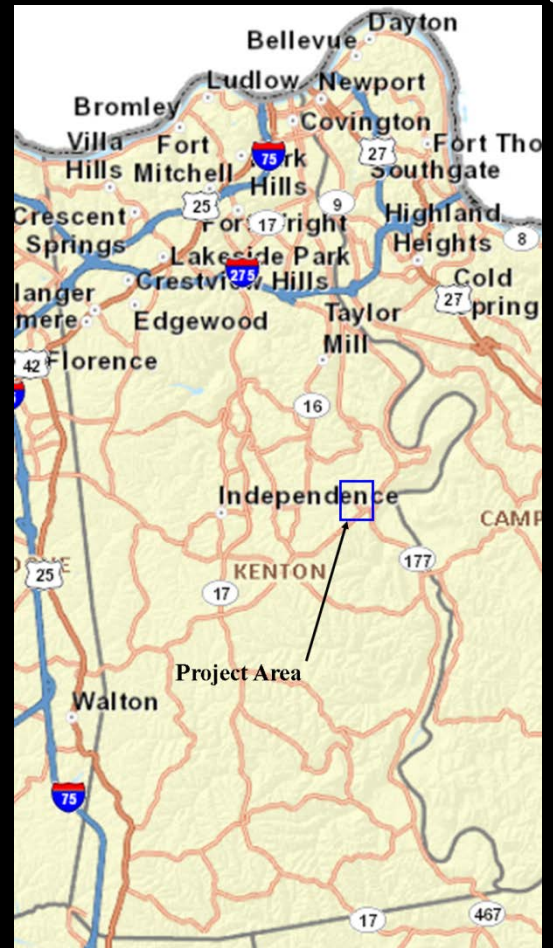


Data

Needs

Analysis

Scoping Study



Kenton County

KY 2045

From MP 3.711 to 3.760

Item No. 6-1080

Prepared by the KYTC
Division of Planning
KYTC District 6

November 2012



I. PRELIMINARY PROJECT INFORMATION					
County:	Kenton	Item No.:	6-1080		
Route Number(s):	KY 2045	Road Name:	Pruett Rd		
Program No.:	86646	UPN:	FD52	59	2045 003-004
Federal Project No.:	BRO 0603 230	Type of Work:	Bridge Replacement		
2012 Highway Plan Project Description:					
REPLACE BRIDGE ON PRUETT RD (KY 2045) OVER DECOURSEY CREEK AT JCT WITH MARSHALL RD (CS 1007)(SR 18.2) 059B00030N					
Beginning MP:	3.711	Ending MP:	3.76	Project Length:	0.05
Functional Class.:	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural <input type="checkbox"/> Local	State Class.:	<input type="checkbox"/> Primary <input checked="" type="checkbox"/> Secondary		
MPO Area:	OKI	Route is on:	<input type="checkbox"/> NHS <input type="checkbox"/> NN <input type="checkbox"/> Ext Wt		
In TIP:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Truck Class.:	A		
ADT (current):	806	% Trucks:	N/A		
Access Control:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled	Terrain:	Rolling		
Median Type:	<input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type):	Partial Spacing:			
Existing Bike Accommodations:	Shared Lane	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 :	40 MPH Proposed Design Speed				
COMMON GEOMETRIC					
Roadway Data:	EXISTING	PRACTICES*			
No. of Lanes	2	2	Existing Rdwy. Plans available?		
Lane Width	9 ft	10 ft	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Shoulder Width	2 ft	5 ft	Year of Plans:		
Max. Superelevation**	N/A	6%	<input type="checkbox"/> Traffic Forecast Requested		
Minimum Radius**	N/A	510 ft	Date Requested:		
Maximum Grade	N/A	10%	<input type="checkbox"/> Mapping/Survey Requested		
Minimum Sight Dist.	N/A	305 ft	Date Requested:		
Sidewalk Width(urban)	N/A	N/A	Type:		
Clear-zone***	N/A	**			
Project Notes/Design Exceptions?:	** Slope of 1V:3H, fixed objects should not be present in vicinity				
<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.*:	<u>(Bridge #1)</u>	<u>(Bridge #2)</u>			
Sufficiency Rating	16.1	N/A	Existing Geotech data available?		
Total Length	36.1 ft	N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Width, curb to curb	22 ft	N/A	Detour Length(s): 2.0 miles		
Span Lengths	331 ft	N/A			
Year Built	1965	N/A			
Posted Weight Limit	15 T/16 T/19 T	N/A			
Structurally Deficient?	Yes	N/A	*If more than two bridges are located on the project, include additions sheets.		
Functionally Obsolete?	No	N/A			
Existing Bridge Type	Concrete Channel Beam	N/A			

