

ENVIRONMENTAL ASSESSMENT

(File No. 200600583)
Applicant: City of Pigeon Forge

**PROPOSED STREAM ENCAPSULATIONS
AT UNNAMED TRIBUTARIES TO THE WEST PRONG LITTLE PIGEON RIVER,
IN PIGEON FORGE, SEVIER COUNTY, TENNESSEE**

**U.S. ARMY CORPS OF ENGINEERS
Nashville District, Regulatory Branch
in cooperation with the
TENNESSEE VALLEY AUTHORITY**

Prepared by:

**J. Ruben Hernandez
Project Manager
U.S. Army Corps of Engineers
Regulatory Branch
3701 Bell Road
Nashville, Tennessee 37214-2660
(615) 369-7519
Fax: (615) 369-7501
Email: jose.r.hernandez@usace.army.mil**

**Stanford E. Davis
NEPA Services
Tennessee Valley Authority
400 West Summit Hill Drive
Knoxville, Tennessee 37902
(865) 632-2915
Email: sedavis2@tva.gov**

6 May 2008

Table of Contents

1. Proposed Activity

- 1.1 Project Description
- 1.2 Purpose and Need
- 1.3 Project Changes
- 1.4 Additional Proposed Area Development
- 1.5 Decision Required
- 1.6 Other Approvals Required
- 1.7 Scope of Analysis
- 1.8 Existing Setting

2. Public Involvement Process

- 2.1 General
- 2.2 Public Notice Comments
- 2.3 Applicant's Rebuttal
- 2.4 Public Notice Comment Period Extension
- 2.5 Supplemental Public Notice

3. Environmental and Public Interest Factors Considered

- 3.1 Introduction
- 3.2 Physical/Chemical Characteristics and Anticipated Changes
- 3.3 Biological Characteristics and Anticipated Changes
- 3.4 Human Use Characteristics and Anticipated Impacts
- 3.5 Cumulative and Secondary Impacts

4. Alternatives

- 4.1 Introduction
- 4.2 Description of Alternatives
- 4.3 Alternatives not Considered in Detail
- 4.4 Comparison of Alternatives

Appendixes

- A. Typical Road Cross Sections
- B. Supplement to Permit Application
- C. Water Quality Certification
- D. Joint Public Notice
- E. Public Responses

1.0 Proposed Activity

1.1 Project Description. The City of Pigeon Forge (CPF) proposes to construct 2,800' of roadway called Pigeon Falls Lane (PFL) to provide access to the proposed Pigeon Falls Village (PFV) development (see Section 1.4.1 below). A typical road cross section would consist of a minimum of two 11' wide lanes in each direction, curb/gutter and sidewalks, and a raised median (Appendix A). PFL would be located north of Teaster Lane and west of the future Jake Thomas Road Extension, in Pigeon Forge, Sevier County, Tennessee.

Approximately 1,102' (and 297' of ephemeral) of an unnamed intermittent tributary to the West Prong of the Little Pigeon River would be filled. The unnamed tributary is approximately 4-6' wide, with average channel depths of 4-6' upstream and 3-4' downstream, a mud and silt substrate, and water depths of 2-4". In-stream habitat is very limited. Pools, riffles, and point bars, were not visible in most of the stream. Macroinvertebrate life was observed. French drains and pipes would be used in the channel to collect the subsurface seeps and springs. An impermeable layer would be constructed over the french drain and pipe to separate the subsurface flow from the proposed development. In addition, a collection system with subsurface treatment is designed to collect/treat stormwater runoff from the majority of the new proposed area roadways (i.e., PFL and the Teaster Lane/Jake Thomas Road Improvements and Parking Area advertised under separate public notice (see Section 1.4, Additional Proposed Area Development).

Alternatives. CPF states that it has made efforts to avoid stream impacts but because of existing and proposed development the option for acquiring right-of-way (ROW) is limited. It adds that topography, regional traffic concerns, and regional road improvements were related to the need to locate the road at its proposed location.

Mitigation. CPF conducted a search for suitable mitigation sites in the area but did not find any. Therefore, compensatory stream mitigation for impacts to 1,102' of stream would consist of a payment of \$220,400 (\$200/linear foot) to the Tennessee Stream Mitigation Program.

1.2 Purpose and Need. The basic purpose of this roadway project is to serve the proposed PFV development (see Section 2.3.1 below). For purposes of the Section 404(b)(1) Guidelines (Guidelines) of the Clean Water Act (CWA) (40 CFR 230), the proposed roadway project fill is presumed to be a "non-water dependent" activity. In reaching this presumption, the Guidelines assume that practical alternatives not involving special aquatic sites (e.g., wetlands) or resulting in less damaging impacts on the aquatic environment are available. A Guidelines compliance document has been enclosed (Encl 2) rebutting the above presumptions and showing that the proposal would comply with the Guidelines with appropriate and practical conditions. The overall project purpose is to construct an approximate 2,800' long, 4-lane divided road to provide access to PFV, access from Pigeon Forge to the Dollywood Theme Park, and alleviate regional traffic problems. We determined the overall project purpose based on information submitted by PFV.

1.3 Project Changes. Concerns for water quality and aquatic resources impacts were raised during the application's public interest review and state's water quality certification processes. A meeting attended by representatives from the Tennessee Department of Environment and Conservation (TDEC), CPF, Pigeon Falls, LLC, Gresham Smith & Partners (GS&P), Waterfield Design (WD), and S&ME, Inc. (CPF consultant) was held on 29 August 2007 to discuss the issues raised and formulate a response. On 13 September 2007, CPF submitted to this office information on the commitments formulated during the meeting. The following commitments were developed: Showcase project-specific use of Green Infrastructure and Low-Impact Design (LID) tech-

niques, fund construction of a new city Wastewater Treatment Plant, make In-Lieu-Fee (ILF) payments to the Tennessee Stream Mitigation Program (TSMP), pursue project and city Leadership in Energy and Environmental Design (LEED) certifications, develop a city-wide Comprehensive Stormwater Management Plan, and make off-site Physical Habitat Improvements. Details of the supplemental information are provided in Appendix B.

1.4 Additional Proposed Area Development. This office is presently reviewing additional developments planned in the vicinity of PFL. Information about these projects can be obtained by selecting the applicable public notice link at the Corps of Engineers (Corps) Regulatory Branch website: http://www.lrn.usace.army.mil/cof/proposed_activities.htm

1.4.1 Pigeon Falls Village. Pigeon Falls, LLC proposes to develop an 85-acre tract located north-northeast of the Jake Thomas Road and Teaster Lane intersection for commercial use. (Public Notice 07-68, File 200602640).

1.4.2 Teaster Lane/Jake Thomas Road Improvements and Parking Area. As part of its regional road plan to address traffic problems in Pigeon Forge, the City of Pigeon Forge proposes to extend Jake Thomas Road, widen Teaster Lane, expand the intersection at Teaster Lane and Jake Thomas Road, and create a regional parking facility. (Public Notice 07-69, File 200701556).

1.5 Decision Required. Section 301 of the CWA prohibits the discharge of dredged or fill material into waters of the United States (WUS) unless authorized by the Department of the Army (DA) pursuant to Section 404 of the same Act. The unnamed tributaries to the West Prong Little Pigeon River are WUS as defined by 33 CFR 328. A DA permit under Section 404 of the CWA is required for the work. Section 26a of the TVA (Tennessee Valley Authority) Act (16 USC 831y-1) requires that no dam, appurtenant work, or other obstruction affecting navigation, flood control, or public lands or reservations be constructed and thereafter operated or maintained across, along, or in the Tennessee River or any of its tributaries until plans for such construction, operation, and maintenance have been submitted to and approved by TVA. TVA is a cooperating agency in the preparation of this environmental assessment (EA). TVA and DA permits are required for the work; therefore, the agencies must decide on one of the following:

- issuance of a permit for the proposal
- issuance of a permit w/modifications or conditions
- denial of the permit

1.6 Other Approvals Required.

1.6.1 TVA 26a Permit. In addition to other provisions of its approval, TVA would require the applicant to employ best management practices to control erosion and sedimentation, as necessary, to prevent adverse aquatic impacts. TVA has not finalized its 26a permit review of the proposal. In communications we have had with TVA, the agency has not identified any substantial problem with the proposed action.

1.6.2 Water Quality Certification. The proposed work requires a TDEC water quality certification pursuant to Section 401(a)(1) of the CWA. TDEC issued the required certification for the proposal on 7 December 2007 (Appendix C). The certification will be valid until 6 December 2012. The agency incorporated 14 special conditions to ensure that the proposed activities will not violate applicable state and federal water quality standards and provisions. Special Conditions (SC) 8 to 12 and 14 address in detail the stream mitigation requirements. In particular, SC 8A

requires LEED certification and LID techniques (35% of mitigation). Similarly, SC 8B requires implementation of a comprehensive stormwater management plan (30% of mitigation). Also 8C allows for potential offsite mitigation including use of the TSMP (35% of mitigation). SCs 9 to 11 specify monitoring requirements. A requirement to secure the services of an approved environmental consultant is indicated under SC 12. Finally, SC 14 clarifies that LEED and LID requirements are just a demonstration project (i.e., experimental), and the information gathered by TDEC will be used for future permitting decisions.

Note: The Corps considers LEED and LID mitigation as non-traditional and is allowing its implementation on this project on a trial basis. Benefits will be monitored, and based on the results, this type of mitigation may be accepted for other developments in the future. However, it is essentially being allowed here as a pilot project. The approval of this non-traditional mitigation should not be construed as an indication that the Corps will always utilize it from this point forward.

1.7 Scope of Analysis. The Corps determines its action area under 33 CFR 325 Appendix B and C. Normally the action area includes all WUS, as well as any additional area of non-waters where the Corps concludes there is adequate federal control and responsibility. The action area would include the upland areas in the immediate vicinity of the WUS where the regulated activity occurs. Appendix B, National Environmental Policy Act (NEPA) Implementation Procedures for the Regulatory Program, states that for those regulated activities that comprise merely a link in a transportation or utility transmission project, the scope of analysis should address the federal action, i.e., the specific activity requiring a DA permit and any other portion of the project that is within the control or responsibility of the Corps (or other federal agencies). Appendix C, Procedures for the Protection of Historic Properties, sets forth three tests and requires that all must be met for activities outside of WUS to be included within the permit area and thus considered under the Corps scope of analysis. These are: 1) the activity would not occur but for the authorization of the work or structures within the WUS; 2) the activity must be integrally related to the work or structures to be authorized within WUS, or, conversely, the work or structures to be authorized must be essential to the completeness of the overall project or program; and 3) the activity must be directly associated (first order impact) with the work or structures to be authorized. An example of a linear project is given in Appendix C, which states "Such projects almost always can be undertaken without Corps authorization if they are designed to avoid affecting the WUS. Thus the "but for" test is not met by the entire project ROW." The example further states that "some portion of the ROW, approaching the crossing, would not occur in its given configuration "but for" the authorized activity.

Following a discussion with Earlene Teaster, Manager, City of Pigeon Forge, it was determined that PFL would additionally serve several other business and anticipated development ventures in the near future:

- The existing Belz Mall, 2655 Teaster Lane, which lies adjacent (and just west of) to the proposed PFL, has just been sold. The new owner plans improvements to the mall that include new or additional commercial and retail facilities that would be accessible via the new PFL.
- There are new condos proposed on a tract of land behind the mall that would likely require access from PFL.
- The City of Pigeon Forge owns 15 acres accessible by PFL that is planned for a welcome center or similar facility. The City also owns another 60 acres of land that would possibly be used in the future for public use and PFL would provide access to this land.

- PFL would connect to the anticipated new and improved Jake Thomas Road, provide alternative access to the Dollywood Theme Parks, and eventually connect to Middle Creek Road. This would help alleviate regional traffic problems.

Also, the Pigeon Forge Tourism Development Zone shows a proposed location of a civic events center along PFL, a proposed nearby public parking and intermodal facility, and plans for extending Jake Thomas Road (see Section 1.4.2). PFL would be a city street that is expected to help improve access, smooth traffic flow, reduce travel time and expense, maintain or enhance safety, and reduce congestion.

Therefore, the proposed PFL access road is an example of a linear project with independent utility because it would start and end at logical termini where traffic could disperse onto other routes in the area. For these reasons and based upon the criteria set forth in Appendices B and C of the Corps' regulations, we have determined that the permit area for this application is each separate crossing of WUS involving a discharge of dredged and/or fill material, the immediate upland area of these crossings, and the filled stream channel footprints and immediate upland areas. The permit area for this project comprises only a small percentage of the total length of roadway to be constructed.

