

Rezoning Transportation Analysis

Petition Number: 2019-085
General Location Identifier: 20145105

From: Robyn Byers, PhD
Robyn.Byers@charlottenc.gov
704-336-7404

Reviewer: Kevin Parker, EI
Kevin.Parker@charlottenc.gov
704-432-6511

Revision Log:

Date	Description
07-17-2019	First Review (EL)
09-24-2019	Second Review (EL)
10-22-2019	Third Review (EL)
12-23-2019	Fourth Review (EL)
09-21-2020	Fifth Review (KP)
11-10-2020	Sixth Review (KP)

General Review Information

The site is on W Arrowood Road (major thoroughfare, state maintained) and is in a center outside Route 4. The site is within the limits of the Steele Creek Area Plan.

Active Projects Near the Site:

- Active City projects:
 - Brown-Grier Road Upgrades
 - This project will upgrade Brown-Grier Road between Steele Creek Road and Whitehall Park Drive. The existing road is mostly 2 / 3 lanes with ditches, the upgraded road will have a 4-lane median divided section with multi-use paths on both sides.
 - Brown-Grier/Gallant Ln Sidewalk
 - This project will provide sidewalk along the south side Brown-Grier Road from Grier's Fork Road to Gallant Lane, and along the east side of Gallant Lane to the entrance of Kennedy Middle School

CDOT's review of this rezoning petition is intended to ensure consistency with the Transportation Action Plan (TAP) which seeks to ensure that the City'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.

This document is primarily for communication to Planning Department staff as part of the overall City staff analysis of the rezoning petition and includes an overall summary of the case from a transportation perspective, information on trip generation, and resolved or outstanding site plan concerns. Additional advisory information about the driveway permit process is provided for information only.

Based on our review of the petition, we offer the following information for your consideration.

Transportation Summary

The site is served by West Arrowood Road, a major thoroughfare, state-maintained road. A Traffic Impact Study was performed as a part of the original Rezoning Petition 2008-053. The site commits to constructing all the improvements from the previous approved TIS. In addition, the petitioner commits to install a bi-directional crossover at the intersection of West Arrowood Road and 'Future 2-Lane Avenue' and a right turn lane at the 'Future 2-Lane Avenue'. Lastly, a 12-foot wide pedestrian network will be constructed.

Rezoning Transportation Analysis

Petition Number: 2019-085
General Location Identifier: 20145105

Trip Generation

Scenario	Land Use	Intensity	Trip Generation (vehicle trips/day)	Source
Existing Use	Vacant	NA	0	Tax Record
Entitlement with Current Zoning	28.71 ac of MUDD-O	Too many uses to determine		RZ 2008-053
Proposed Zoning	Apartments Hotel Retail	352 dwellings 308 rooms 20,000 sf	7,680	Site Plan: no date provided
	Apartments	352 dwellings	2,620	Site Plan: 12-16-19

Outstanding Issues

Strikøout = Not an outstanding issue

1. ~~**Curblino** The proposed zoning district has a setback measured from back of the existing or proposed future curblino.~~
 - a. ~~**Arrowood Road:** The future location of curb and gutter is in its existing location.~~

2. ~~**Traffic Study** A Traffic Impact Study is necessary for the complete review of this petition. CDOT approved the Traffic Impact Study scope on 04-03-2019. NCDOT is also involved with the review. The Traffic Impact Study has not yet been received.~~

3. ~~The petitioner should revise the site plan and conditional note(s) to commit to dedicate 55-foot of right-of-way from the Arrowood Road centerline. The site plan should label and dimension the right-of-way from the road centerline. The Steele Creek Area Plan cross section requires 54-foot of right-of-way from the centerline. An additional 1-foot of right-of-way is requested to support a future 12-foot multi-use path, in lieu of a 5-foot wide paved bike lane, (per the Charlotte Bikes Plan).~~

4. ~~**Steele Creek Area Plan**~~
 - a. ~~The petitioner should revise the site plan and conditional note(s) to commit to construct an 8-foot planting strip, and 6-foot sidewalk on Arrowood Rd, per the Steele Creek Area Plan. CDOT requests for the back of 6-foot sidewalk to be placed 53 feet from centerline, to plan for a future 12-foot multi-use path. The site plan should label and dimension both items from the back of curb and gutter/road centerline.~~
 - b. ~~**Comment Revised/Outstanding** The petitioner should revise the site plan and conditional note(s) to construct the future Arrowood Road/Whitehall Park Drive Connection to the intersection of the Savoy Corporate Drive's future extension alignment, per the Avenue – Two Lane Undivided cross section provided within the Steele Creek Area Plan.~~

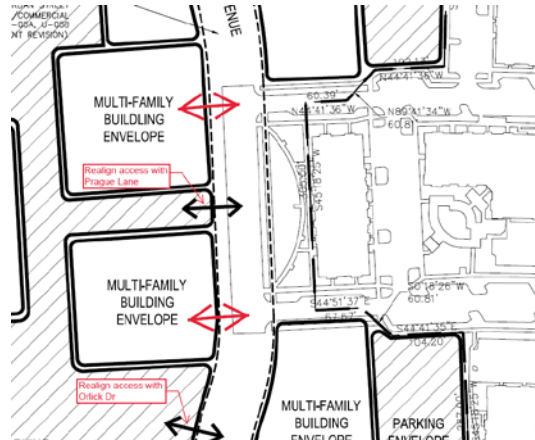
5. ~~The petitioner should revise the site plan and conditional note(s) to extend Savoy Corporate Drive to the future stub provided at Whitehall Executive Center Drive, per the USDG Local Office/Commercial Wide Street typical section.~~

