Dear Members of the ZBA.

In advance of Monday's final ZBA hearing on the Villages at Sudbury Station we would like to submit this comprehensive overview of community and citizen concerns. These remarks have been sourced from the many concerned citizens following the Sudbury Station project.

### Pressing Outstanding Items

Below is a list of the most pressing questions and concerns from our group in advance of the final scheduled hearing. This list should not be mistaken for our only concerns — in light of the close of the hearing these are the most pressing concerns that remain outstanding. A full list of citizen concerns is included later in this letter.

### Hydrology

We do not have an understanding of how the flow of groundwater moves from the site, both above and below grade. This is an area of strong concern and the need for ground water mapping and mounding analysis is supported by the Conservation Commission and the Horsely & Witten Group consultant.

The developer has performed perc tests at various locations to determine whether the soil can absorb the runoff collected from roofs and roads. However, the critical issue of where the water goes when it is absorbed by the ground has not been addressed. On sloped sites, water that is absorbed from containment vessels tends to travel horizontally down slope. There are wetlands to the north of the building area. Wetlands collect water that falls on adjacent areas and flows into the wetland. The building area is approx. 13 acres of pervious surface that will largely be replaced by buildings, parking and roads. Rainfall that is currently distributed over the entire site will be concentrated in a few outlets. No study has been done that addresses whether this subsurface flow of this concentrated discharge will have serious detrimental effects to Ti-sales, Parkinson Field, the future rail trail, or adjacent wetlands. Ti-sales has already documented groundwater issues due to runoff from the subject property onto their property. The concentrated discharge has the potential to exacerbate this problem.

In addition, the sewage treatment plant is designed to release close to 50,000 gallons per day of treated sewage. This subsurface flow of this concentrated discharge has also not been studied. The combined effect of concentrating treated sewage and stormwater into a few discharge points presents serious hazards that must be addressed by a professional hydrologist conducting a comprehensive mounding and subsurface flow analysis using piezometers and other standard techniques for groundwater mapping.

Finally, the comment letter from Tom Noble of Horsley Witten Group provides a detailed critique of the developer's stormwater management methodology and design, and enumerates multiple areas of concern and unanswered questions. We suggest that clearcutting a steeply wooded slope and largely covering it with impervious surface poses numerous complex and serious hydrological concerns that have not been addressed by the developer.

### MEPA and Mass Historical Commission Review

Our group has requested clarity as to whether the developer should file project notification forms with both Massachusetts Historical Commission and the Massachusetts Environmental Protection Agency dating back to the May ZBA hearing (please see our email dated 5/23/16). We strongly believe the project will require both MEPA and MHC review — processes that require several weeks — and input from those reviews should inform the ZBA's decision.

The need for both reviews has often been highlighted by the Town Planner, the Conservation

Commission, and peer reviewers (Public Archeology Laboratory and Horsely & Witten). While the developer's attorney has asserted they do not meet the threshold for either review, we feel strongly this determination should be left up to the State and project notification forms to both bodies should be filed. The responsibility of filing these documents falls on the developer - the ZBA should not be forced into making a decision without all pertinent information.

### Traffic, Pedestrian, & Pedacyclist Safety Concerns

While traffic volume and flow has been researched by the developer's traffic expert and the Town's peer review, the impact to motor, pedestrian, and pedacyclist safety has not been fully vetted. Traffic safety has been an ongoing citizen concern and many questions have been raised and left unanswered from the March and June ZBA discussions focusing on traffic. Per the developer's "Architectural Narrative" by Cube3 the project will be "focused on the pedestrian experience with lots of connectivity to the adjacent lands and greater Sudbury."

Questions still remain about the safety of both access points and the new intersections they are creating. Mitigating and better understanding these issues was a point made by Mass-Housing in their letter to the developer. The police and fire departments still have serious concerns about these newly created intersections. We also question the impartiality of the Town's traffic reviewer as he is working with the developer's 40B consultant on concurrent 40B projects in other towns.<sup>1</sup>

Please see further questions and concerns on traffic safety on the following pages and Appendix B for illustrations of various *Unexamined Trafic Safety Scenarios*.

### Effect on the Bruce Freeman Rail Trail

The effect of the development on the Bruce Freeman Rail Trail — from the visual blight and danger posed by the retaining wall to the traffic safety impact of the Hudson Road access point — deserves consideration.

