Date: January 27, 2023

To: Cruz Companies, Inc.
One John Elliot Square
Roxbury, MA 02119

From: Bob Rego, P.E., L.S.P.
River Hawk Environmental, LLC
2183 Ocean Street
Marshfield, MA 02050

Re: **Transportation Impact Assessment**
Multi-Family Redevelopment, 130 Jenney Street, New Bedford, MA 02746

1.0 INTRODUCTION

River Hawk Environmental, LLC (RHE) has prepared this Transportation Impact Assessment (TIA) in order to identify the traffic impacts associated with the redevelopment of 130 Jenney Street, New Bedford, Massachusetts. This report identifies:

- calculated trip generation for the current proposal; and
- a Sight Distance evaluation.

Based on the results of this TIA, it was determined that:

- The total number of trip-ends is 53. A total of 4 trip ends will occur during the morning peak hour and 5 trip ends will occur during the evening peak hour.

  Given the low number of trips ends, it is clear that the projected traffic from this project will not negatively impact the City's street system. It is equally clear that there is no need for implementation of any off-site traffic mitigation measures.

- There is adequate Sight Distance at the site driveways.

2.0 TRIP GENERATION

Current Proposal
The current proposal reflects the following land uses and intensities:

- Low-rise apartment - 8 dwelling units

Most Recent Former Use
The property was formerly used as a Vacant lot:

Traffic characteristics of the proposed Project, were developed using trip-generation statistics published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual*[1] for the following land uses:

- Low-Rise Apartment, land use 221, based on dwelling units

The calculated vehicle-trips are summarized in Table 1 :

Table 1 - Calculated Trip Generation for Current Proposal

	Vehicle-Trips by Land Use		
Time Period	**Apartments (8 D.U.)**	**Total**	**CHANGE**
Weekday Daily (6.59/DU)	53	53	53
Weekday AM-Street-Peak Hour			
In	1	1	1
Out	3	3	3
Total	4	4	4
Weekday PM-Street-Peak Hour			
In	3	3	3
Out	2	2	2
Total	5	5	5

[1]ITE, *Trip Generation Manual*, 10th edition (Washington DC, 2012)

Based on the results of this TIA, it was determined that:

- The total number of trip-ends is 53. A total of 4 trip ends will occur during the morning peak hour and 5 trip ends will occur during the evening peak hour. This represents 1 car leaving every 20 minutes during the morning peak hour and 1 car entering every 20 minutes during the evening peak hour.

Even though there is a slight increase in traffic numbers due to the proposed Project, it is clear that the projected traffic from this project will have negligible impact on the City's street system. It is equally clear that there is no need for implementation of any off-site traffic mitigation measures.

2.0 STOPPING SIGHT DISTANCE EVALUATION

The approaching vehicles on North Street (one-way from the east)making a left turn on to Jenney Street and vehicles approaching on Jenney Street from the north must be able to stop in time to avoid making contact with a vehicle emerging from the site's northernmost driveway.

Vehicles driving west on North Street and taking a left hand turn on to Jenney Streetwill have a clear view of the site driveway. Cars exiting the driveway will also have a clear view of cars approaching the turn on to Jenney Street.

There is a stop sign at the intersection of North Street and Jenney Street. Cars approaching from the north on Jenney Street and crossing North Street would have to stop prior to proceeding across North Street and passing by the northernmost driveway on the Subject Property . There would be a clear view of a car stopped at this intersection from the northernmost driveway.

The required stopping sight distance was obtained using the formula presented in "A Policy on Geometric Design of Highways and Streets" as published by the American Association of State Highway and Transportation Officials (AASHTO) 6th Edition published in 2011. Since cars passing by the northernmost driveway would either be starting from a stopped position or turning left, the anticipated speed would be a maximum of 10 miles per hour (mph). The calculated Stopping Sight Distance (SSD) at 10 mph is 41 feet. The actual SSD for cars turning left on to Jenney Street is 100 feet, and the actual SSD for cars traveling on Jenney Street and crossing through the intersection with North Street is 75 feet.

Therefore, both the exiting driver from the site as well as all through motorists, do have clear stopping sight distance at the proposed driveway location.