



Appendix A:

TIP Page

Knoxville Regional Transportation Planning Organization

TRANSPORTATION IMPROVEMENT PROGRAM FY 2014-2017

TIP No.	2014-038	Revision No.	0
TDOT PIN	110301.00	Mobility Plan No.	09-615
Project Name	Washington Pk.		
Lead Agency	City of Knoxville		
Total Project Cost	\$15,146,000		

Project Description	Widen from 2-lanes to 4-lanes including pedestrian and bicycle facilities.			
Termini/Intersection	North of I-640 to Murphy Rd			
Counties	Knox			
City/Agency	City of Knoxville			
Length	1.7	(miles)	Conformity Status	Non-Exempt

Additional Details Transferred construction dollars to Pleasant Ridge Rd project (2008-041) to fund CEI in March 2008. Add PE & ROW funds in Aug 09.

Programmed Funds

FY	Type of Work	Funding Type	Total Funds	Federal	State	Local	Other
2014	PE-N/PE-D/RW/CN	L-STP	\$3,455,600	\$2,764,480	\$0	\$691,120	\$0
2016	PE-N/PE-D/RW/CN	L-STP	\$11,690,400	\$9,352,320	\$0	\$2,338,080	\$0
Total			\$15,146,000	\$12,116,800	\$0	\$3,029,200	\$0

Revision Date	
Revision Details	
Previous TIP No.	2006-022, 2008-053, 2011-049





Appendix B:

Location Maps

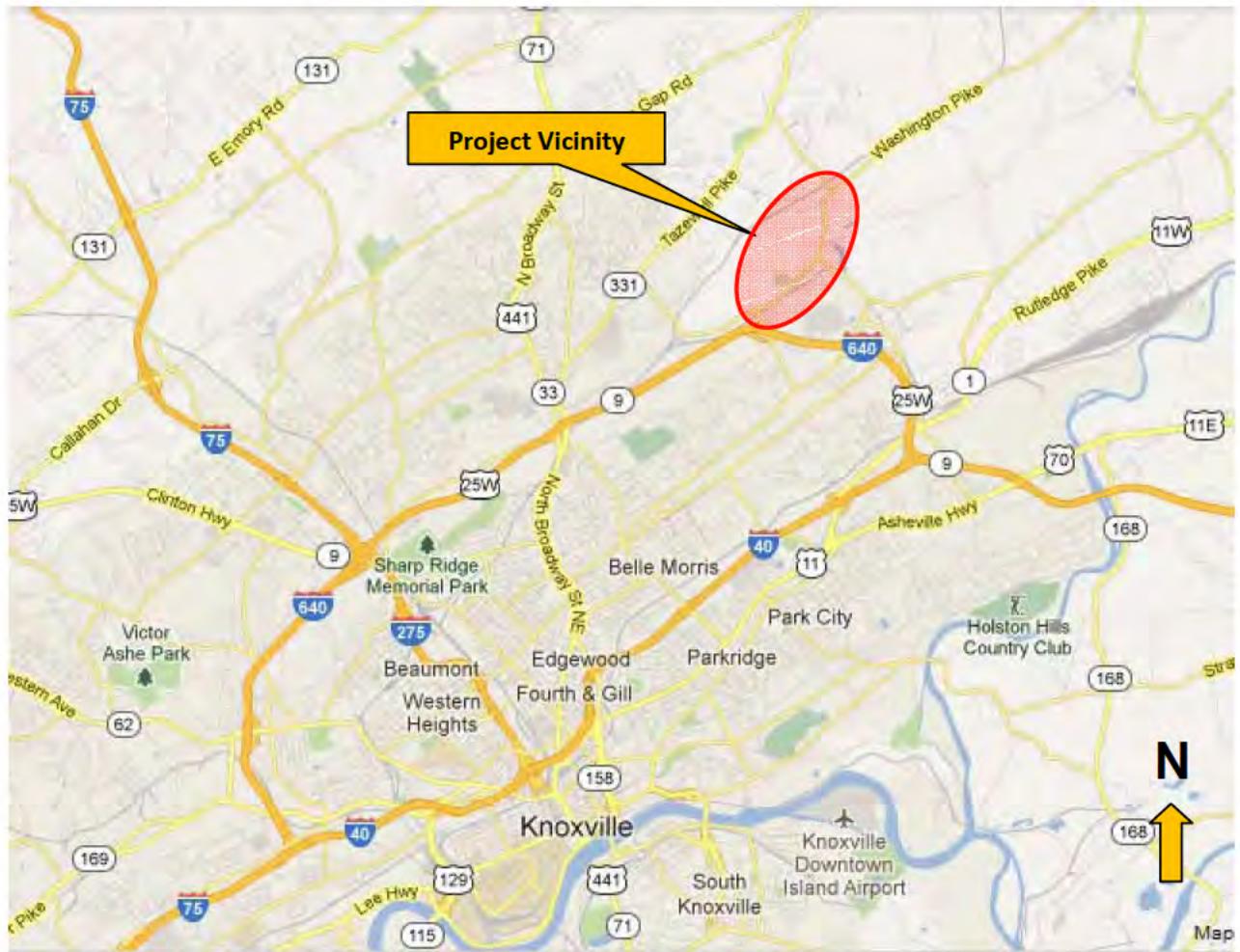
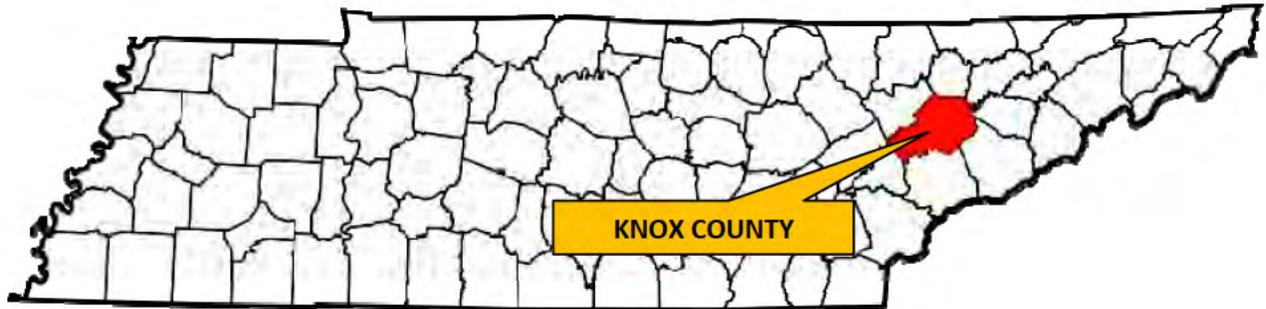
Project Plans

Project Area Photos

WASHINGTON PIKE PROJECT

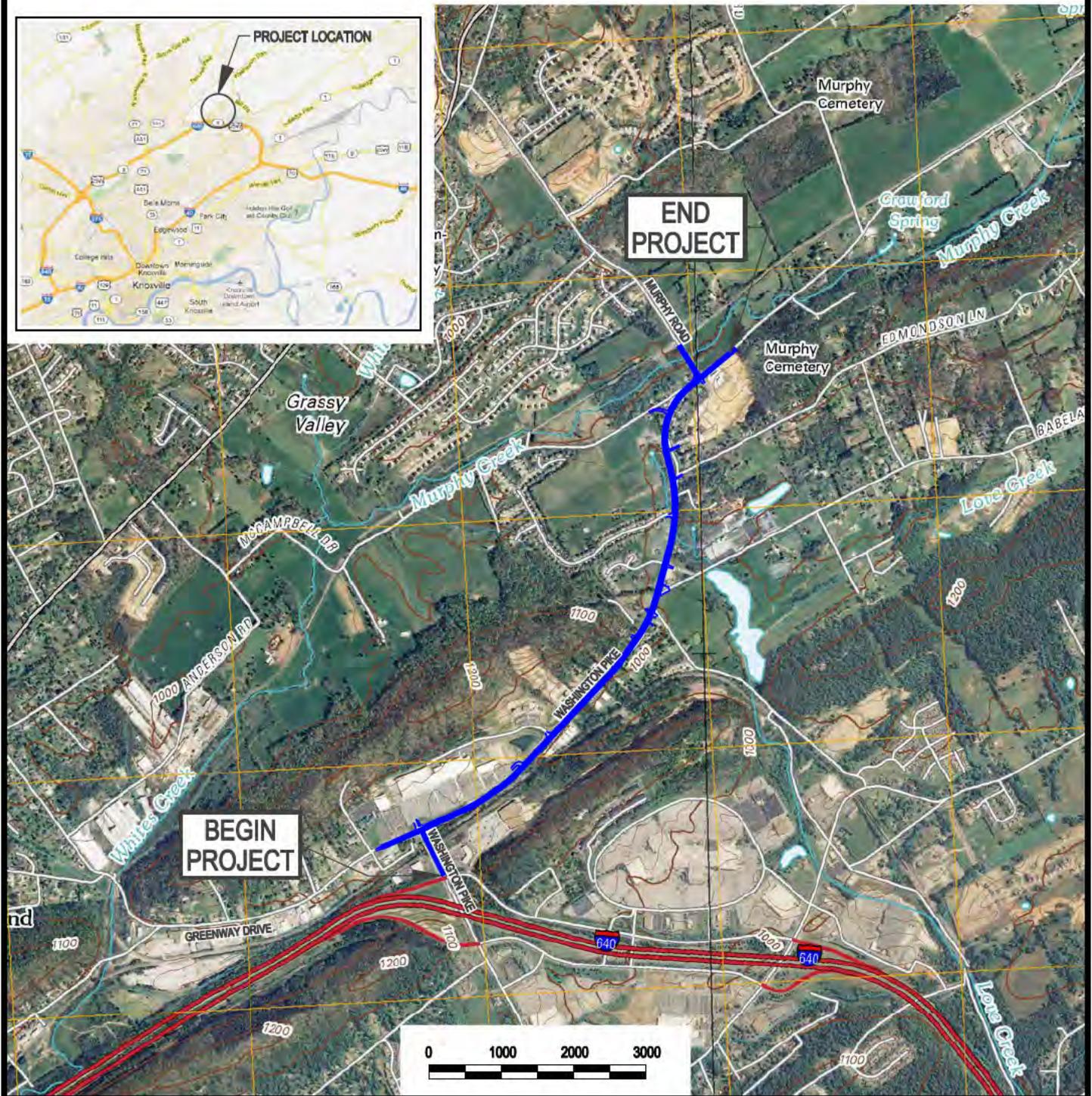
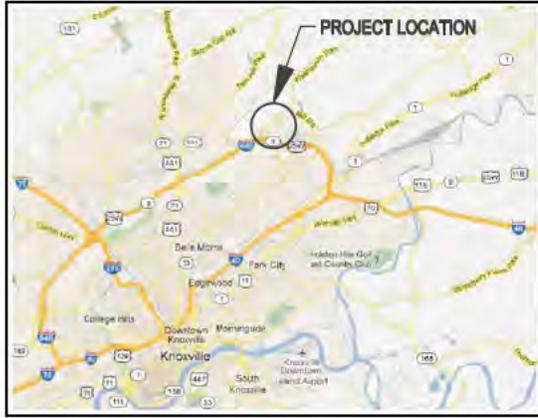
FROM I-640 TO MURPHY ROAD NE

KNOXVILLE, KNOX COUNTY, TENNESSEE



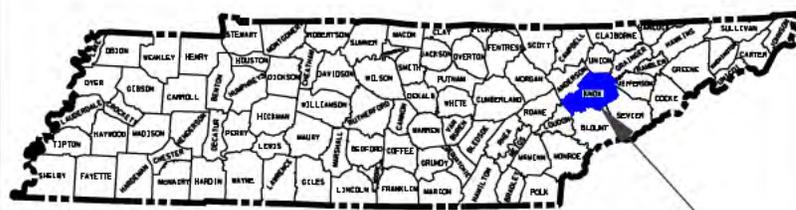
PROJECT VICINITY MAP





LEGEND

 PROPOSED ALIGNMENT



PROJECT LOCATION

USGS Quadrangle Maps
7.5 Minute Series
Fountain City (2010)
&
John Sevier (2010)

TDOT PIN# 043090.00

**WASHINGTON PIKE IMPROVEMENTS FROM I-640 TO MURPHY ROAD
KNOXVILLE, KNOX COUNTY, TENNESSEE**

DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
KNOXVILLE, TENNESSEE

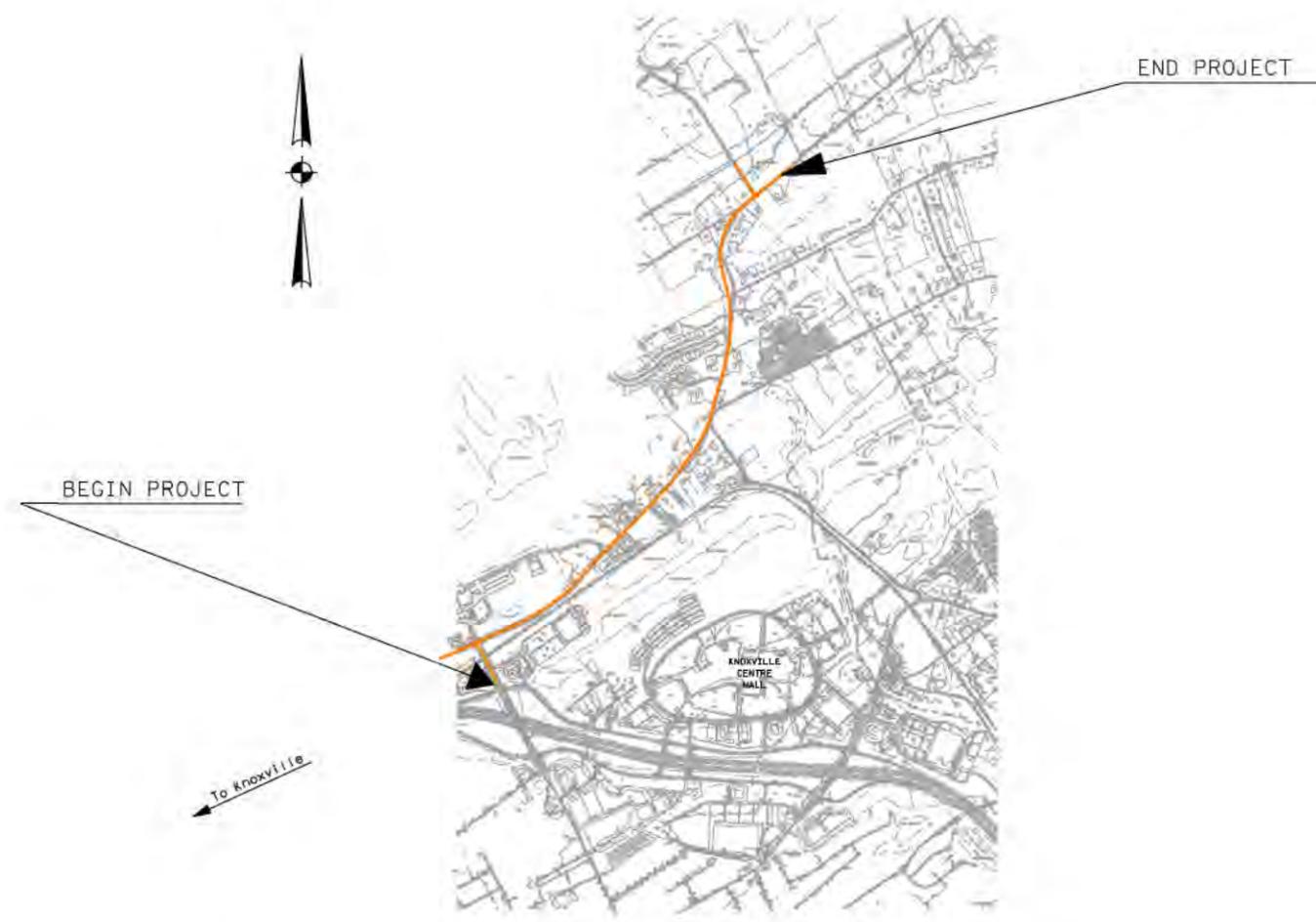
CITY OF KNOXVILLE	YEAR 2012	SHEET NO. 1
KNOX COUNTY	FUNCTIONAL PLANS WASHINGTON PIKE	
FED. AID PROJ. NO.	STP-M-8108 (89)	
STATE PROJ. NO.	47963-1816-54	

WASHINGTON PIKE
ROADWAY PROJECT

FUNCTIONAL



PROJECT LOCATION



**PRELIMINARY
PLANS**

**NO EXCLUSIONS
NO EQUATIONS**

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY OWNER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

DESIGNER BOB HALL CHECKED BY JEFF MIZE, P.E.
P.E. NO. _____
PIN NO. 043090.00

Not To Scale

APPROVED: _____ MAYOR
DATE: _____

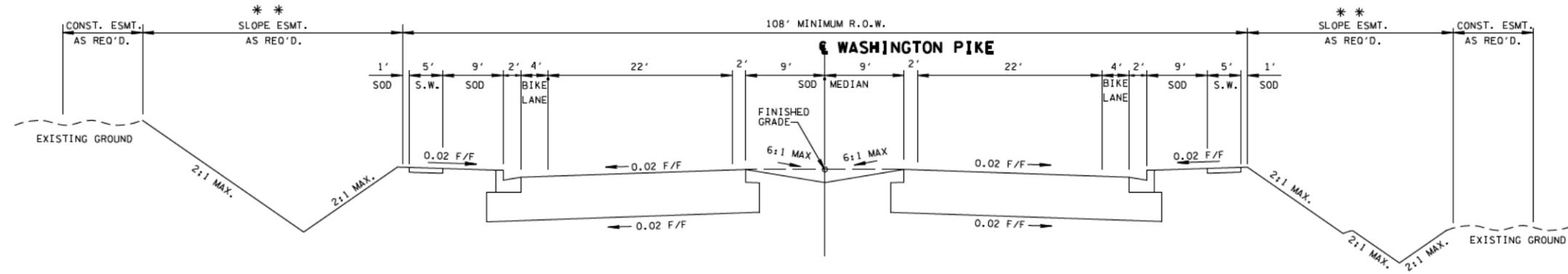
DESIGNED BY:
CDM Smith
1100 MARION STREET
SUITE 200
KNOXVILLE, TN. 37921
(865) 963-4300



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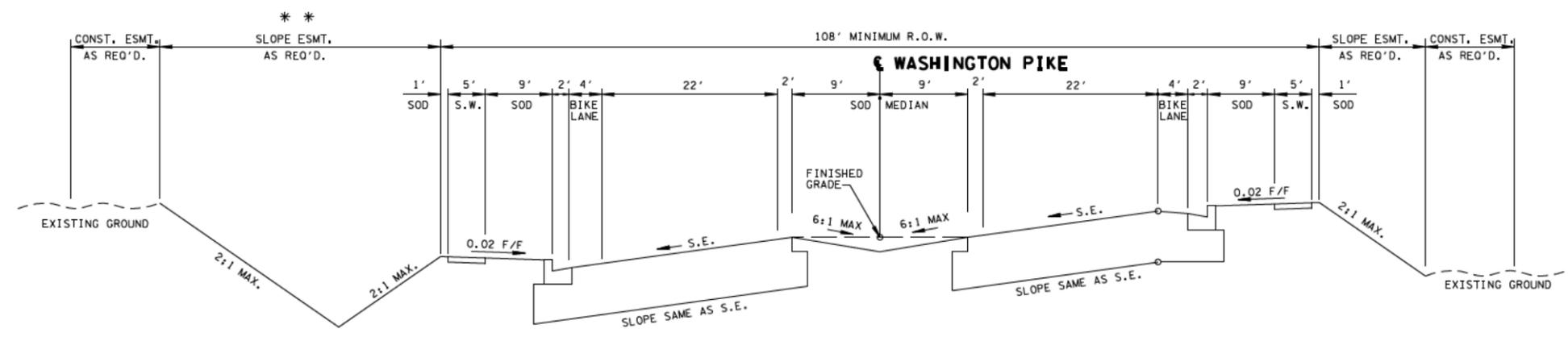
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FUNC.	2012	WASHINGTON PIKE	2

FEDERAL PROJECT NO. STP-M-9109 (89)
 STATE PROJECT NO. 47953-1516-54
 PIN NO. 043080.00



TANGENT SECTION
 (BASED ON STD. DWG. RD01-TS-6 & RD01-TS-3C)

** INFILTRATION BASIN



SUPERELEVATED SECTION
 (BASED ON STD. DWG. RD01-TS-6 & RD01-TS-3C)

** INFILTRATION BASIN

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CITY OF KNOXVILLE
 KNOX COUNTY, TN

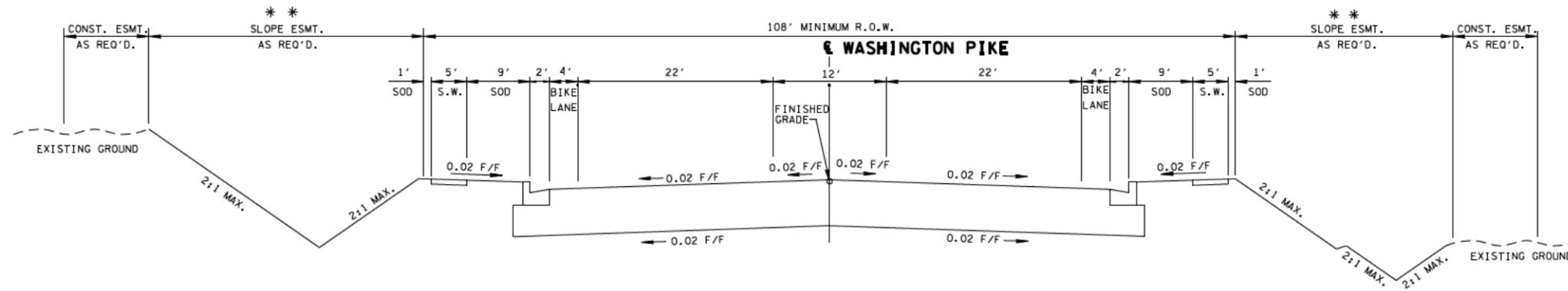
WASHINGTON PIKE
 FUNCTIONAL LAYOUT

TYPICAL SECTIONS

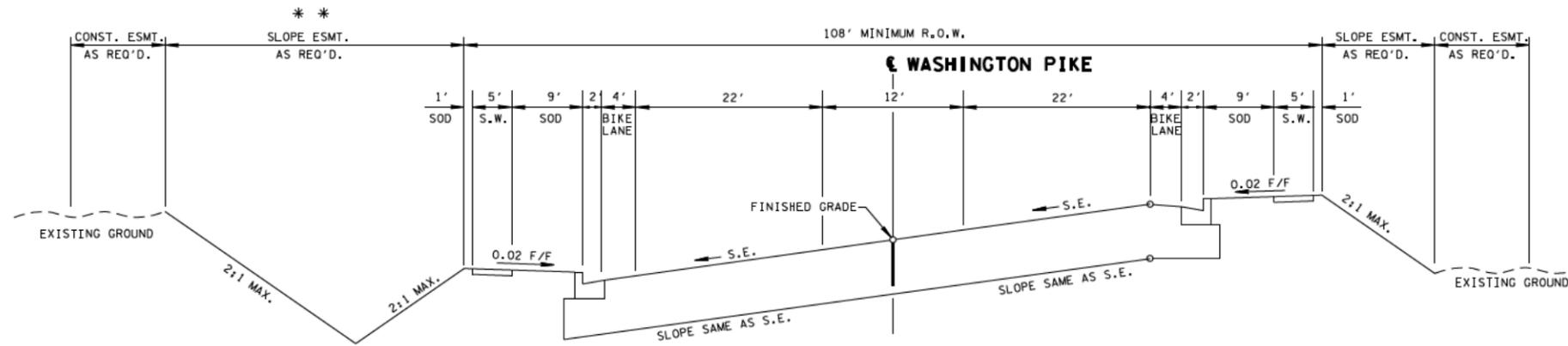
N.T.S.
CDM Smith

TYPE	YEAR	PROJECT	SHEET NO.
FUNC.	2012	WASHINGTON PIKE	3

FEDERAL PROJECT NO. STP-M-9109 (89)
 STATE PROJECT NO. 47953-1516-54
 PIN NO. 043080.00



TANGENT SECTION
 (BASED ON STD. DWG. RD01-TS-6 & RD01-TS-3C)



SUPERELEVATED SECTION
 (BASED ON STD. DWG. RD01-TS-6 & RD01-TS-3C)

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CITY OF KNOXVILLE
 KNOX COUNTY, TN

WASHINGTON PIKE
 FUNCTIONAL LAYOUT

TYPICAL SECTIONS

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TYPE	YEAR	PROJECT	SHEET NO.
FUNC.	2012	WASHINGTON PIKE	4

FEDERAL PROJECT NO. STP-M-9109 (69)
 STATE PROJECT NO. 47953-1516-54
 PIN NO. 043090.00

MATCH LINE STA. 14+00.00 SEE SHEET NO. 5

CITY OF KNOXVILLE
 KNOX COUNTY, TN

WASHINGTON PIKE
 FUNCTIONAL LAYOUT

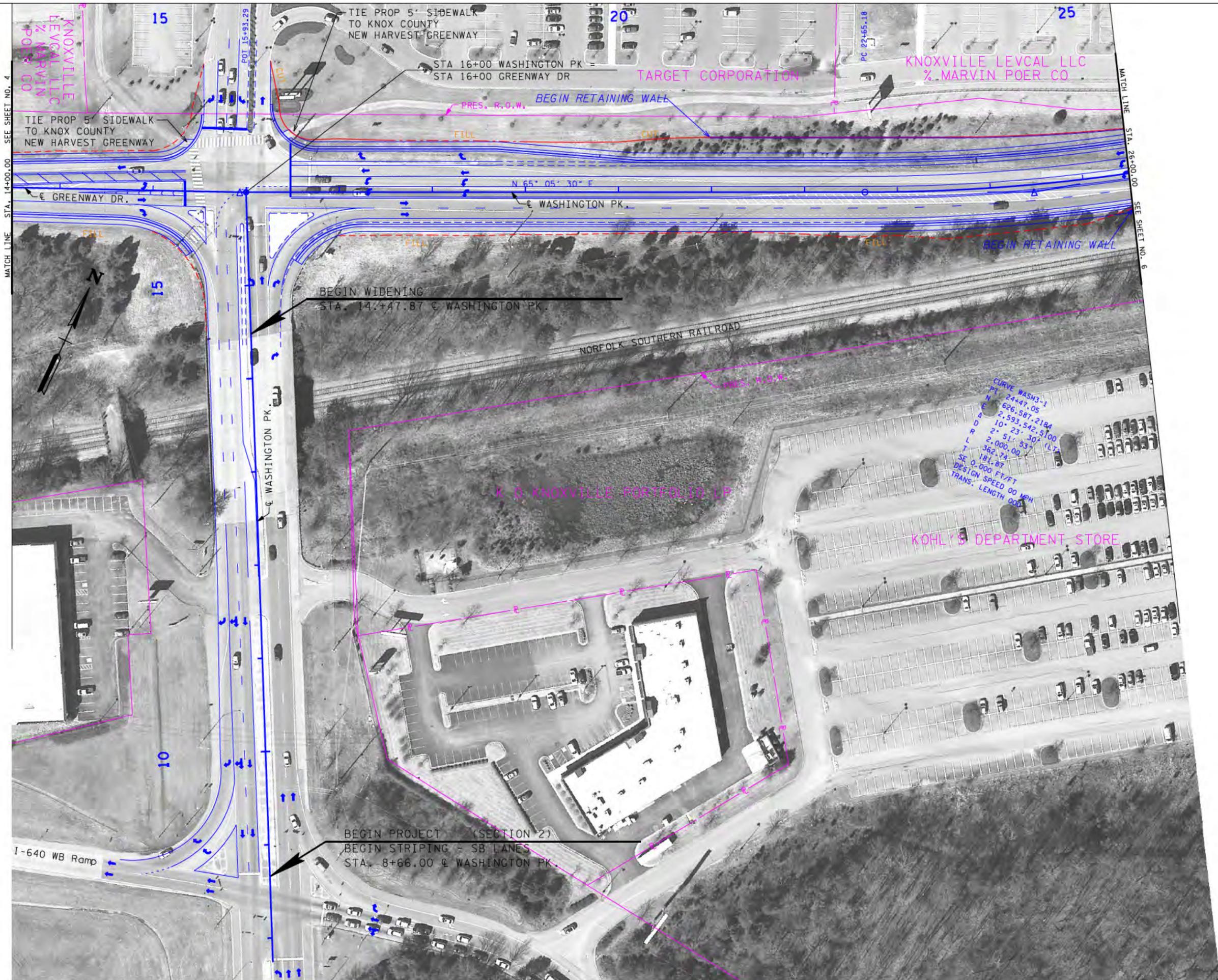
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**CDM
 Smith**

TYPE	YEAR	PROJECT	SHEET NO.
FUNC.	2012	WASHINGTON PIKE	5

FEDERAL PROJECT NO. STP-M-9109 (69)
 STATE PROJECT NO. 47953-1516-54
 PIN NO. 043090.00



MATCH LINE STA. 14+00.00 SEE SHEET NO. 4

MATCH LINE STA. 26+00.00 SEE SHEET NO. 6

BEGIN WIDENING
 STA. 14+47.87 @ WASHINGTON PK.

BEGIN PROJECT (SECTION 2)
 BEGIN STRIPING - SB LANES
 STA. 8+66.00 @ WASHINGTON PK.

CURVE WASH3-1
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 L 2,000.00
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 SF 0.000 FT/FT
 DESIGN SPEED 60 MPH
 TRANS. LENGTH 000

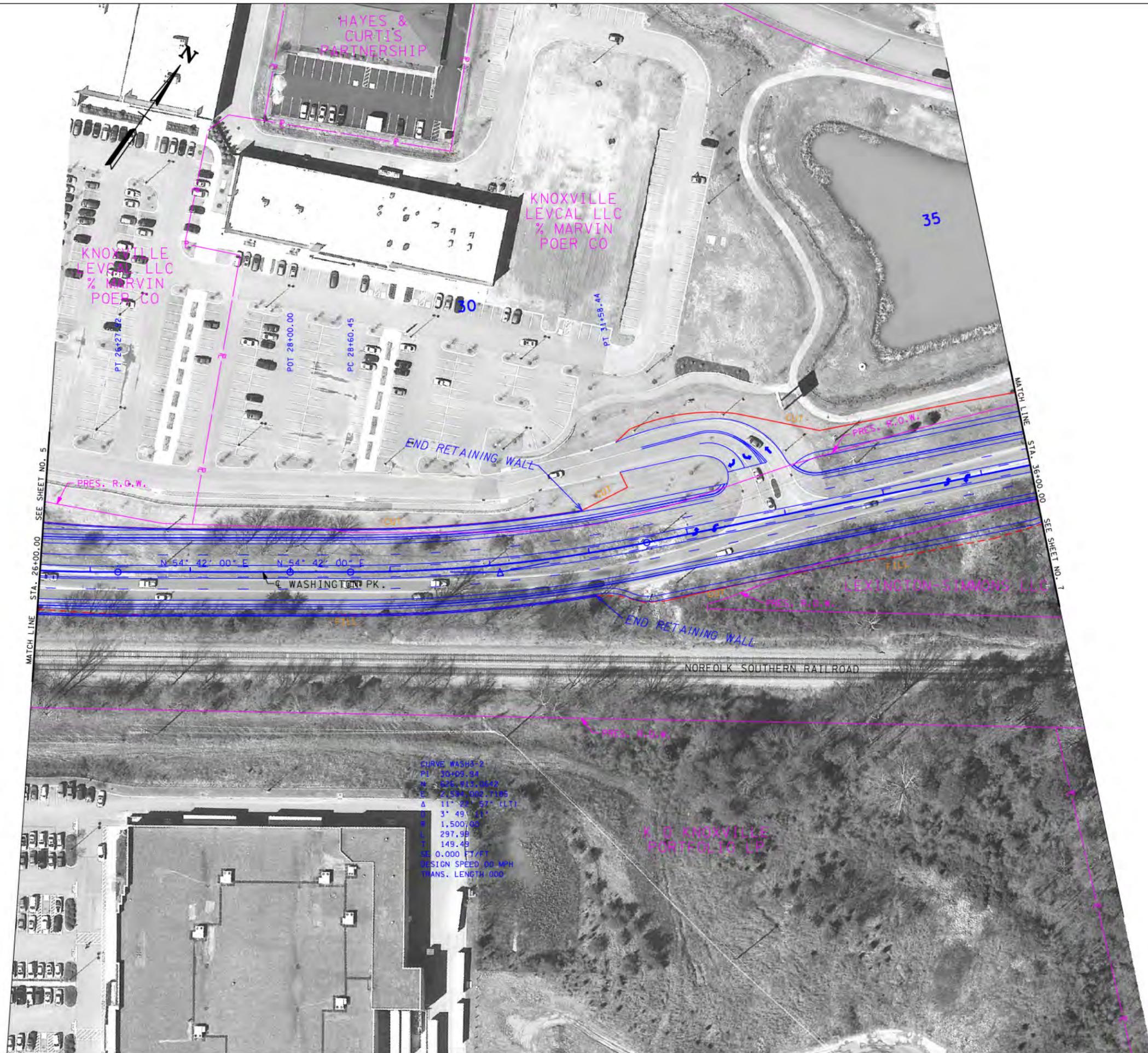
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CITY OF KNOXVILLE
 KNOX COUNTY, TN
 WASHINGTON PIKE
 FUNCTIONAL LAYOUT
 STA. 14+00.00 TO STA. 26+00.00

SCALE = 1" = 50'
CDM Smith

TYPE	YEAR	PROJECT	SHEET NO.
FUNC.	2012	WASHINGTON PIKE	6

FEDERAL PROJECT NO. STP-M-9109 (69)
 STATE PROJECT NO. 47953-1516-54
 PIN NO. 043090.00



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 L 21594.00(7.195)
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CITY OF KNOXVILLE
 KNOX COUNTY, TN

WASHINGTON PIKE
 FUNCTIONAL LAYOUT

STA.26+00.00 TO STA.36+00.00

SCALE = 1" = 50'

**CDM
 Smith**

TYPE	YEAR	PROJECT	SHEET NO.
FUNC.	2012	WASHINGTON PIKE	7

FEDERAL PROJECT NO. STP-M-9109 (69)
STATE PROJECT NO. 47953-1516-54
PIN NO. 043090.00



MATCH LINE STA. 36+00.00 SEE SHEET NO. 6

MATCH LINE STA. 48+00.00 SEE SHEET NO. 8

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CITY OF KNOXVILLE
KNOX COUNTY, TN

