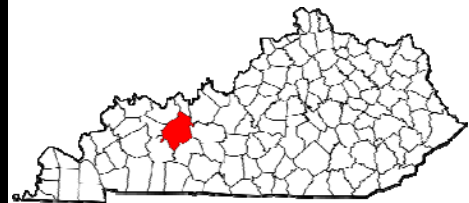


**D**ata  
**N**eeds  
**A**nalysis



## Scoping Study



KY 54, Ohio County

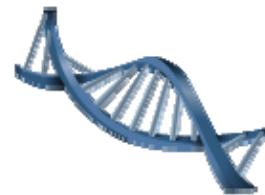
Reconstruct Intersection of KY  
54 and KY 2671

Item No. **2-231.00**

Prepared by

KYTC District 2 Planning

June 2014



**I. PRELIMINARY PROJECT INFORMATION**

<b>County:</b>	Ohio	<b>Item No.:</b>	2-231.00
<b>Route Number(s):</b>	KY 54	<b>Road Name:</b>	KY 54
<b>Program No.:</b>	874120	<b>UPN:</b>	FD04 092 0054 003-005
<b>Federal Project No.:</b>	na	<b>Type of Work:</b>	Intersection Reconstruction

2012 **Highway Plan Project Description:**

Reconstruct intersection at KY 54 and KY 2671.(12CCR)(Same Project as 2-8704)

**Beginning MP:** 3.939      **Ending MP:** 4.039      **Project Length:** 0.1

**Functional Class.:**  Urban  Rural  
 Collector  Primary  Secondary

**MPO Area:** Not Applicable  
 In TIP:  Yes  No  
**Truck Class.:** AA  
**% Trucks:** 7.1

**ADT (current):** 2416 2010  
**Access Control:**  None  Permit  Fully Controlled  Partial  
**Median Type:**  Undivided  Divided (Type):  
**Terrain:** Rolling

**Existing Bike Accommodations:** Shared Lane  
**Ped:**  Sidewalk

**Posted Speed:**  35 mph  45 mph  55 mph  Other (Specify):

**KYTC Guidelines Preliminarily Based on :** 55 MPH Proposed Design Speed

**COMMON GEOMETRIC**

Roadway Data:	EXISTING	PRACTICES*	
No. of Lanes	2	min 2	<a href="#">Existing Rdwy. Plans available?</a>
Lane Width	10ft	12ft	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Shoulder Width	2ft	8ft	Year of Plans: 1938
Max. Superelevation**		8%	<input checked="" type="checkbox"/> <a href="#">Traffic Forecast Requested</a>
Minimum Radius**		965ft	Date Requested: 6/29/2012
Maximum Grade		7%	<input type="checkbox"/> Mapping/Survey Requested
Minimum Sight Dist.		495ft	Date Requested:
Sidewalk Width(urban)		na	Type:
Clear-zone***			

Project Notes/Design Exceptions?:

\*Based on proposed Design Speed, \*\*AASHTO's A Policy on Geometric Design of Highways and Streets, \*\*\*AASHTO's Roadside Design Guide

**Bridge No.\*:** (Bridge #1) (Bridge #2)

**Sufficiency Rating**

**Total Length**

**Width, curb to curb**

**Span Lengths**

**Year Built**

**Posted Weight Limit**

**Structurally Deficient?**

**Functionally Obsolete?**

**Existing Bridge Type**

[Existing Geotech data available?](#)  
 Yes  No

**Detour Length(s):**

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

**II. PROJECT PURPOSE AND NEED**

**A. Legislation**

This project is in the approved 2012 Highway Plan.	<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
	SPP	D	2014	\$300,000
	SPP	R	2015	\$200,000
	SPP	U	2015	\$300,000
	SPP	C	2016	\$1,000,000

**B. Project Status**

This was UPL project# 02 092 D0054 74.00. The issue was identified in 2006 by the GRADD. Funds for Design were authorized in October of 2012.

**C. System Linkage**

This route is a 54.329 mile rural major collector which terminates at S. Main St. in Leitchfield to the east and KY 2831 in Owensboro to the west. This project should not change the functional classification of this route. Other smaller communities along this route include Fordsville and Whitesville.

**D. Modal Interrelationships**

This project will not impact modal interrelationships.

**E. Social Demands & Economic Development**

This project should not impact social demands or economic development.

**II. PROJECT PURPOSE AND NEED (cont.)**

**F. Transportation Demand**

This route connects the Fordsville area to the City of Owensboro. The Average Daily Traffic on this route was 2416 per day in 2010.

**G. Capacity**

This project is to improve safety at the intersection. Capacity should not be impacted. The existing two lane facility is adequate to handle the current traffic volume.

