

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY  
GOVERNOR

ANTHONY J. TATA  
SECRETARY

July 13, 2015

Mr. Earl Lewellyn, PE  
Kimley-Horne & Associates  
200 North Mangum Street, Suite 201  
Durham, NC 27701

**Subject:** Smart Property – Updated Traffic Impact Analysis Review

Dear Mr. Lewellyn:

The Department has reviewed the additional information supplied for the site drives on Cleora Drive as well as the functional design for the future grade separation of Farrington Road and NC 54 and will require the below noted improvements and/or restrictions of this development.

**NC 54 and Farrington Road**

- Construct a second southbound left-turn lane with 250 feet of full width storage and appropriate taper in order to provide dual left-turn lanes from Farrington Road onto NC 54.
- Construct an exclusive westbound right-turn lane providing maximum full width storage from the eastbound I-40 ramp on NC 54 onto Farrington Road.
- Construct an exclusive eastbound right-turn lane with 250 feet of storage and appropriate taper on NC 54 onto Farrington Road.
- Construct a raised concrete island with a minimum width of 4 feet along Farrington Road from NC 54 to Cleora Drive.
- Upgrade the existing signal to accommodate the new geometry of the intersection.

**Farrington Road and Cleora Drive**

- Construct an exclusive northbound left-turn lane providing maximum full width storage from NC 54 on Farrington Road onto Cleora Drive.
- Construct a raised concrete island with a minimum width of 4 feet along Farrington Road from NC 54 to Cleora Drive.
- Improve Cleora Drive to NCDOT standards and provide a three-lane cross-section from Farrington Road to Crescent Drive.

**Farrington Road and Site Driveway**

- Construct an exclusive northbound left-turn lane with 150 feet of full width storage and appropriate taper on Farrington Road at the Site Driveway.
- The approach for Site Driveway shall be placed under stop sign control with adequate sight distance.
- The Site Driveway shall have a minimum of 100 feet of Internal Protective Storage before a parking and/or crossing maneuvers occur.

- The Site Driveway shall allow full access movement and consist of a three-lane cross-section (one ingress and two egress lanes). The egress lanes shall consist of an exclusive left-turn and an exclusive right-turn lane.

**Farrington Road and Rutgers Place**

- Construct an exclusive northbound left-turn lane with 100 feet of full width storage and appropriate taper on Farrington Road at Rutgers Place.

**Cleora Drive and Site Driveways-East**

- Improve Cleora Drive to NCDOT standards and provide a three-lane cross-section from Farrington Road to Crescent Drive.
- The Site Driveway shall allow full access movement and consist of an ingress lane and an egress lane.
- The Site Driveway shall have a minimum of 100 feet of Internal Protective Storage before a parking and/or crossing maneuvers occur.

**Cleora Drive and Site Driveways-West**

- Improve Cleora Drive to NCDOT standards and provide a three-lane cross-section from Farrington Road to Crescent Drive.
- The Site Driveway shall allow full access movement and consist of an ingress lane and an egress lane.
- The Site Driveway shall have a minimum of 100 feet of Internal Protective Storage before a parking and/or crossing maneuvers occur.

**Crescent Drive and Site Driveway-North (Advisory Comments – Non System Street)**

- The Site Driveway shall have a minimum of 100 feet of Internal Protective Storage before a parking and/or crossing maneuvers occur.
- The Site Driveway shall allow full access movement and consist of an ingress lane and an egress lane.

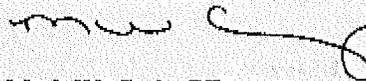
**Crescent Drive and Site Driveway-South (Advisory Comments – Non System Street)**

- The Site Driveway shall have a minimum of 100 feet of Internal Protective Storage before a parking and/or crossing maneuvers occur.
- The Site Driveway shall allow full access movement and consist of an ingress lane and an egress lane.

The functional design for the future grade separation of NC 54 and Farrington Road is acceptable to NCDOT.

If you have any questions or need additional information, please feel free to contact me at 919-220-4750.

Sincerely,



Mark W. Craig, PE  
District Engineer

Ec: Clarence Bunting, PE, Congestion Management  
Bill Judge, PE, City of Durham