

**Document Type:** EA – Administrative Record  
**Index Field:** Supplemental Environmental Assessment (SEA)  
**Project Name:** US 321-Fort Loudoun Dam Reservation  
**Project Number:** 2002-126

## SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

# **U.S. HIGHWAY 321 BRIDGES REPLACEMENT AND REMOVAL AT FORT LOUDOUN DAM RESERVATION**

**Loudon County, Tennessee**

TENNESSEE VALLEY AUTHORITY

APRIL 2008

Page intentionally blank

## **SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT**

### **U.S. HIGHWAY 321 BRIDGES REPLACEMENT AND REMOVAL AT FORT LOUDOUN DAM RESERVATION LOUDON COUNTY, TENNESSEE**

**TENNESSEE VALLEY AUTHORITY**

**APRIL 2008**

#### **The Proposed Decision and Need**

On April 8, 2003, the Tennessee Department of Transportation (TDOT) submitted an application to Tennessee Valley Authority (TVA) for a highway easement on the Fort Loudoun Dam Reservation and approval under Section 26a of the TVA Act for new bridges over the Tennessee River at Tennessee River Mile (TRM) 601.8 and over the Tellico Canal between Fort Loudoun and Tellico reservoirs. Approval would allow TDOT to complete the upgrading of U.S. Highway (US) 321 (State Route 73) between Lenoir City and Blount County from two to four lanes in order to relieve traffic congestion and improve safety.

The Federal Highway Administration (FHWA) and TDOT issued an environmental assessment (EA) in May 1998 that addressed environmental impacts of the proposed US 321 improvement project, including the new bridges on the Fort Loudoun Dam Reservation. TVA and the U.S. Coast Guard (USCG) were cooperators in the preparation of the EA. On October 6, 1999, FHWA issued a finding of no significant impact (FONSI) for the US 321 improvement project. On May 9, 2001, the USCG issued a FONSI for its action to approve the construction of the new bridges. However, TVA has not yet made a decision on whether to provide TDOT highway easement and Section 26a approvals for the US 321 improvement project.

During the development of this project, TVA proposed that TDOT remove the existing two-lane J. Carmichael Greer Bridge (US 321) on top of Fort Loudoun Dam and approach roadways once their replacements were constructed and modify other roadways to improve access to Lenoir City Park, Fort Loudoun Marina, and the dam reservation. In April 2003, TDOT agreed to TVA's proposal. Subsequently, in December 2005, TDOT provided TVA with modified plans (TDOT 2005) of the proposed new bridge construction including plans of the bridge removal and road modifications (see map [Attachment 1]). These plans include:

- Removal and demolition of existing US 321 bridge on Fort Loudoun Dam.
- Removal and demolition of existing City Park Drive overpass.
- Rerouting City Park Drive access by connecting directly with existing US 321 roadway.
- Moving transmission tower northwest of existing overpass to make room for the proposed City Park Drive connector.
- Rerouting a connector for access to the TVA maintenance base and powerhouse.

- Constructing a single-lane access road for the TVA switchyard at Fort Loudoun Dam.
- Relocating potable waterline for Fort Loudoun Dam locking facilities.

TVA needs to decide whether to approve the construction and operation of the proposed bridges under Section 26a and road easements for the bridge approaches and roadway. If the new bridges are approved, TVA needs to decide whether to approve the removal of the J. Carmichael Greer Bridge (existing bridge) on top of Fort Loudoun Dam and the other actions on TVA property listed above, which were not part of the 1998 FHWA/TDOT EA. Consequently, TVA has prepared this supplement to the FHWA/TDOT EA. The supplemental EA documents TVA's consideration of impacts and mitigation measures associated with removing the existing bridge and approach roadways over Fort Loudoun Dam as well as other changes that have occurred since the FHWA/TDOT EA was issued.