Based on the determined scope of analysis, we developed alternatives to the proposed action (Section 4) and considered primary, secondary, and cumulative impacts (Section 3.5) as part of our NEPA analysis. During our secondary impact analysis, we considered the strength of the relationship between those impacts and the regulated portion of the activity, i.e., whether or not the impacts are likely to occur even if the permit is not issued. This information was used in deciding the level of analysis and what weight to give these impacts in the decision. When appropriate, our analysis considered whether another project, not requiring a permit, could likely occur at the site or in the vicinity, and whether its impacts would be similar to impacts of the project requiring a permit.

1.8 Existing Setting. Since May 2004, Mr. J. Ruben Hernandez, Project Manager, Regulatory Branch, and TVA staff have visited the site vicinity several times. The roadway corridor has rolling topography with very steep slopes particularly in the north and northeast portions of the alignment. The proposed roadway termini are Teaster Lane (southwest) and the proposed Jake Thomas Road Extension (northeast). The existing streams that would be affected by this project are ephemeral and/or intermittent with narrow channel widths not exceeding 4'-6'. Mixed timber stands are scattered throughout the tract. Dense vegetation covers the remaining areas. Evidence of past timber harvests were observed.

2.0 Public Involvement Process

2.1 General. On 2 August 2007, the Corps issued Joint Corps/TVA Public Notice (JPN) No. 07-67 to advertise the proposed work (Appendix D). The JPN was distributed to a wide list of interested parties that included federal, state, and local agencies, elected officials, private/public organizations, news agencies, commercial navigation interests, adjacent property owners, and individuals. Comments to the JPN were received from the Tennessee Historical Commission (THC), U.S. Fish and Wildlife Service (USFWS), and U.S. Environmental Protection Agency (EPA). The comments have been summarized below and a copy included in Appendix E. Where a response to the comment was warranted, one is provided to clarify the issues raised.

2.2 Public Notice Comments.

2.2.1 In a letter dated 6 August 2007, THC concurred that no National Register of Historic Places (NRHP) listed or eligible properties would be affected by the proposal. *Response: No response necessary.*

2.2.2 By letter dated 31 August 2007, USFWS stated that based on available collection records no federally listed or proposed threatened or endangered species were known to occur in the impact area. Therefore, based on the information available at the time, it believed that Corps obligations under Section 7 of the Endangered Species Act had been fulfilled. Provided CPF makes appropriate payment to the TSMP, the proposal should not result in significant impacts to fish and wildlife or their habitats, and USFWS would not object to the proposal. *Response: CPF has agreed to adequately mitigate for the impacts resulting from construction of the roadway. Impact mitigation would be through in-lieu fee payment combined with LID techniques and a stormwater management approach intended to reduce pollutants through hydrologic buffering of stormwater runoff.*

2.2.3 In a 20 November 2007 email, EPA recommended protection of the existing uses of the Tier 1 receiving streams. EPA welcomed CPF's offer of LID, "green" building, subsurface storm water management system, etc., and other innovations as well as promises to maintain downstream flow and water quality. The agency recommended that conditions for appropriate construction BMPs be included in accordance with state requirements. In addition, post-construction monitoring conditions (e.g., flow, pH, TSS, turbidity, metals, etc.) should also be included in the permit. An adaptive management clause should also be included in the event state water quality standards are contravened. Finally, EPA recommended that any monies paid into the TSMP to offset any remaining impacts not mitigated on site or via alternative storm water mitigation BMPs should be paid prior to or concurrent with construction. *Response: Same response as in Paragraph 2.2.2. In satisfying the conditions stipulated in TDEC's water quality certification (Appendix C), CPF would satisfy all of EPA's requirements and recommendations.*

2.3 Applicant's Rebuttal. We furnished to CPF the JPN objections/comments (Section 2.2) for an opportunity to resolve or rebut the objections/comments. CPF also received similar objections/comments from TDEC associated with the response to the 401 certification public notice. Representatives from TDEC, CPF, GS&P, and WD met on 29 August 2007 to discuss the project. Prior to that, CPF had met with TDEC officials on 26 April 2007 to communicate measures being considered to address mitigation and water quality issues. In a letter dated 13 September 2007, S&ME, Inc. responded to the substantive issues raised by the commenters. The following commitments were developed and are being offered by CPF: To showcase project-specific use of green infrastructure and LID techniques; Fund construction of a new city wastewater treatment plant; Make ILF payments to the TSMP; Pursue project and city LEED certifications; Develop a city-wide comprehensive stormwater management plan; and Make off-site physical habitat improvements. A copy of S&ME's response on behalf of CPF has been included in Appendix B.

2.4 Public Notice Comment Period Extension. JPN No. 07-67 advertising the proposed work (Appendix D) expired on 2 September 2007. By email dated 27 August 2007, EPA's Darryl Williams requested a comment period extension until 17 September 2007. Mr. Williams indicated that the information contained in the JPN was not entirely clear regarding project impacts and alternatives. The extension would allow time for the Corps to forward a better copy of the site

plan, more details on the project impacts and alternatives analysis and for EPA to review and provide comments, if needed. On that same date, the Corps granted the time extension.

2.5 Supplemental Public Notice. The basic precept of the public notice process is to include sufficient information to give a clear understanding of the nature and magnitude of the activity to generate meaningful comment. A supplemental notice must be issued whenever there is a change in the application data that would affect the public's review of the proposal or when the probable impacts to the aquatic environment resulting from the changes are substantially greater from those described in the original notice. The changes and/or commitments described in Section 1.3 (Project Changes) are intended to address the environmental impacts that were identified during the public involvement phase. The mitigative measures listed would not result in additional project impacts. We believe advertisement of the changes would not have substantially affected the public's review of the proposal. Therefore, issuance of a revised JPN to advertise the changes is not warranted. The environmental evaluation conducted in Section 3 of this decision document is based on the final proposal including all changes.

3.0 Environmental and Public Interest Factors Considered

3.1 Introduction. 33 CFR 320.4(a) states that the decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. All factors that may be relevant to the proposal must be considered (for full list see JPN 07-67, Appendix D). The following sections describe the relevant factors identified and provide a concise description of the probable impacts of the proposed action. The baseline data discussed in this section has been obtained from information provided by CPF, field investigations, input to the JPN, agency data, and other sources.

3.2 Physical/Chemical Characteristics and Anticipated Changes. The relevant blocks are checked with a description of the impacts. An unchecked block denotes that negligible to no adverse effects are expected.

(x) substrate – Observations made by S&ME, Inc., in support of the DA/TVA permit application package indicated that the substrate is primarily mud and silt throughout the entire length of the impacted channels. Approximately 6,500 square feet (SF) or 0.15 acres of this material would be lost when the existing channels are filled. When compared to the amount of available biologically productive substrate in the area, this impact is considered minor in nature. CPF plans to mitigate for this impact through in-lieu fee payment combined with LID techniques and a stormwater management approach intended to reduce pollutants through hydrologic buffering of stormwater runoff.

(x) currents, circulation or drainage patterns – The overall property drainage pattern would not be substantially altered. Runoff would be appropriately captured and channeled away from the property.

(x) suspended particulates, turbidity – There would be minor releases of sediment and turbidity associated with the roadway construction activities. The proper use of best management practices would minimize these impacts. Terms and conditions set forth in the Corps and TVA permits and the TDEC 401 water quality certification would require that all stream work be performed in a manner that would prevent violations of water quality standards. Examples of these special conditions include requirements to apply green infrastructure and LID techniques, ILF payments to the

TSMP, LEED certification, a comprehensive stormwater management plan, and physical habitat improvements.

(x) water quality (temperature, color, odor, nutrients, etc) – The proposed action would impact unnamed tributaries of the West Prong Little Pigeon River (WPLPR). The WPLPR discharges approximately 10 miles downstream into the Little Pigeon River (LPR). The LPR in turn discharges into the French Broad River. The project site is located in the Lower French Broad River Watershed (HUC 06010107). The WPLPR and LPR are Tier 1 waters listed as impaired in the draft version of the 2008 TDEC 303(d) list. However, water quality of the unnamed tributaries within the project site is good.

Excavation and grading activities would result in minor short-term localized increases in turbidity and siltation. However, the employment of sound construction techniques, including use of effective erosion and sedimentation control measures, would minimize impacts on the streams. Sound construction techniques include, but are not limited to, close conformity with plans and specifications, adherence to existing codes and laws, employment of safety practices, use of quality materials, and minimization of errors.

Conditions in the state-issued water quality certification (Appendix C) would require CPF to showcase project-specific use of Green Infrastructure and Low-Impact Design (LID) techniques, fund construction of a new city Wastewater Treatment Plant, make In-Lieu-Fee (ILF) payments to the Tennessee Stream Mitigation Program (TSMP), pursue project and city Leadership in Energy and Environmental Design (LEED) certifications, develop a city-wide Comprehensive Stormwater Management Plan, make off-site Physical Habitat Improvements, and monitor surface water discharges at various locations to prove the adequacy of the stream mitigation and water quality commitments. Water quality conditions would return to background levels when construction ceases. Long-term adverse impacts would be minimal.

(x) flood control functions – The proposed facilities would be constructed outside of WPLPR's designated floodway and 100-year floodplain. The roadway is being designed to appropriately collect and redirect stormwater so as to minimize flooding potential. The local floodplain management and/or surface drainage authority would review the design as necessary.

() storm, wave, and erosion buffers – No adverse effects.

(x) baseflow – Baseflow can be defined as the normal dry-weather flow which is mainly derived from groundwater. The proposed filling of the two unnamed intermittent streams would impact baseflow since french drains and pipes would be used in the channel (buried under the fill) to collect subsurface flows. An impermeable layer would be constructed over the french drain and pipe to separate the subsurface flow from the proposed development. In addition, a collection system with subsurface treatment is designed to collect/treat stormwater runoff from the majority of the new proposed area roadways (i.e., PFL and the Teaster Lane/Jake Thomas Road Improvements and Parking Area advertised under separate public notice (Section 1.4)). Because the impacted channel area is small, the proposed action would have minor negative effects on baseflow.

3.3 Biological Characteristics and Anticipated Changes. The relevant blocks are checked with a description of the impacts. An unchecked block denotes that negligible to no adverse effects are expected.

(x) special aquatic sites (wetlands, mudflats, pool and riffle areas, vegetated shallows, sanctuaries, and refuges, as defined in 40 CFR 230.40-45) – In-stream habitat is very limited. Pools, riffles, and point bars, were not visible in most of the stream. Therefore, impacts on special aquatic sites would be minimal.

(x) habitat for fish and other aquatic organisms – The affected streams are characterized by the presence of mud and silt substrate and very limited in-stream habitat (i.e., pools, riffles, and point bars). Although in-stream habitat was observed near the lower end of the reaches, fish were not observed; however, macro-invertebrate life was. Canopy cover ranges from open to shaded and streambank stability from fair to good. The proposal would eliminate the streambed composition and permanently reduce the biological productivity of the impacted areas (approximately 0.15 acre). However, this impact would be minor since the affected areas constitute just a small fraction of the available aquatic habitat in this area.

(x) wildlife habitat – CPF proposes to construct 2,800' of roadway called PFL to provide access to the proposed PFV and other future developments. The typical road cross section would consist of a minimum of two 11' wide lanes in each direction, curb/gutter and sidewalks, and a raised median. The roadway corridor has rolling topography with very steep slopes particularly in the north and northeast portions of the alignment. The currently proposed roadway termini are Teaster Lane (southwest) and the proposed Jake Thomas Road Extension (northeast). Mixed timber stands are scattered throughout the tract. Dense vegetation covers the remaining areas. Past logging practices are evident in various portions of the corridor.

The proposal would result in the permanent loss of approximately 13 acres of wildlife habitat due to road construction within the ROW and easement clearing. Due to the relative abundance of upland vegetation and common wildlife species in the area and region and the present disturbed/fragmented state of the property, wildlife habitat impacts would not be substantial.

(x) endangered or threatened species – A review of existing records did not reveal the presence of any federally listed threatened or endangered species or designated critical habitat at the project site. In response to the JPN 07-67, USFWS stated by letter dated 31 August 2007 (Section 2.2.2), that it believes the requirements of Section 7 of the Endangered Species Act of 1973, as amended, have been fulfilled. Based on a review of all relevant information, the Corps and TVA have reached a "no effect" determination.

