

Appendix 1

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US Army Corps
of Engineers®

Nashville District

Nationwide Permit

No. 14, Linear Transportation Projects

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands. (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).



Nationwide Permit Conditions

2007

The following General Conditions must be followed in order for any authorization by NWP to be valid:

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the US Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the US. (c) The permittee understands and agrees that, if future operations by the US require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the US. No claim shall be made against the US on account of any such removal or alteration.
2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the US that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is related to a shellfish harvesting activity authorized by NWP 4 and 48.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act)

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects from Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the US during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations and revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, US Forest Service, US Fish and Wildlife Service).

16. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that may affect Federally-listed species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the FWS, the District Engineer may add species-specific regional endangered species conditions to the NWP.

- (b) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical

habitat can be obtained directly from the offices of the USFWS and NMFS or their World Wide Webpages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.html> respectively.

18. Historic Properties. No activity which may affect historic properties listed or eligible for listing, in the National Register of Historic Places is authorized, until the District Engineer has complied with the provisions of 33 CFR Part 325, Appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the notification must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Prospective permittees should be aware that section 110k of the NHPA (16 USC 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur.

19. Designated Critical Resource Waters. Critical resource waters including state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment. (a) Discharges of dredged or fill material into waters of the US are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. Mitigation. The activity must be constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the US to the maximum extent practicable at the project site (i.e. on site). Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

21. Water Quality. The activity must comply with case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

22. Coastal Zone Management. (Not applicable in Nashville District.)

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal water is constructed under NWP14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with NWP verification, the permittee may transfer the NWP verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the NWP verification must be attached to the letter, and the letter must contain the following statement: When the structures or work authorized by this NWP are still in existence at the time the property is transferred, the terms and conditions of this NWP, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below:

Transferee _____ Date _____

26. Compliance Certification. Every permittee who has received a Nationwide permit verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification form is included with this verification.

27. Pre-Construction Notification. N/A as a permit condition for this verification letter. (For full text of this condition, refer to page 11-194 of the *Federal Register*, Vol. 72, No. 47, Monday, March 12, 2007 at <http://www.usace.army.mil/inet/functions/cw/cecwofreg/>.)

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

Further information:

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other Federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.

APPENDIX 2

General Permit for Construction and Removal of Minor Road Crossings

Effective Date: July 1, 2005

Expiration Date: June 30, 2010

This general permit authorizes the construction and/or removal of minor road crossings. A "minor road crossing" is defined in Rule 1200-4-7-.03 as a bridged or culverted roadway fill across a stream or river which results in the alteration of 200 linear feet or less of stream bed (on a single stream) or shoreline. This permit also authorizes other transportation crossings of the same size restriction such as linear crossings of greenway trails.

Failure to comply with the terms and conditions of this permit is a violation of the *Tennessee Water Quality Control Act of 1977* and is subject to penalty in accordance with T.C.A. §69-3-115.

Exclusions

This general permit shall not be used to authorize activities in the following circumstances:

- 1) where the total length of road crossing is more than 200 feet on a single stream, for the entire project, including transitions;
- 2) where a portion of the proposed activity is located in a component of the National Wild and Scenic River System, a State Scenic River, waters designated as Outstanding National Resource Waters;
- 3) where the proposed activity may adversely affect wetlands;
- 4) where a portion of the proposed activity is located in any waterway which is identified by the department as having contaminated sediments, and where the activity will likely mobilize the contaminated sediments;
- 5) when the proposed activity will adversely affect a species formally listed on either state or federal lists of threatened or endangered species or their critical habitat;
- 6) where the design of the crossing is anticipated to significantly alter the hydraulics of the stream, such as under-sizing or over widening the channel;
- 7) when the department determines that the proposed activities, either individually or cumulatively, may result in degradation to waters of the state; or
- 8) when an individual permit is otherwise required.

Projects not qualifying for authorization under this general permit, may be authorized by an individual permit, provided that all requirements of the *Tennessee Water Quality Control Act of 1977* are met.

Notification

Applicants proposing to construct or remove a road crossing shall notify the division by submission of an original, signed application (form CN-1091) along with the following minimum information:

- (a) a cover letter explaining the scope of the project;
- (b) a USGS topographical map showing the exact location of the proposed project; and
- (c) a single copy of construction plans and drawings which include all dimensions and specifications for the proposed work, as well as pollution control methods and/or structures.

Where the total width of the fill or disturbance to the stream channel for construction for the road crossing is less than 25 feet, activities may commence without written authorization from the division. For crossings greater than 25 feet, work shall not commence until the applicant has received written authorization from the division that the proposed activities may proceed under this general permit or that an individual permit has been issued.

All activities covered under this general permit shall comply with all terms and conditions contained hereinafter.

Terms and Conditions

- 1) The work shall be accomplished in conformance with the accepted plans, specifications, data and other information submitted in support of the above mentioned application and the limitations, requirements, and conditions set forth herein.
- 2) Applicant is responsible for obtaining the necessary authorization pursuant to applicable provisions of §10 of *The Rivers and Harbors Act of 1899*; §404 of *The Clean Water Act* and §26a of *The Tennessee Valley Authority Act*, as well as any other federal, state or local laws.