II. PROJECT PURPOSE AND NEED				
A. Legislation				
The following funding is listed in the Kentucky Transportation Cabinet 2012 - 2018 6 Year Highway Plan as item number 6-1080 Page 86	Funding	Phase	Year	Amount
	BRO	D	2013	\$350,000
	BRO	R	2014	\$50,000
	BRO	U	2014	\$50,000
	BRO	C	2015	\$500,000
B. Project Status				
Project is listed in the TC-10 project authorization no. 86646 providing \$350,000 in initial design funds to begin the design phase of the project.				
C. System Linkage				
This bridge crosses Decoursey Creek on KY 2045 Pruett Rd near the intersection with Marshall Rd. Pruett Rd connect Marshall Rd with Petty Rd (KY 2044). Provides connectivity to nearby Mills Road Park an Ryland Lakes Golf Course.				
D. Modal Interrelationships				
This route is not a major freight route.				
E. Social Demands & Economic Development				
This bridge provides access mainly for local residents to Marshall Rd. Has little effect on economic development.				
F. Transportation Demand				
The ADT was 806 in 2011 on this section of KY 2045. Traffic volumes expect to remain constant in the future.				

II. PROJECT PURPOSE AND NEED (cont.)

G. Capacity

The bridge on KY 2045 is a two lane road with no shoulders. Given the low traffic volumes, capacity is not an issue.

H. Safety

Collision data for a 5 year period from 07/01/2007 to 6/30/2012 from MP 3.7 to MP 3.8 on KY 2045 indicate there was 1 collision with 2 injuries. Crash data indicates that there is not a major safety issue in the area.

I. Roadway Deficiencies

The bridge over Decoursey Creek is structurally deficient and needs replacement. Sufficiency Rating from the 2010 KYTC Bridge Inspection Report is 16.1

Draft Purpose and Need Statement:

Need: The bridge on KY 2045 over Decoursey Creek is structurally deficient and needs to be replaced.

Purpose: The purpose of this project is to address the replacement of this bridge, the impacts it will have on the region and to provide safe and reliable travel.

III. PRELIMINARY ENVIRONMENTAL OVERVIEW

A. Air Quality

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

STIP Pg. #: 70 - 71

TIP Pg. #: 85

B. Archeology/Historic Resources

☐ Known Archeological or Historic Resources are present

No known historical building in the area will be affected. Unknown if any archeology resources are in the area.

C. Threatened and Endangered Species

Possible presence of bat habits in the area as well as mussel species in the creek near the bridge.

D. Hazardous Materials

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

Bridge demolition may cause hazardous materials to get into the creek.

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

Permit may be required due to impacts to the creek.

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

No impact to any socioeconomic categories.

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

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

No section 4(f) or 6(f) properties.

Anticipated Environmental Document:

