

D-List Categorical Exclusion – South Waterfront Pedestrian Bridge - Spanning Tennessee River at the University of Tennessee at Knoxville

Knoxville/Knox County

TN-PIN: 113061.00

Date: 10/24/2014

## Environmental Commitments

Commitments are involved on the project.

### List of Environmental Commitments

1) It is possible that historical releases of petroleum hydrocarbons, metals and polyaromatic hydrocarbons from the Knox River Warehouse and Specialty Metals facilities that may experience nearby ground disturbance during construction could have impacted the subsurface soils and/or groundwater in this area. If impacted soils are encountered during these activities, a Phase II ESA investigation may be necessary. The Phase II ESA would support either preconstruction remediation or a site health and safety plan/soil handling plan for construction.

2) Ground disturbing activities proposed in the vicinity of the south bridge landing may include pier and sidewalk construction and possible sidewalk removal and replacement. This would include excavation below the ground surface. The Hazardous Material Evaluation report indicated that a Phase II ESA was performed on the Specialty Metals property in 2011. Mercury, arsenic, barium chromium, lead, and polyaromatic hydrocarbons (PAHs) were detected in soils at levels exceeding the EPA Regional Screening Levels. The report stated that disturbances and excavation of soils on the Specialty Metals property during pier construction will require further characterization in order to determine proper handling and disposal of the soils from this property. This will be done during the construction phase of the project.

3) Aesthetically, the bridge must complement the family of nearby historic bridges (Henley Street Bridge and Gay Street Bridge), the nearby downtown buildings, and the University of Tennessee campus.



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## D-List Categorical Exclusion

### Memorandum

**To:** Ms. Leigh Ann Tribble  
Environmental Program Engineer  
Federal Highway Administration - Tennessee Division  
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Nashville, Tennessee 37217

**From:** Ann Epperson  
Assistant Director, TDOT Environmental Documentation Office  
James K. Polk Building, Suite 900  
505 Deaderick Street  
Nashville, Tennessee 37243

**Date:** 10/24/2014

### Project Information

**Route:** South Waterfront Pedestrian Bridge - Spanning Tennessee River at the University of Tennessee at Knoxville

**Project Termini:** South and North Waterfronts of the Tennessee River

**City/Town/County:** Knoxville/Knox County

**MPO/RPO/TPO Area:** Knoxville TPO Area **PIN #:** 113061.00

	<b>PE #</b>	<b>Right-of-Way #</b>	<b>Construction #</b>
<b>Federal</b>	TCSP-9TN(2)	N/A	N/A
<b>State</b>	PE-N: 47LPLM-F0-038 PE-D: 47LPLM-F1-038	N/A	N/A

### Project Planning

- The project is in an MPO/TPO**—The relevant Transportation Improvement Program (TIP) page is included in the attachment.
- The project is in an RPO**—The relevant State Transportation Improvement Program (STIP) page is included in the attachment.

## Project Description

The project involves the construction of a new pedestrian/bicycle bridge, connecting Knoxville's South Waterfront to the University of Tennessee at Knoxville campus. The site is located in the City of Knoxville (Site Vicinity Map is provided in Attachment B), directly across the Tennessee River from downtown Knoxville. It will span the Tennessee River from Clancy Avenue on the south side of the river to Lake Loudon Boulevard on the north (university) side connecting to the pedestrian concourse located between Thompson-Boling Arena and Pratt Pavilion (Project Location Map provided in Attachment B).

## Purpose and Need

The South Waterfront Pedestrian bridge was included in the City of Knoxville's 2006 Knoxville South Waterfront Vision Plan to provide connectivity between the South Waterfront and the University of Tennessee campus, and to expand the pedestrian/ bicycle network envisioned as a major loop connecting existing greenways, Volunteer Landing and the South Waterfront riverwalks. The Knoxville South Waterfront Redevelopment Plan calls for mixed use with the idea that the South Waterfront will become an extension of downtown where people will live, work, exercise, and seek entertainment. Many owners of new condominiums in the South Waterfront purchased their units because the location allows them to be less reliant on vehicular transportation. The Pedestrian Bridge will provide efficient access to jobs, services, and centers of trade on both sides of the river. The pedestrian/bicycle bridge will maximize pedestrian and bicycle safety by allocating a non-motorized route unshared by vehicles across the river, and will aid in minimizing environmental impacts, transportation-related fuel consumption, and reliance on foreign oil by providing safe and attractive alternative transportation and commuting options.