General Permit for Construction and Removal of Minor Road Crossings

- 3) Applicant is responsible for obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Construction Activities for construction sites involving clearing, grading or excavation that result in an area of disturbance of one or more acres, and activities that result in the disturbance of less than one acre if it is part of a larger common plan of development or sale.
- 4) Stream alterations authorized by this general permit must be a part of a single and complete project. This general permit shall not be used in incremental means to combine with other projects to alter larger areas of the stream.
- 5) This permit does not authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, cul-de-sacs and turn arounds.
- 6) Where practicable, the bottom of culverts should be constructed below the stream bed level, in a manner that allows natural substrate to reestablish.
- 7) The activity may not be conducted in a manner that would permanently disrupt the movement of fish and aquatic life.
- 8) Applicant is responsible for complying with all applicable floodplain regulations. It is the responsibility of the applicant to contact local government officials to determine what the regulations are at the specific location of the proposed project.
- 9) The width of the fill associated with the crossing shall be limited to the minimum necessary for the actual crossing.
- 10) Only clean rock used for the road crossing may be placed directly in the stream. Clean rock can be of various type and size, depending on the application. Clean rock shall not contain fines, soils or other wastes or contaminants.
- 11) The crossing shall be culverted, bridged or otherwise designed to prevent the impoundment of normal or base flows. Base flow is the usual or normal flow of the stream that is supplied primarily by groundwater from springs and seeps, but not affected by rapid runoff during and after rainfall.
- 12) Checkdams shall be utilized where runoff is concentrated. Clean rock, log, sandbag or straw bale checkdams shall be properly constructed to detain runoff and trap sediment. Checkdams or other erosion control devices are not to be constructed in stream. Clean rock can be of various type and size, depending on the application. Clean rock shall not contain fines, soils or other wastes or contaminants.
- 13) Stream beds shall not be used as transportation routes for construction equipment. Temporary stream crossings shall be limited to one point in the construction area and erosion control measures shall be utilized where stream banks are disturbed. Stream crossings should be constructed of clean rock and stream flow should be conveyed in appropriately sized pipe. The crossing shall be constructed so that stream flow is not obstructed. Following construction, all materials used for the temporary crossing shall be removed and disturbed stream banks shall be restored and stabilized if needed.
- 14) Removal of road crossings shall be done in the dry to the maximum extent practicable.
- 15) Where a crossing is removed, the channel shall be returned to stable conditions, which replicates the characteristics (dimensions, shape, substrate, etc.) of the upstream and downstream conditions.
- 16) Upon removal of a crossing, stream banks shall be stabilized. Materials used in bank stabilization shall include clean rock, riprap, anchored trees or other non-erodible materials found in the natural environment.
- 17) Materials used in road crossing projects shall be free of contaminants, including toxic pollutants, hazardous substances, waste metal, construction debris and other wastes as defined by T.C.A. 69-3-103(18).
- 18) The excavation and fill activities associated with the road crossing shall be kept to a minimum and shall be separated from flowing waters except in instances involving only the placement of a culvert and clean rock. The crossing shall be constructed in the dry to the maximum extent practicable, by diverting flow utilizing cofferdams, berms, temporary channels or pipes. Temporary diversion channels shall be protected by non-erodible material and lined to the expected high water level.
- 19) Excavated materials, removed vegetation, construction debris, and other wastes shall be removed to an upland location and properly stabilized or disposed of in such a manner as to prevent reentry into the waterway.
- 20) Material may not be placed in a location or manner so as to impair surface water flow into or out of any wetland area.

General Permit for Construction and Removal of Minor Road Crossings

- 21) Sediment shall be prevented from entering waters of the state. Erosion and sediment controls shall be designed according to the size and slope of disturbed or drainage areas to detain runoff and trap sediment and shall be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices.
- 22) Erosion and sediment control measures shall be in place and functional before earth moving operations begin, and shall be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the work day, but shall be replaced at the end of the work day.
- 23) Sediment should be removed from sediment traps, silt fences, sedimentation ponds, and other sediment controls as necessary, and shall be removed when design capacity has been reduced by 50%. Discharges from sediment basins and traps shall be through a pipe or lined or well-grassed channel so that the discharge does not cause erosion.
- 24) Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events (e.g. forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, daily pick-up, etc.). After use, silt fences should be removed or otherwise prevented from becoming a pollutant source for storm water discharges.
- 25) Clearing, grubbing and other disturbance to the riparian vegetation shall be kept at the minimum necessary for slope construction and equipment operations. Unnecessary riparian vegetation removal, including trees, is prohibited.
- 26) Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 10 calendar days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
- 27) Stabilization measures shall be initiated within seven days after the construction activity has temporarily or permanently ceased.
- 28) Temporary or permanent soil stabilization shall be accomplished within 15 days after final grading or other earth work. Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall replace any temporary measures as soon as practicable.
- 29) Muddy water to be pumped from excavation and work areas shall be held in settling basins or filtered prior to its discharge into surface waters. Settling basins shall not be located closer than 20 feet from the top bank of the stream and water shall be discharged through a pipe, well grassed or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation.
- 30) Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the state. All spills shall be reported to the appropriate emergency management agency and to the division. In the event of a spill, measures shall be taken immediately to prevent pollution of waters of the state, including groundwater.
- 31) This general permit does not authorize impacts to cultural, historical or archaeological features or sites.
- 32) Where authorization is required, the division will establish an expiration date for coverage under this general permit that is specific to the authorization and separate from the general permit expiration date.

APPROVED: Paul E. Davis
Paul E. Davis, Director, Water Pollution Control

DATE: 6-30-05

General Permit for Construction and Removal of Minor Road Crossings

APPENDIX 3



**United Keetoowah Band
Of Cherokee Indians in Oklahoma**

P.O. Box 746 • Tahlequah, OK 74465
2450 S. Muskogee • Tahlequah, OK 74464
Phone: (918) 456-9200 • Fax: (918) 456-9220
www.ukb-nsn.gov

Lisa Stopp, Acting Tribal Historic Preservation Officer

COUNCIL

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Treasurer

Eddie Sacks
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Cliff Wofford
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Joyce Fourkiller
Goingsnake District

Susan Adair
Illinois District

Adalene Smith
Saline District

Barry Dotson
Sequoyah District

Albert Shade
Tahlequah District

August 21, 2006

Pat Ezzell
TVA
400 West Summit Hill Drive
Knoxville, TN 37903-1401

Dear Pat:

Thank you for your letter of August 10 regarding Seven Islands Nature Preserve. We, too, agree that sites 40KN262 and 40KN287 are potentially eligible for listing in the National Register of Historic Places.

