



Charlotte Department of Transportation

Memorandum

Date: September 13, 2011

To: Tammie Keplinger
Charlotte-Mecklenburg Planning Department

From: Michael A. Davis, PE *Rich H. Furbaker for*
Development Services Division

Subject: Rezoning Petition 11-036: Approximately 62.70 acres located on the south side of West Mallard Creek Church Road between Claude Freeman Drive and Legranger Rd. (*revised August 19, 2011*)

CDOT has previously commented on this petition in our August 31, 2011 memoranda to you.

Vehicle Trip Generation

This site as currently zoned RE-1 could have a wide variety of land-uses and associated densities. To estimate a reasonable trip generation under existing zoning conditions we assumed 1M sf office on the 63 acre site. This use would generate approximately 11,000 trips per day. Under the proposed zoning the site could generate approximately 12,870 trips per day. Since this site is currently vacant the proposed development would have a significant impact on the surrounding thoroughfare system.

In a meeting held prior to the submittal of the rezoning CDOT determined the developer needed to submit a Traffic Impact Study (TIS) in order to evaluate the effect that site-generated traffic will have on the thoroughfare system in the vicinity. Since the site proposed driveways are entirely onto NCDOT-maintained roadways (i.e. Mallard Creek Church Road and Senator Royall Drive) NCDOT has also required a TIS as part of their driveway permit approval process. They may have additional or different requirements for their approval than what is identified during the rezoning process. We recommend the petitioner meet with NCDOT early in the development process to identify any requirements that they may have.

CDOT has received the draft TIS. A summary of our TIS comments are included in the section below CDOT's recommended changes to the site plan.

We have the following comments regarding apparent conflicts between the proposed rezoning and existing ordinances or policies:

1. The petitioner needs to implement a new internal east/west "public" street in accordance with the City's Subdivision Ordinance during the planned multi-family development as shown on the revised site plan. This public street alignment needs to be as direct as possible between Senator Royall Drive and Legranger Road. Either parallel or angle parking on-street parking will be allowed along both sides of this proposed street. This new east/west street will increase the area's street network and therefore provide additional

street/pedestrian/bike connectivity. This new public street is currently shown as a private street in the August 19, 2011 revised site plan.

In addition to the comments above, CDOT requests the following changes to the rezoning site plan, based upon our review of the petition's TIS, received August 18, 2011:

1. Transportation improvements along the site's Mallard Creek Church Road's frontage will require the addition of a 5' bike lane (as shown in the University Research Park Area Plan and City's Bike Plan) curb and gutter, 8' planting strip and 6' sidewalk. A transportation conditional note needs to be added to the revised site plan.
2. Senator Royal is designated as an Avenue with two (2) directional travel lanes and 1 TWLTL lane. CDOT requests three (3) raised pedestrian refuge islands within Senator Royal's TWLTL. The locations of these medians will be determined in the construction permitting phase.
3. CDOT recommends the continuation of the existing southbound outside travel lane from Mallard Creek Church Rd. to site dw #4 (approximately 700 feet in length). The southbound lane will terminate as a right-turn lane into site dw #4.
4. CDOT recommends during the phase 2 developer transportation improvements need to include the design and implementation of channelized dual right turn lanes with protected traffic signal phasing at the following locations to enhance pedestrian walking across the dual right turn vehicular movements:
 - Northbound Senator Royall at Mallard Creek Church Rd.; and
 - Southbound I-85 exit ramp at Mallard Creek Church Rd.
5. CDOT recommends during the phase 2 developer transportation improvements the northbound Senator Royall at Mallard Creek Church Rd approach be widened to accommodate five (5) travel lanes (i.e. dual left turn, a thru and a dual right turn lanes). The current raised median in Senator Royall needs to be a minimum width of eight (8) feet to accommodate a safe pedestrian refuge area between the north and southbound lanes. Traffic signal modifications at Senator Royall at Mallard Creek Church Rd. may be needed to be to accommodate safe pedestrian movements in all four directions with the new northbound approach laneage.
6. The petitioner will need to work with CDOT before the Zoning Committee meeting (scheduled for September 28th) to document the proposed development phasing to the appropriate transportation improvements in the rezoning conditional notes and to identify possible transportation mitigation improvements at the following intersections:
 - David Taylor and Senator Royal
 - David Taylor and Research Drive

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If we can be of further assistance, please advise.

c: R. H. Grochoske
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Rezoning File