CE Level 1



IV. PROJECT SCOPING

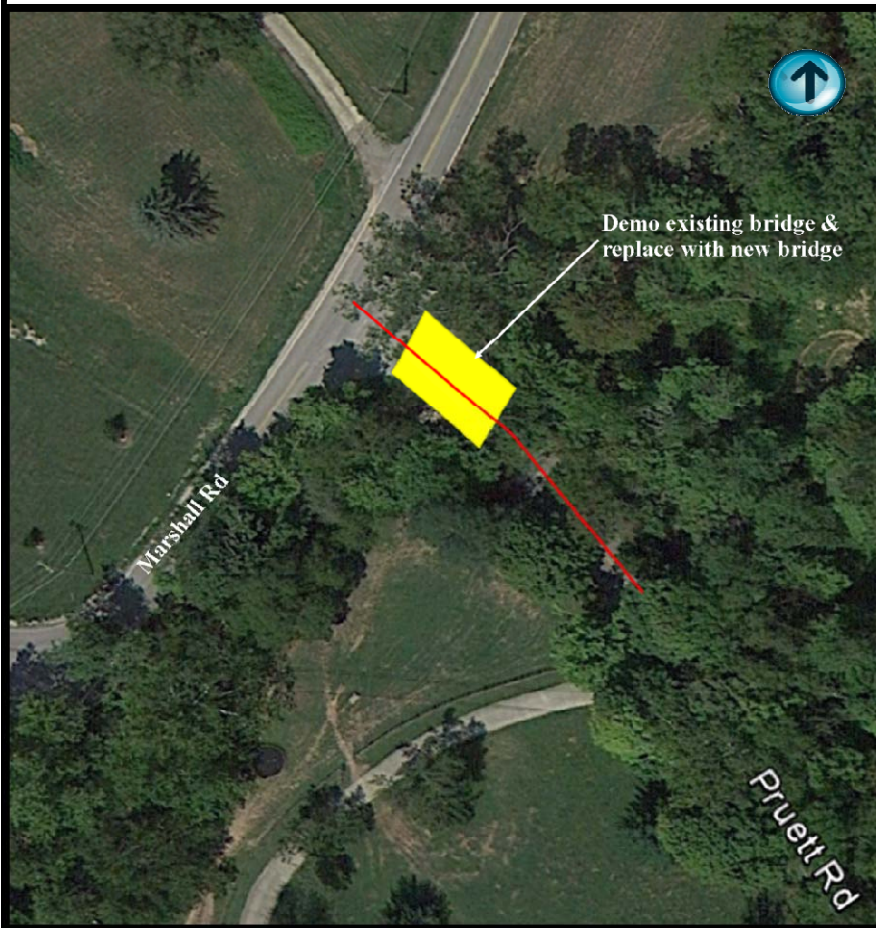
A. Alternative 1: No Build

The bridge will continue to deteriorate and will need repairs and eventually replacement.

B. Alternative 2: Replace Bridge

Construct new bridge to replace existing bridge.

Close existing bridge and begin demolition. Set up detour route during construction. Detour length is about 2.0 miles. Construct new bridge in same location as existing bridge.



Current Estimate	
Phase	Estimate
Design	\$350,000
R/W	\$50,000
Utilites	\$50,000
Const	\$500,000
Total	\$950,000