## Public Involvement

- No public meeting/hearing was held on the project.
- A public meeting/hearing was held on the project. The meeting/hearing summary is included as an attachment.

A public meeting for the South Waterfront Pedestrian Bridge was held on 10/10/2011. Fifty-eight people signed in for the meeting. The majority of the comments received at the public meeting were in favor of the project. The public is generally excited about the pedestrian bridge as a component of the proposed overall South Waterfront redevelopment opportunities. The Knoxville City Council held a workshop for the South Waterfront Pedestrian Bridge on 10/13/2011. The City Council workshop was attended by the mayor, vice-mayor, the finance director, five council members, and a few south waterfront property owners, along with the South Waterfront Redevelopment Director and six representatives from the design team. The City's consultant design team presented the preliminary plans and the environmental team discussed the progress of the environmental clearance. Refer to Attachment C for a copy of the public meeting and workshop announcement, a copy of the public meeting sign-in sheet, and a copy of the October 13, 2011 meeting minutes.

## Project Alternatives

### Build Alternative

The proposed bridge will connect existing pedestrian and bicycle systems located on the north side of the river to the South Waterfront Riverwalk. The City has several portions of the South Waterfront Riverwalk constructed in an effort to ultimately provide approximately three miles of riverwalk. Several alignments were identified (Alternatives Exhibit provided in Attachment B) and an initial evaluation was made. It was determined that the best alignments to stimulate growth in the South Waterfront Area, and create functional and economic development linkages between the UT campus and the South Waterfront Redevelopment Area, as well as expand the pedestrian/bicycle network, connecting existing greenways and Volunteer Landing, and supporting the planned South Waterfront Riverwalk, included alignments A through D. As a result, Alignments E, F and G were eliminated from further study. After further evaluation, Alignment B was eliminated due to

potential conflicts with the UT Master Plan, and C and D were combined (Alternatives Exhibit provided in Attachment B). The south landing is at Clancy Avenue for both alignments (C and D).

The combined C and D alignment was selected as the preferred alignment. The north landing will be in the vicinity of the pedestrian concourse between Thompson-Boling Arena and the Pratt Pavilion. Aesthetically, the bridge must complement the family of nearby historic bridges (Henley Street Bridge and Gay Street Bridge), the nearby downtown buildings, and the University of Tennessee campus, yet be designed to speak to its own time. The preliminary plan presented in this purpose and need document depicts the north landing between Thompson Boling Arena and Pratt Pavilion and the south landing at Clancy Avenue.

The conceptual design considers both concrete and steel designs. The concrete could be precast or cast in place. For the concrete design, a concrete box girder was considered, probably a single cell that would be post-tensioned in order to attain adequate strength. It would include an edge girder system with transverse floorbeams and a longitudinal slab system. This would be particularly suitable for a cable-stayed structure and other types of structures involving hangers, such as the arch structure. Single-cell and two-cell box girders were considered under the structural steel alternative.

#### No Build Alternative

The No-Build Alternative would not result in a maximized pedestrian and bicycle safety by allocating a non-motorized route unshared by vehicles across the river, or aid in minimizing environmental impacts, transportation-related fuel consumption, and reliance on foreign oil by providing safe and attractive alternative transportation and commuting options.

## Relocation and Right-of-Way (ROW) Impacts

- The project does not involve relocation.
- The project involves relocation and the relevant Conceptual Stage Relocation Plan is included in the Technical Studies attachment.
- The project involves permanent easements.

The exact amount of right-of-way and/or easements that will be acquired for the project has not yet been determined. The bridge will be on air rights over the Tennessee River and no piers are proposed in the river. The bridge route other than the south bank is on property which will not be purchased in fee.