WASHINGTON PIKE
FUNCTIONAL LAYOUT

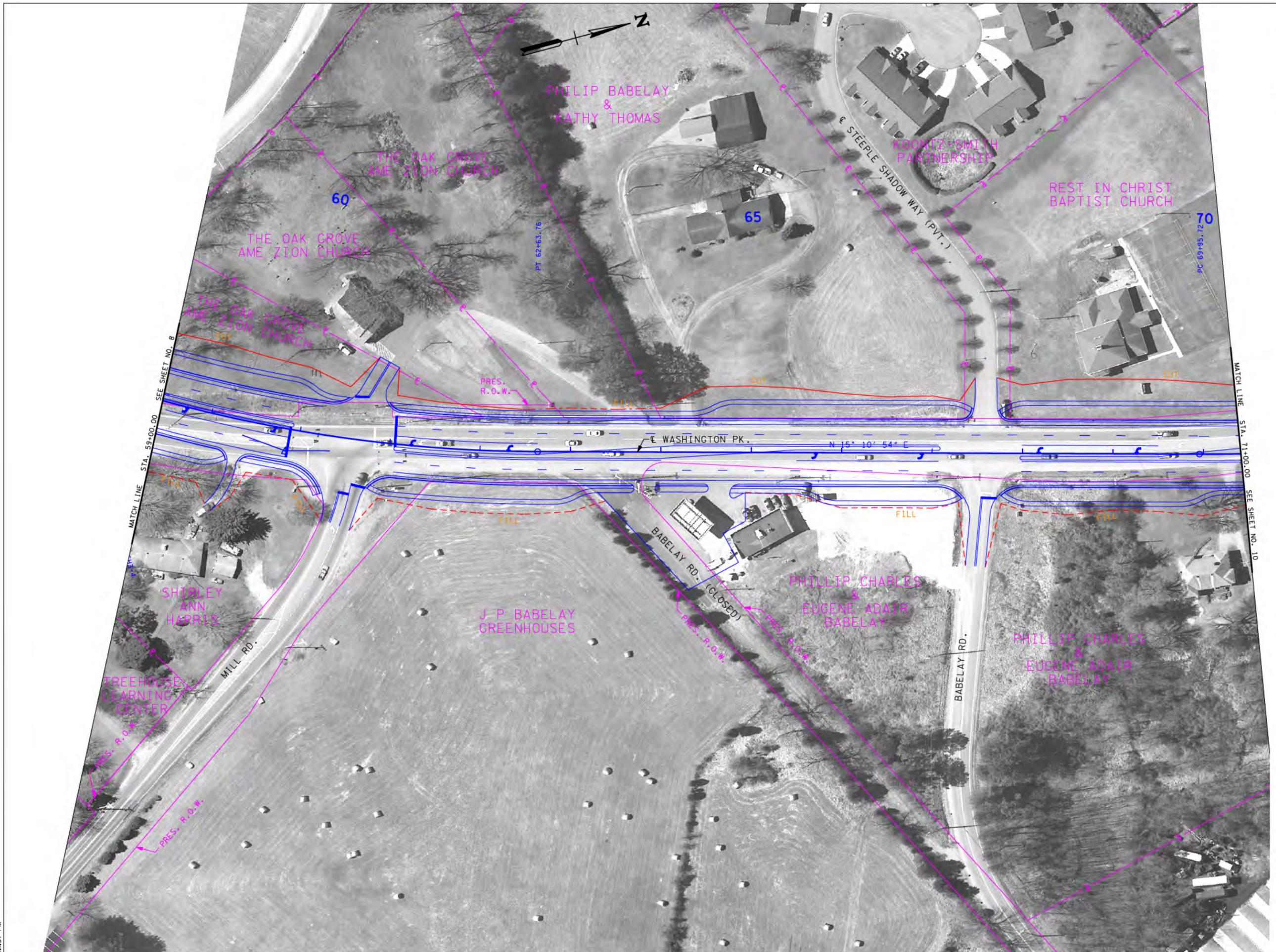
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**CDM
Smith**

TYPE	YEAR	PROJECT	SHEET NO.
FUNC.	2012	WASHINGTON PIKE	9

FEDERAL PROJECT NO. STP-M-9109 (69)
 STATE PROJECT NO. 47953-1516-54
 PIN NO. 043090.00



CITY OF KNOXVILLE
 KNOX COUNTY, TN

WASHINGTON PIKE
 FUNCTIONAL LAYOUT

STA. 59+00.00 TO STA. 71+00.00

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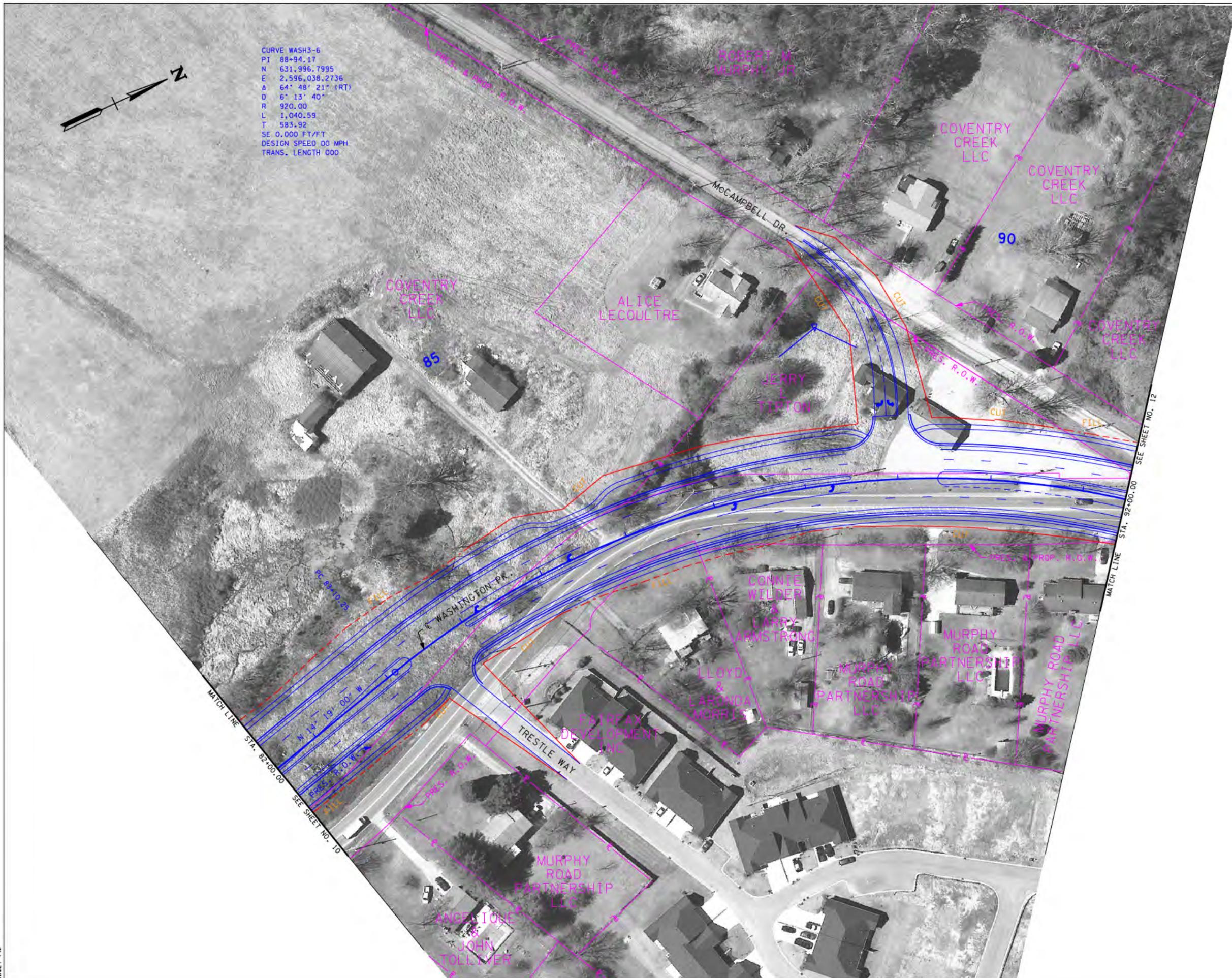
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 STATE PROJECT NO. 47953-1516-84
 PIN NO. 043090.00

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 D 6° 13' 40"
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 L 1,040.59
 T 583.92
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 TRANS. LENGTH 000



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CITY OF KNOXVILLE
 KNOX COUNTY, TN

WASHINGTON PIKE
 FUNCTIONAL LAYOUT

STA.82+00.00 TO STA.92+00.00

SCALE = 1" = 50'

TYPE	YEAR	PROJECT	SHEET NO.
FUNC.	2012	WASHINGTON PIKE	12

FEDERAL PROJECT NO. STP-M-9109 (69)
 STATE PROJECT NO. 47953-1516-54
 PIN NO. 043090.00



MATCH LINE STA. 92+00.00 SEE SHEET NO. 11

END PROJ. (SECTION 2)
 STA. 101+00.00 @ WASHINGTON PK.

CITY OF KNOXVILLE
 KNOX COUNTY, TN

WASHINGTON PIKE
 FUNCTIONAL LAYOUT

STA. 92+00.00 TO END OF PROJ.

SCALE = 1" = 50'

**CDM
 Smith**

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Eastbound Greenway Drive approaching intersection with Washington Pike near project beginning



Northbound view on Washington Pike near I-640 ramps during AM peak hour;
Target store and New Harvest shopping center in background



Southbound view from intersection with Washington Pike and Greenway Drive during PM peak hour;
Looking toward I-640 entrance ramps with I-640 bridge in background



Eastbound Washington Pike as roadway narrows from four-lane to two-lane near
New Harvest Shopping Center



Westbound view along two-lane Washington Pike in AM peak hour, near intersection with New Harvest Shopping Center



Two-lane Washington Pike with businesses on the north side of the roadway



Washington Pike roadway curvature as it approaches Mill Road intersection



Eastbound approach to Mill Road intersection



Westward view of Shell service station, located at southwest corner of Washington Pike and Babelay Road intersection



Westward view along Washington Pike, just east of Steeple Shadow intersection



Two-lane Washington Pike with center, bi-directional turn-lane near new residential developments



Westward view at the Washington Pike and Aylesbury Drive intersection, which serves as the entrance to a large residential subdivision (Wyngate)



Eastbound approach to McCampbell Drive intersection



Washington Pike roadway curvature as it approaches McCampbell Drive intersection



Southward view of Weigel's convenient store, located on southeast corner of Murphy Road intersection with Washington Pike



Northward view of AM traffic cue along Murphy Road at intersection with Washington Pike



Appendix C:
Public Involvement

PUBLIC MEETING MINUTES

MILLERTOWN PIKE/WASHINGTON PIKE
ROADWAY IMPROVEMENTS

JULY 18, 2006
WORKING GROUP MEETING

ATTENDEES

NAME	ORGANIZATION	TELEPHONE	E-MAIL
Brent Johnson	City of Knoxville	215-2148	bjohnson@cityofknoxville.org
Charles Haun	Alice Bell-S-H	524-0038	C_haun@comcast.net
Tommy Vann	Mall Area Businesses	675-0038	TOM0038@aol.com
Mark Donaldson	MPC	215-2500	mark.donaldson@knoxmpc.org
Cindy Pionke	Knox County	215-5804	cindy.pionke@knoxcounty.org
Jeff Welch	Knox TPO	215-3790	jeff.welch@knoxtrans.org
Tom Clabo	City of Knoxville	215-6100	tclabo@cityofknoxville.org
Bob Bowers	Wilbur Smith Assoc.	963-4300	rbowers@wilbursmith.com
Lisa Starbuck	NEKPA	659-5708	lisa@aobe.com
Michael Kane	Ftn. City Town Hall	241-7587	makanel@bellsouth.net
Dave Hill	City of Knoxville	215-3764	dhill@cityofknoxville.org
Jeff Turner	TDOT-Knoxville	594-2442	jeff.d.turner@state.tn.us
Steve King (Not Present)	City of Knoxville	215-6100	sking@cityofknoxville.org
Bruce Wuethrich (Not Present)	Knox County	215-5800	bruce.wuethrich@knoxcounty.org

**MILLERTOWN PIKE/WASHINGTON PIKE
ROADWAY IMPROVEMENTS**

JULY 18, 2006
WORKING GROUP MEETING
MINUTES

The minutes of this meeting are provided in an effort to document discussions that occurred during the course of the working group meeting. Please review the minutes and if any additions or corrections are required, please forward these to Tom Clabo at tclabo@cityofknoxville.org.

Dave Hill with the City of Knoxville gave a brief introduction to begin the meeting.

Bob Bowers with Wilbur Smith Associates gave a brief overview of the Advanced Planning Report (APR) that Wilbur Smith Associates prepared for the City of Knoxville in 2001. Bob described in detail the recommended roadway sections that were developed from the 2001 APR.

Jeff Welch with the Knoxville Regional Transportation Planning Organization (TPO) described the current projects included within the TPO's Transportation Improvement plan (TIP). The TIP has two projects currently programmed. The first is called "Washington Pike/Millertown Pike" and is described as the widening of Washington Pike from I-640 to Millertown Pike and the widening of Millertown Pike from I-640 to Washington Pike to a five-lane section. This project is programmed with a construction cost of \$9,324,827.00. The second programmed project is called "Millertown Pike, I-640 to Loves Creek" and is described as the widening and improving of this roadway as specified in the APR. This project is programmed with an Engineering cost of \$800,000.00.

Jeff mentioned that the current two programmed projects could be amended once projects in this area are prioritized.

Bob Bowers discussed the current project proposals. The changes to the roadway sections with the current proposal included constructing the Washington Pike and Millertown Pike roadways south of I-640 with a 3-lane typical section, but acquiring the right-of-way for the 5-lane typical section. This alternative was discussed because the growth rate projected within the 2001 APR had not occurred for the area south of I-640.

Bob also discussed the configuration of Millertown Pike north of I-640. Specifically the need to determine the alignment of Loves Creek Road and Millertown Pike in relation to the proposed Murphy Road extension.

Charles Haun with the Alice Bell-Spring Hill Association expressed the importance of completing the Valley View Drive realignment project in a timely manner. Dave Hill commented that this project was funded within the City's current capital improvement program for design and right-of-way acquisition. Tom Clabo commented that the intent was to have the project ready to bid for construction in July of 2007. Dave Hill commented that the City is committed to completing this realignment project, but the project is contingent upon the transfer of the necessary right-of-way to the City from the Byrd property.

Charles Haun is going to discuss with the Alice Bell-Springhill Association their thoughts on the need for 5-lanes vs. 3-lanes for Washington Pike and Millertown Pike south of I-640.

MILLERTOWN PIKE/WASHINGTON PIKE
WORKING GROUP MEETING MINUTES
JULY 18, 2006
Page 2 of 2

Tommy Vann with the Mall area businesses expressed his concern for improvements to Millertown Pike north of I-640. He thought improvements should be made as soon as possible. He mentioned that he had discussed these projects with other area businesses. He said the Knoxville Center Mall would like Millertown Pike extend to the north to at least Mill Road to allow for a new mall entrance that would connect to the new Millertown Pike. He also expressed the need for the Murphy Road extension and voiced his support for this project. Mr. Vann also supported the direct connection of Loves Creek Road to the proposed Millertown Pike/Murphy Road extension, with improvements to Loves Creek Road occurring along the existing Loves Creek Road alignment.

Mark Donaldson with the Metropolitan Planning Commission was asked to investigate the current sector plan for the property located within the triangle bound by Washington Pike and Millertown Pike and south of I-640. He was also asked to provide a current copy of the Major Road Plan for this area.

Cindy Pionke with Knox County Engineering discussed capital projects currently funded and programmed by Knox County. Cindy expressed that this area is not currently programmed for any roadway improvements and the roadway priorities for Knox County have been set for the next 5 years.

Lisa Starbuck with the Northeast Knox Preservation Association expressed concern for placing priority on the projects north of I-640. She supported the Murphy Road extension. She was also supportive of short-term improvements to Millertown Pike between Mill Road and I-640.

Michael Kane with Fountain City Town Hall expressed support for the Murphy Road Extension as a means to alleviate some traffic congestion on Tazewell Pike.

Dave Hill expressed the need to utilize the existing funding in an expedient manner and the need to get projects programmed that would accomplish this.

It was generally agreed that the projects south of I-640, improvements to Washington Pike and Millertown Pike, and the improvements to Washington Pike from Greenway Drive to the city limits could be accomplished in a more timely manner due to less environmental concerns and their relative ease of construction.

Tom Clabo with the City of Knoxville was asked to investigate the cost involved to construct the Washington Pike and Millertown Pike roadway improvements south of I-640 with a 3-lane roadway section and acquiring right-of-way for a future 5-lane roadway section. Tom was also asked to investigate the cost involved in constructing improvements to Millertown Pike from Mill Road to I-640.

The next working group meeting is scheduled for August 15, 2006 at 3:00 pm at the City County Building, room 549.

**East Knoxville Transportation Program
Millertown Pike/Washington Pike Improvements
October 9, 2006**

A series of working group meetings including members from the City of Knoxville, Knox County, Metropolitan Planning Commission, Wilbur Smith Associates, Tennessee Department of Transportation, Alice Bell-Spring Hill Neighborhood Association, Knoxville Center Mall Area Businesses, Fountain City Town Hall and Northeast Knox Preservation Association occurred on July 18, 2006 and August 15, 2006 to discuss proposed improvements to Millertown Pike, Washington Pike and Murphy Road.

The purpose of the meetings was to set priorities for roadway improvements within this area. Jeff Welch with the Knoxville Regional Transportation Planning Organization (TPO) described the current projects included within the TPO's Transportation Improvement plan (TIP). The TIP has two projects currently programmed. The first is called "Washington Pike/Millertown Pike" and is described as the widening of Washington Pike from I-640 to Millertown Pike and the widening of Millertown Pike from I-640 to Washington Pike to a five-lane section. This project is programmed with a construction cost of \$9,324,827.00. The second programmed project is called "Millertown Pike, I-640 to Loves Creek" and is described as the widening and improving of this roadway as specified in the APR. This project is programmed with an Engineering cost of \$800,000.00.

Bob Bowers with Wilbur Smith Associates gave a brief overview of the Advanced Planning Report (APR) that Wilbur Smith Associates prepared for the City of Knoxville in 2001. Bob described in detail the recommended roadway sections that were developed from the 2001 APR. Bob discussed the current project proposals. The changes to the roadway sections with the current proposal included constructing the Washington Pike and Millertown Pike roadways south of I-640 with a 3-lane typical section. This alternative was discussed because the growth rate projected within the 2001 APR had not occurred for the area south of I-640. Bob also discussed the configuration of Millertown Pike north of I-640. Specifically the need to determine the alignment of Loves Creek Road and Millertown Pike in relation to the proposed Murphy Road extension. Below are the descriptions for the current proposed projects:

Washington Pike / Millertown Pike Improvements

Widen Washington Pike between Millertown Pike and I-640

Widen to a 3-lane section with center two way left turn lane. Typical section would be a 70-foot minimum R.O.W. with three 12-foot lanes, 3-foot bicycle lane, 2-foot curb and gutter and 7-foot sidewalk on both sides. Realign Valley View Drive with Centerline Drive.

Widen Washington Pike between Greenway Drive and Mill Road

Widen to a divided 4-lane section with median. Typical section would be a 104-foot minimum R.O.W. with a 22-foot median, four 12-foot travel lanes, 3-foot bicycle lane, 2-foot curb and gutter and 7-foot sidewalk on both sides.

Widen Millertown Pike between Washington Pike and I-640

Widen to a 3-lane section with center two way left turn lane. Typical section would be a 70-foot minimum R.O.W. with three 12-foot lanes, 3-foot bicycle lane, 2-foot curb and gutter and 7-foot sidewalk on both sides.

Widen Washington Pike between Mill Road and Murphy Road (County)

Widen to a divided 4-lane section with median. Typical section would be a 104-foot minimum R.O.W. with a 22-foot median, four 12-foot travel lanes, 3-foot bicycle lane, 2-foot curb and gutter and 7-foot sidewalk on both sides.

Murphy Road / Millertown Pike Improvements

Widen Millertown Pike between I-640 and Loves Creek Road

Widen to a divided 6-lane section with median. Millertown Pike would transition to a divided 5-lane undivided section with center two way left turn lane between Loves Creek Road and Mill Road. The typical 6-lane section would include 128-foot minimum R.O.W. with a 22-foot median, six 12-foot travel lanes, 3-foot bicycle lane, 2-foot curb and gutter and 7-foot sidewalk on both sides. The typical 5-lane undivided section would include 94-foot minimum R.O.W. with five 12-foot travel lanes, 3-foot bicycle lane, 2-foot curb and gutter and 7-foot sidewalk on both sides.

Construct new Murphy Road between Mill Road and Washington Pike

Construct a new 5-lane undivided section with center two way left turn lane. The typical 5-lane section would include 94-foot minimum R.O.W. with five 12-foot lanes, 3-foot bicycle lane, 2-foot curb and gutter and 7-foot sidewalk on both sides.

Charles Haun with the Alice Bell-Spring Hill Association expressed the importance of completing the Valley View Drive realignment project in a timely manner. Dave Hill commented that this project was funded within the City's current capital improvement program for design and right-of-way acquisition. Tom Clabo commented that the intent was to have the project ready to bid for construction in July of 2007. Dave Hill commented that the City is committed to completing this realignment project, but the project is contingent upon the transfer of the necessary right-of-way to the City from the Byrd property.

Tommy Vann with the Mall area businesses expressed his concern for improvements to Millertown Pike north of I-640. He thought improvements should be made as soon as possible. He mentioned that he had discussed these projects with other area businesses. He said the Knoxville Center Mall would like Millertown Pike extend to the north to at least Mill Road to allow for a new mall entrance that would connect to the new Millertown Pike. He also expressed the need for the Murphy Road extension and voiced his support for this project. Mr. Vann also supported the direct connection of Loves Creek Road to the proposed Millertown Pike/Murphy Road extension, with improvements to Loves Creek Road occurring along the existing Loves Creek Road alignment.

Cindy Pionke with Knox County Engineering discussed capital projects currently funded and programmed by Knox County. Cindy expressed that this area is not currently programmed for any roadway improvements and the roadway priorities for Knox County have been set for the next 5 years. Bruce Wuetrich with Knox County Engineering agreed that improvements to

Washington Pike and Millertown Pike/Murphy Road Extension would be supported by Knox County.

Lisa Starbuck with the Northeast Knox Preservation Association expressed concern for placing priority on the projects north of I-640. She supported the Murphy Road extension. She was also supportive of short-term improvements to Millertown Pike between Mill Road and I-640.

Michael Kane with Fountain City Town Hall expressed support for the Murphy Road Extension as a means to alleviate some traffic congestion on Tazewell Pike.

Dave Hill expressed the need to utilize the existing funding in an expedient manner and the need to get projects programmed that would accomplish this.

It was generally agreed that the projects south of I-640, improvements to Washington Pike and Millertown Pike, and the improvements to Washington Pike from Greenway Drive to the city limits could be accomplished in a more timely manner due to less environmental concerns and their relative ease of construction.

The City of Knoxville will work with the TPO in order to amend the current Transportation Improvement Program to incorporate the new project limits within the plan. Jeff Welch has outlined this process below:

<u>Agency</u>	<u>Task</u>	<u>Completion Date</u>
Knox TPO and TDOT	Amend TIP to provide funds to begin planning study and environmental assessment (\$500,000); submit TIP amendment to FHWA for approval	December 2006
City of Knoxville and TDOT	Scope of Work to TDOT for planning and environmental studies and enter into a contract with TDOT; contract approved by City Council and TDOT issues notice to proceed for planning study and environmental assessment	February 2007
City of Knoxville and Knox TPO	Select consultant for planning study and environmental assessment and City Council approval; consultant conducts planning study and preliminary environmental assessment, public meetings; City Council and TPO approval; amend TIP to set new project priorities, descriptions and costs	December 2007
City of Knoxville	Consultant finalizes environmental assessment and all necessary parties approve document	Spring 2008

CONCLUSION

The City of Knoxville supports improvements to the roadways within the East Knoxville Transportation Program. The City funded the design of the Valley View Drive Realignment Project within the current Capital Improvement Program. Once the design is complete and the necessary right-of-way is donated by the Byrd property, the City will move forward to fund the construction of this roadway improvement within the next Capital Improvement Program budget.

Once the TIP is amended and TDOT provides approval of funds for the planning study and environmental assessment, the City of Knoxville will utilize a design consultant to perform a transportation planning report for the projects. This report will be phased to allow the improvements to Washington Pike and Millertown Pike south of I-640, Washington Pike from Greenway Drive to the city limits and Millertown Pike from I-640 to Mill Road to proceed, while a more detailed study of the Murphy Road Extension is expected. The study will determine the roadway section required for the projects and will also analyze alternative alignments for the Murphy Road extension. A public meeting will be included in the transportation planning report process and public comments will be considered in the project alternatives.

The connection of a new Murphy Road extension to Millertown Pike is a critical piece of information that will effect any major improvements to Millertown Pike between I-640 and Mill Road. Since the Murphy Road extension is anticipated to occur in several years, the City of Knoxville is pursuing the use of grant funds from the Tennessee Department of Transportation for operational improvements to Millertown Pike from I-640 to Mill Road. These funds will be applied for through TDOT's Local Interstate Connector (LIC) Improvements Program.

After the transportation study is complete and the TIP is amended to reflect the new project priorities, the City of Knoxville will begin the project design process for the prioritized projects. Given the ease of construction and minimal environmental clearance issues, Washington Pike and Millertown Pike south of I-640 and Washington Pike from Greenway Drive to the city limits will be the first projects prioritized for design and construction.

May 21, 2012

Neighborhood Meeting

Members of Alice Bell / Spring Hill / NEKPA

Washington Pike - Project Update

From: Knoxville Mayor
Sent: Thursday, May 03, 2012 4:38 PM
To: Lisa Starbuck
Cc: Terry Alexander
Subject: RE: Invitation from Alice Bell / Spring Hill and NEKPA

Dear Lisa,

Thank you for contacting the Mayor's Office to schedule Mayor Madeline Rogero to attend your event. Your request has been forwarded to Mayor Rogero's Executive Assistant/Scheduler, Terry Alexander, for review. She will contact you soon. Again, thank you for your request and have a great day.

Jacqueline R. Clay-Wimbly
Office of the Mayor
865-215-2831 Office
865-215-2085 Fax
jwimbly@cityofknoxville.org
www.cityofknoxville.org



From: Lisa Starbuck [<mailto:lisa@aobe.com>]
Sent: Thursday, May 03, 2012 4:35 PM
To: Knoxville Mayor
Subject: Invitation from Alice Bell / Spring Hill and NEKPA

----- Original Message -----

Subject: Invitation from Alice Bell / Spring Hill and NEKPA
Date: Tue, 01 May 2012 09:38:52 -0400
From: Lisa Starbuck <lisa@aobe.com>
To: Madeline Rogero <rogero@comcast.net>
CC: Ronnie Collins <abshna@aol.com>, Bob Wolfenbarger <rlw03@bellsouth.net>, "Kevin P. Murphy" <murphysprings@gmail.com>

Hello Madam Mayor,

We would like to invite you to a joint meeting of the Alice Bell/Spring Hill and NEKPA neighborhood associations on Monday, May 21st at 7:00 pm at New Harvest Park.

The subject of discussion will be concerns about our area, specifically the city's planned road widening project on Washington Pike and the impact on the already-troubled Knoxville Center Mall area.

We have had conversations about these concerns with some of your staff, but we don't feel that any one person or group has responsibility for the big picture and is coordinating the overall plan for road improvements,

redevelopment and growth.

We know you are a busy person, but we are hoping you can make time to meet with the neighborhoods because we believe that is the only way to ensure our voices will be heard and some positive action taken.

If you are unable to meet with us on May 21st, would you be available on another date?

Thank you for your consideration of this important issue.

With best regards,

Ronnie Collins, Bob Wolfenbarger, Kevin Murphy and Lisa Starbuck
Neighborhood Representatives

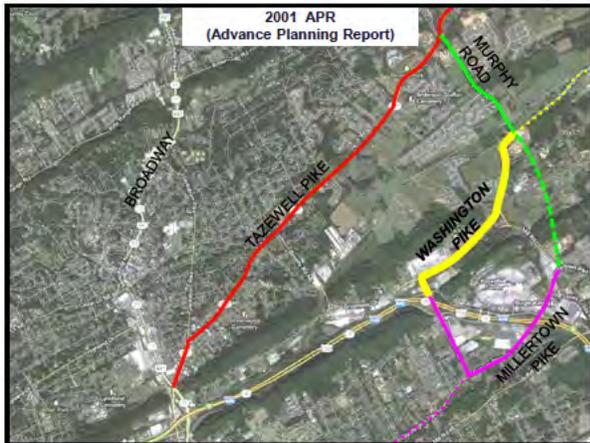
Washington Pike Roadway Project

May 21, 2012
Neighborhood Meeting

CITY OF KNOXVILLE

Project History

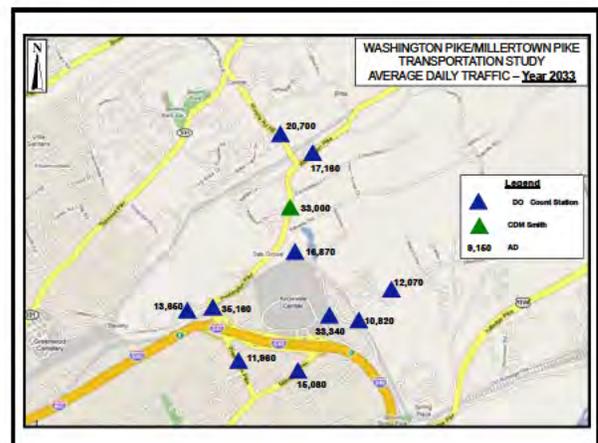
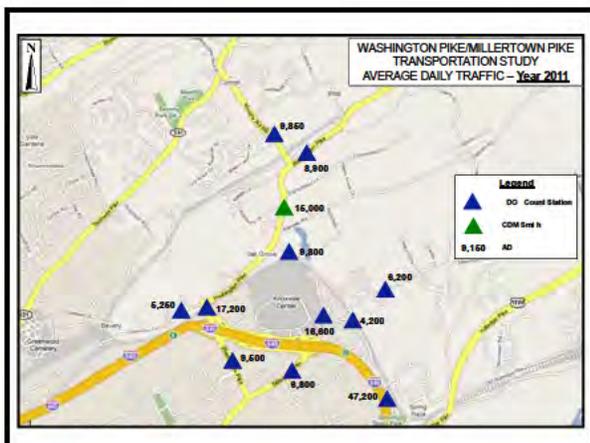
- 2001 – City prepared Advance Planning Report (APR) for northeast sector road network
 - Identified project needs and completed Phase 1 Environmental screening
- 2010 – City prepared updated Transportation Planning Report (TPR) for Washington Pike Project
 - Reevaluated environmental resources
- 2011 – Washington Pike Roadway Project (from I-640 to Murphy Road)
 - Consultant Selection
 - NEPA Document Determination = Categorical Exclusion



Peak Hour Traffic

AM Peak Hour

PM Peak Hour



Typical Section

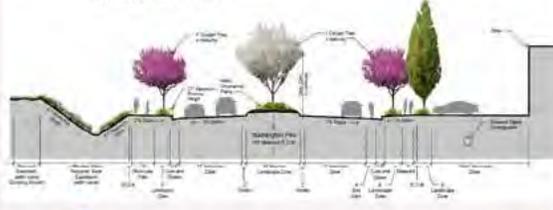
- 4-lanes with turn lanes at intersections
 - Median divided where practical for aesthetics and safety
 - May include infiltration basins for water quality treatment
- 40mph design speed
- Serves multi-modes of transportation
- Minimize ROW impacts



Typical Section

Design Flexibility to Provide:

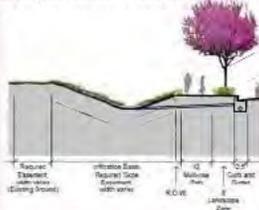
- Adequate traffic capacity
- Serve multi-modes of transportation
- Safety / Aesthetics





Water Quality

- First flush
- Infiltration Systems
- Combination of Best Management Practices
 - Pretreatment measures
 - Water Quality Inlets
 - Grass Swales
 - Filter Strips
 - Check Dams
 - Riprap Aprons
 - Multiple systems
- Volume




Neighborhood Connections








Project Scope / Schedule

TDOT Locally Managed Project 

- Environmental Clearance
(Currently Underway – Anticipated approval 2013)
- Survey & Design / Public Involvement (18 months ±)
- Right of Way Process (12 months ±)
 - Utilities / Railroad Coordination
- Bidding / Construction (TBD)

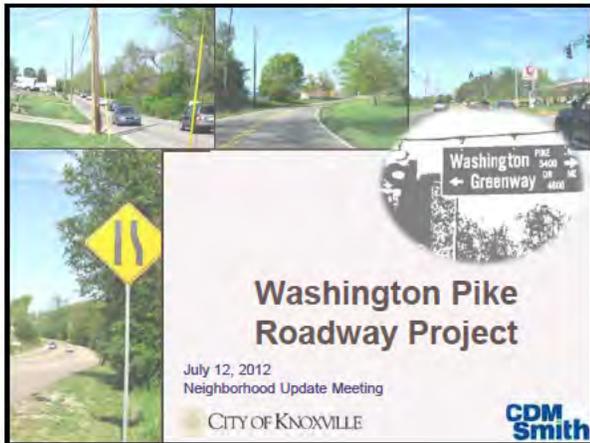


July 12, 2012

Neighborhood Meeting Follow-up

Members of Alice Bell / Spring Hill / NEKPA

Washington Pike - Project Update



Summary of Phased Improvements

- **Project 1: Millertown Pike, Phase 1** (City funds)
 - Safety Improvements
 - Add Center Turn Lane
- **Project 2: Washington Pike** (STP / TDOT funds)
 - Increase Capacity
 - Improve Safety
 - Provide for additional transportation modes (bikes / pedestrians)
 - 10 years service life expected before LOS F
- **Future Projects:**
 - Millertown Pike, Phase 2 widening
 - Murphy Road Extension

CDM Smith

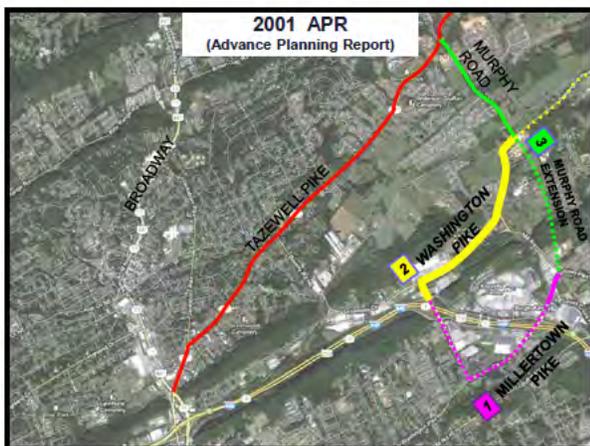
Project History

- 2001 – City prepared **Advance Planning Report (APR)** for northeast sector road network (see next slide)
 - Identified needs / priorities & completed Phase 1 Env screening
- 2010 – City prepared updated **Transportation Planning Report (TPR)** for Washington Pike Project
 - Reevaluated environmental resources
- 2012 – **Millertown Pike Project, Phase 1** (add turn lane & replace bridge at Love's Creek)
 - Design complete; ROW acquisition in progress
- 2012 – **Washington Pike Roadway Project** (from I-640 to Murphy Road)
 - NEPA Document Determination = Categorical Exclusion
 - Environmental Phase currently underway

CDM Smith

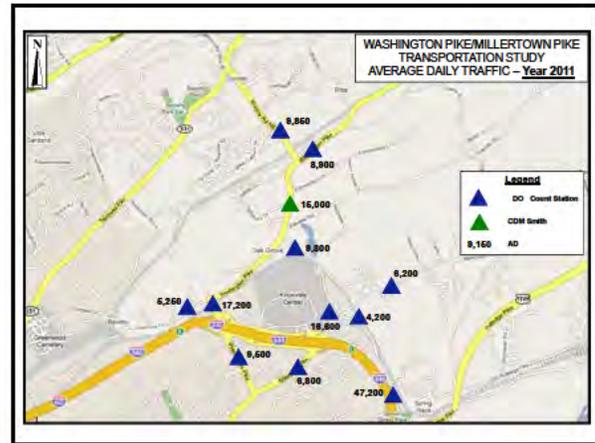
Millertown Pike, Phase 1

CDM Smith

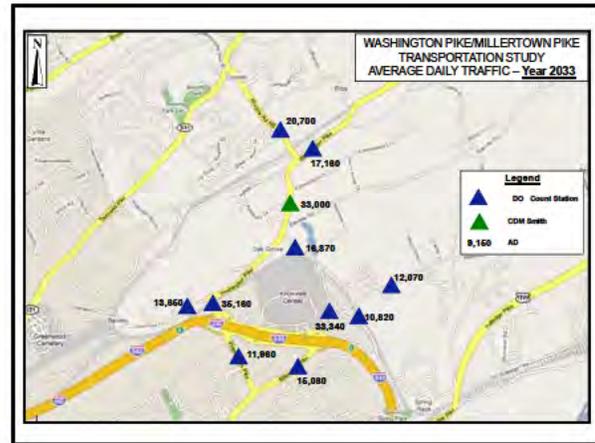


Millertown Pike, Phase 1

- Approved Capital Funding: \$740,000
- Project Length: Approximately 900 linear feet
- Project Description: Widen Millertown Pike to 3-lane section from Kinzel Way to Loves Creek Road (2 through lanes plus center turn lane). Includes curb and gutter, sidewalk along the west side, and bridge widening over Loves Creek.
- Scheduled for 2012 Construction

Washington Pike

Washington Pike Project

AM Peak Hour



PM Peak Hour





Washington Pike Typical Section

- 4-lanes with turn lanes at intersections
 - Median divided where practical for aesthetics and safety
 - May include infiltration basins for water quality treatment
- 40mph design speed
- Serves multi-modes of transportation
- Minimize ROW impacts



Typical Section

Design Flexibility to Provide:

- Adequate traffic capacity
- Serve multi-modes of transportation
- Safety / Aesthetics

The diagram shows a cross-section of a road with various layers and features. From left to right, it includes a shoulder with trees, a curb, a travel lane, a drainage ditch, and another curb with trees. Labels include 'Shoulder', 'Curb', 'Travel Lane', 'Drainage Ditch', and 'Curb'. The diagram is credited to 'hedstrom design' and 'CDM Smith'.

