Item # 52

SEMINOLE COUNTY GOVERNMENT
AGENDA MEMORANDUM

SUBJECT: State Road 15/600 (U.S. Highway 17/92) / State Road 436 Interchange

DEPARTMENT: PUBLIC WORKS **DIVISION:** ENGINEERING

AUTHORIZED BY: W. Gary Johnson, P.E., Director **CONTACT:** Jerry McCollum, P.E. **EXT.** 5651

Agenda Date 10-14-03 **Regular** ☒ **Consent** ☐ **Work Session** ☐ **Briefing** ☐
Public Hearing – 1:30 ☐ **Public Hearing – 7:00** ☐

MOTION/RECOMMENDATION:

The left side alternative (right-of-way acquired on the west side of U.S. Highway 17/92) is recommended.

BACKGROUND:

At the September 23rd, 2003 Board of County Commissioner's meeting, a presentation was made by Luis Diaz of Post, Buckley, Schuh & Jernigan, Inc., consultant for the Florida Department of Transportation (FDOT), regarding the results of the Project Development and Environment (PD&E) Study for the State Road 15/600 (U.S. Highway 17/92) / State Road 436 Interchange. The study identified and evaluated various alternatives for improving the existing intersection. As the Board is aware, this project is part of the 2001 Sales Tax Program and one of the State projects that is financially the responsibility of the FDOT. Attached is a matrix that shows five final alternatives that were derived from numerous alternative alignment evaluations.

The "No-Build", as well as the "Viaduct" Alternatives are not considered feasible due to operational deficiency ("No-Build") or cost ("Viaduct"). Therefore, three alternatives were left for evaluation. As shown in the attached Matrix, all three alternatives (left, right and center) have the same operational characteristics. The matrix shows that from a cost perspective the center alternative

Reviewed by:
Co Atty: N/A
DFS:
Other:
DCM:
CM:
File No. RPWE01

and right side alternative are basically the same. The left side alternative's operational characteristics are the same as the other alternatives but cost 14 million dollars more due to increased right-of-way takings. From a pure cost perspective of the three alternatives, the center alternative (right-of-way from both the east and west side of U.S. Highway 17/92) would be the most practical. However, substantial long term land use impacts will be created by all three alternatives. Based on a detailed review of all three alternatives, the left side (right-of-way acquired on the west side of U.S. Highway 17/92) appears to be less disruptive.

Although, on a preliminary basis, the left side alternative costs more than the other two alternatives, it creates less overall impacts to the future land uses in the corridor and is; therefore, recommended as the final alignment. This recommendation is consistent with the City of Casselberry's position.

(Districts 2 & 4 - Commissioner Morris & Commissioner Henley)

Attachment: Evaluation Matrix

EVALUATION MATRIX

Evaluation Factors	Alternative				
	Center	Left	Right	Viaduct	"No-Build"
Travel Delay					
Total Driver Delay (vehicle-hours/peak hour period)	1,799	1,799	1,799	1,367	3,653
Delay per Vehicle (seconds per average vehicle/peak hour period)	407	407	407	272	997
Business Impacts					
Expected Number of Business Relocations	26	35	16	46	0
Number of Businesses Impacted	42	37	35	46	0
Residential Impacts					
Expected Number of Residential Relocations	0	1	0	0	0
Number of Residences Impacted	1	1	0	2	0
Right-of-Way Impacts					
Number of Parcels Impacted	44	39	36	51	0
Area of ROW to be Acquired for Roadway (acres)	3.25	4.37	4.38	3.84	0
Area of ROW to be Acquired for Pond Sites (acres)	4.39	5.98	5.73	5.88	0
Drainage					
Treatment Volume Requirements (acre-feet)	3	3	3	4	0
Impacts on Cultural/Historical Resources and Public Parks					
Number of Historic Sites Impacted	0	0	0	0	0
Number of Public Parks Impacted	0	0	0	0	0
Natural Environment Impacts					
Total Wetland Impact Area (acres)	0.014	0.0045	0.017	0.089	0
Floodplain/Floodway Encroachment Area (acres)	0	0	0	0	0
Potential Contaminated Sites					
Number of Potential Contaminated Sites Impacted	10	10	8	9	0
Estimated Project Costs (in millions)					
Wetland Mitigation Cost	$0.001	$0.000	$0.001	$0.008	$0.000
Engineering Design Cost (12%)	$2.411	$2.397	$2.412	$5.564	$0.000
ROW Acquisition Cost	$27.140	$41.533	$27.250	$37.004	$0.000
Construction Cost	$20.092	$19.973	$20.096	$46.363	$0.000
Construction Eng. & Inspection Cost (12%)	$2.411	$2.397	$2.412	$5.564	$0.000
Total Cost (in millions)	**$52.055**	**$66.300**	**$52.171**	**$94.502**	**$0.000**