Therefore, for purposes of the Categorical Exclusion document a corridor measuring 1,930-feet long by 80-feet wide was assumed between Phillip Fulmer Way and Blount Avenue in order to calculate potential easements or fee simple right-of-ways. Based on this assumption, the potential right-of-way and/or easement acquisition could be as much as 3.5 acres. The City of Knoxville will carry out a right-of-way and relocation program. This program will be in accordance with the Tennessee Uniform Relocation Assistance Act of 1972 and the Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646).

## TECHNICAL STUDIES

### Ecology

- The Ecology Report is included in the Technical Studies attachment.

An ecology report was not completed for the proposed project. The proposed bridge will cross the Tennessee River. Temporary impacts are anticipated to the banks of the Tennessee River during construction of the bridge. The bridge will be a span bridge as opposed to a pier bridge or culvert to avoid permanent impacts. Tree clearing is anticipated on the river banks during bridge construction, which is typically a concern for the USFWS, in that such activity could impact potential Indiana bat habitat. The City's natural resource consultants evaluated the trees in the vicinity of the north and south landings where clearing is anticipated and determined that suitable habitat for the Indiana bat does not exist. Snags were not present, nor trees with loose bark.

## Executive Order 11990—Protection of Wetlands

- No wetland areas protected under Executive Order 11990 will be impacted.
- Wetlands are impacted and supporting documentation is included as an attachment.

Coordination with the US Army Corps of Engineers (USACE) has occurred. A response letter dated 02/06/2013 from the agency is included in Attachment D. The letter states that a review of the information provided indicates an activity that will not involve work in waters of the U.S. (streams and/or wetlands). Therefore, a Department of Army permit would not be required.

## Endangered Species

### **USFWS**

- The proposed project meets the TDOT/U.S. Fish and Wildlife Service (USFWS) Memorandum of Agreement (MOA). No further coordination with USFWS is required. A copy of the MOA is included as an attachment.
- The proposed project has been coordinated with the USFWS Field Office. The USFWS response dated 01/23/2013 is included as an attachment. The USFWS's response letter states: We are unaware of any federally listed or proposed species that would be adversely impacted by this project. Therefore, based on the best information available at this time, we believe the requirements of Section 7 of the Endangered Species Act of 1973, as amended, are fulfilled for all species that currently receive federal protection.

### **TDEC Database**

- On mm/dd/yyyy the preparer checked the Tennessee Department of Environment and Conservation (TDEC) database to determine if any federal or state listed endangered species are known to exist in the project area. The findings are included in the attachment.
- N/A—A check of the TDEC database was not required.

### **TDEC Natural Heritage Inventory Program**

- The proposed project was coordinated with TDEC's Natural Heritage Inventory Program. The TDEC response dated 01/10/2013 is included as an attachment. The TDEC response e-mail states: Thank you for the opportunity to review this project for potential impacts to rare, threatened, and endangered species. Based on the project description, we cannot envision any impacts to species of concern.
- N/A—Coordination with TDEC's Natural Heritage Inventory Program was not required because either no plant species of concern were found during the TDEC database check or were determined not to be affected by the project.

### **TWRA**

- The proposed project was coordinated with Tennessee Wildlife Resources Agency (TWRA). TWRA response dated 01/04/2013 is included as an attachment. The TWRA response letter states that they concur with the City of Knoxville and TDOT's determination that the proposed project meets the criteria for Categorical Exclusion.
- N/A—Coordination with TWRA was not required because no animal species of concern were found during the TDEC database check.

## Biological Assessment for Endangered Species

- No Biological Assessment is needed.
- A Biological Assessment will be required prior to construction.
- The Biological Assessment is included in the Technical Studies attachment.
- A concurrence letter dated mm/dd/yyyy is included as an attachment.

N/A.

## Executive Order 11988—Floodplain Management

- No encroachments upon the 100-year floodplain protected under Executive Order 11988 are involved.
- Encroachments upon the 100-year floodplain are involved and a FEMA map is included in an attachment.