Please alert us immediately if plans find that the sites cannot be avoided. We will then work with you on your suggestion for a Memorandum of Agreement to handle compliance issues and adverse effects.

Best Regards,

Lisa C. Stopp
Acting Tribal Historic Preservation Officer
918.456.9200 lstopp@unitedkeetoowahband.org

cc: Chief George Wickliffe



CHOCTAW NATION OF OKLAHOMA

Cultural Resources

P.O. Drawer 1210 • Durant, OK 74702-1210
1-580-924-8280 • 1-800-522-6170 • Fax: 580-920-3102

September 8, 2006

Pat Bernard-Ezzell
Tennessee Valley Authority
400 West Summit Hill Drive
Knoxville, Tennessee 37902-1401

Dear Pat Bernard-Ezzell:

We have reviewed the following proposed project (s) as to its effect regarding religious and/or cultural significance to historic properties that may be affected by an undertaking of the projects area of potential effect.

Entity Requesting Service: Construction of a pedestrian bridge across the French Broad River to connect a new parking area with Seven Islands Nature Preserve

Project Location: French Broad River (River Mile 15.6)

County: Knox County, Tennessee

Comments: After further review of the above mentioned project (s), to the best of our knowledge it will have no adverse effect on any historic properties in the project's area of potential effect. However, should construction expose buried archaeological or building materials such as chipped stone, tools, pottery, bone, historic crockery, glass or metal items, this office should be contacted immediately @ 1-800-522-6170 ext. 2137.

Sincerely,

Terry D. Cole
Tribal Historic Preservation Officer
Choctaw Nation of Oklahoma

By: 
Caren A. Johnson
Administrative Assistant



**United Keetoowah Band
Of Cherokee Indians in Oklahoma**

P.O. Box 746 • Tahlequah, OK 74465
2450 S. Muskogee • Tahlequah, OK 74464
Phone: (918) 431-1818 • Fax: (918) 431-1873
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Historic Preservation Program

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Woodrow Proctor
Flint District

Joyce Fourkiller
Goingsnake District

Susan Adair
Illinois District

Adalene Smith
Saline District

Barry Dotson
Sequoyah District

Albert Shade
Tahlequah District

January 3, 2007

Ms. Pat Ezzell
Tennessee Valley Authority
400 West Summit hill Drive
Knoxville, TN 37902-1402

Dear Pat:

I am in receipt of your letter dated December 20, 2006 regarding Seven Islands Nature Preserve in Knox County.

We agree with the fact that an MOA be developed to address adverse effects and mitigation. We also agree to be a concurring party to the MOA, should we concur with the final draft. I look forward to receiving it soon!

Best Regards,

Lisa C. Stopp
Acting Tribal Historic Preservation Officer



United Keetoowah Band of Cherokee Indians in Oklahoma
Historic Preservation Program

P.O. Box 746 • Tahlequah, OK 74465
20525 S. Jules Valdez Rd. • Tahlequah, OK 74464
Phone: 918.822.1959 or 918.456.9200 • Fax: 918.456.9220

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Illinois District

Adalene Smith
Saline District

Barry Dotson
Sequoyah District

Albert Shade
Tahlequah District

CONCURRENCE

Project:

MEMORANDUM OF AGREEMENT

TVA and USACE - KNOX COUNTY, FRENCH BROAD RIVER
PEDESTRIAN BRIDGE

This is to notify you that the United Keetoowah Band of Cherokee Indians in Oklahoma Historic Preservation program **CONCURS** with the wording of the MOA.

However, if any remains, artifacts or other items are inadvertently discovered, please cease any ground disturbance and contact us immediately at 918-822-1952 or via e-mail (lstopp@unitedkeetoowahband.org). We would like to remain a consulting party in this issue.

Lisa C. Stopp, Acting Tribal Historic Preservation Officer

Date: April 23, 2007



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

May 4, 2007

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

RE: TVA, SEVEN ISLAND NATURE PRESERVE, UNINCORPORATED, KNOX COUNTY

Dear Mr. Maher:

In response to your request, received on Monday, April 30, 2007, 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 ARCHITECTURAL HISTORIC PROPERTY THAT IS ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES**. Archaeological Resources associated with this undertaking will be commented upon separately. 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 www.state.tn.us/environment/hist/sect106.shtm.

We appreciate your cooperation.

Sincerely,

Richard G. Tune
Deputy State Historic
Preservation Officer

RGT/jyg

**MEMORANDUM OF AGREEMENT
PURSUANT TO 36 CFR PART 800**

WHEREAS, the Tennessee Valley Authority (TVA) proposes to issue a permit under Section 26a of the TVA Act, and the United States Army Corps of Engineers (USACE) proposes to issue a permit under Section 404 of the Clean Water Act to Knox County, Tennessee for a pedestrian bridge across the French Broad River; and,

WHEREAS, TVA and USACE have consulted and designated TVA as the lead Section 106 compliance Agency for this project; and,

WHEREAS, TVA, in consultation with the Tennessee State Historic Preservation Officer (SHPO), has determined that the archaeological area of potential effects (APE) will be the pedestrian bridge, parking area, and temporary equipment staging areas and access corridors, and the APE for visual effects on historic structures will be ½ mile boundary from the bridge location or direct line of sight, whichever is less, as referenced in Appendix A; and,

WHEREAS, archaeological and historic structure resources identification and evaluation have been conducted within portions of these APEs, as referenced in Appendix B; and TVA and the SHPO agree that archaeological sites 40KN262 and 40KN287 are eligible for listing in the National Register of Historic Places (NRHP); and,

WHEREAS, TVA, in consultation with the SHPO, has determined that the undertaking will adversely affect archaeological site 40KN262, and may affect archaeological site 40KN287; and,

WHEREAS, consistent with 36 CFR Part 800.5(a)(3), the identification and evaluation of archeological resources and historic structures will be undertaken by TVA in a phased manner; and,