Project Scope / Schedule

TDOT Locally Managed Project

- Environmental Clearance
(Currently Underway – Anticipated approval 2013)
- Survey & Design / Public Involvement (18 months ±)
- Right of Way Process (12 months ±)
 - ◆ Utilities / Railroad Coordination
- Bidding / Construction (TBD)

CDM Smith

Water Quality

- First flush
- Infiltration Systems
- Combination of Best Management Practices
 - ◆ Pretreatment measures
 - Water Quality Inlets
 - Grass Swales
 - Filter Strips
 - Check Dams
 - Riprap Aprons
 - ◆ Multiple systems
- Volume

The diagram shows a cross-section of a road with various water quality features. From left to right, it includes a 'Retention Basin (Storm Drain)', an 'Infiltration Basin (Retention Tank) (Equipment with cover)', a '10' Mulch Filter', and a '10' Catchment Basin (Landscape Zone)'. The diagram is credited to 'CDM Smith'.

Neighborhood Connections

The map shows a network of roads with several key locations highlighted. Three inset photos provide more detail: 'New Harvest Park' (a building with a green roof), 'Retail Center' (a building with a red sign), and 'B40 Intersection' (a road intersection). Another inset photo shows the 'Murphy Road Intersection'. The diagram is credited to 'CDM Smith'.

The Honorable Madeline Rogero
Mayor, City of Knoxville

April 17, 2013

Dear Madam Mayor,

Representatives from northeast Knoxville and Knox County are still waiting to hear back from you after our meeting on May 31, 2012. We met with you and Christi Branscom, Tom Clabo, and Jim Hagerman to discuss the project for widening Washington Pike from I-640 to Murpy Road. Our primary concern was that this project had been initiated by the City of Knoxville without advising the local neighborhood groups – Alice Bell / Spring Hill Neighborhood Association (“ABSHNA”) and Northeast Knox Preservation Association (“NEKPA”). **We were also unclear as to how this project impacted the overall traffic situation** for northeast Knox County, including Washington Pike, Millertown Pike, Tazewell Pike, and Loves Creek Road. We left that meeting with a promise that you would examine the issue, discuss it with representatives from Knox County to understand the larger traffic issues and planning, and get back with us.

This is not the only time that the neighborhoods have requested to be involved and updated on this project and have not been informed:

- Above-mentioned meeting in May 2012 with the Mayor and staff from Engineering
- Meeting with ABSHNA, Tom Clabo and others from engineering at Loraine Street offices in 2011
- Letter from Kevin Murphy to Jim Hagerman in April 2012 requesting to be involved and updated on the project

ABSHNA and NEKPA have received no correspondence from anybody in your office or City Engineering in the eleven (11) months since our meeting in May 2012, nor any follow-up after the other two requests. 4th District Councilman Della Volpe has been in discussions with engineering and passed on items from those discussions to us, but we have not had any representative work directly with **the impacted citizens’ groups**.

We are concerned that planning is progressing without any public meeting or public involvement. Recently, Kevin Murphy was informed through Knox MPC staff that a historic impact survey had been completed, which directly impacts a 215 year old Tennessee Century Farm. No communications were sent to Mr. Murphy despite him sending a letter in April 2012 to Mr. Hagerman specifically requesting to be contacted, and being listed as an interested party in the report. Moreover, the report states that copies of it will be mailed to interested parties, including NEKPA, Knox Heritage, East TN Preservation Alliance, and Mr. Murphy. None of those parties received the report.

We would appreciate hearing back from you about how this project fits into the overall context of traffic patterns in northeast Knoxville and Knox County, and if it is the best use of limited resources, or if other projects should be prioritized. Also, given the lack of response, we request that a representative from the City of Knoxville attend the monthly ABSHNA meetings for the duration of this project. We also request that all documents, reports, and studies related to this project and traffic studies and projects in northeast Knoxville be posted on a publicly accessible website, and that the repository be used for future communication and collaboration with the community.

We also request that a series of key points be identified in this project for public meetings to be held, and that approximate timelines for those public meetings be constructed. Our community is keenly interested in the impacts of this project and would like to work with the city and county to mitigate unfavorable impacts as well as direct resources and design to achieve maximum benefit. Without conversation and communication from the city, that will not happen.

Sent on behalf of:

Ronnie Collins, President, Alice Bell / Spring Hill Neighborhood Association
Lisa Starbuck, President, Northeast Knox Preservation Association
Kevin Murphy, Representative, Murphy Springs Farm

CC: Nick Della Volpe, Councilman, 4th District, City of Knoxville
R. Larry Smith, Commissioner, 7th District, Knox County
Dave Wright, Commissioner, 8th District, Knox County
James McMillan
Jamie Rowe, Fountain City Town Hall
Gene Mathis, ABSHNA
Bob Wolfenbarger, ABSHNA



May 13, 2013

Ronnie Collins
Kevin Murphy
Lisa Starbuck

Dear Mr. Collins, Mr. Murphy and Ms. Starbuck,

Thank you for your letter of April 17, 2013, to Mayor Rogero regarding the Washington Pike Roadway Project. I have met with the Mayor and other staff to discuss the issues you have raised, and she has asked me to respond on her behalf.

At the outset, I apologize for not keeping in touch with Alice Bell Spring Hill Neighborhood Association since meeting with you in May of 2012. You have a right to receive timely information on this project, and we will endeavor to provide more complete communication as this project advances.

You expressed concern that “planning is progressing without any public meeting or public involvement.” I can assure you that you have not missed an opportunity for further consultation or public involvement as required by law as well as the City’s own commitment to public involvement. This project is not moving that rapidly, in part because of federal regulations and in part because such projects must of necessity be executed over a multi-year period.

This project was in the environmental documentation stage in May of 2012, and we are still in that phase, although it is coming to a close. As you know, this project has been approved for 80% federal funding, which triggers a review of various possible impacts on air quality, noise, streams and wetlands, and archeological, architectural and historical resources. Those reports are being completed this spring, and they will be posted on the city website as they become available, as will the summary “Categorical Exclusion” (CE) document required by TDOT.

We cannot and will not proceed to the design phase — the next opportunity for formal public comment — until the CE has been approved by TDOT and the Federal Highway Administration. This approval is not expected before June 2013 at the earliest. Please see the project timeline attached to this letter.

To address another question raised in your letter, the City Administration did have two follow-up meetings, both in August of 2012, regarding the Washington Pike project after the May 31, 2012, Alice Bell Spring Hill meeting. We apologize for not directly communicating the results of these meetings to you.

First, the Mayor and her engineering staff met with Mayor Burchett and his engineering staff, along with City Councilman Nick Della Volpe. At this meeting, we updated the County on the Washington Pike and Millertown Pike projects, and we also discussed future county road needs, including the proposed extension of Murphy Road. County officials indicated they would confer with the one district and two at-large commissioners regarding the implications for the long range transportation plan and conduct public hearings as necessary in the future. Also, both the city and the county still believe the Washington Pike Roadway Project is an appropriate response to increased traffic congestion in the area.

I should also point out that any construction for the Washington Pike widening that is to be completed by the city must remain within city limits. The construction phasing would likely transition back to a two-lane road at the Murphy Road intersection inside the city boundary. While improvements to the intersection are, in our view, advisable and therefore included in the environmental report, any work beyond the city limit would fall to Knox County.

Also in August of 2012, the Mayor and her staff conferred with Mark Donaldson of Metropolitan Planning Commission, Knox County engineering staff, and Councilman Della Volpe, regarding concerns about the development of land along the section of Washington Pike that is to be widened. These concerns are similar to those voiced by others regarding corridor development in other parts of the city. As a result, MPC staff drafted an Ordinance that would enable the development of corridor overlay districts. As you may already be aware, MPC this month recommended this Ordinance to City Council. If adopted by City Council, the Ordinance would allow for comprehensive planning and zoning for major corridors and could be a useful tool for managing the appearance and function of any commercial development along a corridor such as the widened section of Washington Pike. A corridor overlay would be tailored to fit a particular area and public participation would be a necessary part of the overlay process.

Here is a brief response to other issues you raised:

- 1) *Copies of the architecture/historic impact report were not sent to Mr. Murphy or other interested parties.* TDOT has responsibility for mailing the report since this project is being completed under state oversight. Prior to this correspondence, we have verified that TDOT's Historic Preservation Section indeed mailed copies of the report to interested parties via standard mail. According to TDOT, copies were mailed to Kevin Murphy, 4508 Murphy Rd., Knoxville, TN 37918, and to Northeast Knox Preservation Association, P.O. Box 5863, Knoxville, TN 37928. If these addresses are incorrect, please let us and TDOT know. In the meantime, we have seen Mr. Murphy's comments on the report.
- 2) *How does the project impact the overall traffic situation for Northeast Knox County including Washington Pike, Millertown Pike, Tazewell Pike and Loves Creek Road?* The City continues to believe that the project will relieve congestion on these and neighboring

roads, particularly at morning and evening rush hour. The previous traffic studies, including an Advance Planning Report (APR) for the area, have all indicated the need for additional capacity. (These documents are now available on the City's web site; see Item 6 below.)

- 3) *Are monies spent on the Washington Pike Roadway Project the best use of limited resources or should other projects be prioritized?* This project was identified as a priority as far back as 2001 under then Mayor Victor Ashe. Given traffic patterns and congestion, it continues to be a priority today. Millertown Pike is also a priority, and we have chosen to phase in the needed improvements as necessary. The first phase of Millertown Pike is currently under construction.
- 4) *ABSHNA and other groups wish to work with the city and county to mitigate unfavorable impacts and to direct resources and design to achieve maximum benefit.* We welcome your ideas and especially encourage you to make detailed suggestions during the design public hearing. After the Environmental Phase is complete, TDOT and FHWA will give us a notice to proceed with the Final Design Phase. During that phase, we will hold at least one public meeting to encourage feedback about project specific details. We will advertise well in advance of having any public meetings. At this time, we are simply not at that phase of project development, and we cannot proceed with detailed design until the Environmental Phase is complete.
- 5) *We request that a representative from the City of Knoxville attend the monthly ABSHNA meetings for the duration of this project.* As noted previously, this project has a multi-year timeline. It is unlikely there would be much new to report or answer on a monthly basis for the remaining years of this project, and such a commitment would take staff time away from other duties, including attendance at other neighborhood meetings on other current projects. However, we will be happy to schedule a representative at your next meeting if you have additional questions after this correspondence. Also, we will attend future meetings, as appropriate, for updates on the project. Please contact me at 215-2027 to schedule a visit.
- 6) *We request that all documents, reports and studies related to this project and traffic studies and projects in northeast Knoxville be posted on a publicly available web site, and that the repository be used for future communication and collaboration with the community.* This is a good idea, and we have assembled those documents and created a page for them. A link to the Washington Pike project page can be found at <http://www.cityofknoxville.org/projects/>.

We appreciate your interest in this project and your concern for your community. We realize that you disagree with the City's determination — over three different mayors and a dozen years — that the Washington Pike project is needed. As Mayor Rogero often says, “reasonable people disagree.” As administrators and stewards of public funds, local

governments have to balance many different interests and concerns from a wide variety of stakeholders.

At the same time, we, too, wish to mitigate any negative impacts. For example, we have worked with our consultant to develop a “complete streets” concept plan to make this section of Washington Pike user friendly not just to motorists but also to bicyclists and pedestrians. The concept includes a landscaped median and side slopes where possible, and storm water treatment that is above and beyond a normal roadway project. More about this can be discussed during the design phase.

Finally, going forward, we will certainly strive to communicate more regularly, and we ask that you do the same. Please do not hesitate to contact me at 215-2027 as other concerns or questions arise.

Sincerely,



James R. Hagerman, P.E.
Director of Engineering

Enclosure: Project Timeline

cc: Madeline Rogero, Mayor, City of Knoxville
Mayor Tim Burchett, Knox County
Nick Della Volpe, Councilman, 4th District, City of Knoxville
R. Larry Smith, Commissioner, 7th District, Knox County
Dave Wright, Commissioner, 8th District, Knox County
James McMillan
Gene Mathis, ABSHNA
Bob Wolfenbarger, ABSHNA
Mark Donaldson, Metropolitan Planning Commission
Dwight Van de Vate, Knox County Engineering
Cindy Pionke, Knox County Engineering
Christi Branscom, Director, Public Works, City of Knoxville

Washington Pike Road Widening Project Timeline

Date	Anticipated Length of Time	Comments
2001		Advance Planning Report prepared by the City of Knoxville identified and prioritized several northeast city road improvement projects — including the widening of Millertown Pike to a 3-lane section (with a center turn lane) from Kinzel Way to Loves Creek Road (under construction), the Washington Pike project, and a Phase 2 widening of Millertown Pike.
2010		The City of Knoxville updated the Transportation Planning Report (TPR) for the Washington Pike Roadway Project.
2012		Consultant (CDM Smith) retained to develop project plans
2012 - 2013		Environmental Documentation Phase
Summer 2013		Anticipated approval by the Federal Highway Administration of Categorical Exclusion environmental review
	18 months	Survey and Design Phase Public Meeting to be scheduled approximately 6 months after this phase is initiated.
	12 months	Right of Way Acquisition Phase
	2.5 years	Construction Phase

Project Information Website:

The City of Knoxville has posted all available project information, including approved environmental reports to a project website hosted by the city:

www.cityofknoxville.org/engineering/projects/WashingtonPike_I640toMurphyRoad.pdf

The project website has a direct link to the City of Knoxville main website under the heading "City Engineering Projects Update", so that the general public will have easy access to all posted information.



Washington Pike from I-640 to Murphy Road Project

[View January 2009 Transportation Planning Report and Appendices – 416 pages – 35.0m \[PDF\]](#)

[View May 2012 Neighborhood Meeting Presentation – 11 pages – 1.0m \[PDF\]](#)

[View July 2012 Update Meeting Presentation – 16 pages – 1.3m \[PDF\]](#)

[View September 2012 Functional Plan – 12 pages – 7.0m \[PDF\]](#)

Draft Environmental Documents:

[View July 2012 Initial Environmental Screening Report – 36 pages – 1.8m \[PDF\]](#)

[View November 2012 Air Quality Determination – 13 pages -264k \[PDF\]](#)

[View November 2012 Noise Technical Report – 60 pages – 3.2m \[PDF\]](#)

Final Environmental Documents:

[View January 2012 Purpose and Need Statement – 57 pages – 7.5m \[PDF\]](#)

[View August 2012 Native American Coordination Letters – 6 pages – 456k \[PDF\]](#)

[View January 2013 Historical Structures Survey – 74 pages – 6.2m \[PDF\]](#)

[View March 2013 Historical Structures SHPO Determination – 1 page – 56k \[PDF\]](#)

[View April 2013 Conceptual Stage Relocation Plan – 4 pages - 472k \[PDF\]](#)





Appendix D:
Conceptual Stage Relocation Plan



on behalf of
Dept. of Engineering and Public Works, Knoxville, TN

CONCEPTUAL STAGE RELOCATION PLAN

Knoxville, Knox County, Tennessee

State Project Number: 47953-1516-54

Federal Project Number: STP-M-9109(69)

Pin Number: 043090.00

Washington Pike from I -640 ramps to Murphy Road in Knoxville.

PROJECT INFORMATION: The City of Knoxville, Tennessee is proposing to improve roughly 1.73 miles of Washington Pike in northeastern Knox County. The proposed improvement will begin at the intersection of Washington Pike with Greenway Drive just north of the I-640 interchange and extend in a northeasterly direction to the intersection of Washington Pike and Murphy Road at the city limits of Knoxville.

The proposed improvements will consist of widening Washington Pike to four, eleven-foot traffic lanes (two lanes in each direction), grassed median with turn lanes as required at the intersecting side streets, and the installation of two-foot curb and gutter, five-foot sidewalks, and four-foot bike lanes. Roadway realignment of Washington Pike would occur at the approaches to intersections with Mill Road and McCampbell Drive to correct roadway deficiencies. Additional turn lanes would be incorporated at side streets where necessary. The project would also include cut and fill and retaining walls where needed. The typical section design is guided by the City's request for first flush capability as required by the City's storm water quality ordinance. As an option, this design may eliminate or reduce some curb and gutter sections with construction of grass swales.

AREA INFORMATION: Washington Pike is classified as an urban minor arterial street. Washington Pike begins as a four-lane, divided roadway extending northeast from its intersection with I-640 which curves around Knoxville as a bypass. Washington Pike has seen a rise in commercial development in recent years at this location. The roadway then turns east at Greenway Drive and tapers to a two-lane roadway with no shoulders. The area quickly changes to rural residential. New subdivisions have been constructed leading off of Washington Pike as the road continues east of Mill Road. The project ends at the Knoxville city limits at Murphy Road. According to the United States Census Bureau, the 2010 Population of Census Tract 43 of Knox County was 2,533 and represents a 20% increase over the 2000 census.

DISPLACEMENTS:

ANTICIPATED RELOCATIONS	
SINGLE FAMILY UNITS	1
MULTI FAMILY UNITS	0
MOBILE HOMES	0
BUSINESSES	1
NON-PROFITS	0
FARMS	0

DISPLACEMENT EFFECTS AND ANALYSIS

Residences: Construction of this alternative is expected to displace 1 (one) single family residence that is approximately 2,000± square feet. This residence appears to be typical for the area in terms of size and style. The number of occupants is not known.

Businesses: Construction of this alternative is expected to displace 1 (one) small business (a restaurant). The business is estimated to have fewer than ten employees. The business rents the property.

Other: No multi-family units, mobile homes, non-profits, or farming operations are expected to be displaced.

Availability of Replacement Housing

A brief search of the Knoxville real estate market for the 37918 zip code indicates a supply of housing sufficient to accommodate relocation of the single-family residence displaced by the project. Thirteen available residences ranging in size from 1,800 square feet to 2,300 square feet with sale prices from \$70,000 to \$125,000 were discovered. Source: Realtor.com.

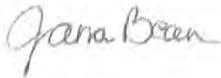
A search of the Knoxville commercial real estate market for the 37918 zip code indicates a supply of commercial property sufficient to accommodate relocation of the business displaced by the project. Nine relocation properties for lease ranging in size from 1,500 to 2,500 square feet were located within 37918 that could potentially meet the needs of the business displacement. Source: Knoxville Area Association of Realtors.

ENVIRONMENTAL: Construction of the proposed project is not expected to be a disruptive influence or have an adverse impact on the locally established community. Traffic circulation is not anticipated to be disrupted or significantly changed. There are no anticipated changes to access or denial of access.

ASSURANCES: This agency will make relocation assistance available to all eligible persons impacted by this project, including residences, businesses, farm operations, non-profit organizations, and those requiring special services or assistance. The agency Relocation Staff will administer the relocation program under the rules, policies, and procedures set forth in the Federal Uniform Relocation Assistance and Real Property

Acquisition Policies Act of 1970 as amended, the Uniform Relocation Assistance Act of 1972, implementing federal regulations, TCA 13-11-101 through 119, This agency's Relocation Assistance Brochure and Chapter IX of the State of Tennessee Department of Transportation Right-of-Way Manual. This agency's relocation program is practical and will allow for the efficient relocation of all eligible displaced persons in accordance with State and Federal Guidelines.

Prepared By:



Jana Bean
Environmental Coordinator
CDM Smith

April 2, 2013

Date

Tennessee Department of Transportation Review and Concurrence By:



4/3/2013

David S. Goodman
Transportation Specialist I

DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
KNOXVILLE, TENNESSEE

CITY OF KNOXVILLE	YEAR 2012	SHEET NO. 1
KNOX COUNTY	FUNCTIONAL PLANS WASHINGTON PIKE	
FED. AID PROJ. NO.	STP-M-8108 (89)	
STATE PROJ. NO.	47963-1816-54	

WASHINGTON PIKE
ROADWAY PROJECT

FUNCTIONAL

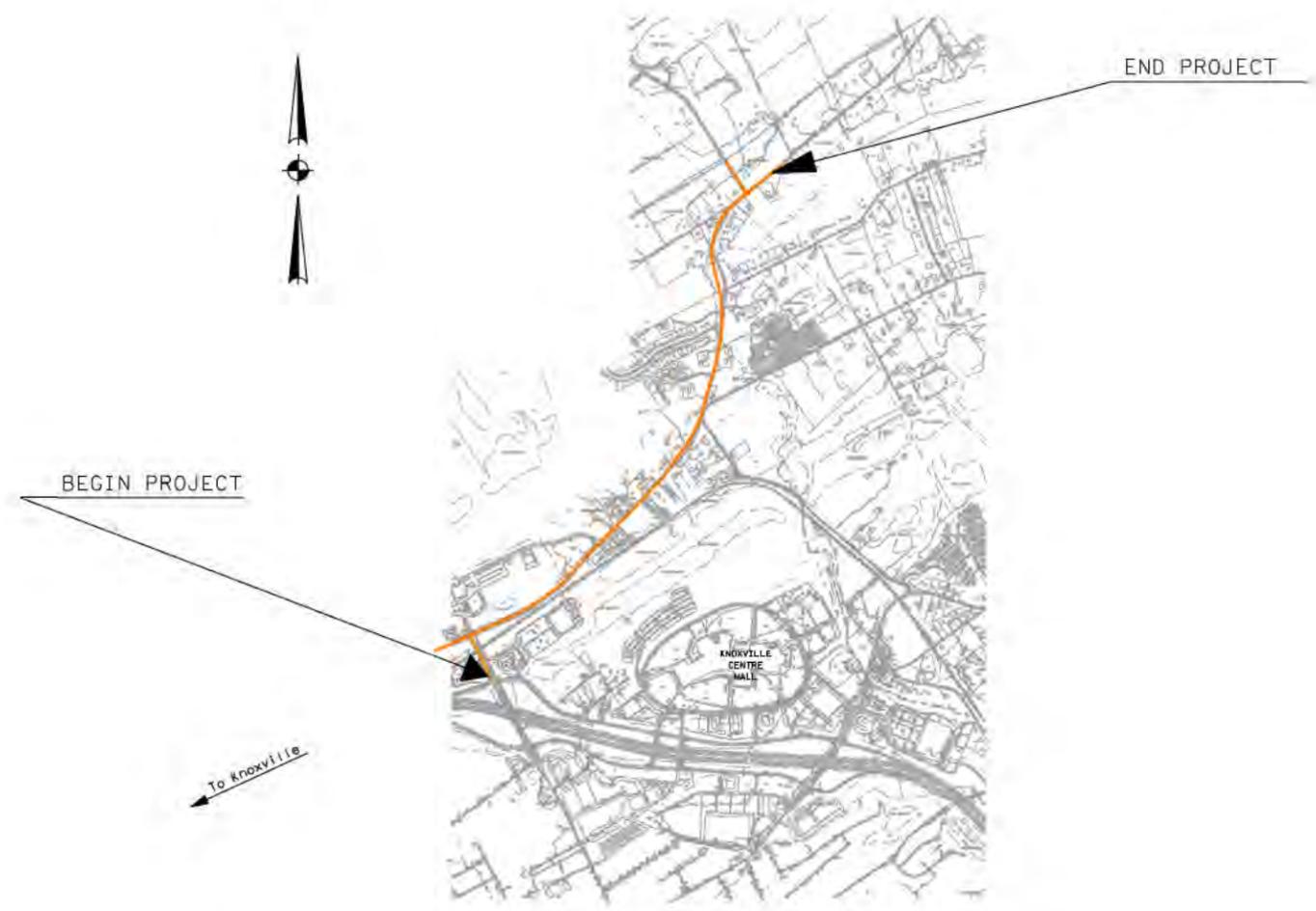
CSRP Marked Plans



PROJECT LOCATION

**PRELIMINARY
PLANS**

**NO EXCLUSIONS
NO EQUATIONS**



SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY OWNER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

DESIGNER BOB HALL CHECKED BY JEFF MIZE, P.E.
P.E. NO. _____
PIN NO. 043090.00

Not To Scale

APPROVED: _____ MAYOR
DATE: _____

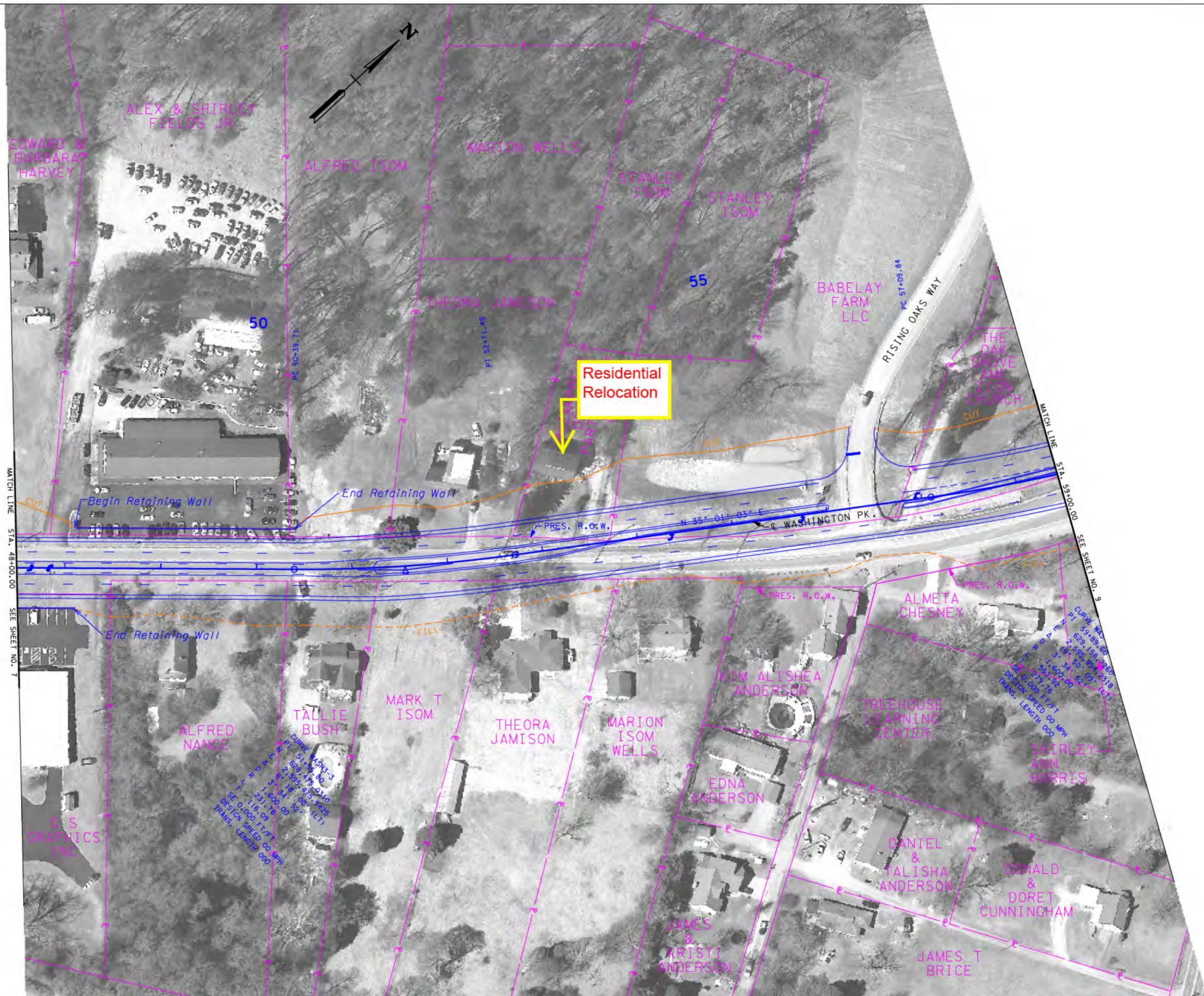
DESIGNED BY:
CDM Smith
1100 MARION STREET
SUITE 200
KNOXVILLE, TN. 37921
(865) 963-4300



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TYPE	YEAR	PROJECT	SHEET NO.
FUNC.	2012	WASHINGTON PIKE	8

FEDERAL PROJECT NO. STP-M-9109 (89)
 STATE PROJECT NO. 47963-1516-54
 PIN NO. 043080.00



Residential Relocation

MATCH LINE STA. 48+00.00 SEE SHEET NO. 7

MATCH LINE STA. 59+00.00 SEE SHEET NO. 9

CITY OF KNOXVILLE
 KNOX COUNTY, TN

WASHINGTON PIKE
 FUNCTIONAL LAYOUT

STA. 48+00.00 TO STA. 59+00.00

SCALE = 1" = 50'

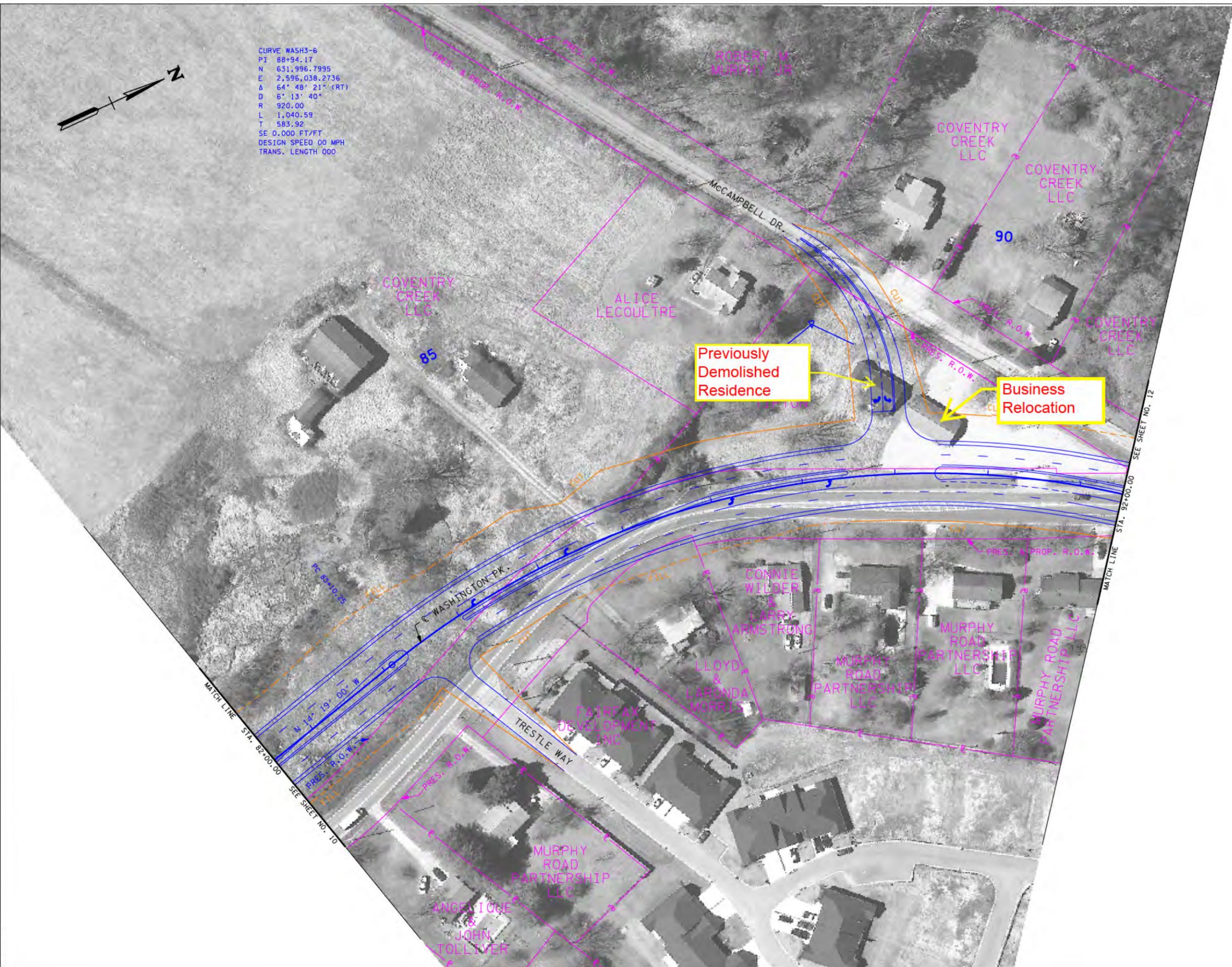
CDM Smith

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TYPE	YEAR	PROJECT	SHEET NO.
FUNC.	2012	WASHINGTON PIKE	11

FEDERAL PROJECT NO. STP-M-9109 (89)
STATE PROJECT NO. 47953-1516-54
PIN NO. 043080.00

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L 1,040.59
T 583.92
SE 0.000 FT/FT
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TRANS. LENGTH 000



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CITY OF KNOXVILLE
KNOX COUNTY, TN

WASHINGTON PIKE
FUNCTIONAL LAYOUT

STA.82+00.00 TO STA.92+00.00

SCALE = 1" = 50'



Appendix E:
Ecology Coordination Response Letters

INITIAL
ENVIRONMENTAL
SCREENING REPORT

Washington Pike Improvements
TN PIN #043090.00

Submitted by
Will Carroll

on behalf of
City of Knoxville



Table of Contents

1.0 INTRODUCTION.....3
1.1 Databases Reviewed.....3
1.2 Onsite Visit.....4

2.0 GENERAL DESCRIPTION OF PROPOSED PROJECT SITE.....4

3.0 ADJACENT PROPERTIES.....8

4.0 HISTORICAL AERIAL PHOTOGRAPHS.....8

5.0 SURFACE WATER.....8

6.0 GROUNDWATER.....10

7.0 WETLANDS.....10

8.0 FLOODPLAINS.....10

9.0 THREATENED AND ENDANGERED SPECIES.....10

10.0 STORAGE TANKS.....12

11.0 HAZARDOUS WASTE SITES.....12

12.0 DISCHARGES INTO WATER SOURCES.....13

13.0 AIR EMISSIONS.....13

14.0 CONCLUSIONS.....13

15.0 REPORT LIMITATIONS.....15

List of Figures and Tables

Figure 1 Project Vicinity Map5

Figure 2 Project Location Map.....6

Figure 3 Topographic Map with General Surface Water Flow7

Table 1 Rare Species Observations Within 1 Mile Radius Listed by TDEC DNH.....11

Table 2 Rare Species Observations Within 4 Mile Radius Listed by TDEC DNH11

Table 3 UST and LUST Facilities Located Within or Adjacent to Subject Area.....12

Table 4 RCRA Hazardous Waste Facility Locations Within or Adjacent to Subject Area ..12

Appendices

Appendix A EDR® Environmental Data Resources, Inc.
Federal and State Database Review, Radius Search and Map

Appendix B Photo Log for Proposed Project Site

Appendix C Tennessee Department of Transportation (TDOT) Preliminary Environmental
Evaluation Checklist

Appendix D EDR® Environmental Data Resources, Inc. Aerial Photo Decade Package

Appendix E NWI Wetlands Map

Appendix F FEMA Floodplain Maps

Appendix G Tennessee Department of Environment and Conservation Division of Natural
Areas Correspondence

INITIAL ENVIRONMENTAL SCREENING

Washington Pike Improvements

1.0 INTRODUCTION

CDM Smith has been tasked by the Tennessee Department of Transportation to prepare a Categorical Exclusion (CE) document as part of the NEPA documentation to address any environmental concerns prior to the Washington Pike Improvements. As part of this environmental process, CDM Smith will provide the initial environmental screening effort identifying potential hazardous waste/hazardous material and ecological issues that pose possible impacts to the proposed project site.

