



I. PRELIMINARY PROJECT INFORMATION			
County:	Christian	Item No.:	02-8703.00
Route Number(s):	KY 107	Road Name:	KY 107
Program No.:	8762201D	UPN:	FD04 024 0107 016-018
Federal Project No.:	NA	Type of Work:	Minor Widening
<div style="display: flex; justify-content: space-between;"> 2012 Highway Plan Project Description: </div>			
Widen KY 107 to three lanes from Gateway Ln to KY 380.			
Beginning MP: 16.823		Ending MP: 17.169	
		Project Length: 0.346	
Functional Class.: <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural <div style="border: 1px solid black; padding: 2px; display: inline-block;">Arterial</div>		State Class.: <input type="checkbox"/> Primary <input checked="" type="checkbox"/> Secondary Route is on: <input type="checkbox"/> NHS <input checked="" type="checkbox"/> NN <input type="checkbox"/> Ext Wt	
MPO Area: Not Applicable In TIP: <input type="checkbox"/> Yes <input type="checkbox"/> No		Truck Class.: A % Trucks: 4.90% Terrain: Rolling	
ADT (current): 13052 (2013)			
Access Control: <input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled <input type="checkbox"/> Partial		Spacing:	
Median Type: <input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type):			
Existing Bike Accommodation: Shared Lane <div style="border: 1px solid black; padding: 2px; display: inline-block;">Shared Lane</div>		Ped: <input type="checkbox"/> Sidewalk	
Posted Speed: <input checked="" type="checkbox"/> 35 mph <input type="checkbox"/> 45 mph <input type="checkbox"/> 55 mph <input type="checkbox"/> Other (Specify):			
KYTC Guidelines Preliminarily Based on : 35 MPH Proposed Design Speed			
COMMON GEOMETRIC			
Roadway Data:	EXISTING	PRACTICES*	
No. of Lanes	2	MIN 2	Existing Rdwy. Plans available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Year of Plans: 1930
Lane Width	10'	11' MIN	
Shoulder Width	1.5'		<input checked="" type="checkbox"/> Traffic Forecast Requested Date Requested: 6/29/12
Max. Superelevation**		4-6%	
Minimum Radius**		4%-371' 6%-340'	<input type="checkbox"/> Mapping/Survey Requested Date Requested:
Maximum Grade		7%	
Minimum Sight Dist.		250'	Type:
Sidewalk Width(urban)	NONE	MIN 4'	
Clear-zone***			
Project Notes/Design Exceptions?:			
<small>*Based on proposed Design Speed, **AASHTO's A Policy on Geometric Design of Highways and Streets, ***AASHTO's Roadside Design Guide</small>			
Bridge No.*:	(Bridge #1)	(Bridge #2)	
Sufficiency Rating			Existing Geotech data available? <input type="checkbox"/> Yes <input type="checkbox"/> No
Total Length			
Width, curb to curb			Detour Length(s):
Span Lengths			
Year Built			
Posted Weight Limit			
Structurally Deficient?			
Functionally Obsolete?			

*If more than two bridges are located on the project, include additions sheets.

Existing Bridge Type				
II. PROJECT PURPOSE AND NEED				
A. Legislation				
Item # 02-8703.00 in the 2012 Highway plan	Funding	Phase	Year	Amount
	SPP	D	2012	\$300,000
	SPP	R	2013	\$600,000
	SPP	U	2013	\$600,000
	SPP	C	2015	\$1,200,000
B. Project Status				
Design funds for this project were authorized in February. This is part of UPL# 02 024 D0107 9.10. Project 2-203.00 to improve the intersection on KY 107 and Koffman Drive is also within these project limits.				
C. System Linkage				
KY 107 is an urban arterial within the city limits of Hopkinsville that links several schools to KY 380 and US 68.				
D. Modal Interrelationships				
No Modal Interrelationships known				
E. Social Demands & Economic Development				
This section of road handles much of the traffic to and from Hopkinsville High School and Hopkinsville Middle School (including heavy bus traffic). There are also plans to develop another school on KY 380 near the KY 107/ KY 380 intersection. KY 107 also serves a large Rec. center to the south and a Golf Course to the East.				
F. Transportation Demand				
Most traffic to and from Hopkinsville Middle and High schools gain access via Gateway Ln or Koffman Dr off of KY 107. Congestion peaks at the start and end of the school day. Due to the absence of a turn lane, traffic traveling south on KY 107 must stop traffic to wait to turn left onto Gateway Ln or Koffman Dr. Daily traffic has increased approx. 21% in the last 2 years.				

