

# SEMINOLE COUNTY GOVERNMENT AGENDA MEMORANDUM

**SUBJECT:** Airport Boulevard Extension Project (State Road 46 to County Road 15)

**DEPARTMENT:** Public Works **DIVISION:** Engineering

**AUTHORIZED BY:** *W. Gary Johnson* **CONTACT:** David Nichols, P.E. **EXT.** 5657  
W. Gary Johnson, P.E., Director

<b>Agenda Date</b> <u>01/24/06</u>	<b>Regular</b> <input type="checkbox"/>	<b>Consent</b> <input type="checkbox"/>	<b>Work Session</b> <input type="checkbox"/>	<b>Briefing</b> <input type="checkbox"/>
	<b>Public Hearing – 1:30</b> <input checked="" type="checkbox"/>		<b>Public Hearing – 7:00</b> <input type="checkbox"/>	

**MOTION/RECOMMENDATION:**

Adopt an alignment and typical section for the design of the Airport Boulevard Extension from State Road 46 to County Road 15.

District 5 – Commissioner Carey (Jerry McCollum, P.E., County Engineer)

**BACKGROUND:**

The County's consultant has completed the preliminary engineering study for the Airport Boulevard Extension Project, (State Road 46 to County Road 15). During this process, two Public Involvement Meetings were held at the Central Baptist Church. The meetings were held on May 19, 2005 and October 27, 2005.

Based upon the engineering and environmental resource data collected, a review of the Seminole County goals and the application of current roadway design standards, five potential alternatives were developed and evaluated based on impacts resulting from their alignment locations and configurations. Each alternative was assessed against the others using evaluation criteria developed for that purpose.

The proposed project involves extending Airport Boulevard in a northwesterly direction to County Road 15 (Monroe Road) from its current proposed north terminus at State Road 46. The roadway is located in the City of Sanford and the project study area is shaped like a triangle and is bounded by State Road 46 on the south, County Road 15 on the west, Rand Yard Road on the east and the CSX railroad on the north. The length of project varies significantly depending on the corridor alternative being analyzed and ranges in length between 1.5 miles and 1.8 miles.

<b>Reviewed by:</b>
<b>Co Atty:</b> <u><i>SA</i></u>
<b>DFS:</b> _____
<b>Other:</b> _____
<b>DCM:</b> <u><i>SS</i></u>
<b>CM:</b> <u><i>DA</i></u>
<b>File No.</b> <u>PH1:30PWE01</u>

The need for the extension of Airport Boulevard to County Road 15 was identified in the 1999 Roadway Network Feasibility Study (RNFS) undertaken as a joint venture between the City of Sanford and Seminole County and is based on several factors. First, is the need to remedy the expected capacity deficiencies resulting from future projected traffic volumes on the roadway system in northern Seminole County. Second, is the need to improve safety for both motorists through the project study area and for pedestrians who do not have adequate sidewalks and bicycle facilities. Third, is the need to comply with the objectives set forth in the Seminole County Comprehensive Plan and MetroPlan Orlando. Lastly, all of the internal roadways including School Road, Church Street, Iowa Avenue, Narcissus Avenue, White Cedar Road, Kennel Road and Rand Yard Road are substandard roadways generally having only 30 feet of right-of-way width and total pavement widths of 15-16 feet. Current development regulations would require that the internal roadways be improved to City and County standards prior to allowing any additional development of the internal portions of the study area. This lack of adequate roadways and utility systems for the internal areas has limited development in the study area to those properties fronting on State Road 46.

#### ROADWAY ALTERNATIVES - (See Exhibit A)

The objective of the alignment analysis process is to provide technically and environmentally sound alignment alternatives that are cost effective, minimize impacts and are acceptable to the community. The process involves the use of aerial imagery in conjunction with overlaying environmentally sensitive areas, archeologically sensitive areas, contamination areas, existing and future land use designations, future roadway improvement projects and property lines to develop preliminary alternative alignments that provide the greatest overall benefit and avoid significant environmental or social impacts.

##### Alternative 1

Beginning at the intersection of State Road 46 and the proposed realigned Airport Boulevard, the proposed alignment runs north in the existing Rand Yard Road right-of-way then turns to the northwest approximately 800' north of the intersection. The corridor parallels the existing CSX rail corridor on the south side. The alignment then turns to the west and ties into the existing Iowa Avenue right-of-way at the North White Cedar Road intersection. The alignment then travels along the Iowa Avenue for approximately 2600' and terminates at County Road 15 (Monroe Road).

