

Upon conception the project was to reconstruct KY 2432 from 2nd Street to Coal Hollow Road to improve safety and provide better access to Bert T. Combs Lake and Governor's Campground RV Park. District 11 in-house design evaluated two alternates along this route and determined there would be approximately 30 relocations with a large quantity of excavation along a side hill cut. Additionally, the existing bridge along 2nd Street is narrow with tight turns that would make it difficult for RVs to maneuver.

Conceptually the district identified another alternate that could potentially provide more benefit than the two initially studied while having less property impacts. After meeting with the legislator that funded the project, it was decided that we would investigate this alternate, as well as an alternate to provide enough widening for shoulders and guardrail on KY 2432 from 2nd Street to the intersection with Marcum Ave.

The additional alternate investigated was along Memorial Drive (KY 3472) starting at US 421 to KY 2432 at Coal Hollow Road. District 11 in-house design has spent a considerable amount of time investigating the horizontal alignment. The following is a description of the scope of work that remains to be done on this alignment. Some of these items may be performed by the district or become part of the Phase II contract.

- Investigate a right turn lane from US 421 onto Memorial Drive and provide pedestrian access from Clay County Middle School to the park by potentially adding sidewalk and a crosswalk across Main St. In addition, we were asked to provide estimates for a pedestrian bridge with this same goal in mind.
- Investigate adding a left turn lane on bridge from Memorial Drive onto US 421 along with a barrier separated sidewalk for pedestrian access. Improve radius between these two approaches.
- Investigate replacing structure entirely to provide for a longer structure in order to allow for a multi-use path under bridge to provide access to the north area of the park. The reason for this being the amount of impact to the park by the alignment. The other option would be widening the existing structure to provide for the left turn lane and pedestrian access mentioned above.
- Due to the impact to the park a retaining wall would also need to be investigated along the south side of Memorial Drive and replacing their parking on the abandoned roadway of what would become old Memorial Drive at approximately 11+50.
- Consultation with the city about the need to relocate their building left of centerline station 12+50.
- Revise vertical alignment to be as close as possible to existing Memorial Drive grade at approximate station 14+50 for Maintenance of Traffic (MOT).
- Provide access to the back parking lot of the hospital at approximate station 18+50. Investigate providing a left turn lane into this approach.
- Provide access to the front of the hospital at approximate station 26+50 and investigate providing a right turn lane into this approach.

- Evaluate adjusting horizontal alignment thru the cut to minimize excavation while balancing property impacts to the north. The alignment as shown is at a max grade of 8%, shifting the alignment north and closer to existing Memorial Drive could minimize excavation, but these savings could potentially be offset by property impacts and MOT issues.
- Existing Marcum Avenue and KY 2432 need to be analyzed to provide as close as practical a 90 degree approach to new Memorial Drive (KY 3472). Vertical approach grade to the intersection is of particular concern and needs to be analyzed further.
- Investigate the potential to waste material along the right side of centerline starting at approximate station 39+00 to the newly constructed bridge at Cotton Bend Road. This is a low lying area and the backs of most of the properties in this area are near the elevation of the proposed roadway.
- The new road is offset in this area to provide for MOT along existing KY 2432. There appears to be minor pavement salvage opportunities in this area due to the existing condition of the pavement. Could investigate leaving this in as a frontage road or removing and providing access to the new road.
- Due to the bridge replacement at approximate station 58+50 and the substandard existing horizontal and vertical alignment in the area along with a local crash history, the proposed alignment needs to be significantly elevated in this area. Thus, reconstructing the approaches to the County Maintenance Garage and Cotton Bend Road (to the golf course) needs to be extensively evaluated.
- Two potential alternates for the access to the maintenance garage have been identified. Provide a tie to existing Front Street most likely at a later construction phase and potentially requiring the proposed alignment to be shifted to the south to allow for MOT and this tie. The other potential alternate would be to provide a tie from the back of the maintenance lot to existing Bowling St. north of the project.
- Two potential alternates for re aligning Cotton Bend Road have also been identified. The first would be to reconstruct the approach between proposed KY 2432 and the existing graveyard and tie in east of the new bridge at approximate station 62+50 requiring a complete change of access for the property owner in that location due to their entrance being severed. The other option identified would be to relocate Cotton Bend Road starting approximately 1400' up existing Cotton Bend Rd. and provide a more direct connection between the existing pond and graveyard avoiding as much of the farm as possible and tying in at approximately 62+00. There appears to be very little drainage overflowing from the pond toward existing Cotton Bend Road, but this could be a problem.
- Proposed curve at station 61+00 may need shifted northeast along with revising the vertical alignment in order to be at grade with existing KY 2432 for MOT purposes.
- The existing Coal Hollow approach will require reconstruction to provide a direct approach with KY 2432 currently proposed to be at approximately a 16% grade. A bridge replacement is required for this approach due to the condition of the existing structure. It is proposed to perform this work by utilizing an onsite diversion.

- The project may be required to be extended further east in order to miss the house at station 77+00. This will require adding some additional horizontal curvature in this location.
- The current typical section is shown with curb and gutter along with sidewalks on both sides. It was originally discussed that a good termini for this would be the bridge at Cotton Bend Rd. and a rural section would be used from that point on. However, there is potential that the template would change at the hospital access from urban to rural and what the cost savings for doing so would be. In any event, interceptor ditches would need to be placed along the back side of the berm in any major cut section.

By Notice to Proceed on the Phase II portion of this project, it should be assumed that Phase I has been completed except for a considerable amount of refinement to the Memorial Drive alignment involving any or all of the issues mentioned above.

Additional project files are available on the KYTC FTP site. These files are in five folders Coal Hollow Topo, Existing KY 2432 Mapping, GIS Data, Memorial Drive Mapping, Proposed Files.

The FTP site is located at: <ftp://kycftp.kytc.state.ky.us/11-8001.00%20KY%202432%20Reconstruction/>

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