



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**


**PROJECT PLANNING DIVISION**  
SUITE 1000, JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-1402  
(615) 741-2208

**JOHN C. SCHROER**  
COMMISSIONER

**BILL HASLAM**  
GOVERNOR

**MEMORANDUM**

**TO:** Paul Degges, Deputy Commissioner and Chief Engineer

**FROM:**  Steve Allen, Director  
Project Planning Division

**DATE:** July 9, 2013

**SUBJECT:** **Road Safety Audit Review (RSAR)**  
**State Route 13 (US-79)**  
**Intersection at Wylma Van Allen Place**  
**Montgomery County**  
**PIN 118293.00**

This project of State Route 13 at intersection of Wylma Van Allen Place was requested by the Honorable Joe Pitts. This location will be considered for other safety funding.

A contract will be let to implement the recommended improvements. The estimated cost of improvements listed in this report is \$211,500. No right-of-way is required for the proposed improvements and no local match is required. A maintenance agreement will be required.

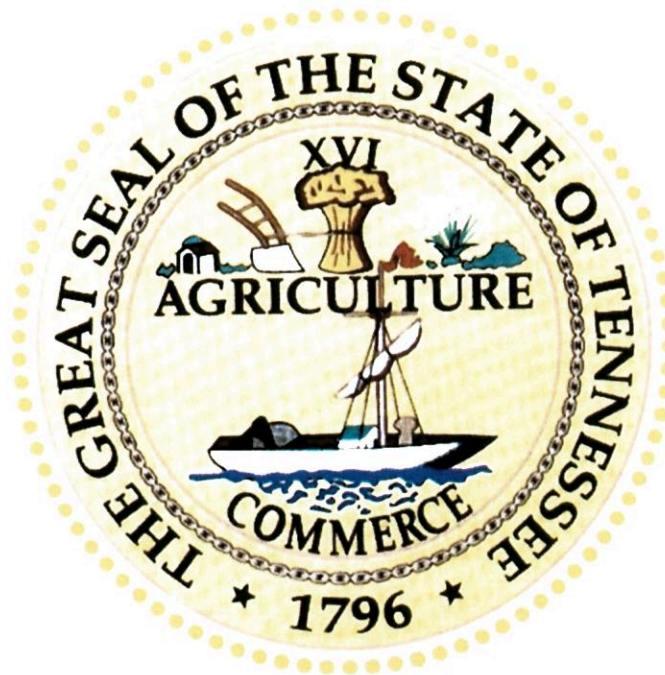
If you should need any further information, please contact me at (615) 741-2208 or e-mail me at [Steve.Allen@tn.gov](mailto:Steve.Allen@tn.gov).

SLA/bg

Attachment

**CC:** Adetokunbo Omishakin, David Layhew, Jim Moore, Brad Freeze, Brian Hurst, Mike Tugwell, Stanley Sumner, Stan Williams (Clarksville MPO), Chris Cowan (City of Clarksville), Gena Gilliam, File

***ROAD SAFETY AUDIT REPORT***  
***STATE ROUTE 13***  
***AT INTERSECTION OF WYLMA VAN ALLEN PLACE***  
***L.M. 22.40***  
***MONTGOMERY COUNTY***  
***PIN 118293.00***

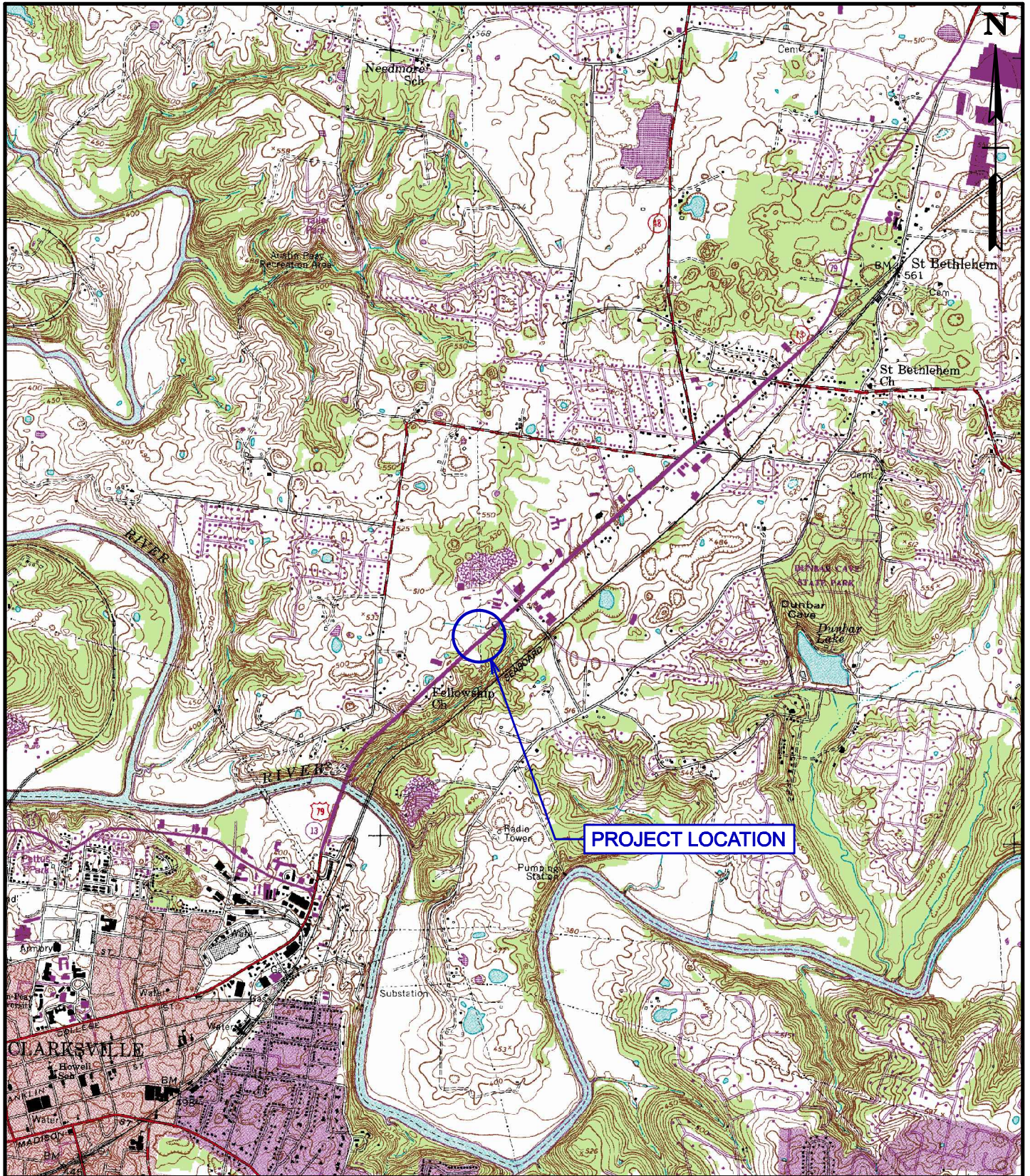


***PREPARED BY***  
***ALFRED BENESCH & COMPANY***  
***FOR THE***  
***TENNESSEE DEPARTMENT OF TRANSPORTATION***  
***PROJECT PLANNING DIVISION***

Approved by:	Signature	DATE
<b>DIRECTOR</b> <b>Project Planning Division</b>		<b>7-9-13</b>

