

# ***PVI Site Design***

18 Glendale Road, Norwood, MA - 339.206.1030  
Master Planning - Civil Engineering - Land Entitlements

## **TECHNICAL MEMORANDUM**

TO: Bluestone Residential, Inc.  
35 Norwood Ave  
Newton, MA 02459

DATE: 09-19-2022  
PVI PROJ. # 21-001

RE: **Jefferson Mill Redevelopment –Stopping Site Distance**

## **BACKGROUND**

PVI Site Design, LLC (PVI) has prepared this technical memorandum to evaluate the sight distance for the Jefferson Mill Redevelopment located at 1665 Main Street, Holden, MA. The project is proposing to utilize two existing curb cuts located at the easterly end of building 3.

Under existing conditions, there are two curb cuts that are used to access and undefined parking area. Figure 1 is an image of the existing curb-cuts provided by Google Street View.



**Figure 1 – Google Street View**

## PROPOSED DESIGN

The current configuration allows cars to enter and exit from either curb-cut. The applicant is proposing to improve the parking area to provide a defined entrance and exit lane and striped parking spaces. This will ensure cars exiting onto Main Street have the most site distance available to them from on-coming traffic. Refer to the site plans prepared by PVI for more detail. The subsequent calculations are based on the proposed configuration.

## STOPPING SITE DISTANCE CALCULATIONS

MassDOT has requested a site distance calculation as part of the State Highway Access Permit application for the project.

The calculations provided herein are based on the vehicle speed data collected by Howard Stein Hudson (HSH) for the benefit of the project in February 2020. The 85th percentile speed along Main Street was observed as 41 mph in the northbound direction and 48 mph in the southbound direction. Refer to the HSH Technical Memorandum dated February 24, 2020 for more detailed information on how the speed data was collected.


	Northbound	Southbound
Design Speed	41 MPH	48 MPH
Road Grade	6% Downgradient	6% Upgradient
SSD Required (feet)	346	356
SSD Provided (Feet)	400	360
<b>SSD Satisfied</b>	Yes	Yes

**Table 1 – Stopping Site Distance Summary**

## CONCLUSION

The SSD is satisfied in both directions for the existing curb-cut. However, in order to further improve the safety of the intersection, we recommend the site design include curbing alignments to encourage right turn out movements only from the parking area.

**PVI Site Design, LLC**



Timothy J. Power, PE