A study of the proposed rail trail was commissioned in 2006 by Fay, Spofford, & Thorndike LLC for the Town of Sudbury.<sup>2</sup> A portion of the study was dedicated to evaluating rail trail intersections in Sudbury, including Hudson Road. Many of the safety concerns raised by our group about the Hudson Road access point are predated by issues raised in this report, such as: 1) vehicles stopped at the end of Peakham Road restrict sight lines at the proposed rail trail crossing; 2) vehicles taking a right hand turn out of Peakham Road only look at approaching vehicles along Hudson Road; and, 3) vehicles traveling westbound along Hudson Road use the narrow shoulders to pass vehicles waiting to turn into Peakham Road.

How will the addition of Sudbury Station affect the safety of the rail trail in an already congested area?

Jeffrey Dirk of Vanasse & Associates, Inc. is working with SEB, LLC, Bob Engler's firm, as the developer's traffic expert in four concurrent 40B projects where Mr. Engler is either the developer or the consultant for the developer. Mr. Engler is the 40B consultant advising the Sudbury Station development team. A list of the four developments and materials listing Mr. Engler and Mr. Dirk's involvement are listed below.

<sup>-</sup>Winchester 40B, Winchester North, Submitted July 2015 (Engler is Developer)

http://www.winchester.us/DocumentCenter/View/1407

<sup>-</sup>Reading 40B, Reading Village, Submitted January 2016 (Engler is Developer's Consultant)

http://www.readingma.gov/sites/readingma/files/file/reading\_village\_application\_for\_comprehensive\_permit\_0.pdf

<sup>-</sup>Weston 40B, Village at Silver Hill, Submitted February 2016 (Engler is Developer)

http://www.weston.org/DocumentCenter/Home/View/3839

<sup>-</sup>Newton 40B, 1615 Beacon in Newton, Submitted April 2016 (Engler is Developer's Consultant)

http://www.wabanareacouncil.com/sites/default/files/1615%20Beacon%20App.pdf

The study is available online through the Bruce Freeman Rail Trail website. Discussion of the trail crossing at Hudson Road appears on pages 11:15-11:16: http://www.brucefreemanrailtrail.org/pdf/BFRT\_Final\_Assess\_Sudbury.pdf

### Impact on the Historic Cemetery

The Sudbury Historic District encompasses two of the town cemeteries, including the 'Revolutionary War' cemetery which holds the remains of 47 soldiers who fought in the Revolutionary War, and 'Mount Pleasant' (c. 1840) and 'New Town' (c. 1843) cemeteries (which would directly border the development) where many of Sudbury's founders and notable residents are buried. Currently the portion of the cemetery abutting Sudbury Station is a scenic hilltop overlooking the town center on one side and open forest on the other. Many of Sudbury's senior citizens have already purchased plots in the cemetery for their final resting place. We have heard from countless of these individuals, as well as family members of those buried in the cemetery, who are heartbroken and feel that they and loved ones are not being honored. Imagine burying your loved one while a hundred feet away a boisterous group is having a barbeque at one of the adjacent townhouses. What are the developers' final plans to minimize the visual and auditory impacts to the cemetery? Despite concerns raised by town officials and citizens, the latest site plan has the townhouses bordering the cemetery.

Additionally, the impact of such a massive construction project in such close proximity the cemetery and the potential damage to the graves must be carefully considered.

### Visual Impact of the Hudson Road Access Point on the Historic District

We believe the visual impact on the Historic District of the access roads, particularly at Hudson Road, have not been properly evaluated. At Hudson Road, according to submitted plans, the width of the road at its widest point (where it meets Hudson Road) measures to be approximately 76 feet. To the extent that HDC purview can extend to these areas, it can and should be applied. The three-lane configuration will make the entrance a dominant feature and expose more of the buildings from Hudson Road. The entrance appears to service a shopping mall or corporate complex, rather than a "village" tucked away.

### **Construction Management and Mitigation**

The citizens of Sudbury are weary after undergoing a long reconstruction to the Town Center intersection, which is only now nearing completion 1 1/2 years after construction began. We are concerned about the impact the proposed construction plans and logistics will have on our roads, our schools, our sidewalks, our historic buildings, and our Town Center.

Please see Appendix A for our Construction Mitigation Management & Concerns.