*This document is covered by 23 USC § 409 and its production pursuant to fulfilling public planning requirements does not waive the provisions of § 409.*

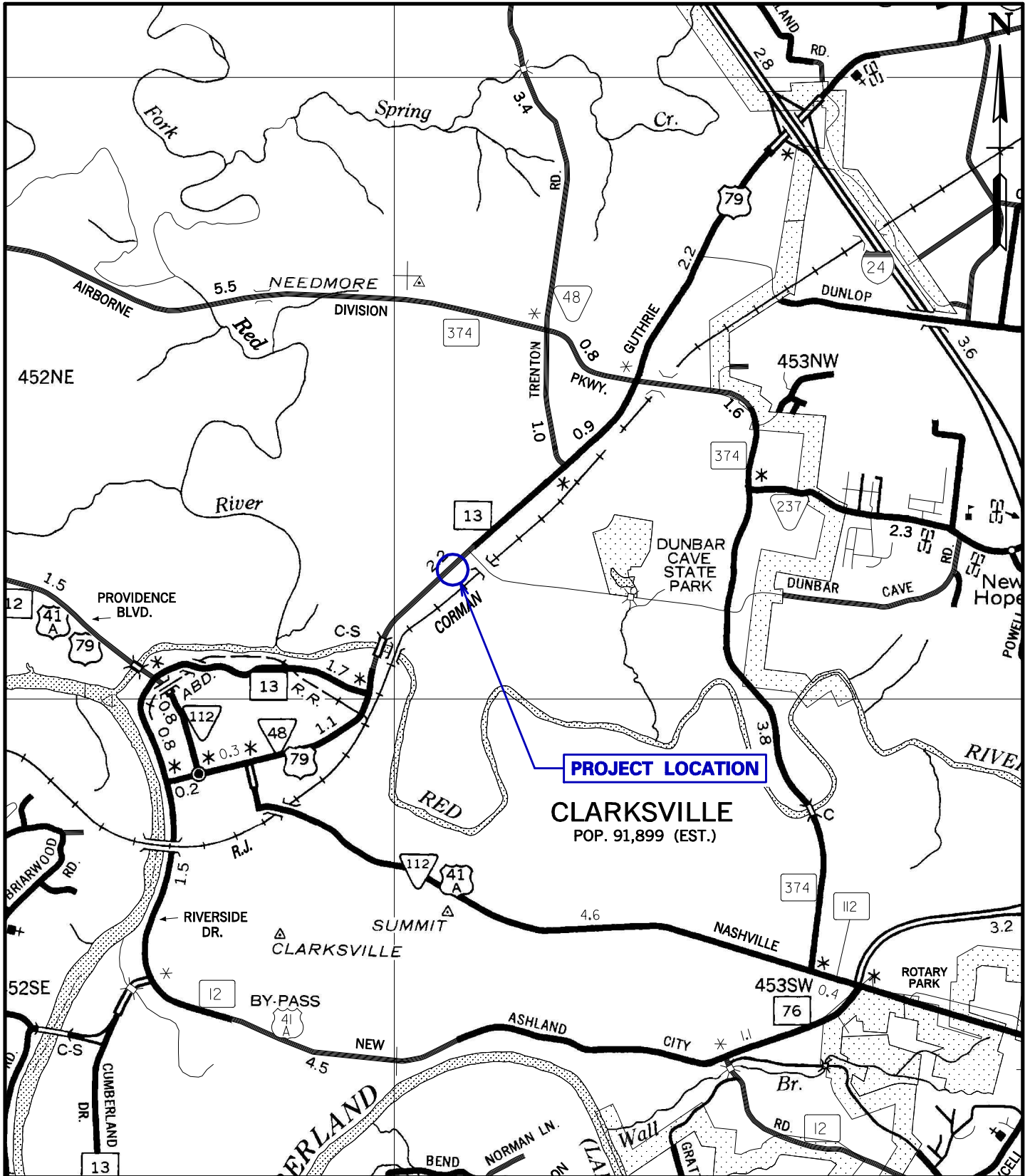




## VICINITY MAP

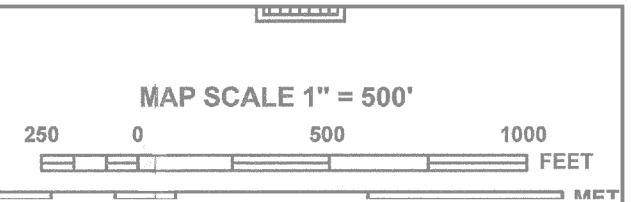
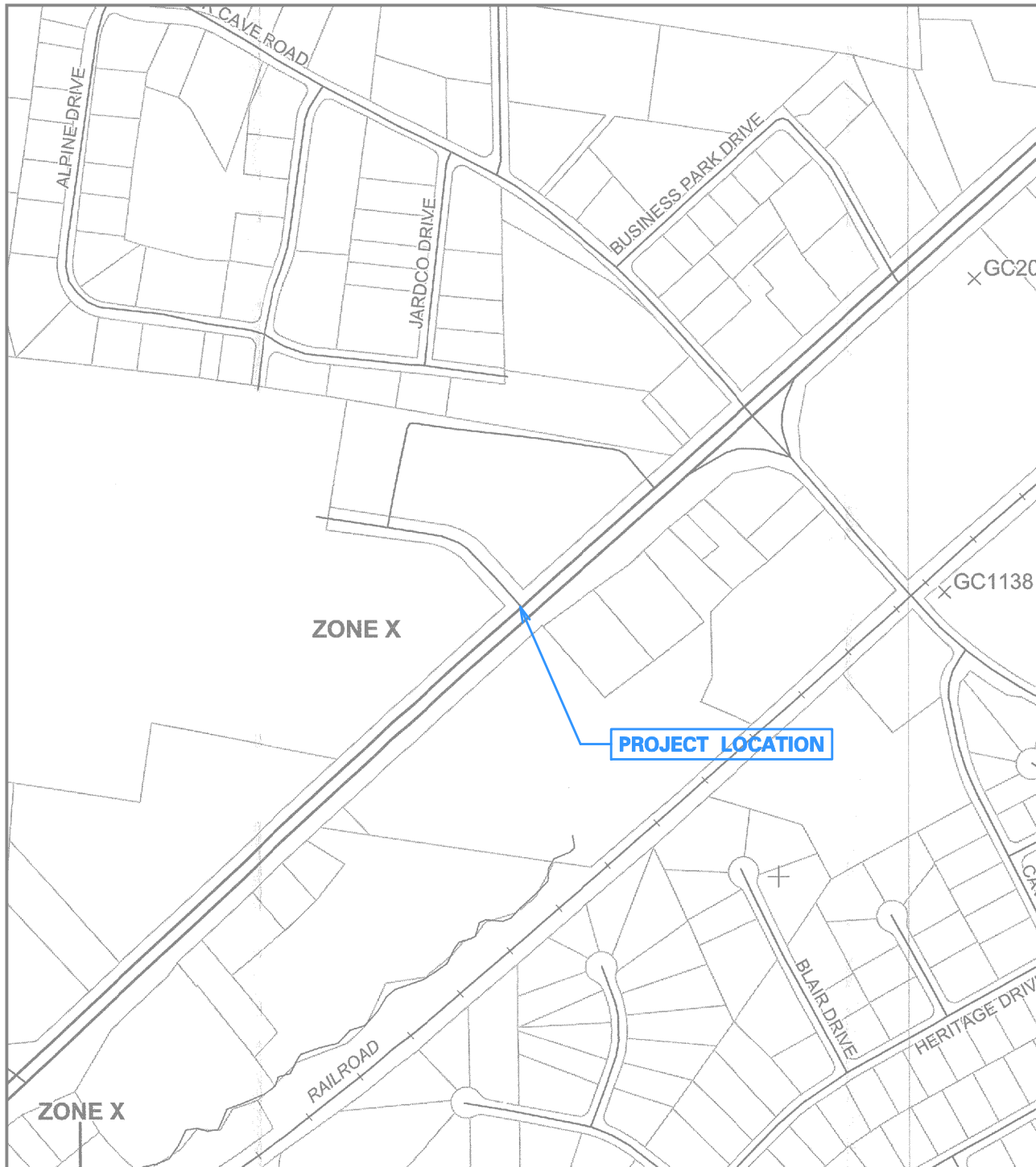
COUNTY:	CITY:
MONTGOMERY	CLARKSVILLE
SR-13/US 79 AND WYLMA VAN ALLEN PL.	
PIN 118293.00	
SCALE:	DATE:
1"= 1/2 MILE	02-15-13