This project is located within and will encroach upon the 100-year flood plain. The City will address FEMA requirements associated with the bridge construction. Flood Insurance Rate Map Panel 47093C0283F is included in Attachment E.

## Farmland

- The project does not convert farmland to a transportation use.
- If the project converts farmland, the total points in the Natural Resource Conservation Service (NRCS) Farmland Impact Conversion Form are less than 160 points.

N/A.

## Wild and Scenic Rivers

- The project does not involve a designated Wild and Scenic River.
- The project involves a designated Wild and Scenic River.

N/A.

## Air Quality

### *Transportation Conformity*

- The Air Quality Report is included in the Technical Studies attachment.
- Air quality coordination information is included as an attachment.

This project is located in the Knoxville ozone and PM<sub>2.5</sub> nonattainment areas. However, the project is exempt from conformity.

The Knoxville Area Interagency Consultation (IAC) Group concurred with the exempt status of the project on the following dates: FHWA, October 2, 2012; EPA, October 1, 2012; TDEC, October 2, 2012; and Knox County, October 1, 2012. The PM<sub>2.5</sub> clearance record and IAC concurrence responses are attached.

**Mobile Source Air Toxics (MSAT)**

- The project is exempt from MSAT analysis. Coordination information is included as an attachment.
- An MSAT analysis is required.
- MSAT supporting documentation is included as an appendix.

This project is exempt from MSATs analysis since it is exempt from conformity per FHWA's "Interim Guidance Update on Air Toxic Analysis in NEPA Documents".

**Particulate Matter less than 2.5 microns (PM<sub>2.5</sub>)**

- The project area is in a nonattainment area for PM<sub>2.5</sub>.
- The project area is in attainment for PM<sub>2.5</sub>.
- Inter-agency consultation (IAC) documentation is included as an attachment.

**Noise**

- This project is Type III. Coordination information is included as an attachment.
- This project is Type I or Type II. The Noise Report is included in the Technical Studies attachment.

This proposed project is Type III, so a noise study is not needed. Refer to Attachment F for the noise clearance statement provided by TDOT.

**Section 4(f) of the Department of Transportation Act of 1966**

- No land given protection under Section 4(f) will be affected by this project.
- Section 4(f) land is involved. The required Section 4(f) evaluation is included in the Technical Studies attachment.
- A *de minimus* finding for this project is included in the Technical Studies attachment.

N/A.

**Section 6(f) of the Land and Water Conservation Fund Act of 1965**

- Section 6(f) is not involved.
- Section 6(f) is involved. Supporting documentation is included as an attachment.

N/A.

## Section 106 of the National Historic Preservation Act of 1966

### **Cultural Resources**

- This project meets a TDOT/Tennessee State Historic Preservation Office (SHPO) Memorandum of Understanding (MOU). No further coordination with the SHPO is necessary.
- Combined Cultural Resources Report was prepared (the combined report is in the Technical Studies attachment).
- SHPO combined cultural resources letter dated mm/dd/yyyy is included as an attachment.
- Separate Cultural Resources Reports were prepared (see next two sections below). The Historic/Architectural and the Archaeology Reports are in the Technical Studies attachment.
- SHPO historic/architectural resources letter dated 08/13/2014 is included as an attachment.
  - National Register of Historic Places listed or eligible historic/architectural properties are affected.
  - No National Register of Historic Places listed or eligible historic/architectural properties are affected.
- SHPO archaeological resources letter dated 08/13/2014 is included as an attachment.
  - National Register of Historic Places listed or eligible archaeological properties are affected.
  - No National Register of Historic Places listed or eligible archaeological properties are affected.

The proposed project has been coordinated with the SHPO. The SHPO response dated 08/13/2014, regarding the Historic Architectural Report, states: Based on the information provided, we find that the project contains eight cultural resources eligible for listing in the National Register of Historic Places. We further find that the project as currently proposed will not adversely affect any of these resources. Unless project plans change, this office has no objection to the implementation of this project. Should project plans change, please contact this office to determine what additional action, if any, is necessary.