### Other Concerns

### Flaws of the Peer Review Process

The peer review process has been hampered by the bounds of the developer's submitted materials. Both the traffic and pro forma analyses suffered from not looking beyond the information provided and have accepted the premises (often flawed or incomplete) supplied by the developer.

### **Submission Deadlines & Outstanding Items**

We have repeatedly expressed frustration with the pattern of late submissions, which result in lack of proper time for ZBA, peer review experts, and public review. Further, electronic copies of documents have been frequently submitted days after paper copies are provided (usually the Thursday or Friday before a hearing despite repeated requests from Town staff for electronic copies) — severely limiting the ability for citizen analysis.<sup>3</sup>

The developer's submitted "Proposed Construction Management Plan" states, "We believe whole-heartedly that professional coordination is one of the major keystones in delivering a successful, on

<sup>3</sup> We believe the developer is taking advantage of the lack of clarity in the ZBA's Supplemental Rules for Comprehensive Permits, which does not have language specifying the submission of electronic copies. For the benefit of future projects this language should be amended.

budget, on schedule, high quality project." We object mightily to this statement as their participation in this review process has been characterized by delayed submittals, incomplete information, and a complete lack of respect for the process, Town staff, and Town citizens.

Following the 3/21 ZBA meeting, it took more than two months for MDM Traffic Consultants to send required data to Vanasse for subsequent peer review. This resulted in a rushed process for follow-up study before the end of the school year and the beginning of summer traffic patterns. For the 5/23 meeting, many documents were submitted to the Town on 5/19. Per the ZBA's rules for Comprehensive Permits (section 3.5) all materials for continued hearings must be submitted 7 calendar days in advance. Site plan documents were submitted late for the last meeting and this was noted by the developer's attorney in his opening remarks.

In planning memos available to the ZBA and developer it was stated multiple times that materials related to site constraints (stormwater, wastewater, clearing & grading, etc.) needed to be received by 4/10 for adequate peer review. This was also mentioned in the working meetings. Stormwater documents were not submitted until late June. In the cover letter for the stormwater submission Atty. Henchy states:

"We are filing this plan for the June 20, 2016 hearing in accordance with the schedule established by the Board during its public hearings. I note that Staff has repeatedly suggested that these materials were due at an early date, for an earlier hearing, but those assertions are incorrect, as the record plainly establishes. We are responding to the schedule for proceeding as established by the Board, not staff."

This is a twisting of the ZBA review process and is not in the spirit of good faith in which the town, ZBA, and citizens have all participated in. It also harms the process as there was little time for peer review and resulted in a rushed process — something that could have long-term consequences for such a large project in a particularly vulnerable location.

### **Pro Forma Analysis**

We consuted with a former head of the Hombuilders Association of Massachusetts who has developed at least two 40B projects. They reviewed the proforma data provided by the developer along with the submitted Mass Housing application and recent site plans. They also reviewed this project in comparison to the Avalon/Meadow Walk. Their comments are as follows:

- It is unusual in their experience to find a 40B that does not satisfy the MassHousing ROTC at the outset.
- Sudbury Station is one of the densest 40B developments they have seen and is "clearly too dense" with a number of safety-related issues.
- This project has one of the highest requests for site, zoning, and environment variances this person has seen (likely due not only to density, but the nature and topography of the site).
- Given that this project brings no value to the town beyond reaching the 10% affordable threshold, it is appropriate for the ZBA to request offsite concessions.<sup>4</sup>
- The difference between this project's impact on the town budget and Raytehon's are striking and warrant follow-up as it pertains to costs to the town (+variance vs neutral for Raytheon in consideration of retail component)

### Other Pro Forma Questions

- Do common area costs include trash pick-up?
- The proforma counter analysis concurs that the project is less than 5% profitable over a 10-year period; why so short? Most home mortgages are 30-year, so it follows that 10 years is a rather shortened window for evaluation and creates a "false time frame" for analysis?
- The developer has the burden of proving that the various waivers requested are needed to avoid making the project uneconomic. How does the submitted pro forma data relate to the various waivers requested?

The 10% threshold will already be met by the Avalon/Meadow Walk, so it is questionable as to whether Sudbury is still in need of meeting the affordable housing statute.

### Stormwater & Wastewater Management

- How will stormwater be managed and mitigated during the clearing, regrading, and construction process?
- Do the wastewater calculations include water use in the outbuildings (non-rental buildings) and clubhouse swimming pool?