## LOCATION MAP

COUNTY:	CITY:
MONTGOMERY	CLARKSVILLE
SR-13/US 79 AND WYLMA VAN ALLEN PL.	
PIN 118293.00	
SCALE:	DATE:
1" = 1 MILE	02-15-13



PANEL 0237D

**FIRM**

**FLOOD INSURANCE RATE MAP**

**MONTGOMERY COUNTY  
TENNESSEE  
AND INCORPORATED AREAS**

**PANEL 237 OF 491**

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CLARKSVILLE, CITY OF	470137	0237	D

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  
47125C0237D  
EFFECTIVE DATE  
MARCH 18, 2008**

**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](http://www.msc.fema.gov)

Montgomery County  
State Route 13  
At Wylma Van Allen Place (L.M. 22.40)

# Road Safety Audit Review

## Project Description and Background

The intersection of State Route 13 at Wylma Van Allen Place (Log Mile 22.40) was identified as a candidate safety project. After a complete review of this project, it was determined the location did not qualify for Highway Safety Improvement Program (HSIP) funding because the location has an actual to critical rate of 0.83 which is less than the minimum threshold for HSIP of 3.5. Additionally, State Route 13 is classified as an Urban Major Arterial with twelve (12) foot travel lanes and eight (8) foot or less shoulders and is not eligible for the High Risk Rural Roads (HRRR) program. Therefore, this location is under consideration for other safety funding.

Crash data was taken for the years 2007 through 2009. A total of ten (10) crashes occurred at the intersection during that period; with five (5) property damage crashes, four (4) non-incapacitating injury crashes, one (1) incapacitating injury crash involving one (1) incapacitating injury and zero (0) fatal crashes.

## RSAR Team Members:

Name	Organization	Title	Phone #	Email
Gena Gilliam	TDOT Project Planning	Transportation Planner 4	615-253-7692	<a href="mailto:Gena.Gilliam@tn.gov">Gena.Gilliam@tn.gov</a>
Eric Jackson	TDOT Traffic	Operations Specialist 2	615-741-0802	<a href="mailto:Eric.Jackson@tn.gov">Eric.Jackson@tn.gov</a>
Terry Arnold	TDOT Region 3 Design	Roadway Specialist Supervisor 1	615-350-4274	<a href="mailto:Terry.Arnold@tn.gov">Terry.Arnold@tn.gov</a>
Scott Johnson	TDOT Region 3 Design	Roadway Specialist 2	615-350-4263	<a href="mailto:Scott.Johnson@tn.gov">Scott.Johnson@tn.gov</a>
Stanley Sumner	TDOT Region 3 Traffic	Operations Specialist 3	615-350-4333	<a href="mailto:Stanley.Sumner@tn.gov">Stanley.Sumner@tn.gov</a>
Jack Frazier	City of Clarksville	Engineering Manager	931-645-7464	<a href="mailto:Jack.Frazier@cityofclarksville.com">Jack.Frazier@cityofclarksville.com</a>
Chris Cowan	City of Clarksville	Traffic Engineer	931-645-7464	<a href="mailto:Chris.Cowan@cityofclarksville.com">Chris.Cowan@cityofclarksville.com</a>
Stan Williams	Clarksville MPO	Transportation Planning Coordinator	931-645-7448	<a href="mailto:Stan.Williams@cityofclarksville.com">Stan.Williams@cityofclarksville.com</a>
Brian Gaffney	Alfred Benesch & Company	Project Manager 1	615-370-6079	<a href="mailto:BGaffney@Benesch.com">BGaffney@Benesch.com</a>
Greg Freeman	Alfred Benesch & Company	Designer 1	615-370-6079	<a href="mailto:GFreeman@Benesch.com">GFreeman@Benesch.com</a>

Montgomery County  
State Route 13  
At Wylma Van Allen Place (L.M. 22.40)

#### **Information Used in Review**

- County Highway Map
- Aerial Photographs
- TRIMS Route Feature, Traffic, and Geometric Reports
- Crash Diagrams
- Crash Reports
- On-Site Visit on 1/3/2013

#### **Pre-Brief Summary**

A pre-brief meeting was held on December 21, 2012 at 1:00 PM CST at TDOT Headquarters in Nashville.

- State Route 13 is a five lane urban major arterial with 12' lanes and 8' shoulders. The speed limit is 45 MPH. The intersection of State Route 13 with Wylma Van Allen Place is located northeast of Clarksville, TN.
- The 2011 AADT on State Route 13 is 33,270 vehicles/day.
- The majority, 90% (9 out of 10) of the crashes were between 7:00 am and 7:00 pm (Daytime).
- The majority, 90% (9 out of 10) of the crashes were rear-end collisions.
- The majority, 90% (9 out of 10) of the crashes were during clear (not raining) conditions.
- There was one rear-end incapacitating injury crash at the intersection.
- There is a signalized intersection approximately 1000' to the north (Dunbar Cave Rd.).

#### **Observations**

An on-site field review was held at 1:00 PM CST on January 4, 2013. The following discussions/observations are provided concerning the location:

- Speed Limit is posted at 45 MPH.
- Wylma Van Allen Place serves Nashville State Community College.
- Pavement markings are in fair condition on SR-13.
- Wylma Van Allen Place does not have pavement markings.
- Traffic backs up south of Dunbar Cave Rd. Visibility of the queued cars is minimal from the south.
- There are signal improvements planned for Dunbar Cave Rd.
- The intersection of SR-13 and Wylma Van Allen Place is directly under TVA high voltage power lines. Due to the proximity of the power lines and the adjacent signal at Dunbar Cave Rd. a signal at the study location is not recommended.
- There is poor line of sight south of the intersection.
- There is a Clarksville Transit System (CTS) bus stop located on Wylma Van Allen Place at the intersection with SR-13. City of Clarksville will contact CTS about possible relocation.
- Underground utility markers were observed in the field. Exact location and direction of underground utilities will be determined via survey in the design phase of the project.

Guidance for proposed improvements can be found on the attached figures.

A contract will be let to implement the recommended improvements. The estimated cost of improvements listed in this report is \$211,500. No right-of-way is required for the proposed improvements and no local match is required. A maintenance agreement will be required.