The SHPO response dated 08/13/2014, regarding the archaeological report, states: Based on the information provided, we find that the project area contains no archaeological resources eligible for listing in the National Register of Historic Places.

- Cultural resources mitigation measures are included as an attachment.

N/A.

### **Native American Consultation**

- This project does not require Native American consultation. Verification that coordination is not required is included as an attachment.
- Pursuant to 36 CFR 800, a consultation letter dated 09/26/2012 was sent to the following tribes (*check below all tribes that apply*) and is included as an attachment.
- Responses were received from the following tribes (*check below all tribes that apply*) and are included as an attachment.
- No tribal responses were received.

*Letters sent to/responses received from (Check all that apply):*

Sent to	Received from		Sent to	Received from	
<input type="checkbox"/>	<input type="checkbox"/>	Absentee—Shawnee Tribe of Oklahoma	<input type="checkbox"/>	<input type="checkbox"/>	Muscogee (Creek) Nation
<input type="checkbox"/>	<input type="checkbox"/>	Alabama Quassarte Tribal Town	<input type="checkbox"/>	<input type="checkbox"/>	Poarch Band of Creek Indians
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cherokee Nation	<input type="checkbox"/>	<input type="checkbox"/>	Quapaw Tribe of Oklahoma
<input type="checkbox"/>	<input type="checkbox"/>	Chickasaw Nation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Shawnee Tribe
<input type="checkbox"/>	<input type="checkbox"/>	Choctaw Nation of Oklahoma	<input type="checkbox"/>	<input type="checkbox"/>	Thlopthlocco Tribal Town
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Eastern Band of Cherokee Indians	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	United Keetoowah Band of Cherokee Indians in Oklahoma
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Eastern Shawnee Tribe of Oklahoma	<input type="checkbox"/>	<input type="checkbox"/>	Other—name of tribe
<input type="checkbox"/>	<input type="checkbox"/>	Kialegee Tribal Town	<input type="checkbox"/>	<input type="checkbox"/>	Other—name of tribe

The United Keetoowah Band of Cherokee Indians responded by email on 09/30/2012, stating they have no comments or objections to the proposed project.

The Cherokee Nation responded by email on October 25, 2012, stating they have no knowledge of any historic, cultural or sacred sites within the effected area.

The NAC coordination letter and both responses are located in Attachment H..

## Hazardous Materials

- No underground storage tanks or sources of hazardous materials are, or have been, located in the project impact area. If any hazardous materials are found during construction they will be handled and disposed of in compliance with applicable federal and state regulation. Verification that there are not sites or a study is not needed is included as an attachment.
- Hazardous material site(s) are involved.
- The Hazardous Materials (Phase I ESA) Report is included in the Technical Studies attachment.

A Hazardous Material Evaluation was conducted for the South Waterfront Pedestrian Bridge project area based on regulatory file reviews, historic aerial photographs and topographic maps, city directory reviews, interviews of regulatory personnel and field observations. The combined findings of the evaluation indicated that three registered UST sites and two US Brownfields sites (Knox River Warehouses and Specialty Metals) are within or adjacent to the pedestrian bridge corridor. According to the Tennessee Department of Environment and Conservation Division of Underground Storage Tanks the three UST sites have received closure letters, and are therefore not expected to pose a concern for the project corridor.

Ground disturbing activities proposed in the vicinity of the south bridge landing may include pier and sidewalk construction and possible sidewalk removal and replacement. This would include excavation below the ground surface. The Hazardous Material Evaluation report indicated that a Phase II ESA was performed on the Specialty Metals property in 2011. Mercury, arsenic, barium chromium, lead, and polyaromatic hydrocarbons (PAHs) were detected in soils at levels exceeding the EPA Regional Screening Levels. The report stated that disturbances and excavation of soils on the Specialty Metals property during pier construction will require further characterization in order to determine proper handling and disposal of the soils from this property.