(x) biological availability of possible contaminants in dredged/fill material – To the Corps' and TVA's knowledge, no contaminants have been identified or are suspected in the fill material.

3.4 Human Use Characteristics and Anticipated Impacts. The relevant blocks are checked with a description of the impacts. An unchecked block denotes that negligible to no adverse effects are expected.

(x) existing and potential water supplies; water conservation – Our permit database does not contain any records of municipal or industrial raw water intakes on the WPLPR. In 2005, TVA and the Corps approved Sevierville Water Systems' proposal to construct of a 12 million gallon per day raw water treatment plant, associated intake and finished water line on McCroskey Island at French Broad River Mile 27.5L. Approximately at Mile 3.2 of the LPR, a golf course irrigation intake has been recently permitted to the Sevierville Water and Sewer Department. Neither the Corps nor TVA is aware of any plans for future intakes or dams on any of these

ivers. Therefore, impacts on existing/potential water supplies would be negligible. The proposed action would not affect the availability of water or opportunities to reduce demand and improve efficiency.

(x) water-related recreation – The two unnamed WPLPR tributaries are not suitable for uses such as canoeing, kayaking, or the operation of any type of motorboat or personal watercraft. Although fishing is not possible at the site, opportunities exist downstream in the WPLPR (receiving stream) although fish captured there may not be suitable for human consumption. The proposed action would have no adverse effects on the recreational uses that could potentially occur on the two unnamed tributaries and negligible adverse effects on the recreational uses of WPLPR or LPR located downstream.

(x) aesthetics – As indicated in the existing setting and wildlife habitat paragraphs, human activity (logging) has already modified part of the existing landscape. The proposed action would cause an additional short- and long-term disruption to area aesthetics. However, the development is typical of many found in this rapidly growing city and region and would not be out of character. Therefore, impacts would be minor.

(x) traffic/transportation patterns – PFL would be constructed to provide access to the proposed PFV and other future developments. The roadway would be located north of Teaster Lane and west of the future Jake Thomas Road Extension, in Pigeon Forge. As indicated in Section 1.7, PFL would additionally serve several other business and anticipated development ventures. Some of these projects include improvements to the existing Belz Mall, new condos proposed on a tract of land behind the mall, and two city of Pigeon Forge projects: a welcome center (or similar facility) and public use area. PFL would connect to the anticipated new and improved Jake Thomas Road, provide alternative access to the Dollywood Theme Parks, and eventually connect to Middle Creek Road. This would help alleviate regional traffic problems. Also, the Pigeon Forge Tourism Development Zone shows a proposed location of a civic events center along PFL, and a proposed nearby public parking and intermodal facility (see Section 1.4.2). PFL would be a city street that is expected to help improve access, smooth traffic flow, reduce travel time and expense, maintain or enhance safety, and reduce congestion. Area streets appear to have enough capacity to accommodate the short- and long-term highway traffic increases during and after construction, respectively. Decisions regarding highway capacity, connections, and geometric design rests with state and/or county highway departments and are normally accepted by the Corps and TVA. The long-term beneficial effects of the proposal on traffic/transportation patterns would be minor.

() energy consumption or generation – No adverse effects.

() navigation – No adverse effects.

(x) safety – The proposed PFL would provide access to the future PFV and allow traffic to access the Dollywood Theme Park, and other future developments. Decreased vehicular safety would be experienced during construction. However, provided an appropriate traffic control plan (state or locally controlled) is implemented, construction impacts would be minor. Long-term, by redirecting and/or removing some traffic away from other city streets, the carrying capacity of those streets would be slightly improved. A higher capacity or volume results in an improved level of service (LOS). A higher LOS is synonymous with improved safety.

(x) air quality –The EPA Air data website (<http://www.epa.gov/oar/data/geosel.html>) indicates that Sevier County is a "non-attainment" area concerning 8-hour ozone criteria air pollutant. The proposed roadway would allow traffic to access the Dollywood Theme Park, which is a major regional tourist destination, and remove some of the traffic presently using other city streets. Thus, it is likely that the improved traffic flow in the area would result in a minor decrease in over-all indirect emissions (those from vehicles using the road) in the area. Overall, the proposed action would only result in minimal direct pollutant emissions (those from construction activities). All of the non-federal activities that require Corps permits are fully subject to the Clean Air Act (CAA) authority of the EPA and state of Tennessee government.

(x) noise – Most of the land type along the roadway corridor is mixed forested/open-space undeveloped land. Commercial retail property borders a relatively short segment of the proposed PFL where it connects to Teaster Lane to the west. No private residences exist close to the corridor. Noise levels would increase slightly above background values during the construction phase. Long-term noise level increases resulting mostly from highway traffic are expected to be minor and comparable to the levels now emanating from the nearby streets and commercial development.

(x) historic properties and cultural values – A Phase I archaeological survey, *A Phase I Archaeological Survey of the Proposed Riverwalk Park Development (Management Area A: Uplands) Along Teaster Lane in Pigeon Forge, Sevier County, Tennessee*, was completed by DuVall & Associates, Inc., in 2004. The report documents that no archaeological sites or historic properties were identified on the development site. The Corps and TVA agree with this conclusion. In a letter dated 6 August 2007, THC concurred with the Corps that no NRHP listed or eligible properties would be affected by the proposal.

(x) land use classification – Land use along the PFL corridor is agricultural in nature (former Jake Thomas Farm). To the west, at the point where the new road would intersect Teaster Lane, the land is in commercial use. The proposed activity would not substantially alter these classifications or affect the principal uses for which the properties are suited. The highway corridor land has to be properly zoned for that type of use prior to construction. The primary responsibility for determining zoning and land use matters rests with state, local and tribal governments. The Corps will normally accept decisions by such governments on those issues.

(x) conservation – The PFL corridor would permanently eliminate approximately 0.15 acres of aquatic habitat and approximately 13 acres of wildlife habitat. As indicated elsewhere in this document, the affected streams do not possess biologically productive aquatic habitat. They are characterized by the presence of mud and silt substrate and very limited in-stream habitat (i.e., pools, riffles, and point bars). Fish were not observed. Regarding wildlife habitat, the relative abundance of upland vegetated areas in this region and the present disturbed/fragmented state of vegetation on the property would result in minor wildlife habitat impacts.

CPF has documented its efforts to avoid stream impacts. In addition, the city has developed the following mitigation commitments: Showcase project-specific use of green Infrastructure and LID techniques, fund construction of a new city wastewater treatment plant, make ILF payments to the TSMP, pursue project and city LEED certifications, develop a city-wide comprehensive stormwater management plan, and make off-site physical habitat improvements.

(x) economics – The economic benefits of many projects are important to the local community and contribute to needed improvements in the local economic base, affecting factors such as

employment, tax revenues, community cohesion, community services, and property values. PFL would have the multiple purpose of providing access for PFV, alleviating area traffic congestion, and accommodating future growth anticipated within the Tourism Development Zone. In the DA permit application, CPF stated that PFV is expected to generate \$40 million in annual sales tax and is the primary funding source for CPF's \$182 million bonded infrastructure development program. The 85-acre PFV retail/entertainment complex is projected to result in approximately 3,000 permanent employment positions. In addition, the local economy would benefit from the sales of materials/goods associated with construction of the facility (short-term effect).

() food and fiber production – No adverse effects.

(x) general environmental concerns - This is a broad factor almost synonymous with the area's quality of life. All the relevant issues falling under this heading have been evaluated in this document. Federal and/or state natural resource agency concerns have been resolved through additional coordination. Special conditions have been added to minimize the unavoidable adverse environmental impacts identified.

() mineral needs – No adverse effects.

(x) consideration of private property - Corps regulations at 33 CFR 320.4(g) state that authorization of work by the DA does not convey any property rights, either in real estate or material, or any exclusive privileges. Furthermore, a DA permit does not authorize any injury to property or invasion of rights or any infringement of federal, state or local laws or regulations. The use of this property would be consistent with uses for similar property in this area. It is not expected that the development of this property for roadways and construction of the PFV complex would result in considerable impacts to nearby public or private properties.

() floodplain values – No adverse effect.

() other -

3.5 Cumulative and Secondary Impacts. The Council on Environmental Quality regulations define cumulative impact as “the environmental impact which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” The Corps considers every DA permit application on its own merits and assesses its environmental impacts within the proper scope of review for National Environmental Policy Act (NEPA) purposes. The scope of analysis for this DA permit application is limited to the “Permit Area” which for this particular application is each separate crossing of WUS involving a discharge of dredged and/or fill material and the immediate upland area of these crossings. The Permit Area impacts described in this document would result in minimal adverse cumulative impacts on areas within our NEPA scope of review. A discussion of these impacts has been presented in Section 3 above.

Our permit database did not reveal past actions directly affecting the two unnamed intermittent tributaries. However, a total of 21 past actions were identified in WPLPR (the receiving stream) within 10 miles of the project (five miles upstream and downstream). The permitted actions include bridges, bank stabilizations, utility line crossings, and an impoundment structure. The actions were permitted between 1981 and 2005. We cannot predict the number of DA permit applications impacting the WPLPR channel that would be submitted in the future. However, all

future applications will be thoroughly evaluated for impacts on aquatic resources. Because of the general and special conditions added to DA, TDEC, and TVA permits, the Corps' national permitting goals requirements for no net loss to waters and wetlands, and the requirements for mitigation measures, cumulative effects to WPLPR and its tributaries affected by these projects would be substantially reduced or avoided. Special conditions (described in Section 4.4.3 below) would help to ensure that the cumulative and secondary effects from this proposal would be minor.

4.0 Alternatives

4.1 Introduction. This section discusses alternatives as required by 40 CFR 230.10 and 33 CFR 320.4(a)(2). The relevant environmental issues identified in Section 3.0 were used to formulate the alternatives. The alternatives considered in detail are described in Section 4.2. Other alternatives not considered in detail are discussed in Section 4.3. The impacts of the alternatives considered in detail are compared in Section 4.4.

4.2 Description of Alternatives.

4.2.1 No Action. This alternative is one that results in no construction or work requiring a Corps or TVA permit. No Action could also be brought about by agency denial or applicant withdrawal of the DA and TVA permit application.

4.2.2 Applicant's Final Proposal. This alternative consists of the proposal and changes described in sections 1.1 and 1.3. Neither the Corps nor TVA is a proponent or an opponent of the applicant's final proposal.

4.2.3 Applicant's Final Proposal with Added Special Conditions. This alternative consists of the Applicant's Final Proposal identified in Section 4.2.2 with the inclusion of special conditions to minimize/mitigate unavoidable environmental impacts to the maximum extent practicable.

4.3 Alternatives not Considered in Detail. CPF stated that other potential road alignments were evaluated to limit impact on the existing streams. Bridges in lieu of culverts and their associated subsurface collection systems could potentially be constructed at various locations to span the WUS and prevent impacts of the channel segments. Different materials could be used, e.g., steel, aluminum, plastics, wood, etc. In addition, minor design changes such as constructing slightly larger, smaller, longer, or shorter culverts and their associated subsurface collection systems are also possible. The implementation of any of these options would also result in a degree of aquatic habitat impact commensurate with the impacts of the proposed action. Some of the alternative designs would require DA permits subject to NEPA provisions. Therefore, we have decided that the evaluation of these alternative designs is not warranted in this document.

4.4 Comparison of Alternatives.

4.4.1 No Action. This alternative would result if no work occurs in WUS. No Action would be brought about by agency denial or applicant withdrawal of the DA and TVA permit application or by any development scheme not requiring filling the existing stream channels. The potential environmental impacts described in Section 3.0 would not occur. Conversely, the expected socio-economic benefits also described in that section would not be achieved. No Action would not satisfy the applicant's stated purpose and need described in Section 1.2.


4.4.2 Applicant's Final Proposal. The proposed action described in sections 1.1 and 1.3 would potentially have various adverse and beneficial environmental and socioeconomic effects. These potential effects have been listed in Section 3.0 above.

4.4.3 Applicant's Final Proposal with Added Special Conditions. This alternative would result in similar impacts and benefits to the alternative described in Section 4.4.2 above. Special permit conditions have been developed (see following paragraph) to minimize adverse impacts on water quality and the aquatic environment. The special conditions are reasonably enforceable and would afford appropriate and practicable environmental protection. After conducting an analysis of the various available alternatives, we have determined that this alternative is the "least environmentally damaging practicable alternative" for purposes of satisfying the Section 404(b)(1) Guidelines of the CWA. As with the applicant's final proposal (Section 4.2.2), this alternative would also meet the applicant's stated purpose and need.