## Project Photographs

### RSAR

State Route 13 & Wylma Van Allen Place

Montgomery County

Date Photos Taken: 01/04/2013 & 02/11/2013



**Photograph 1**

L.M. 22.48

Looking east on State Route 13.

The existing guardrail along the northern shoulder of State Route 13 is in poor condition.

The signalized intersection at Dunbar Cave Road can be seen in the distance.



**Photograph 2**

L.M. 22.48

Looking west on State Route 13.

The intersection with Wylma Van Allen Place can be seen in the distance.



## Project Photographs

### RSAR

State Route 13 & Wylma Van Allen Place

Montgomery County

Date Photos Taken: 01/04/2013 & 02/11/2013



**Photograph 3**

L.M. 22.44

Looking west along northern fill slope of State Route 13.

The fill slope varies from 2:1 to 3:1 and has evidence of gas lines and power poles in the immediate vicinity.

A TVA tower can be seen in the distance.



**Photograph 4**

Wylma Van Allen Place

Looking north from Wylma Van Allen Place.

This road currently serves as the entrance to Nashville State Community College. It is median divided and has curb and gutter.

A city bus stop has been located at the intersection with State Route 13.

## Project Photographs

### RSAR

State Route 13 & Wylma Van Allen Place

Montgomery County

Date Photos Taken: 01/04/2013 & 02/11/2013



**Photograph 5**

L.M. 22.40

Looking east from  
Wylma Van Allen Place.

Heavy traffic flow from  
the signalized intersection  
to the east is visible.

A light pole is installed  
at this intersection.



**Photograph 6**

L.M. 22.40

Looking west from  
Wylma Van Allen Place.

State Route 13 has a  
crest just to the west  
that limits sight distance.



## Project Photographs

### RSAR

State Route 13 & Wylma Van Allen Place

Montgomery County

Date Photos Taken: 01/04/2013 & 02/11/2013



### Photograph 7

L.M. 22.23

Looking east on State Route 13.

A Signal Ahead sign is installed along the right shoulder in advance of the signal at Dunbar Cave Road.

Route:	State Route 13
Description:	Intersection with Wylma Van Allen Place
	L.M. 22.40
Counties:	Montgomery
Length:	N/A
Date:	June 12, 2013

<u>DESCRIPTION</u>	<u>LOCAL</u>	<u>STATE</u>	<u>FEDERAL</u>	<u>TOTAL</u>
Right-of-Way	\$ -	\$ 500	\$ 4,500	\$ 5,000
Clearing and Grubbing	\$ -	\$ 200	\$ 1,800	\$ 2,000
Earthwork	\$ -	\$ 1,020	\$ 9,180	\$ 10,200
Railroad Crossing or Separation	\$ -	\$ -	\$ -	\$ -
Drainage	\$ -	\$ -	\$ -	\$ -
Utilities	\$ -	\$ 3,890	\$ 35,010	\$ 38,900
Structures	\$ -	\$ -	\$ -	\$ -
Pavement Removal	\$ -	\$ 200	\$ 1,500	\$ 1,700
Paving	\$ -	\$ 5,100	\$ 46,200	\$ 51,300
Roadway and Pavement Appurtenances	\$ -	\$ 80	\$ 720	\$ 800
Retaining Walls	\$ -	\$ -	\$ -	\$ -
Topsoil	\$ -	\$ -	\$ -	\$ -
Seeding	\$ -	\$ -	\$ -	\$ -
Sodding	\$ -	\$ -	\$ -	\$ -
Rip-Rap or Slope Protection	\$ -	\$ 320	\$ 2,880	\$ 3,200
Fencing	\$ -	\$ -	\$ -	\$ -
Signing <sup>1</sup>			\$ 1,100	\$ 1,100
Pavement Markings <sup>1</sup>			\$ 4,600	\$ 4,600
Lighting <sup>1</sup>			\$ -	\$ -
Signalization <sup>1</sup>			\$ 3,200	\$ 3,200
Guardrail <sup>1</sup>			\$ 16,700	\$ 16,700
Pay Item Quantity Adjustment (15%) <sup>2</sup>	\$ -	\$ 1,700	\$ 19,100	\$ 20,800
Maintenance of Traffic		\$ 700	\$ 6,300	\$ 7,000
Mobilization (5%)		\$ 700	\$ 7,600	\$ 8,300
CONSTRUCTION COST (rounded)		\$ 14,400	\$ 160,400	\$ 174,800
Engineering and Contingency (10%)		\$ 1,500	\$ 16,000	\$ 17,500
TOTAL CONSTRUCTION COST (rounded)		\$ 15,900	\$ 176,400	\$ 192,300
Preliminary Engineering (10%)		\$ 1,600	\$ 17,600	\$ 19,200
<b>PROJECT COST <sup>3</sup>(rounded)</b>	<b>\$ -</b>	<b>\$17,500</b>	<b>\$ 194,000</b>	<b>\$ 211,500</b>

<sup>1</sup> This safety item is 100% eligible and does not require a 10% funding match by the local agency.

<sup>2</sup> For estimating purposes pay items are adjusted for fluctuation of cost based on quantity.

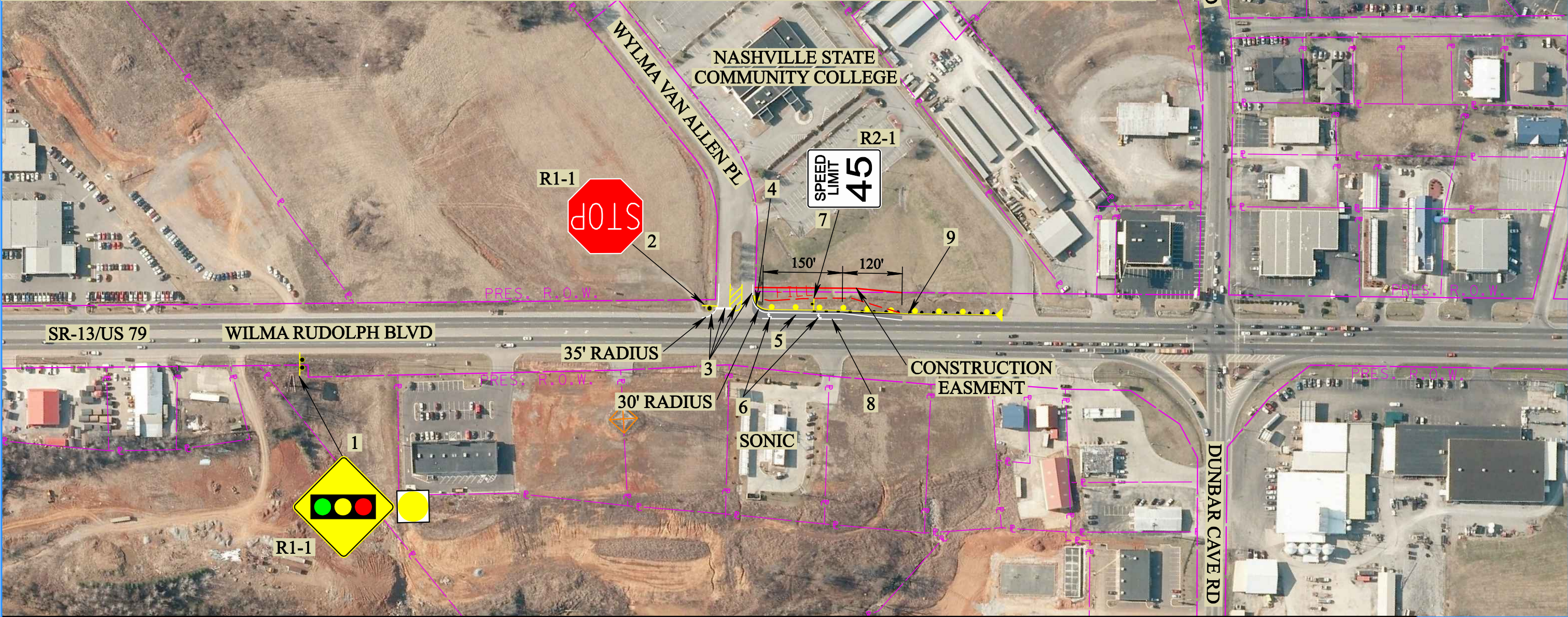
<sup>3</sup> For estimating future project costs, a compounded inflation rate of 10% should be applied from the date of this estimate.