### **Background**

TDOT is proposing to upgrade 7.4 miles of US 321 in Loudon County from two lanes to four lanes. The upgrade would be accomplished by improving lane and shoulder widths and sight distance, as well as by adding lanes to increase traffic capacity. The project would also require new bridge structures over the Tennessee River and Tellico Canal near Fort Loudoun Dam. A new bridge is proposed over the Tennessee River to replace the existing two-lane bridge on the top of Fort Loudoun Dam, and an additional two-lane bridge is proposed over the Tellico Canal. The project begins 0.2 mile west of US 11 and ends at the existing four-lane section near the Blount County line. To date, the sections of the highway from the Blount County line to near the Tellico Canal have been completed.

The existing bridge was constructed in 1960 to replace several ferries over the Tennessee River and is an important transportation link between Maryville and Lenoir City. However, after the proposed construction of a new bridge downstream of the dam, the older bridge would not be needed for through traffic, access to the dam reservation, or access to the locks operated by the U.S. Army Corps of Engineers (USACE). Although of little value for access, maintenance of the bridge would have to continue for public safety and to prevent damage to Fort Loudoun facilities. In addition, modifying public access to the Fort Loudoun Marina and adjoining Lenoir City Park by providing direct access from US 321 rather than the current serpentine route through the dam reservation would be more convenient to the public and increase the security of nearby TVA facilities. (See Attachment 2, hereafter referred to as the Bridge Removal Plan.)

### **Other Environmental Reviews and Documentation**

*U.S. 321 (State Route 73) From .32 km (0.2 mile) West of U.S. 11 (State Route 2) to the Existing Four-Lane Section Near the Blount County Line, Loudon County, Tennessee* (FHWA and TDOT 1998). This document describes the anticipated environmental impacts of upgrading 7.4 miles of US 321 in Loudon County from two lanes to four lanes. The project would also require new bridge structures over the Tennessee River and Tellico Canal near Fort Loudoun Dam.

*Tellico Reservoir Land Management Plan Final Environmental Impact Statement and Record of Decision (TVA 2000)*. This plan evaluated alternative uses of TVA public lands including some of the lands affected by the US 321 improvement project. It provides a statement of how TVA would manage public land on Tellico Reservoir in the future. It

further identified and evaluated land use allocations that will guide the management of 12,643 acres of TVA public land in 139 parcels.

## **Alternatives**

FHWA and TDOT completed an EA in which the potential impacts of a No Build Alternative and a Build Alternative were evaluated for construction of the bridges over the Tennessee River and the Tellico Canal. This supplemental EA expands upon the Build Alternative in the 1998 FHWA/TDOT EA by considering a “Keep Option” and a “Removal Option” that address the existing bridge and approaches and modification of the approach roadways, including the removal of the City Park Drive overpass and the relocation of a transmission line tower.

Under the No Build Alternative, the new bridge construction would not occur. If any of the state or federal agencies involved (FHWA, TDOT, USACE, USCG, or TVA) did not approve the new bridge construction, then the existing bridge on top of Fort Loudoun Dam would stay in service. TVA would not approve the new bridges under Section 26a or grant an easement across the dam reservation. Therefore, the potential environmental impacts associated with the construction and operation of the proposed bridges would not occur, and transportation over the Tennessee River and Tellico Canal would not be improved. TVA would continue maintenance to preserve the structural integrity of the existing bridge, and public access to the Fort Loudoun Marina and Lenoir City Park would continue through the dam reservation.

Under the Build Alternative in the FHWA/TDOT EA, the proposed new bridge construction would occur along with the associated impacts described in the EA. However, under this alternative, TVA would consider one of two options concerning the disposition of the existing bridge.

Under the “Keep Option,” TVA would not approve the removal of the existing bridge. TVA would continue maintenance to preserve the structural integrity of the existing bridge, and public access to the Fort Loudoun Marina and Lenoir City Park would continue through the dam reservation.

Under the “Removal Option,” TVA would approve the removal of the existing bridge and associated actions. This would result in the impacts and benefits described below. Further, approval conditions have been developed to minimize the impacts of the Build Alternative in the 1998 FHWA/TDOT EA as well as the removal of the existing bridge (see Bridge Removal Plan).