The following special permit conditions have been developed to satisfy legal and public interest requirements. In addition, some of these conditions help clarify the permit application and offer appropriate and practicable environmental protection.

- You must comply with the conditions specified in the state water quality certification issued for your project as special conditions to this permit. *Justification: Satisfy legal requirements.*
- Work must be in accordance with any plans attached to this permit. *Clarify permit application.*
- You must have a copy of this permit available on the site and ensure all contractors are aware of its conditions and abide by them. *Recommended at 33 CFR 325, Appendix A.*
- The discharge shall consist of suitable material free from toxic pollutants in toxic amounts. *Minimize impacts on water quality and the aquatic environment.*
- The fill created by the discharge shall be properly maintained to prevent erosion and other non-point sources of pollution. *Minimize impacts on water quality and the aquatic environment.*
- The disturbance to riparian vegetation shall be kept to a minimum during construction. *Minimize impacts on water quality and the aquatic environment.*
- All channel work shall be performed during low flow periods. *Minimize impacts on water quality and the aquatic environment.*
- Siltation and erosion control methods, including entrenched slit fences and rock check dams, erosion control mats, etc., shall be used and in place prior to starting any work. All site preparations shall be conducted in a manner which minimizes any siltation of the stream below the project site. Appropriate siltation control shall be utilized in all phases of the work including the mitigation phase. Trucks and heavy equipment shall enter and depart the work area via one access point to minimize runoff and erosion. *Minimize impacts on water quality and the aquatic environment.*

1/12/08
Date


William L. James, Chief
Eastern Regulatory Section
Regulatory Branch
Operations Division

Appendix A
Typical Road Cross Sections



**Design Services
For The Built
Environment**

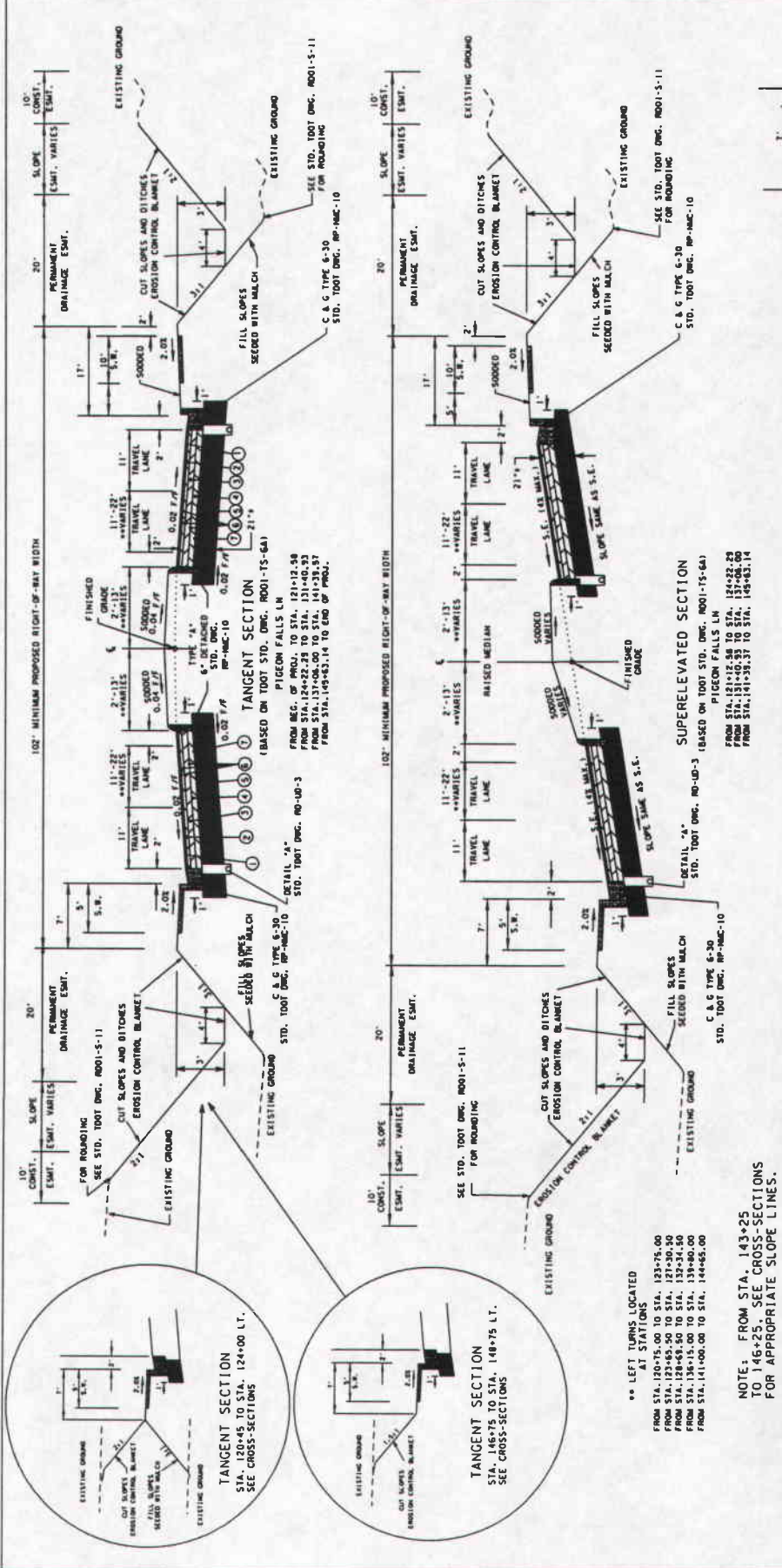
- Atlanta
- Birmingham
- Charlotte
- Columbus
- Dallas
- Fort Lauderdale
- Indianapolis
- Jacksonville
- Knoxville
- Louisville
- Memphis
- Richmond
- Savannah
- Tampa

**GREENHAM
SMITH AND
PARTNERS**
1400 N. W. 10TH AVENUE, SUITE 200
MIAMI, FLORIDA 33136
TEL: 305.573.2000
WWW.GSANDP.COM

**ROADWAY DEVELOPMENTS
PIGEON FALLS DEVELOPMENT
PIGEON FALLS LAKE
GREYER COUNTY, TENNESSEE**

NO.	DATE	REVISION
1	11/10/08	ISSUE DRAWING
2	11/10/08	FIELD REVISION
3	11/10/08	REVISION MADE BY
4	11/10/08	REVISION MADE BY
5	11/10/08	REVISION MADE BY
6	11/10/08	REVISION MADE BY
7	11/10/08	REVISION MADE BY
8	11/10/08	REVISION MADE BY
9	11/10/08	REVISION MADE BY
10	11/10/08	REVISION MADE BY

TYPICAL SECTIONS
PIGEON FALLS LAKE
2B



PROPOSED PAVEMENT SCHEDULE *	
① SURFACE @ 1 1/2" ± THICK (APPROX. 132.5 LBS. / S.Y.) 411-02.10 ACS MIX (PG70-22) GRADING "0"	⑤ BASE STONE @ 12" ± THICK 303-01 MINERAL AGGREGATE TYPE A BASE GRADING "0"
② BINDER "BM2" @ 1 1/2" ± THICK (APPROX. 197.75 LBS. / S.Y.) 307-02.08 ASPHALT CONCRETE MIX (PG70-22)(BPMB-HM) GRADING "B-42"	⑥ TACK COAT @ 0.02 GAL./S.Y. 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)
③ BASE "A" @ 3" ± THICK (APPROX. 345 LBS. / S.Y.) 307-02.01 ASPHALT CONCRETE MIX (PG70-22)(BPMB-HM) GRADING "A"	⑦ PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) @ 0.30-0.35 GAL./S.Y. 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) @ 0.12-0.15 GAL./S.Y.
④ BASE "A-S" @ 3" ± THICK (APPROX. 270 LBS./S.Y.) 307-02.02 ASPHALT CONCRETE MIX (PG70-22)(BPMB-HM) GRADING "A-S" 307-02.03 AGGREGATE (BPMB-HM) GRADING "A-S" MIX	

NOTE: FROM STA. 143+25 TO 146+25, SEE CROSS-SECTIONS FOR APPROPRIATE SLOPE LINES.

** LEFT TURNS LOCATED AT STATIONS
FROM STA. 120+75.00 TO STA. 123+75.00
FROM STA. 123+85.50 TO STA. 127+30.50
FROM STA. 128+65.50 TO STA. 132+34.50
FROM STA. 141+00.00 TO STA. 144+65.00

* PROPOSED PAVEMENT SCHEDULE PROVIDED BY SB&E, INC. IN THE GEOTECHNICAL REPORT FOR PIGEON FALLS LAKE

Appendix B
Supplement to Permit Application

TDEC File Nos.: NRS06-258, NRS07-034, NRS06-250, NRS05-422
USACE File Nos.: 07-67, 07-68, 07-69

September 13, 2007

TDEC DWPC
6th Floor, L&C Annex
Nashville, Tennessee 37243-1534
Attention: Mr. Mike Lee

U.S. Army Corps of Engineers
Nashville District
3701 Bell Road
Nashville, TN 37214
Attention: Mr. Ruben Hernandez

Tennessee Valley Authority
Cherokee-Douglas Watershed Team
3726 E. Morris Boulevard
Morristown, Tennessee
Attention: Ms. Karen Stewart

SUBJECT: SUPPLEMENT TO PERMIT APPLICATIONS
City Tract – Former Jake Thomas Farm
Pigeon Forge, Tennessee
S&ME Project Nos. 1434-05-679, -329, -329A

Dear Mike, Ruben and Karen:

On behalf of the City of Pigeon Forge (City) and Pigeon Falls LLC (Pigeon Falls), S&ME is providing this correspondence to respond to comments raised during the permit review process for the above referenced projects. Representatives from the Tennessee Department of Environment and Conservation (TDEC), the City, Pigeon Falls, Gresham Smith & Partners (GS&P), Waterfield Design, and S&ME met on August 29, 2007 to discuss the projects.

The applicants are providing this joint response because the projects under consideration are collectively part of a development scenario for the former Jake Thomas Farm tract. As such, they have been public noticed together to consider the cumulative effect of the

impacts. Likewise, the cumulative impacts of the mitigation efforts should be considered as they collectively address water quality and quantity issues.

PROMOTING GREEN INFRASTRUCTURE

The City has expressed to the regulatory agencies on several occasions the significance of this proposed development to future City planning. The City and the developer have worked closely to plan a project that meets the objectives of all involved parties. Guided by City objectives for the development of the former Jake Thomas farm, local, state and federal regulatory agencies are working together to achieve City objectives within the framework of the current regulatory requirements. Recognizing that water quality and stormwater management are issues of increasing concern, regulatory agencies are tasked with balancing resource protection with sustainable growth and development.

Promoting resource protection strategies, Mr. Benjamin Grumbles, the Environmental Protection Agency (EPA) Assistant Administrator for Water, testified before the United States House of Representatives Subcommittee on Technology and Innovation on May 10, 2007. In his testimony, Mr. Grumbles promoted green infrastructure, referring to "systems and practices that use or mimic natural processes to infiltrate, evapotranspire, or reuse stormwater on the site where it is generated". On March 7, 2007, Mr. Grumbles issued a memorandum to all of EPA's Regional Administrators, expressing "strong support for the increased development and use of green infrastructure in water program implementation".

Recognizing that EPA is promoting and encouraging green infrastructure, the City and the developer have committed to use these techniques in the proposed development. Incorporating input from all involved parties, the proposed development will be a showcase project for the community and for the state, using Low Impact Design (LID) to protect water quality and enhance the development.

WASTEWATER TREATMENT PLANT COMMITMENT

Both TDEC and the City are committed to recovering uses of the West Prong Little Pigeon River (WPLPR), and the City's proposed Wastewater Treatment Plant (WWTP) is a significant component of the recovery process. As part of the Tourism Development Zone package approved by the State of Tennessee, the City has committed to providing up to \$29 million in sales tax revenue from the development for the new WWTP. Documentation from the City outlining their commitment to this funding is attached.