GUIDANCE

1. Remove one (1) Signal Ahead (W3-3) sign and install one (1) Signal Ahead (W3-3) (48"x48") sign with a solar powered yellow flashing beacon on double posts eastbound on State Route 13 approximately 825 feet west of Wylma Van Allen Place. See Detail 4, Figure 2. Install 2" min. width yellow reflective strip on both posts. See Detail 2, Figure 2.
2. Remove and replace one (1) Stop (R1-1) (36"x36") sign on Wylma Van Allen Place and install 2" min. width red reflective strip on post. See Detail 1, Figure 2.
3. Install one (1) thermoplastic Stop Line (twenty-eight feet (28') in length and two feet (2') in width) and stripe Wylma Van Allen Place with 4" enhanced flatline thermoplastic edgeline and channelization pavement markings for a distance of 65 feet. See Detail 3, Figure 2.
4. Remove ten feet (10') of existing curb and gutter and install 45 feet of proposed curb and gutter along the radius of Wylma Van Allen Place.
5. Install two (2) Turn Arrow plastic pavement markings along the proposed right turn lane. Approximate locations are indicated on Figure 1.
6. Remove 270 feet of eight foot (8') shoulder and install 270 feet (150 feet of storage and 120 feet of taper) of full depth pavement for a twelve foot (12') right turn lane and four foot (4') shoulder. See Figure 1A for Cross Section details.
7. Remove and replace one (1) 45 MPH Speed Limit (R2-1) (30"x36") sign westbound on State Route 13 approximately 125 feet east of Wylma Van Allen Place.
8. Stripe the proposed right turn lane with 4" enhanced flatline thermoplastic solid lane line and edgeline pavement markings from Wylma Van Allen Place to 270 feet east of Wylma Van Allen Place. Install clear mono-directional snowplowable pavement markers at 20' spacing along the right turn lane line.
9. Remove 385 feet of existing guardrail and install 550 feet of proposed guardrail (includes one (1) Type 38 and one (1) Type In-Line terminal between the two (2) Nashville State Community College driveways. See Figure 1A for Cross Section details. Install spaced white linear delineation enhancement along 550 feet of proposed guardrail.
- \* ALL WARNING SIGNS SHALL BE ON FLUORESCENT YELLOW SHEETING MATERIAL.

TYPE	YEAR	COUNTY	FIGURE NO.
RSAR	2013	MONTGOMERY	1



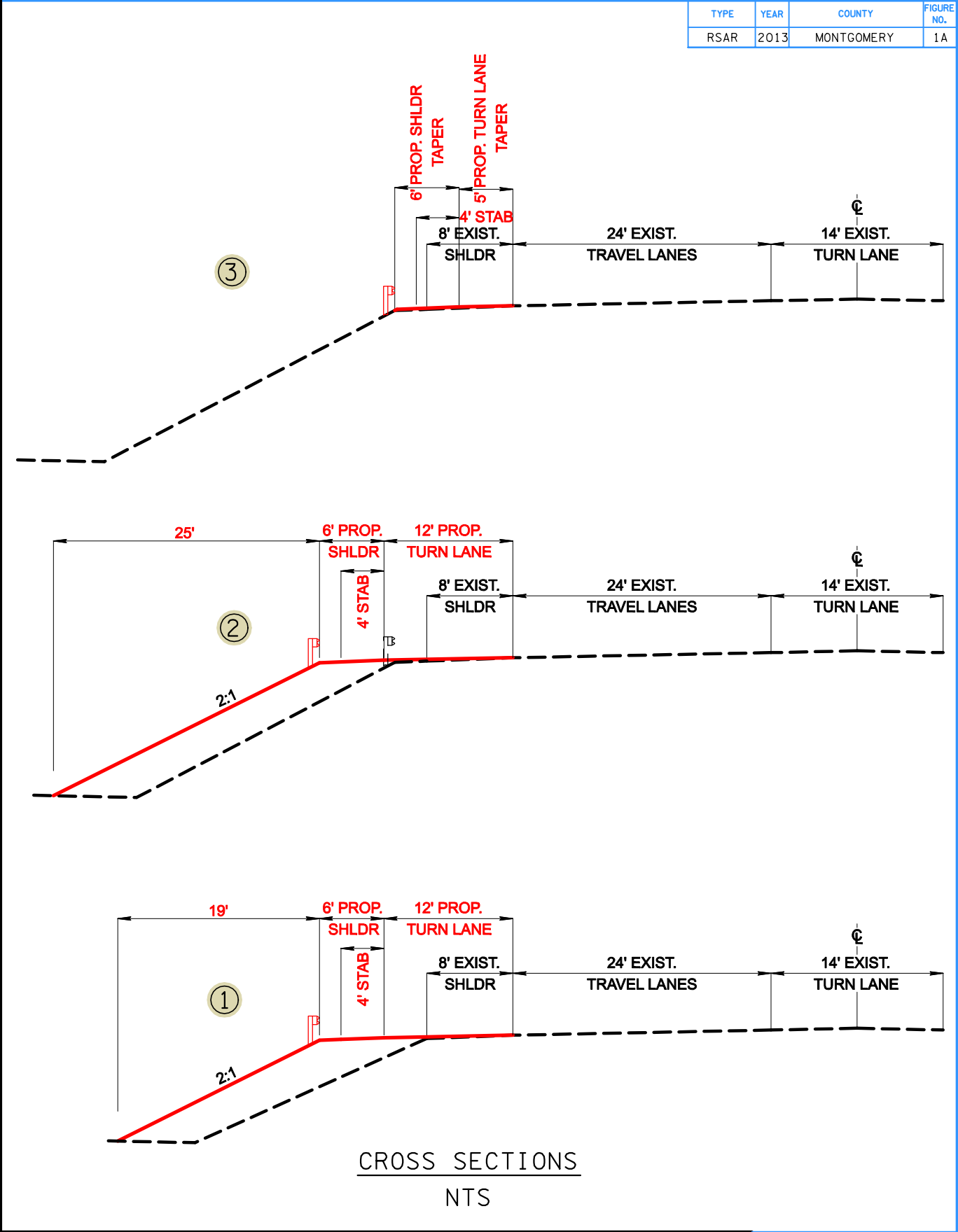
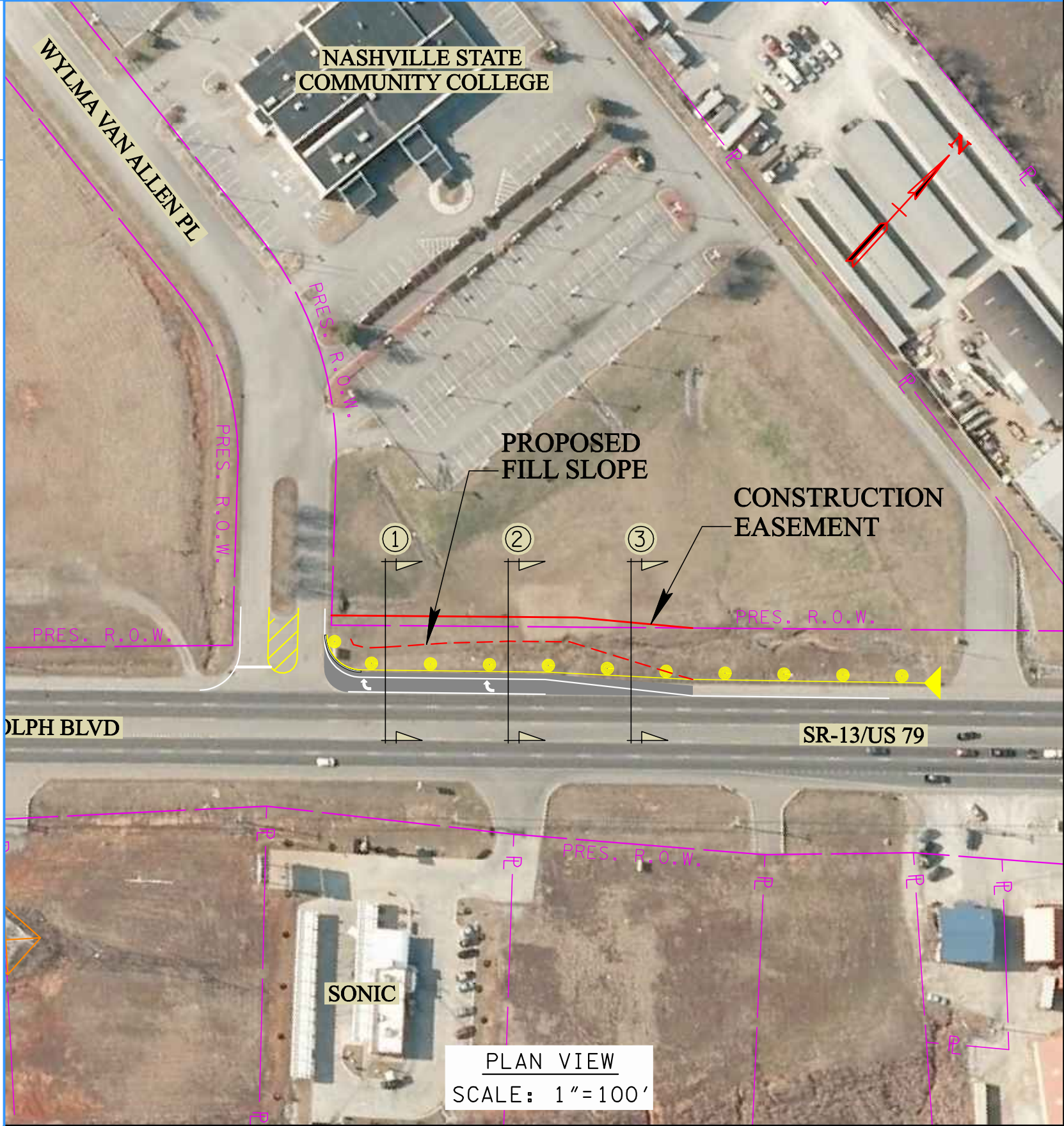
ROAD SAFETY AUDIT REVIEW