The following is a Scope of Work (SOW) for the initial environmental screening. Briefly, the components are:

- Record Review: CDM Smith will review the results of a federal environmental database search provided by EDR® Environmental Data Resources, Inc., to determine the location of known hazardous waste sites, including permitted generators of hazardous waste, within a 1-mile radius of the project site. Available historic aerial photographs included in the EDR database search will be reviewed. Also, a records search will be performed at the Tennessee Department of Environment, the city and county building, and several databases pertaining to environmental records pertinent.
- Site Reconnaissance: CDM Smith will conduct an onsite reconnaissance to visually examine the project site. An experienced professional environmental scientist will conduct the onsite environmental screening. Visual observations to be conducted onsite include the determination of the presence of distressed vegetation, physical irregularities, dumping, aboveground storage tanks (AST), underground storage tanks (UST), potential habitat for protected species known to occur in the general area, and potential wetlands and other sensitive ecological resources. Any other items that in the opinion of the investigator are deemed appropriate in the conduct of this screening will also be noted.
- Preparation of a Report: CDM Smith will prepare an initial environmental screening report detailing the findings resulting from the above onsite screening. The report will identify issues the CDM Smith investigator determines may potentially impact the proposed project site. A map detailing the location(s) of any items of environmental concern found during the initial screening will be included in the report.

1.1 Databases Reviewed

CDM Smith personnel obtained an environmental database search from EDR covering the proposed project site and adjacent areas. This database included a review of federal and state environmental databases and is presented in its entirety in **Appendix A**.

Information pertaining to federal- and state-listed protected species known to occur in this area of Knox County, TN, where the project site lies, was obtained from the Tennessee Department of Environment and Conservation (TDEC) Division of Natural Heritage (DNH). Furthermore, databases were searched at the TDEC office in Knoxville, TN and at the city/county building.

1.2 Onsite Visit

CDM Smith personnel visited the project site on May 25, June 1, and July 12, 2012 to verify information gathered and to visually examine the site. Photographs taken during the site visit are presented in **Appendix B**. During the site visit the Preliminary Environmental Evaluation Checklist provided by the Tennessee Department of Transportation (TDOT) (see **Appendix C**) was completed. Also, a thorough investigation of surface waters, wetlands, underground storage tanks, hazardous material, and use of adjacent properties occurred.

2.0 GENERAL DESCRIPTION OF PROPOSED PROJECT SITE

The subject area under review for this project is located in the City of Knoxville, Knox County, Tennessee. The location of the proposed project is shown in **Figures 1 and 2**. **Figure 3** depicts the site topography and is derived from the 7.5 minute United States Geological Survey (USGS) quadrangle for Fountain City and John Sevier, Tennessee (2010). The subject area of Washington Pike runs north from Interstate 640 to Murphy Road. It is proposed as a four-lane facility with a raised median. This section consists of four traffic lanes (two in each direction), curb and gutter, sidewalks, and bike lanes. The typical section design for this section is guided by the City's request for first flush capability as guided by the City's storm water quality ordinance. As an option, this design may eliminate or reduce some curb and gutter sections with construction of grass swales. The project length of Section Two is approximately 1.73 miles (9130 feet). A 200 feet corridor width is suggested for the proposed roadway design for this section. A consistent multi-lane section is recommended in order to provide adequate future capacity.

Washington Pike Improvements

The goals and objectives of an improved Washington Pike corridor include:

- Create a traffic circulation system that minimizes conflicts between pedestrians, bicyclists and vehicles;
- Enhance Washington Pike to adequately serve the commercial/retail/residential development in the area relative to capacity, safety, circulation and access to I-640;
- Improve east-west mobility in the Knoxville Center Mall area;
- Enhance regional and local economic development opportunities;
- Modify key intersections to increase operational safety and capacity;
- Create a greenway system in conjunction with stormwater control programs;
- Improve transportation linkages throughout the northeastern quadrant of the City;
- Be compatible with and serve the needs of the surrounding neighborhoods.

PROJECT VICINITY MAP

Washington Pike/Millertown Pike Transportation Planning Report Knoxville, Knox County, Tennessee

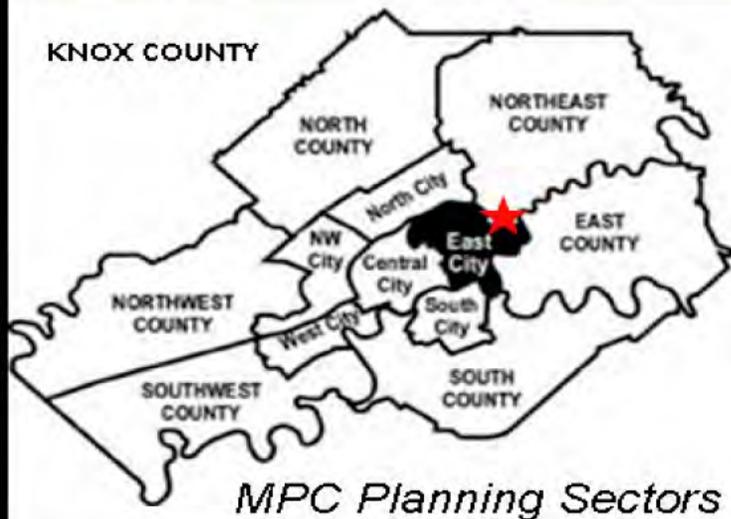
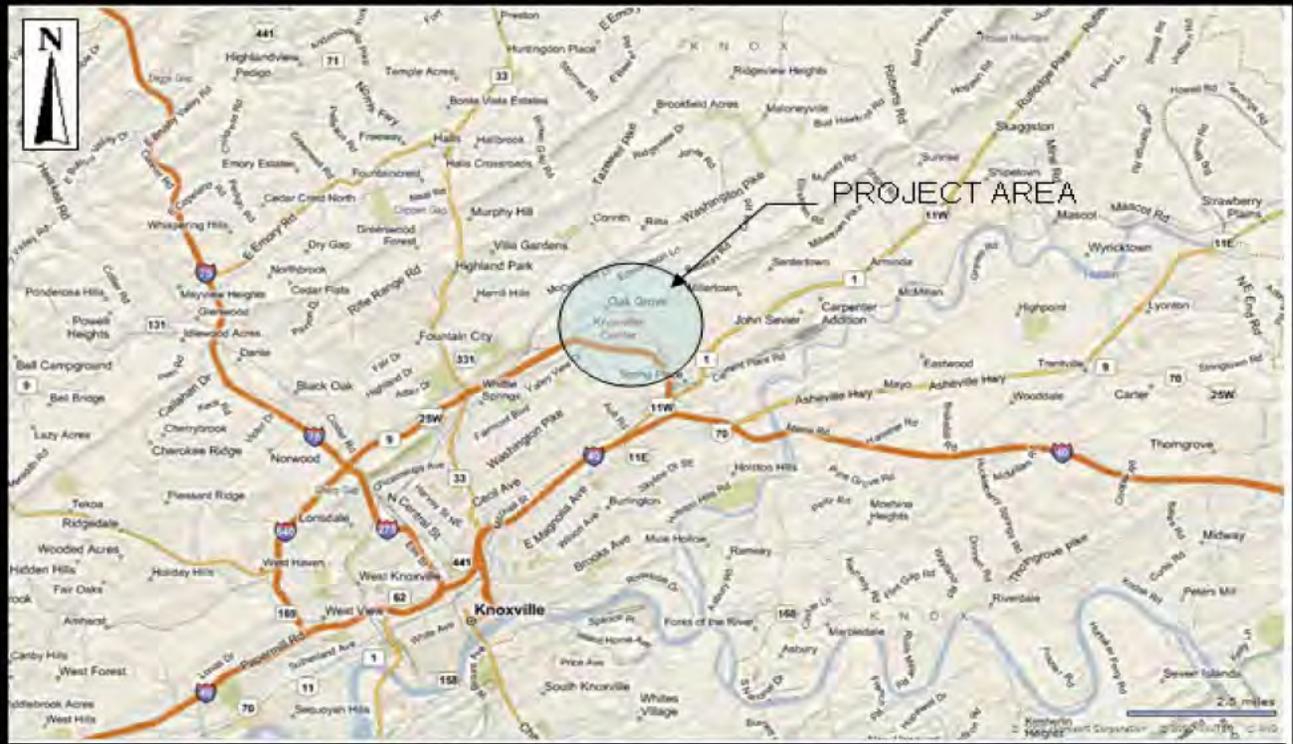
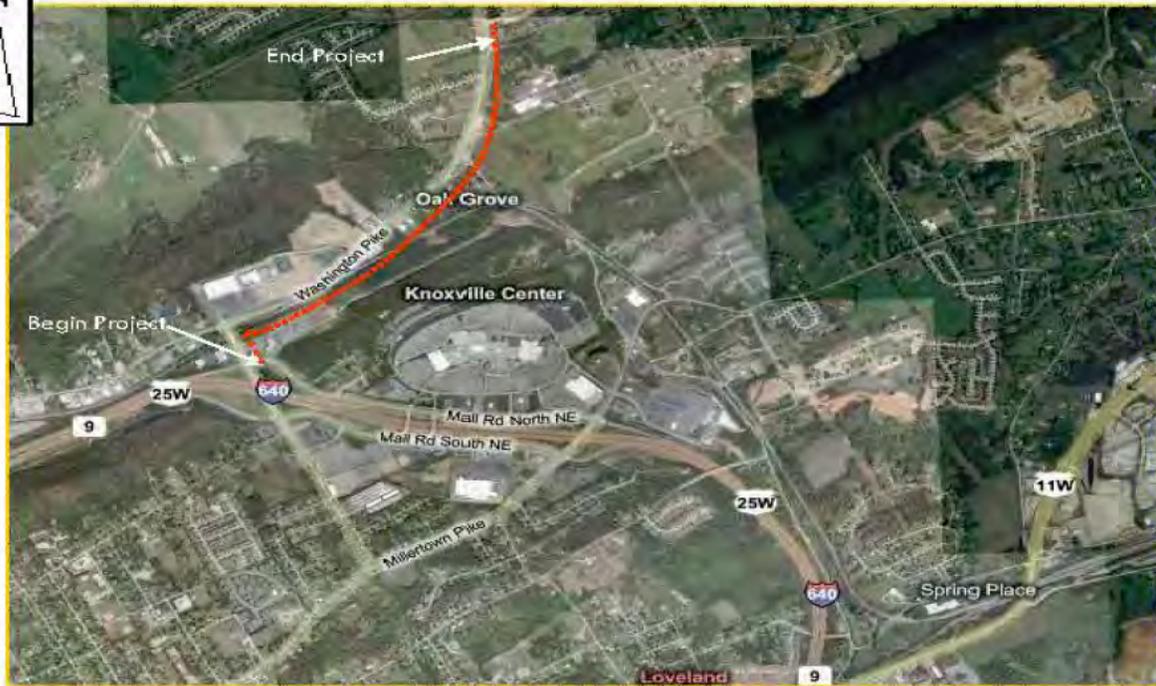


Figure 1



AREA LOCATION MAP
WASHINGTON PIKE AND MILLERTOWN PIKE
Knoxville, Knox County, Tennessee



Figure 2

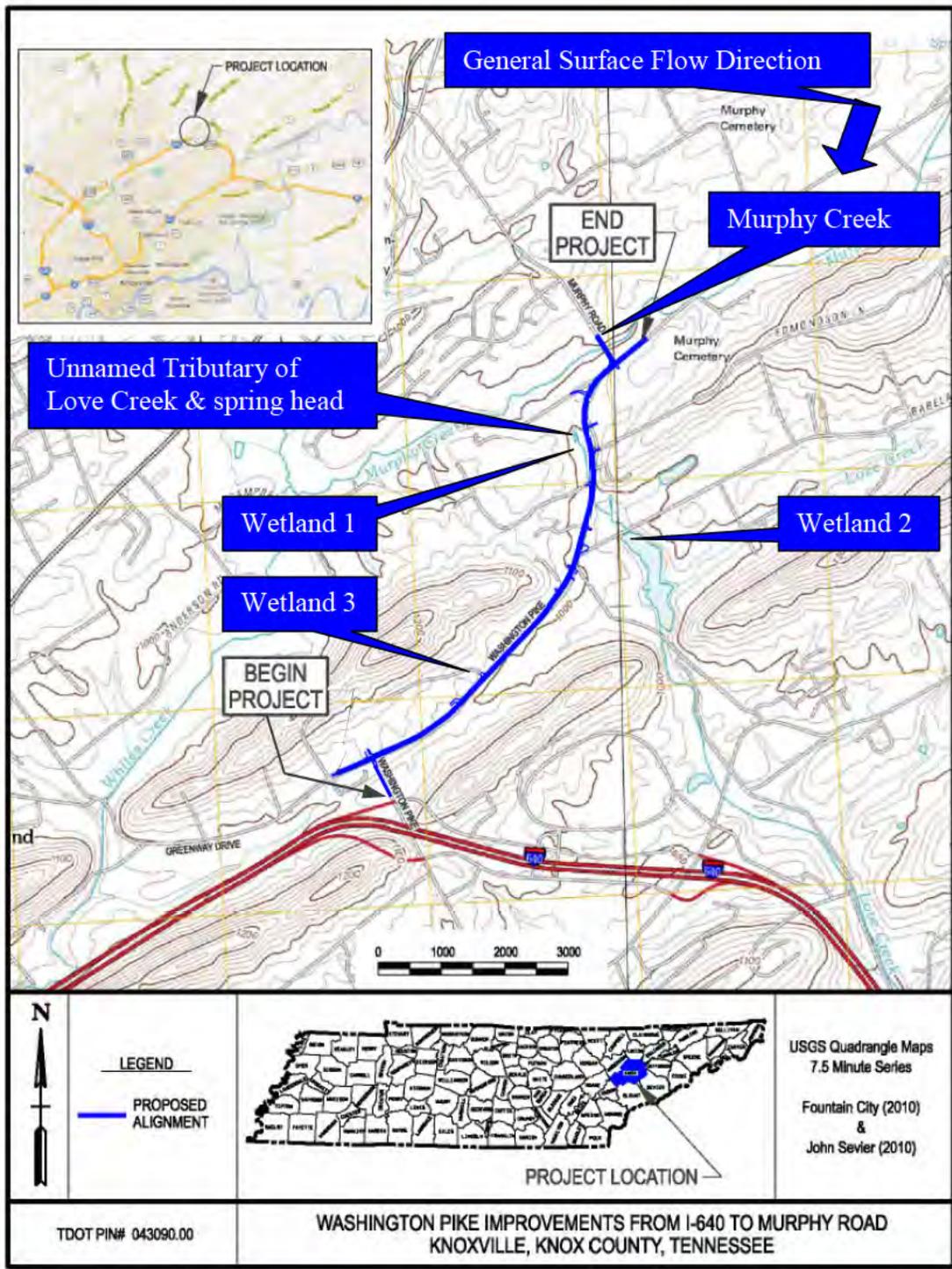


Figure 3

3.0 ADJACENT PROPERTIES

3.1 Properties Adjacent to Washington Pike Improvements

Washington Pike from I-640 north to Greenway Drive Intersection

There are several commercial and retail buildings in this area. To the north of Washington Pike/Greenway Drive are New Beverly Baptist Church, Shoe Carnival, Target, Old Navy, Marshall's, and several other retail facilities. To the south of Washington Pike is the Knoxville TVA Employee Credit Union, a food outlet store, Kitts Café, and the Norfolk Southern Railroad main line. Also, there are several other retail facilities south of the railroad such as a mattress outlet, Kohl's Shopping Center, Honeybaked Hams, and several other retailers.

Washington Pike from New Harvest Lane to Mill Road

New Harvest Park is located north of Washington Pike. This area also contains an office of the USDA, the Farmer's Market, a greenway and park, and a USDA protected management pond and natural area. The overflow of the pond has another detention area that ultimately drains into the city stormwater system. Also to the north of Washington Pike are two landscaping facilities, an automotive repair facility, residences, an entrance to an apartment complex, and Oak Grove Zion Church. To the south of Washington Pike are seven different buildings used commercially that are located between the roadway and Norfolk Southern Railroad main line. These include such businesses as Backstage Dance Studios, Staley Inc., S&DY Coffee, Industrial Distribution Group, G. S. Graphics Inc., and a couple of warehouse/distribution facilities. There are also several residences along the south side of the road.

Washington Pike from Mill Road to Murphy Road

There are several subdivisions and residences on both sides of Washington Pike between Mill Road and Murphy Road. There is a gas station called Town and Country Market Shell Station. This station has underground storage tanks and a "case-closed" historical leaking underground storage tank in the state registered storage tank database. There are several residences, commercial tracts, and agricultural tracts along both sides of this segment of Washington Pike. There is a Weigels gas station and market with state registered underground storage tanks at the intersection of Murphy Road and Washington Pike. Also, a historic register eligible farm called the Murphy Farm is located at the northwest corner of Murphy Road and Washington Pike intersection.

4.0 HISTORICAL AERIAL PHOTOGRAPHS

Available historical aerial photographs of portions of the project area were included in the EDR database search report. These aerial photos are in **Appendix D**. The aerial photographs reviewed are dated 1953, 1960, 1973, 1984, 1987, and 1992.

5.0 SURFACE WATER

The study area falls within the Holston and Fort Loudon watershed which drains to the Holston and Tennessee River. There are two surface waters, several storm water inlets on both sides of

Washington Pike, and several wet weather conveyances within the area of interest. Minimal impact to this surface water is expected during and after construction with the implementation of best management practices to prevent erosion and sedimentation. The first surface water located is a spring-fed, unnamed tributary of Love Creek that ultimately discharges into the Holston River shown in **Figure 3**. This small stream is charged by a spring-fed pond that is located on the northwest side of Washington Pike approximately 180 feet from the existing road across from Trestle Way. The spring and pond were used for agricultural purposes and has a deteriorated spring house adjacent to the seep area next to the spring head that was used for a saw mill. The spring discharges southward into a large wetland pond (Wetland 1 on **Figure 3**) that is located approximately 30 feet west from a proposed fill area. The wetland pond discharges into a small stream that flows south through several culverts including a 24" metal culvert that crosses Aylesbury Drive. This section of the stream's channel bottom width is 2-3 feet wide, the top of the bank width is 3-4 feet wide, the bank height is 1-3 feet, the water depth is 3-8 inches, and the water width is 2-3 feet. The substratum of the unnamed tributary of Love Creek is gravel with 90% silt. The banks are somewhat stable with bushes and trees. The overhead canopy is approximately 80%. The buffer zone ranges from 10-25 feet. There were gastropods and semi-aquatic bugs observed in the stream during this observation. The stream then flows through approximately 50 feet of a mowed ditch line (which contains several crayfish chimneys and semi-aquatic) and into a storm water catch basin. This section's channel bottom width is 6" to 1 foot wide, the top of the bank width is 1-2 feet wide, the bank height is 1-2 feet, the water depth is 2-6 inches, and the water width is 6" to 1 foot wide. The substratum of this section of the unnamed tributary of the creek is vegetated with 25% silt. The banks are stable with mowed grass. There is little to no buffer zone since the area is mowed. There is no overhead canopy. There were semi-aquatic bugs, gastropods, and crayfish observed in the creek. This section discharges into a storm water catch basin and then crosses Washington Pike in a 36" reinforced concrete pipe culvert the flows approximately 250 feet into a large wetland (Wetland 2 on **Figure 3**) and ultimately into Love Creek. This outlet point has a channel bottom width of 2-3 feet, the top of bank width is 3-4 feet, the bank height is 1-2 feet, the water depth is 4-6 inches, and the water width ranges from 2-4 feet. The substratum is cobbles and rock with 50% silt. The banks are somewhat stable with some riprap, bushes, and trees. The overhead canopy is approximately 90% covered. The buffer zone ranges from 25-50+ feet. There were semi-aquatic bugs observed in the stream on this side of the road. There are several storm water inlets and wet weather conveyances that contribute to this stream. There may be impacts to this stream during the construction phase, therefore best management practices will need to be implemented during construction to prevent erosion and sedimentation to the stream.

The second surface water is a perennial, blue-line stream called Murphy Creek shown in **Figure 3**. It flows westward underneath Murphy Road approximately 150 feet northwest from the Washington Pike intersection through a box culvert. Murphy Creek connects with Whites Creek then outfalls into First Creek discharging ultimately into the Tennessee River/ Fort Loudon Lake. On the east (inlet) side of Murphy Road, Murphy Creek has a channel bottom width of 10-15 feet, the top of bank width is approximately 25 feet, the bank height ranges from 3-6 feet, the water depth is 6 inches to 1 foot, and the water width ranges from 10-15 feet. The substratum is bedrock with 20% silt. The banks are stable with bushes and trees. The overhead canopy is approximately 75% covered. The buffer zone ranges from 10-25 feet. There were semi-aquatic bugs, gastropods, and minnows observed in the stream on this side of the road. The west (outlet) side of Murphy Road, the creek has a channel bottom width of 15-20 feet, the top of bank width is approximately 20-25 feet, the bank height ranges from 2-4 feet, the water depth is 1-2 feet, and the water width ranges from 10-15 feet. The substratum is cobble/gravel with 75% silt. The banks are stable with bushes and trees. The overhead canopy is approximately 95% covered. The buffer zone ranges

>25 feet. There were semi-aquatic bugs, gastropods, crayfish, and minnows observed in the stream on this side of the road.

Minimal impact is expected during and after construction with the implementation of best management practices to prevent erosion and sedimentation into the storm drain system, wet weather conveyances, and surface waters.

6.0 GROUNDWATER

The EDR report (**Appendix A**) states the general direction of groundwater flow in the area is general east. The EDR radius report (**Appendix B**) shows one state registered private residential water supply well within subject property.

7.0 WETLANDS

National Wetlands Inventory (NWI) and USGS quadrangle maps were reviewed to determine if any wetlands or potential wetland habitats exist within the project site. The NWI map is located in **Appendix E**. In addition, field observations were made to ensure that the informational resources were accurate. Based on these techniques and procedures, no possible wetlands were found within the study area. Three wetlands were observed adjacent to the study area. The first (Wetland 1 on **Figure 3**) is located on the west side of Washington Pike across from Edmondson Road and Trestle Way approximately 85 feet from the existing roadway. This open water/ponded wetland would be classified as a palustrine, aquatic bed, persistent, flooded, and is spring fed. This spring and pond were used for agricultural purposes in the past. There is standing water and an abundance of vegetation and soils with hydric characteristics throughout the area. The proposed roadway will have a fill area adjacent to this wetland with approximately 25-30 feet of buffer.

The second wetland (Wetland 2 on **Figure 3**) adjacent to the project area is downstream from the aforementioned, spring-fed unnamed tributary to Love Creek. This wetland is located over 250 feet away from the proposed project area to the southeast and will not be impacted if best management practices are applied.

The third wetland (Wetland 3 on **Figure 3**) is open water, protected wetland located on New Harvest Lane adjacent to the farmers market and the USDA office building. It is approximately 30 feet upgradient from the proposed project area and will not be impacted if best management practices are applied.

8.0 FLOODPLAINS

According to the EDR report and Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) maps, one small portion of the study area lies within the 100-year floodplain. This occurs at the crossing of Murphy Creek by Murphy Road. This is a very small area and minimal impact is proposed. A map of the flood zones is located in the in **Appendix F**.

9.0 THREATENED AND ENDANGERED SPECIES

Table 1 is the TDEC DNH list of federal/state protected and rare species known to exist within the 1-mile radius. **Table 2** is the TDEC DNH list of federal/state protected and rare species known to exist within the 4-mile radius. A county and watershed search for rare species was also conducted. The TDEC response of the rare species search and the key to the symbols regarding species protection and status ranks are included in **Appendix G. A**

coordination letter has been sent to the USFWS, TDEC, and ACOE. TWRA should be contacted prior to construction for guidance on protective measures needed to ensure that legal requirements for protection of state listed animals are addressed.

There were no plants or animals of these types observed within the proposed project area, but conducive habitats for most of these species listed in Tables 1 and 2 do exist within or adjacent to the study area. Best management practices will need to be implemented in order to minimize impacts to these species if present.

**TABLE 1
Rare Species Observations Within 1 Mile Radius Listed by TDEC DNH**

Type	Scientific Name	Common Name	Global Rank	St. Rank	Fed. Prot.	St. Prot.	Habitat
Vascular Plant	Lilium Canadense	Canada Lily	G5	S3	--	T	Rich Woods And Seeps
Vertebrate Animal	Pituophis Melanoleucus	Northern Pinesnake	G4T4	S2	--	T	Well drained sandy soils in pine & pine/oak woods; dry mountain ridges; E to lower elevations of appalachians

Keys to all abbreviations in Tables 1 & 2 are located in Appendix G

**TABLE 2
Database of Observed Rare Species Within a 4-Mile Radius**

Type	Scientific Name	Common Name	Global Rank	St. Rank	Fed. Prot.	St. Prot.	Habitat
Invertebrate Animal	Fusconaia cor	Shiny Pigtoe	G1	S1	LE	E	Shoals and riffles of small-medium rivers with mod-fast current over sand/cobble substrate, Upper TN River watershed
Invertebrate Animal	Lo fluvialis	Spiny Riversnail	G2	S2	--	Rare, not state listed	Shallow water of shoals that are rapid to moderate and well oxygenated; TN Rive and main tributaries, East TN
Invertebrate Animal	Lasmigonia holstonia	Tennessee Heelsplitter	G3	S2	--	Rare, not state listed	Spring runs, creeks and rivers, in subst of sand and mud; upper TN River
Vascular Plant	Lilium Canadense	Canada Lily	G5	S3	--	T	Rich Woods And Seeps

Vascular Plant	Panax quinquefolius	American Ginseng	G3G4	S3S4	--	S-CE	Rich Woods
Vascular Plant	Silene regia	Royal Catchfly	G3	SH	--	E-P	Rocky openings and thickets
Vascular Plant	Tetragonotheca helianthoides	Pineland Squarehead	G5	SH	--	E-P	Dry open woods
Vertebrate Animal	Percina tanasi	Snail Darter	G2G3	S2S3	LT	T	Sand and gravel shoals of moderate flowing, vegetated, large creeks, upper TN River watershed.
Vertebrate Animal	Pituophis Melanoleucus	Northern Pinesnake	G4T4	S2	--	T	Well drained sandy soils in pine & pine/oak woods; dry mountain ridges; E to lower elevations of appalachians

Keys to all abbreviations in Tables 1 & 2 are located in Appendix G

10.0 STORAGE TANKS

There were two facilities with underground storage tanks (USTs) observed that are adjacent to the subject property. There was no aboveground storage tanks (ASTs) observed within the subject area. The first facility is the Town and Country Market located southwest of the Washington Pike and Babelay Road intersection adjacent to the subject property. It has registered USTs, no ASTs, and one registered closed historical leaking USTs (LUST) on file with TDEC. The other facility is the Weigels Gas Station #60 located southeast from the Washington Pike and Murphy Road intersection. It has registered underground storage tanks registered with TDEC. TDEC UST and AST records reviewed in the EDR report indicate that there are three more registered UST facilities located within a ¼ mile radius of the study area and two LUST TRUST sites within a 0.5 mile radius of the subject area.

Table 3
UST and LUST Facilities Located Within or Adjacent to the Subject Area

Facility	USEPA UST Identification #	Address	Proximity to Subject Site	Downgradient or Upgradient from Subject Site	Status	NOVs on File
Town and Country Market	U0013914656	5704 Washington Pike, Knoxville, TN 37918	< ¼ mile SE	Downgradient	Currently In Use, Tank Closure	UST, LUST, LUST TRUST Tank Closure, HIST UST
Weigels Gas Station #60	U004066449	5904 Wahington Pike, Knoxville, TN 37918	< ¼ mile NNE	Upgradient	UST In Use	LUST Tank Closure

11.0 HAZARDOUS WASTE SITES

There are no Hazardous Waste Sites within the proposed roadway improvements. The EDR report (**Appendix A**) lists one Resource Conservation and Recovery Act (RCRA) hazardous waste generator registered under the Resource Conservation and Recovery Information System (RCRIS) adjacent to the study area at the Target located on the west end of the study area. The EDR report lists no hazardous waste or hazardous materials releases or spills reported to the United States Environmental Protection Agency (USEPA) or TDEC for any areas within the project site.

The EDR database search of the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) indicated that there is no Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priority List (NPL) or State Listed Superfund sites located within a 1-mile radius of the project site.

Table 4
RCRA Hazardous Waste Facility Locations Within or Adjacent to the Subject Area

Facility	USEPA RCRA-CESQ Identification #	Address	Proximity to Subject Site	Downgradient or Upgradient from Subject Site	Status	NOVs on File
Target Corp. #2507	1010332501 TNR000023010	4700 New Harvest Ln, Knoxville, TN 37918	1/8 - 1/2 mile S	Upgradient	In Use	None

12.0 DISCHARGES INTO WATER SOURCES

The EDR database search (**Appendix A**) listed no National Pollutant Discharge Elimination System (NPDES) permits for the subject site. There are storm water inlet drains throughout the proposed roadway improvements. A NPDES General Permit for Construction Storm Water is required by the State of Tennessee for any construction site or project that disturbs more than one acre of ground. There are Notice of Intent (NOI) requirements associated with this permit and a fee schedule which is determined by the extent of the project. Best management practices will need to be implemented prior to and during construction to prevent erosion and sediment from entering the storm water system.

13.0 AIR EMISSIONS

The EDR report (**Appendix A**) listed no sources of air emissions on the subject site or within a 1-mile radius of the subject site. No air emissions were observed onsite or on adjacent properties during the site visit. Fugitive dust emissions must be controlled during the construction of the road improvement project following best management practices.

14.0 CONCLUSIONS

The subject property is currently located within an urban, commercial and residential area. Also, there are three churches, a mainline of Norfolk Southern Railroad, two gas stations, several stores, a registered historic farm, a farmers market and park adjacent to the proposed roadway improvements. There are two surface waters located within the study area. One is an unnamed

tributary to Love Creek and the other is Murphy Creek. These ultimately discharge into the Holston and Fort Loudon Watershed. There are storm water drains and wet weather conveyances located within the project that would need protected during construction with the implementation of best management practices to prevent sedimentation and erosion. A NPDES General Permit for Construction Storm Water permit will be required for the proposed project. In the process of applying for these permits, NOI requirements may be required and fees may be assessed. Fugitive dust emissions must also be controlled during the construction of the road improvement project. There were three wetlands observed adjacent to the subject property during the site visit. Best management practice will need to be implemented in order to protect these wetlands from sedimentation, erosion, and general pollutants. One small area at the Murphy Road crossing of Murphy Creek is within the 100 year floodplain on the proposed roadway improvements.