PROPOSED MITIGATION COMMITMENTS

Mitigation for this project has been evaluated with consideration of TDEC Rule 1200-4-7-04 (7)(c)10, which requires consideration of the quality of the streams to be impacted. As has been previously documented, the features in question are intermittent streams originating onsite. As documented in the permit applications, the streams were evaluated by TDEC as part of the jurisdictional determination, and were found to be degraded, with limited riparian buffer on the downstream portion of the channels, and evidence of previous channel alterations. Prior to the onsite evaluation for the jurisdictional

determination, these intermittent streams had not been assessed by TDEC as part of the 2006 State of Tennessee Stream Assessment Draft (Geographic File), further supporting the assertion that the features are highly intermittent first order features. The TDEC database for similar sized first order streams indicates that they generally have a designated use limited to fish and aquatic habitat. The intermittent nature of the streams would not support fish, and historic agricultural impacts and ongoing urban impacts have reduced the diversity of other aquatic habitats. Discharge from the streams flows directly into the WPLPR, and therefore these channels are not contributors to second or third order streams down gradient of the property.

Mitigation proposed in the permit applications included payment of \$200/foot into the Tennessee Stream Mitigation Program for stream impacts that could not be mitigated onsite. Both TDEC and the applicants in subsequent conversations expressed an interest in modifying this mitigation approach to develop a plan that would more directly benefit water quality in the Pigeon Forge community. Taking into consideration the existing stream conditions, the commitment to green development, and the City's role in planning for their future growth, TDEC and the applicants discussed potential mitigation allocations during the August 29, 2007 meeting.

Following the meeting, S&ME and the applicants have attempted to address the TDEC concerns, and offer the following mitigation strategy. S&ME has attached a draft list of Proposed Special Conditions that reflect the strategy discussed in the following sections. The applicants understand that the proposed mitigation efforts must demonstrate a plan to improve water quality, with specific action items to be implemented, and subsequent monitoring to demonstrate the effectiveness of the selected techniques.

LEED DEVELOPMENT

The applicants propose to collectively offset 25 % of the mitigation effort through a commitment to Leadership in Energy and Environmental Design (LEED) certification. Recognizing EPA's recommendation to utilize green infrastructure in new developments, both the City and Pigeon Falls are committed to achieving LEED certification.

ADDITIONAL LOW IMPACT DESIGN COMPONENTS

The LEED certification process assigns points for green technologies from a variety of design components. As stated in the permit application and in meetings with TDEC representatives, the applicants are committed to addressing onsite stormwater management with a variety of green technologies. As discussed during the August 29, 2007 meeting, the applicants will exceed the available credits in the stormwater management categories under the LEED program. Consequently, the applicants would like to offset an additional 20 % of the mitigation effort through the use of LID technologies that exceed the LEED point structure. These additional LID technologies would also be focused on stormwater management and water quality, and would include the measures previously discussed in the permit applications.

The proposed LID stormwater controls will be designed to limit the offsite discharge of stormwater pollutants to pre-development levels to the maximum extent practicable using Best Management Practices (BMPs). The major goal of these BMPs is to remove an approved amount of Total Suspended Solids (TSS). Most municipalities strive for TSS removal rates of 80%, which will be the goal for the Pigeon Falls Parking and Roadway Improvements project.

The construction of infrastructure to support the Pigeon Falls development will require the use of various BMPs to address water quality. Knoxville's stormwater guidelines will be used in the implementation and design of these BMPs. Listed below are common BMPs that may be utilized in the infrastructure mentioned above to provide 80% TSS removal, as a stand alone BMP or in a treatment train.

Stormwater wet ponds, stormwater wetlands, bioretention areas, and water quality swales, organic filters, underground sand filters, infiltration trenches and perimeter sand filters are able to achieve 80% TSS removal as stand alone BMPs. When combined with other methods, features such as dry detention ponds, stand alone water quality units, gravity separators, and grass channels can also provide the 80% TSS removal required. These BMPs will be implemented in the site design to achieve the desired water quality measures. In some areas, the intent is to use some of the stand alone 80% TSS removal BMPs in conjunction with each other, in an effort to remove greater than 80% TSS.

As an added effort to address overall water quality, the City has previously committed to leaving the stream channels open on the terrace portion of the site to the extent practicable, and creating fringe wetlands where feasible. Both measures will serve to improve water quality in these channels prior to discharging into the WPLPR.

The proposed stormwater controls and improvements to the downstream channel segments are designed to decentralize the stormwater treatment to the extent practicable, and to move beyond conventional stormwater collection systems in the application of LID technologies. For a project of this size, this approach is unprecedented in the East Tennessee region, and is intended to be a showcase for green technologies.

To highlight these efforts, the City has committed to developing an educational program in conjunction with their transportation facility and/or event center, and both the City and Pigeon Falls will highlight the green technologies in their marketing efforts for the development. These opportunities to increase awareness of benefits of green development will assist in promoting this EPA initiative.

COMPREHENSIVE STORMWATER MANAGEMENT PLAN

In accordance with TDEC's request to address regional concerns as well as onsite water quality, 25% of the mitigation effort is proposed to be accomplished through development and implementation of a Comprehensive Stormwater Management Plan (Plan) for the City of Pigeon Forge.

As a first step in this process, the City is prepared to add a full time Stormwater Manager to their staff. Within six months of the hire date, this individual would generate a draft of the Plan for submittal to TDEC. The Plan would identify specific goals and an implementation schedule intended to improve stormwater management in the City.

PHYSICAL HABITAT IMPROVEMENTS

TDEC expressed an interest in improving physical habitat in offsite streams in Pigeon Forge as a component of the mitigation effort. As stated previously, the streams to be impacted are low quality, they originate onsite, and they discharge directly to the WPLPR. Mitigation of the physical habitats provided by these highly intermittent and degraded streams could offset the remaining 30% of the mitigation effort.

Habitat improvement can be accomplished in a variety of ways. The new WWTP planned by the City should reduce pathogen levels in surface waters in the Pigeon Forge area, which is one of the primary contributors to the TDEC 303(d) listing. A second contributor is siltation, which would be a target of the City's Comprehensive Stormwater Management Plan. Phosphorus is also a contributor to the stream impacts. The City will use their Stormwater Management Plan to structure an educational program using media and general mailings to raise community awareness of the phosphorus issue and the link to fertilizer and agricultural activities.

The permit applications currently under review by the regulatory agencies address efforts to search for additional offsite mitigation opportunities. To supplement this activity, the City recently contracted Fuller Mossbarger Scott & May (FMSM) to perform a stream restoration assessment, also intended to identify potential stream mitigation opportunities in Pigeon Forge. Four stream segments were identified by FMSM and the report findings were discussed with representatives of the Tennessee Stream Mitigation Program (TSMP). Due to property owner or TSMP concerns, none of the identified streams has yielded a viable mitigation opportunity.

Combined with the work previously performed by S&ME, the FMSM study demonstrates that the City has put forth considerable effort to locate mitigation sites in their community. The pathogen, siltation, and phosphorus reduction methods mentioned above are also intended to mitigate stream quality. The proposed Stormwater Manager position will also be used to continue to search for mitigation opportunities. If additional opportunities are identified, the sites will be discussed with the regulatory agencies to determine the mitigation credits available. As the development proceeds, in the absence of additional viable stream mitigation opportunities, the applicants request the flexibility to utilize TSMP payment for this portion of the mitigation effort.

SUMMARY

The applicants appreciate the opportunity to provide the regulatory agencies with this summary of the issues discussed during the August 29, 2007 meeting. The items detailed herein are also itemized in the attached Proposed Special Conditions. These conditions are intended to provide our understanding of the requirements TDEC presented in the meeting.

The applicants understand that the regulatory agencies typically have standard permit conditions, and the items addressed herein would be in addition to these standards.

Thank you for your continued assistance with this important and innovative project. The City of Pigeon Forge and Pigeon Falls LLC are committed to creating a showcase development for the State of Tennessee. We hope the information contained herein adequately addresses the objectives outlined by TDEC in our recent meeting. Please contact us if you require additional information.

Sincerely,

Elizabeth Porter, P.G.
Project Manager

Eric Solt, P.G.
Environmental Services Manager

Attachment: City WWTP Commitment
Proposed Special Conditions - Draft

cc: Mr. Paul Sloan, TDEC
Mr. Paul Davis, TDEC
Mr. Dan Eagar, TDEC
Ms. Earlene Teaster, City of Pigeon Forge
Mr. John Jagger, City of Pigeon Forge
Mr. Buddy Kaplan, Riverwalk Park LLC
Mr. Michael McCall, Pigeon Falls Leisure Land Co., LLC
Mr. Norm Johnson, Waterfield Design
Mr. Jason Brady, GS&P

PROPOSED SPECIAL CONDITIONS - DRAFT:

1. The work shall be accomplished in conformance with the accepted plans, specifications, data and other information submitted in support of the above application, and the limitations, requirements and conditions set forth herein. The supporting documentation includes the September 13, 2007 S&ME correspondence submitted on behalf of the City and Pigeon Falls LLC.
2. The project will be LEED Certified. **(25% of the mitigation effort)**
3. In accordance with Rule 1200-4-7-04 (7)(a)3., as part of the mitigation, removal of pollutants from hydrologic buffering of stormwater runoff will be required. This will be accomplished, beyond the LEED Certification of Condition 2, through the use of additional Low Impact Development (LID) Design Techniques. Prior to construction, both the City of Pigeon Forge (City) and Pigeon Falls LLC (the Developer) will be required to submit their respective plans with specific LID components identified. The LID components used for LEED Certification will be identified, along with a minimum of two additional LID components from each party for their respective projects. **(20% of the mitigation effort)**
4. In an effort to prove the adequacy and viability of the mitigation, in accordance with TDEC Rule 1200-4-7-04 (7)(c)9, a surface water monitoring program is to be established. Beginning with the issuance of the permit, or earlier at the discretion of the applicants, surface water discharge will be monitored quarterly at the three confluences of onsite streams with the West Prong Little Pigeon River. The monitoring will occur within 72 hours of a measurable storm event at each location, and the samples will be analyzed for total suspended solids. Annual reports will be required from the applicants for a period of five years, documenting the progress of the development, the LID components installed to date, and the quarterly surface water sampling results. Increases in total suspended solids will be accompanied by a discussion of the presumed cause of the increase and a remedy to address the issue.
5. The City of Pigeon Forge will develop and implement a Comprehensive Stormwater Management Plan. As a first step in this process, the City will add a full time Stormwater Manager to their staff. Within six months of the hire date, this individual would generate a draft of the Plan for submittal to TDEC. The Plan would identify specific goals, including the establishment of targeted sediment reduction goals, and provide an implementation schedule intended to improve stormwater management in the City. **(25% of the mitigation effort)**
6. If offsite opportunities for stream mitigation are identified as the development progresses, the sites will be discussed with the regulatory agencies to determine the mitigation credits available. In the absence of viable stream mitigation opportunities within 6 months of the permit issuance, TSMP will be utilized for the balance of the mitigation. **(30% of the mitigation effort).**

Appendix C
Water Quality Certification

→ 5144
12/17



**TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION
DIVISION OF WATER POLLUTION CONTROL
401 CHURCH STREET
7th FLOOR L & C ANNEX
NASHVILLE, TENNESSEE 37243-1534**

Certified Mail Receipt 7099 3400 0014 0976 0939

December 7, 2007

Ms. Earlene M. Teaster
City of Pigeon Forge
P.O. Box 1350
Pigeon Forge, TN 37868-1350

**Subject: §401 Water Quality Certification; State of Tennessee
Application NRS 06.258 – Pigeon Falls Lane, Unnamed
tributary to the West Prong Little Pigeon River; Pigeon Forge,
Sevier County.**

Dear Ms. Teaster:

We have reviewed your application for the proposed encapsulation of 1,399 linear feet of an unnamed tributary to the West Prong of the Little Pigeon River. Pursuant to §401 of the Federal Clean Water Act (33 U.S.C. 1341), the state of Tennessee is required to certify whether the activity described below will violate applicable water quality standards.

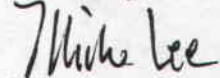
Subject to conformance with accepted plans, specifications and other information submitted in support of the referenced application, the state of Tennessee hereby issues certification for the proposed activity (enclosed). Failure to comply with the terms of this permit or other violations of the *Tennessee Water Control Act of 1977* is subject to penalty in accordance with T.C.A. § 69-3-115.

It is the responsibility of the permittee to ensure that all contractors involved with this project have read and understood the permit conditions before the project begins. If you need any additional information of clarification, please contact Mike Lee at 615-532-0712 or by e-mail at Mike.Lee@state.tn.us.

