

# BOARD OF ALDERMEN

ITEM NO. (3)

## AGENDA ITEM ABSTRACT

**MEETING DATE: February 8, 2005**

**TITLE: Update on the Alternative Design for the Smith Level Road Project**

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| <b>DEPARTMENT: PLANNING</b>  | <b>PUBLIC HEARING: YES ___NO__X__</b>                            |
| <b>ATTACHMENTS:</b> <ul style="list-style-type: none"><li><b>A. Resolution</b></li><li><b>B. Adopted Resolution – March 18, 2003</b></li><li><b>C. Project Chronology – 1985 to 2005</b></li><li><b>D. Revised NCDOT Traffic Forecast</b></li><li><b>E. Review by NCDOT Congestion Management Section</b></li><li><b>F. Project Map</b></li><li><b>G. Four-lane Cross-section</b></li><li><b>H. Two-lane Cross-section</b></li><li><b>I. Map Showing Existing Right-of-Way and Typical Cross-Section</b></li></ul> | <b>FOR INFORMATION CONTACT:</b><br><b>Dale McKeel – 918-7329</b> |

### **PURPOSE**

At its meeting on January 18, the Board of Aldermen discussed an alternative to the four-lane widening project for Smith Level Road between Morgan Creek and Rock Haven Road. At that meeting the Board requested additional information regarding the amount of right-of-way needed for the alternative and the cost of acquiring this right-of-way. This purpose of this agenda item is to provide an update on information received from NCDOT since the January 18 meeting. A resolution receiving the report is provided for the Board's adoption (Attachment A).

### **UPDATE**

Since the January 18 meeting, NCDOT has provided to the Town a map showing the existing right-of-way on Smith Level Road between Morgan Creek and Rock Haven Road (Attachment I). The right-of-way width varies from 94 feet to 60 feet. The map also provides a typical cross-section for the alternative.

NCDOT and Town staff are meeting on Tuesday, February 8 to discuss the right-of-way needed for the alternative. The purpose of this meeting is to review in the field the typical cross-section and available right-of-way to get a better sense of where additional right-of-way may be needed.

Town staff will provide an oral report at the Board meeting of additional information that comes out of this meeting.

It will not be possible to determine the total amount of right-of-way needed for the project until design drawings are prepared. At intersections, for instance, there will be additional turn lanes beyond what is shown on the typical cross-section.

When the total amount of right-of-way needed for the project has been determined, NCDOT will provide to the Town an estimate of the cost of acquiring the right-of-way. However, the actual acquisition cost will be determined through negotiation with landowners or condemnation proceedings, and may vary significantly from the estimate.

### **INFORMATION**

Note: This is the same information presented to the Board of Aldermen on January 18, 2005.

The N.C. Department of Transportation (NCDOT) held a public hearing on the proposed widening of Smith Level Road on October 25, 2001. The plan presented to the public showed Smith Level Road being widened to four lanes with an 18-foot median, curb and gutter, and bike lanes and sidewalks on both sides of the road.

Approximately 50 persons attended the open house and public hearing in addition to NCDOT and Town of Carrboro staff. Many of those present expressed support for the bike lanes, sidewalks, and crosswalks, but there were major points of contention. Several residents questioned the need for the project and stated that the focus should be on addressing current problems on Smith Level Road, including timing of signals, speeding, ingress/egress problems at Frank Porter Graham school, and the need for better pedestrian and bike connections to the school and across Morgan Creek.

In response to citizen and Town comments during and following the public hearing, NCDOT prepared additional information on the project. There were also several meetings between NCDOT staff, Town staff, and Board of Aldermen members to discuss the project.

On March 18, 2003, the Board of Aldermen adopted a resolution requesting that the N.C. Department of Transportation consider an alternative design for the proposed modifications to Smith Level Road between Morgan Creek and Rock Haven Road (Attachment B). The adoption of this resolution followed a joint worksession that was held on October 15, 2002 with the Transportation Advisory Board (TAB) to meet with NCDOT staff and review the information that has been compiled.