**H. Safety**

The KY 54 and KY 2671 intersection has sight distance concerns. The KY 2671 intersection is located below the crest of a hill. A Critical Rate Factor of 0.774 indicates safety concerns. According to the Kentucky State Police Website five crashes were report between 2010 and 2013 at this location: one head on collision and one angle collision occurred while crossing KY 54 at the intersection of KY 2671; two run of the road crashes and one sideswipe crash occurred while weather was a factor.

**I. Roadway Deficiencies**

The intersection is combined with a horizontal curve and is below a hill crest. KY 54 has a posted speed limit of 55 mph. Based on this, Common Geometric Practices require a minimum stopping sight distance of 495ft. It appears that the distance between the crest curve and the intersection with KY 2671 does not meet this standard.

**III. PRELIMINARY ENVIRONMENTAL OVERVIEW**

**A. Air Quality**

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

STIP Pg.#: [Redacted]

TIP Pg.#: [Redacted]

**B. Archeology/Historic Resources**

Known Archeological or Historic Resources are present

Old Wagon Road is in the area but should not be affected.

**C. Threatened and Endangered Species**

No effect known

**D. Hazardous Materials**

Potentially Contaminated Sites are present  Potential Bridge or Structure Demolition

None known.

**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 known.

Anticipated Environmental Document:

None (Completely State funded) ▼

### IV. PROJECT SCOPING, NEEDS & PURPOSE

#### A. Scoping & Need:

The intersection of KY2671 with KY54 is located within a horizontal curve and is below a hill crest. There have been multiple accidents at this location. The scope of this project is to reconstruct this intersection.



#### B. Draft Project Purpose:

The purpose of this project is to improve safety and address roadway deficiencies at the intersection of KY 54 and KY 2671.

**V. PROJECT ESTIMATE & METHODOLOGY**

<b>Estimate Methodology:</b>	<b>Current Estimate</b>	
The costs in the highway plan should be adequate to complete this project. This estimate is based on similar projects.	<u>Phase</u>	<u>Estimate</u>
	Planning	0
	Design	300,000
	R/W	200,000
	Utilities	300,000
	Const	1,000,000
	<b>Total</b>	<b>1,800,000</b>

**VI. UTILITIES POTENTIALLY AFFECTED - CONTACT INFORMATION**

Ohio County Water  
 130 East Washington Stree  
 Hartford KY, 42347  
 270-298-7704

**VII. PRECONSTRUCTION STATUS REPORT**

02-Apr-2013

**Preconstruction Status Report**

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Auth No. / Date 87412 31-Oct-2012 **Project No. 02 231.00** Parent No. 02 231.00  
 County Name OHIO  
 BMP / EMP 3.939 / 4.039  
 Route KY-54-

Desc RECONSTRUCT INTERSECTION AT KY 54 AND KY 2671. (12CCR) (SAME PROJECT AS 2-8704)

Type Of Work SAFETY(P) No. Lanes Length Measurement Type E

Road Eng. DEPARTMENT-D02 Bridge Eng.  
 Proj Mgr kytjohn.rudd Bridge No. Suff. Rating

Letting Status / Date \*\*\*\*\*

Final Plans Contractor Notice

Environmental	Name	Date	Type	Sched. Comp.	Actual Comp.	Expire Date
Assigned:						
Requested:						