REC 2007

**§401 CERTIFICATION
CITY OF PIGEON FORGE
NRS #06.258
PAGE 2.**

Sincerely,



Mike Lee

Natural Resources Section

Cc: Knoxville Environmental Field Office
Ruben Hernandez, U.S. Army Corps of Engineers, Nashville District
Tom Welborn, U.S. Environmental Protection Agency, Atlanta, GA
Lee Barclay, U.S. Fish and Wildlife Service, Cookeville, TN
Rob Todd, Tenn. Wildlife Resources Agency, Nashville, TN
Stan Davis, TVA
Liz Porter, S&ME, Inc.
File Copy.

**§401 CERTIFICATION
CITY OF PIGEON FORGE
NRS #06.258
PAGE 3.**



NRS 06.258

Pursuant to §401 of the Federal Clean Water Act (33 U.S.C. 1341), the state of Tennessee is required to certify whether the activity described below will violate applicable water quality standards. Accordingly, the Division of Water Pollution Control requires reasonable assurance that the activity will not violate provisions of *The Tennessee Water Quality Control Act of 1977* (T.C.A. § 69-3-101 et seq.) or of §§ 301, 302, 303, 306 or 306 of *The Clean Water Act*.

Subject to conformance with accepted plans, specifications and other information submitted in support of application NRS 06.258, the state of Tennessee hereby certifies the activity described under authorized work below pursuant to 33 U.S.C. 1341. This shall serve as authorization pursuant to §T.C.A. 69-3-101 et seq.

PERMITTEE: **City of Pigeon Forge**

AUTHORIZED WORK: The encapsulation of 1,399 linear feet of an unnamed tributary to the West Prong of the Little Pigeon River. Compensatory stream mitigation shall occur with a combination of low impact development (LID), certification in Leadership in Energy and Environmental Design (LEED), a comprehensive stormwater management plan for the City of Pigeon Forge and the physical habitat improvements in offsite streams in Pigeon Forge.

LOCATION: North of the intersection of Jake Thomas Road and Teaster Lane in the adjacent to the former Jake Thomas Farm, Pigeon Forge, Sevier County.

**§401 CERTIFICATION
CITY OF PIGEON FORGE
NRS #06.258
PAGE 4.**

EFFECTIVE DATE: December 7, 2007

EXPIRATION DATE: December 6, 2012

SPECIAL CONDITIONS:

1. The work shall be accomplished in conformance with the accepted plans, specifications, data and other information submitted in support of the above application and the limitations, requirements and conditions set forth herein.
2. No impacts to any waters of the state by this project, other than those specifically addressed in the plans and this permit, are allowed. All other streams, springs and wetlands shall be fully protected prior, during and after construction until the area is stabilized. Any questions, problems or concerns that arise regarding any stream, spring or wetland either before or during construction, shall be addressed to the Division of Water Pollution Control, 865-594-6035. Wetlands outside of the proposed area of impact shall not be used as storage or staging areas for equipment.
3. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in Rule 1200-4-3.-03 of the Rules of The Tennessee Department of Environment and Conservation. This includes but is not limited to the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of waters of the state for any of the uses designated by Rule 1200-4-4. These uses include fish and aquatic life, livestock watering and wildlife, recreation, irrigation, industrial water supply, domestic water supply, and navigation.
4. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the state. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the state, including groundwater.
5. Adverse impact to formally listed state or federal threatened or endangered species or their critical habitat is prohibited.
6. This permit does not authorize adverse impacts to cultural, historical or archeological features or sites.

**§401 CERTIFICATION
CITY OF PIGEON FORGE
NRS #06.258
PAGE 5.**

7. A compensatory stream mitigation plan for the encapsulation of 1,399 linear feet of an unnamed tributary to the West Prong of the Little Pigeon River shall be in accordance with 'Rule 1200-4-7-04(7)(a) Mitigation of state waters other than wetlands": Mitigation measures include, but are not limited to: 1. Restoration of degraded stream reaches and/or riparian zones; 2. New (relocated) stream channels; 3. Removal of pollutants from hydrologic buffering of stormwater runoff; 4. Any other measures which have a reasonable likelihood of increasing the resource value of a state water.

8. In order to accomplish the stream mitigation the permittee shall conduct the following:

A. The proposed project shall be LEED (Leadership in Energy and Environmental Design) certified and utilize low impacts designs (LID) techniques that will maintain or replicate the predevelopment hydrologic regime through the use of design techniques to create a functionally equivalent hydrologic landscape. Hydrological functions of storage, infiltration, ground water recharge as well as the volume and frequency of discharges are maintained through the use of integrated and distributed micro-scale stormwater retention and detention areas, reduction of impervious surface, and the lengthening of flow paths and runoff time. Specifically these design techniques will include, but are not limited to, water efficient landscaping, innovative wastewater technologies, water use reduction, disconnection of roof and paved areas from traditional drainage structures into vegetated swales, buffers, strips, bioretention areas, rain gardens. Native vegetation shall be utilized emphasizing soil amendments and trees. LID techniques will be distributed throughout the development. Impervious surface reduction shall be a priority with use of pervious pavement in parking, sidewalks and in the overall reduction of these structures. At least three months prior to construction of any phase the permittee shall submit a draft plan of that phase for approval detailing the Low Impact Development design techniques, and the LEED certification techniques, and a long-term maintenance plan of these techniques. The plan shall compare pre- and post development site hydrology (35% of the mitigation).

B. The permittee shall develop and implement a Comprehensive Stormwater Management Plan. As the first step in the process,

**§401 CERTIFICATION
CITY OF PIGEON FORGE
NRS #06.258
PAGE 6.**

the permittee shall add a full time Stormwater Manager to their staff. Within six months of the hire date, the permittee shall generate a draft of the plan and submit to this office. The plans shall identify specific goals, including the establishment of targeted sediment reduction goals, and provide an implementation schedule to improve stormwater management in the City of Pigeon Forge. The plan should ensure that water quality from post construction stormwater meet the requirements for post construction similar to what is utilized by the City of Knoxville as well as other state programs. (30% of the mitigation).

- C. Offsite mitigation of habitat loss within the watershed. If insufficient or no opportunities are identified, after demonstration that reasonable effort has been undertaken, within 6 (six) months of the issuance of the 404 and 401 permits then the permittee shall utilize the Tennessee Stream Mitigation Program (TSMP) (35% of the mitigation).

9. In order to prove the adequacy and viability of the stream mitigation plan the permittee and the City of Pigeon Forge shall monitor the surface water discharge. On site post construction monitoring will occur quarterly at the three confluences of the onsite streams with the West Prong and several locations within the development. In addition, a similar development will be chosen within the City for monitoring that has none of these stormwater designs. A minimum of one grab sample will be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours for the previously measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the activity. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If this is not practicable then a garb sample can be taken during the first hour of the discharge. Total suspended solids, settleable solids, metals (asbestos, oil/grease, TPH (total petroleum hydrocarbons), nutrients (phosphates and nitrates), flow, temperature and dissolved oxygen will be monitored. To compare pre- and post development concentrations baseline data shall be collected for these pollutants in the West Prong prior to development. Cut-off concentrations will follow those

**§401 CERTIFICATION
CITY OF PIGEON FORGE
NRS #06.258
PAGE 7.**

of Table AD-1 of the Tennessee Stormwater Multi-Sector General Permit. If the results of the monitoring reveal that cut-off concentrations exceed Table AD-1 and pre-development baseline concentrations the permittee shall within 60 days from the event review its stormwater plan and make modifications or additions necessary to reduce the concentrations. A draft plan shall be submitted to the division for approval within 3 months of the issuance of the 404 and 401 permits.

10. Any approved offsite stream mitigation (condition #8 C.) shall include monitoring protocol, performance criteria and reporting schedule.
11. The first monitoring report shall be submitted by October 31, 2008 and each subsequent year until the division notifies the permittee that reporting can be terminated. (If no work has been completed by the due date of the first monitoring report then a no work report shall be submitted.)
12. The permittee shall retain the services of an approved environmental consultant (preferably the consultant who has been involved in the permitting process) to oversee any compensatory mitigation and monitoring. The name of the responsible party shall be submitted to this office within 3 months after receipt of this permit and the COE 404 permit.
13. It is the responsibility of the permittee to convey all the terms and conditions of this certification to all contractors.
14. The compensatory stream mitigation plan that utilizes low impact development (LID) and LEED certification is a demonstration project. The information gathered from this project shall be used in future permitting decisions by the Division.

A copy of this permit, approved plans and any other document pertinent to the activities authorized by this permit shall be maintained on site at all times during periods of construction activity.

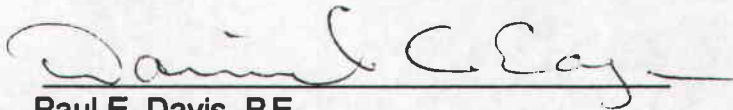
This does not preclude requirements of other federal, state or local laws. In particular, work shall not commence until the applicant has received the federal §404 permit from the U. S. Army Corps of Engineers, a §26a permit from the Tennessee Valley Authority or authorization under a Tennessee NPDES Storm Water Construction Permit where necessary. This permit also serves as a Tennessee Aquatic Resource Alteration Permit pursuant to the *Tennessee Water Quality Control Act of 1977* (T.C.A. § 69-3-101 et seq.).

The state of Tennessee may modify or revoke this permit or seek modification or revocation should the state determine that the activity results in more than an insignificant violation of applicable water quality standards or violation of the act.

**§401 CERTIFICATION
CITY OF PIGEON FORGE
NRS #06.258
PAGE 8.**

Failure to comply with permit terms may result in penalty in accordance with T.C.A. §69-3-115.

An appeal of this action may be made to the Water Quality Control Board. In order to appeal, a petition requesting a hearing before the Board must be filed within 30 days after receipt of the permit. In such petition, each contention should be stated in numbered paragraphs that describe how the proposed activity would be lawful and the action of the state is inappropriate. The petition must be prepared on 8½" x 11" paper, addressed to the Water Quality Control Board and filed in duplicate at the following address: Paul E. Davis, Director, Division of Water Pollution Control, 6th Floor L C Annex, 401 Church Street, Nashville, Tennessee 37243-1534. Any hearing would be in accordance with Tennessee Code Annotated Section 69-3-110 and 4-5-301 et seq. Questions concerning this certification should be addressed to Mike Lee at 615-532-0712.



Paul E. Davis, P.E.

Director, Division of Water Pollution Control

Appendix D
Joint Public Notice



**US Army Corps
of Engineers.**

Public Notice

Public Notice No. 07-67

Date: August 2, 2007

Nashville District Application No. 200600583 Expires: September 1, 2007

Please address all comments to: Regulatory Branch, 3701 Bell Road, Nashville, TN 37214-2660; ATTN: J. Ruben Hernandez

JOINT PUBLIC NOTICE
US ARMY CORPS OF ENGINEERS
AND
TENNESSEE VALLEY AUTHORITY

SUBJECT: Proposed Stream Encapsulations at Unnamed Tributaries to the West Prong Little Pigeon River, in Pigeon Forge, Sevier County, Tennessee

TO ALL CONCERNED: The application described below has been submitted for a Department of the Army Permit pursuant to **Section 404 of the Clean Water Act (33 USC 1344) and Tennessee Valley Authority permit pursuant to Section 26a of the TVA Act (16 USC 831y-1)**. Before a permit can be issued, certification must be provided by the State of Tennessee, Division of Water Pollution Control, pursuant to Section 401(a)(1) of the CWA, that applicable water quality standards will not be violated. The applicant has applied for the State certification by separate application (NRS 06-258).

APPLICANT: City of Pigeon Forge
P.O. Box 1350
Pigeon Forge, Tennessee 37868-1350

LOCATION: Unnamed tributaries to the West Prong Little Pigeon River, in Pigeon Forge, Sevier County, Tennessee, Lat 35.8048N, Lon 83.5655W, USGS Pigeon Forge Topographic Quadrangle.

DESCRIPTION: The applicant proposes to construct 2,800' of roadway called Pigeon Falls Lane (PFL) to alleviate regional traffic problems. PFL would serve the proposed Pigeon Falls Village (see *Additional Proposed Area Development* later in this document) and as access from Pigeon Forge to other venues such as the Dollywood Theme Park in Pigeon Forge.

