



Charlotte Department of Transportation

Memorandum

Date: February 27, 2015

To: Tammie Keplinger
Charlotte-Mecklenburg Planning Department

From: Michael A. Davis, PE *Mike Davis*
Development Services Division

Subject: Rezoning Petition 15-045: Approximately 16.98 acres located on the southwest corner at the intersection of Brown-Grier Road, West Arrowood Road, and Sandy Porter 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

This site could generate approximately 2,100 trips per day as currently zoned. Under the proposed zoning the site could generate approximately 1,900 trips per day.

CDOT requests the following changes to the rezoning plan:

1. CDOT does not support the use of angled parking as proposed on this plan for the public streets. Parallel on-street parking is acceptable and appropriate as a Local Residential Wide street type.
2. The future curb location of Brown Grier Rd. should accommodate a cross section of four 11 foot travel lanes divided by a 17' wide median, 5' bicycle lanes in each direction, 2.5' curb and gutter, 8' wide planting strips, and 6' wide sidewalks. Thus, CDOT requests the following improvements along the site's Brown Grier Rd. frontage:
 - a. Establish / Install the new back of curb at a location 38' from centerline of existing road.
 - b. Along the entire frontage of Brown Grier Rd., install an 8' wide planting strip and 10' wide sidewalk (Sidewalk width Per Mecklenburg County overland connector).

- c. CDOT requests that the petitioner install 10' wide sidewalk along the frontage of parcels 20147307 and 20147308 (approximately 250' of sidewalk) and coordinate the design with The City of Charlotte's future sidewalk project adjacent to these parcels to the west. In lieu of constructing this sidewalk segment, the developer may contribute \$60,000 for the sidewalk to be designed and constructed by the City.
 - d. Install an 11' left turn lane to serve vehicles traveling west on Brown Grier Rd. with a 100' bay taper length and 150' of storage length.
3. Brown Grier Rd. is classified as a major thoroughfare to the CRTPO Thoroughfare Plan. CDOT requests that the petitioner dedicates 50' of right-of-way along the property's frontage, measured from the centerline of existing right-of-way.
4. The future curb location of Sandy Porter Rd. should accommodate the addition of a south bound 5' bicycle lane. Thus, CDOT requests the following improvements along the site's Sandy Porter Rd. frontage:
 - a. Establish / Install the new back of curb at a location 35' from centerline of existing road.
 - b. Along the entire frontage of Sandy Porter Rd. install an 8' wide planting strip and 8' wide sidewalk.
5. At the intersection of the Sandy Porter Rd. and Arco Corporate Dr., modify the existing concrete median to allow for a pedestrian refuge island (minimum of 6' wide) which will allow pedestrians to safely cross at the future street connection. In addition, CDOT requests that \$50,000 be contributed for the installation of a Pedestrian Hawk Signal at this location.
6. CDOT requests that on-street parking on all public streets within this site meet or exceed the minimum required number of accessible parking spaces per the chart below:

Total Number of Marked or Metered Parking Spaces on the Block Perimeter	Minimum Required Number of Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 and over	4% of total

Advisory R214 On-Street Parking Spaces. The MUTCD contains provisions for marking on-street parking spaces (see section 3B.19). Metered parking includes parking metered by parking pay stations. Where parking on part of the block perimeter is altered, the minimum number of accessible parking spaces required is based on the total number of marked or metered parking spaces on the block perimeter.

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. 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/private driveway connection(s) for this site. 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/private driveway connection(s) provided that a left-turn lane is constructed on Brown Grier Road. We recommend the rezoning plan reflect the design of this required left-turn lane prior to submittal/approval of the public street/private driveway connection(s). 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.
2. Adequate sight triangles must be reserved at the existing/proposed street entrance(s). Two 35' x 35' and two 10' x 70' sight triangles are required for the entrance(s) to meet requirements. All proposed trees, berms, walls, fences, and/or identification signs must not

interfere with sight distance at the entrance(s). Such items should be identified on the site plan.

3. The proposed driveway connection(s) to Brown Grier Rd. and Sandy Porter Rd. will require a driveway permit(s) to be submitted to CDOT and the North Carolina Department of Transportation for review and approval. The exact driveway location(s) and type/width of the driveway(s) will be determined by CDOT during the driveway permit process. The locations of the driveway(s) shown on the site plan are subject to change in order to align with driveway(s) on the opposite side of the street and comply with City Driveway Regulations and the City Tree Ordinance.
4. All proposed commercial driveway connections to a future public street will require a driveway permit to be submitted to CDOT for review and approval.
5. Any fence or wall constructed along or adjacent to any sidewalk or street right-of-way requires a certificate issued by CDOT.
6. 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 recommend the Petitioner work directly with Mr. Brett Canipe with NCDOT regarding any anticipated request.

1. The developer/petitioner is recommended to meet with NCDOT early in the development process to identify any issues that they may have. Please contact Brett Canipe with NCDOT at 980-523-0002.

If we can be of further assistance, please advise.

K. Hedrick

cc: S. Correll
Rezoning File