WHEREAS, TVA, in consultation with the SHPO, has determined that the undertaking will not adversely affect historic structures listed on or eligible for listing in the NRHP; and,

WHEREAS, TVA has consulted with Knox County, USACE, SHPO, Eastern Band of Cherokee Indians, Cherokee Nation, United Keetoowah Band, Chickasaw Nation, Muscogee (Creek) Nation of Oklahoma, Kialegee Tribal Town, Thlopthlocco Tribal Town, Alabama Quassarte Tribal Town, Alabama-Coushatta Tribe, Shawnee Nation, Absentee-Shawnee Tribe of Oklahoma, Eastern Shawnee Tribe of Oklahoma, Choctaw Nation of Oklahoma, and Jena Band of Choctaw Indians ; and,

WHEREAS, there is no evidence to date that human remains, associated or unassociated funerary objects, sacred objects, or objects of cultural patrimony (collectively termed cultural items) are present at the designated sites; and,

WHEREAS, the possibility exists that cultural items could be inadvertently discovered during mitigation and construction activities; and,

WHEREAS, Knox County has been invited to be a signatory to this agreement and will be responsible for all costs necessary for implementation of this agreement; and,

WHEREAS, the USACE has been invited to be a signatory to this agreement; and,

WHEREAS, the United Keetoowah Band of Cherokee Indians in Oklahoma has been invited to concur with this agreement; and,

WHEREAS, a Treatment Plan has been developed and is made a part of this Agreement as Appendix C, Treatment Plan; and,

NOW THEREFORE, TVA, Knox County, USACE and the SHPO agree that the undertaking shall be implemented in accordance with the following stipulations to satisfy TVA's and USACE's Section 106 responsibilities. The TVA Federal Preservation Officer, or the designee thereof, shall act for TVA in all matters concerning the administration of this Agreement.

STIPULATIONS

TVA shall ensure that the following stipulations are carried out before the commencement of any ground-disturbing activities could affect historic properties.

1. TREATMENT

The Treatment Plan, attached as Appendix C, has been developed in consultation with the SHPO, USACE, Knox County and those Indian tribes that attach religious and cultural significance to eligible properties. Such Treatment Plan includes the archaeological monitoring, data recovery and/or avoidance of 40KN262, 40KN287 and any newly identified and evaluated historic properties under Stipulations 2 and 3 below.

2. IDENTIFICATION

- a. Identification level surveys have been conducted within portions of the archaeological APE as defined in Appendix A-1 and described in Appendix B-1 and B-2. Once an access corridor and equipment staging areas have been formally selected, Knox County will conduct an identification survey within the boundaries of the access corridor and equipment staging areas before any construction is approved. The survey shall be carried out in a manner consistent with 48 FR 44720-23. This survey shall be conducted in consultation with TVA, USACE and the SHPO. Knox County will submit a written report of the results of the survey as an addendum to the report in Appendix B of this Agreement, to TVA for review and approval. TVA will submit the approved draft report to all signatories for review, allowing 30 days for comments.
- b. An identification level survey has been conducted within portions of the structural APE as depicted in Appendix A-2 and described in Appendix B-4.

3. EVALUATION

Evaluation of archaeological sites has been conducted within portions the APE as depicted in Appendix A-1, and the results are described in Appendix B-3. Knox County will conduct additional archaeological evaluation investigations if project plans are revised or if resources potentially eligible for listing on the NRHP are identified during the investigations of the access corridor or equipment staging area. Such investigations will be conducted in consultation with the other signatories to this

Agreement and in a manner consistent with the Secretary of the Interior's Standards and Guidelines for Identification (48 FR 44720-23) and the Tennessee SHPO Standards and Guidelines for Archaeological Resource Management Studies. The scope of work (SOW) for the evaluation study will be submitted to TVA and the SHPO for approval. Upon completion of the evaluation, Knox County shall submit a draft report of the National Register eligibility evaluation to TVA for review and approval. TVA will submit the approved draft report to all signatories, allowing thirty (30) days for their review and comments.

TVA, in consultation with the SHPO, USACE and Indian tribes that attach religious and cultural significance to identified properties, shall apply the National Register criteria (36 CFR Part 63) to properties identified within the APE in evaluating such properties for National Register eligibility. It is acknowledged that Indian tribes possess special expertise in assessing the eligibility of historic properties that may possess characteristics of religious and cultural significance to them. All evaluations of National Register eligibility shall be conducted in accordance with 36 CFR Part 800.4(c).

Any historic properties identified under Stipulation 2 above and found to meet the criteria for National Register eligibility will be treated according to the process under Appendix C, Treatment Plan.

4. SPECIAL CONSTRUCTION CONSIDERATIONS

To allow for certain construction activities within the boundary of 40KN262, special construction considerations may be agreed upon by TVA, USACE, SHPO, and Knox County. The use of matting at equipment staging areas must be of a design that is acceptable to all consulting parties. This matting will disperse the size, weight and pressure of the equipment during use to minimize impacting the ground below. All equipment that is used within the boundaries of 40KN262 will be confined to the matting. Furthermore, construction activities will only be conducted in dry weather conditions.

Additionally, a temporary barrier or fence will be installed adjacent to 40KN287 to avoid allowing any construction equipment within the boundary of the site.

5. POST REVIEW DISCOVERIES

Previously unidentified historic properties discovered during the implementation of the development will be subject to the evaluation process under Stipulation 3 and treated according to the process outlined in the Treatment Plan in Appendix C.

6. REPORTS

TVA shall ensure that all investigations undertaken for compliance with this agreement are recorded in formal written reports that meet the Secretary of Interior's Standards and Guidelines for Identification (48 FR 44720-23) and the Tennessee SHPO Standards and Guidelines for Architectural and Archaeological Resources Management Studies. The SHPO, USACE, Knox County and Indian tribes that attach religious and cultural significance to eligible properties shall be afforded thirty (30) days to review and comment on any reports submitted as compliance with this agreement.