## **Affected Environment and Evaluation of Impacts**

### Site Description

The TVA Fort Loudoun and Tellico dam reservations are east of Lenoir City, Tennessee, and straddle the Tennessee and Little Tennessee rivers. Proceeding from west to east, the existing roadway for US 321 enters TVA-managed property at Lenoir City and after the Elm Hill Road intersection, bends northward to the bridge through a narrow cut to Fort Loudoun Dam. The current steel and concrete bridge is constructed directly on top of the dam crossing over the powerhouse, gates, and navigation lock. From the navigation lock, the steel and concrete roadway declines to an earthen berm directly on the western portion of the dam. An intersect/interchange diverts State Route 444 to the southeast, continuing past the main Tellico Dam and its overflow areas, and off TVA property. US 321 continues

eastward over the Tellico Canal on a steel constructed bridge, leaving TVA-managed property and continuing on to Blount County. TVA currently maintains the Fort Loudoun Dam and Hydro Plant, switchyard and lines, a maintenance base, Tellico Dam, and public recreation areas with a boat ramp, beach, and picnic areas. The remainder of the TVA-managed property is open grass or woodlands. The USACE operates the lock and facilities on the east side of the dam and river. Northward and upstream of Fort Loudoun Dam is the Fort Loudoun Marina and Lenoir City Park. Access to both the park and marina is via City Park Drive, which loops northward from the access road to Fort Loudoun Dam past the switchyard and crosses US 321 (see Attachment 1).

### Impacts Evaluated

Potential effects to various resources were evaluated in the 1998 FHWA/TDOT EA. TVA has performed additional analyses to determine potential effects resulting from the modifications to the applicant's original proposal. Specifically, potential effects to property access and safety; navigation and transportation; cultural resources; water quality; terrestrial and aquatic resources; and aesthetic, noise, and socioeconomic effects were considered. Results of these additional analyses are provided below.

### Property Access and Safety

Vegetation management along the proposed right-of-way, new bridge approaches, and former bridge approaches needs to be done safely and efficiently. TVA would require that slopes and drainage ditches be designed to accommodate mowers, tractors, and workers at the new construction and bridge removal sites as specified in the December 2005 plans. The new bridges would bisect TVA property in places, restricting or eliminating vehicle access to TVA property. To rectify this, TVA would require that at least a 25-foot-wide maintenance road corridor be provided under the proposed bridges between the water and the proposed bridge structures.

### Navigation and Transportation

Removal of the bridge over Fort Loudoun Dam and modification of existing access roads would provide better direct access to the Lenoir City Park and Fort Loudoun Marina upstream of the dam and, in general, would improve their accessibility to the public, while reducing traffic in the vicinity of the Fort Loudoun powerhouse, switchyard, and other facilities. Removal of the bridge would have negligible impacts to US 321 traffic, since the new bridge at that point in time would be operational. The current road system to Lenoir City Park and Fort Loudoun Marina would continue to be maintained and available to local traffic if the bridge removal and road modification were not to take place. However, the road modification would provide convenience and beneficial impacts to local traffic and transportation.

Removal of the bridge would impact navigation and use of the lock only during the demolition phase of the project and only in the vicinity of the navigation lock. For the safety and protection of personnel and property, no locking activities would occur when demolition work was occurring nearby, especially directly over the navigation lock. However, safety measures and schedules, as provided in the attached Bridge Removal Plan, would increase safety to personnel and property while minimizing interruptions to navigation and the use of the locks.

### Cultural Resources

The Tennessee State Historic Preservation Officer (SHPO) concurred with the findings in the FHWA/TDOT EA that new alignment of US 321 would have no effect on historic

properties. The actions being assessed in this supplement to the EA (road addition and road/bridge removal) would occur in locations that have been severely impacted by previous road and dam construction activities. In addition, removal of the bridge would return Fort Loudoun Dam, powerhouse, and lock to their original historic appearance. Construction on this highway bridge over the dam began in 1960 and opened to traffic in 1961. The bridge is under 50 years old and under criteria of the National Register of Historic Places (NRHP), it is not an eligible element of the dam complex. The proposed changes to the roadways and bridge removal would not adversely affect any archaeological resources or any property eligible for listing in the NRHP. The SHPO concurred with this determination in a letter dated March 18, 2008 (Attachment 3).