### Alternative 2

Beginning at the intersection of State Road 46 and the proposed realigned Airport Boulevard, the proposed alignment runs north in the existing Rand Yard Road right-of-way then turns to the northwest approximately 1200' north of the intersection. The corridor parallels the existing CSX rail corridor on the south side. The alignment then turns to the west and ties into the existing Iowa Avenue right-of-way at the North White Cedar Road intersection. The alignment then travels along Iowa Avenue for approximately 2600' and terminates at County Road 15 (Monroe Road).

### Alternative 3

Beginning at the intersection of State Road 46 and the proposed realigned Airport Boulevard, the proposed alignment runs north in the existing Rand Yard Road right-of-way then turns to the northwest approximately 1200' north of the intersection. The corridor continues along Rand Yard Road and parallels the existing CSX rail corridor on the south side. The alignment then turns to the west and ties into the existing Church Street right-of-way at the North White Cedar Road intersection. The alignment then travels along Church Street for approximately 2600' and terminates at County Road 15 (Monroe Road).

### Alternative 4

Beginning at the intersection of State Road 46 and the proposed realigned Airport Boulevard, the proposed alignment runs north in the existing Rand Yard Road right-of-way then turns to the northwest approximately 1200' north of the intersection. The corridor continues along Rand Yard Road and parallels the existing CSX rail corridor on the south side. The alignment then turns to the west and ties into the existing School Road right-of-way at the St. Josephs Court intersection. The alignment then travels along School Road for approximately 600' and terminates at County Road 15 (Monroe Road).

### Alternative 5

Beginning at the intersection of State Road 46 and the proposed realigned Airport Boulevard, the proposed alignment runs north in the existing Rand Yard Road right-of-way then turns to the northwest approximately 1200' north of the intersection. The corridor continues along Rand Yard Road and parallels the existing CSX rail corridor on the south side. The alignment continues bearing northwest and terminates at County Road 15 (Monroe Road) at the Orange Boulevard intersection.

## RECOMMENDATIONS

It is the recommendation of the County's consultant that Alternative 5 is the preferred Alternative that will be advanced into Phase II (Final Design) and later into Construction. A four-lane divided urban typical, (curb and gutter located on the outside as well as the median), cross section includes four thru lanes (two in each direction) separated by a 22-foot median. Travel lanes are 12 feet in width with four foot wide undesignated bicycle lanes on the outside. An 8 foot wide sidewalk is proposed only for the west side of the Airport Blvd Extension due to the alignment's proximity to the railroad right-of-way on the east.