STATE ROUTE 13  
AT WYLMA VAN ALLEN PLACE (L.M. 22.40)  
MONTGOMERY COUNTY

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
PROJECT PLANNING DIVISION

FIGURE 1  
SR-13  
L.M. 22.40

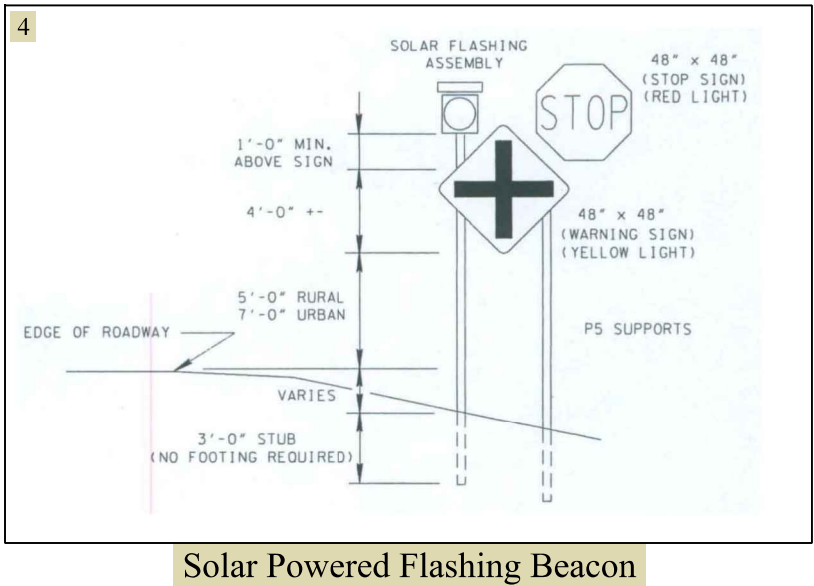
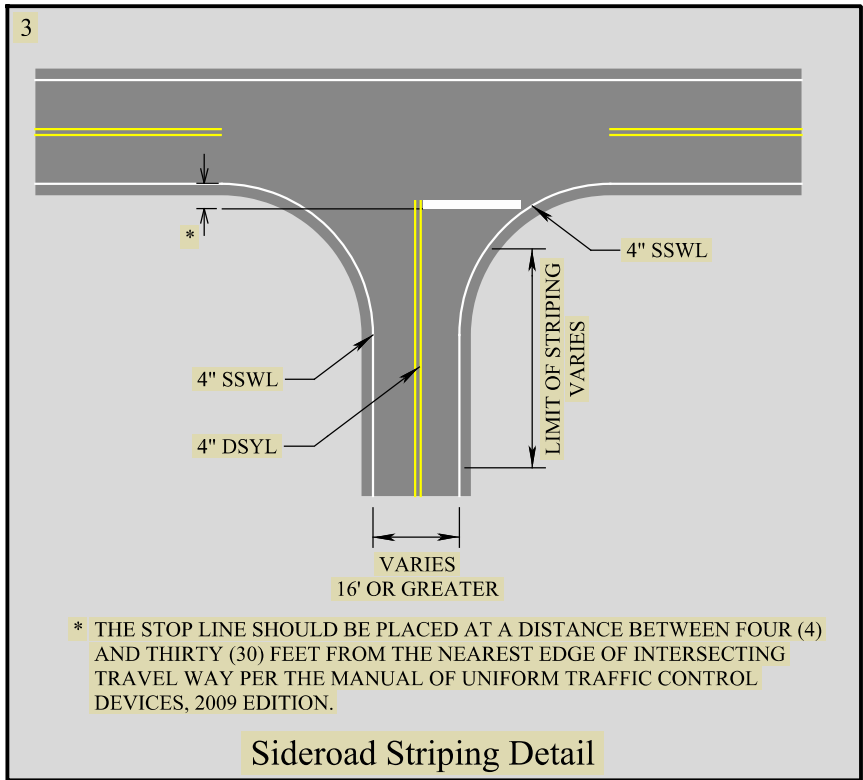
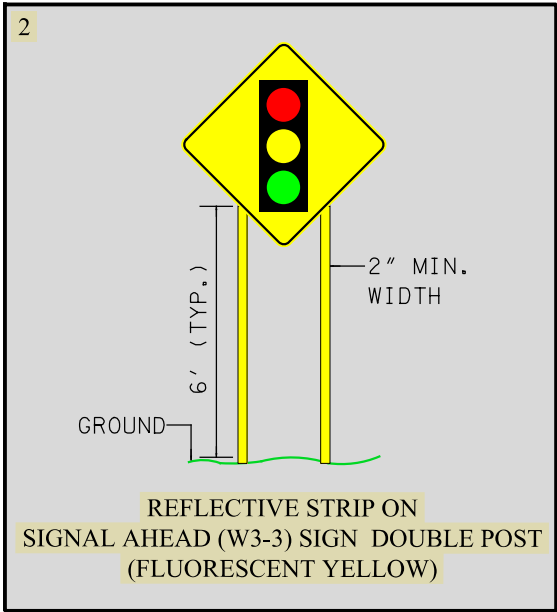
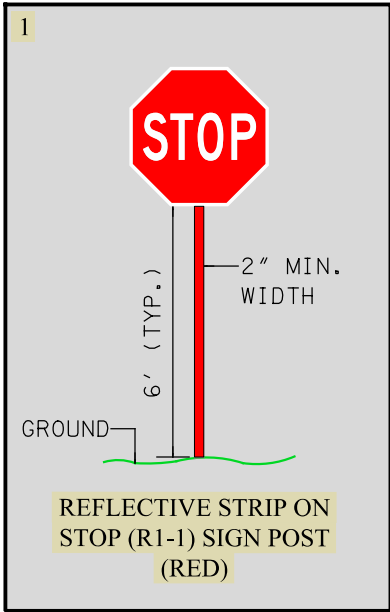