Approximately 1,102' (and 297' of ephemeral) of an unnamed intermittent tributary to the West Prong of the Little Pigeon River would be filled. The unnamed tributary is approximately 4-6' wide, with average channel depths of 4-6' upstream and 3-4' downstream, a mud and silt substrate, and water depths of 2-4". In-stream habitat is very limited. Pools, riffles, and point

Public Notice No. 07-67

bars, were not visible in most of the stream. Macroinvertebrate life was observed. French drains and pipes would be used in the channel to collect the subsurface seeps and springs. An impermeable layer would be constructed over the french drain and pipe to separate the subsurface flow from the proposed development. In addition, a collection system with subsurface treatment is designed to collect/treat stormwater runoff from the majority of the new proposed area roadways (Pigeon Falls Lane and the Teaster Lane/Jake Thomas Road Improvements and Parking Area advertised under separate public notice--See *Additional Proposed Area Development* later in this document).

Alternatives. The applicant states that it has made efforts to avoid stream impacts but because of existing and proposed development the option for acquiring right-of-way is limited. It adds that topography, regional traffic concerns, and regional road improvements were related to the need to locate the road at its proposed location.

Mitigation. Suitable mitigation sites in the area were not found during a search by the applicant, and therefore compensatory stream mitigation for impacts to 1,102' of stream would consist of a payment of \$200/linear foot to the Tennessee Stream Mitigation Program.

ADDITIONAL PROPOSED AREA DEVELOPMENT: By separate public notices we are advertising additional projects planned for the Pigeon Forge area. Information on these projects may be obtained by visiting: <http://www.lrn.usace.army.mil/cof/notices.htm>

Pigeon Falls Village: Pigeon Falls, LLC proposes to commercially develop an 85-acre tract located north-northeast of the Jake Thomas Road and Teaster Lane intersection. (Public Notice 07-68, File 200602640)

Teaster Lane/Jake Thomas Road Improvements and Parking Area: The City of Pigeon Forge proposes to extend Jake Thomas Road, widen Teaster Lane, expand the intersection at Teaster Lane and Jake Thomas Road, and create a regional parking facility as part of its regional road plan to address traffic problems in Pigeon Forge. (Public Notice 07-69, File 200701556)

Plans of the proposed work are attached to this notice.

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected

Public Notice No. 07-67

to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. In addition, the evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b)(1) of the CWA (40 CFR Part 230). A permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

An Environmental Assessment will be prepared by this office prior to a final decision concerning issuance or denial of the requested Department of the Army Permit.

A Phase I archaeological survey was completed by DuVall & Associates, Inc., in 2004. The report entitled: *A Phase I Archaeological Survey of the Proposed Riverwalk Park Development (Management Area A: Uplands) Along Teaster Lane in Pigeon Forge, Sevier County, Tennessee*, documents that no archaeological sites or historic properties were identified on the development site. The Corps agrees with this conclusion and through this notice is requesting concurrence from the Tennessee Historical Commission. This review constitutes the full extent of cultural resources investigations unless comment to this notice is received documenting that significant sites or properties exist which may be affected by this work, or that adequately documents that a potential exists for the location of significant sites or

Public Notice No. 07-67

properties within the permit area. Copies of this notice are being sent to the office of the State Historic Preservation Officer.

Based on available information, the proposed work will not destroy or endanger any federally-listed threatened or endangered species or their critical habitats, as identified under the Endangered Species Act. Therefore, we have reached a no effect determination, and initiation of formal consultation procedures with the U.S. Fish and Wildlife Service is not planned at this time.

Other federal, state, and/or local approvals required for the proposed work are as follows:

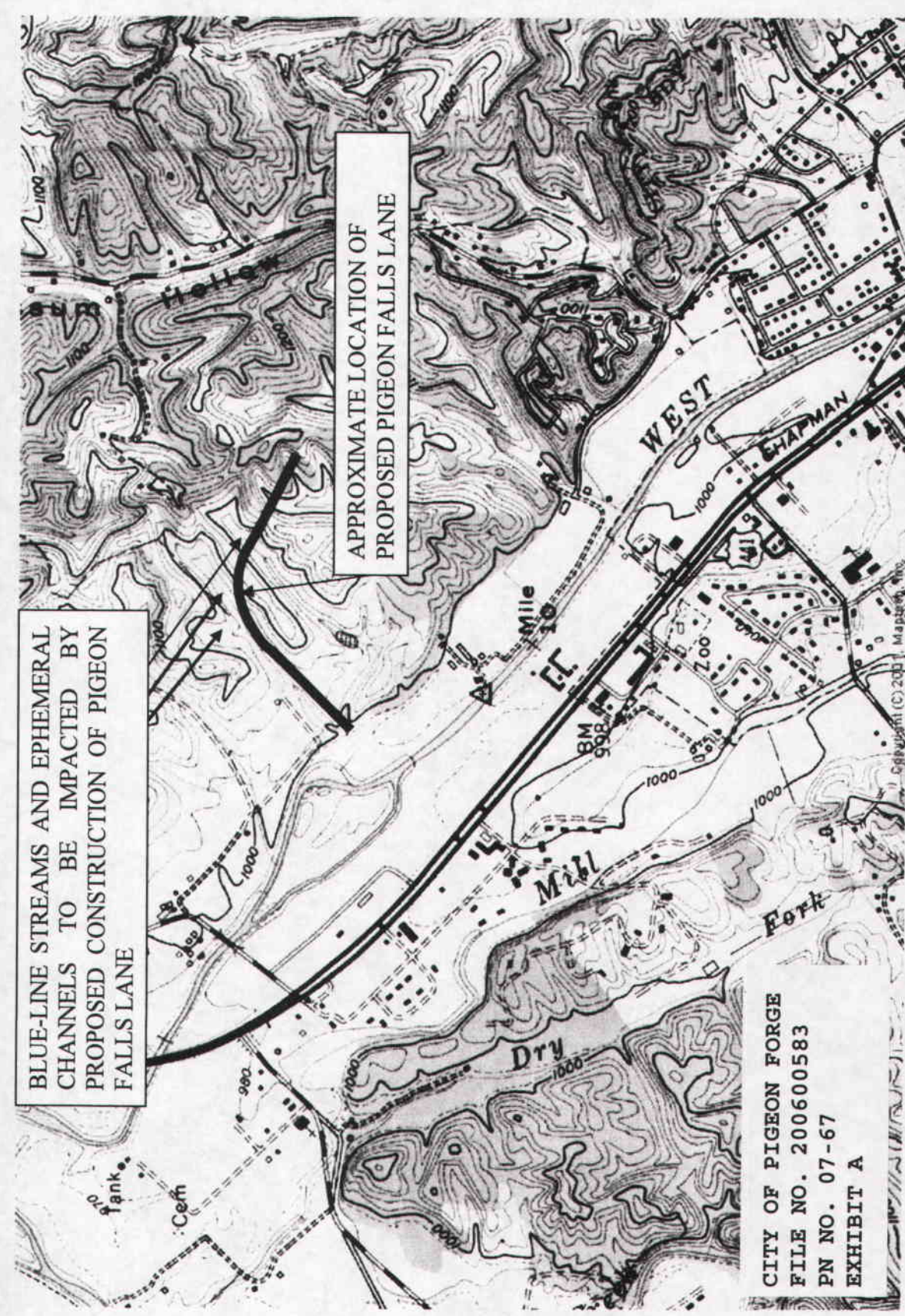
a. Tennessee Valley Authority (TVA) approval under Section 26a of the TVA Act. In addition to other provisions of its approval, TVA would require the applicant to employ best management practices to control erosion and sedimentation, as necessary, to prevent adverse aquatic impacts.

b. Water quality certification from the State of Tennessee in accordance with Section 401(a)(1) of the Clean Water Act.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

Written statements received in this office on or before September 1, 2007, will become a part of the record and will be considered in the determination. Any response to this notice should be directed to the Regulatory Branch, Attention: J. Ruben Hernandez, at the above address, telephone (615) 369-7519. It is not necessary to comment separately to TVA since copies of all comments will be sent to that agency and will become part of its record on the proposal. However, if comments are sent to TVA, they should be mailed to Ms. Karen Stewart, Holston-Cherokee-Douglas Watershed Team, 3726 E. Morris Boulevard, Morristown, Tennessee 37813-1270.

If you received this notice by mail and wish to view all of the diagrams, visit our web site at:
<http://www.lrn.usace.army.mil/cof/notices.htm>, or contact Mr. Hernandez at the above address or phone number.



Topo Name: Pigeon Forge, TN	Scale: 1" = 1500'	Site Vicinity Map Proposed Pigeon Falls Lane Pigeon Forge, Tennessee	Figure 1
Topo Date: 1956	Checked By: EMP		
Topo Revision: 1970	Drawn By: BD		
Contour Interval: 20 feet	Date: 06/10/05		

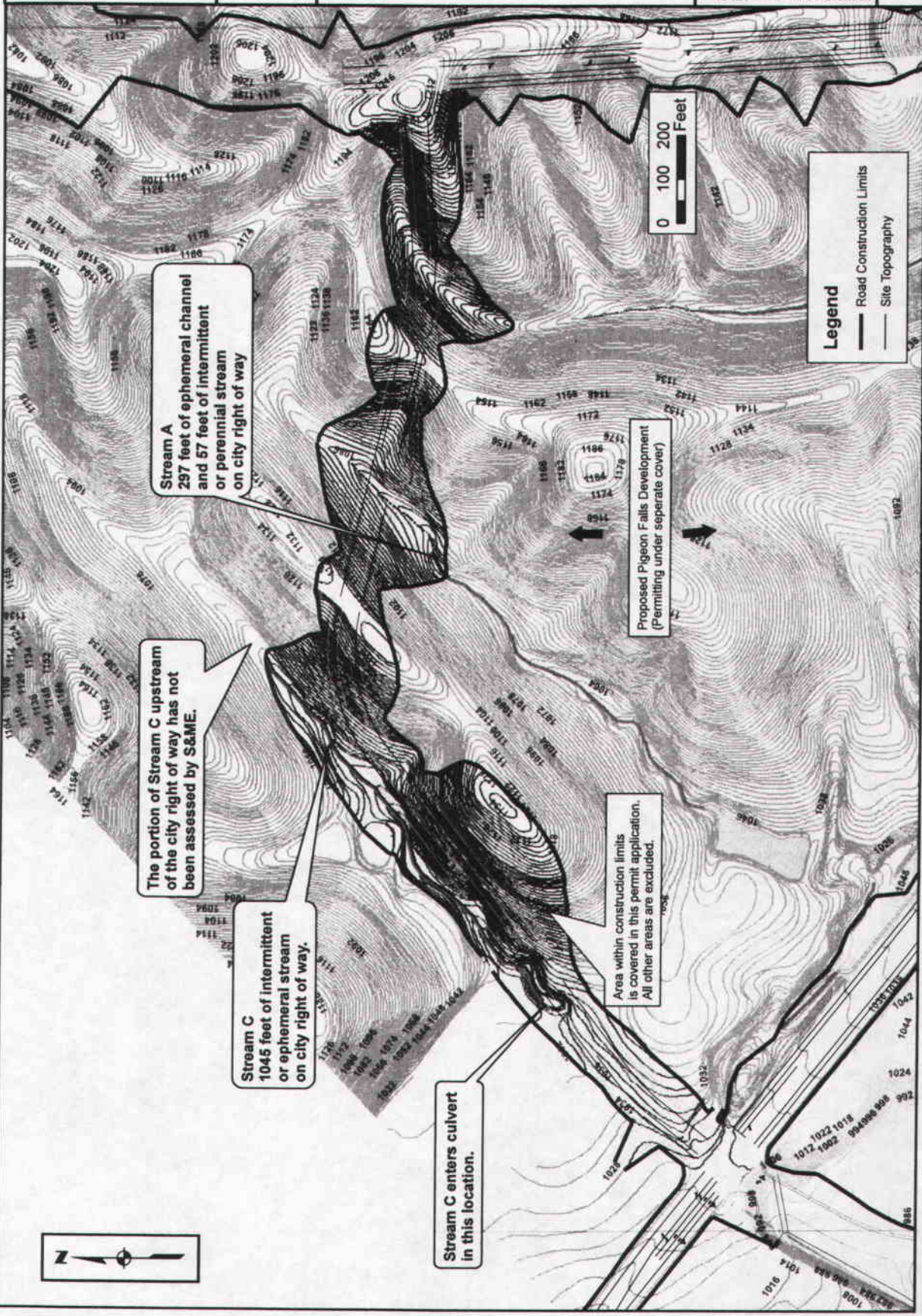
S&ME
ENGINEERING · TESTING
ENVIRONMENTAL SERVICES
1413 Topside Road
Louisville, TN 37277