#### Water Quality

Under the Removal Option of the Build Alternative, there would be little to no impact on existing shoreline resources. Although previously scoured and repainted, there potentially are residual amounts of lead paint on the existing metal parts of the bridge. However, the metal parts would be disassembled and sent to another location for recovery of materials. Use of the methods described in the attached Bridge Removal Plan would prevent the release of hazardous material into the Tennessee River.

#### Terrestrial and Aquatic Resources

Removal of the existing bridge and modification of the roadways are expected to result in minor, temporary, and insignificant effects to local terrestrial and aquatic life. Construction of a bridge in tailwater (particularly blasting) may impact migrating fish species if in-stream work is conducted during the period prior to and during spawning. Important tailwater-spawning species found below Fort Loudoun Dam are sauger, white bass, and paddlefish. These species are usually staging for spawning from February through May.

The TVA Natural Heritage database indicated that in addition to previously identified species, two state-listed species, eastern hellbender (*Cryptobranchus alleghaniensis*) and bald eagle (*Haliaeetus leucocephalus*), have been reported from Loudon County, Tennessee, within 4 miles of the project site. In addition, one heronry, two osprey nests, and one cave are known to exist within 4 miles of the project site.

The bald eagle nest is at the confluence of the Little Tennessee and Tennessee rivers in the Fort Loudoun/Tellico Dam tailwaters approximately 1.2 miles from the J. Carmichael Greer Bridge and is only 0.7 mile from the proposed bridge over the Tennessee River. TVA and U.S. Fish and Wildlife Service (USFWS) personnel met at the site on April 3, 2006, to assess potential impacts to the nest. The USFWS concluded that the nest could potentially be affected by activities associated with TDOT's proposed bridge construction below Fort Loudoun Dam and contacted them to inform them about the nest and the need to reevaluate the impacts of the bridge.

Since this contact, the bald eagle has been removed from the federal list of endangered and threatened species, July 2007. However, it is still protected under the Bald and Golden Eagle Protection Act and state laws. Using the new USFWS Bald Eagle Management Guidelines, the bald eagle nest is beyond the suggested protective buffer zones, and the nest is not in direct line-of-site to the project. Therefore, TVA has determined that the bridge construction would not have an impact on the bald eagle. TVA also determined that removal of the existing bridge from Fort Loudoun Dam would not result in impacts to this eagle nest or other listed terrestrial animal species.

As stated in the 1998 FHWA/TDOT EA, the snail darter (*Percina tanasi*), pink mucket pearly mussel (*Lampsilis abrupta*), and orange-footed pearly mussel (*Plethobasus cooperianus*) are federally listed as endangered or threatened species in the vicinity of the proposed new bridges. If the conditions of the April 22, 1998, USFWS letter to TDOT are met, these species are unlikely to be adversely affected by construction of the bridges. These same species are of concern for the proposed bridge removal. However, none of these species would be directly impacted by the proposal, and no effects to threatened or endangered species are anticipated from the bridge removal.

#### Aesthetic, Noise, and Socioeconomic Effects

Under the Removal Option, the elevated roadway and the approaches would be removed from Fort Loudoun Dam. This would lower the profile of the dam complex, returning it to near its original appearance. Thus, the crossing is not expected to be visually disruptive. The removal of the overhead structure would result in making the overall visual effect consistent with the general aesthetic character of the area.

Lenoir City is located approximately 1 mile from the facility. Only a few residences, along with the Fort Loudoun Marina and Lenoir City Park, are located within a 1-mile radius. Because of the remote nature of the dam and the lack of nearby residences, loading the barges with scrap and debris (see attached Bridge Removal Plan) is not expected to be an annoyance to the local community. Given the current private and commercial traffic via the navigation lock and land traffic over the existing bridge, noise impacts from removing the bridge are expected to be temporary and insignificant.

