
Traffic Impact and Access Study

Proposed Halifax 40B Development

314 Plymouth Street
Halifax, Massachusetts

Prepared for
R&J, LLC

October 2019

Prepared by



GREEN INTERNATIONAL AFFILIATES, INC.
TRANSPORTATION | STRUCTURAL | WATER RESOURCES | CIVIL/SITE

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1.0 INTRODUCTION AND EXECUTIVE SUMMARY

This report evaluates the potential traffic impacts associated with the proposed Halifax 40B Residential Development project located near 318 Plymouth Street Halifax, MA. The development consists of 30 duplex units and developed by R&J, LLC. Access to this proposed site will be provided through a two-lane driveway on Plymouth Street.

This report describes the potential traffic impacts on the adjacent roadways and nearby intersections as a result of the development project. Intersection capacity analyses were completed at the study intersections for the existing, future No-Build, and future Build conditions.

The analysis and evaluation in this report includes traffic volumes, safety data and review, and an analysis of the roadway/site access interface. The guidelines of the Massachusetts Department of Transportation (MassDOT) and the Institute of Transportation Engineers (ITE) were used for completing this traffic impact and access study. The report's content contains descriptions of existing characteristics of the abutting roadway network, current traffic conditions, estimated traffic impacts and access/egress characteristics of the proposed residential development.

1.1 Future Conditions

For this study, the future year 2026 was chosen based on current MassDOT analysis guidelines. The evaluation of future conditions involves comparing No-Build and Build conditions. The proposed development project is expected to generate approximately 26 and 32 net new vehicle trips during the weekday AM and PM peak hours, respectively. The trips were distributed across the study area network based on existing traffic patterns.

1.2 Conclusions and Recommendations

The roadways within the study area are able to accommodate the additional traffic associated with the proposed development project. The analyses indicated the following:

- The proposed project results in minimal changes in level of service and vehicle delays for the study area intersection compared to 2026 Future No-Build conditions.
- The analysis predicts that traffic will be able to access the proposed site driveway safely and efficiently, with minimal delays (LOS 'A' to 'B') and queues during the weekday AM and PM peak hour.
- All the other approaches at the signalized study intersection operate at adequate level of service LOS 'C' in Future Build conditions.
- Sufficient sight distance with respect to the site drive location is expected to be available following construction.

1.2.1 Recommendations

While the analyses show that the proposed development can be accommodated on the study area network, several recommendations have been made to enhance the network. The proposed actions are as follows:

- Pavement markings for a one-lane signalized intersection approach configuration consistent with current Manual on Uniform Traffic Control Devices (MUTCD) standards and guidelines, should be installed at the site access driveway approach to Plymouth street.
- Any proposed landscaping and signage should be low enough and/or set back sufficiently so as not to create any sight distance constraints at the proposed site drives.

- Update the existing two crosswalks to be ADA-compliant on the intersection at Stop & Shop Driveway to accommodate safe pedestrian access from the proposed site.
- Install equipment at the site driveway approach and update the signal at the intersection at Stop & Shop Driveway. Requirements for this new setup shall include two signal posts, one remove and reset post, and signal detection.



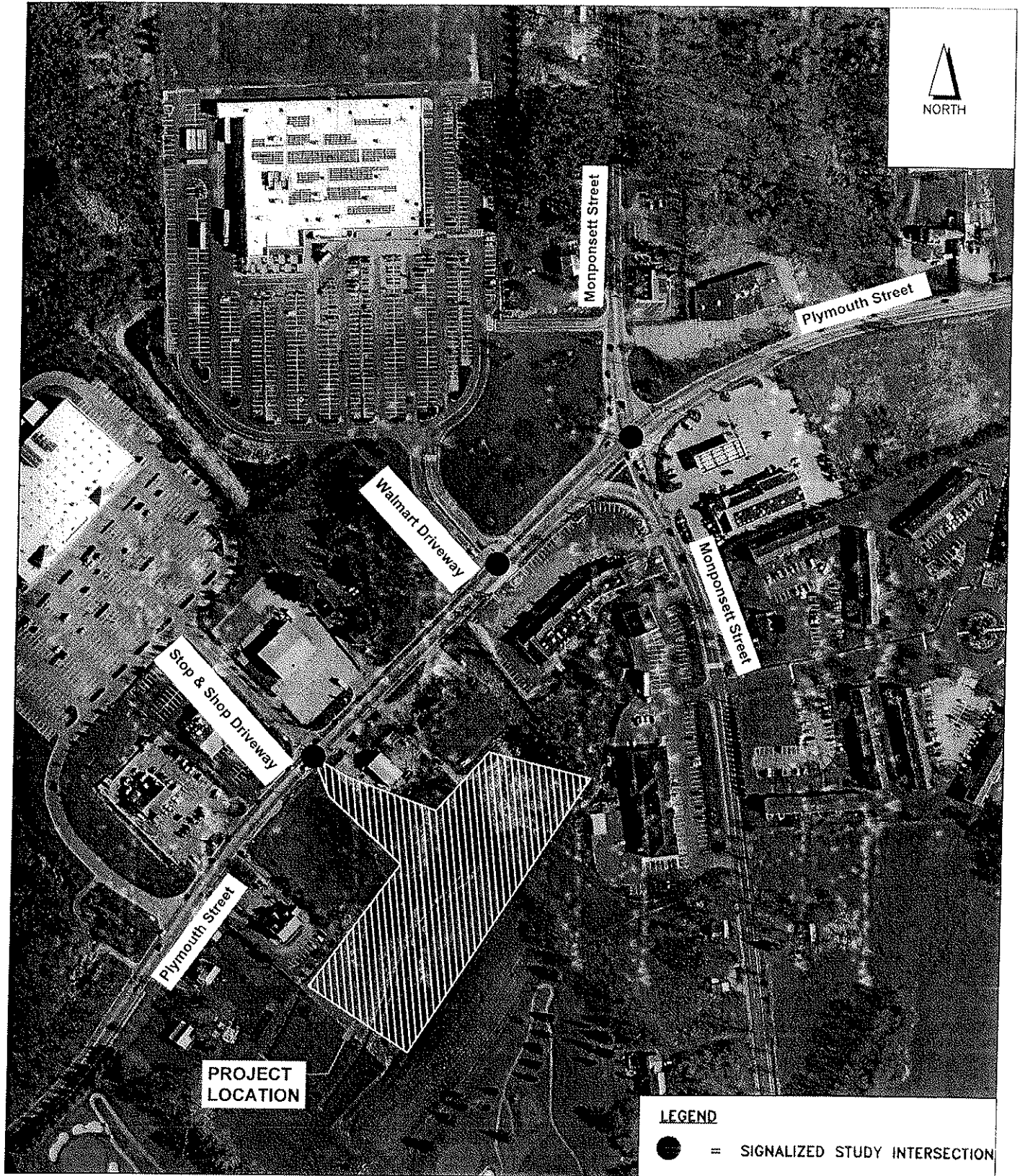


Figure 1
Project Location
Proposed Residential Development
Halifax, MA