



# Charlotte Department of Transportation

## Memorandum

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**Date:** March 6, 2008

**To:** Tammie Keplinger & Tom Drake  
Charlotte-Mecklenburg Planning Department

**From:**   
Scott L. Putnam  
Development Services Division

**Subject:** Rezoning Petition 08-059: Located on the east side of the I-85 and City Boulevard Interchange

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**Consistency with Transportation Action Plan (TAP):** The two goals of the TAP that most directly affected the staff's review of this petition define the integration of land use and transportation, and the provision of transportation choices.

- Goal 1 of the TAP relies on the Centers, Corridors and Wedges land use strategy to be implemented. This project site is located inside an adopted Centers/Corridors area and appears to support the Centers, Corridors and Wedges land use strategy as an appropriately scaled activity center provided that the internal street network is further enhanced.
- Goal 2 of the TAP describes various connectivity and design features that are important for motorists, pedestrians and bicyclists. Specific comments are identified below that need to be addressed for CDOT's support of the petition and to bring the site plan into compliance with the TAP and best practices for multimodal transportation.

### Vehicle Trip Generation

This site could generate approximately 19,870 trips per day as currently zoned. Under the proposed zoning the site could generate approximately 20,330 trips per day. This will have little additional impact than development under existing zoning. However, this development was analyzed as part of the adopted University City Area Plan and the US29/NC 49 Transportation Report. Transportation network/improvements needed to better distribute traffic in the area and mitigate impacts were identified in these documents. Therefore, we will not request that a Traffic Impact Study (TIS) be submitted by the petitioner. Since access is proposed to NCDOT-maintained roadways, they may require a TIS as part of their driveway permit approval process.

The City has entered into an Agreement with Crescent Resources to construct transportation improvements in the area. The funded transportation improvements that will be completed by the City and the petitioner are listed below:

- Elimination of the US 29/NC 49 weave/reconstruction of North Tryon Street between I-85 Ramps/Sandy Drive and University City Boulevard- City
- North Tryon/University City Boulevard intersection (new)- City
- North Tryon/I-85 Ramp/Sandy intersection (new)- City

- North Tryon/Commons at Chancellor Park Shopping Center/University Pointe Boulevard (Walmart) intersection (new)- City
- City Boulevard between I-85 ramps and North Tryon/University City intersection (new)- Crescent Resources
- IKEA Boulevard between City Boulevard and McCullough Drive- Crescent Resources
- University Pointe Boulevard (new) from IKEA Boulevard to eastern property line (Walmart to extend to North Tryon Street) and dedication/conveyance of right-of-way for extension to I-85- Crescent Resources
- IKEA Boulevard between City Boulevard and Macfarlane Boulevard to provide access to properties between I-85 and North Tryon Street- Crescent Resources

We have the following specific comments that are critical to CDOT's support of the rezoning petition:

1. The site plan provides a comparably less robust street network than included in the approved University City Area Plan (UCAP). Although many of the streets included in the UCAP may not to be feasible due to topography, environmental, or existing/proposed development, other internal streets on the petitioner's property appear to be feasible and need to be provided. Without these additional connections, the development will have a largely suburban layout with few complete blocks. The following street connections need to be provided:
  - a. A public street in Parcel A, linking IKEA Boulevard and Shopping Center Drive (University Pointe Boulevard), northeast of the proposed roundabout
  - b. A public street stub (extended by others) to link IKEA Boulevard and North Tryon Street, south of City Boulevard
  - c. A public street linking Parcel B to Parcel C, parallel to IKEA Boulevard
  - d. An extension of Macfarlane Drive to the rear of Parcel C
2. Although we acknowledge that there may be constraints precluding its construction, we request the petitioner also consider construction of a public street between Brookside Lane and Shopping Center Drive east of IKEA Boulevard. This will provide a better block spacing/internal network once Brookside Lane is completed between IKEA Boulevard and North Tryon Street.
3. While the interconnected parking lots shown on current site plan provide some amount of interconnectivity, actual local streets (be they public or private) would more adequately provide alternatives to, and discourage unnecessary use of, Shopping Center Drive and IKEA Boulevard for circulation. We recommend streets instead of drive aisles at the following locations:
  - a. One road parallel to IKEA Boulevard between IKEA and Shopping Center Drive on the west side of Ikea Boulevard
  - b. Both drive aisles connecting IKEA directly to City Boulevard
  - c. Spine road for parcel A

