

TECHNICAL MEMORANDUM

Date: Tuesday, January 23, 2024

To: Jason Sullivan

Chatham County Planning Director

From: Brittany Chase, P.E.

Traffic Engineer Exult Engineering

Subject: Hamlets Chapel Road Residential

Trip Generation Letter

BACKGROUND

Exult Engineering has been contracted by David Weekley Homes to perform traffic engineering services for the proposed Hamlets Chapel Road Residential Development located in Chatham County, North Carolina. The proposed site is located on the south side of Hamlets Chapel Road east of Pleasant Springs Road as shown on the Vicinity Map on Figure 1. The proposed site consists of 46 single family homes and one full movement driveway on Hamlets Chapel Road as shown on the Site Plan on Figure 2. The proposed site is to be developed within five years by 2029. The purpose of this letter is to discuss the trip generation of the proposed development.

TRIP GENERATION

The trip generation was based on rates published in the most recent edition of the Institute of Transportation Engineer's *Trip Generation Manual* (11th Edition). The North Carolina Department of Transportation (NCDOT) *Congestion Management Rates vs Equations Spreadsheet* was used for guidance. As shown in Table 1, the proposed site is expected to generate 494 external daily trips, 37 AM peak hour external trips (9 entering, 28 exiting), and 48 PM peak hour external trips (30 entering, 18 exiting).

Table 1: Trip Generation

Land Use			Daily	AM Peak Hour			PM Peak Hour		
				Total	Enter	Exit	Total	Enter	Exit
210: Single-Family Detached	46	d.u.	494	37	9	28	48	30	18
Total Site Trips			494	37	9	28	48	30	18

Reference: Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, September 2021

The anticipated trip generation of the proposed site is well below NCDOT's threshold (3,000 vehicles per day) for requiring a Traffic Impact Analysis. The proposed site is expected to have minimal impact on the surrounding roadway network.

Please let me know if you have any questions or comments.

Sincerely,

1. W. Chare

Brittany Chase, P.E. **Exult Engineering**

cc:

Charlie Yokley, David Weekley Homes R.J. Monroe, NCDOT Division 8, District 1

Attachments:

Figure 1: Vicinity Map Figure 2: Site Plan

2



