



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

April 30, 2014

Ramey Kemp & Associates, Inc.
Attn: Molly Mathewson
5808 Faringdon Place, Suite 100
Raleigh, NC 27609

Subject: Hanover Pointe Sub-Area C Traffic Impact Analysis

A TIA was previously prepared with the development plan for the overall Hanover Pointe (formerly Ellington Place). Site plans for Hanover Point Sub-Area A and Sub-Area B on the east and west sides of N. Mineral Springs have been previously approved and are currently under construction. The proposed Hanover Pointe Sub-Area C development is located adjacent to the existing Aston Hall subdivision, north of Sherron Road and east of S. Mineral Springs Road.

The previous TIA assumed the completion of multiple roadway improvements at the intersection of Sherron Road and Ashton Glen proffered by the Brightleaf at the Park development. These improvements included an additional access point on the south side of Ashton Hall for access to the Brightleaf at the Park development which was subsequently denied by NCDOT. The previous TIA assumed build-out of the Brightleaf at the Park development at a density higher than is now being constructed. The TIA was prepared by Ramey Kemp and Associates, Inc. in October 2013.

The TIA analyzed the following intersections:

- Sherron Road and Ashton Glen.

Approved Surrounding Developments

- Hanover Point Sub-Area A (single-family development located on the west side of South Mineral Springs Road, south of Pleasant Drive);
- Hanover Point Sub-Area B (townhome development located on the east side of South Mineral Springs Road, south of Pleasant Drive);
- Ashton Hall (single-family development located on the north side of Sherron Road at Ashton Glen); and
- Brightleaf at the Park (single-family and townhome development on the south side of Sherron Road at Golden Belt Parkway).

TIP Roadway Improvement Projects Relevant to Proposed Development

- None in the area

Trip Generation and Distribution

The trips will be distributed as follows:

- 10% to/from the North via McLamb Drive;
- 81% to/from the West via Sherron Road; and
- 9% to/from the East via Sherron Road.

Capacity Analysis for Existing and Future Conditions

- Existing (2013) conditions;
- No-Build (2016) conditions (2013 Existing + Background growth traffic); and
- Build (2016) conditions (2013 Existing + Background growth traffic + Site traffic).

Summary of Road Improvements

The Department has reviewed the preliminary site plan and Traffic Impact Analysis (TIA) for the Hanover Pointe Sub-Area C prepared by Ramey Kemp and Associates, Inc. (Sealed and dated 10-23-13). In order to accommodate the site-generated traffic safely and efficiently, while also attempting to protect the functional integrity and operational capacity of the adjacent roadway facilities, we recommend the following improvements and/or restrictions related to this development. Any additional changes to the site plan must be submitted in writing to the District Office.

Sherron Road and Ashton Glen

- No roadway improvements are required at this intersection.

General

Cross-access to adjacent properties is strongly encouraged to reduce repetitive trips and provide future alternative routes of ingress/egress.

Due to, but not limited to, the comments and recommendations from this review of the proposed developments, changes in the internal circulation may be necessary to ensure that driver confusion is minimized to the maximum extent possible.

Any signal revisions, modifications, or additions necessitated by the development should be coordinated with the Regional Traffic Engineer, the Division Traffic Engineer, the Signals and Geometrics Section and the City of Durham.

Molly Mathewson, P.E.
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Any pavement marking revisions/modifications necessitated by the development should be the responsibility of the developer and coordinated with the Division Traffic Engineer.

Any roadway modifications or improvements necessitated by the development should be the responsibility of the developer unless otherwise noted.

Reference should also be made to the information included in the "General Recommendations Attachment."

If we can provide further assistance, please contact me at (919) 220-4750.

Sincerely,

A handwritten signature in black ink that reads "Mike Goodwin". The signature is written in a cursive, slightly slanted style.

Mike Goodwin
Assistant District Engineer

cc: Mr. H. Wesley Parham, P.E.
File

General Recommendations Attachment
(For Hanover Pointe Sub-Area C)

Adequate horizontal and vertical sight distances should be reserved at all proposed entrances. Foliage that interferes with sight distance should be cut back to protect lines of sight. The District Engineer should determine if all drainage facilities are adequate. Curb cuts and curb ramps should be constructed in conformance with the "*Guidelines for Curb Cuts and Ramps for Disabled Persons*," if applicable.

The developer may be required to obtain an approved encroachment agreement covering proposed work within the state right-of-way. If this is the case, the encroachment should be cross-referenced to this review.

All street and driveway entrances onto state system roadways should be controlled with appropriate traffic control devices, including but not limited to, stop, yield, directional, regulatory, and advisory signs and pavement markings. All traffic control devices shall conform to the requirements set forth in the Manual on Uniform Traffic Control Devices. Final pavement marking and signing plans should be submitted to the Division Traffic Engineer for approval prior to the installation of any signs and/or pavement markings.

Unless otherwise noted, a recommended width of 40 feet (curb face to curb face) should be used at each drive. It is also recommended that 40 feet (minimum) radii should be used at each drive to accommodate any service type vehicles or truck traffic that may visit the site.

If the developer anticipates adding or petitioning for addition to the state system, all roads/streets should be designed and constructed in conformance with the current North Carolina Department of Transportation design and construction guidelines.

All "outparcels" or "excluded areas" should be served internally with no additional access onto abutting roadways. The developer should convey this condition in any lease or sell agreements.

As required by the "*Policy on Street and Driveway Access to North Carolina Highways*," dated July 2003, the applicant is responsible for identifying all right-of-way and/or control-of-access limits and for including this information on all submittals. Failure to accurately disclose R/W and C/A limits could result in the denial or closure of access points.

Adequate right-of-way for widening and sight distance triangles should be reserved. Any additional development, either within this site or adjacent to this site, that intends on using the developments access will require an updated driveway permit and re-evaluation of geometric and traffic control needs

Any additional development, either within this site or adjacent to this site, that intends on using this development's access will require an updated driveway permit and re-evaluation of geometric and traffic control needs.

Where possible, opposite side driveways should be aligned to prevent the operational and safety problems caused by offset driveways.