be adversely impacted as a result of the disposal action.

e. Species of Concern. The following species of concern could occur in the impacted area. These include the eastern sand darter (Etheostoma pellucidum); longhead darter (Percina
macrocephala); Allegheny woodrat (Neotoma magister) and the cerulean warbler (Dendroica cerulean). None of these species have been reported for the area, Kentucky Department Fish and Wildlife Resources.


7. Actions Taken to Minimize Impacts. The Proposed material placement activities would be accomplished under conditions that would minimize, to the extent practicable, adverse effects on the aquatic ecosystem. Appropriate measures will be taken to minimize adverse effects of the fill on the aquatic environment. These include proper design and placement of environmentally acceptable fill, implementation of an Erosion Control Plan and reclamation of the disposal sites during and after construction activities.

L. Proposed Disposal Site Determinations.

1. Mixing Zone Determination. No discharge of liquid material would be involved with project implementation. Accidental discharges of petroleum products may occur during operation and maintenance of construction equipment, however, standard preventatives measures will be taken to minimize such risks.

2. Determination of Compliance with Applicable Water Quality Standards. Disposal of fill materials will be in conformance with Federal and Commonwealth of Kentucky standards.

   a. Municipal and Private Water Supply. The discharge associated with the disposal of fill material will not cause any violations of drinking water standards.


   d. Aesthetics. See II.I.E. above.

M. Determination of Cumulative Effects on the Aquatic Ecosystem.

Based on the most probable future conditions, there should be no cumulative or secondary impacts on the aquatic ecosystem as a result of fill material placement.

III. FINDINGS OF COMPLIANCE OR NONCOMPLIANCE WITH THE RESTRICTIONS ON DISCHARGE.

A. Guidelines.

No Significant adaptations of the 404 (b) (1) guidelines were made relative to this evaluation.

B. Evaluation of Availability of Practicable Alternatives to the Proposed Discharge Site which would have Less Adverse Impact on the Aquatic Ecosystem.

Evaluation of proposal involving the discharge of fill materials in waters of the United States must consider the practicability of alternatives actions, their relative impact on the aquatic ecosystem, and other significant adverse effects they may have on the environment.

Alternatives to this proposal are discussed in the attached Environmental Assessment, Town of Martin Nonstructural Project Floyd, Kentucky.

C. Compliance with Applicable State Water Quality Standards.

The planned placement of fill materials will not violate any applicable state water quality standards.

D. Compliance with Applicable Toxic EPFluent Standards or Prohibition under section 307 of the Clean Water Act.

The proposed fill would not violate section 307 of the Clean Water Act.


In accordance with the Endangered Species Act of 1973, a Biological Assessment (Literature Review) for Impacts to Threatened or Endangered species was conduct.
F. **Compliance with Specified Protected Measures For Marine Sanctuaries Designed by the Marine protection, research, and Sanctuaries Act of 1972.**

Not Applicable.

G. **Evaluation of Extend of Degradation of the Waters of the United States.**

The proposed placement of fill materials will not result in significant adverse effects on human health and welfare, including municipal and private water supplies, benthos, fish, aquatic food web, wetlands, endangered species and wildlife. General changes brought about indirectly by placement of fill material may create impacts on aquatic ecosystem diversity, particularly downstream over the life of the project. Wildlife dependent on the aquatic ecosystem will not be adversely affected. Gross productivity and stability will not be significantly affected.

H. **Appropriate and Practicable Steps Taken to Minimize Potential Adverse Impacts of the Discharge on the Aquatic Ecosystem.**

Appropriate steps to minimize potential adverse impacts from the discharge on the aquatic ecosystem have been incorporated and include the use of clean fill material obtained from and unpolluted source and placement in a confined area. In addition, the contractor(s) placing the fill material will be governed by detailed contract specifications to prevent environmental pollution and damage as a result of construction operations.

John D. Rivenburgh
Colonel, Corps of Engineers
District Engineer

Date