Local residential property values are not expected to be adversely affected by the bridge removal. The proposed action would not disproportionately affect any minority or low-income groups.

#### Cumulative Impacts

Considering past, present, and future proposals, there would be only minimal adverse cumulative impacts associated with the bridge removal and other modifications.

#### **Mitigation and Special Permit Conditions**

In addition to the normal best management practices and other measures included as TVA's General and Standard Conditions of Section 26a permits, TVA would require the following measures:

- Implementation of the Bridge Removal Plan.
- To the extent practical, in-stream construction (particularly blasting) would be scheduled to avoid the February through May fish spawning season.
- Provide mowable slopes and ditches for vegetation management at the new construction and bridge removal sites as specified in the December 2005 plans.
- Provide at least a 25-foot-wide maintenance road corridor under bridges between the water and the bridge for access to TVA land.

### **Preferred Alternative**

TVA prefers the Build Alternative with the “Removal Option,” which provides for the construction of the new bridges, removal the J. Carmichael Greer Bridge and approaches, and modification of the roadway to the Fort Loudoun Marina and Lenoir City Park.

### **TVA Preparers**

Darrell A. Cuthbertson, TVA Environmental Stewardship & Policy, Lenoir City, Tennessee,  
Project Leader

Travis H. Henry, TVA Environmental Stewardship & Policy, Knoxville, Tennessee,  
Threatened and Endangered Species

A. Eric Howard, TVA Environmental Stewardship & Policy, Knoxville, Tennessee,  
Archaeology

Wesley K. James, TVA Environmental Stewardship & Policy, Lenoir City, Tennessee,  
Terrestrial Resources

George C. Peck, TVA (Retired), Knoxville, Tennessee, Aquatic Resources

Harold L. Petty, TVA Fossil Power Group Technical Support, Chattanooga, Tennessee,  
Transportation

Charles R. Tichy, TVA (Retired), Knoxville, Tennessee, Historic Resources

Richard L. Toennisson, TVA Environmental Stewardship & Policy, Knoxville, Tennessee,  
NEPA Editor

Russell W. Tompkins, TVA River Scheduling, Chattanooga, Tennessee, Dam Safety

### **Agencies Consulted**

U.S. Army Corps of Engineers

U.S. Coast Guard

U.S. Fish and Wildlife Service

Tennessee Department of Transportation

Tennessee State Historic Preservation Office

### **References**

Federal Highway Administration and Tennessee Department of Transportation. 1998. *U.S. 321 (State Route 73) From .32 km (0.2 mile) West of U.S. 11 (State Route 2) to the Existing Four-Lane Section Near the Blount County Line, Loudon County, Tennessee*. Publication prepared in cooperation with Tennessee Valley Authority and the U.S. Coast Guard. EA dated May 1998; FHWA FONSI issued October 6, 1999; USCG FONSI issued May 9, 2001.

