

DESIGN STANDARDS/PRACTICE EXCEPTION REQUEST SUMMARY

Title: Signalized Triple Left Turn Intersection Design for Stage 1 Interchange

Memorandum Date: May 12, 2011

Design Exception Request Date: March 31, 2011

Region: North Central Approval Status: Approved

Project Location							
Highway	Control Section	At km	From km	To km	Existing AADT		
63	11		17.680	20.399	25,000		
	12		0.000	4.040	25,000		

Project Type (Mark all that apply with an X)						
Functional Planning:	New Construction:	X	Reconstruction:	Paving/Surfacing:		
Bridge:	Operations:		Geotechnical:	Environmental:		
Other:						

Summary

A request for a triple left-turn lane to be used for the eastbound to northbound left-turn traffic and northbound to westbound left-turn traffic at the east ramp terminal intersection at the interchange of Highway 63 and Highway 686 for a Stage 1 interchange.

Rationale for Approval/Rejection

- Stage 1 interchange configuration could trim in the order of 75 million in capital costs compared to the original system interchange configuration which would cost 300 million.
- The traffic analysis results show that the traffic operation is relatively satisfactory compared to the other alternatives.
- According to the projected traffic volumes on Highway 63, the eastbound to northbound triple left-turn does not appear to be a significant factor related to the bottleneck on Highway 63 where the three lanes are reduced to two lanes.
- Based on the traffic analysis a double left-turn will fail in a short term due to the rapid growth of the surrounding development.
- EBA completed a safety audit with respect to a Stage 1 configuration. The consultant has addressed or mitigated the concerns raised in the safety audit.
- The triple left-turn lanes at the intersection are temporary.

Additional Mitigation Required				
No mitigation is required.				

И	Key Words
Triple left-turn lane, Stage 1 Interchange	

