

Rezoning Transportation Analysis

Petition Number: 2012-074

General Location Identifier: 029-651-01

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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 along Mallard Creek Church Road, a major thoroughfare, adjacent to an I-85 interchange. The current site plan requires intersection reconfigurations at John Adams and Mallard Glen to provide access for development needs. In addition to offsite improvements identified in the traffic impact study, CDOT is requesting additional right of way reservation along Mallard Creek Church Road for future improvements, construction of the ultimate cross section and intersection at the realigned John Adams Rd. intersection, and accommodation for a connection to the adjacent development's private street if approved by the adjacent property owner. The petitioner is implementing necessary pedestrian/bike connections from the site to existing nearby neighborhoods.

General Description

The site is along Mallard Creek Church Rd. (MCC Rd), a major thoroughfare and is located within a corridor outside of Route 4.

A traffic impact study (TIS) was performed to identify offsite mitigations. This petition requests access management modifications along MCC Rd. to provide access for development needs. The widening of MCC Rd, realignment of John Adams Rd., a proposed traffic signal and a bi-directional left over are necessary traffic mitigation improvements identified by the 2016 Traffic Impact Study (TIS).

Trip Generation

Scenario	Land Use	Intensity	Trip Generation (vehicle trips/day)	Source
Existing Use	Single Family	1 dwelling	10	Tax Record
Entitlement with Current Zoning	Restaurant Daycare	30,000 sf 24,000 sf	5,600	RZ 1999-040(C) Tract I
Proposed Zoning	Convenience Market w/ Gas Pumps Bank w/ Drive Thru Retail	20 pumps 5,000 sf 15,000 sf	13,570	Traffic Study

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Resolved Issues

1. The petitioner should revise the site plan to add a conditional note listing construction of all transportation improvements identified in the 2016 TIS. This may require additional graphics showing offsite improvements. Raised medians will be required along MCC Rd.
2. 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. Sidewalks should be contained within a SUE if not within dedicated public street right of way.
3. The petitioner should revise the site plan to include conditional transportation notes that identifies each transportation improvement as mutually agreed upon between the petitioner and the City.
4. The petitioner should revise the site plan to add a conditional note indicating that separate public outreach will be conducted prior to conversion of John Adams realignment / Mallard Glen intersections and potential connection to Mallard Highlands Drive. Notice of and minutes for public meeting should be transmitted to CDOT and NCDOT consistent with prior discussions between the petitioner and NCDOT.
5. 11/7/16 Update: Depending on the outcome of the public outreach effort, the connection to Mallard Highlands Dr. may be required before the site's first CO is issued.
6. In addition to the laneage identified in the 2016 TIS, the petitioner should revise the site plan to depict and label construction of the following cross section elements along the site's MCC Rd frontage:
 - a. 5' wide bike lanes
 - b. 8' planting strip
 - c. 6' sidewalk, including tie-in to existing sidewalk near the site's eastern property line
 - d. 2' buffer to right of way

11/7/16 Update: Last bullet of transportation note e 6 is insufficient to satisfy this comment.
7. The petitioner should revise the site plan to depict, label, and add a conditional transportation note the future back of curblin on MCC Rd to include the following cross section elements while holding the existing centerline and median. Sidewalk construction, street tree location, and right-of-way dedication along the site's MCC Rd. frontage should be in the ultimate location as part of this petition.
 - a. Additional (third) through lane (at existing John Adams the right can be considered a future through-right)
 - b. 2030 left and right turn lanes as indicated by the 2016 TIS
 - c. 8' planting strip
 - d. 12' multiuse path
 - e. 2' buffer to right of way

11/7/16 Update: Last bullet of transportation note e 6 is insufficient to satisfy this comment.
8. The petitioner should revise the site plan to depict and label construction of the realignment of John Adams Rd. between MCC Rd. and the connection to the existing John Adams alignment including the 2030 build out street cross section (136' proposed public right-of-way) at the signalized intersection including
 - a. 11' travel lanes (as identified in the 2016 TIS)
 - b. 5' bike lanes
 - c. 12' raised median
 - d. 8' planting strip
 - e. 6' sidewalks
 - f. 2' buffer to right of way
9. The petitioner should revise the site plan to depict and label the public right of way along the western side of John Adams realignment to coincide with the property line between MCC Rd. and the east-west internal street intersection.