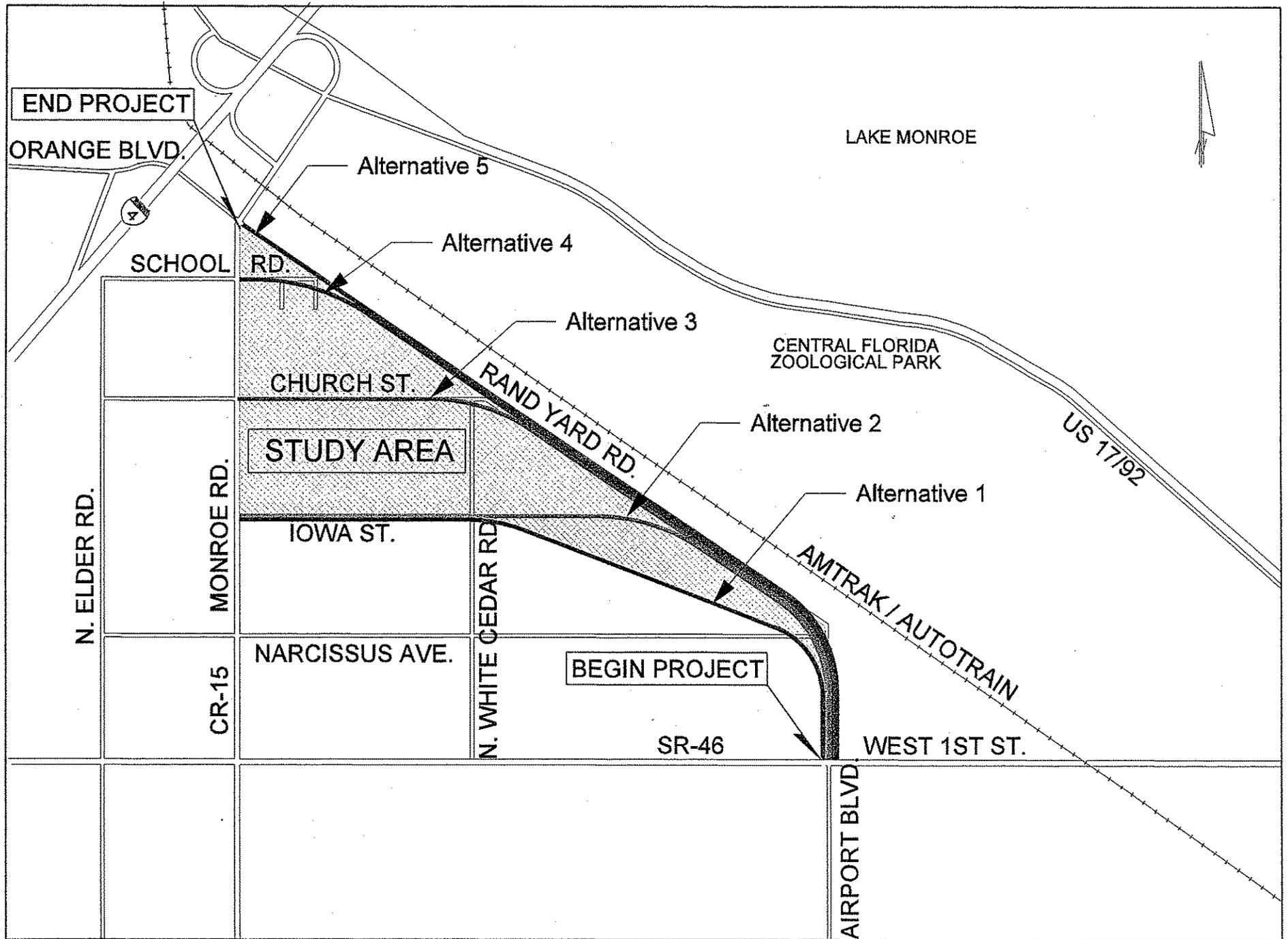
Beginning at the intersection of State Road 46 and the proposed realigned Airport Boulevard, the intersection is proposed to be modified from a three-way to a four-way intersection. The proposed alignment runs north in the existing Rand Yard Road right-of-way then turns to the northwest approximately 1200' north of the intersection. The corridor continues along Rand Yard Road and parallels the CSX rail corridor on the south side. The alignment continues bearing northwest creating three-way intersections with Narcissus Avenue, Iowa Avenue, Church Street and School Road. and terminates at County Road 15 (Monroe Road) at the Orange Boulevard intersection. The existing signal at the Monroe Avenue/Orange Boulevard intersection would need to be modified to accommodate the Airport Boulevard Extension.

Existing right-of-way is limited in the project study area. The right-of-way width along Rand Yard Road ranges from 36' to 60' in width south of the former Ice Factory and no available right-of-way north of the former Ice Factory. The extension of Airport Boulevard will require a right-of-way width of 120' to accommodate the proposed 4 lane urban typical section.

The proposed four lane roadway is expected to operate above the minimum allowable Level of Service (LOS) D in the design year 2028 carrying approximately 29,000 vehicles per day. The preferred Alignment is expected to divert approximately 50% of the daily traffic off of State Road 46 between Airport Boulevard and County Road 15 and nearly 60% off of County Road 15 between State Road 46 and Orange Boulevard.

The County's internal multi-disciplinary Project Review Team and the Engineering Division concur with the Consultant's recommendation that Alternative 5 is the preferred Alternative that will be advanced into Phase II (Final Design) and later into Construction.