ROAD SAFETY AUDIT REVIEW

STATE ROUTE 13  
AT WYLMA VAN ALLEN PLACE (L.M. 22.40)  
MONTGOMERY COUNTY

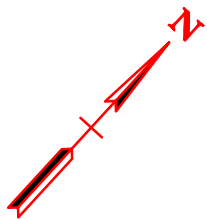
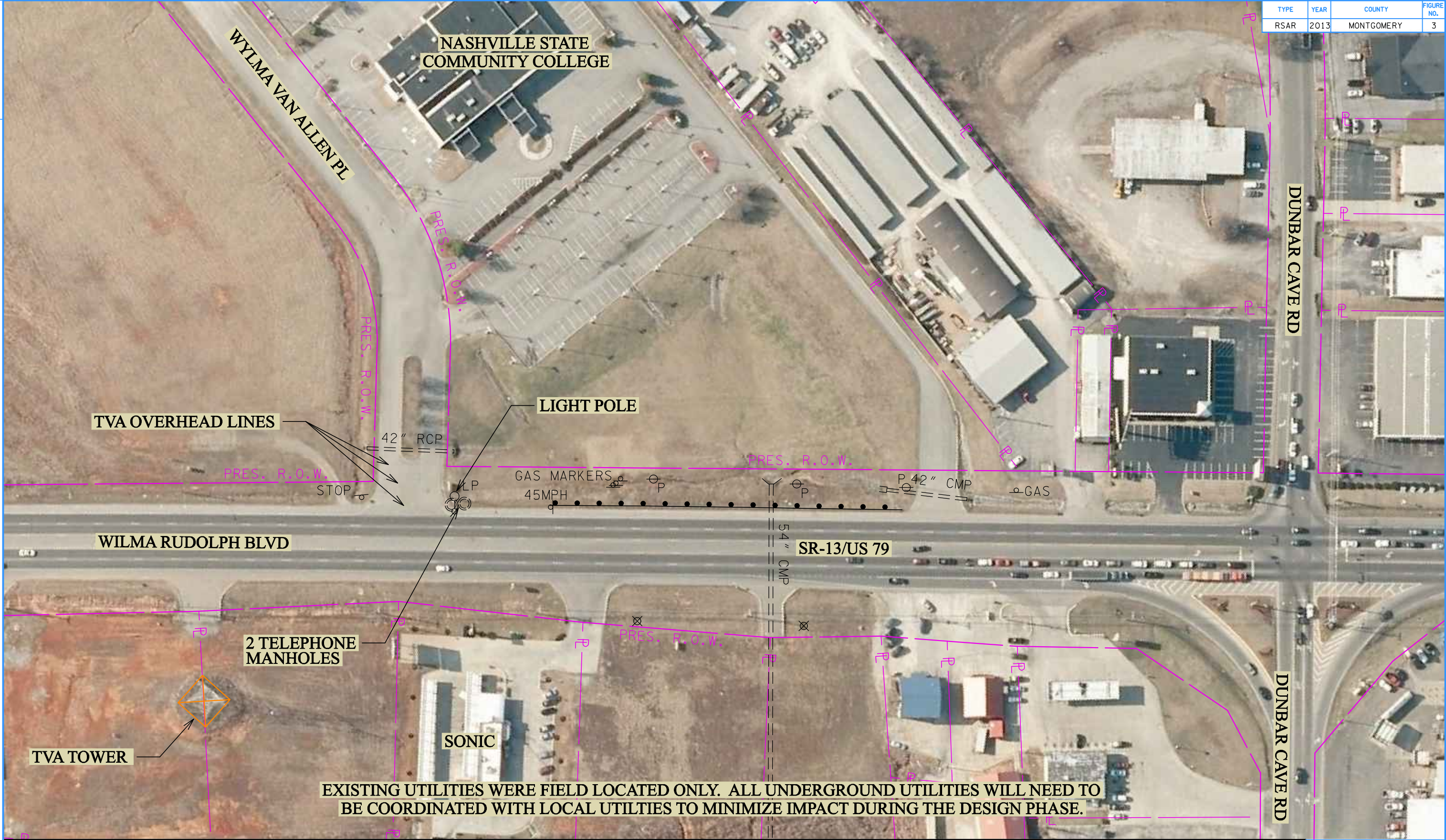




ROAD SAFETY AUDIT REVIEW

STATE ROUTE 13  
AT WYLMA VAN ALLEN PLACE (L.M. 22.40)  
MONTGOMERY COUNTY





ROAD SAFETY AUDIT REVIEW

STATE ROUTE 13  
AT WYLMA VAN ALLEN PLACE (L.M. 22.40)  
MONTGOMERY COUNTY

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
PROJECT PLANNING DIVISION

FIGURE 3  
EXIST. CONDITIONS  
SR-13  
L.M. 22.40



Montgomery County  
State Route 13  
At Wylma Van Allen Place (L.M. 22.40)

## APPENDIX

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Crash Data Statistics .....	1
Crash Rate Calculations .....	1
Crash Diagrams .....	1