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10. The petitioner should revise the site plan to depict and label existing John Adams Rd. between MCC Rd. and the future John Adams realignment as follows:
 - g. Conforming to a Local Office/Commercial Wide street cross-section
 - h. Converting intersection with MCC Rd. to right-in/right-out traffic movements with internal protected stem from MCC to proposed east-west internal street and adjustment of curb returns.
 11. The petitioner should revise the site plan to depict and label the proposed east-west internal street
 - a. As a public street and designed to Local Office/Commercial Narrow Street (see CLDSM U-04). On-street parking may be added if desired.
 - b. Stubbing to the site's eastern property line to accommodate a future connection to parcel no. 02965103.
 - c. Extending stub to Mallard Highlands Glen upon approval of adjacent property owner.
 12. The petitioner needs to revise the site plan to indicate the square footage for each proposed building as documented in the 2016 TIS.
- 11/7/16 Update:** Revise transportation note c
13. The petitioner should revise the site plan to add a note specifying all transportation improvements will be constructed and approved before the site's first building certificate of occupancy is issued or phased per the site's development plan.
 14. The petitioner should revise the site plan to label and call out on all streets
 - Existing and proposed right-of-way
 - Indication of public or private streets and typical local street types with reference to CLDSM
 15. The petitioner should revise the site plan to include three (3) typical Mallard Creek Church Rd. cross-sections to depict and label all the roadway elements as described in comments 2 and 3. These sections should to be at the following locations:
 - Between existing Mallard Glen Dr. (proposed EB directional left over) and Public Street 1 (realigned John Adams Rd.
 - Between Public Street 1 (realigned John Adams Rd. and the existing John Adams Rd.
 - Between existing John Adams Rd. and I-85 NB exit dual right ramp

Outstanding Issues

1. The petitioner should revise the site plan to depict and label the maintenance or replacement of the two existing accesses across MCC Rd from the site (Deaton Lane and driveway directly across from existing John Adams serving tax parcel 04718104). CDOT recommends the petitioner coordinate with Ms. Wendy Taylor with NCDOT at 980.523.0013.
2. **12/22/16 Update:** The below idea to combine developer improvements with proposed NCDOT improvements has been taken off the table by NCDOT. Revise transportation conditional note: 1.1 first bullet.

The petitioner should revise the site plan to modify transportation notes as follows:

 - a. Note d – include City as some public right of way will not be dedicated to NCDOT
 - b. Note e 1 - Remove last sentence and replace with "If agreed to by NCDOT and CDOT, the petitioner may provide a \$xxx, xxx contribution prior to the issuance of the site's first certificate of occupancy in lieu of the additional southbound right turn lane with 250 feet of storage, including channelizing and signal modifications, at the I-85 southbound off-

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ramp to Mallard Creek Church Road for use by CDOT, in conjunction with NCDOT, to fund other improvements at this interchange.

- i. Appropriate cost for substitute improvement(s) has not been provided. Petitioner should coordinate with NCDOT to provide acceptable format and documentation.
 - ii. The petitioner should work with NCDOT to determine if the cost of mitigations “by others” that have not been constructed but were identified as existing in the TIS will be required to be included in the transportation commitments and/or payment in lieu.
3. **11/22/16 Update:** This petition should show the implementation of the new John Adams Rd. alignment from MCC to 200’ north of the existing John Adam Rd. CDOT recommends the outside future curblines be constructed in the site’s phase 1 construction. Therefore, the petitioner needs to revise the site plan and add a conditional note that provides the necessary completion of the new realigned John Adams in the initial construction phase. This completed section of John Adams will allow and set up the implementation of the Mallard Glen driveway connection. If the petitioner desires to phase the required transportation improvements a detailed transportation phasing plan needs to be provided in the rezoning petition for CDOT/NCDOT review and approval.
4. The petitioner should revise the site plan to remove the proposed driveway realigned John Adams Rd. between the internal east-west public street and MCC Rd. Driveway connections shall align with opposing driveways within the site and shall be located a minimum of 100’ from intersecting streets.
12/22/16 Update: To clarify, CDOT does not support the following two (2) driveways as currently shown on the site plan:
 - a. RI/RO into Phase 1 parcel on the realigned John Adams – needs to be located a minimum 200’ from MCC Rd.
 - b. E/W internal street driveway locations nearest the intersections on existing and realigned John Adams – shift to 100’ beyond realigned John Adams intersection.
5. **12/22/16 Update:** The following conditional notes need to be revised;
 - a. Note e. 3. – revise bullet 2 to include reconstruction of existing John Adams curb returns to reduce crossing width
 - b. Note e. 4 – second sentence....An “**eastbound**” left turn (not westbound).
 - c. Note e. 6.5
 - iii. Revise bullet 1: Include necessary interconnect cable and conduit from Berkeley Place Dr. to I-85 as needed.
 - iv. Replace bullet 2: Realigned John Adams outside curblines needs to be constructed in future location in phase 1 construction. Future southbound John Adams travel lanes will be added within initial median area as needed.
 - v. Add bullet to commitment to construct pedestrian refuge island across MCC
 - vi. Revise last bullet to describe full cross section of realigned John Adams midblock typical section at intersection with MCC
 - d. Add note: e. 7. Berkley Place and MCC – modify right turn phasing from permissive to permissive/overlap.
6. **12/22/16 Update:** Conditional note 6. needs to be revised as follows: Second sentence: The petitioner will construct a two (2) travel lane driveway connection with a 5’ sidewalk on one side between new John Adams to Mallard Highlands Drive within six (6) months after the site’s first CO is issued.
7. **12/22/16 Update:** Add a transportation conditional note: Proposed driveway connections to the new E/W internal public street need to be located on property lines to provide for “shared driveways”. Other driveway connections will be allowed on this proposed public street, however their locations will be determined during the site’s permitting process.

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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. 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.
2. 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.
3. 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.
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.

Revision Log

Date	Description	By
10-06-2016	First Review	RHG
11-07-2016	Second Review	RHG
12-22-16	Third Review	RHG