



Charlotte Department of Transportation

Memorandum

Date: October 4, 2013

To: Tammie Keplinger
Charlotte-Mecklenburg Planning Department

From: Dennis E. Rorie, PE *Dennis E. Rorie*
Development Services Division

Subject: Rezoning Petition 13-072: Approximately 5.11 acres located at the intersection of Eastfield Road and Prosperity Church Road.

CDOT has completed a review of the subject petition in order to ensure consistency with the Transportation Action Plan (TAP). The TAP seeks to ensure that Charlotte's transportation network supports current and future land uses and includes streets that provide safe and comfortable mobility for motorists, pedestrians, bicyclists, and transit users. Based on our review of the petition, we offer the following comments.

Vehicle Trip Generation

Under the current zoning, this site could generate approximately 2,400 trips per day zoned if developed as a high school. Under the proposed zoning the site could generate approximately 5,675 trips per day.

We required a Traffic Impact Study (TIS) to be submitted due to the increase in traffic volume for the subject development. We have reviewed the subject TIS and our comments are incorporated in this memorandum.

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

1. It appears that there is insufficient vehicular stacking space available for the drive through windows associated with the easternmost most proposed commercial building.

The following are requirements of the developer that must be satisfied prior to driveway permit approval. We recommend that the petitioner reflect these on the rezoning plan as-appropriate.

1. After our review of the TIS, and our evaluation of the existing crash data, CDOT will only approve access to Prosperity Church Road via the installation of a directional cross-over. The directional cross-over will allow for right-in/right-out and left-in access from Prosperity Church Road into the subject site. Left-turns out of the development will be prohibited. The design, construction, and installation costs associated with the directional cross-over will be the responsibility of the petitioner. CDOT will work with the petitioner on the geometric design requirements during driveway permit process.

2. According to the City of Charlotte's Driveway Regulations, CDOT has the authority to regulate/approve all private street/driveway and public street connections to the right-of-way of a street under the regulatory jurisdiction of the City of Charlotte. CDOT has determined that a left-turn lane is necessary to serve the traffic using the proposed public street connection at Arbor Creek Drive. The engineering design and construction of the left-turn lane is the responsibility of the owner, and shall be performed by a professional engineer registered in the State of North Carolina who has roadway-design experience. CDOT will only approve the proposed public street connection provided that a left-turn lane is constructed on northbound Prosperity Church Road at Arbor Creek Drive. We recommend the rezoning plan reflect the design of this required left-turn lane prior to submittal/approval of the public street driveway connection. The left-turn lane needs to be designed using NCDOT standards with a minimum 150 feet of storage. This roadway improvement is required to meet the traffic demands of the proposed development.
3. We have concerns with the proximity of the subject drive through window relative to the public right-of-way along Eastfield Road for the proposed easternmost commercial building. CDOT cannot approve the easternmost driveway onto Eastfield Road with the drive through window in its current location, as it has the potential to have negative impacts on traffic operations and safety at the public right-of-way. We will work with the petitioner to identify alternate locations for the drive through window throughout the Rezoning Process.
4. The proposed "pork-chop" islands shown on each proposed driveway that accesses Eastfield Road need to be eliminated. Right-in/Right-out access onto Eastfield Road will need to be accomplished via a continuous raised concrete median along Eastfield Road from the intersection of Eastfield Road & Prosperity Church Road to the westernmost proposed driveway.
5. Adequate sight triangles must be reserved at the existing/proposed street entrances. Two 35' x 35' and two 10' x 70' sight triangles are required for the entrances to meet requirements. All proposed trees, berms, walls, fences, and/or identification signs must not interfere with sight distance at the entrances. Such items should be identified on the site plan.
6. The proposed driveway/street connections to Eastfield Road and Prosperity Church Road will require driveway permits to be submitted to CDOT and the North Carolina Department of Transportation for review and approval. The exact driveway locations and type/width of the driveways shown on the site plan will be determined by CDOT during the driveway permit process. The locations of the driveways shown on the site plan are subject to change in order to align with driveways on the opposite side of the street and comply with City Driveway Regulations and the City Tree Ordinance.
7. All proposed commercial driveway connections to a future public street will require a driveway permit to be submitted to CDOT for review and approval.
8. Any fence or wall constructed along or adjacent to any sidewalk or street right-of-way requires a certificate issued by CDOT.

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9. A Right-of-Way Encroachment Agreement is required for the installation of any non-standard item(s) (irrigation systems, decorative concrete pavement, brick pavers, etc.) within a proposed/existing City maintained street right-of-way by a private individual, group, business, or homeowner's/business association. An encroachment agreement must be approved by CDOT prior to the construction/installation of the non-standard item(s). Contact CDOT for additional information concerning cost, submittal, and liability insurance coverage requirements.

We anticipate that NCDOT will request the following, and recommend the Petitioner work directly with Mr. Brett Canipe (980- 523-0000) with NCDOT regarding their anticipated request:.

We understand NCDOT may require right-turn lanes at each proposed driveway onto Eastfield Road. We recommend the petitioner work directly with NCDOT on the subject requirement.

If we can be of further assistance, please advise.

R. Grochoske

cc: S. Correll
Brett Canipe, NCDOT (via email)
Sean Epperson, NCDOT (via email)
Rezoning File