7. TREATMENT OF HUMAN REMAINS AND FUNERARY OBJECTS

Knox County, in consultation with TVA, the SHPO, and Indian tribes that attach religious and cultural significance to NRHP eligible properties (concerned Indian tribes), shall ensure that the treatment of

any human remains and associated funerary objects discovered within the project area complies with all applicable state and federal laws. Should human remains be encountered during historic properties investigations or post-review discovery, all ground disturbing activities within 50 feet of the discovery will be ceased immediately. The remains will be treated with respect to the deceased, and shall be protected from the time of discovery from further construction activities pending consultation to resolve treatment of such remains.

Knox County shall immediately notify the Knox County Coroner, the State Archaeologist, TVA and the SHPO, should any human remains and/or associated funerary objects be encountered in connection with any activity covered by this agreement. TVA will notify the concerned Indian tribes within forty-eight (48) hours of being informed of the presence of these remains and/or funerary objects, and invite signatories and these Indian tribes to comment on any plans developed to treat these remains and/or funerary objects. Whenever and wherever it is feasible, human remains will be preserved in place. Knox County, in consultation with TVA, the SHPO, and concerned Indian tribes shall ensure that those remains and artifacts are treated in a manner that is consistent with the Advisory Council of Historic Preservation's "Policy Statement Regarding the Treatment of Human Remains and Grave Goods" (1988). Further, this treatment will be conducted in accordance with the applicable provisions of Tennessee Code Annotated (T.C.A.) 46-4-101 et seq. ("Termination of Use of Land as a Cemetery,"); T.C.A. 11-6-116, ("Excavation of Areas Containing Native American Indian Remains,"); T.C.A. 11-6-119 ("Reburial of Human Remains or Native American Burial Objects following Discovery or Confiscation") and Tennessee Rules and Regulations Chapter 0400-9-1 ("Native American Indian Cemetery Removal and Reburial."); and the policies of the culturally affiliated Indian tribes regarding the treatment of human remains and funerary objects, if such human remains are of Native American origin and cultural affiliation can be determined.

8. TIMETABLE FOR COMPLIANCE

- a. TVA and Knox County shall ensure that Stipulations 1-4 of this agreement are met before commencement of any ground-disturbing activities. If development is to be completed in a phased construction, the stipulations of this agreement may be satisfied independently for each phase.
- b. Throughout this agreement, unless otherwise stated, the SHPO, USACE, Knox County and Indian tribes that attach religious and cultural significance to eligible properties shall have thirty (30) days to review and comment on all reports concerning investigations of historic properties and proposed data recovery plans provided by TVA. Comments received from the signatories shall be taken into consideration in preparing final plans. TVA will supply copies of the final reports and data recovery plans to the signatories.

9. PHASED COMPLIANCE

Pursuant to 36 CFR Part 800.5(a)(3), TVA, in consultation with the SHPO and other consulting parties, shall use a phased process in applying the criteria of adverse effect consistent with phased identification and evaluation efforts conducted pursuant to 36 CFR Part 800.4 (b)(2).

10. ADMINISTRATIVE CONDITIONS

- a. If Stipulations 1 to 8 has not been implemented within ten (10) years from the date of this agreement's execution, this agreement shall be considered null and void, unless the signatories have agreed in writing as provided in Paragraph 10.b. below to an extension for carrying out its terms. Upon the agreement's becoming null and void, TVA, SHPO, USACE and Knox County will resume consultation pursuant to 36 CFR Part 800.

- b. If the implementation of Stipulations 1 to 8 has not commenced within 4 (four) years from the date of this agreement's execution, TVA, SHPO, USACE and Knox County shall review the agreement to determine whether the agreement should be extended. If an extension is deemed necessary, TVA, SHPO, USACE and Knox County will consult in accordance with 36 CFR Part 800.6(c) to make appropriate revisions to the agreement.
- c. The signatories to this agreement may agree to amend the terms of the agreement. Such amendment shall be effective upon the signatures of all signatories to this agreement, and the amendment shall be appended to the agreement as an attachment.
- d. Should any signatory object within thirty (30) days after receipt of any plans, specifications, contracts, or other documents provided for review pursuant to this agreement, TVA shall consult with the objecting party to resolve the objection.
- e. If any signatory to this agreement determines that the terms of the agreement cannot be or are not being carried out, the signatories shall consult to seek an amendment to the agreement. If the agreement is not amended, then any signatory may terminate the agreement. If the agreement is so terminated, TVA shall ensure that historic properties within the area of potential effect for the undertaking are protected in accordance with Section 106 of the National Historic Preservation Act until such time that TVA may enter into a new MOA with the signatories or request the comments of the Council pursuant to 36 CFR Part 800.7(a).

Execution of this Agreement by TVA, SHPO, and Knox County, and implementation of its terms evidence that TVA has taken into account the effects of the undertaking on historic properties, and that TVA has complied with its obligations under section 106 of the National Historic Preservation Act.