There were two facilities with underground storage tanks (USTs) observed adjacent to the subject property during the site visit. There was no aboveground storage tanks (ASTs) observed within the subject property. There was one report of a historical leaking underground storage tank that is “case closed” found in the state or federal databases at the Town and Country Market. The EDR report (**Appendix A**) indicates that there are three more registered UST facilities located within a ¼ mile radius of the study area and two LUST TRUST sites within a 0.5 mile radius of the subject area.

No hazardous waste/materials storage was observed onsite during the site visit. Federal and state records reviewed indicated that 1RCRA hazardous waste generator is located adjacent to the study area. There are no CERCLA NPL or State Superfund sites within or adjacent to the study area.

No discharges to water sources or air emissions discharges were observed on the subject property or adjacent properties during the site visit.

The categories present on the subject site as listed on the TDOT Preliminary Environmental Evaluation Checklist (see Appendix D) include:

- Hazardous Material Site or Underground Storage Tanks: No RCRA hazardous waste generators are located within the study area. No active USTs are located within the study area, but 2 are on adjacent properties.
- Floodplains: One small area of the subject property is located within the 100-year floodplain according the EDR report (**Appendix A**) and FEMA Flood Maps (**Appendix F**). The 100-year floodplain is adjacent to Murphy Road crossing of Murphy Creek.
- Urban area, city, town, or community: The project site is located within a residential, agricultural and commercial area of Knoxville, Tennessee.
- Residential establishment: There are residential subdivisions adjacent to Washington Pike from Mill Road to Murphy Road.
- Commercial area: There is a shopping center, several other commercial buildings from Greenway Drive to Mill Road. Also, there are two gas stations adjacent to Washington Pike.
- Institutional Uses: The New Beverly Baptist Church is located northwest the Washington Pike and Greenway Drive intersection. The Oak Grove AME Mount Zion church is located northwest of the Mill Road and Washington Pike intersection. The Nehemiah Church is located 1000 feet east on Washington Pike from the aforementioned Zion Church on the same side of the road.
- Forested land: There are some forested areas located on the west side of the proposed roadway improvements throughout the length of the subject area.
- Recreational Uses: There are no recreational areas located within the subject property.

- Waterway: There are two blue line streams located throughout the study area. Murphy Creek is located east of the subject property and an unnamed tributary to Love Creek is in the center of the project area.
- Project coordinated with metropolitan/regional planning organizations (MPO/RPO) and or local officials: The area of interest lies within the City of Knoxville and Knox County metropolitan areas.

15.0 REPORT LIMITATIONS

This project is not designed to provide comprehensive data accumulation, chemical or radiological analyses, inferences as to surface/subsurface soil contamination, or the conditions of surface and groundwater. Conclusions drawn from the results of this assessment should recognize the limitations of the methods utilized. This effort is a screening activity and is NOT a comprehensive study.

APPENDIX E

**NWI Wetland Map
Washington Pike Improvements
Knoxville, Knox County, TN**

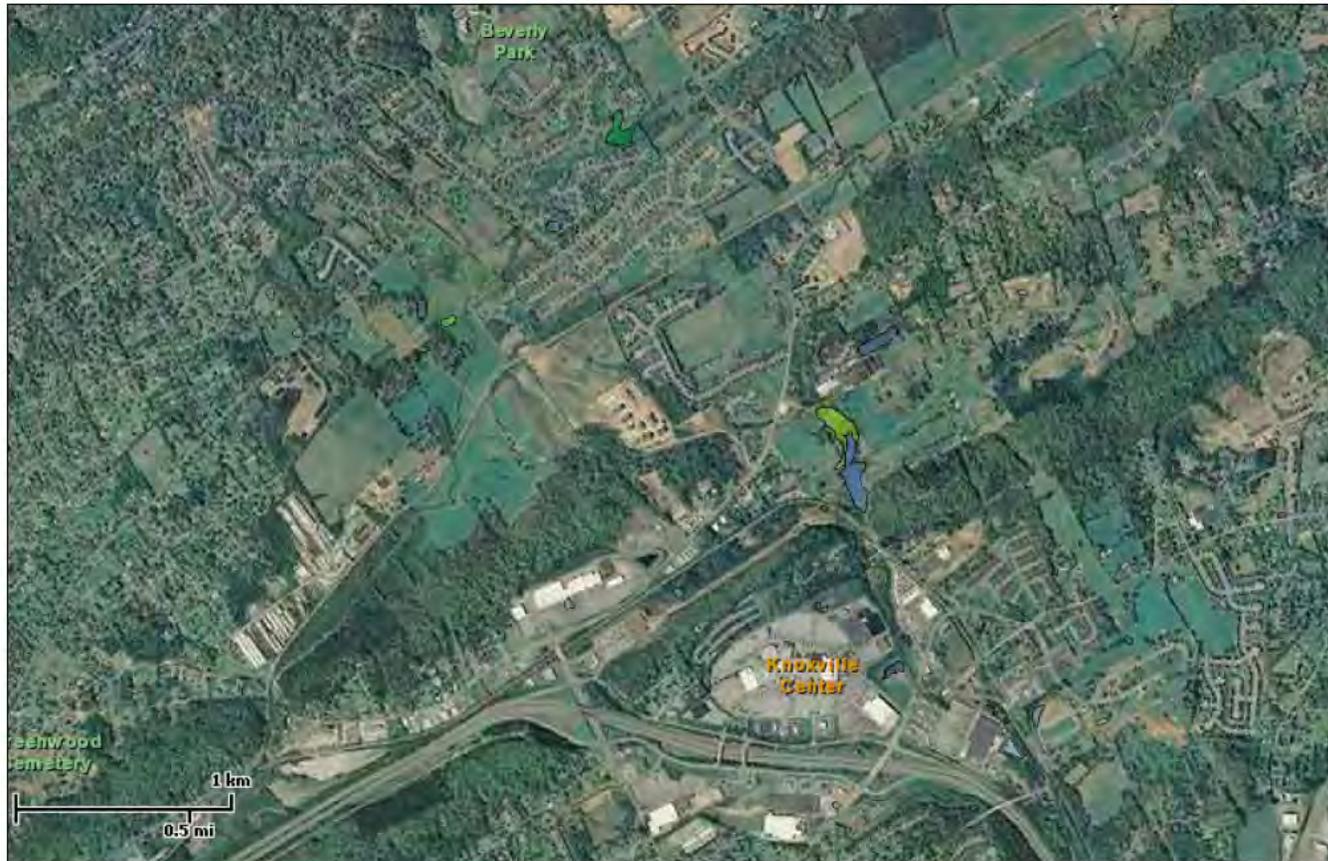


U.S. Fish and Wildlife Service

National Wetlands Inventory

Washington Pike

May 16, 2012



Wetlands

-  Freshwater Emergent
-  Freshwater Forested/Shrub
-  Estuarine and Marine Deepwater
-  Estuarine and Marine
-  Freshwater Pond
-  Lake
-  Riverine
-  Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:



U.S. Fish and Wildlife Service National Wetlands Inventory

West Washington
Pike

May 16, 2012



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:



U.S. Fish and Wildlife Service

National Wetlands Inventory

East Washington
Pike

May 16, 2012



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
3701 BELL ROAD
NASHVILLE, TENNESSEE 37214

April 23, 2013

Regulatory Branch

SUBJECT: File No. 2013-00496; Washington Pike Improvements, Knoxville, Knox County, Tennessee.

Ms. Scarlett Sharpe
Tennessee Department of Transportation
Senior Transportation Planner
James K. Polk Building, Suite 900
Environmental Documentation Office
505 Deaderick Street
Nashville, Tennessee 37243

Dear Ms. Sharpe:

This is in regard to your recent request for information on the proposed Washington Pike Improvements, Knoxville, Knox County, Tennessee

The U.S. Army Corps of Engineers (USACE) has regulatory responsibilities pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). Under Section 404, the USACE regulates the discharge of dredged and/or fill material into waters of the U.S., including wetlands. Under Section 10, the USACE regulates any work in, or affecting, navigable waters of the U.S.

A review of the information provided indicates an activity that would involve work in waters of the US. Therefore, a Department of the Army (DA) permit would be required.

We understand that the project proposal may not have specific design plans at this time, and this inquiry is an initial review to obtain funding. Therefore, we have no objections to the applicant receiving funds provided the applicant applies for and obtains any required permits prior to any disturbance to streams and/or wetlands that may occur due to project construction. The applicant may apply at any time.

We appreciate your awareness of our regulatory program. If you have any questions regarding this matter, please contact me at the above address, telephone (615) 369-7500.

Sincerely,

A handwritten signature in cursive script that reads "Lisa R. Morris".

Lisa R. Morris
Project Manager
Regulatory Branch



United States Department of the Interior

FISH AND WILDLIFE SERVICE
446 Neal Street
Cookeville, TN 38501

August 9, 2013

Ms. Scarlett Sharpe
Tennessee Department of Transportation
Environmental Planning and Permits Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Subject: FWS# 13-I-0353. Proposed Washington Pike Improvements in the City of Knoxville; PIN# 043090.01, Knox County, Tennessee.

Dear Ms. Sharpe:

Thank you for your email correspondence dated July 17, 2013, regarding the proposed Washington Pike Improvements in the City of Knoxville, Knox County, Tennessee. CDM Smith, on behalf of the Tennessee Department of Transportation (TDOT), has determined that potential effects to the federally endangered Indiana bat (*Myotis sodalis*) are unlikely due to overall marginality of habitat from development in the area. Personnel of the U.S. Fish and Wildlife Service have reviewed the subject proposal and offer the following comments.

You spoke with John Griffith of my staff by telephone on August 5, 2013, and informed him that a commitment would be added to the project plans requiring the removal of trees from October 15 to March 31. In light of this commitment and the results from the assessment indicating marginal habitat suitability, we concur that the proposed project is "not likely to adversely affect" the Indiana bat. We are unaware of any federally listed or proposed species that would be impacted by this project. Therefore, 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 for all species that currently receive protection under the Act. Obligations under section 7 of the Act must be reconsidered if (1) new information reveals impacts of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed 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 proposed action.

If you have any questions regarding our comments, please contact John Griffith of my staff at 931/528-6481 (ext. 228) or by email at john_griffith@fws.gov.

Sincerely,

A handwritten signature in cursive script that reads "Mary E. Jennings". The signature is written in black ink and is positioned to the right of the typed name.

Mary E. Jennings
Field Supervisor

xc: Jeff Mize, CDM Smith, Knoxville, TN



United States Department of the Interior

FISH AND WILDLIFE SERVICE
446 Neal Street
Cookeville, TN 38501

April 3, 2013

Ms. Scarlett Sharpe
Tennessee Department of Transportation
Environmental Planning and Permits Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Subject: FWS# 13-CPA-0383. Proposed Washington Pike Improvements in the City of Knoxville; PIN# 043090.01, Knox County, Tennessee.

Dear Ms. Sharpe:

Thank you for your letter dated March 28, 2013, regarding the proposed Washington Pike Improvements in the City of Knoxville, Knox County, Tennessee. The project would consist of widening approximately 1.73 miles of Washington Pike from two lanes to a four lane design with five-foot shoulders and four-foot bike lanes. The Tennessee Department of Transportation (TDOT) has requested our comments on federally listed species, wetlands, or other areas of concern for this project. Personnel of the U.S. Fish and Wildlife Service (Service) have reviewed the subject proposal and offer the following comments.

Upon review of the information provided and available imagery, removal of suitable summer roosting habitat for the federally endangered Indiana bat (*Myotis sodalis*) may be required for the project. A qualified individual should assess potential impacts and determine if the proposed project may affect this species. As a designated representative for the Federal Highway Administration (FHWA), TDOT should submit a copy of the assessment and findings to this office for review and concurrence. A finding of "may affect" could require initiation of formal consultation by the FHWA.

Information available to the Service does not indicate that wetlands exist in the vicinity of the proposed project. However, our wetland determination has been made in the absence of a field inspection and does not constitute a wetland delineation for the purposes of Section 404 of the Clean Water Act. The Corps of Engineers should be contacted if other evidence, particularly that obtained during an on-site inspection, indicates the potential presence of wetlands.

If you have any questions regarding our comments, please contact John Griffith of my staff at 931/528-6481 (ext. 228) or by email at john_griffith@fws.gov.

Sincerely,

A handwritten signature in cursive script that reads "Mary E. Jennings". The signature is written in black ink and is positioned above the typed name.

Mary E. Jennings
Field Supervisor



STATE OF TENNESSEE

DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Natural Areas
Natural Heritage Program
7th Floor L&C Tower
401 Church Street
Nashville, Tennessee 37243
Phone 615/532-0431 Fax 615/532-0046

April 27, 2012

Will Carroll, CPESC
CDM Smith
1100 Marion Street, Suite 200
Knoxville, Tennessee 37921

Subject: Washington Pike Improvements
Knoxville, Tennessee
Rare Species Database Review

Dear Mr. Carroll:

Thank you for your correspondence requesting a rare species database review for the proposed Washington Pike improvements in Knoxville, Tennessee.

We have reviewed the state's natural heritage database with regard to the project locations, and we find that the following rare species have been observed previously within one mile of the project:

Type	Scientific Name	Common Name	Global Rank	St. Rank	Fed. Prot.	St. Prot.	Habitat
Vascular Plant	Lilium canadense	Canada Lily	G5	S3	--	T	Rich Woods And Seeps
Vertebrate Animal	Pituophis melanoleucus melanoleucus	Northern Pinesnake	G4T4	S3	--	T	Well-drained sandy soils in pine/pine-oak woods; dry mountain ridges; E portions of west TN, E to lower elev of the Appalachians.

Within four miles of the project we find that the following rare species have been observed (see attached map):

Type	Scientific Name	Common Name	Global Rank	St. Rank	Fed. Prot.	St. Prot.	Habitat
Invertebrate Animal	<i>Fusconaia cor</i>	Shiny Pigtoe	G1	S1	LE	E	Shoals and riffles of small-medium sized rivers with mod-fast current over sand-cobble substrates; upper Tennessee River watershed.
Invertebrate Animal	<i>Io fluviatilis</i>	Spiny Riversnail	G2	S2	--	Rare, Not State Listed	Shallow waters of shoals that are rapid to moderate and well-oxygenated; Tennessee River & main tributaries; E Tennessee.
Invertebrate Animal	<i>Lasmigona holstonia</i>	Tennessee Heelsplitter	G3	S2	--	Rare, Not State Listed	Spring runs, creeks, & small rivers, in subst of sand & mud; upper Tenn & Conasauga river watersheds; Blue Ridge & Ridge & Valley.
Vascular Plant	<i>Lilium canadense</i>	Canada Lily	G5	S3	--	T	Rich Woods And Seeps
Vascular Plant	<i>Panax quinquefolius</i>	American Ginseng	G3G4	S3S4	--	S-CE	Rich Woods
Vascular Plant	<i>Silene regia</i>	Royal Catchfly	G3	SH	--	E-P	Rocky Openings And Thickets
Vascular Plant	<i>Tetragonotheca helianthoides</i>	Pineland Squarehead	G5	SH	--	E-P	Dry Open Woods
Vertebrate Animal	<i>Percina tanasi</i>	Snail Darter	G2G3	S2S3	LT	T	Sand and gravel shoals of moderately flowing, vegetated, large creeks; upper Tennessee River watershed.
Vertebrate Animal	<i>Pituophis melanoleucus melanoleucus</i>	Northern Pinesnake	G4T4	S3	--	T	Well-drained sandy soils in pine/pine-oak woods; dry mountain ridges; E portions of west TN, E to lower elev of the Appalachians.

Because of the disturbed nature of the project corridor, few of the above species are likely to occur onsite. However, given suitable conditions, the Tennessee heelsplitter may occur in the Murphy Creek or Love Creek watersheds. The above record refers to 1921 collection from First Creek (of which Murphy Creek is a tributary). The pinesnake record also is historic.

Although not falling near the project site, the northern Ridge & Valley is home to a presumably endemic crayfish (Valley flame crayfish, *Cambarus deweesae*). The nearest known location of this species is approximately 20 miles west of the project in Anderson County. The species is confirmed only from four

locations in Anderson and Roane counties. However, because inventories for burrowing crayfish are scant, the actual range of the species remains unknown. Populations reasonably may be anticipated from portions of Knox County.

As part of your site evaluation, we would appreciate any documentation and photo documentation of hydric soils and sign of occupancy by burrowing crayfish, if present (e.g. visible burrows or chimneys in ditches, riparian zones, and wetlands). Presence of such may warrant further evaluation or specimen collection by TDEC or TWRA biologists, as prudent.

For the balance of the taxa listed above, should suitable habitat exist on or immediately downstream of the site, we ask that project plans provide for the protection of the species noted in this review. We ask that you coordinate this project with the Tennessee Wildlife Resources Agency (Rob Todd, rob.todd@tn.gov, 615-781-6577) to ensure that legal requirements for protection of state listed rare animals are addressed.

For stabilization of disturbed areas, the Tennessee Natural Heritage Program advocates the use of native trees, shrubs, and warm season grasses, where practicable. Care should be taken to prevent re-vegetation of disturbed areas with plants listed by the Tennessee Exotic Pest Plant Council as harmful exotic plants.

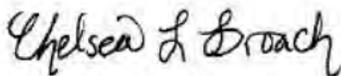
Please keep in mind that not all areas of Tennessee have been surveyed and that a lack of records for any particular area should not be construed to mean that rare species necessarily are absent. For information regarding species protection status and ranks, please visit our website at <http://state.tn.us/environment/na>.

In order to better assist with determining whether rare species are located on a given development site, the Tennessee Natural Heritage Program has implemented a publicly accessible website where rare species data lists by county, quadrangle, watershed, and MS4 boundaries can be obtained: http://environment-online.state.tn.us:8080/pls/enf_reports/f?p=9014:3:3875605994273657.

Thank you for considering Tennessee's rare species throughout the planning of this project. Should you have any questions, please do not hesitate to contact David at (615) 532-0441 or david.withers@tn.gov.

We would greatly appreciate receiving any additional survey data resulting from your site evaluations.

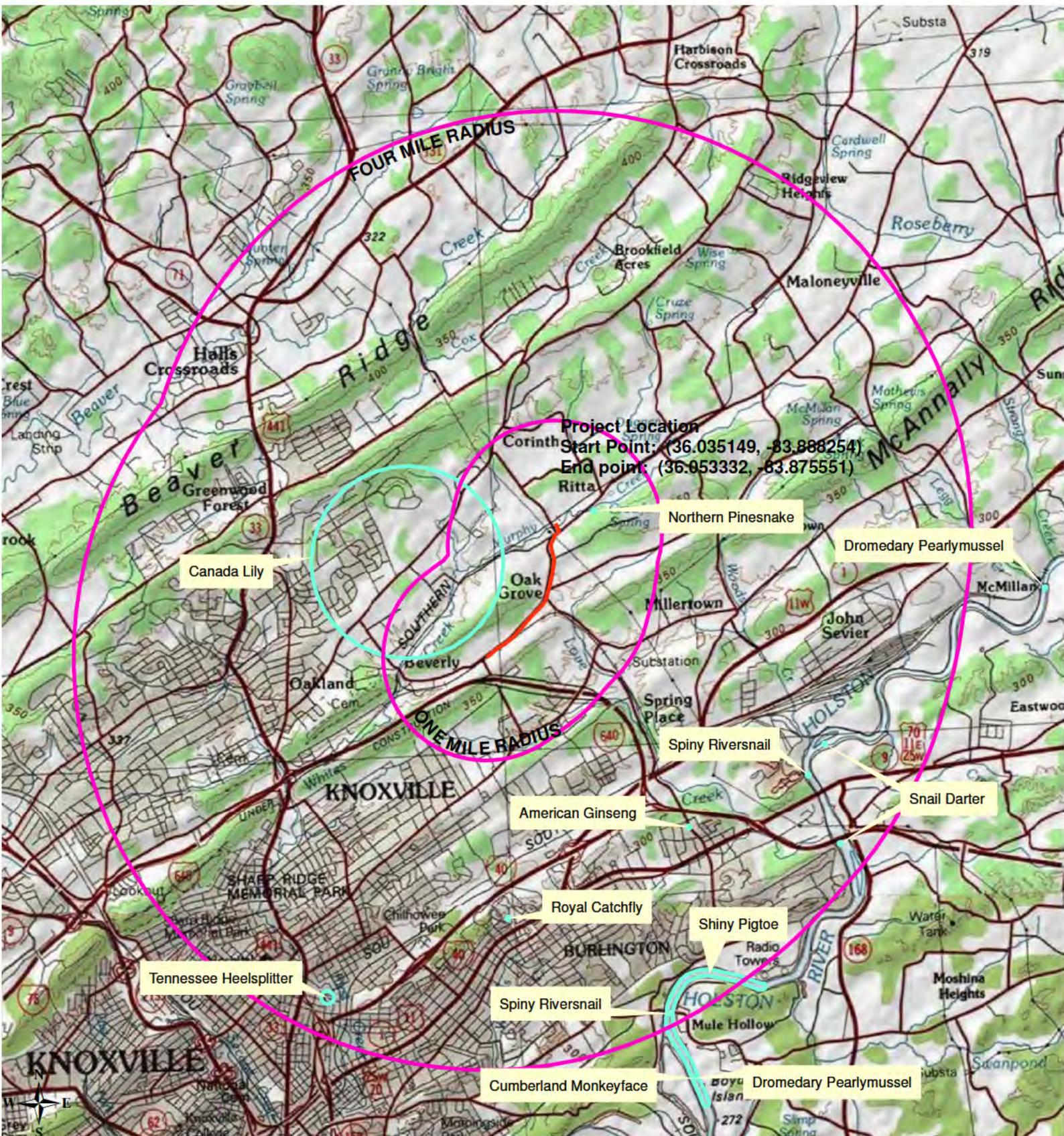
Sincerely,



Chelsea L. Broach
Interim Data Manager



David Ian Withers
Natural Heritage Zoologist



This map should not be used to determine where rare species are absent. Many areas of Tennessee have not been surveyed for rare species. Turquoise polygons represent the most probable location of a rare plant or animal population. In general, the larger polygons represent observations with high locational uncertainty.

TENNESSEE NATURAL HERITAGE PROGRAM

7th Floor L&C Annex
401 Church Street
Nashville, TN 37243
Phone: 615.532.0441

www.state.tn.us/environment/na





TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER
P. O. BOX 40747
NASHVILLE, TENNESSEE 37204

July 17, 2013

Scarlett Sharpe
Senior Transportation Planner
Tennessee Department of Transportation
James K. Polk Building, Suite 900
Environmental Documentation Office
505 Deaderick Street
Nashville, TN 37243-7120

Re: Agency Coordination and Environmental Review
Washington Pike Improvements
Knoxville, Knox County, Tennessee
PIN #043090.001

Dear Ms. Sharpe:

The Tennessee Wildlife Resources Agency has reviewed the information that you provided regarding the proposed Washington Pike Improvements project in Knoxville, Tennessee. Your letter to us requested comments by our agency regarding potential impacts to endangered species, wetlands, and other areas of concern as we may think pertinent due to this proposed project.

The proposed project consists of widening Washington Pike to four, eleven-foot traffic lanes, grassed median with turn lanes, the installation of two-foot curb and gutter, five-foot sidewalks, and four-foot bike lanes in Knoxville, Tennessee. It is our understanding a small portion of the study area is located within the 100-year floodplain, two streams will be crossed, and no wetlands were found within the project footprint as a result of a survey. No endangered species have been recorded within one mile of the project and it is not anticipated to affect any federally or state-listed threatened or endangered species. Based upon these understandings, we do not anticipate adverse impacts to listed species under our authority due to the project and have no concerns or objection to the proposed project.

Thank you for the opportunity to review and comment on this proposed project. If you have further questions regarding this matter, please contact me at 615-781-6572.

Sincerely,

Robert M. Todd
Fish and Wildlife Environmentalist

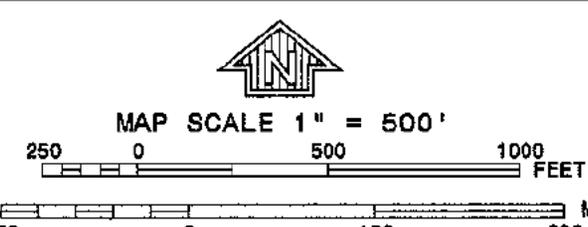
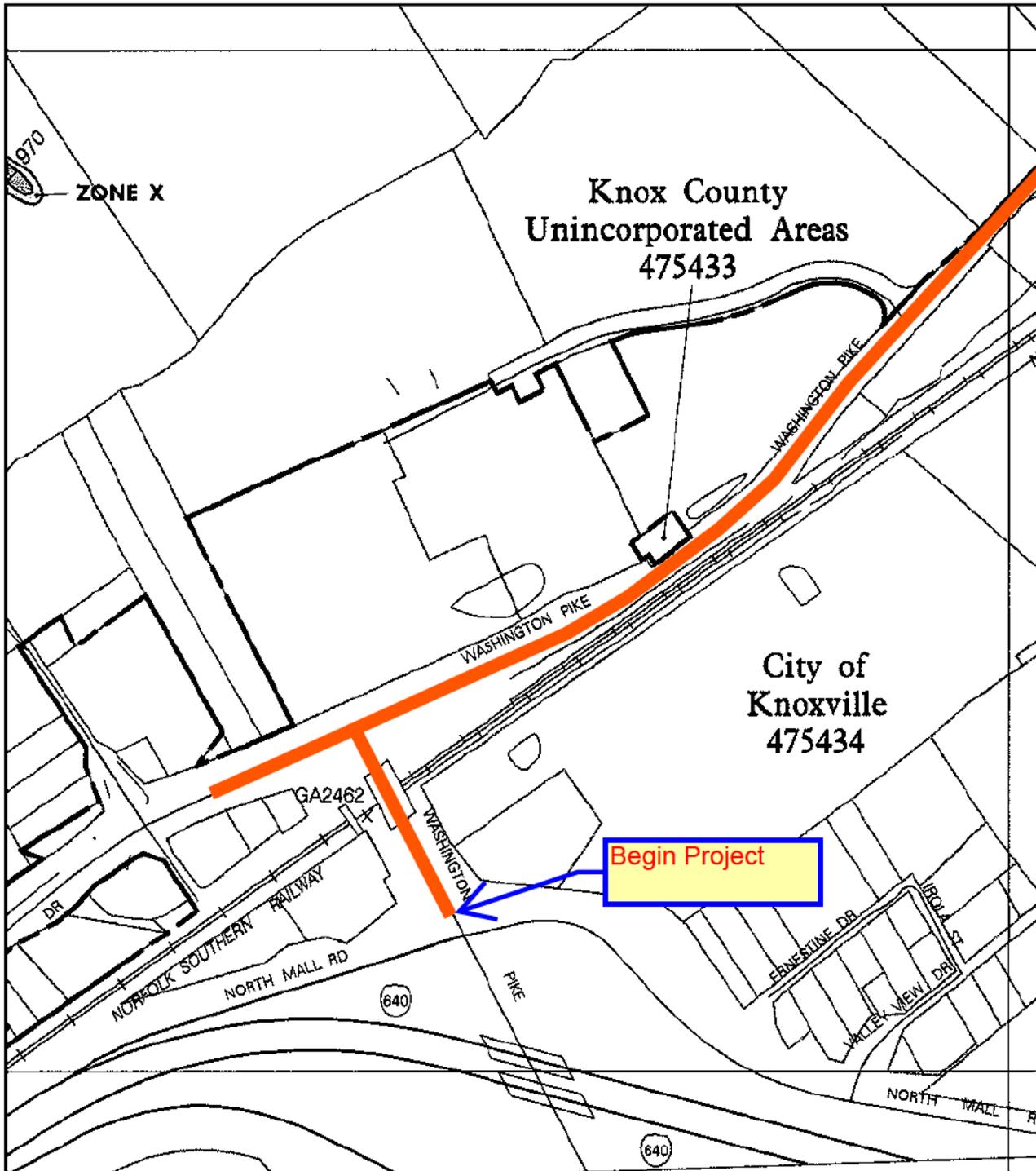
The State of Tennessee

IS AN EQUAL OPPORTUNITY, EQUAL ACCESS, AFFIRMATIVE ACTION EMPLOYER

cc: Vincent Pontello, Wildlife Biologist/East TN TDOT Liaison
Rob Lindbom, Region IV Habitat Biologist
John Gregory, Region IV Manager
John Griffith, USFWS
Stephanie Whitaker, TDEC Division of Natural Areas



Appendix F:
FEMA Firm Map



PANEL 0142F

FIRM
FLOOD INSURANCE RATE MAP
KNOX COUNTY,
TENNESSEE
AND INCORPORATED AREAS

PANEL 142 OF 430
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
KNOX COUNTY	475433	0142	F
KNOXVILLE, CITY OF	475434	0142	F

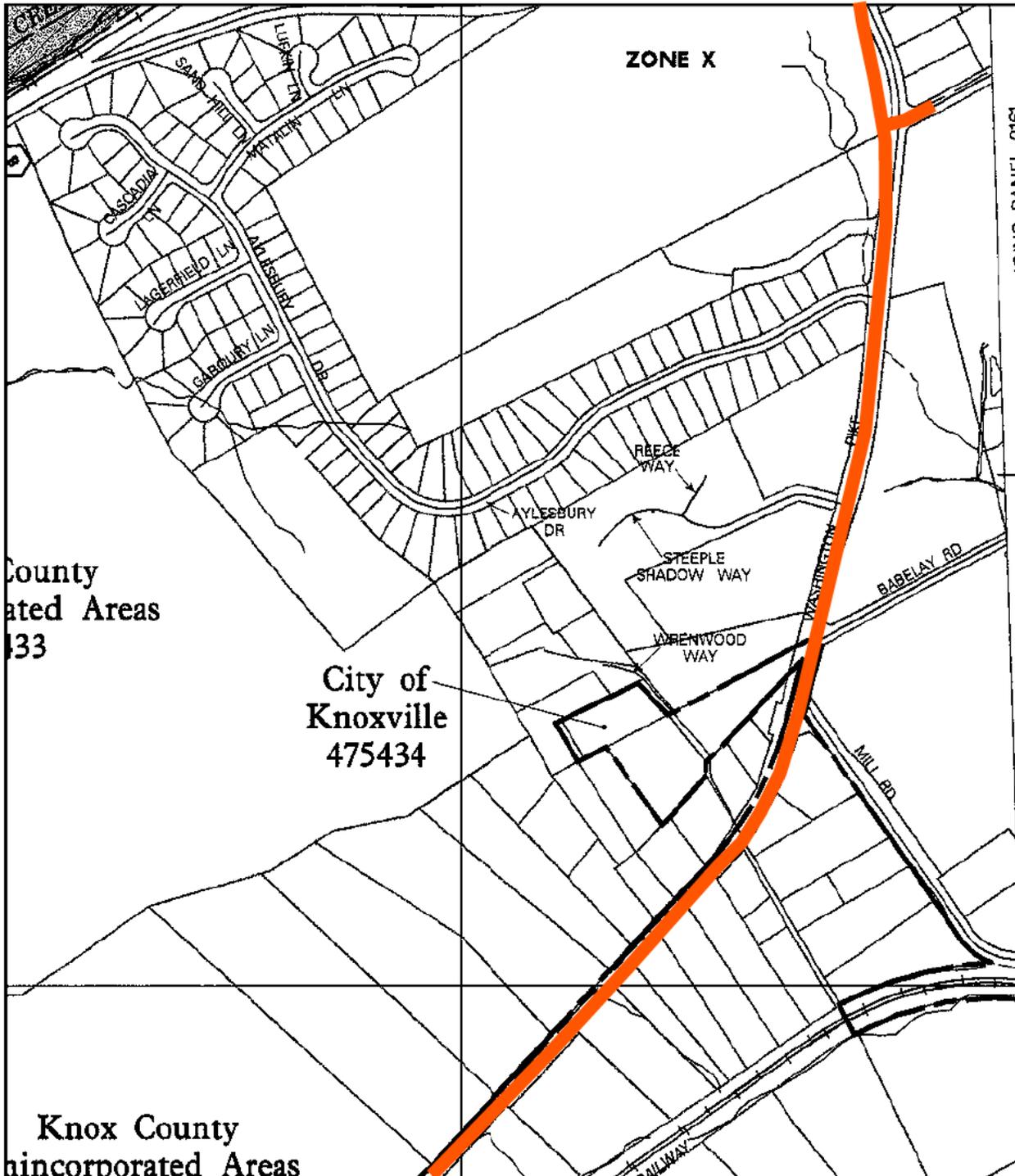
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
47093C0142F

EFFECTIVE DATE
MAY 2, 2007

Federal Emergency Management Agency

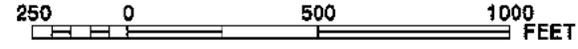
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



JOINS PANEL 0161



MAP SCALE 1" = 500'



NFIIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0142F

**FIRM
FLOOD INSURANCE RATE MAP
KNOX COUNTY,
TENNESSEE
AND INCORPORATED AREAS**

PANEL 142 OF 430

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
KNOX COUNTY	475433	042	F
KNOXVILLE, CITY OF	475434	042	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