- d. Spine road for Parcel B linking IKEA Boulevard to City Boulevard northeast of the IKEA/City Boulevard intersection
  - e. Spine road for Parcel C
  - f. Spine road connecting IKEA Boulevard to City Boulevard, southwest of the IKEA/City Boulevard intersection
4. The right-of-way (62 feet) shown on the site plan for the extension of Shopping Center Drive across I-85 is insufficient. It is anticipated that at least 90 feet of right-of-way will be necessary to accommodate the required cross-section and that additional right-of-way will be necessary for slopes near the future bridge over I-85.
  5. The alignment for the extension of Shopping Center Drive shown on the site plan has not been determined at this time. What is shown on this site plan is likely to change. CDOT has retained a consultant to study the best alignment and necessary right-of-way. In the event that the final alignment is not determined by the City prior to the Council's decision on this rezoning request, a note needs to be added to the site plan that indicates the petitioner/developer will make any necessary adjustments to the development plan, dedicate appropriate right-of-way/easements, and agree to incorporate the final alignment in the first subdivision plan submittal for this portion of IKEA Boulevard.
  6. The proposed roundabout at the IKEA Boulevard/Shopping Center Drive intersection needs to be designed with a maximum outside diameter of 130 feet, corresponding to an "urban single-lane" roundabout as defined by the Federal Highway Administration.
  7. The middle portion of IKEA Boulevard (from IKEA to Shopping Center Drive) is classified as an Avenue (Urban Street Design Guidelines, USDG). Cross-sections C-C and D-D need to reflect this. Due to the intensity of proposed development and the mix of land uses, 8-foot sidewalks need to be provided along IKEA Boulevard. All other local streets/cross sections will need to conform to the appropriate USDG street type.
  8. Wheelstops are not permitted when an existing hardship does not exist. The "or wheelstops" reference needs to be deleted from note 8 on sheet RZ-3.
  9. If angled parking is proposed on portions of IKEA Boulevard, it needs to be reverse-angle parking. The location of angled parking needs to be limited to the Main Street portion north of IKEA and south of Shopping Center Drive.
  10. All street dimensions, such as lane widths or parking bay widths, on sections A-A, B-B, C-C, and D-D need to be referenced to the face of curb instead of the back of curb.
  11. Cross-sections for City Boulevard and typical local internal street(s) need to be provided.
  12. Parcel C needs to have access to an extension of Macfarlane Drive.

13. For streets located in "Centers" (Centers, Corridors, and Wedges strategy), the Urban Street Design Guidelines indicate preferred block lengths of 500 feet and maximum block lengths of 650 feet. In cases of such intense land use as proposed with this site, the preferred block length is the more appropriate for design.

We have the following specific comments that are important to CDOT's support of the rezoning petition. We would like the petitioner to give serious consideration to these comments/requests. These may require coordination with related PD issues.

1. Because it is a Main Street, Section C-C of Ikea Boulevard should use hardscape, with trees in tree pits, instead of a dedicated planting strip.
2. This project is located within ¼ mile of transit service. However, such a dramatic increase in employment, households and services would likely require a reconfiguration of transit to adequately serve such a significant increase in demand. This project is also located within ¼ mile of two planned transit stations on North Tryon Street (City Boulevard and Rocky River stations). The additional street connections described above will better facilitate multimodal access between the future stations and the various proposed uses.

We have the following general comments that are provided to aid the petitioner in planning and subsequent permitting phases:

I-85 is a freeway requiring a minimum of 350 feet of right-of-way. City Boulevard is a Parkway (and will be Strategic Corridor NC 49) requiring a minimum of 200 feet of right-of-way. The developer/petitioner should convey right-of-way in fee simple title to meet these requirements, measuring 175 feet and 100 feet from the centerlines of the respective roadways.

Adequate sight triangles must be reserved at the 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.

The proposed connections to City Boulevard and North Tryon Street will require driveway permits to be submitted to CDOT and the North Carolina Department of Transportation for review and approval. The exact locations and type/width of the connections will be determined by CDOT during the subdivision process. The locations of the streets/driveways shown on the site plan are subject to change in order to align with street(s)/driveway(s) on the opposite side of the street and comply with City Driveway Regulations and the City Tree Ordinance.

All proposed commercial driveway connections to a future public street will require a driveway permit to be submitted to CDOT for review and approval.

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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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.

To facilitate building permit/driveway permit review and approval, the site plan must be revised to include the following:

- Dimension width of the existing and proposed driveways.
- Indicate the locations and widths of all adjacent and opposing driveways.
- Indicate typical parking module dimensions.
- Include a parking summary with figures for the numbers of parking spaces required and provided.

If we can be of further assistance, please advise.

SLP

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Rezoning File