SIGNATORIES

TENNESSEE VALLEY AUTHORITY

By: _____ Date: _____
[Bridgette K. Ellis, Senior Vice President, O&ER]

THE TENNESSEE STATE HISTORIC PRESERVATION OFFICER

By: _____ Date: _____
[E. Patrick McIntyre, State Historic Preservation Officer]

INVITED SIGNATORIES

UNITED STATES ARMY CORPS OF ENGINEERS

By: _____ Date: _____
[Lieutenant Colonel Steven J. Roemhildt, District Engineer]

KNOX COUNTY, TENNESSEE

By: _____ Date: _____
[Michael R. Ragsdale, Knox County Mayor]

CONCURRENCE BY OTHERS

UNITED KEETOOWAH BAND OF CHEROKEE INDIANS OF OKLAHOMA

By: _____ Date: _____
[George G. Wickcliffe, Chief]

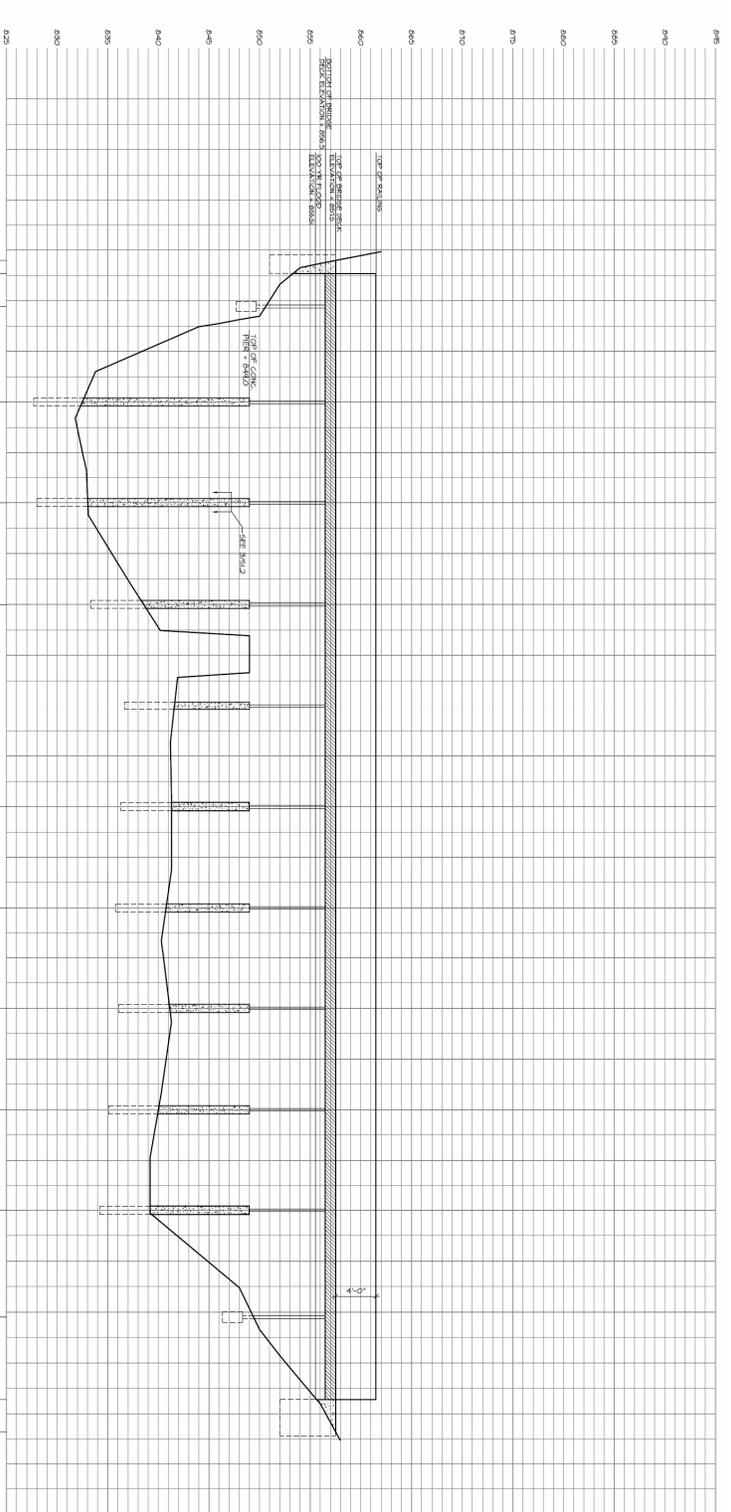
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By: _____ Date: _____

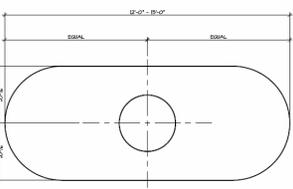
APPENDIX 4



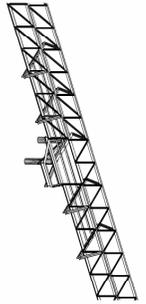
PRELIMINARY BRIDGE/RIVER SECTION

SCALE: H = 80'-0" HORIZONTAL / V = 1'-0" VERTICAL

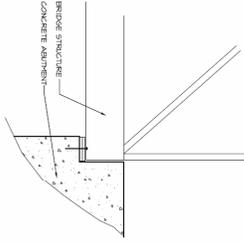
BRIDGE BASE
SCALE: N/A



ISOMETRIC VIEW
SCALE: N/A



ATTACHMENT DETAIL
SCALE: N/A



Sheet of 1
C12

Date: 2/15/07
Designed By: Diana Br...
Drawn By: ...
Checked By: ...
CADD: ...
CADD: ...

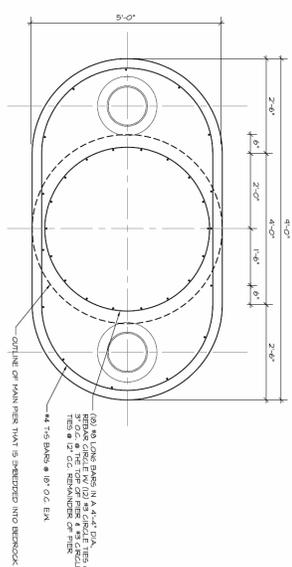
THE ENGINEER HAS BEEN ADVISED THAT THIS DRAWING IS NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF MICHAEL BRADY INC.