### Architecture, Design & Density

We share the concerns voiced by Frank Riepe, the Historic Districts Commission, and Davis Square Architects about the overall inappropriateness of the scale, design, and density of this development in this location.

After three working group meetings the developer offered a token 10% reduction in units. The proposed reduction is negligible and will have little bearing on the full detrimental impact to the Town Center, as voiced by citizens and Town review boards. Further, it is unclear if this proposed reduction in density is truly an offer made in good faith by the developer; in the site plans submitted ahead of the final meeting the density remains unchanged at 13 buildings and 250 units.

### Landscaping & Lack of Clearing & Grading Plan

Given the close proximity to the cemetery and historic Town Center the landscape plans submitted provide information about proposed plantings. Instead of detailed landscape plans the developer provided heavily Photoshopped elevation images with superimposed (sometimes floating) trees. Given this site's proximity to sacred and historic spaces the quality and quantity of landscaping is of high priority.

- As no clearing and grading plans have been submitted it is unclear the extent of tree removal needed for construction. Based on the current layout of buildings and roads, we estimate 4960 trees will need to be removed.
- What are the specific landscaping plans for the portions of the developments closest to the Mount Pleasant and New Town Cemeteries — particularly to the rear of the town homes with patios, and along Peter's Way which bounds the cemetery?
- What are the landscaping plans at both access roads particularly the first 300' visible from the right-of-way as part of the Town Center Historic District? To the extent that it does not make the project economically infeasible, landscaping at the access roads should remain under the purview of the Historic District Commission.
- What is the long term covenant overseeing landscape maintenance and future changes?

### Traffic Safety - Incomplete Traffic Crash Data Analysis

We question the thoroughness of MDM's crash data analysis as presented in the "Traffic Impact & Assessment Study" dated December 2015. This report only examined crash data between 2010 and 2013; crash data for 2014 is also available from MassDoT. The traffic analysis only looked at a small radius of traffic crash data and not the broader area where traffic frequently backs up at the intersection of Route 27 and Concord Road. When the area is expanded to include traffic queues the number of crashes significantly increases. Similarly, extending the rush hour times between 7:00-9:30 a.m. and 4:30-7:00 p.m. (which is more accurate for Sudbury Town Center area) results in higher crash data.<sup>5</sup> Further, crash data from MassDoT is inherently incomplete or inconsistent as approximately 20% of all reported crashes are not assigned geolocational metadata and are not included on the maps in MassDoT's crash portal. <sup>6</sup>

Please see Appendix B for our crash data analysis for the Town Center intersection compared to that of the developer.

<sup>5</sup> Crash data sourced from the Massachusetts Department of Transportation Crash Data Portal available at http://services. massdot.state.ma.us/crashportal/. Data was sourced using the "Mapping" module focused on located crashes within a specific geographic location.

MassDot provides the following caveat on the CrashData portal home page, "Individuals using the Mrapping tool should understand that, because crash reports are incomplete or (missing location data, for example) inconsistent, approximately 20% of all reported crashes are not located and are not included on the maps. At a particular location, the percentage of crashes able to be located may be higher or lower than the overall geocoding rate."

Crash studies should be done for the entire area studied in the follow-up pedestrian study including around the crosswalks at Peter Noyes School, the crosswalk at Candy Hill, and for the wider area where traffic queues at the Town Center intersection during peak morning and evening traffic.

- MDM does not note when crashes involve pedalcyclists (between 2010-2014 one at Peakham, two at the Town Center intersection).
- It does not appear that accidents occurring in the queue lines radiating from the Town Center intersection were included; if included, the number of incidents is significantly higher and brings the crash rate in line with, if not higher than, the MassDoT average rate for District 3.
- Crash incidents at Concord Road and Candy Hill were not considered, although there are at least 5 crash reports for this intersection between 2010-14, including a pedestrian-related incident.
- Crash incidents occurring near Peter Noyes and Nixon elementary school are not considered, but should be.