II. PROJECT PURPOSE AND NEED (cont.)

G. Capacity

KY 107 is a two lane facility with current ADT of 13,052(2013). There is congestion on this route including student drivers.

H. Safety

A current Critical Rate Factor of 1.4 indicates safety issues along this route. There were 58 collisions reported in this area from 1/1/2010 - 1/1/2013 mostly occurring during pick up and drop-off times at the schools. Many are rear end and side collisions occurring during left turn movements.

I. Roadway Deficiencies

This section of KY 107 is currently 2 lanes only with narrow shoulders and no turn lanes. KYTC Common Geometric Practices for urban Arterials recommend 11' wide driving lanes and curb and gutter in locations with restricted right of way.

Draft Purpose and Need Statement:

Need: This project is needed to reduce traffic congestion and improve safety and traffic flow. Vehicles on KY 107 making left turns block thru traffic flow while waiting for oncoming traffic to clear. 58 collisions were reported from 1/1/2010 - 1/1/2013 and the majority of them involved left turn movements.

Purpose: To relieve congestion and provide safer access to area schools

III. PRELIMINARY ENVIRONMENTAL OVERVIEW

A. Air Quality

Project is in: ☒ Attainment area ☐ Nonattainment or Maintenance Area ☐ PM 2.5 County

STIP Pg. #:

TIP Pg. #:

B. Archeology/Historic Resources

☐ Known Archeological or Historic Resources are present

None Known

C. Threatened and Endangered Species

No effect

D. Hazardous Materials

☒ Potentially Contaminated Sites are present ☐ Potential Bridge or Structure Demolition

Gas stations present at both the Koffman/KY 107 intersection and the Gateway/KY 107 intersection. Possible past underground storage tanks to be investigated.

E. Permitting

Check all that may apply: ☐ Waters of the US ☐ MS4 area ☐ Floodplain Impacts ☐ Navigable Waters of the US Impacts
Are 401/404 Permits likely to be required? ☐ Yes ☐ No Impacts to: ☐ Wetlands ☐ Stream/Lake/Pond
☐ ACE LON ☐ ACE NW ☐ ACE IP ☐ DOW IWQC ☐ Special Use Waters

None known

F. Noise

Are existing or planned noise sensitive receptors adjacent to the proposed project? ☒ Yes ☐ No
Is this considered a "Type I Project" according to the [KYTC Noise Analysis and Abatement Policy?](#) ☐ Yes ☒ No

G. Socioeconomic

Check all that may apply: ☐ Low Income/Minority Populations affected ☐ Relocations ☒ Local Land Use Plan available

None known

H. Section 4(f) or 6(f) Resources

The following are present on the project: ☐ Section 4(f) Resources ☐ Section 6(f) Resources

None

Anticipated Environmental Document:

None (Completely State funded)

IV. PROJECT SCOPING

This project is to widen KY 107 to 3 lanes with appropriate shoulders from Gateway Lane to KY 380. This project will also include project 2-203 to add turn lanes at Koffman Drive. Locals have also requested that the standing water/drainage issues be addressed at the KY 107/KY 380 intersection. The standing water is located in a triangle shaped area on the west side of KY 107 and the south side of KY 380 and both roads are intersected by a railroad road bed(see below).

Total Estimate	
Phase	Estimate
Planning	
Design	300,000
R/W	990,000
Utilities	1,300,000
Const	1,850,000
Total	4,440,000



IV. PROJECT SCOPING (cont.)

V. Summary

This project is needed to reduce congestion, improve safety and create better access to area schools. The highway plan funding for Design and Construction for item 2-8703(and 2-203) appear to be adequate. However, it is anticipated that additional funds will be needed to complete ROW and Utilities. Additional needed funds for ROW and Utilities are estimated at \$150,000 each.