A NEW DEVELOPMENT FOR:
**SEVEN ISLANDS
PEDESTRIAN BRIDGE**
KNOXVILLE, TENNESSEE

NOT FOR CONSTRUCTION

Michael Brady Inc.
Architecture Interiors Civil Structural Mechanical Electrical
Surveying Information Systems
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299 N. Weisgarber Rd.
www.mbrarch.com
Fax: (865) 584-5213
Knoxville, TN 37919
mbi@mbiarch.com

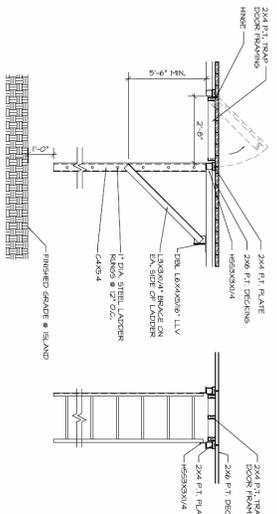
PIER PLAN VIEW (REINF.)
SCALE: 3/8" = 1'-0"



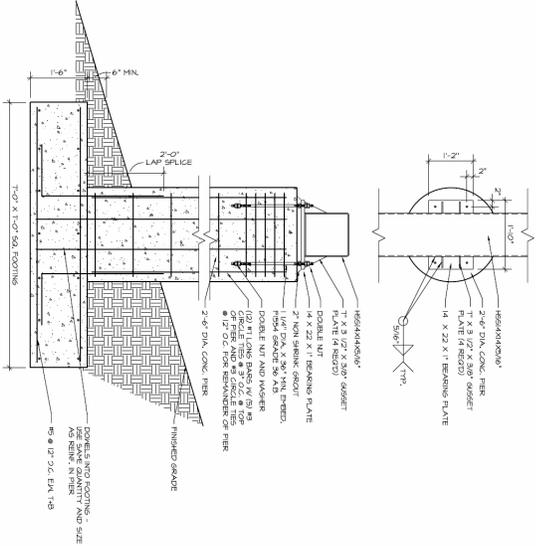
BASE PLATE DETAIL
SCALE: 1/2" = 1'-0"



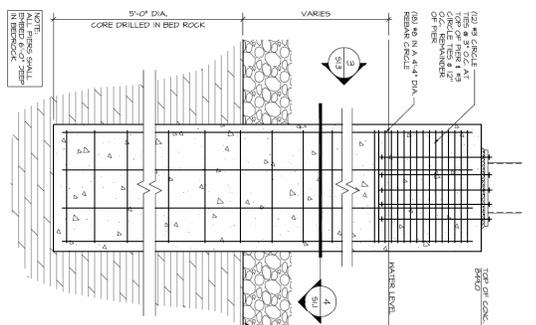
TRAP DOOR DETAIL
SCALE: 1/2" = 1'-0"



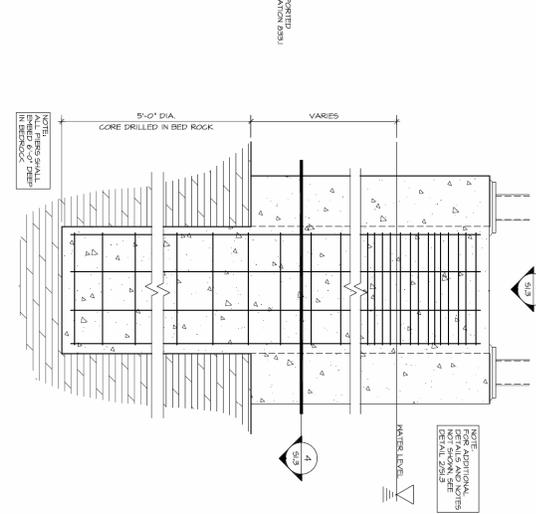
PIER DETAIL
SCALE: 3/8" = 1'-0"



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SCALE: 1/2" = 1'-0"



PIER DETAIL
SCALE: 1/2" = 1'-0"



Sheet of 513

DESIGNED BY: [Name]

DRAWN BY: [Name]

CHECKED BY: [Name]

DATE: 2/15/07

PROJECT: SEVEN ISLANDS PEDESTRIAN BRIDGE

LOCATION: KNOXVILLE, TENNESSEE

A NEW DEVELOPMENT FOR:

SEVEN ISLANDS PEDESTRIAN BRIDGE

KNOXVILLE, TENNESSEE

NOT FOR CONSTRUCTION

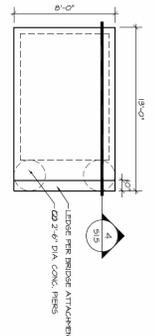
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Michael Brady Inc.

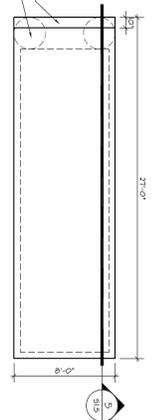
Architecture Interiors Civil Structural Mechanical Electrical
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Phone: (865) 584-0999
800 N. Weigand Rd.
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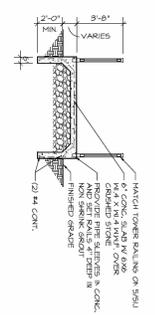
Fax: (865) 584-5213
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mbr@mbrarch.com



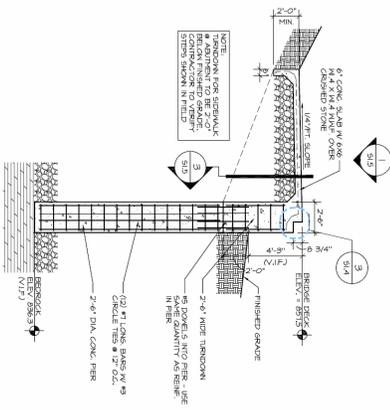
WEST ABUTMENT PLAN
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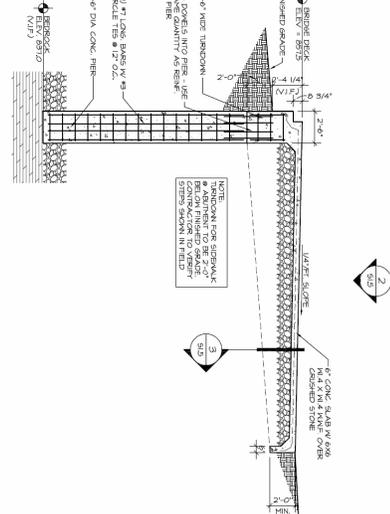
EAST ABUTMENT PLAN
SCALE: 1/4" = 1'-0"



