## To the Zoning Board of Appeals:

Traffic Safety Analysis-

The addition of 400 vehicles to the town center will impact both traffic congestion and traffic safety. The developer has focused the majority of his submissions on traffic congestion, whereas traffic safety is of much greater concern. We do, however, contest almost all of his assertions about traffic congestion as well. The peer reviewer hired by the town did not look at any areas of traffic safety or congestion than what the developer himself addressed, so the peer review was essentially "checking the math" of the developer, as opposed to a comprehensive look at the traffic and safety issues.

## 1) Traffic congestion:

a) The developer's assertion that congestion at the center will be alleviated by adjusting the timing of the traffic signal at Hudson and Concord is illogical. Traffic is backed up in all directions by at least ½ mile during rush hour periods. Adjustment of the signal will simply make one queue longer and one shorter.

b) The developer asserts that using Plympton and Candy Hill are not time-saving shortcuts to and from the development. We have repeatedly proven that this is incorrect, and suggest that these incorrect assertions are easily tested using two vehicles and a stopwatch. The fact is that absent any traffic intervention by the developer and/or the town, these windy, narrow back roads will become principal cut-throughs by residents of the development both during the morning and evening commute periods.

## Traffic safety:

- a) We define the traffic impact area as spanning from Candy Hill Road to the north, Maynard Road to the west, the Noyes crosswalk to the east, and Old Lancaster Rd to the South. Within this area, the accident rate is equal or greater than Mass DOT averages.
- b) The town center has difficult pedestrian pathways that require pedestrians to take circuitous paths to their destinations. Crosswalks are located in sub-optimal locations with visibility issues. Only one of crosswalks currently has a signal. The developer plans to create a new crosswalk across Hudson Rd near Peakham Rd. Pedestrians attempting to use this crosswalk will be in danger from blocked sightlines from vehicles coming from all directions. This is the sole route for any resident of the development to travel towards shopping or Noyes school.
- c) Twenty school bus routes pass through the impact area daily. They will be subject to the dangerous conditions outlined below, as well as sharing the road with thousands of construction vehicles for two years. There was a fatal school bus collision in the impact area this year.
- d) The intersection of Peter's Way and Concord Road present serious visibility issues. The southbound queue on Concord Road prevents a driver exiting Peter's Way from seeing northbound traffic. Peter's way must be either right turn only, or limited to emergency vehicle use only.
- e) The Hudson Road access point also has serious visibility issues. Because of the confluence of numerous roads and driveways in a small area, there are multiple issues related to vehicles blocking sight-lines for other vehicles attempting to turn onto Hudson Road from Peakham Road, SS development, Ti-Sales, the shopping complex, or resident driveways. We illustrate some of these issues below (this is not a complete or exhaustive list of possible accident scenarios, it is meant to highlight a few to illustrate that none of these scenarios have been studied by the developer):

Figure 1 is an overview of the Hudson Road egress and adjacent roads/driveways. Crosswalks (existing across Peakham Rd., proposed across Hudson Rd.) are shown in yellow, vehicle turning paths are shown in orange. The traffic depicts a typical morning rush hour with cars queuing at the lighting heading east on Hudson Rd., with lighter traffic flow heading west on Hudson. Vehicles leaving Sudbury Station are heading west (right lane) and east (center lane).







Vehicle 4 turning west out of the proposed Village at Sudbury Station, pulls forward beyond Vehicle 5 to see westbound cars on Hudson Road. Vehicle 3 coming west from the town center intersection swerves towards the double center line to avoid Vehicles 4 and 5. Vehicles 1 and 2 turn east from Peakham Road to Hudson Road and cross double center line to pass queued cars in order to turn left at the town center intersection. The left turning lane at the town center intersection begins to the east at 18 Hudson Rd. Vehicles 2 and 3 collide. Figure 3: A different accident scenario described in caption below image. Note, this condition is not caused by the Sudbury Station egress, but is shown to highlight the dangerous existing conditions and the proximity of the proposed crosswalk to these conditions-



Vehicle 2 heading west out of the proposed Village at Sudbury Station, pulls forward beyond Vehicle 1 to see westbound vehicles on Hudson Road. Vehicle 2 collides with Vehicle 3 (view of Vehicle 3 Is blocked by Vehicle 1).

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Figure 3: A different accident scenario described in caption below image. This view is reversed- it is looking south with Sudbury Station behind you. Peakham Rd will be the primary route for southbound traffic from Sudbury Station.



turns right, collides with Vehicle 3. Vehicle 2's view is blocked by Vehicle 1 which has pulled forward to turn left on to Hudson Road.

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Figure 4- A street-level view of a child attempting to cross the new crosswalk southbound. This will be the primary route for all children walking from Sudbury Station of Noyes School, as well as all pedestrian traffic from the development to the Sudbury 29 plaza.



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Figure 5- The same scenario (child in crosswalk, circled in black) as seen from above. Vehicle 1, turning west advances into traffic blocking view of child in crosswalk. Vehicle 2 is approaching at 35mph. It will reach child in 1.5 seconds.



Figure 6- The same view showing the child's field of vision. She is paying attention to the turning minivan from Sudbury Station as well as the vehicle turning left from Sudbury 29. She does not see the white car approaching westbound.



Figure 7: The same crosswalk scenario showing the point of impact.



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These are a few of many dangerous scenarios that have not been studied. Without such a study, and appropriate mitigation measures (if possible), a child's injury or death is a predictable outcome.

We appreciate the ZBA's efforts to fully investigate critical traffic safety concerns.

David Hornstein, Candy Hill Road

On behalf of the Oppose Sudbury Station Steering Committee