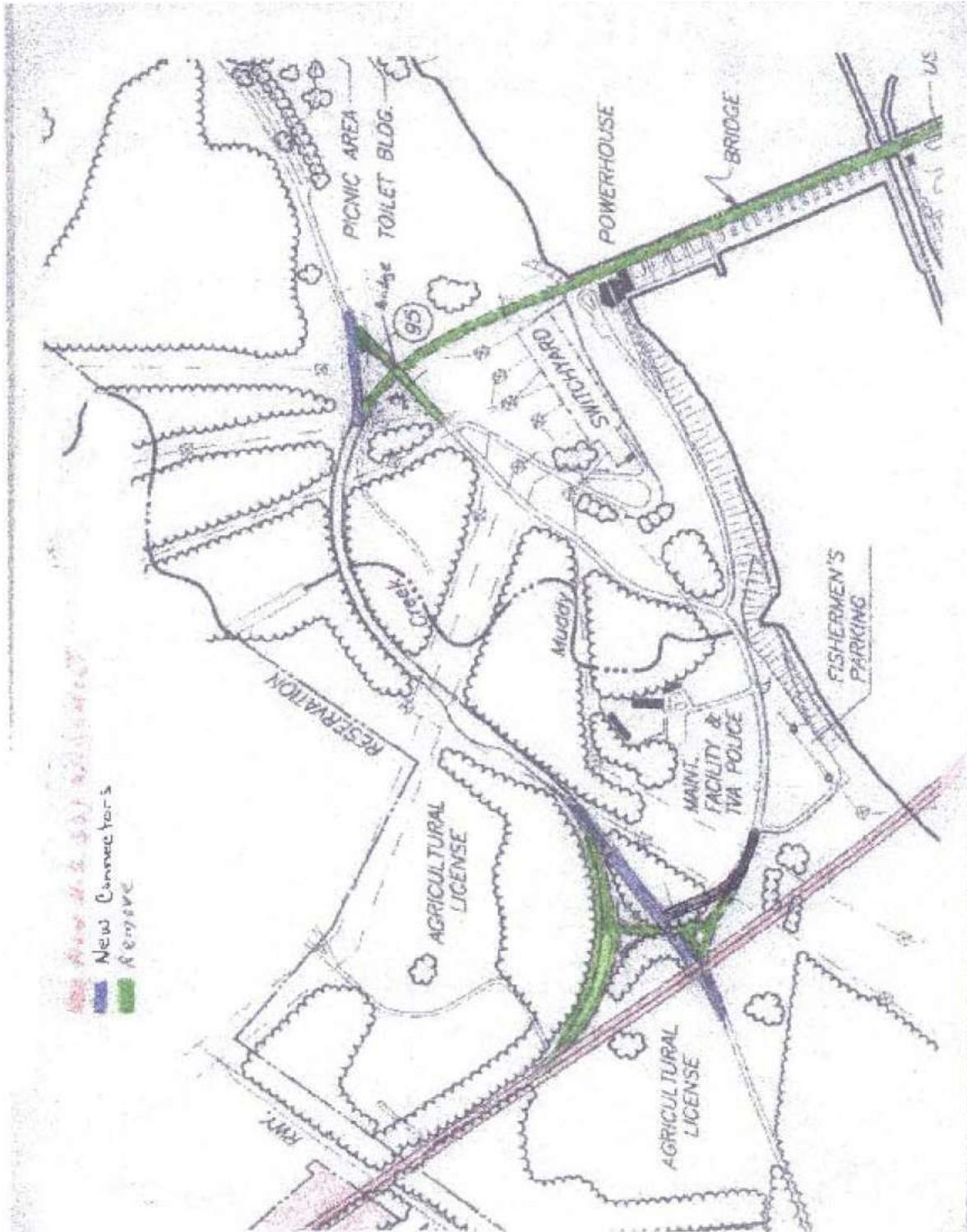
Tennessee Department of Transportation. 2005. *Right-of-Way and Plans for State Route 73 (U.S. 321) From: S.R. 2 (U.S. 11) To: West of Tellico/Fort Loudoun Channel, Loudon County, Tennessee*. December 2005.

Tennessee Valley Authority. 2000. *Tellico Reservoir Land Management Plan Final Environmental Impact Statement and Record of Decision*. June 2000.

**Attachments**

1. Map of Proposed Bridge Removal and Road Modifications
2. TVA Dam Safety *Requirement for Removal of Bridge and Approach Roadways Across Fort Loudoun Dam* (Bridge Removal Plan)
3. Tennessee SHPO Letter, March 18, 2008
4. FHWA and TDOT EA and FONSI
5. USCG FONSI

Attachment 1



Map of Proposed Bridge Removal and Road Modifications

**Attachment 2**  
**REQUIREMENTS FOR REMOVAL OF BRIDGE AND APPROACH ROADWAYS**  
**ACROSS FORT LOUDOUN DAM**  
 (prepared by TVA Dam Safety)