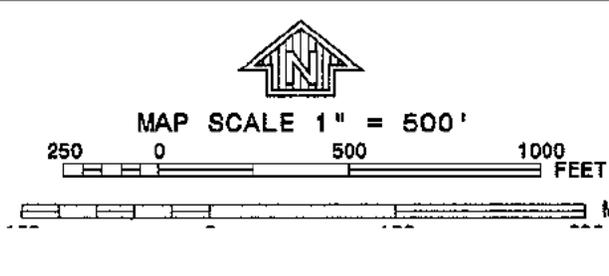
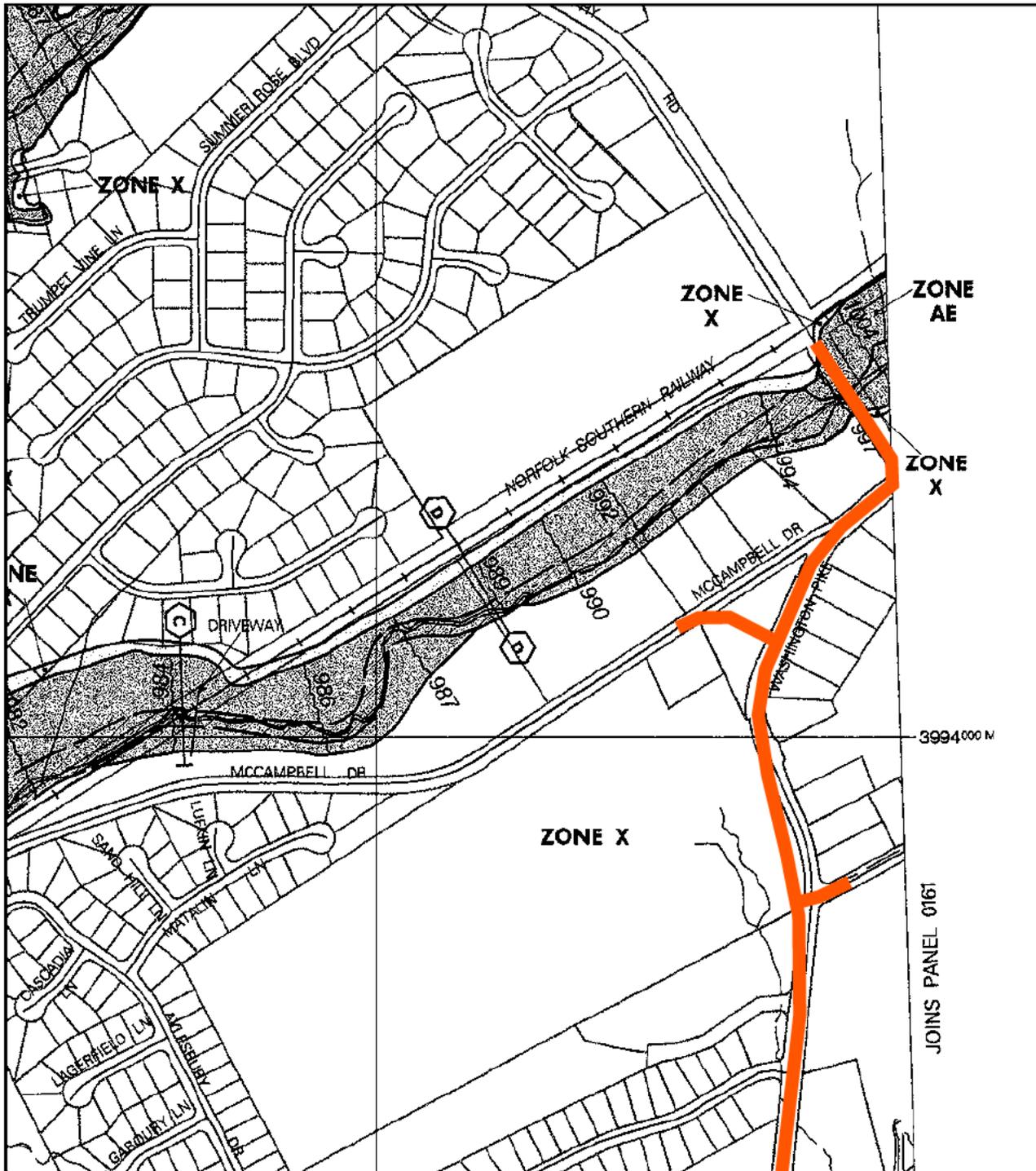


**MAP NUMBER
47093C0142F**

**EFFECTIVE DATE
MAY 2, 2007**

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



NFIP PANEL 0142F

FIRM FLOOD INSURANCE RATE MAP
 KNOX COUNTY, TENNESSEE
 AND INCORPORATED AREAS

PANEL 142 OF 430
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
KNOX COUNTY	475439	042	F
KNOXVILLE, CITY OF	476434	042	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
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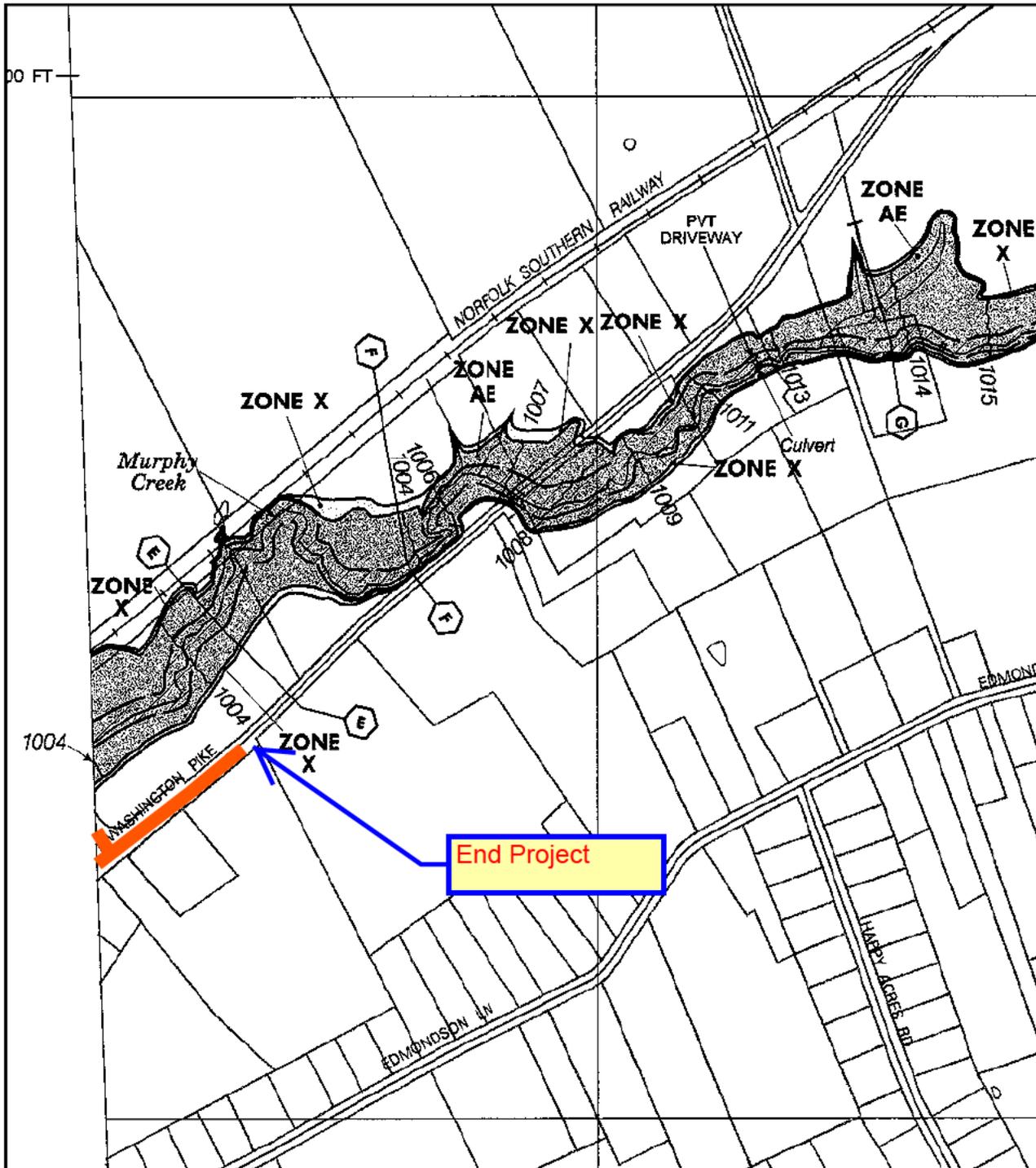
EFFECTIVE DATE
MAY 2, 2007

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

3994.000 M
 JOINS PANEL 0161

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



MAP SCALE 1" = 500'



PANEL 0161F

FIRM
FLOOD INSURANCE RATE MAP
KNOX COUNTY,
TENNESSEE
AND INCORPORATED AREAS

PANEL 161 OF 430

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
KNOX COUNTY	476433	0161	F
KNOXVILLE, CITY OF	476434	0161	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
47093C0161F

EFFECTIVE DATE
MAY 2, 2007

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



Appendix G:
Air Quality Coordination

Air Quality Analysis Report
For
**Washington Pike Roadway Improvements
From I-640 to Murphy Road**

City of Knoxville, Knox County, Tennessee

TDOT PIN: 043090.00

State Project No: 47953-3518-54

Prepared For:
Tennessee Department of Transportation



1100 Marion Street, Suite 200
Knoxville, TN 37921

January 2014

TABLE OF CONTENTS

Executive Summary	1
1.0 Introduction	2
2.0 Air Quality Evaluation.....	4
2.1 National Ambient Air Quality Standards (NAAQS)	4
2.2.1 PM _{2.5} Hot-Spot Analysis	4
2.3 Mobile Source Air Toxics (MSATs)	5
2.4 Construction Air Quality.....	5
2.5 Indirect and Cumulative Effects.....	7
3.0 Summary and Conclusions	7
4.0 References.....	7
Appendix A: Regional Mobility Plan and TIP Project Sheets	
Appendix B: PM _{2.5} Concurrence Information	
Appendix C: MSATs Background Information	

LIST OF FIGURES

Figure 1: Project Location	3
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EXECUTIVE SUMMARY

The air quality evaluation was conducted in accordance with Section 5.3.5 (Air Quality) of the *Tennessee Environmental Procedures Manual*. [1] This report summarizes the potential air quality effects of the Washington Pike Roadway Improvements project in Knoxville, Tennessee. Washington Pike is an urban minor arterial street that extends northeast and southwest to the Interstate 640 (I-640) interchange. Intersections along Washington Pike currently operate at capacity during both morning and evening peak hours. Traffic queues at the intersections often spill over into the adjacent traffic lanes resulting in added congestion and increased delays. Existing traffic volumes along Washington Pike range from 12,100 vehicles per day (vpd) near Mill Road to 8,200 vpd east of Murphy Road. For the design year 2033, the projected traffic volumes are expected to be approximately 33,000 vpd.

The proposed project would widen Washington Pike between I-640 and Murphy Road to four lanes and add turn lanes at intersections. Without improvements to the corridor, the congestion is expected to worsen in the future. The project is designed to improve delays at the study area intersections.

The proposed project is located in the Knoxville ozone and PM_{2.5} nonattainment areas. Therefore, a transportation conformity analysis was completed that concluded that the project conforms to the State Implementation Plan and is "not a project of air quality concern" for PM_{2.5}.

This project is a "Project with Low Potential MSAT Effects" and is not likely to increase emissions of criteria pollutants or Mobile Source Air Toxics (MSATs). Therefore, it is not anticipated to create any adverse effects on the air quality of the study area.

1.0 INTRODUCTION

This report summarizes the results of an analysis of the potential air quality effects of the Washington Pike Roadway Improvements in the City of Knoxville.

Washington Pike is an urban minor arterial street that extends northeast and southwest to the I-640 interchange. This minor arterial provides a multi-lane section through the I-640 interchange and across the Norfolk Southern Railway to Greenway Drive where Washington Pike turns right and continues as a two lane facility to the City Limits at Murphy Road. Signalized intersection exists at I-640 interchange ramp, Greenway Drive, Mill Road, and Murphy Road within the corridor. The project location is shown in Figure 1.

Existing traffic volumes along Washington Pike range from 12,100 vpd near Mill Road to 8,200 vpd east of Murphy Road. For the design year 2033, the projected traffic volumes are expected to be approximately 33,000 vpd. The projected daily truck percentage along this facility is expected to be 2%.

Intersections along Washington Pike currently operate at capacity during both morning and evening peak hours. Traffic queues at the intersections often spill over into the adjacent traffic lanes resulting in added congestion and increased delays. Without improvements to the corridor, the level of service (LOS) and delays are expected to worsen under the 2033 No Build condition. Widening Washington Pike to four lanes and adding turn lanes at intersections are expected to improve the LOS and delays at the study area intersections.

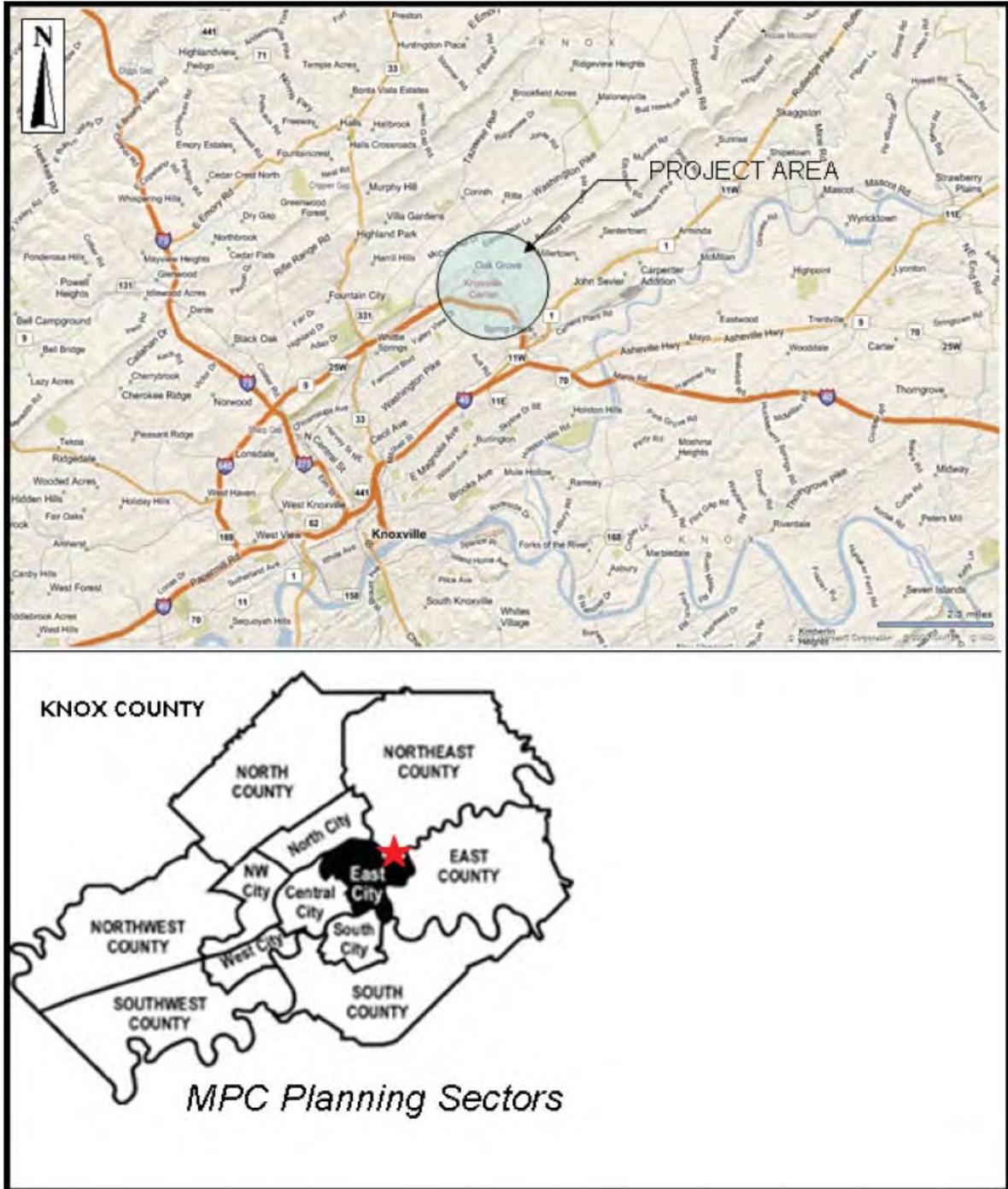
The proposed project is a four lane facility from I-640 to Murphy Road. The proposed section consist of four travel lanes, curb and gutter, sidewalks, and bike lanes. The project length is approximately 1.73 miles (9,130 feet). The proposed right of way width is 200 feet to accommodate future capacity and innovative storm water treatment. The goals and objectives of the project are to:

- Create a traffic circulation system that minimizes conflicts between pedestrians, bicyclists, and vehicles;
- Enhance Washington Pike to adequately serve the commercial/retail/residential development in the area relative to capacity, safety, circulation, and access to I-640;
- Improve east-west mobility in the Knoxville Center Mall area;
- Enhance regional and local economic development opportunities;
- Modify key intersections to increase operational safety and capacity;
- Create a greenway system in conjunction with storm water control programs;
- Improve transportation linkages throughout the northeastern quadrant of Knoxville;
- Be compatible with and serve the needs of the surrounding neighborhoods.

The purposes of this analysis to address transportation conformity; MSATs; and construction air quality.

Figure 1: Project Location

Washington Pike
Knoxville, Knox County, TN



2.0 AIR QUALITY EVALUATION

2.1 *National Ambient Air Quality Standards (NAAQS)*

The EPA has established allowable concentrations and exposure limits called the National Ambient Air Quality Standards (NAAQS) for various “criteria” pollutants. These pollutants include carbon monoxide (CO), nitrogen oxides (NO_x), O₃, particulate matter (PM₁₀ and PM_{2.5}), sulfur oxides (SO_x), and lead (Pb).

In accordance with the Clean Air Act Amendments of 1990 (CAAA of 1990), EPA identified areas that did not meet the NAAQS for the criteria pollutants and designated them as “nonattainment” areas. Once a nonattainment area meets the NAAQS, it is redesignated as a “maintenance” area.

The proposed project is located in Knoxville, Knox County, Tennessee. Knoxville has been designated as a nonattainment area for ozone (8-hour) and PM_{2.5}.

2.2 *Transportation Conformity*

Transportation conformity is a process required of Metropolitan Planning Organizations (MPOs) pursuant to the CAAA of 1990. CAAA require that transportation plans, programs, and projects in nonattainment or maintenance areas that are funded or approved by the Federal Highway Administration (FHWA) be in conformity with the State Implementation Plan (SIP), which represents the State’s plan to either achieve or maintain the NAAQS for a particular pollutant.

Projects conform to the SIP if they are included in a fiscally constrained and conforming Long Range Transportation Plan (LRTP) or Transportation Improvement Program (TIP). The project is located in the Knoxville O₃ and PM_{2.5} nonattainment areas. This project is included in the Knoxville Regional Transportation Planning Organization *2009-2040 Knoxville Regional Mobility Plan* as LRMP #615 and the *2011-2014 Transportation Improvement Program* as TIP #2011-049. Therefore, the project is in conformity with the SIP. A copy of the regional mobility plan and TIP project sheets are provided in Appendix A.

2.2.1 *PM_{2.5} Hot-Spot Analysis*

TDOT completed a PM_{2.5} Hot-Spot Determination for the project that concluded that the project was “not a project of air quality concern.” TDOT submitted this determination to the Knoxville Area Interagency Consultation (IAC) group on November 15, 2012. The IAC members concurred with TDOT’s determination on the following dates: FHWA, November 27, 2012; EPA, November 26, 2012; TDEC, November 16, 2012; and Knox County, November 26, 2012. The PM_{2.5} Hot-Spot Determination, IAC concurrence responses, and PM_{2.5} clearance record are provided in Appendix B.

2.3 MOBILE SOURCE AIR TOXICS (MSATS)

On February 3, 2006, the FHWA released “*Interim Guidance on Air Toxic Analysis in NEPA Documents.*” This guidance was superseded on September 30, 2009 and most recently on December 6, 2012 by FHWA’s “*Interim Guidance Update on Air Toxic Analysis in NEPA Documents.*” [1] The purpose FHWA’s guidance is to advise on when and how to analyze Mobile Source Air Toxics (MSATs) in the NEPA process for highways. This guidance is interim, because MSAT science is still evolving. As the science progresses, FHWA will update the guidance.

The qualitative analysis presented below provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The assessment is derived in part from a study conducted by the FHWA entitled “*A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives.*” [2] Additional information regarding MSATs is provided in Appendix C.

FHWA’s Interim Guidance groups projects into the following categories:

- Exempt Projects and Projects with no Meaningful Potential MSAT Effects;
- Projects with Low Potential MSAT Effects; and,
- Projects with Higher Potential MSAT Effects.

FHWA’s Interim Guidance provides examples of “Projects with Low Potential MSAT Effects.” These projects include minor widening projects and new interchanges, such as those that replace a signalized intersection on a surface street or where design year traffic projections are less than 140,000 to 150,000 AADT.

The Build Alternative includes the widening of Washington Pike. The highest projected design year 2033 AADT on Washington Pike is 33,000 vpd and substantially lower than the FHWA criterion. Therefore, the project meets the criteria for a “Project with Low Potential MSAT Effects.”

For both the No-Build and Build Alternative, the amount of MSATs emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The estimated VMT for the Build Alternative is essentially the same as the VMT for the No-Build Alternative. Therefore, it is expected that there would be no appreciable difference in overall MSAT emissions between the No-Build and Build Alternatives.

Any emissions increases would also be offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA’s MOVES2010b model, emissions of all of the priority MSAT decrease as speed increases. Travel speeds for the Build Alternative are expected to be higher than for the No-Build Alternative.

Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA’s national control programs that are projected to reduce annual MSAT emissions by over 80 percent between 2010 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after

accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated for the Build Alternative will have the effect of moving some traffic closer to nearby sensitive land uses; therefore, under the Build Alternative there may be localized areas where ambient concentrations of MSATs could be higher than under the No-Build Alternative.

However, the magnitude and the duration of these potential increases compared to the No-Build Alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts.

In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No-Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSATs will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Substantial construction-related MSAT emissions are not anticipated for this project as construction is not planned to occur over an extended building period. However, construction activity may generate temporary increases in MSAT emissions in the project area.

- [1] *Interim Guidance Update on Air Toxic Analysis in NEPA Documents*, FHWA, December 6, 2012.
http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/aqintguidmem.cfm
- [2] Claggett, M., et. al., "A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives," Federal Highway Administration, Resource Center.

2.4 Construction Air Quality

This project will result in the temporary generation of construction-related pollutant emissions and dust that could result in short-term air quality impacts. These construction-related impacts will be mitigated through the implementation of Best Management Practices, which are included in *TDOT's Standard Specifications for Road and Bridge Construction*. All construction equipment shall be maintained, repaired and adjusted to keep it in full satisfactory condition to minimize pollutant emissions.

2.5 Indirect and Cumulative Effects

The forecasted traffic volumes for most projects typically account for any redistribution of traffic that would occur as a result of the project. Therefore, the air quality analysis addresses any indirect traffic-related air quality impacts that might occur.

Additionally, the forecast traffic volumes include expected traffic growth and other planned and programmed projects in the area. As a result, the air quality analysis addresses the traffic-related cumulative air quality impacts of the project.

3.0 SUMMARY AND CONCLUSIONS

This project will not add substantial new capacity or create a facility that is likely to significantly increase emissions. Therefore, it is not anticipated to create any adverse effects on the air quality of the study area.

TDOT completed a PM_{2.5} Hot-Spot Determination for this project in accordance with TDOT's PM_{2.5} Hot Spot Determination Process and Procedures and concluded that the project is "Not a Project of Air Quality Concern." This determination was submitted to the Knoxville area IAC group on November 15, 2012. The IAC members concurred with TDOT's determination.

4.0 REFERENCES

1. *The Green Book Nonattainment Areas for Criteria Pollutants*, EPA, July 31, 2013.
<http://www.epa.gov/airquality/greenbook/>
2. *Interim Guidance on Air Toxic Analysis in NEPA Documents*, FHWA, February 3, 2006.
<http://www.fhwa.dot.gov/environment/airtoxic/020306guidmem.htm>
3. *Interim Guidance Update on Air Toxic Analysis in NEPA Documents*, FHWA, December 6, 2012.
http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/aqintguidmem.cfm
4. Claggett, M., et. al., "A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives," Federal Highway Administration, Resource Center.

APPENDIX A
REGIONAL MOBILITY PLAN AND TIP PROJECT SHEETS

Knoxville Regional Transportation Planning Organization Long Range Regional Mobility Plan 2040 (Adopted April 24, 2013)

RMP#	Jurisdiction	Project Name	Termini	Length (mi.)	Project Description	Priority	Horizon Year	Total Horizon Year Cost	Funding Source	Federal Share (%)	State Share (%)	Local Share (%)
13-203	Alcoa	Robert C. Jackson Extension / New Road Construction, Phase 2	Louisville Rd to US 129 Bypass	0.5	Extension of Robert C. Jackson, Phase 1. Construct new 4-lane section and grade separated interchange connecting US 129 and Associates Blvd	2	2024	\$42,161,108	STP	80%	20%	0%
09-605	Knox Co	Schaad Rd Extension / New Road Construction	Middlebrook Pk (SR 169) to west of Oak Ridge Hwy (SR 62)	4.6	Construct new 4-lane road with median, 6' sidewalks, 2 grade separated rail crossings	3	2024	\$44,292,662	Local	0%	0%	100%
09-615	Knoxville	Washington Pk Widening	I-640 to Murphy Rd	1.6	Widen 2-lane to 4-lane	2	2024	\$21,398,032	NHPP	80%	20%	0%
09-624	Knoxville	Cedar Bluff Rd Intersection Improvements	Cross Park Dr to Peters Rd	0.4	Intersection and Operational Improvements	2	2024	\$1,269,913	CMAQ	80%	0%	20%
09-629	Farragut	I-40/75 at Campbell Station Rd Interchange Improvements	Interchange at Campbell Station Rd	0.0	Reconfigure existing interchange to improve capacity, safety, and operations	1	2024	\$48,567,819	NHPP	80%	20%	0%
09-638	Knox Co	Oak Ridge Hwy (SR 62) Widening	Schaad Rd to Byington-Beaver Ridge Rd (SR 131)	4.2	Widen 2-lane to 4-lane with TWLTL most likely as well as bike lanes and sidewalks	1	2024	\$41,794,358	NHPP	80%	20%	0%
09-641	Knox Co	Tazewell Pk (SR 331) Widening	Emory Rd (SR 131) to Barker Rd	1.2	Widen 2-lane to 4-lane	3	2024	\$11,941,245	STP	80%	20%	0%
09-642	Knox Co	Westland Dr Reconstruction	Morrell Rd to Ebenezer Rd	2.7	Reconstruct 2-lane section	3	2024	\$17,766,488	HSIP	80%	0%	20%
09-644	Knox Co	Gov John Sevier Hwy (SR 168) Widening	Alcoa Hwy (US 129 / SR 115) to Chapman Hwy (US 441 / SR 71)	6.5	Widen 2-lane to 4-lane	2	2024	\$64,681,744	STP	80%	0%	20%
09-645	Knox Co	Northshore Dr (SR 332) Reconstruction	Morrell Rd to Ebenezer Rd	3.5	Reconstruct 2-lane section	4	2024	\$21,010,709	HSIP	80%	20%	0%
09-646	Knox Co	Northshore Dr (SR 332) Reconstruction	Pellissippi Pkwy (I-140) to Concord Rd (SR 332)	4.5	Reconstruct 2-lane section	2	2024	\$26,744,366	STP	80%	20%	0%
09-648	Knox Co	Pellissippi Pwy (SR 162) at Lovell Rd (SR 131) Interchange Improvements	Interchange at Lovell Rd (SR 131)	0.0	Reconfigure existing interchange to improve safety and operations	1	2024	\$22,858,432	NHPP	80%	20%	0%
09-649	Knox Co	Pellissippi Pwy (SR 162) at Oak Ridge Hwy (SR 62) Interchange Improvements	Interchange at Oak Ridge Hwy (SR 62)	0.0	Reconfigure existing interchange to improve safety and operations	2	2024	\$38,097,387	NHPP	80%	20%	0%
09-650	Knox Co	Byington-Beaver Ridge Rd (SR 131) Railroad Underpass	At One-Lane Railroad Underpass	0.2	Widen railroad underpass	2	2024	\$3,076,396	NHPP	80%	20%	0%
09-656	Knoxville	Millertown Pk Widening	I-640 to Mill Rd	0.6	Widen 2-lane and 4-lane sections to 4-lane and 6-lane sections	1	2024	\$8,254,434	L-STP	80%	0%	20%
10-699	Farragut	Kingston Pk (US 11/70 / SR 1) at Campbell Station Rd Intersection Improvements	Intersection w/ Campbell Station Rd	0.4	Construct additional eastbound and northbound left turn lanes	3	2024	\$6,730,538	CMAQ	80%	20%	0%
10-700	Farragut / Knox Co	Campbell Station Rd Widening	Snyder Rd to Yarnell Rd	1.8	Widening to include addition of center turn lane, bike/ped facilities	2	2024	\$19,048,694	STP	80%	20%	0%

Knoxville Regional Transportation Planning Organization TRANSPORTATION IMPROVEMENT PROGRAM FY 2011-2014

TIP No.	<input type="text" value="2011-049"/>	Revision No.	<input type="text" value="0"/>	
TDOT PIN	<input type="text" value="110301.00"/>	L RTP No.	<input type="text" value="615"/>	
Project Name	<input type="text" value="Washington Pk"/>			
Lead Agency	<input type="text" value="City of Knoxville"/>			
Total Project Cost	<input type="text" value="\$15,146,000"/>			

Project Description	<input type="text" value="Widen from 2 lanes to a 5 lane section with curb, gutter, sidewalk, and bike lanes."/>			
Termini/Intersection	<input type="text" value="North of I-640 to Murphy Rd"/>			
Counties	<input type="text" value="Knox"/>			
City/Agency	<input type="text" value="City of Knoxville"/>			
Length	<input type="text" value=""/>	(miles)	Conformity Status	<input type="text" value="Non-Exempt"/>

Additional Details	<input type="text" value="Transferred construction dollars to Pleasant Ridge Rd project (2008-041) to fund CEI in March 2008. Add PE & ROW funds in Aug 09."/>			
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Programmed Funds

FY	Type of Work	Funding Type	Total Funds	Federal	State	Local	Other
2011	ENG	L-STP	\$750,000	\$600,000	\$0	\$150,000	\$0
2012	ROW	L-STP	\$2,596,000	\$2,076,800	\$0	\$519,200	\$0
2014	CON	L-STP	\$11,800,000	\$9,440,000	\$0	\$2,360,000	\$0
Total			\$15,146,000	\$12,116,800	\$0	\$3,029,200	\$0

Revision Date	<input type="text" value=""/>
Revision Details	<input type="text" value=""/>
Previous TIP No.	<input type="text" value="2006-022, 2008-053"/>



TIP # / LRTP #	TDOT #	Project Name	Limits	Description	Lead Agency	Year	Phase	Source	Total Funding	Federal Funding	State Funding	Local Funding	Other Funding	Status
2011-045 / 610	101204	Western Ave (SR 62)	Major Ave to Texas Ave	Widen from 2 to 4 lane section with curb and gutter.	TDOT	2011	ROW	STP TOTAL	\$2,800,000 \$2,800,000	\$2,240,000 \$2,240,000	\$560,000 \$560,000	\$0 \$0	\$0 \$0	
2011-046 / 698		Kingston Pk/Everett Rd Intersection Improvements	From 1,200 ft west of Everett Rd to approximately 500 ft east of Everett Rd	Add center turn lane. Also includes widening of bridge over Little Turkey Creek, traffic signal, etc.	Town of Farragut	2011 2011	CON CON	L-STP SAFETY TOTAL	\$1,000,000 \$800,000 \$1,800,000	\$800,000 \$0 \$800,000	\$200,000 \$800,000 \$1,000,000	\$0 \$0 \$0	\$0 \$0 \$0	
2011-047 / 616	101008.00	Pleasant Ridge Rd	Knoxville city limits to and including the Merchant Dr intersection to Wilkerson Rd	Add Center Turn Lane on Pleasant Ridge Rd from Merchant Dr to city limits and on Merchant Dr from Pleasant Ridge Rd to Wilkerson Rd.	City of Knoxville	2013 2013	PE-D PE-N	L-STP L-STP TOTAL	\$87,000 \$87,000 \$174,000	\$69,600 \$69,600 \$139,200	\$0 \$0 \$0	\$17,400 \$17,400 \$34,800	\$0 \$0 \$0	
2011-048 / E+C	101424.00	Pleasant Ridge Rd	Merchant Dr to I-640	Widen from 2 lanes to 3 lanes with sidewalks. Include drainage and lighting work.	City of Knoxville	2011	OVRRUN	L-STP TOTAL	\$100,000 \$100,000	\$80,000 \$80,000	\$0 \$0	\$20,000 \$20,000	\$0 \$0	
2011-049 / 615	110301.00	Washington Pk	North of I-640 to Murphy Rd	Widen from 2 lanes to a 5 lane section with curb, gutter, sidewalk, and bike lanes.	City of Knoxville	2011 2012 2014	ENG ROW CON	L-STP L-STP L-STP TOTAL	\$750,000 \$2,596,000 \$11,800,000 \$15,146,000	\$600,000 \$2,076,800 \$9,440,000 \$12,116,800	\$0 \$0 \$0 \$0	\$150,000 \$519,200 \$2,360,000 \$3,029,200	\$0 \$0 \$0 \$0	
2011-050 / 700		Campbell Station Rd Widening	North of I-40/75 from Snyder Rd to Yarnell Rd	Conduct Transportation Planning Report. Initial concept is to widen to 3 12-ft lanes with 4-ft bike lanes, curb and gutters, sidewalk, and walking trail.	Town of Farragut	2011 2013 2013	TPR PE-D PE-N	L-STP L-STP L-STP TOTAL	\$50,000 \$200,000 \$200,000 \$450,000	\$40,000 \$160,000 \$160,000 \$360,000	\$0 \$0 \$0 \$0	\$10,000 \$40,000 \$40,000 \$90,000	\$0 \$0 \$0 \$0	
2011-051 / 699		Kingston Pk/Campbell Station Rd Intersection Improvements		Widen to allow an additional left turn lane for eastbound motorists turning onto northbound Campbell Station Rd.	Town of Farragut	2013 2013 2014	PE-D PE-N ROW	L-STP L-STP L-STP TOTAL	\$150,000 \$150,000 \$400,000 \$700,000	\$120,000 \$120,000 \$320,000 \$560,000	\$30,000 \$30,000 \$80,000 \$140,000	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	
2011-052 / 600	107015	Watt Rd Extension and Old Stage Rd Improvements	Watt Rd: From Kingston Pk (SR-1) to Old Stage Rd. Old Stage Rd: From SR-2 to Dixon Rd	Widening of Old Stage Rd from Johnson's Corner Rd to western town limits and extension of Watt Rd from its current termini to Old Stage Rd.	Farragut	2011 2012	ROW CON	L-STP L-STP TOTAL	\$414,400 \$3,522,400 \$3,936,800	\$331,520 \$2,817,920 \$3,149,440	\$0 \$0 \$0	\$82,880 \$704,480 \$787,360	\$0 \$0 \$0	
2011-053 / 409	100489.00	US-321/SR-73 - New Bridge	SR-2 (US-11) to east of Little Tennessee River (Ft Loudoun / Tellico Dam)	Construct new 4 lane.	TDOT	2011	CON	NHS TOTAL	\$33,000,000 \$33,000,000	\$26,400,000 \$26,400,000	\$6,600,000 \$6,600,000	\$0 \$0	\$0 \$0	
2011-054 / Consistent with Chapter 4		I-140 (Pellissippi Pwy)	Interchange area at SR-115 / US-129 (Alcoa Hwy)	Install traffic cameras and associated hardware / software, etc.	TDOT	2011	CON	IM TOTAL	\$500,000 \$500,000	\$450,000 \$450,000	\$50,000 \$50,000	\$0 \$0	\$0 \$0	
2011-055 / 603	100997.0	SR-131 (Emory Rd)	SR-9 (US-25W) to south of Gill Rd (Winwood Rd in Powell)	Widen to 4 lane facility with center turn lane.	TDOT	2011	CON	STATE TOTAL	\$20,500,000 \$20,500,000	\$0 \$0	\$20,500,000 \$20,500,000	\$0 \$0	\$0 \$0	
2011-056 / 259		McCammon Ave Relocation		Realign McCammon Ave at Bessemer St to create a signalized 4-leg intersection.	City of Maryville	2011 2011	CON ROW	STP STP TOTAL	\$400,000 \$200,000 \$600,000	\$320,000 \$160,000 \$480,000	\$0 \$0 \$0	\$80,000 \$40,000 \$120,000	\$0 \$0 \$0	
2011-057 / Consistent with CMP	108732	Traffic Control Equipment Upgrade - Knoxville		Purchase of signal controllers, signal monitors, closed loop equipment and software.	City of Knoxville	2011	PUR	L-STP TOTAL	\$1,000,000 \$1,000,000	\$800,000 \$800,000	\$0 \$0	\$200,000 \$200,000	\$0 \$0	
2011-058 / Consistent with Chapter 4		I-40/I-75 Interchange Traffic Cameras		Install traffic cameras and associated hardware/software, etc.	TDOT	2011	CON	IM TOTAL	\$500,000 \$500,000	\$450,000 \$450,000	\$50,000 \$50,000	\$0 \$0	\$0 \$0	

APPENDIX B
PM_{2.5} CONCURRENCE INFORMATION



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900 - JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334**

PM_{2.5} Hot-Spot Determination

Project Name: Washington Pike from I-640 to Murphy Road
PIN: 043090.00
Project Number: STP-M-9109(64)
County: Knox
Date: November 15, 2012

Statement of Purpose and Legal Requirements

Section 176(c) of the Clean Air Act, as amended, requires that transportation agencies, such as the Tennessee Department of Transportation (TDOT), demonstrate that all proposed transportation projects that are located in nonattainment or maintenance areas, and require federal approval or federal money, are consistent with the air quality goals found in the State Implementation Plan (SIP) and the corresponding Transportation Improvement Program (TIP) and other conforming plans.

