Appendix J – Project Team Meeting Minutes

MEETING MINUTES

Project: Pre-Design Scoping Study for 4-1068 & 4-1069

Purpose: Project Team Meeting

Place: Kentucky Transportation Cabinet (KYTC), District 4 Conference

Room, Elizabethtown, Ky.

Meeting Date: July 16, 2010, 9:30 am EST

In Attendance: Kevin Young KYTC-D4 Planning

Jared Clemons KYTC-D4 Design/Planning

Josh Hornbeck KYTC-D4 PD&P
Patty Dunaway KYTC-D4 CDE
David Kemper KYTC-D4 Structures

Jude Filiatreau KYTC-D4 PD&P, Bardstown Chad Filiatreau KYTC-D4 PD&P, Bardstown

John Edwards KYTC-D4 Utilities Kevin Blain KYTC-D4 Traffic

Joseph Ferguson KYTC-D4 Environmental

John Moore KYTC-D4 Project Development Brad Eldridge KYTC-CO Highway Design

Charlie Spalding
Sreenu Gutti
Scott Thomson
Jill Asher

KYTC-CO Planning
KYTC-CO Planning
KYTC-CO Planning

INTRODUCTIONS: Jill opened the Project Team Meeting by discussing the purpose of the Pre-Design Scoping Studies. These studies, formerly known as First Look Studies, are not new to D4 or some of the other districts. It is anticipated that a study of this type will be done for every project preceding the design phase if there is no planning study associated with the project. The nine elements of Purpose and Need as defined by NEPA will be addressed and used to create a purpose and need statement for each project. Pre-Design Scoping Studies will also provide more-defined project scopes, cost estimates for possible alternatives, potential environmental impacts, and other information that will be of assistance in the Phase I Design process. This study was done for Item Numbers 4-1068.00 and 4-1069.00 which are bridge replacement projects on US 150 in Nelson and Washington Counties. A handout of the meeting presentation was given to all meeting attendees. A sign-in sheet was also passed around.

NINE ELEMENTS OF A PURPOSE AND NEED STATEMENT: A checklist of the nine elements was displayed and the importance of each of the elements as they relate to the subject projects was discussed:

Legislation – The Design and Right-of-Way phases are scheduled in the 2010 Highway Plan. They are both funded with BRO funding. The description in the Highway Plan states that the bridges are to be replaced.

Project Status – Both the Bridges are structurally deficient. Bridge 090B00028N has a SR of 45.8, and Bridge 115B00022N has a SR of 41.1. Design funds have not yet been authorized. The Highway Plan design year is 2010. The Right of Way phase is scheduled for 2012. The district is unsure if the design of the approaches will be done inhouse.

System Linkage – US 150 in this area connects Springfield to Bardstown. It is a route used by truck traffic coming off of the Bluegrass Parkway. St. Catharine College is also on this route. The project team stated that the completion of US 150 in Rockcastle County may increase traffic from I-75. The road classifications of US 150 in the project area was discussed.

Modal Interrelationships – There is no public transit on this route. The nearest Rail Line is RJ Corman in Bardstown. The amount of traffic generated on this route by the Rail Line is unknown, but is not thought to be substantial. The project team does not believe that separate bike/pedestrian facilities are needed in this area.

Social Demands & Economic Development – There is a park located just southeast of the project site. There is another route into the park area. The greatest potential for development that would impact the project site is a 200 acre industrial park on the south side of the Bluegrass Parkway in Bardstown. Currently, there is a bakery there with more room for development.

Transportation Demand – Since no design money is currently authorized, traffic forecasts were not requested. Traffic projections are based on historic trends for this road. This section of US 150 has generally followed a 3% annual growth rate. The current ADT is approximately 8,500. If the historic 3% growth rate continues, the anticipated 2030 ADT will be near 15,000.

Capacity – According to the Division of Planning's data, the current V/SF is 0.46. If traffic volumes continue to follow a 3% growth rate, consideration may need to be given to increasing the number of through lanes on this corridor to accommodate the 2030 projection. There is a project in the UPL that is supported by local officials in Washington County to add lanes to this road.

Safety – Collision data was obtained from the KY State Police database of collisions for a three year period of time from June 1, 2007 to May 31, 2010. There were 12 collisions reported in the project area during this three year period of time. Four of the collisions were located at the intersection with Connor Road. Two were located at the intersection with Croakes Station Road. All but one of these occurred at night and, in the description of the collisions in the reports, two of them stated that sight distance was limited by the bridge railings. The project team agreed that this is more of a problem at night because

the bridge rail blocks the headlights of the oncoming vehicles at these intersections. The manner and location of other collisions were discussed. The project team did not believe that there is a significant traffic queue to turn into any of these entrances and turn lanes were not recommended.

Roadway Deficiencies – The roadway currently has 11 feet lanes, 4-8 feet shoulders with guardrail on both sides of the road, approximately a 0% grade, a posted speed limit of 55 MPH, and an Adequacy Rating Percentile of 85.7. KYTC's Common Geometric Practices for this type of road recommends 12 feet lanes for a 60 MPH Design Speed and 8 feet shoulders. Both bridges are structurally deficient with a rating of "Poor" for their Superstructure. Both bridges are between 27 to 28 feet wide, curb to curb. It should also be noted that there is a 46 ft. long, three-span culvert located approximately 500 feet west of the bridge over Beech Fork. The culvert is dry most of the time, and is used to accommodate the overflow from Beech Fork. It is not structurally deficient, but does have some issues with the wing walls separating from the culvert and some rebar exposure.