**EXTENT OF BRIDGE STRUCTURE REMOVAL:**

FH )  
 (X) 80H400R is  
 "Details of Bridge Removal" Section for

**Details of Bridge Removal:**

- 
- 
- 
- 
- 
- 

**REQUIREMENTS FOR REMOVAL OF BRIDGE DRAINS AND EXISTING BRIDGE LIGHTING:**

**REQUIREMENTS FOR REWORK OF BRIDGE APPROACH ROADWAY AND APPROACH ABUTMENTS:**

**REQUIREMENTS FOR USE AND REMOVAL OF THE BRIDGE SAFETY NETS OVER THE LOCK:**

At the end of its service life; and should not be considered as adequate protection  
for the structure  
The structure  
The structure  
The structure

**REQUIREMENTS FOR THE GENERAL APPROACH TO AND ACCEPTABLE METHODS OF BRIDGE DEMOLITION:**

The structure  
The structure  
The structure

1. The structure, and  
The structure  
The structure  
The structure  
The structure

**PROTECTION OF TVA EQUIPMENT AT THE LOCK AND DAM DURING DEMOLITION.**

3. The structure  
The structure  
The structure  
**PROTECTION OF TVA EQUIPMENT AT THE LOCK AND DAM DURING DEMOLITION.**

4. The structure
5. The structure
6. The structure  
The structure  
The structure  
The structure
7. The structure  
The structure  
The structure

**REQUIREMENTS FOR DISPOSAL OF DEBRIS FROM BRIDGE DEMOLITION:**

1. The structure  
The structure

2. ~~Apply~~
3. ~~Apply~~
4. ~~Apply~~ ~~Apply~~
5. ~~Apply~~
  - ◆ ~~T&C~~
  - ◆ ~~Bo~~
  - ◆ ~~Al~~

**HISTORY AND CURRENT CONDITION OF THE COATINGS ON THE BRIDGE SUPERSTRUCTURE:**

1. The structural steel portion of the bridge was originally coated with Type II "Red Lead" - 1950's. The original coating was e superstructure was painted in the late 1970's  
- 1981
2. ~~Apply~~ to
3. ~~Apply~~ - to to
4. ~~Apply~~ to
5. ~~Apply~~ to

**PROTECTION OF TVA EQUIPMENT AT THE LOCK AND DAM DURING DEMOLITION:**

~~Apply~~ to

~~Apply~~ to

~~Apply~~ to

~~Apply~~ to

The demolition contractor is to submit a plan specifying the extent and methods to be used to cover this equipment prior to the start of demolition operations in the vicinity. ~~Apply~~

~~Apply~~ to

~~From Exhibit~~  
~~on~~

- ~~the~~
- ~~the~~
- ~~the~~

b

**OPERATIONAL CONSIDERATIONS:**

~~is attached~~

~~in the~~

b

~~with the~~

~~the~~

Corps of Engineers (CORPS), US Co

~~General~~

The demolition contractor is to submit a detailed plan and schedule for the demolition of the bridge deck and superstructure which takes into account the following operational considerations:

1. ~~the~~

~~the~~

2. ~~the~~

~~the~~

3. ~~the~~

~~the~~

~~the~~

~~the~~

~~the~~

4. ~~the~~

~~the~~

~~the~~

~~the~~

~~the~~

5. ~~the~~

~~the~~

~~the~~

~~the~~

6. ~~the~~

~~the~~

- ~~the~~

~~the~~

~~the~~

~~the~~

~~the~~

- ~~the~~

~~the~~

~~the~~

- ~~the~~

~~the~~

- ~~the~~

~~the~~

~~the~~

b

b

b

b

**CONSTRUCTION STAGING AND LAY DOWN AREAS:**

down areas for the demolition contractor’s use. One area will be identified upstream of the

**ENVIRONMENTAL REQUIREMENTS:**

Environmental Management Plan

- 1. [Redacted]
- 2. [Redacted]

- [Redacted]
  - ◆ [Redacted]
  - ◆ [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

**REQUIREMENTS FOR FUELING OF EQUIPMENT:**

“Fuel Handling and Fueling Procedure”  
“Fuel Handling and Fueling Procedure”  
“Fuel Handling and Fueling Procedure”

- 1. The contractor’s site superintendent or project manager is to designate a Site Fueling
- 2. The “Fuel Handling and Fueling Procedure” is to contain the following detailed requirements
  - 1) [Redacted]
  - 2) [Redacted]
  - 3) [Redacted]
  - 4) [Redacted]