TDOT PAY ITEM	TDOT DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
-	Right-of-Way (0.1 Acres of Const. Esmt.)	LS	1	\$ 5,000.00	\$ 5,000
RIGHT-OF-WAY TOTAL (ROUNDED)					\$ 5,000
201-01	Clearing and Grubbing (0.27 Acres)	LS	1	\$ 2,000.00	\$ 2,000
CLEAR AND GRUBBING TOTAL (ROUNDED)					\$ 2,000
203-03	Borrow Excavation (Unclassified)	CY	680	\$ 15.00	\$ 10,200
EARTHWORK TOTAL (ROUNDED)					\$ 10,200
202-03.01	Removal of Asphalt Pavement	SY	240	\$ 7.00	\$ 1,680
PAVEMENT REMOVAL TOTAL (ROUNDED)					\$ 1,700
DRAINAGE TOTAL (ROUNDED)					\$ -
-	Utility Relocation	LS	1	\$ 38,900.00	\$ 38,900
UTILITIES TOTAL (ROUNDED)					\$ 38,900
STRUCTURES TOTAL (ROUNDED)					\$ -
303-01	Mineral Aggregate Base (10")	TON	270	\$ 20.00	\$ 5,400
307-02.01	Bituminous Base (3")	TON	81	\$ 75.00	\$ 6,075
307-02.08	Bituminous Binder (2")	TON	54	\$ 80.00	\$ 4,320
402-01	Bituminous Material for Prime Coat	TON	1	\$ 525.00	\$ 525
402-02	Aggregate for Prime Coat	TON	3	\$ 25.00	\$ 75
403-01	Tack Coat	TON	1	\$ 570.00	\$ 570
411-02.10	Asphaltic Surface (1.25")	TON	381	\$ 90.00	\$ 34,290
PAVING TOTAL (ROUNDED)					\$ 51,300
202-08.15	Removal of Curb & Gutter	LF	10	\$ 5.00	\$ 50
702-03	Concrete Combined Curb & Gutter	CY	3	\$ 230.00	\$ 690
ROADWAY AND PAVEMENT APPURTENANCES TOTAL (ROUNDED)					\$ 800
RETAINING WALLS TOTAL (ROUNDED)					\$ -
712-01	Traffic Control	LS	1	\$ 6,935.00	\$ 6,935
MAINTENANCE OF TRAFFIC TOTAL (ROUNDED)					\$ 7,000
TOPSOIL TOTAL (ROUNDED)					\$ -
SEEDING TOTAL (ROUNDED)					\$ -
SODDING TOTAL (ROUNDED)					\$ -
713-02.21	Sign Post Delineation Enhancement	18	L.F.	\$6.00	\$ 108
713-11.02	Perforated/Knockout Square Tube Post	84	Lbs.	\$4.50	\$ 380
713-13.03	Flat Sheet Aluminum (0.100" Thick)	31	SF	\$13.00	\$ 403
713-15.41	Remove existing signs	3	EACH	\$60.00	\$ 180
SIGNING TOTAL (ROUNDED)					\$ 1,100

TDOT PAY ITEM	TDOT DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
716-01.22	Snowplowable RPM (Mono-Directional)	EA	8	\$ 28.00	\$ 224
716-02.04	Plastic Pavement Marking (Channel. Striping)	SY	130	\$ 25.00	\$ 3,250
716-02.05	Plastic Pavement Marking (Stop Line)	LF	28	\$ 10.00	\$ 280
716-02.06	Plastic Pavement Marking (Turn Lane Arrow)	EA	2	\$ 200.00	\$ 400
716-12.01	4" Enhanced Flatline Thermo.	LM	0.13	\$ 3,000.00	\$ 390
PAVEMENT MARKINGS TOTAL (ROUNDED)					\$ 4,600
LIGHTING TOTAL (ROUNDED)					\$ -
730-50.10	Solar Powered Flashing Assembly	EA	1	\$ 3,200.00	\$ 3,200
SIGNALIZATION TOTAL (ROUNDED)					\$ 3,200
FENCE TOTAL (ROUNDED)					\$ -
705-02.02	Single Guardrail (Type 2)	LF	550	\$ 18.00	\$ 9,900
705-04.05	Guardrail Terminal (Type In-Line)	EA	2	\$ 575.00	\$ 1,150
705-04.07	Guardrail Terminal (Type 38)	EA	1	\$ 2,200.00	\$ 2,200
706-01	Guardrail Removed	LF	385	\$ 3.00	\$ 1,155
705-04.21	Guardrail Delineation Enhancement	LF	550	\$ 4.00	\$ 2,200
GUARDRAIL TOTAL (ROUNDED)					\$ 16,700
709-05.06	Machined Rip-Rap (Class A-1)	TON	80	\$ 40.00	\$ 3,200
RIP-RAP OR SLOPE PROTECTION TOTAL (ROUNDED)					\$ 3,200

Designation	Legend or Description	No. of Signs	Size1 (in)	Size2 (in.)	Total Sq. Ft.
R1-1	STOP SIGN	1	36	36	7.50
R2-1	45 MPH SPEED LIMIT	1	30	36	7.50
W3-1	SIGNAL AHEAD	1	48	48	16.00
<b>Totals</b>		<b>3</b>			<b>31.00</b>



**RSAR – State Route 13  
L.M. 22.40 – L.M. 22.40  
Bedford County  
PIN 118293.00**

**Crash Data Statistics**

Condition	Frequency	Percentage of Total
Daytime (7:00 am-7:00 pm)	9	90%
Nighttime (7:00 pm-7:00 am)	1	10%
Unknown	0	0%
Property Damage	5	50%
Non-Incap. Injury	4	40%
Incapacitating Injury	1	10%
Fatality	0	0%
Lane Departure	0	0%
Rear-End	9	90%
Sideswipe	0	0%
Angle	1	10%
Head-On	0	0%
Avoidance Maneuver	0	0%
Raining	1	10%
Clear	9	90%
Unknown	0	0%
Pedestrians/Cyclist Involved	0	0%

2007-2009 Crash Data

2011 AADT on State Route 13 – 33,270 vehicles/day

COUNTY = Montgomery Date: 12/19/2012

Route = State Route 13

Location = L.M. 22.40 (Intersection with Saturn Blvd.)

Highway Type = Urban Four-Lane

FUNCTIONAL CLASS= Urban Major Arterial

DATA YEARS = 2007-2009

ADT YEARS USED= 2011

COMMENTS =

ANALYZED BY = GVF

SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE

BLM	ELM	Length	Average AADT	VMT
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0

0.00 0 0

# INTERSECTION

Log Mile = 22.4

Leg Traffic AADT

North = 33,270

East = 0

South = 33,270

West = 0

Entering AADT = 33,270

#VALUE!

Urban Four-Lane  
2007-2009

		Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury
No. of Crashes	=	10	0	1	1	4
No. of Years	=	3				
SW avg. rate	=	0.161	0.001	0.004	0.005	0.040
06-08 S/W Rates						
Exposure (E)	=	36.4307				
Crash Rate (A)	=	0.274	0.000	0.027	0.027	0.110
Critical Rate (C)	=	0.329				
Severity Index (SI)	=	0.6000				
Actual Rate/SW Average	=	1.70	0.00	6.86	5.49	2.74
Ratio of A/C	=	0.83				

\* Severe Crashes are the sum of fatal and incapacitating injury crashes

Revised 4/3/2007



CRASH DATA  
2007-2009

COUNTY:	CITY:
MONTGOMERY	CLARKSVILLE
SR-13 (WILMA RUDOLPH BLVD.)	
PIN 118293.00	
SCALE:	DATE:
1"= 50'	12-10-12