Attachments: Project Location Map  
Evaluation Matrix  
Typical Section

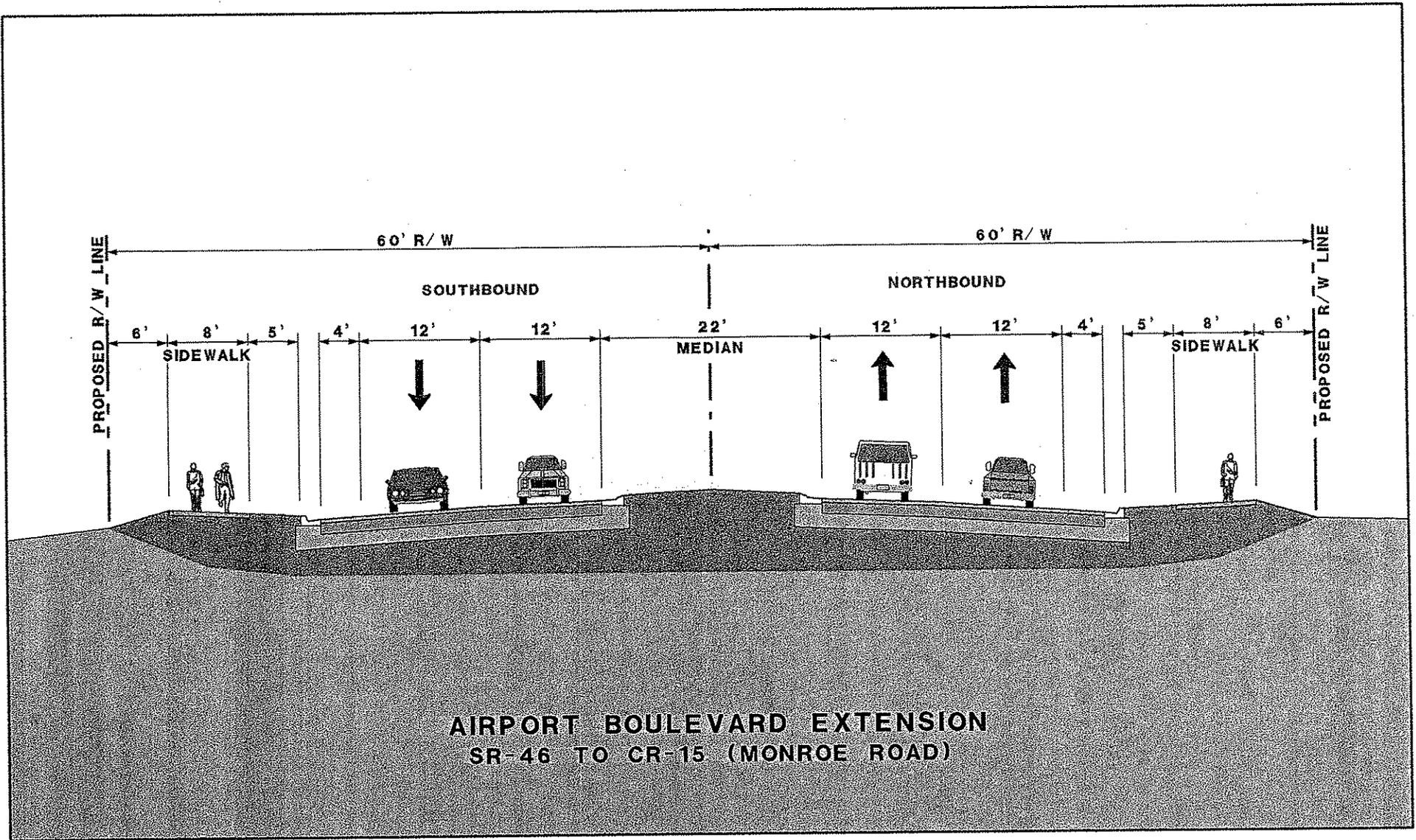


AIRPORT BLVD. EXTENSION  
PROJECT LOCATION MAP

**Alternative Evaluation Matrix  
Airport Boulevard Extension**

Criteria	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Traffic Operations	2	2	4	3	5
Wetlands Impacts	5	5	4	3	4
Historical Impacts	4	4	2	1	3
Utility Impacts	4	4	3	2	5
Construction Cost	5	5	4	3	2
Right-of-way Cost	2	2	3	4	5
Facilitation of Future Development	2	2	4	3	5
Relocations	4	4	3	2	5
<b>Total Score</b>	<b>28</b>	<b>28</b>	<b>27</b>	<b>21</b>	<b>34</b>

Scoring: 1-5 (Lowest to Highest)



**AIRPORT BOULEVARD EXTENSION STUDY**  
**PREFERRED TYPICAL SECTION**