- 5) ~~Exhibition~~ ~~affix~~ b
- 6) ~~Registration~~ ~~affix~~ a
- 7) ~~Registration~~ ~~affix~~
- 8) ~~Registration~~ ~~affix~~ b
- 9) ~~Registration~~ ~~affix~~ b
- 10) ~~Registration~~ ~~affix~~ b
- 11) ~~Registration~~ ~~affix~~
- 12) ~~Registration~~ ~~affix~~ b
- 13) ~~Registration~~ ~~affix~~ b

**Qualifications of Contractors:**

1. ~~Registration~~ ~~affix~~
2. ~~Registration~~ ~~affix~~ b
3. ~~Registration~~ ~~affix~~
4. ~~Registration~~ ~~affix~~
5. ~~Registration~~ ~~affix~~ b
6. ~~Registration~~ ~~affix~~

**QUALIFICATIONS OF CONTRACTORS:**

- ~~Registration~~ ~~affix~~ b
1. ~~Registration~~ ~~affix~~ b
  2. ~~Registration~~ ~~affix~~ b

**CONTRACTOR SAFETY PERFORMANCE:**

Alphabetically  
by the  
DOR table  
page

1. The Safety Program to
2. A Safety Plan
3. Alphabetically (3)

- ◆
- ◆
- ◆
- ◆ BIA Co

**INSURANCE AND LIABILITY REQUIREMENTS:**

All contractors bidding on this work shall have the following insurance provisions in effect:

Min	\$20,000,000
Max	\$1,000,000

\* From the  
the  
the

in "A" to A.M.B.C.M

The  
the  
the  
the  
the  
the  
the  
the  
the

Altitude  
Est. to be

1. If, US to be  
to be  
to be  
to be  
to be

to be

2. to be, to be  
to be

3. to be  
to be

to be  
to be

(30) to be

**JOINT TDOT-TVA-CORPS OF ENGINEERS-CONTRACTOR PRE-CONSTRUCTION CONFERENCE:**

to be - to be  
to be  
to be

to be

**SUBMITTALS:**

to be  
to be  
to be

to be

- Evidence of qualification to perform this project.
- A detailed plan and schedule for the demolition of the bridge deck and superstructure.
- A plan specifying the extent and methods to be used to protect TVA and CORPS equipment prior to the start of demolition operations.
- Environmental Management Plan for laydown areas, jobsite, and floating equipment.
- "Fuel Handling and Fueling Procedure"
- Corporate Safety Program and related safety data
- A Project Specific Safety Plan
- A summary of required insurance coverage.

Attachment 3



**TENNESSEE HISTORICAL COMMISSION**  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
2941 LEBANON ROAD  
NASHVILLE, TN 37243-0442  
(615) 532-1550

March 18, 2008

Dr. Thomas O. Maher  
Tennessee Valley Authority  
400 West Summit Hill Dr.  
Knoxville, Tennessee, 37902-1499

RE: TVA, SR-231 BRIDGE REMOVAL/FT. LOUDOUN DAM, UNINCORPORATED, LOUDON COUNTY

Dear Dr. Maher:

In response to your request, received on Monday, March 10, 2008, we have reviewed the documents you submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicant for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800. You may wish to familiarize yourself with these procedures (Federal Register, December 12, 2000, pages 77698-77739) if you are unsure about the Section 106 process.

Considering available information, we find that the project as currently proposed will NOT ADVERSELY AFFECT ANY PROPERTY THAT IS ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES. Therefore, this office has no objection to the implementation of this project. Please direct questions and comments to Joe Garrison (615) 532-1550-103. You may find additional information concerning the Section 106 process and the Tennessee SHPO's documentation requirements at: <http://www.tennessee.gov/environment/hist/federal/sect106.shtml>

We appreciate your cooperation.

Sincerely,

E. Patrick McIntyre, Jr.  
Executive Director and  
State Historic Preservation Officer

EPM/jyg