

January 17, 2024

Mr. Gregory Rondeau, Chairman
Franklin Planning Board
355 East Central Street
Franklin, MA 02038

**Re: Uncas Avenue Extension Residential Development
 Traffic Assessment Peer Review**

Dear Mr. Rondeau:

BETA Group, Inc. reviewed the Traffic Assessment associated with the proposed Uncas Avenue Extension Residential Development in Franklin, MA. This letter is provided to outline our findings, comments, and recommendations relative to the proposed project.

BASIS OF REVIEW

The following documents were received by BETA and formed the basis of the review:

- Uncas Avenue Extension Residential Development ***Traffic Assessment***, prepared by Kimley Horn dated January 2, 2024

INTRODUCTION

The project consists of a proposed residential development project located at Uncas Avenue in the Town of Franklin, Massachusetts just east of King Street. The development site is located along Uncas Avenue where the subdivision road, Uncas Avenue Extension, breaks off from Uncas Avenue. A sidewalk will be provided along one side of the Extension connecting to the existing sidewalk that exists on Uncas Avenue. The currently approved subdivision defines nine (9) lots. It is our understanding that the nine (9) duplexes building option (18 dwelling units) has been approved and the alternative development program would consist of nine (9) triplexes (27 dwelling units).

FINDINGS, COMMENTS, AND RECOMMENDATIONS

Data Collection

New traffic volume and speed data was collected on Hill Avenue on Wednesday December 13 and Thursday December 14, 2023. The counts show the average daily traffic volume to be approximately 100 vehicles with 11 vehicles in the AM peak hour and 15 vehicles in the PM peak hour. The average travel speed was 20 MPH and the 85th percentile speed was approximately 25 MPH. The posted speed limit is 25 MPH.

A spot 30-minute traffic turning movement count was conducted at the intersection of East Central Street and Uncas Avenue during the morning peak period. The 30-minute volumes were adjusted to

represent peak hour volumes. The PM peak hour volumes were estimated by reversing the AM peak hour volumes.

Traffic turning movements volumes at the intersection of East Central Street and King Street were conducted on December 1, 2022 for a previous study and were increased by 1.0 percent to represent 2023 volumes.

Comment 1. Identify the time and date of the 30-minute spot traffic volume count.

Comment 2. The collected traffic data is adequate to evaluate existing conditions.

Future and No-Build Conditions

Comment 3. The locations of the Taj Estates Franklin I & II background development projects are listed as west of the project site. Both are located east of the project. The peak hour vehicle trip assignments for these projects are correct.

Trip Generation

The TIAS estimated project vehicle trip generation using Land Use Code 215 – Single Family Attached Housing from the Institute of Transportation Engineer's *Trip Generation Manual, 11th Edition*. The project is estimated to generate 8 to 12 trips in the peak hours for the Build A scenario and between 4 and 7 trips for the Build B scenario.

Comment 4. The estimated trip generation using Land Use Code 220 – Multi-Family Housing (Low Rise) would result in a few more vehicle trips in the peak hours. These additional trips would not change the analysis results. Therefore, the project trip generation presented in the TIAS is reasonable.

Trip Distribution

Comment 5. The distribution and assignment of peak hour project trips are correct, except that no project-generated trips are shown on Figure 7 (Build A) or Figure 8 (Build B) traveling south on Uncas Avenue to Ledge Street, Hill Avenue, Crocket Street, Summer Street to King Street southbound. The project-generated traffic volumes using the neighborhood streets would be considered low volume.

Future Build Conditions

Comment 6. The intersection capacity analysis results are reasonable. The following are noted:

- The westbound vehicle queue for the through movement on East Central Street at King Street and Chestnut Street is currently 290 feet long in the AM peak hour and 380 feet long in the PM peak hour and will extend beyond Uncas Avenue, blocking vehicles turning left onto East Central

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Street westbound. The vehicle queue lengths will be exacerbated by additional background traffic.

- The Uncas Avenue northbound approach to East Central Street will operate at LOS E in the PM Peak hour with long delays, although the total approach volume will be low (10 vehicles for less for both Build scenarios).

Comment 7. Do Not Block intersection pavement markings should be considered for the intersection of East Central Street and Uncas Avenue to help allow vehicles to make a left from Uncas Avenue to East Central Street westbound.

Comment 8. Has the Fire Department reviewed and approved the cul-de-sac roadway dimensions?

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.



Jeff Maxtutis
Senior Associate

cc: Amy Love, Planner