BRIDGE ABUTMENT SECTION
SCALE: 1/4" = 1'-0"



WEST ABUTMENT SECTION
SCALE: 1/4" = 1'-0"



EAST ABUTMENT SECTION
SCALE: 1/4" = 1'-0"

Baker: 2/15/07
 Designed By:
 Drawn By:
 Checked By:
 Comm. No. 21507
 REVISIONS:

DRAWN BY: HIL
 CHECKED BY: HIL
 DATE: 2/15/07
 DETAILS AND NOTES

A NEW DEVELOPMENT FOR:
**SEVEN ISLANDS
 PEDESTRIAN BRIDGE**
 KNOXVILLE, TENNESSEE

**NOT FOR
 CONSTRUCTION**

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 Knoxville, TN 37918
 mb@mbrarch.com

STRUCTURAL NOTES

Design Date: Live Load
 150 psf
 70 psf
 150 psf
 70 psf
 150 psf
 70 psf

1. Concrete and log strength shall be as follows:

- a. Concrete: 4000 psi
- b. Formed Walls, Beams, Slabs: 3000 psi
- c. Cast-in-place concrete: 3000 psi

2. All loadings shall have a 10% reduction for dead load and 10% increase for live load as determined by ASCE 7-10.

3. All loadings shall be verified by geotechnical analysis. **SECTION 10**

4. All loadings shall be verified by geotechnical analysis. **SECTION 10**

5. All loadings shall be verified by geotechnical analysis. **SECTION 10**

6. All loadings shall be verified by geotechnical analysis. **SECTION 10**

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41. All loadings shall be verified by geotechnical analysis. **SECTION 10**

Structural Steel Notes

1. Structural steel shall be designed fabricated erected etc. per AISC Specification for Structural Steel Buildings (AISC 360-10) unless otherwise noted.

2. All steel shall be painted with a minimum of two coats of zinc-rich primer.

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NOT FOR CONSTRUCTION

Michael Brady Inc.
 Architecture Interiors Civil Structural Mechanical Electrical
 Surveying Information Systems

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 899 N. Weisgarber Rd.
 www.mbrarch.com

Fax: (865) 584-5213
 Knoxville, TN 37919
 mbr@mbrarch.com

Project: SEVEN ISLANDS PEDESTRIAN BRIDGE

Sheet: 16 of 16

Date: 2/15/07

Designed By: [Signature]

Drawn By: [Signature]

Reviewed By: [Signature]

Comm. No. 04507

Revisions:

1. [Revision]

2. [Revision]

3. [Revision]

4. [Revision]

5. [Revision]

6. [Revision]

7. [Revision]

8. [Revision]

9. [Revision]

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22. [Revision]

23. [Revision]

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25. [Revision]

26. [Revision]

27. [Revision]

28. [Revision]

29. [Revision]

30. [Revision]

31. [Revision]

32. [Revision]

APPENDIX 5



United States Department of the Interior



NATIONAL PARK SERVICE
Rivers, Trails, and Conservation Assistance
Southern Appalachian Field Office
175 Hamm Road, Suite C
Chattanooga, Tennessee 37405

IN REPLY REFER TO:

Electronic transmittal:

July 31, 2007

Clay Guerry
Tennessee Valley Authority

Re: Seven Islands Pedestrian Bridge

Dear Mr. Guerry:

Thank you for the opportunity to provide comment regarding the above referenced project and potential impacts to rivers listed on the Nationwide Rivers Inventory (NRI). As you may know, the NRI is a listing of more than 3,400 free-flowing river segments in the United States that are believed to possess one or more "outstandingly remarkable" natural or cultural values judged to be of more than local or regional significance.

In partial fulfillment of Section 5(d) of the Wild and Scenic Rivers Act, a 1979 presidential directive requires each federal agency, as part of its normal planning and environmental review processes, to take care to avoid or mitigate adverse effects on rivers identified in the NRI, particularly if those actions would foreclose potential designation as a "wild," "scenic," or "recreational," river. Although responsible for maintaining and overseeing the NRI, the National Park Service (NPS) does not make determinations as to the extent of impact of a given action. Instead, the NPS makes recommendations for avoiding and/or mitigating actions that could potentially foreclose eligibility.

Based on information received to date, it is my understanding that the proposed project will occur in the Seven Islands reach of the French Broad River. The French Broad is listed on the NRI from River Mile 0 to River Mile 32 for its outstanding scenic, recreation, geological, fisheries, wildlife, historical, and cultural resources. In the design and construction of a pedestrian bridge over the French Broad, care should be taken to avoid or otherwise mitigate impacts to the river's ORVs. Following are examples of recommendations to avoiding or mitigating project impacts:



1. The bridge should be designed such that it does not stand out aesthetically from its surroundings.
2. Any disruption to riparian vegetation should be replaced/replanted with native vegetation that characteristic of species found in the immediate project vicinity.
3. Care should be taken to avoid freshwater mussels, fishes, aquatic plants, other aquatic organisms, and their habitat during the construction of bridge supports.
4. Care should be taken to avoid interfering with cultural and history resources at or near the site.
5. Bridge pilings should be designed in such a way as to minimize the potential pinning of recreation boaters, swimmers, and fishermen during a range of flow conditions.

More information on the NRI can be found at www.nps.gov/rtca/nri. In the meantime, if you have any questions or need additional information, please do not hesitate to contact me. Thank you again for consulting with the National Park Service.

Sincerely,

_____/s/
Jeffrey R. Duncan, Ph.D.
Regional Rivers Program Manager