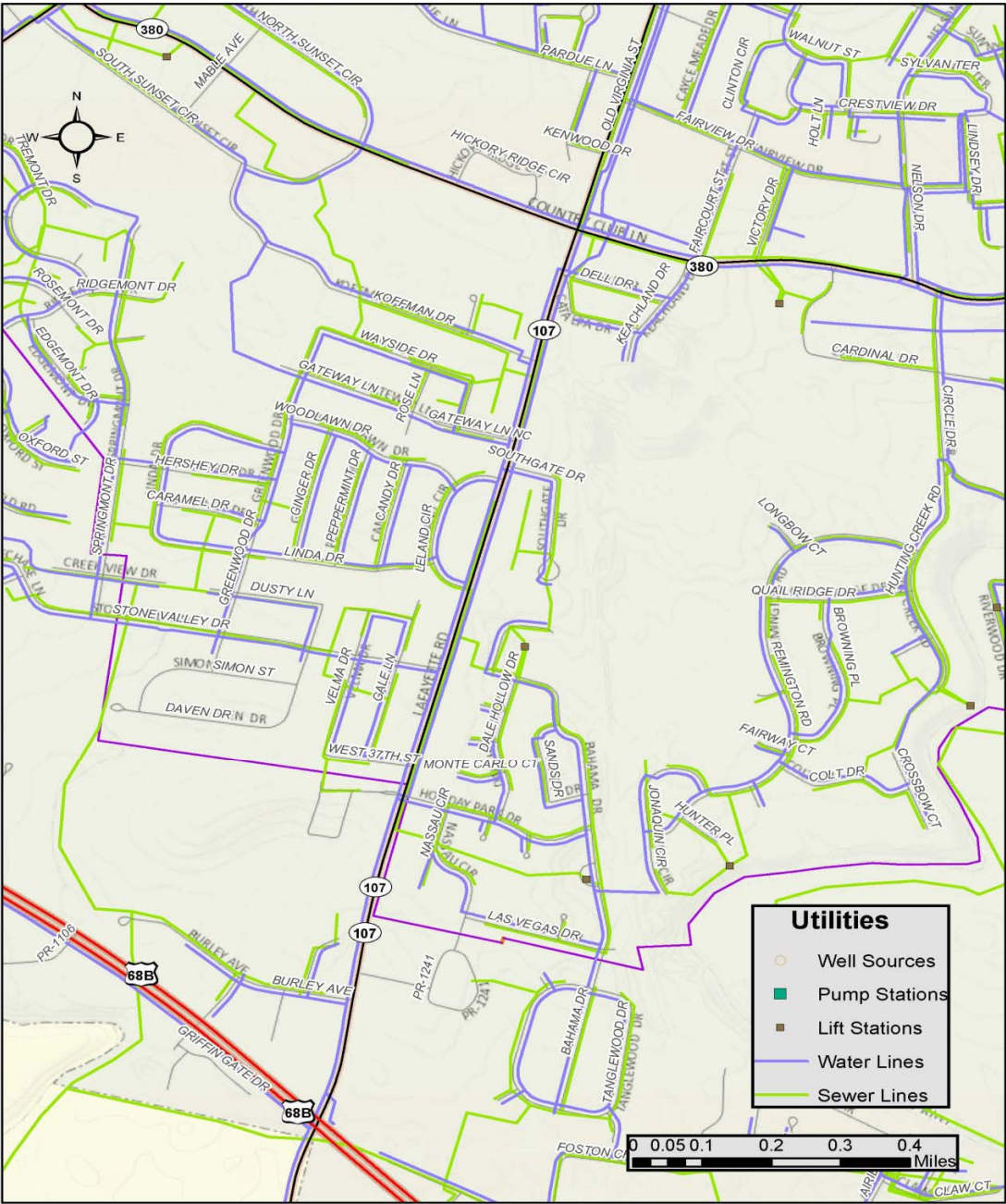
2-8703.00 Estimate		2-203.00 Estimate		Total Current Estimate	
<u>Phase</u>	<u>Estimate</u>	<u>Phase</u>	<u>Estimate</u>	<u>Phase</u>	<u>Estimate</u>
Planning		Planning		Planning	
Design	300,000	Design	Complete	Design	300,000
R/W	600,000	R/W	240,000	R/W	990,000
Utilities	600,000	Utilities	550,000	Utilities	1,300,000
Const	1,200,000	Const	650,000	Const	1,850,000
Total	2,700,000	Total	1,440,000	Total	4,440,000

VI. Tables and Exhibits

Average Daily Traffic			
Location	2011	2013	Notes
KY 107 between Koffman and KY 380	not available	13,052	MP17
KY 107 between Gateway and Koffman	9,640	11,664	MP16.9



VI. Tables and Exhibits (cont.)



Utilities potentially impacted	
HWEA(Water and Sewer)	AT&T
Atmos Energy	Time Warner Cable
Pennyrile Rural Electric	Wind Stream Communication
Hopkinsville Electric System	