February 18, 2020

Ms. Pamela Harding
Town Planner / Director of Planning & Development
Town of Holden
1204 Main Street
Holden, MA 01520

Subject: Traffic Engineering Peer Review -

Additional Issues

Salisbury Pine Tree Estates Holden, Massachusetts

Dear Ms. Harding:

In addition to the findings discussed in our engineering peer review of the application package for the proposed residential subdivision between Bailey Road and Salisbury Street on behalf of the Town of Holden (the Town), Green International Affiliates, Inc. (Green) is submitting this letter to respond to other concerns communicated to us by the Town.

Responses to Town's concerns

- 1. One concern that has been brought to the attention of Green is the possibility that either site traffic may use Putnam Road as a cut-through route between Bailey Road and Salisbury Street, or that the site itself may be used as a cut-through route. Given that the proposed Farmer's Way will provide access between Salisbury Street (via Pine Tree Road) and Bailey Road (via Henry Way), residents within in the new development who want to avoid Main Street are unlikely to use Putnam Road (or Hubbard Lane for that matter) as cut-through routes. As for the site itself being used as a cut-through road, drivers will need to negotiate two 90-degree turns within the site to access one of the exterior roads to the other. It is likely that this will provide an inconvenience for drivers wanting to use the site as a cut-through road, considering that the existing routes are more direct. Therefore, it is in our opinion that the proposed project will not alter the traffic pattern for Putnam Road.
- 2. Another concerns that has been brought to our attention is how the project may affect operations for Bailey Road at its intersection with Main Street. Based on the traffic analysis provided in the TIAS, Bailey is operating at LOS 'F', which indicates long delays for vehicles exiting onto Main Street. This operating condition is typical of STOP-controlled side streets at intersections with roadways carrying moderately high traffic volumes during peak hours. The project predicts that an insignificant amount of new traffic will be added to this intersection and it is in our opinion that the projected trip distribution for Bailey Road is reasonable. As a result, while we acknowledge the project will add more trips onto the Bailey Road and Main Street intersection, its impact to the Bailey Road approach during the peak period is relatively small when compared to existing operating conditions.
- 3. Bailey Road is a relatively narrow roadway at approximately 20 feet wide. The FHWA's A Policy on Geometric Design of Highways and Streets recommends that collector roads having speed and

volume characteristics such as Bailey Road should range in width between 20-24 feet exclusive of shoulders; the MassDOT *Project Development and Design Guide* recommends having at least a one-foot-wide shoulder on each side of the roadway to facilitate drainage and pavement stability.

The TIAS anticipates that 20 percent of site traffic volumes will use Bailey Road (i.e. approximately 150 trips out of 750 daily trips predicted) which has an existing traffic volume of 1,100 vehicles per day. As a result, it is in our opinion that the proposed project is anticipated to result in minor impacts to the capacity of Bailey Road. Based on the Town's Complete Street Prioritization Plan, a sidewalk is proposed for Bailey Road as one of the Complete Streets projects. The installation of the sidewalk may provide an opportunity to widen the road by two feet to meet the applicable design standards.

If Town staff would like to discuss any of these responses further, please feel free to contact me at 978-923-0400.

Sincerely, Green International Affiliates, Inc.

Wing Wong, P.E., PTOE

Transportation Planning Group Leader

cc: W. Wong, Green W. Scully, Green

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