

## TRANSPORTATION ADVISORY COMMITTEE

7 Twin Circle Drive, Arlington, MA 02474

To: Board of Selectmen, Arlington, Mass

From: Transportation Advisory Committee (TAC)

Subject: Recommendations for the Beacon, Hamlet, Coral Intersection

**Date:** 14 July 2008

Recent accidents at this intersection were brought to the TAC's attention by the Arlington Police Department. The intersection in question was studied by Jean Clark, Scott Smith and Jeff Maxtutis. Traffic measurements were made as a part of this process.

The attached report describes the rationale for the recommendations. Below are the recommended actions, which were voted by the TAC on 6/18/08.

## There recommendations are:

- 1) Install four-way stop control at the Beacon/Hamlet/Coral intersection.
- 2) Place temporary signage to advise motorists of the change.
- 3) Remove the existing Intersection Ahead signs.

Respectfully submitted,

Transportation Advisory Committee Ed Starr - Chair

### Beacon Street/Hamlet Street/Coral Street

# Recommendations of the Transportation Advisory Committee 14 July 2008

### Introduction

The Transportation Advisory Committee (TAC) has evaluated and developed recommendations regarding traffic operations at the intersection of Beacon Street/Hamlet Street/Coral Street. There have been recent vehicular accidents at this intersection that indicate safety issues.

The study location is a four-way unsignalized intersection with Stop sign control on the northbound Beacon Street and westbound Coral Street approaches. The remaining two approaches are uncontrolled. The Stop signs are located next to each other and not on opposing approaches as a typical two-way Stop configuration. The intersection is located approximately 100 feet south of the Mystic Valley Parkway.

#### **Evaluation**

Traffic turning movement volumes were collected at the intersection on Tuesday, April 29, 2008 between 7-9 AM and 4-6 PM. The Hamlet Street eastbound approach experienced the highest volumes in the morning peak hour with 63 vehicles. The Hamlet Street westbound approach experienced the highest volumes in the afternoon peak hour with 28 vehicles. Overall, the traffic volumes at this intersection are low with 2-3 vehicles per minute during peak hours.

Site observations were made at the study intersection. The number of motorists running through the Stop signs during the peak periods was low. The sight distance for the northbound Beacon Street intersection approach is restricted by vegetation on the southwest corner of the intersection. Observations confirmed the low traffic volumes at the study intersection. On the Beacon Street northbound and southbound approaches to the intersection, the Intersection Ahead signs are not in accordance with industry standards (MUTCD).

The evaluation concluded that the current two-way Stop control at the study intersection is non-standard and confusing for motorists. The TAC considered the following alternatives:

- Do Nothing leave as is
- Two-way Stop on opposing approaches
- Three-way Stop with Beacon Street southbound left uncontrolled
- All-way four-way Stop

Based on traffic volumes, accident history, sight distance, and usage patterns, the TAC recommends installing an all-way four-way Stop control at the intersection of Beacon Street/Hamlet Street/Coral Street. We also recommend that temporary signage be installed altering motorists to the new change in traffic control. In addition, we recommend that the existing Intersection Ahead signs be removed/or replaced by Stop Ahead signs (pending site observations). The recommendations will help to improve safety and driver confusion at this location.