The report also stated that the adjacent Knox River Warehouses operated as a textile mill for over 45 years. It is possible that historical releases of petroleum hydrocarbons, metals, or PAHs from this property could have impacted the subsurface soils and/or groundwater in this area. If impacted soils are encountered during these activities, a Phase II ESA investigation may be necessary. The Phase II ESA would support either preconstruction remediation or a site health and safety plan/soil handling plan for construction.

In the event hazardous substances/wastes are encountered within the proposed right-of-way or other portions of the project corridor, their disposition shall be subject to the applicable sections of the Federal Resources Conservation and Recovery Act, as amended; the Comprehensive Environmental Response, Compensation, and Liability Act, as amended; and the Tennessee Hazardous Waste Management Act of 1977.

The Hazardous Materials Evaluation was reviewed by TDOT. In an email dated 03/06/2013, the TDOT Hazardous Materials Office stated that it had reviewed the report and found it to be acceptable, and they anticipate more information once the final alignment is tied down. Refer to the email dated 03/06/2013 located in Attachment I.

## Environmental Justice

- No Environmental Justice issue is involved.
- Environmental Justice issues are involved.
- Environmental Justice documentation is included in the Technical Studies attachment.

The project will be in compliance with Executive Order 12898, which requires federal agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health and environmental effects, including the interrelated social and economic effects of their programs, policies, and activities on minority populations and low income populations in the United States.

It is not anticipated that the proposed project would disproportionately impact any environmental justice populations/communities.

## Other Issues

- No other issues are involved.
- Other issues are involved.
- Supporting documentation of other issues is included as an attachment.

N/A.

## Environmental Commitments

- Commitments are involved on the project and the list is found on the Environmental Commitments Green Sheet.
- Commitments are not involved on the project.

## Preparer's Certification

I hereby certify that I have read and understand the *Guidance for TDOT Environmental Document Templates*.

This document has been reviewed for compliance with applicable federal, state, and local laws and regulations. It has been prepared in compliance with the Council on Environmental Quality Regulations for Implementing the Procedural Provision of the National Environmental Policy Act, 40 CFR 1500–1508, 23 CFR 771, and the Tennessee Environmental Procedures Manual. I hereby certify that I have read and understand 23 CFR 771.117(d).

This document has been prepared by experienced, technically competent, and knowledgeable professionals. I can attest to the document's quality, accuracy, and completeness. By signing this document I am further certifying that, to the best of my knowledge, it meets the criteria for a D-List Categorical Exclusion.

**Prepared by:**



10/24/2014

Leira Douthat  
Project Manager  
S&ME Inc.  
865-970-0003  
ldouthat@smeinc.com

**Local Government  
Representative Signature  
(if prepared by local  
government):**



10/24/2014

Tom Clabo  
Chief Civil Engineer  
City of Knoxville  
865-215-6100  
tclabo@cityofknoxville.org

## TDOT Approval

The Environmental Division TDOT has reviewed the proposed project for compliance with environmental laws and regulations. This project as proposed will not involve significant impacts to planned growth, land use, or existing travel patterns. The above findings demonstrate the fact that the proposed improvements will not indirectly or cumulatively have any significant environmental impacts. Therefore; it is our recommendation that this project be classified as a D-List Categorical Exclusion under the provision of 23 CFR 771.117(d).

**Reviewed by:**



10/24/2014

Drew Gaskins  
Transportation Planner  
TDOT Environmental Documentation Office

**Approved by:**

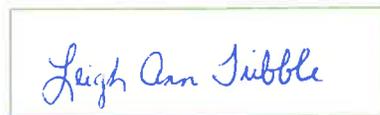


10/24/2014

Ann Epperson  
Assistant Director  
TDOT Environmental Documentation Office

## FHWA Concurrence

**Concurrence**



10-29-14

Ms. Leigh Ann Tribble  
Environmental Program Engineer  
Federal Highway Administration- Tennessee Division Region 1

**cc:** TDOT Environmental Docs, TDOT  
Region 1, TDOT Local Programs,  
Mr. Ronnie Porter, Mr. Tom Clabo,  
City of Knoxville, Ms. Leira Douthat

## Attachments