On January 5, 2005, there was a meeting between town officials, NCDOT staff, and Board Member Doug Galyon to discuss the project. NCDOT staff stated that their continued support for a four-lane, median divided design, but proposed the following alternative design:

We propose to widen the existing pavement to provide 12' lanes with a 2' paved shoulder on the east side; a 4' bike lane with curb and gutter on the west side; right turn lanes NB at Culbreth Road and SB at Rock Haven Road and a left turn lane on NB Smith Level at Rock Haven Road. A sidewalk could also be constructed on the west side adjacent to the curb and gutter. Additional right of way and utility relocation will be required throughout the limits of this project.

Attachment C provides a chronology of the Smith Level Road project from 1985 to 2005. Attachment F is a map showing the beginning and ending points for the project.

### **OPTIONS FOR CONSIDERATION**

Town staff have identified three options for consideration by the Board of Aldermen.

#### **OPTION 1: ACCEPT THE PROPOSED FOUR-LANE, MEDIAN-DIVIDED DESIGN.**

The Board of Aldermen's first option is to accept the design proposed by NCDOT. A cross-section of this design is shown in Attachment G. Much of the design work for the project has already been completed and right-of-way acquisition was scheduled to begin this fiscal year. Selection of this option would allow NCDOT staff to finish the design work and begin the process of right-of-way acquisition and construction.

Please note that the Board of Aldermen on June 27, 2000 adopted a resolution endorsing a four-lane median divided road with bike lanes and sidewalks. However, the only other choice presented to the Town at that time was a five-lane roadway (two lanes in each direction with a center two-way left-turn lane).

NCDOT's preference for a four-lane design is based on the traffic projections for the year 2025. The most recent traffic projections developed by NCDOT indicate that 24,800 vehicles per day will travel on Smith Level Road in 2030 in the section between Willow Oak Drive and BPW Club Road. NCDOT staff generally recommend a four-lane roadway when daily traffic volumes exceed a certain number, such as 18,000 vehicles per day.

Attachment D provides a revised traffic forecast for Smith Level Road in the year 2030. Attachment E is a review of the revised traffic forecast by NCDOT's Congestion Management Section. Please note in Attachment E that based upon the projected traffic volumes, NCDOT staff recommend a four-lane divided roadway as the typical cross-section for the Smith Level Road project.

If this option is selected, it is anticipated that right-of-way acquisition would begin in August 2005 and construction would begin in August 2006. It is likely that construction would not be completed before the target opening date for the Carrboro High School in August 2007.

#### **OPTION 2: ACCEPT NCDOT'S ALTERNATIVE PROPOSAL**

The Board of Aldermen's second option is to accept the alternative design proposed by NCDOT. A cross-section of this design is shown in Attachment H. Please note that NCDOT's alternative would be funded with state Moving Ahead funds rather than from the Transportation Improvement Program. If this option is chosen, the four-lane median divided project would need to be removed from the Transportation Improvement Program so that the alternative design could move forward.

A major consideration in selecting NCDOT's alternative is the right-of-way and utility relocation costs for the project. NCDOT typically does not purchase right-of-way or relocate utilities for Moving Ahead projects; these activities are typically borne by the local government. It is estimated that the right-of-way and utility relocation costs for NCDOT's alternative are in the range of \$300,000.

With the four-lane, median-divided project, NCDOT estimates that \$600,000 will be needed for right-of-way and \$2.4 million for construction. The estimated cost of constructing NCDOT's alternative is \$1.3 million. In light of the \$1.7 million cost savings if the Town chooses NCDOT's alternative, the Mayor and Town Manager on January 5 requested that NCDOT purchase needed right-of-way for the project, but were told that NCDOT typically does not purchase right-of-way for Moving Ahead projects.

Also note that NCDOT's alternative proposal would only provide sidewalk on the west side of Smith Level Road, whereas sidewalks on both sides would be provided with the four-lane, median-divided project. At the current time, NCDOT does not have confirmation that funding is available for the sidewalk.

As proposed, NCDOT's alternative would not provide a standard four-foot bike lane on the east side of the road. However, initial conversations with NCDOT staff indicate that the design can likely be changed to provide bike lanes on both sides of Smith Level Road.