Rezoning Transportation Analysis

Petition Number: 2019-085

General Location Identifier: 20145105

6. ~~The petitioner should revise the site plan and conditional note(s) to realign the parking envelope driveways with the existing Prague Lane and Orlick Drive.~~



7. ~~The petitioner should revise the site plan and conditional note(s) to acquire formal agreements with the property owner of parcel ID 20145115 to establish cross access easements for street connections to existing Prague Lane and Orlick Drive, and Cerny Dr.~~

8. ~~The petitioner should revise the site plan and the conditional notes by adding the notes shown below from the approved 2008-053 rezoning plan in reference to the Arrowood-Whitehall Connector road.~~

Rezoning Transportation Analysis

Petition Number: 2019-085

General Location Identifier: 20145105

~~including a roadway bridge to accommodate pedestrians and bikes over nearby canyons.~~

Completion of the functional design of the grade-separated connection from the development site over I-485 to Whitehall Park Drive. The purpose of the functional design is to establish the horizontal and vertical alignments of the proposed connection. Structural design of the bridge sufficient to determine substructure and superstructure thickness, profile grades, slopes/cut-and-fill limits, and right-of-way shall occur prior to the issuance of a final certificate of occupancy for the first building in Phase Ic, and such plans shall be submitted by the petitioner as part of the subdivision process. The petitioner shall confer with CDOT, NCDOT, and FHWA as necessary to determine whether steel, reinforced concrete, or another material shall be used for the substructure prior to developing the functional design plans. The bridge shall be designed to accommodate the following:

- A. Two 11-foot travel lanes and a left-turn lane as needed for access to parking decks/lots
- B. Two 5-foot bike lanes
- C. Two 8-foot sidewalks
- D. Curb and gutter
- E. Bridge rails

In connection with the preparation of the functional design of the grade-separated connection from the development site over I-485 to Whitehall Park Drive, the petitioner shall determine the location and width of the right of way on the western side of I-485 on tax parcel no. 201-021-28 to be dedicated to the City of Charlotte (the "City") for the grade separated connection as provided in paragraph 4 below.

Construct the approach (which will be paved) for the future grade separated connection over I-485 from the development site's internal spine road to the driveways into the parking structures to be located on the development site adjacent to I-485. From that point south/west, construct an earthen slope to be tied in prior to the control of access line. The petitioner will dedicate all necessary right-of-way, easements, and controlled access limits on the development site for the future grade separated connection.

Upon the completion of the functional design of the grade-separated connection from the development site over I-485 to Whitehall Park Drive, the petitioner shall reserve right of way on the western side of I-485 on tax parcel no. 20102128 for the grade separated connection.

- ~~9. The petitioner should revise the site plan to add a note specifying dedication and fee simple conveyance of all rights of way to the City before the site's first building certificate of occupancy is issued. CDOT requests right of way set at 2' behind back of sidewalk where feasible.~~
- ~~10. The petitioner should revise the site plan to add a note specifying all transportation improvements will be approved and constructed before the site's first building certificate of occupancy is issued. The petitioner may phase transportation improvements if said improvements and phasing are explicitly described in site plan notes.~~
- ~~11. **New Comment** The petitioner should revise the site plan and conditional notes to construct an eastbound right turn lane with 150 feet of storage at the proposed Future 2-Lane Avenue & West Arrowood Road intersection.~~
- ~~12. **New Comment** The petitioner should revise the site plan and conditional notes to construct a bi-directional crossover with a minimum of 150 feet of storage westbound on Arrowood Road at the proposed Future 2-Lane Avenue & West Arrowood Road intersection.~~
- ~~13. The petitioner should revise conditional note 4(G) to clarify that "the required transportation improvements will be determined once the Updated TIA is completed," rather than noting "The transportation improvements required under the Updated TIA shall be consistent with and not exceed the transportation improvements required under the Approved TIA."~~
- ~~14. **Technical Correction based on revised site plan 9/16/2019** Note 4(H) should revise "otherwise provided below in paragraph G" to "otherwise provided below in paragraph I."~~

Rezoning Transportation Analysis

Petition Number: 2019-085

General Location Identifier: 20145105

15. ~~New Comment from 09-15-2020 Site Plan: Update the multi-use path language to have the MUP constructed in accordance to the City of Charlotte's multi-use path standards as shown in detail 10.42 of the CLDSM. Update to Comment 11-10-20: Gravel path was agreed upon by the petitioner and Mecklenburg County Parks and Rec. This comment is rescinded.~~

Provide a response to our comments as part of your resubmittal.

Advisory Information

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. The setback for this district is measured from the back of the existing or future curbline as determined by CDOT and Planning during the permitting 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.
3. Adequate sight triangles must be reserved at the existing/proposed street entrance(s). Two 35' x 35' sight triangles (and two 10' x 70' sight triangles on North Carolina Department of Transportation on NCDOT maintained streets) 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.
4. The proposed driveway connection(s) to public streets will require a driveway permit(s) to be submitted to CDOT (and the North Carolina Department of Transportation on NCDOT maintained streets) 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.
5. All proposed commercial driveway connections to a future public street will require a driveway permit to be submitted to CDOT for review and approval.
6. Any fence or wall constructed along or adjacent to any sidewalk or street right-of-way requires a certificate issued by CDOT.
7. 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.