

MEMORANDUM

TO: Mr. Robert Hewitt, P.E.
Trammell Crow Residential, Inc.
160 Gould Street
Suite 121
Needham, MA 02494

FROM: Mr. Jeffrey S. Dirk, P.E., PTOE *and* 
Mr. Michael A. Santos, EIT
Vanasse & Associates, Inc.
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DATE: November 8, 2007

RE: 4984

SUBJECT: Supplemental Motor Vehicle Crash Analysis
High Street at Parker Street
Acton, Massachusetts

Vanasse & Associates, Inc. (VAI) has completed a detailed review of motor vehicle crash reports obtained from the Town of Acton Police Department for the intersection of High Street and Parker Street. The crash reports obtained were for the time period between January 2004 and September 2007. A total of 11 motor vehicle crashes were reported at the subject intersection within the aforementioned review period. The majority of the crashes occurring at the intersection of involved property damage only (7 out of 11); occurred on a weekday (8 out of 11); and were classified as angle-type collisions (8 out of 11). This data is consistent with the motor vehicle crash analysis for the intersection presented in the October 2007 Traffic Impact and Access Study (TIAS) prepared by VAI in support of the Alexan at Concord residential development. A review of the detailed crash records indicates that all of the angle-type collisions involved a motorist entering the intersection from the Parker Street north or southbound approach (STOP-sign controlled) that failed to yield to traffic along High Street. This type of collision may be the result of inadequate sight distances for vehicles approaching the intersection combined with vehicle travel speeds that are not conducive to the geometry of the intersection.

In order to address the predominance of motor vehicle collisions reported at the intersection of High Street at Parker Street, the following recommendations are offered:

- Trim, remove and/or maintain vegetation or other potential sight line obstructions located within the public right-of-way at and approaching the intersection.
- Install advance "intersection ahead" warning signs on all approaches to the intersection in accordance with the provisions of the Manual on Uniform Traffic Control Devices (MUTCD).¹
- Replace all signs and pavement markings at the intersection.

In addition, it is suggested that the Town of Acton Police Department conduct a periodic speed enforcement program along High Street approaching the intersection.

cc: D. Horwitz, Esquire – Goulston and Storrs
RDV, BG, MAS, File

¹Manual on Uniform Traffic Control Devices; Federal Highway Administration; Washington, DC; 2000.