In consideration of this option, the Board of Aldermen should also note the following language included as part of the revised NCDOT traffic forecast (Attachment E):

Smith Level Road is functionally classified as a minor arterial *not* of regional or statewide significance. Regional travel into and out of Chapel Hill and Carrboro would be better served on US 15-501. From a planning perspective, limiting the number of lanes for use by automobiles is more consistent with the Town's walkable community goals. We have attached a March 18, 2003, resolution from the Town of Carrboro which describes their goals in more detail. However, we also recommend that NCDOT receive some assurance from the Town of Carrboro that the Town will accept a context sensitive solution which may not meet the long term vehicular mobility needs in the area. NCDOT should also challenge the Town to implement planned travel demand management measures in the corridor as a means to limit growth of automobile trips on Smith Level Road, with a focus on reducing automobile trips to the elementary school. A system of bicycle facilities that provide continuous routes to the UNC campus, sidewalks along neighborhood roadways which connect to Smith Level Road, and convenient transit stops should be

constructed by the Town of Carrboro within five years. The Town's land use plan should also allow neighborhood-scale commercial development along Smith Level Road to offer convenient services within walking and biking distance of surrounding residential neighborhoods.

Under this option, NCDOT would manage design and construction. NCDOT staff indicated that they thought it was feasible to complete the work before the target opening date for the Carrboro High School in August 2007. However, this is also contingent on the Town of Carrboro acquiring any needed right-of-way for the project.

### **OPTION 3: DISCONTINUE WORK ON THE PROJECT**

The Board of Aldermen's third option is to request that NCDOT discontinue work and drop the project. However, there is a strong need and public support for bike lanes, sidewalks, and other pedestrian improvements along Smith Level Road. There will also be a need for intersection improvements along Smith Level Road in the future. If the project is dropped, it is unclear how needed bike facilities, pedestrian facilities, and intersection improvements will be provided.

### **OTHER ISSUES FOR CONSIDERATION**

If either Option 1 or Option 2 is chosen, there are several other issues that need to be discussed with NCDOT staff and addressed as part of the final design for the project. These issues have been raised at public meetings, in meetings with NCDOT staff, and by the Transportation Advisory Board. In conjunction with the final decision about the cross-section, careful consideration of these issues will be needed. The following is a list of some of these issues:

- Include improvements to the operation of the interchange at Smith Level Road and NC 54 Bypass as part of the project.
- Consider extending the right southbound lane across the bridge to Willow Oak Lane, as proposed by the Berryhill neighborhood in its presentation to the TAB.
- Add bikelanes and sidewalks to the east side of the existing bridge over Morgan Creek on Smith Level Road and other bicycle and pedestrian improvements in the vicinity of NC 54.
- Ensure that emergency response and public safety needs are addressed in the design.
- Use recycled materials in all aspects of the project.
- Review the design to ensure a safe and functional pedestrian environment along Smith Level Road.
- Incorporate recommendations from the traffic operations study at the Frank Porter Graham site.
- Coordinate signal timing on Smith Level Road.
- Incorporate additional landscape plantings into the project.
- Replace any fencing removed by the project.

### **FISCAL IMPACT**

If Option 1 is chosen, Carrboro will be responsible for paying 30 percent of the construction cost for new sidewalks constructed within the town limits or extra-territorial jurisdiction area. However, funding of \$66,300 was included in the sidewalk bond program for the Town's share of providing sidewalk along Smith Level Road.

If Option 2 is chosen, the Town of Carrboro will be responsible for securing needed right-of-way for the project and paying for utility relocation, and it is estimated that these costs are in the range of \$300,000. A source for these funds has not been identified.

### **STAFF RECOMMENDATION**

Staff recommends that the Board of Aldermen adopt the attached resolution receiving the report (Attachment A).

Please note that if the Board is interested in selecting Option B, Town staff recommends that the Board of Aldermen request that the project not be removed from the state TIP until (1) the Town and NCDOT have executed a municipal agreement for the work, (2) the Town receives detailed estimates of the cost of right-of-way and utility relocation, and (3) the Town receives confirmation that NCDOT funding is available for the sidewalk.