David Kemper, D4 Structures, stated that he is not aware of the bridges flooding, but water has risen to the superstructure and there is a problem with conveyance. There is a problem with debris catching on the piers in this location. The opening will need to be studied hydraulically during Phase I Design. It was suggested that the alignment be raised to increase the size of the hydraulic opening. Moving the pier to allow for a longer span (currently 90 feet) may also be helpful.

ENVIRONMENTAL CONSIDERATIONS: The bridges cross over Beech Fork and Cartwright Creek, which are blue line streams. It was noted during the site visit that the streams may contain a threatened species of Mussels. There is also some indication that there are wetlands located just southwest of the bridge over Beech Fork. The flood plain will need to be considered. The bridges are stamped as being built in 1955 and may be historically significant. According to the project team, the school located at the corner of Connor Road and Fredericktown Road in the GIS database is no longer open. Joseph Ferguson, D4 Environmental Coordinator, stated that there will be 6(f) issues with Fredericktown Park, which is adjacent to the project site. An EA will probably be required for this project. Joseph agreed to write a short Environmental Overview to include in the study report.

<u>UTILITIES:</u> A list of utility providers and contact information was given to Jill by John Edwards, D4 Utilities. The location of the overhead lines was noted during the site visit. The project team confirmed that there are no gas or sewer lines near the project site. Someone mentioned the possibility of a fiber optic cable in the area, but no markers could be seen during the site visit.

POSSIBLE OPTIONS: The following are some of the alternates that were discussed:

- No Build not a feasible option due to the structural deficiency of the bridges
- Build in Place

- o Temporary Crossing At the site visit it was noted that the terrain is not favorable for a low-water crossing.
- o Detour A detour using state routes would require motorists to go several miles out of their way.
- Move the Alignment north or south of the existing structures
 - Moving the alignment to the south would have greater impacts to utilities, would impact Fredericktown Park creating 6(f) issues, and possibly have a much greater impact on Beech Fork and wetlands near the roadway than moving the alignment to the north.
 - There were a couple of options discussed to move the alignment to the north of the existing alignment:
 - Moving the new structure several feet north of the existing alignment to create a separate structure. This would require an extension of the culvert west of the bridges to accommodate the tie-in of the approaches to the new bridge. The culvert is not currently structurally deficient, but does have some issues with separation of the headwalls from the culvert and some exposure of rebar. These issues can be addressed if the culvert is extended. In addition, it is suggested that the alignment be raised to increase the hydraulic opening of the bridges. It was also recommended that current design standards be used (12 ft. lanes, 8 ft. shoulders) on both the approaches and the bridges, which would require the bridge to be 40 ft. curb to curb. The district did not recommend widening the bridge to accommodate any potential future widening of the roadway.

This option would allow for 2 lanes of traffic to remain open while constructing the bridges.

Another option is partial width construction of the new bridge which would shift the center line approximately 7 feet to the north in order to accommodate the proposed lane widths and shoulder widths of 12 feet and 8 feet, respectively. This would allow shorter tie-ins to the approaches, and would probably eliminate the need to extend the culvert. Raising the elevation of the alignment would still be possible.

This option would most likely have the least impact on right of way, but would require the road width to be reduced to one-lane during construction with a temporary traffic signal to control the direction of traffic flow. The width needed for traffic is 17 feet (12 feet lane width + 2 feet for the barrier + 3 feet for the overhang).

OTHER ISSUES: There are three field entrances and two entrances to county roads, Croakes Station Road and Connor Road, in the project area, next to the end of the bridges that will need to be considered. Recommended widening of the shoulders should allow for greater sight distance for cars pulling out of these entrances onto US 150.

<u>PURPOSE & NEED:</u> After some discussion the project team agreed that the purpose and need statement should read similar to the following:

US 150 provides a vital connection between the city of Bardstown and Springfield. Bridges located over Beech Fork on the Nelson/Washington County Line and the bridge over Cartwright Creek just east of the County Line are structurally deficient. There are collisions occurring at the intersections of Croakes Station Road and Connor Road due to poor visibility caused by the bridge railings. There are also conveyance problems with the existing structures and the bridge piers accumulate large amounts of debris. The purpose of this project is to address the structural deficiencies and conveyance issues of the bridges and the occurrence of collisions at the intersections in order to provide safety, mobility and connectivity between the areas of Springfield and Bardstown.

NEXT STEPS: The district agreed to provide planning level estimates for the alternates they would like to see move forward. They will provide estimates for the approaches, but the estimate for the structures would be a square foot cost provided by the Division of Structural Design. The project team recommended that other roadway projects near the site and UPL projects in the area be included in the report. The interchange at the Bluegrass Parkway and the Springfield Bypass are the nearest projects. It was also requested that Jill check and see if any of the PVA information for the site is available online and that the vertical climb on the Nelson County side of the project be mentioned in the report.

Jill stated that she plans on having a draft report available by Mid-August. The meeting was followed by a visit to the site.

END OF MINUTES