The process to ensure this consistency is called Transportation Conformity. Conformity to the SIP means that transportation activities will not cause new violations of the National Ambient Air Quality Standards (NAAQS), will not worsen existing violations, and will not delay attainment of the NAAQS.

Project-level conformity is required by Title 40 Code of Federal Regulations (CFR) Part 93, more commonly known as the Transportation Conformity Rule. When evaluating project-level conformity for particulate matter that is 2.5 microns in diameter or smaller, the process is called a PM_{2.5} Hot Spot Determination.

The Transportation Conformity Rule instructs the U.S. Department of Transportation (DOT) to ensure that all proposed transportation projects are in conformity before releasing federal funds for the project. To accomplish this, the FHWA and/or FTA require that all proposed transportation projects in a PM_{2.5} nonattainment or maintenance area be classified as: 1) Exempt, 2) Not a Project of Air Quality Concern, or 3) Project of Air Quality Concern.

In §93.126 and §93.128, the Transportation Conformity Rule establishes a list of transportation projects that are categorically exempt from conformity determination. For nonexempt projects, TDOT must determine if the project has the potential to adversely impact air quality and FHWA and/or FTA must make the same determination once the interagency consultation (IAC) process is complete.

This proposed transportation project is located in Knox County, which is currently classified as nonattainment for the PM_{2.5} NAAQS by the U.S. Environmental Protection Agency. TDOT is presenting the following conformity determination for IAC review to demonstrate this project is **NOT A PROJECT OF AIR QUALITY CONCERN** and that it does conform to the SIP.

Project Description

The project involves widening Washington Pike to provide four travel lanes from I-640 to Murphy Road and associates intersections improvements along the corridor. The project location and proposed typical cross-section are provided in Attachment A,

PM_{2.5} Hot Spot Determination Questions and Answers

1. Is this project in a conforming Plan/TIP?

Yes. This project is included in the Knoxville Regional Transportation Planning Organization 2009-2034 Knoxville Regional Mobility Plan as LRMP #615 and the Transportation Improvement Program as TIP #2011-049. The project sheets are provided in Attachment B.

2. Is the project on a new or expanded highway or expressway that serves a significant volume of diesel truck traffic, such as a facility with greater than 125,000 annual average daily traffic (AADT) and 8% or more of such AADT is diesel truck traffic?

No. The projected design year 2033 AADT on Washington Pike is 33,000 vehicles per day with 2% trucks.

3. Does the project construct new exit ramps or other highway facility improvements that connect a highway or expressway to a major freight, bus, or intermodal terminal?

No.

4. Does the project expand an existing highway or other facility that already has a congested intersection (Operates at LOS D, E, or F) and will this project result in a significant increase in the number of diesel trucks?

Yes. The project will expand several roadway intersections along Washington Pike that currently operate at poor levels of service because they are at or over capacity. The additional through traffic lanes on Washington Pike and associated intersection improvements will significantly improve traffic operations and reduce delays. The projected LOS at the corridor intersections are summarized in the table below.

Level of Service						
Intersection	2013 LOS (v/c)		2033 No Build LOS (v/c)		2033 Build LOS (v/c)	
	AM	PM	AM	PM	AM	PM
Washington Pike and Murphy Rd	F (1.54)	C (0.89)	F (2.70)	F (1.61)	F (1.46)	F (1.41)
Washington Pike and Mill Rod	A (0.77)	F (1.39)	F (1.34)	F (2.39)	B (0.88)	F (1.30)
Washington Pike and Greenway Dr	F (1.10)	B (0.76)	F (2.17)	F (1.29)	F (1.08)	C (0.90)
Washington Pike and N Mall Rd/I-640 Ramp	F (1.38)	B (0.68)	F (2.55)	E (1.24)	F (2.47)	D (1.04)

The project will not result in a distribution of trucks on the existing roadway network.

5. Does the highway project involve a significant increase in the number of diesel transit buses and/or diesel trucks?

No.

6. Will this project cause or worsen an existing violation?

No. The project is not projected to result in a net change in the number of total vehicles or diesel vehicles on the roadway network and will significantly improve traffic operations and reduce idling along the corridor. Therefore, the project would not cause or worsen an existing violation.

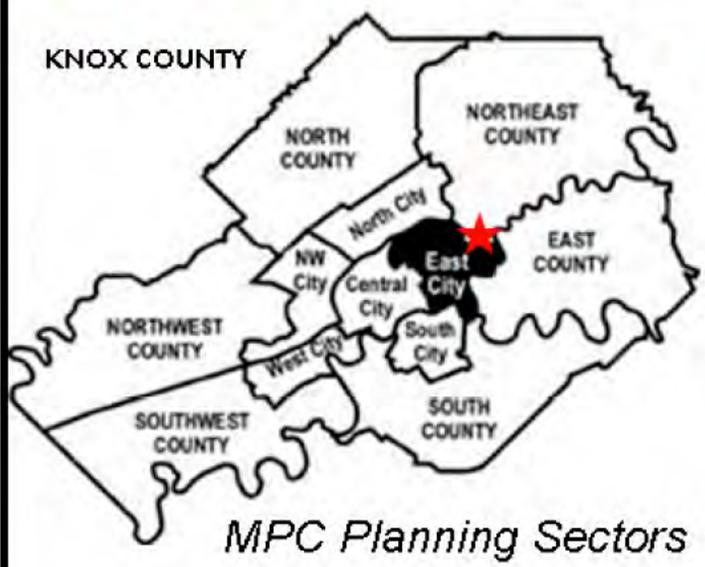
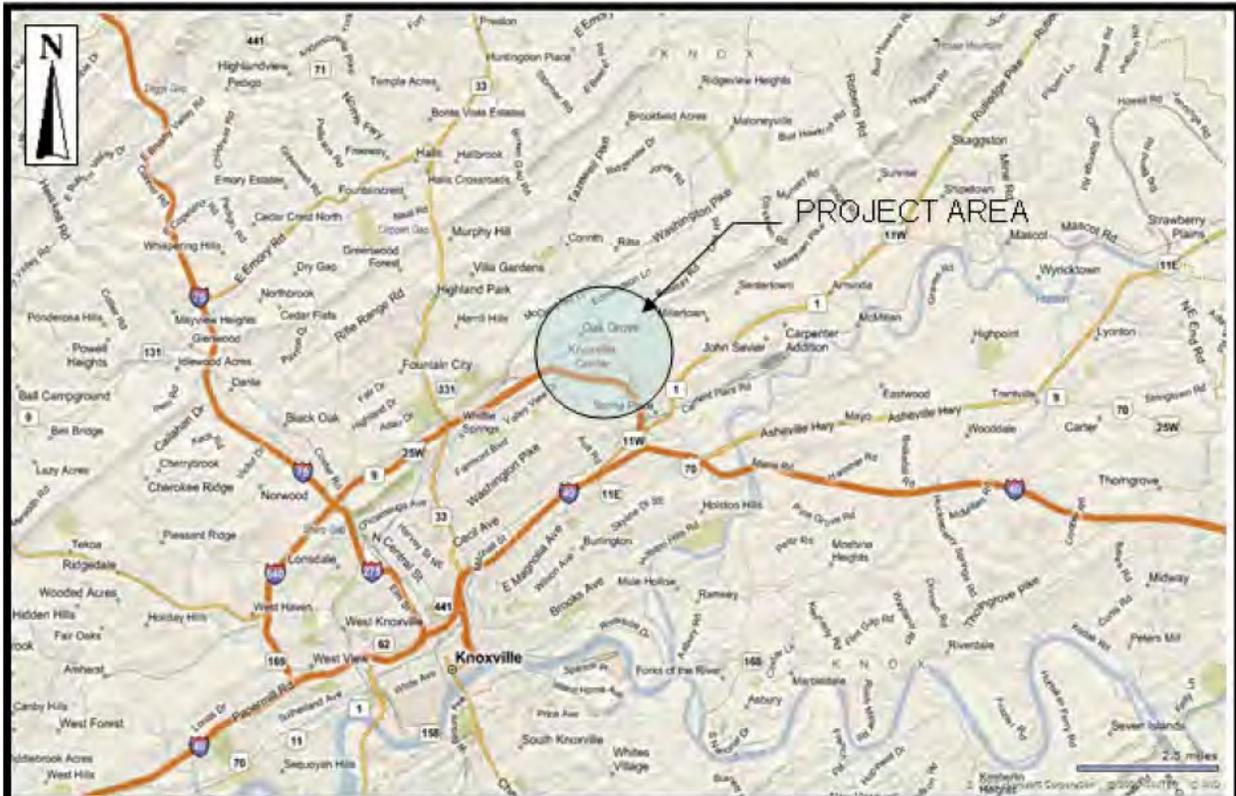
Conclusion

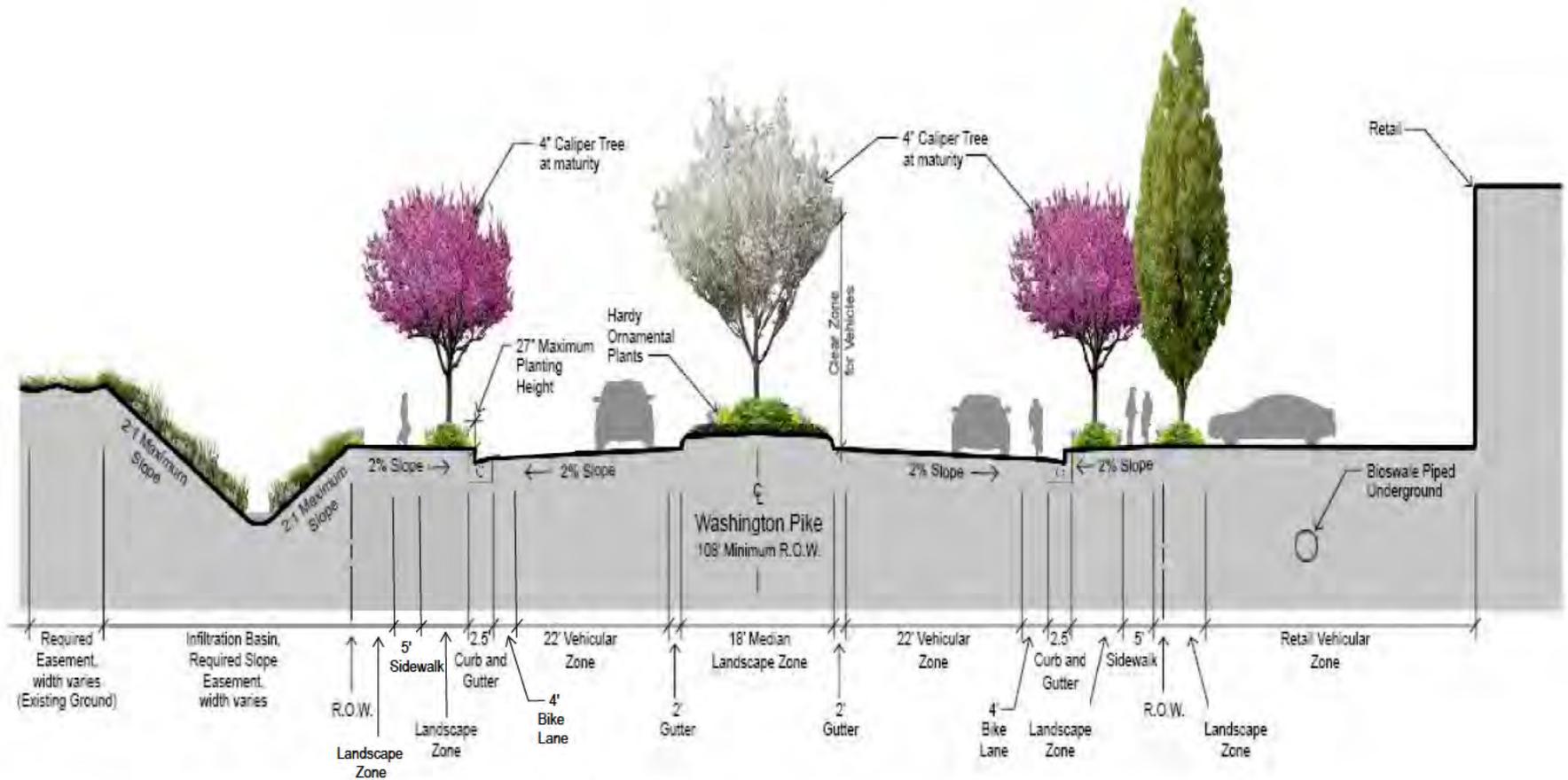
For the reasons provided above, TDOT's PM_{2.5} hot spot determination is that this project is **NOT A PROJECT OF AIR QUALITY CONCERN**, as determined in accordance with 40 CFR §93.123(b)(1), and that this project is in conformity with the SIP. Therefore, the Clean Air Act and 40 CFR §93.116 requirements are met without a qualitative hot spot analysis once the IAC provides concurrence.

Attachment A

PROJECT VICINITY MAP

Washington Pike/Millertown Pike
Transportation Planning Report
Knoxville, Knox County, Tennessee





Washington Pike Roadway Improvements
 From I -640 to Murphy Road

Typical Section

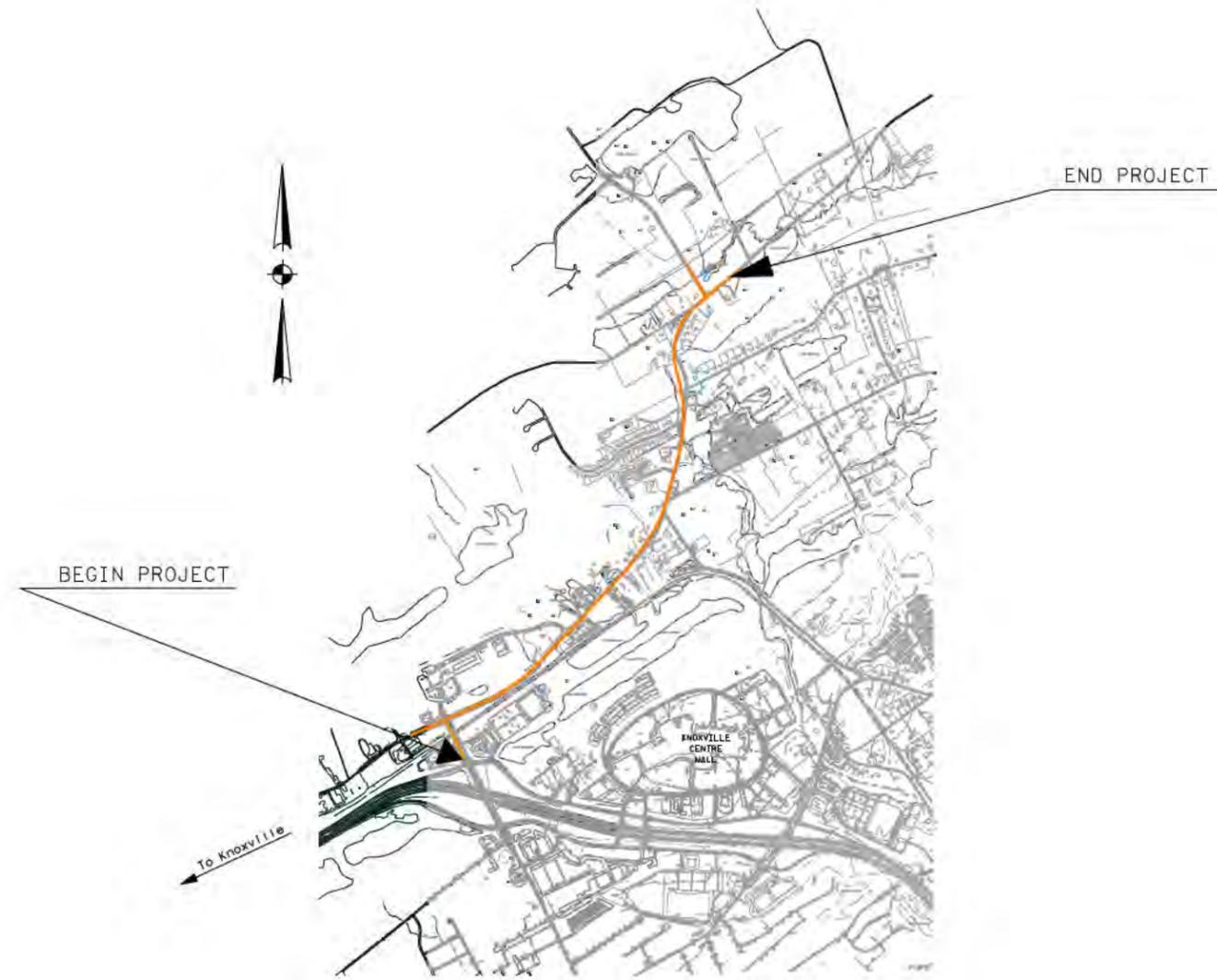
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
KNOXVILLE, TENNESSEE

CITY OF KNOXVILLE	YEAR	ISSUE NO.
	2012	1
KNOX COUNTY	FUNCTIONAL PLANS WASHINGTON PIKE	

WASHINGTON PIKE
ROADWAY PROJECT
FUNCTIONAL



PROJECT LOCATION



**PRELIMINARY
PLANS**

**NO EXCLUSIONS
NO EQUATIONS**

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY OWNER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

DESIGNER BOB HALL CHECKED BY JEFF MIZE, P.E.
P.E. NO. _____

Not To Scale

APPROVED: _____ MAYOR

DATE: _____

DESIGNED BY:
CDM Smith
1100 MARION STREET
SUITE 200
KNOXVILLE, TN. 37921
(865) 963-4300



Attachment B

Table 34: Knoxville Regional Roadway Project List

New LRMP #	Old LRTP #	Route	Termini	Jurisdiction	Length (miles)	Type of Improvement	Proposed Completion Timeframe	Year of Expenditure Cost	Source of Funds	Planning Area	1	2	3	4	5	6	7	8
611	57*	I-640/ Broadway (SR 33) (US 441) Interchange Phase II	I-640/ Broadway (SR 33) (US 441) Interchange	Knoxville	0.0	Construct additional ramps and access improvements	2009 - 2014	\$16 386 668	NHS	KRTPO	√	√		√		√	√	√
612	77*	Western Avenue (SR 62)	Schaad Rd to I-640	Knoxville	3.7	Widen 2-lane to 4-lane w/center turn lane	2009 - 2014	\$30 151 469	STP	KRTPO		√			√	√	√	√
613	94	Cumberland Avenue (SR 1) (US 11/70)	22nd St to 16th St	Knoxville	0.6	Pedestrian Improvements and Reduce from 4 lanes to 2 lanes with center turn lane	2009 - 2014	\$16 386 668	STP-TPO	KRTPO	√		√	√		√	√	√
614	101	Henley Street Bridge (SR 33/71) (US 441)	Bridge over Tennessee River	Knoxville	0.4	Rehabilitate bridge & widen 5-lane to 6-lane	2009 - 2014	\$31 134 669	Bridge	KRTPO	√	√	√	√		√	√	√
615	125	Washington Pike	I-640 to Murphy Rd	Knoxville	1.6	Widen 2-lane to 4-lane	2009 - 2014	\$15 184 979	STP-TPO	KRTPO		√				√	√	√
616	71	Pleasant Ridge Rd/Merchant Dr Phase II	Knoxville City Limits to Merchant Dr / Pleasant Ridge Rd to Wilkerson Rd	Knoxville	1.6	Add center turn lane	2009 - 2014	\$24 033 779	Local	KRTPO		√				√	√	√
617	E7	South Knoxville Waterfront Roadway Improvements	Sevier Ave / Blount Ave from Scottish Pk to James White Pkwy (SR 71)	Knoxville	1.9	Add turn lanes where needed and widen one-lane underpass to two lanes	2009 - 2014	\$6 554 667	HPP	KRTPO		√		√		√	√	√
618	E8	I-275 Industrial Park Access Improvements	I-275 Corridor	Knoxville	N/A	Improve railroad underpasses and make access improvements	2009 - 2014	\$5 462 223	HPP	KRTPO		√		√		√	√	√
619	E10	Various Railroad Crossings	Various Railroad Crossing Locations	Knoxville	N/A	Improve circuitry on vehicle protection devices of at-grade RR crossings throughout Knoxville	2009 - 2014	\$187 900	HPP	KRTPO	√	√			√	√	√	√
620	E11	Cessna Road RR Crossing	Cesna Rd RR crossing	Knoxville	0.0	Improve the at-grade RR crossing at Cessna Rd	2009 - 2014	\$83 900	HPP	KRTPO	√	√				√	√	√
621	New	I-40/75	From I-140 to Lovell Rd (SR 131) Interchange Westbound Direction	Knoxville	1.8	Add full auxiliary lane westbound between interchanges (approx 2 700 ft)	2009 - 2014	\$1 201 689	IM	KRTPO	√	√				√	√	√

Knoxville Regional Transportation Planning Organization TRANSPORTATION IMPROVEMENT PROGRAM FY 2011-2014

TIP No.	<input type="text" value="2011-049"/>	Revision No.	<input type="text" value="0"/>	
TDOT PIN	<input type="text" value="110301.00"/>	L RTP No.	<input type="text" value="615"/>	
Project Name	<input type="text" value="Washington Pk"/>			
Lead Agency	<input type="text" value="City of Knoxville"/>			
Total Project Cost	<input type="text" value="\$15,146,000"/>			

Project Description	<input type="text" value="Widen from 2 lanes to a 5 lane section with curb, gutter, sidewalk, and bike lanes."/>			
Termini/Intersection	<input type="text" value="North of I-640 to Murphy Rd"/>			
Counties	<input type="text" value="Knox"/>			
City/Agency	<input type="text" value="City of Knoxville"/>			
Length	<input type="text" value=""/>	(miles)	Conformity Status	<input type="text" value="Non-Exempt"/>

Additional Details	<input type="text" value="Transferred construction dollars to Pleasant Ridge Rd project (2008-041) to fund CEI in March 2008. Add PE & ROW funds in Aug 09."/>			
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Programmed Funds

FY	Type of Work	Funding Type	Total Funds	Federal	State	Local	Other
2011	ENG	L-STP	\$750,000	\$600,000	\$0	\$150,000	\$0
2012	ROW	L-STP	\$2,596,000	\$2,076,800	\$0	\$519,200	\$0
2014	CON	L-STP	\$11,800,000	\$9,440,000	\$0	\$2,360,000	\$0
Total			\$15,146,000	\$12,116,800	\$0	\$3,029,200	\$0

Revision Date	<input type="text" value=""/>
Revision Details	<input type="text" value=""/>
Previous TIP No.	<input type="text" value="2006-022, 2008-053"/>



Darlene Reiter

From: corbin.davis@dot.gov
Sent: Tuesday, November 27, 2012 9:24 AM
To: Darlene Reiter; Alan Jones; Angela Midgett; Benjamin.Lynorae@epa.gov; teresa_cantrell@nps.gov; Mike.Conger@knoxtrans.org; richd@mymorristown.com; Jim Ozment; laliddington@aqm.co.knox.tn.us; Marc Corrigan; Elizabeth.Martin@dot.gov; asmcdaniel@aqm.co.knox.tn.us; jim_renfro@nps.gov; Robert Rock; Ronnie Porter; Sheckler.Kelly@epa.gov; smith.dianna@epa.gov; LeighAnn.Tribble@dot.gov; Jeff.Welch@knoxtrans.org
Subject: RE: PM2.5 Hot-Spot Determinations for 1) I-40 and Campbell Station Road, Knox County 2) Washington Pike, Knox County and 3) North Central Street, Knox County

Greetings,

The FHWA Tennessee Division concurs with TDOT's determination that the three projects listed below are not projects of air quality concern in regards to transportation conformity.

Regards,
Corbin

Corbin Davis
Planning & Air Quality Specialist
Federal Highway Administration
Tennessee Division
404 BNA Drive
Building 200, Suite 508
Nashville, TN 37217

corbin.davis@dot.gov
Phone: 615-781-5767
Fax: 615-781-5773

From: Darlene Reiter [<mailto:Darlene.Reiter@tn.gov>]
Sent: Thursday, November 15, 2012 3:36 PM
To: Alan Jones; Angela Midgett; Benjamin, Lynorae; Cantrell, Teresa; Conger, Mike; D, Rich; Davis, Corbin (FHWA); Jim Ozment; Liddington, L; Marc Corrigan; Martin, Elizabeth (FTA); McDaniel, A; Renfro, Jim; Robert Rock; Ronnie Porter; Sheckler, Kelly; Smith, Dianna; Tribble, Leigh Ann (FHWA); Welch, Jeff
Subject: PM2.5 Hot-Spot Determinations for 1) I-40 and Campbell Station Road, Knox County 2) Washington Pike, Knox County and 3) North Central Street, Knox County

Knoxville Area IAC:

TDOT has evaluated the following projects and determined that they are NOT A PROJECT OF AIR QUALITY CONCERN.

Project	PIN	County	Description
Interstate 40 (I-40) and Campbell Station Road	114774.00	Knox	Ramp improvements and installation of traffic signals
Washington Pike	043090.00	Knox	Widening
North Central Street	116003.00	Knox	Modification of 4-lane road

The project description and details are provided in the attached PM_{2.5} Hot-Spot Determinations.

TDOT requests your concurrence with our determinations that these projects are NOT A PROJECT OF AIR QUALITY CONCERN. Please respond no later than close of business (4:30 central time) on **November 30, 2012**. If TDOT does not receive a response to the contrary within 10 business days of this email then TDOT will assume that you concur with these determinations.

Thank you.

Darlene D. Reiter, Ph.D., P.E.
TDOT Environmental Division Consultant

Darlene Reiter

From: Sheckler.Kelly@epamail.epa.gov
Sent: Monday, November 26, 2012 7:08 AM
To: Darlene Reiter
Cc: Alan Jones; Angela Midgett; McDaniel, A; Davis, Corbin; Smith.Dianna@epamail.epa.gov; Martin, Elizabeth; Welch, Jeff; Jim Ozment; Renfro, Jim; Liddington, L; Tribble, Leigh Ann; Benjamin.Lynorae@epamail.epa.gov; Marc Corrigan; Conger, Mike; D, Rich; Robert Rock; Ronnie Porter; Cantrell, Teresa
Subject: (3) Re: PM2.5 Hot-Spot Determinations for 1) I-40 and Campbell Station Road, Knox County 2) Washington Pike, Knox County and 3) North Central Street, Knox County

Darlene- thank you for the opportunity to review the three projects listed below - EPA concurs that these projects are not of air quality concern.

Kelly Sheckler
US Environmental Protection Agency- Region 4
Diesel Collaborative and Transportation Outreach Liaison
61 Forsyths Street
Atlanta, Georgia 30303
(404) 562-9222
Sheckler.Kelly@epa.gov

-----Darlene Reiter <Darlene.Reiter@tn.gov> wrote: -----

To: Alan Jones <Alan.Jones@tn.gov>, Angela Midgett <Angela.Midgett@tn.gov>, Lynorae Benjamin/R4/USEPA/US@EPA, "Cantrell, Teresa" <teresa_cantrell@nps.gov>, "Conger, Mike" <Mike.Conger@knoxtrans.org>, "D, Rich" <richd@mymorristown.com>, "Davis, Corbin" <corbin.davis@dot.gov>, "Jim Ozment" <Jim.Ozment@tn.gov>, "Liddington, L" <laliddington@agm.co.knox.tn.us>, Marc Corrigan <Marc.Corrigan@tn.gov>, "Martin, Elizabeth" <Elizabeth.Martin@dot.gov>, "McDaniel, A" <asmcdaniel@agm.co.knox.tn.us>, "Renfro, Jim" <jim_renfro@nps.gov>, Robert Rock <Robert.Rock@tn.gov>, "Ronnie Porter" <Ronnie.Porter@tn.gov>, Kelly Sheckler/R4/USEPA/US@EPA, Dianna Smith/R4/USEPA/US@EPA, "Tribble, Leigh Ann" <LeighAnn.Tribble@fhwa.dot.gov>, "Welch, Jeff" <Jeff.Welch@knoxtrans.org>
From: Darlene Reiter <Darlene.Reiter@tn.gov>
Date: 11/15/2012 04:40PM
Subject: PM2.5 Hot-Spot Determinations for 1) I-40 and Campbell Station Road, Knox County 2) Washington Pike, Knox County and 3) North Central Street, Knox County

Knoxville Area IAC:

TDOT has evaluated the following projects and determined that they are NOT A PROJECT OF AIR QUALITY CONCERN.

Project	PIN	County	Description
Interstate 40 (I-40) and Campbell Station Road	114774.00	Knox	Ramp improvements and installation of traffic signals
Washington Pike	043090.00	Knox	Widening

North Central Street	116003.00	Knox	Modification of 4-lane road section to 2-3 lanes
----------------------	-----------	------	--

The project description and details are provided in the attached PM_{2.5} Hot-Spot Determinations.

TDOT requests your concurrence with our determinations that these projects are NOT A PROJECT OF AIR QUALITY CONCERN. Please respond no later than close of business (4:30 central time) on **November 30, 2012**. If TDOT does not receive a response to the contrary within 10 business days of this email then TDOT will assume that you concur with these determinations.

Thank you.

Darlene D. Reiter, Ph.D., P.E.

TDOT Environmental Division Consultant

[attachment "PM2 5 Hot Spot Determination I-40 and Campbell Station Knox 114774.00 November 15 2012.pdf" removed by Kelly Sheckler/R4/USEPA/US]
[attachment "PM2 5 Hot Spot Determination North Central Knox 116003.00 November 15 2012.pdf" removed by Kelly Sheckler/R4/USEPA/US]
[attachment "PM2 5 Hot Spot Determination Washington Pike Knox 043090.00 November 15 2012.pdf" removed by Kelly Sheckler/R4/USEPA/US]

Darlene Reiter

From: Marc Corrigan
Sent: Friday, November 16, 2012 2:29 PM
To: Darlene Reiter; Alan Jones; Angela Midgett; Benjamin, Lynorae; Cantrell, Teresa; Conger, Mike; D, Rich; Davis, Corbin; Jim Ozment; Liddington, L; Martin, Elizabeth; McDaniel, A; Renfro, Jim; Robert Rock; Ronnie Porter; Sheckler, Kelly; Smith, Dianna; Tribble, Leigh Ann; Welch, Jeff
Subject: RE: PM2.5 Hot-Spot Determinations for 1) I-40 and Campbell Station Road, Knox County 2) Washington Pike, Knox County and 3) North Central Street, Knox County

Darlene,

The TAPCD agrees with TDOT's assessment that the projects listed below are not projects of air quality concern.

Marc

From: Darlene Reiter
Sent: Thursday, November 15, 2012 3:36 PM
To: Alan Jones; Angela Midgett; Benjamin, Lynorae; Cantrell, Teresa; Conger, Mike; D, Rich; Davis, Corbin; Jim Ozment; Liddington, L; Marc Corrigan; Martin, Elizabeth; McDaniel, A; Renfro, Jim; Robert Rock; Ronnie Porter; Sheckler, Kelly; Smith, Dianna; Tribble, Leigh Ann; Welch, Jeff
Subject: PM2.5 Hot-Spot Determinations for 1) I-40 and Campbell Station Road, Knox County 2) Washington Pike, Knox County and 3) North Central Street, Knox County

Knoxville Area IAC:

TDOT has evaluated the following projects and determined that they are NOT A PROJECT OF AIR QUALITY CONCERN.

Project	PIN	County	Description
Interstate 40 (I-40) and Campbell Station Road	114774.00	Knox	Ramp improvements and installation of traffic signals
Washington Pike	043090.00	Knox	Widening
North Central Street	116003.00	Knox	Modification of 4-lane road section to 2-3 lanes

The project description and details are provided in the attached PM_{2.5} Hot-Spot Determinations.

TDOT requests your concurrence with our determinations that these projects are NOT A PROJECT OF AIR QUALITY CONCERN. Please respond no later than close of business (4:30 central time) on **November 30, 2012**. If TDOT does not receive a response to the contrary within 10 business days of this email then TDOT will assume that you concur with these determinations.

Thank you.

Darlene D. Reiter, Ph.D., P.E.
TDOT Environmental Division Consultant

Darlene Reiter

From: Arthur S. McDaniel <asmcdaniel@aqm.co.knox.tn.us>
Sent: Monday, November 26, 2012 7:28 AM
To: Darlene Reiter
Subject: RE: PM2.5 Hot-Spot Determinations for 1) I-40 and Campbell Station Road, Knox County 2) Washington Pike, Knox County and 3) North Central Street, Knox County

Knox County Air Quality Management concurs.

