



## ATTACHMENT 8: SUMMARY OF DEVELOPMENT IMPACTS

This attachment provides a summary of the potential infrastructure impacts associated with the proposed request in terms of how it affects the transportation system, utilities (water, sewer systems, and stormwater) and schools.

### 1. Transportation Impacts

Bill Poole Road and US 501 (N. Roxboro Road) are the major roads impacted by the proposed zoning change. There are no scheduled NCDOT roadway improvement projects in the area.

<b>Table 1: Existing Roadway Characteristics</b>		
<b>Affected Segment</b>	Bill Poole Road	N. Roxboro Road
<b>Type of Roadway</b>	2-lane undivided class I arterial without left-turn lanes	4-lane undivided class I arterial with left-turn lanes
<b>Current Roadway Capacity (LOS D) (AADT)*</b>	14,200	37,800
<b>Latest Traffic Volume (AADT)**</b>	1,200	14,000

Source of LOS Capacity: FDOT Generalized Level of Service Volume Table 4-1 (2012)

Source of Latest Traffic Volume: 2017 NCDOT Traffic Count Map

Table 2, below, shows the projected vehicle trips generated under the proposed rezoning compared to the present zoning designation.

<b>Table 2: Traffic Generation</b>	
<b>Traffic Generated by Present Designation (average 24 hour)*</b>	2,463
<b>Traffic Generated by Proposed Designation (average 24 hour)**</b>	2,770
<b>Impact of Proposed Designation</b>	+307

\*Assumption- (Max Use of Existing Zoning) – CN (0.16 FAR) & RS-10: 5,227 SF fast food restaurant with drive-thru window and 5 single-family lots

\*\*Assumption- (Max Use of Proposed Zoning) – CN(D): Two 4,000SF fast food restaurants without drive-thru windows

Transit service is not currently provided within one-quarter mile of the site.

## 2. Utility Impacts

This site will not be served by City water and sewer. This site proposes to be served by a septic system and County water. At this time, a commercial connection to the County water system cannot be guaranteed, as the County's State permit limits the amount of commercial development allowable to be connected to the system. This issue will need to be resolved prior to site plan approval through modification to the County's State permit for the water system. If the aforementioned permit cannot be modified, proposed commercial development will not be allowed to be permitted on this site. In terms of drainage and stormwater, the impacts of any change based upon the proposed rezoning will be assessed at the time of site plan review. The subject site is of sufficient size and shape to accommodate appropriate stormwater facilities that may be required.

## 3. School System Impact

Durham Public Schools serving the area are Mangum Elementary, Lucas Middle, and Northern High School. Table 3 provides a summary of the current building capacity for the elementary, middle and high schools, as well as the current enrollment and the available capacity.

<b>Table 3: School Enrollment and Capacity Figures</b>			
	<b>Elementary School Students</b>	<b>Middle School Students</b>	<b>High School Students</b>
<b>Current Building Capacity</b>	16,221	7,830	10,516
<b>Maximum Building Capacity (110% of Building Capacity)</b>	17,843	8,613	11,568
<b>20<sup>th</sup> Day Attendance (2017-2018 School Year)</b>	15,574	6,856	10,432
<b>Committed to Date, Based on Recent Approvals (April 2015-March 2018)</b>	(4)	0	(33)
<b>Available Capacity</b>	2,273	1,757	1,169

As shown in Table 4, the proposed zoning will generate no school aged children, compared to the existing zoning, since the project is non-residential.

<b>Table 4: Number of Projected Students Under Rezoning</b>			
	<b>Elementary School Students</b>	<b>Middle School Students</b>	<b>High School Students</b>
<b>Potential Students Generated – Current Zoning*</b>	1	0	1

<b>Potential Students Generated – Proposed Zoning**</b>	0	0	0
<b>Impact of Proposed Zoning</b>	-1	0	-1

\*Assumption- (Max Use of Existing Zoning) – CN (0.16 FAR) & RS-10: 5,227 SF fast food restaurant with drive-thru window and 5 single-family lots

\*\*Assumption- (Max Use of Proposed Zoning) – CN(D): Two 4,000SF fast food restaurants without drive-thru windows

#### 4. Summary

The proposed CN(D) district is consistent with *Comprehensive Plan* policies regarding the infrastructure impacts of the transportation system, utilities, and schools.