Pigeon Falls Lane
Feature Location Map
Pigeon Forge, Tennessee

REVISIONS	
NO.	DATE
A	02/28/06
	Original Issue

CHECKED BY: J.P. PRJ # 1434-05-879
DRAWN BY: MS DATE: 02/23/06

Figure 2



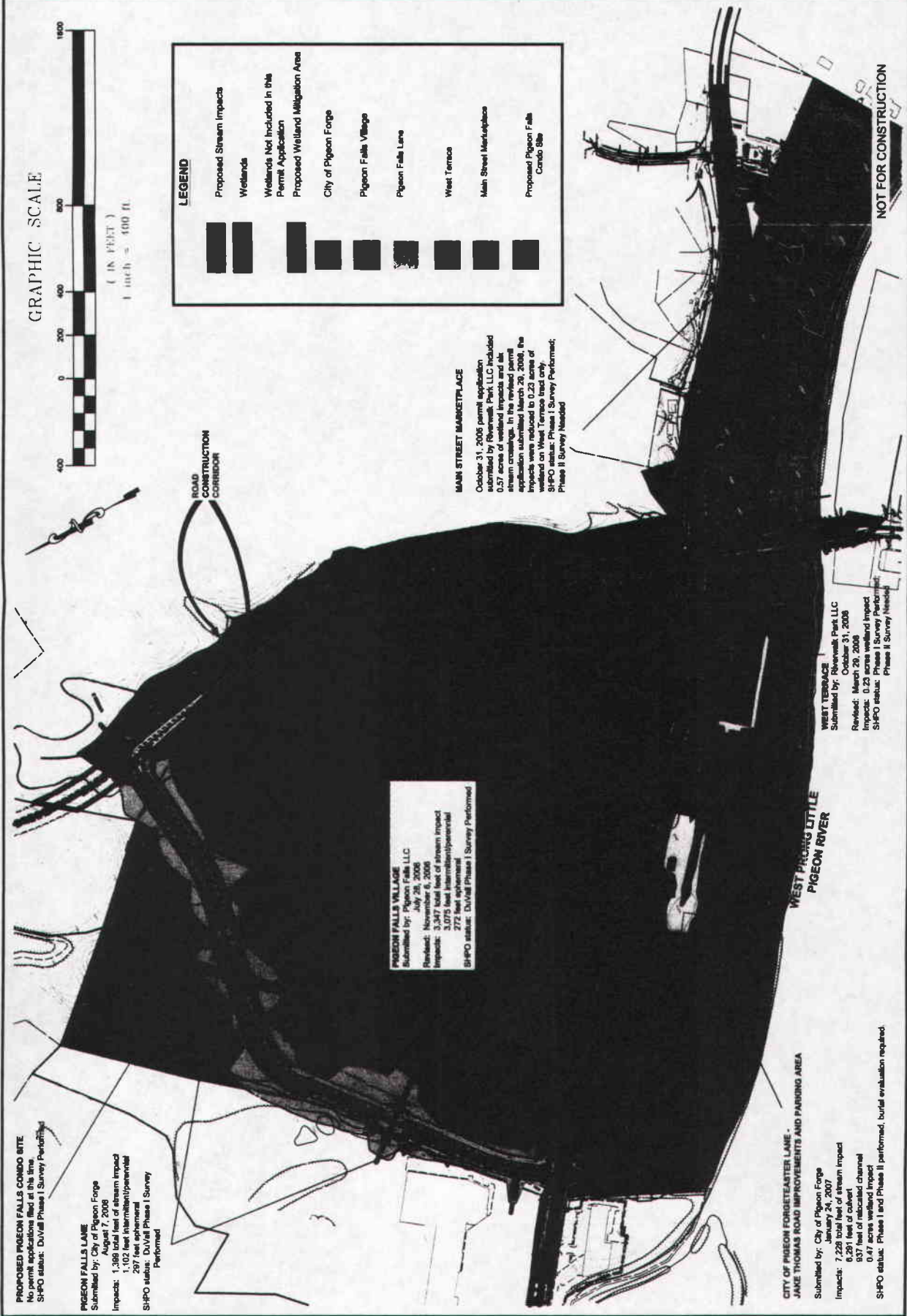
CITY OF PIGEON FORGE
FILE NO. 200600583
PN NO. 07-67
EXHIBIT B



**Former Jake Thomas Farm
Development Plans
Proposed Stream and Wetland Impacts**

Revisions	
No.	Description
1	Initial
2	Revised
3	Revised
4	Revised
5	Revised
6	Revised
7	Revised
8	Revised
9	Revised
10	Revised
11	Revised
12	Revised
13	Revised
14	Revised
15	Revised
16	Revised
17	Revised
18	Revised
19	Revised
20	Revised
21	Revised
22	Revised
23	Revised
24	Revised
25	Revised
26	Revised
27	Revised
28	Revised
29	Revised
30	Revised
31	Revised
32	Revised
33	Revised
34	Revised
35	Revised
36	Revised
37	Revised
38	Revised
39	Revised
40	Revised
41	Revised
42	Revised
43	Revised
44	Revised
45	Revised
46	Revised
47	Revised
48	Revised
49	Revised
50	Revised

Fig. 1



**CITY OF PIGEON FORGE
FILE NO. 200600583
PN NO. 07-67
EXHIBIT C**

Appendix E
Public Responses



2006-00583
→ JRM
or
8/16

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

August 6, 2007

Mr. J. Ruben Hernandez
U.S. Army Corps of Engineers, Nashville District
Regulatory Branch
3701 Bell Road
Nashville, Tennessee 37214

RE: COE-N, ARCHAEOLOGICAL ASSESSMENT, PN# 07-67/PIGEON FALLS LANE,
PIGEON FORGE, SEVIER COUNTY, TN

Dear Mr. Hernandez:

At your request, our office has reviewed the above-referenced undertaking and previously received archaeological survey report in accordance with regulations codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739). Based on the information provided, we find concur the project area contains no archaeological resources eligible for listing in the National Register of Historic Places.

If project plans are changed or archaeological remains are discovered during construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

Your cooperation is appreciated.

Sincerely,

Richard H. Tom, DS HPO

tu
E. Patrick McIntyre
Executive Director and
State Historic Preservation Officer

EPM/jmb



United States Department of the Interior

FISH AND WILDLIFE SERVICE
446 Neal Street
Cookeville, TN 38501

August 31, 2007

2 006 - 00583

→ JRD

✓
9/5

Lt. Colonel Bernard R. Lindstrom
District Engineer
U.S. Army Corps of Engineers
3701 Bell Road
Nashville, Tennessee 37214

Attention: Mr. J. Ruben Hernandez, Regulatory Branch

Subject: Public Notice No. 07-67. City of Pigeon Forge, Proposed Stream Encapsulation, Sevier County, Tennessee.

Dear Colonel Lindstrom:

Fish and Wildlife Service (Service) personnel have reviewed the subject public notice. The applicant (City of Pigeon Forge) proposes to impact approximately 1,102 linear feet of an unnamed tributary to the West Prong of the Little Pigeon River in Pigeon Forge, Sevier County, Tennessee. The stream flow, if any, would be placed into a french drain and pipe. Compensatory mitigation requirements for the stream loss would be met by making a payment of \$220,400 to the Tennessee Stream Mitigation Program. The purpose of the project is to construct 2,800 linear feet of a roadway called Pigeon Falls Lane to alleviate regional traffic problems. The following constitute the comments of the U.S. Department of the Interior, provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Endangered species collection records available to the Service do not indicate that federally listed or proposed endangered or threatened species occur within the impact area of the project. We note, however, that collection records available to the Service may not be all-inclusive. Our data base is a compilation of collection records made available by various individuals and resource agencies. This information is seldom based on comprehensive surveys of all potential habitat and thus does not necessarily provide conclusive evidence that protected species are present or absent at a specific locality. However, based on the best information available at this time, we believe that the requirements of section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. Obligations under section 7 of the Act must be reconsidered if (1) new information reveals impacts of the action that may affect listed species or critical habitat in a manner not previously considered, (2) the action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the action.

04 SEP 2007

We do not anticipate significant adverse impacts to fish and wildlife or their habitats as a result of this project. Assuming the applicant makes the appropriate payment to the Tennessee Stream Mitigation Program in a timely manner, we would have no objection to the issuance of a permit for the work described in the subject public notice.

Thank you for this opportunity to review the subject notice. Please contact Robbie Sykes of my staff at 931/528-6481 (ext. 209) if you have questions about these comments.

Sincerely,



Lee A. Barclay, Ph.D.
Field Supervisor

xc: Robert Todd, TWRA, Nashville, TN
Dan Eagar, TDEC, Nashville, TN
Darryl Williams, EPA, Atlanta, GA

Hernandez, Jose R LRN

From: Williams.Darryl@epamail.epa.gov
Sent: Tuesday, November 20, 2007 3:34 PM
To: Hernandez, Jose R LRN
Cc: Mikulak.Ronald@epamail.epa.gov
Subject: Pigeon Forge projects, PN #'s 07-67,07-68, 07-69

Ruben, I decided to just email you comments. We have reviewed the additional information forwarded to us on September 11, 2007, for the subject PNs all dated in early August 2007. Your office extended the comment period for review by all agencies. We have completed our review and also discussed these projects with TDEC staff and offer the following comments:

The receiving streams have been classified as Tier 1 Waters which means existing uses must be protected. The applicant(s) are implementing several innovations in their project design (LID, "green" building, subsurface storm water management system, etc.) and promises to maintain downstream flow (@ 0.012 cfs) and water quality. It is recommended that conditions for appropriate BMPs during construction be included in accordance with state requirements and that post-construction monitoring conditions (may include: flow, pH, TSS, turbidity, metals, etc.) are also included in the permit to monitor this situation once these facilities are developed. Also, an adaptive management clause should also be included in the event state water quality standards are contravened.

We recommend that any monies paid into the Tennessee Stream Mitigation (In-Lieu-Fee) Program to offset any remaining impacts not mitigated on site or via alternative storm water mitigation BMPs should be paid prior to or concurrent with construction.

Attachment 2

404(b)(1) Guidelines Compliance Checklist

Evaluation of compliance with 404(b)(1) Guidelines (Restrictions on Discharge, 40 CFR 230.10):
(A check in a block denoted by an asterisk indicates that the proposal does not comply with the guidelines.)

● Alternatives test.

Based on the discussions in Section 4, are there available, practicable alternatives having less adverse impact on the aquatic ecosystem and without other significant adverse environmental consequences that do not involve discharges into "WUS" or at other locations within these waters?
[Yes(*)__ No x]

Based on the discussions in Section 4, if the project is in a special aquatic site and is not water-dependent, has applicant clearly demonstrated that there are no practicable alternative sites available?
[Yes x No(*)__]

● Special restrictions. Will the discharge:

- violate state water quality standards? [Yes(*)__ No x]

- violate toxic effluent standards (under Section 307 of the Act)? [Yes(*)__ No x]

- jeopardize endangered or threatened species or their critical habitat? [Yes(*)__ No x]

- violate standards set by the Department of Commerce to protect marine sanctuaries?
[Yes(*)__ No x]

Evaluation of the physical/chemical and biological characteristics and anticipated changes indicates that the proposed discharge material meets testing exclusion criteria for the following reason(s):
[Yes x No __]

(x) based on available information, the material is not a carrier of contaminants

() the levels of contaminants are substantially similar at the extraction and disposal sites and the discharge is not likely to result in degradation of the disposal site and pollutants will not be transported to less contaminated areas

() acceptable constraints are available and will be implemented to reduce contamination to acceptable levels within the disposal site and prevent contaminants from being transported beyond the boundaries of the disposal site

● Other restrictions. Will the discharge contribute to significant degradation of "WUS" through adverse impacts to:

- human health or welfare, through pollution of municipal water supplies, fish, shellfish, wildlife, and special aquatic sites? [Yes(*)__ No x]

- life stages of aquatic life and other wildlife? [Yes(*)__ No x]

- diversity, productivity, and stability of the aquatic ecosystem, such as loss of fish or wildlife habitat, or loss of the capacity of wetland to assimilate nutrients, purify water, or reduce wave energy? [Yes(*)__ No x]

- recreational, aesthetic and economic values? [Yes(*)__ No x]

● Actions to minimize potential adverse impacts (mitigation). Will all appropriate and practicable steps (40 CFR 230.70-77) be taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem? [Yes x No(*)__]

The mitigation measures included in the permit application, additional mitigation, general permit conditions, and special permit conditions developed would adequately minimize adverse effects to the aquatic environment.