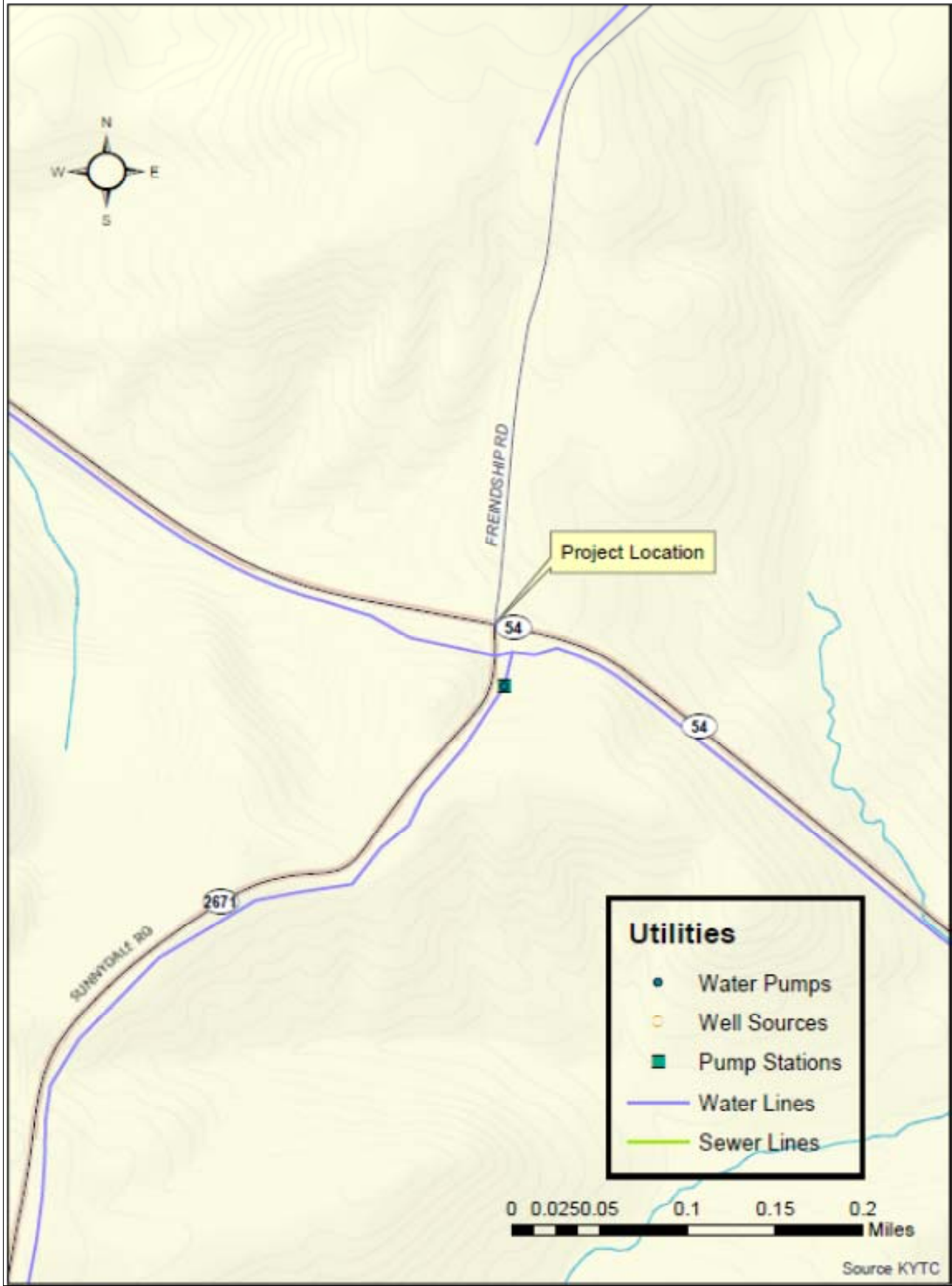
Concerns **EMARS PROGRAM CODE**  
 Phase Code D R U C  
 Stage AUTHORIZED ESTIMATED ESTIMATED ESTIMATED 8741201D  
 Fund Code SPP SPP SPP SPP  
 Escalated Cost 0 200,000 300,000 1,000,000  
 Fiscal Year 2015 2015 2016  
 Auth Amt. 300,000  
 Auth Date 31-Oct-2012  
 Current Cost  
 Date Of Current Cost  
 Year of Proj Auth Date  
 Program Code FD04  
 Remaining Balance 300,000.00

Right Of Way Parcel Information Utility Information  
 Total Parcels: Completion Date  
 Appraisals of Negotiated Starts of  
 Relocated of Agreement of  
 Deeds Signed Relocated of  
 Suits Filed  
 Right Of Entry  
 Parcels Cleared

Milestone	Remarks	Status	Date	Scheduled
PRELIMINARY LINE AND GRADE		UNKNOWN	21-May-2012	
DRAINAGE INSPECTION		UNKNOWN	21-May-2012	
JOINT INSPECTION		UNKNOWN	21-May-2012	
GEOTEC ENGINEERING - ROADWAY		UNKNOWN	21-May-2012	
GEOTEC ENGINEERING - BRIDGES		UNKNOWN	21-May-2012	
BRIDGE AND STRUCTURE PLANS TO CENTRAL OFFICE		UNKNOWN	21-May-2012	
ADVANCE SITUATION TO CENTRAL OFFICE		UNKNOWN	21-May-2012	
RIGHT OF WAY PLANS TO CENTRAL OFFICE		UNKNOWN	21-May-2012	
ROAD PLANS TO CENTRAL OFFICE		UNKNOWN	21-May-2012	
TRAFFIC PLANS - SIGNING		UNKNOWN	21-May-2012	
TRAFFIC PLANS - LIGHTING		UNKNOWN	21-May-2012	
TRAFFIC PLANS - SIGNALS		UNKNOWN	21-May-2012	
TRAFFIC PLANS - TRAFFIC CONTROL		UNKNOWN	21-May-2012	



VIII. TABLES AND EXHIBITS



VIII. TABLES AND EXHIBITS (cont.)