V. Summary

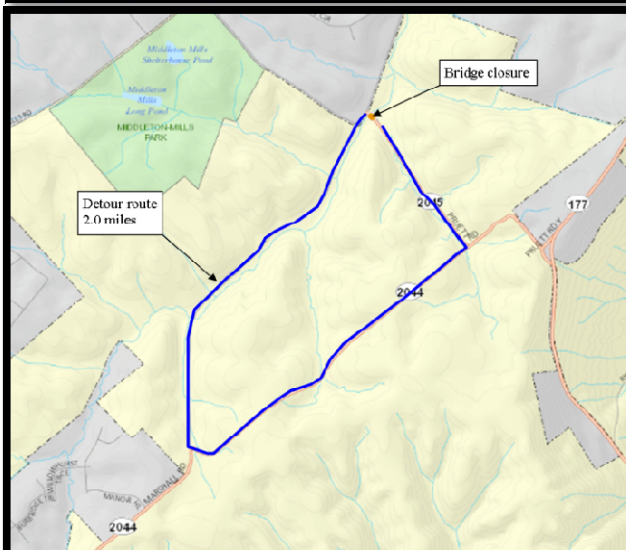
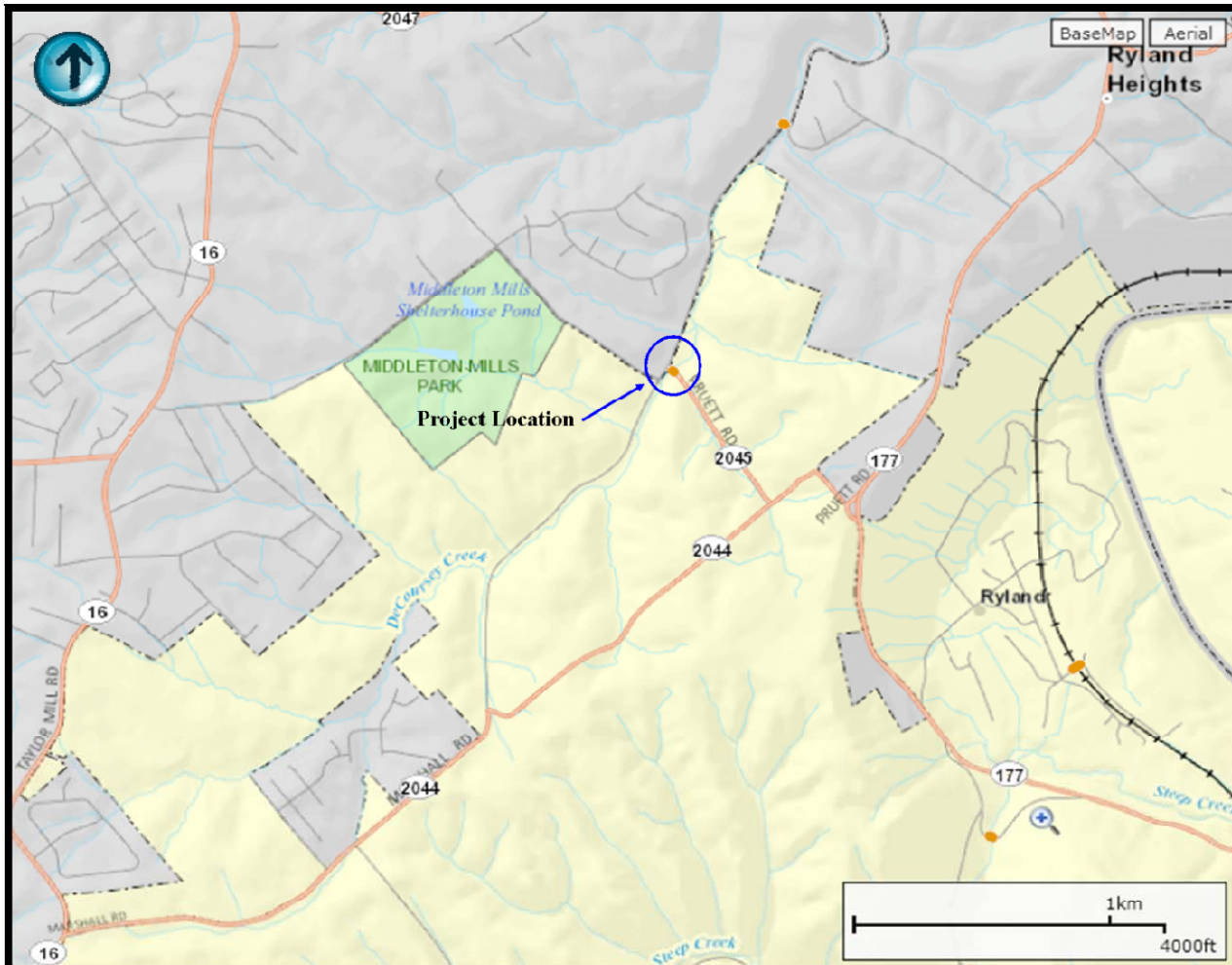
The bridge over Decoursey Creek in Kenton County is structurally deficient and needs replacement. The alternative 2 to replace the bridge is recommended and can be constructed within the budgeted amount. The no build alternative is not recommended but may be allowed for now.



VI. Tables and Exhibits

Project Location Map

Located at the intersection of Pruett Rd and Marshall Rd in Kenton County.



Detour length 2.0 miles along Marshall Rd,
Petty Rd & Pruett Rd