From: Darlene Reiter [<mailto:Darlene.Reiter@tn.gov>]
Sent: Thursday, November 15, 2012 4:36 PM
To: Alan Jones; Angela Midgett; Benjamin, Lynorae; Cantrell, Teresa; Conger, Mike; D, Rich; Davis, Corbin; Jim Ozment; Liddington, L; Marc Corrigan; Martin, Elizabeth; McDaniel, A; Renfro, Jim; Robert Rock; Ronnie Porter; Sheckler, Kelly; Smith, Dianna; Tribble, Leigh Ann; Welch, Jeff
Subject: PM2.5 Hot-Spot Determinations for 1) I-40 and Campbell Station Road, Knox County 2) Washington Pike, Knox County and 3) North Central Street, Knox County

Knoxville Area IAC:

TDOT has evaluated the following projects and determined that they are NOT A PROJECT OF AIR QUALITY CONCERN.

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Washington Pike	043090.00	Knox	Widening
North Central Street	116003.00	Knox	Modification of 4-lane road section to 2-3 lanes

The project description and details are provided in the attached PM_{2.5} Hot-Spot Determinations.

TDOT requests your concurrence with our determinations that these projects are NOT A PROJECT OF AIR QUALITY CONCERN. Please respond no later than close of business (4:30 central time) on **November 30, 2012**. If TDOT does not receive a response to the contrary within 10 business days of this email then TDOT will assume that you concur with these determinations.

Thank you.

Darlene D. Reiter, Ph.D., P.E.
TDOT Environmental Division Consultant

Project-Level Conformity

PIN

Federal Project Number

Conformity Type

County

IAC Group

Type

Priority

**Project Description**

Route Name

Project Description

The project involves widening Washington P ke to provide four travel lanes from I-640 to Murphy Road and associates intersections improvements along the corridor.

Project Origination

Date Need Identified

Determination Requested By

Data Collection

Date Traffic Data Requested

Source of Traffic Data

TDOT Conclusion

Conformity Determination

Date of Determination

Interagency Consultation (IAC)

IAC Status

Deadline for IAC Comments

Agency Concurrence Dates

FHWA EPA

FTA TDEC

Notification And Notes

Date of TDOT Internal Notification

Knox County concurred 11/26/2012.

APPENDIX C
MSATs BACKGROUND INFORMATION

MOBILE SOURCE AIR TOXICS (MSATs)

Background

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (<http://www.epa.gov/iris/>). In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment (NATA) (<http://www.epa.gov/ttn/atw/nata1999/>). These are acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules. The 2007 EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (vehicle-miles travelled, VMT) increases by 145 percent as assumed, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050, as shown in Figure 1.

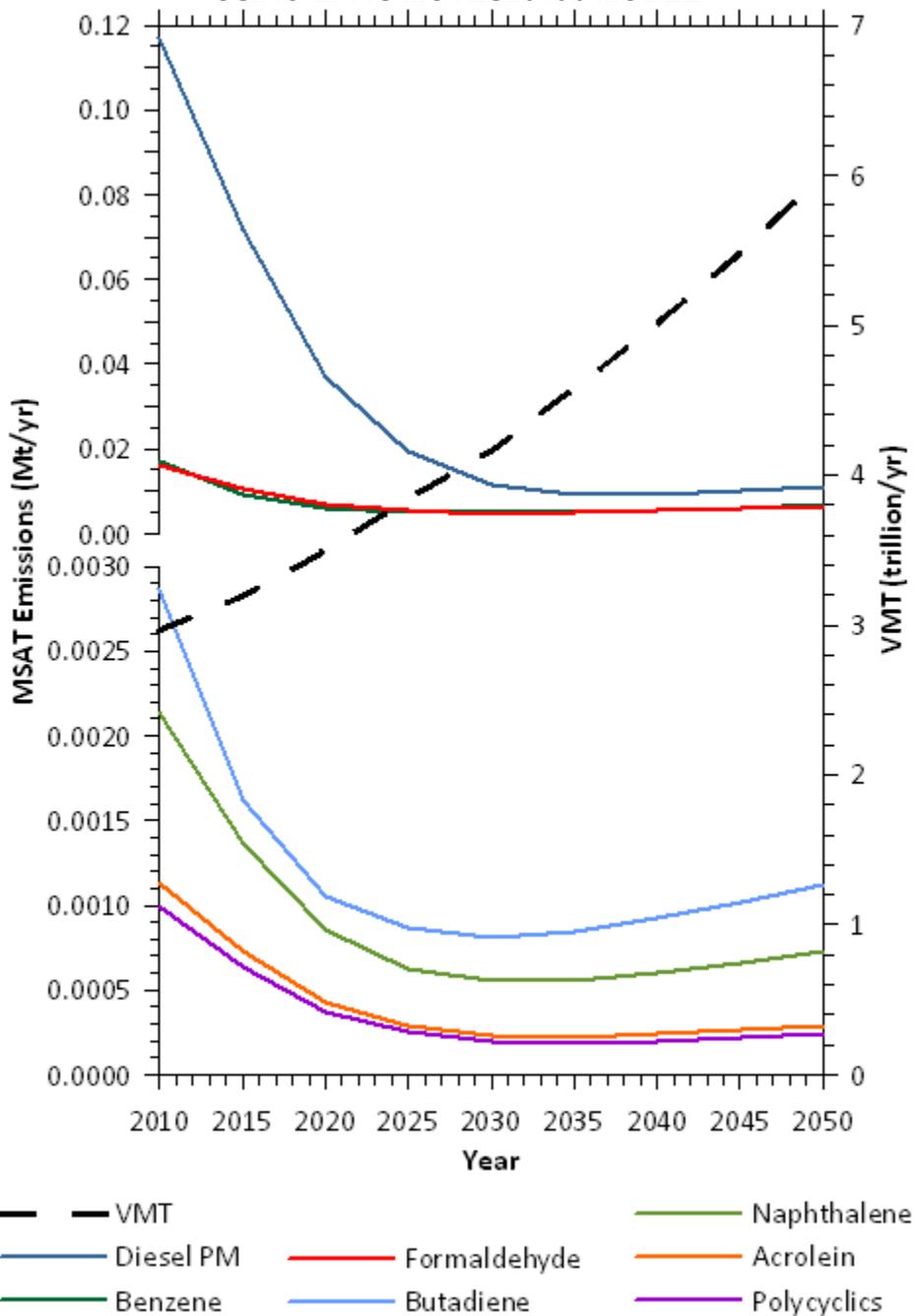
Motor Vehicle Emissions Simulator (MOVES)

According to EPA, MOVES improves upon the previous MOBILE model in several key aspects: MOVES is based on a vast amount of in-use vehicle data collected and analyzed since the latest release of MOBILE, including millions of emissions measurements from light-duty vehicles. Analysis of this data enhanced EPA's understanding of how mobile sources contribute to emissions inventories and the relative effectiveness of various control strategies. In addition, MOVES accounts for the significant effects that vehicle speed and temperature have on PM emissions estimates, whereas MOBILE did not. MOVES2010b includes all air toxic pollutants in NATA that are emitted by mobile sources. EPA has incorporated more recent data into MOVES2010b to update and enhance the quality of MSAT emission estimates. These data reflect advanced emission control technology and modern fuels, plus additional data for older technology vehicles.

Based on an FHWA analysis using EPA's MOVES2010b model, as shown in Figure 1, even if vehicle-miles travelled (VMT) increases by 102 percent as assumed from 2010 to 2050, a combined reduction of 83 percent in the total annual emissions for the priority MSAT is projected for the same time period.

The implications of MOVES on MSAT emissions estimates compared to MOBILE are: lower estimates of total MSAT emissions; significantly lower benzene emissions; significantly higher diesel PM emissions, especially for lower speeds. Consequently, diesel PM is projected to be the dominant component of the emissions total.

**Figure 1: NATIONAL MSAT EMISSION TRENDS 1999 - 2050
FOR VEHICLES OPERATING ON ROADWAYS
USING EPA'S MOVES2010b MODEL**



Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors
Source: EPA MOVES2010b model runs conducted during May - June 2012 by FHWA.

MSAT Research

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how potential public health risks posed by MSAT exposure should be factored into project-level decision-making

within the context of NEPA.

Nonetheless, air toxics concerns continue to be raised on highway projects during the NEPA process. Even as the science emerges, we are duly expected by the public and other agencies to address MSAT impacts in our environmental documents. The FHWA, EPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field.

NEPA Context

The NEPA requires, to the fullest extent possible, that the policies, regulations, and laws of the Federal Government be interpreted and administered in accordance with its environmental protection goals. The NEPA also requires Federal agencies to use an interdisciplinary approach in planning and decision-making for any action that adversely impacts the environment. The NEPA requires and FHWA is committed to the examination and avoidance of potential impacts to the natural and human environment when considering approval of proposed transportation projects. In addition to evaluating the potential environmental effects, we must also take into account the need for safe and efficient transportation in reaching a decision that is in the best overall public interest. The FHWA policies and procedures for implementing NEPA are contained in regulation at 23 CFR Part 771.

Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The U.S. Environmental Protection Agency (EPA) is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, <http://www.epa.gov/iris/>). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). Two HEI studies are summarized in Appendix D of FHWA's Interim Guidance Update on Mobile source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are; cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI, <http://pubs.healtheffects.org/view.php?id=282>) or in the future as vehicle emissions substantially decrease (HEI, <http://pubs.healtheffects.org/view.php?id=306>).

The methodologies for forecasting health impacts include emissions modeling; dispersion

modeling; exposure modeling; and then final determination of health impacts - each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (<http://pubs.healtheffects.org/view.php?id=282>). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA (<http://www.epa.gov/risk/basicinformation.htm#g>) and the HEI (<http://pubs.healtheffects.org/getfile.php?u=395>) have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA's approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

Due to the limitations cited, a discussion such as the example provided in this Appendix (reflecting any local and project-specific circumstances), should be included regarding incomplete or unavailable information in accordance with Council on Environmental Quality (CEQ) regulations [40 CFR 1502.22(b)]. The FHWA Headquarters and Resource Center staff Victoria Martinez (787) 766-5600 X231, Bruce Bender (202) 366-2851, and Michael Claggett (505) 820-2047, are available to provide guidance and technical assistance and support.



Appendix H:
Noise Coordination

NOISE

The project involves the construction of a roadway on a new alignment and is defined as Type I in accordance with the FHWA noise standards, Procedures for Abatement of Highway Traffic and Construction Noise, 23 CFR 772 and the Tennessee Department of Transportation's Policy on Highway Traffic Noise Abatement .

Washington Pike is not a limited access roadway. Most of the impacted receptors have driveways along the existing Washington Pike and are expected to remain the same with the proposed improvements. The openings would prevent the construction of a continuous and acoustically effective noise barrier and would negatively affect property access and possible maintenance requirements. Therefore, construction of noise barriers is not feasible for this project.

Construction Noise

If TDOT's construction specifications will apply to this project, construction procedures shall be governed by the *Standard Specifications for Road and Bridge Construction* as issued by TDOT and as amended by the most recent applicable supplements. The contractor will be bound by Section 107.01 of the Standard Specifications to observe any noise ordinance in effect within the project limits. Detoured traffic shall be routed during construction so as to cause the least practicable noise impact on noise-sensitive areas.

Information for Local Officials

The project area is substantially developed leaving little opportunity to avoid future noise impacts through land use planning. However, TDOT encourages the local governments with jurisdiction over these lands, as well as potential developers of these lands to practice noise compatibility planning in order to avoid future noise impacts. The following language is included in TDOT's noise policy:

“Highway traffic noise should be reduced through a program of shared responsibility. Local governments should use their power to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway or that the developments are planned, designed and constructed in such a way that noise impacts are minimized.”

FHWA has developed two guidance documents *to help local officials and developers practice noise compatibility planning*: 1) *The Audible Landscape: A Manual for Highway Noise and Land Use*, and 2) *Entering the Quiet Zone: Noise Compatibility Land Use Planning*. Both are available on FHWA's website at <http://www.fhwa.dot.gov/environment/noise/quietzon>



Appendix I:
Section 106 Coordination Response Letters



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
Suite 900 - James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Date: August 30, 2012

TO: Ms Martha Carver
Transportation Specialist I
Historic Preservation Section

Subject: Section 106 of the National Historical Preservation Act Review for the
Washington Pike Road Improvements
Knoxville, Knox County, Tennessee
PIN #043090.00

Dear Ms Carver:

The City of Knoxville in coordination with the TDOT Environmental Documentation Office (EDO) requests that after appropriate review and comment, this letter and attachment be forwarded to the Tennessee State Historic Preservation Officer. The EDO and the City further requests that upon receipt of the response letter from the SHPO, a copy be placed in the project file and sent to this office for inclusion in the Categorical Exclusion.

Purpose and Need

In 2001, an Advance Planning Report (APR) was produced and approved to evaluate the existing traffic conditions on Washington and Millertown Pikes located in the environs of the Knoxville Center Mall area. In 2008, as an update to the 2001 study, a Transportation Planning Report (TPR) was produced and approved. The two (2) routes are east-west arterials that extend into northeast Knox County from their interchange with I-640. This area has experienced significant development resulting in increased traffic but without the necessary modifications to the infrastructure to improve traffic operations and accommodate continued growth. The City of Knoxville intends to proceed immediately with significant improvement of the Washington Pike corridor with the assistance of State and Federal funding. Improvements to Millertown Pike are currently budgeted using local funds.

Washington Pike is lined with significant retail/commercial and residential development. In 2008, the 74-acre Farmer's Market site was redeveloped to create space for a community-friendly retail center with adjacent public space, pedestrian amenities and recreational space. Today, the Harvest Park Centre is home to Target, Old Navy, and other retailers. The Farmer's Market has been relocated to New Harvest Park, adjacent to and east of the retail area. The redevelopment of this site provides greater economic return and employment opportunities for area residents.

The goals and objectives of an improved Washington Pike corridor include:

- Create a traffic circulation system that minimizes conflicts between pedestrians, bicyclists and vehicles;
- Enhance Washington Pike to adequately serve the commercial/retail/residential development in the area relative to capacity, safety, circulation and access to I-640;
- Improve east-west mobility in the Knoxville Center Mall area;
- Enhance regional and local economic development opportunities;
- Modify key intersections to increase operational safety and capacity;
- Create a greenway system in conjunction with stormwater control programs;
- Improve transportation linkages throughout the northeastern quadrant of the City;
- Be compatible with and serve the needs of the surrounding neighborhoods.

This project is included in the *Knoxville Regional Mobility Plan 2009-2034*, as well as being listed as a requested project in the *Transportation Improvement Plan (TIP) for Fiscal Years 2011-2014* (TIP #049, TDOT # 110301.00). This is required because the final Planning Rule requires that both the STIP and TIP shall contain all regionally significant projects requiring an action by FHWA irrespective of the project's funding source 23 CFR 450.324(d); 23 CFR 450.216(h). The City of Knoxville, as a sponsor, has provided initial funding for planning, environmental documentation, and conceptual drawings.

Project Description

Washington Pike, north from Interstate 640 to Murphy Road is proposed as a four-lane divided facility. This section consists of four traffic lanes (two in each direction), curb and gutter, sidewalks, and bike lanes. The typical section design for this section is guided by the City's request for first flush capability as required by the City's storm water quality ordinance. As an option, this design may eliminate or reduce some curb and gutter sections with construction of grass swales. The project length of Section Two is approximately 1.73 miles (9130 feet). A 200 feet corridor width is suggested for the proposed roadway design for this section. A consistent multi-lane section is recommended in order to provide adequate future capacity.

The Build Alternative

The most significant recommendations include the widening of the existing two-lane portions of Washington Pike to a multi-lane facility.

The typical section will be guided in part by the City's requirement for first flush capability in accordance with the City's storm water quality ordinance. The design of infiltration trenches, swales and catch basins will be included in the design to control erosion, sediment and other forms of pollution as part of the City's stormwater quality management policy to prevent pollution in nearby creeks and streams.

The proposed roadway improvements should mitigate the existing and projected issues and provide a convenient and accessible facility that would be compatible with transit alternatives and make bicycling and walking a viable transportation choice.

No Build Alternative

The No Build Alternative is not selected as it will not meet the purpose of the project.

Right of Way

The acquisition of additional right-of-way and easements will be carried out by Local Government in accordance with the **Tennessee Uniform Relocation Assistance Act of 1972** and the **Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970** (Public Law 91-646).

Section 106 of the National Historic Preservation Act of 1966, Native American Coordination

The 2001 Advisory Council on Historic Preservation regulations, 36 CFR 800, stipulates that Indian Tribes that attach religious and cultural significance to properties that may be affected by an undertaking be invited to participate in the project review process as consulting parties. The Environmental Division of TDOT, acting as an agent of the Federal Highway Administration reserves the right to determine the need for and the conduct of all Native American Coordination. The widening of some portions of Washington Pike between I-640 and Murphy Road will require the acquisition of new right-of-way. Therefore coordination with Native American Tribes is required.

Cultural Resources (Archaeological, Historical Preservation, Architectural Impacts)

Pursuant to compliance with Section 106 of the National Historic Preservation Act and implementing regulations, 36 CFR 800, a survey is required by Local Government Contract Cultural Resource employees to identify National Register listed, eligible, or potentially eligible resources within the impact zone of the proposed project (eligibility criteria are set forth in 36 CFR 60.4.). The survey includes areas that might possibly be affected by changes in air quality, noise levels, setting, and land use. As a result of the survey, it is the opinion of the Local Government that the project, as presently designed, will have no effect on any archaeological, architectural or historical resources included in or eligible for inclusion in the National Register of Historic Places and that there will be no Section 4(f) use of a historic property.

Conclusion

The City of Knoxville, their contact environmental employees, and in coordination with the Environmental Documentation Office of TDOT, evaluated the proposed project as presented in the application for compliance with environmental laws and regulations as may concern Section 106 National Historic Preservation Act. It is the opinion of the City that no historic or cultural resources would be affected by the proposed project. The information concerning the environmental effects of this proposed project provided to TDOT meets compliance to the best of their knowledge and understanding.

Section 106 of the National Historical Preservation Act Review For
Washington Pike Improvements
Knoxville, Knox County, Tennessee
TN PIN 043090.00

Following is submitted in accordance with SHPO letter of instruction:

1. Federal Agency - The Federal Agency involved is the Federal Highway Administration. The administrative agency within the State of Tennessee is the Department of Transportation. The staff person with direct management responsibility for the program is Joe Matlock, Transportation Planner, Region IV, NEPA Documentation Office-Local Programs, TDOT Environmental Division, James K. Polk Bldg., Suite 900, Nashville, TN 37243- 0334, (615) 741-5365.
2. Applicant - The applicant is the City of Knoxville, Tom Clabo, Division Chief. City of Knoxville, Engineering Division, (865)215-6100 or e-mail at tclabo@cityofknoxville.org may be contacted for information concerning the project.
3. Location of Project - The project location is Washington Pike from I-640 to Murphy Road in northeast Knoxville, TN.
4. Consulting Parties – To coordinate historic issues with any relevant local groups or individuals such as Consulting Parties. Include a list of consulting parties invited to participate in consultation relative to the project. No consulting parties were necessary for this project
5. Public Involvement – The City of Knoxville proposes to hold appropriate public meetings for this project.
7. Maps - The project is located on the USGS topographic map attached.
8. Project Narrative –see project description above
9. Photographs - Photographs of the project site and surrounding area are attached.



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

March 12, 2013

Ms. Martha Carver
Tennessee Department of Transportation
505 Deaderick St/900
Nashville, Tennessee, 37243-0349

RE: FHWA, EFFECT DETERMINATION, WASHINGTON PIKE IMPVT./PIN# 043090, KNOXVILLE,
KNOX COUNTY

Dear Ms. Carver:

Pursuant to your request, received on Thursday, March 7, 2013, this office has reviewed documentation concerning the above-referenced undertaking. This review is a requirement of Section 106 of the National Historic Preservation Act for compliance by the participating federal agency or applicant for federal assistance. Procedures for implementing Section 106 of the Act are codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739)

Based on the information provided, we find that the project area contains a cultural resource eligible for listing in the National Register of Historic Places: Murphy Springs Farm. We further find that the project as currently proposed will not adversely affect this resource.

Unless project plans change, this office has no objection to the implementation of this project. Should project plans change, please contact this office to determine what additional action, if any, is necessary. Questions and comments may be directed to Joe Garrison (615) 532-1550-103. Your cooperation is appreciated.

Sincerely,

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

EPM/jyg



TENNESSEE HISTORICAL COMMISSION
2941 LEBANON ROAD
NASHVILLE, TENNESSEE 37243-0442
OFFICE: (615) 532-1550
www.tnhistoricalcommission.org

July 30, 2013

Mr. Gerald Kline
TDOT – Environmental Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-1402

RE: FHWA, ARCHAEOLOGICAL ASSESSMENT, WASHINGTON/MILLERTOWN/I-640-
MURPHY, UNINCORPORATED, KNOX COUNTY, TN

Dear :

At your request, our office has reviewed the above-referenced 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 that 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,

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

EPM/jmb



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

ENVIRONMENTAL DIVISION
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-3655

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

August 17, 2012

The Cherokee Nation
17675 South Muscogee
Tahlequah, OK 74465
Attn: Dr. Richard Allen, Policy Analyst

SUBJECT: Section 106 Initial Coordination for Proposed Washington Pike Project from I-640 to Murphy Road NE, Knoxville, Knox County, Tennessee

Dear Dr. Allen:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration (FHWA) is proposing to improve Washington Pike from I-640 to Murphy Road NE in Knox County (maps attached). The project will widen the road from two lanes to four with turn lanes as required at intersecting side streets as well as add curb and gutter, sidewalks, and bike lanes; some sections of the road already feature a center turn lane. The intersection with McCampbell Drive near Murphy Road NE will be realigned. The project may eliminate or reduce some curb and gutter section with construction of grass swales. The approximate length of the project is 1.73 miles. Additional right-of-way will be needed.

The National Historic Preservation Act (NHPA) recognizes that federally funded undertakings, like the subject project, can affect historic properties to which your tribe attaches religious, cultural, and historic significance. In accordance with 36 CFR 800 regulations implementing compliance with Section 106 of the NHPA, I would like to know if you have information you could share with me about tribal concerns in the project area and if you wish to be a consulting party on the project? Early awareness of your concerns can serve to protect historic properties valued by your tribe.

If you act as a consulting party you will receive archaeological assessment reports and related documentation, be invited to attend project meetings with FHWA, TDOT, and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held, and be asked to provide input throughout the process. If you choose to not act as a consulting party at this time, you can do so at a later date simply by notifying me.

Please respond to me via letter, telephone (615-741-5257), fax (615-741-1098), or E-mail (Gerald.Kline@tn.gov). I respectfully request responses (email is preferred) to project reports and other materials within thirty (30) days of receipt if at all possible. Thank you for your assistance.

Sincerely,

Gerald Kline
Transportation Specialist I
Archaeology Program Manager

Enclosure

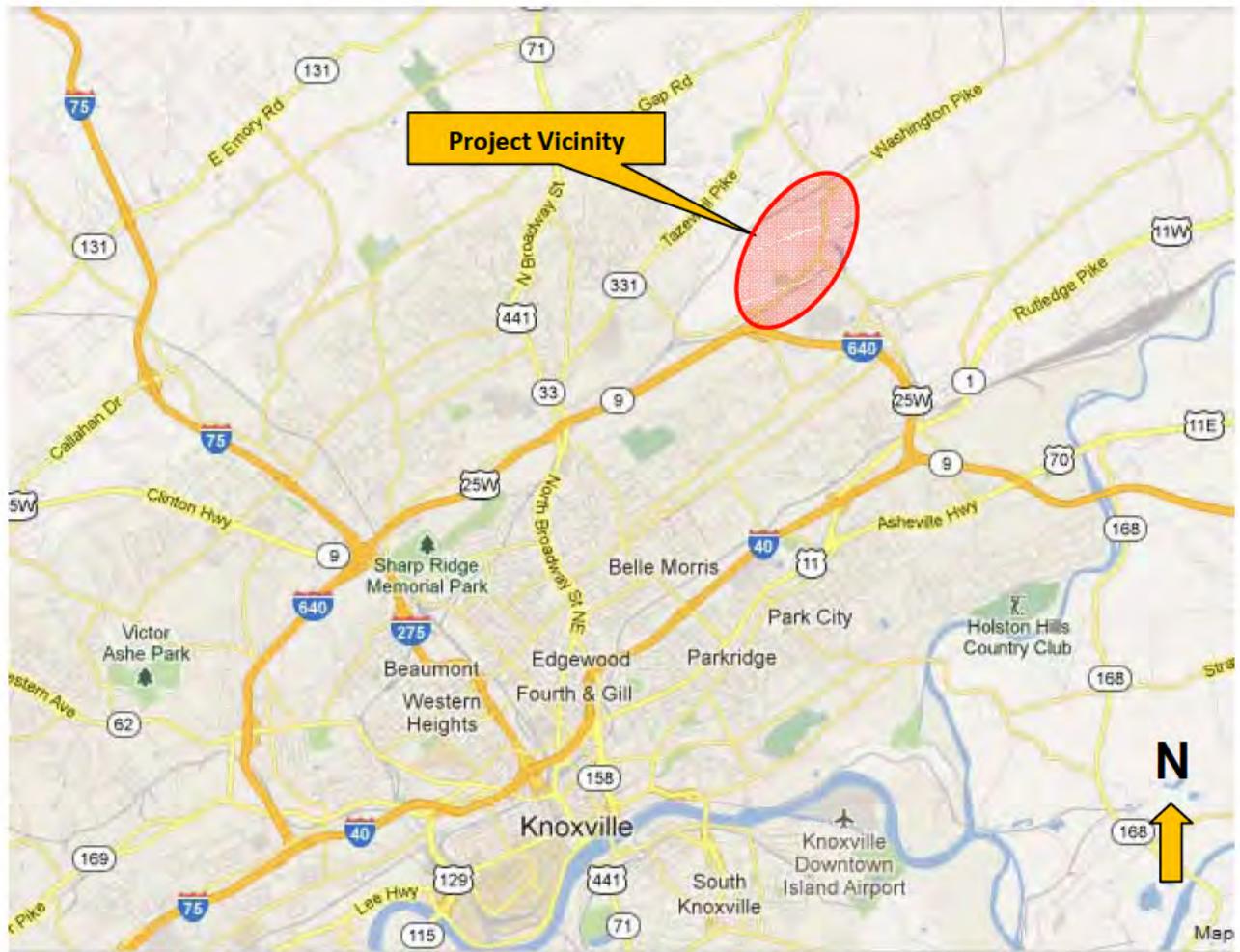
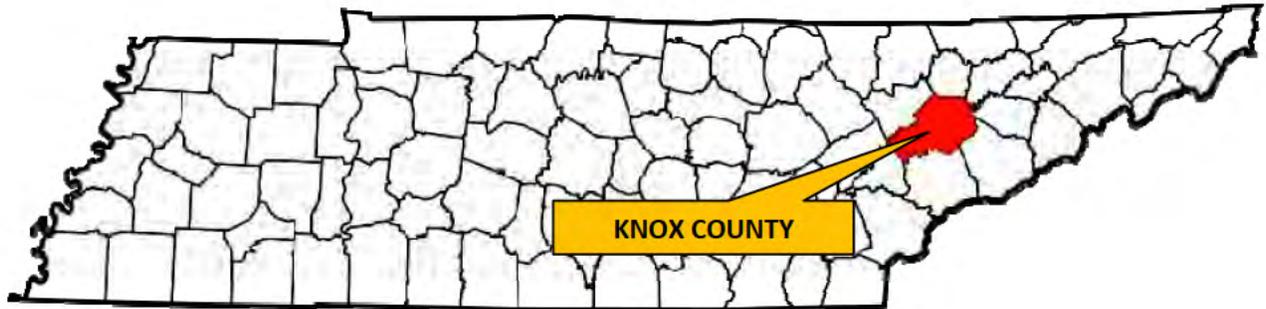
cc Robin Dushane, Eastern Shawnee Tribe of Oklahoma
Kim Jumper, Shawnee Tribe
Lisa LaRue-Baker, United Keetowah Band of Cherokee Indians
Tyler Howe, Eastern Band of Cherokee Indians



WASHINGTON PIKE PROJECT

FROM I-640 TO MURPHY ROAD NE

KNOXVILLE, KNOX COUNTY, TENNESSEE

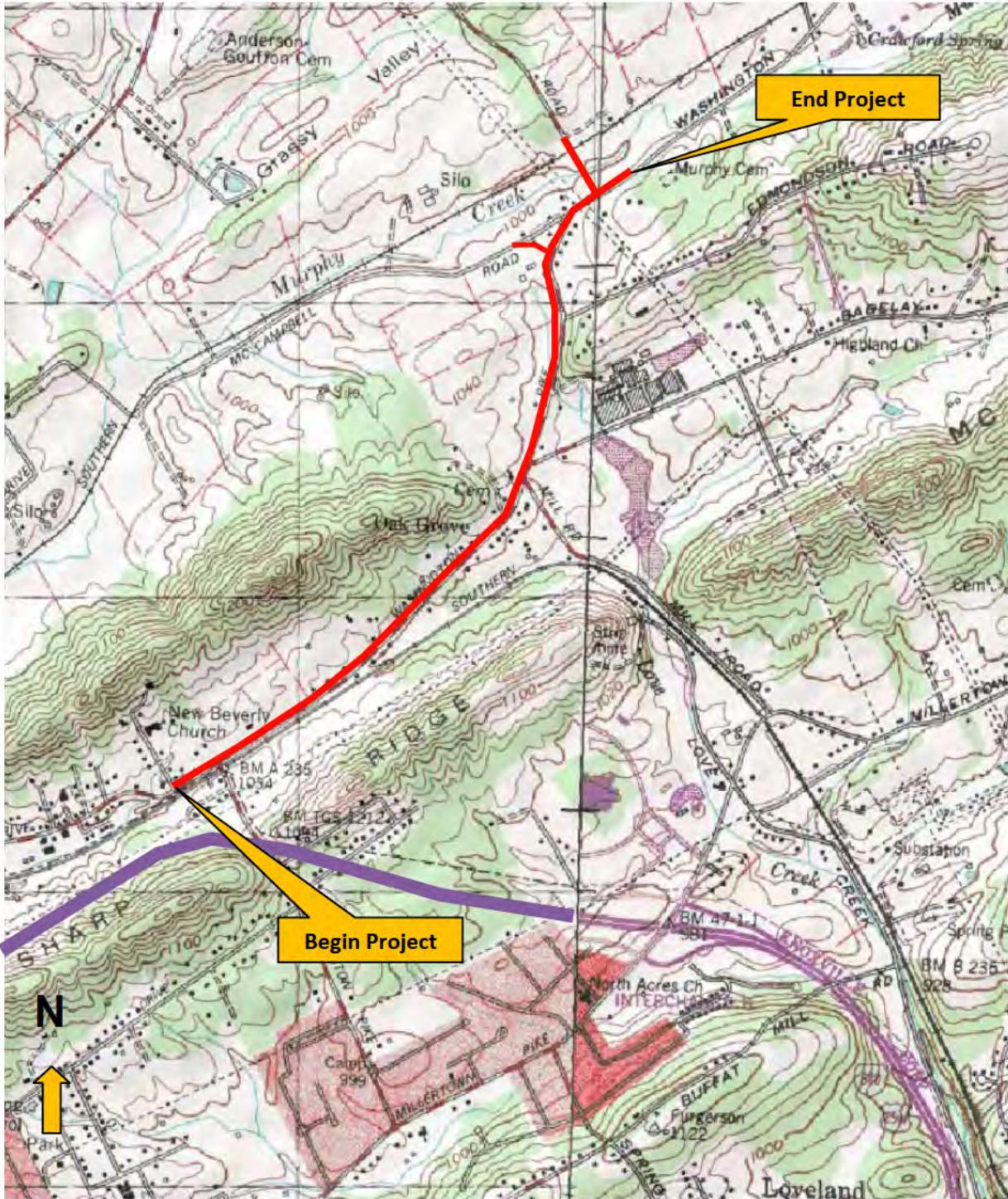


PROJECT VICINITY MAP





Project Location Map



Project Location Map – USGS Fountain City (146 SW) & John Sevier (146 SE)



Robbie D. Jones

From: Lisa LaRue-Baker - UKB THPO <ukbthpo-larue@yahoo.com>
Sent: Friday, August 24, 2012 7:21 PM
To: Robbie D. Jones
Cc: lstapleton@unitedkeetoowahband.org
Subject: Re: Section 106 Coordination, Knox Co., TN #043090.00

The United Keetoowah Band of Cherokee Indians in Oklahoma has reviewed your projects for Section 106 NHPA purposes, and cultural resources. At this time, we have no objection or comment. However, if any human remains or funerary items are inadvertently discovered, please cease all work and contact us immediately.

Lisa LaRue-Baker

Acting THPO
United Keetoowah Band of Cherokee Indians in Oklahoma
PO Box 746
Tahlequah, OK 74465

c 918.822.1952 f 918.458.6889
ukbthpo-larue@yahoo.com

--- On **Fri, 8/17/12**, **Robbie D. Jones** <Robbie.D.Jones@tn.gov> wrote:

From: Robbie D. Jones <Robbie.D.Jones@tn.gov>
Subject: Section 106 Coordination, Knox Co., TN #043090.00
To: "ukbthpo-larue@yahoo.com" <ukbthpo-larue@yahoo.com>
Cc: "Robbie D. Jones" <Robbie.D.Jones@tn.gov>
Date: Friday, August 17, 2012, 4:00 PM

Dear Ms. LaRue-Baker:

I'm sending this email communication on behalf of Gerald Kline, Archaeology Program Manager for the Tennessee Department of Transportation. Please see the attached letters and maps for the following project:

Washington Pike, Knoxville, Knox County, Tennessee (PIN# 043090.00)

If you have any questions or need additional information, please contact Gerald Kline at (615) 741-5257 or

Gerald.Kline@tn.gov.

Thank you for your assistance in this matter.

Robbie

Robbie D. Jones

Native American Coordinator

TDOT Environmental Division

Suite 900, J.K. Polk Building

Nashville, TN 37243-0334

Telephone: 615-741-3655

Fax: 615-741-1098

Email: robbie.d.jones@tn.gov



Appendix J:
Hazardous Materials Coordination

From: Jeffrey Ballard

Sent: Thursday, March 28, 2013 2:21 PM

To: Scarlett Sharpe

Subject: RE: PIN 043090.00 Washington Pike and Millertown Pike Improvements, Knox County

No RCRA hazardous waste generators are located within the study area. No active USTs are located within the study area. There are two USTs on adjacent properties.

In the event hazardous substances/wastes are encountered within the proposed right-of-way, their disposition shall be subject to all applicable regulations, including the applicable sections of the Federal Resource Conservation and Recovery Act, as amended; and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended; and the Tennessee Hazardous Waste Management Act of 1983, as amended.