### Traffic Safety - Implications of Peter's Way as "Right Turn Only"

- Traffic experts for both the developer and ZBA concluded that limited sight distance during peak/ rush hour traffic in combination with the grade and curve of the road makes a left hand turn from the development unsafe. The town police and fire chief have expressed concerns that making the Peter's Way exit "right turn only" makes it unsafe for entering and exiting safety vehicles. If both of these safety concerns are valid, is the use of Peter's Way as an access point viable?
- How does creating a "right turn only" exit at Peter's Way affect exiting traffic onto Hudson? Per the
  developer's original traffic report they estimate 101 cars will exit into Town Center from the development during the peak morning rush hour of 7-8 a.m. 20% of these cars are expected to travel south
  on Concord Road. Therefore, 80% of the exiting traffic will be leaving the Hudson Road exit.
- If the Peter's Way egress is made a "right turn only" will cars now be forced to attempt a left turn into the Peter Noyes Elementary School bus entrance on Concord Road so they can turn around and then continue north on Concord Road? How does this affect the safety of the Town Center public parking lot (used by the school, Town buildings, local churches, etc.)? This is particularly important to consider because the developer has indicated that elementary school children will be zoned to Nixon Elementary. Likewise, Lincoln Sudbury High School is north on Concord Rd. In the alternative, the right turn only will increase the amount of traffic leaving the Hudson road exit to travel through the Town Center and head north, something that was not adequately studied.
- Traffic crash data did not consider the area around Concord Road and Candy Hill/Plympton in their analysis. A pedestrian accident, in addition to car-only crashes, have occurred in this area between 2010 and 2014. (Developer's traffic did not look at crash data for this area.)

### Traffic Safety - Hudson Road Access Point

We include with this letter a link to a video we created that explains the Hudson Entrance safety concerns — https://goo.gl/VGrfaj. We have studied them because the traffic study focused on traffic and vehicle access, not safety, which is the primary concern of town residents.

Although the configuration in this area may change due to further conversations between the Town, developer, Department of Transportation, and Ti-Sales, we feel the developer must evaluate the safety of traffic around the Hudson Road access point in both configurations (as currently proposed and across the DoT parcel) before moving forward.

### Visibility at Hudson Access Point

As was proven on Concord Road, we again doubt the accuracy of the sight lines for cars turning left onto Rte. 27. The entry is down gradient and at the end of a curve. Beyond the vegetation at 30 Hudson, there is vegetation on adjacent properties as well as signs and utility poles that restrict the view. This cannot be studied in "plan" view but must be assessed in real world conditions, including study of the winter condition of snowbanks along the road. In addition, vehicles exiting westbound onto Rte. 27 will have their view of oncoming westbound traffic blocked by vehicles exiting eastbound.

### Lane Confusion and Congestion

We have observed and documented that Peakham Rd is essentially three lanes wide at Rte. 27. The

center lane is used by both left and right turning vehicles. Right turning (eastbound) vehicles from Peakham turn into the "center" lane of Rte. 27. Therefore, vehicles exiting the development heading eastbound must:

- 1) Look left for oncoming westbound traffic (around curve)
- 2) Look right for eastbound traffic (2 lanes)
- 3) Check Peakham road turning vehicles (2 lanes)
- 4) Check vehicles exiting Ti-sales
- 5) Check vehicles exiting shopping plaza
- 6) Check for pedestrians in future crosswalk
- 7) Re-check westbound traffic, etc.

This will be further complicated once the rail trail is completed. As can be seen in the video, drivers are unsure who has the right of way in all these situations – in a three minute period of filming, we witnessed two near-misses.

### Traffic Safety - Candy Hill and Plympton Roads

Our confidence in the traffic analysis is further shaken by the flawed study which suggests that it is faster to take Rte. 27 than Candy Hill/Plympton when heading back to the development from the east (Wayland). This assumption was based on a bizarre calculation that cars travel 15 mph. Candy Hill route was measured between 5 and 6 p.m., the Rte. 27 route was measured between 4:30 and 6 p.m. This is not an apples to apples comparison. The first two Rte. 27 trips weighted the average down significantly, and likely occurred before 5 p.m. When removing those outliers, Candy Hill route becomes 17% faster, which is material. Please see our letter dated 6/20/16 for our own traffic tests run for these routes.

### Traffic Safety - Misc. Questions

- Even though the developer has said the students in Sudbury Station would go to Nixon Elem., the proximity to Noyes Elem. means the traffic from the development would have a noticeable effect on the traffic surrounding both schools.
- The developer has said that children at the development will be zoned to Nixon. Is the expectation that children/high schoolers driving to school must go through town center traffic to then turn left onto Concord Rd? Is this deemed realistic?
- MDM Supplemental Traffic Study, Page 4: 50 vehicles turning right onto Candy Hill are not cars leaving Peter Noyes after drop off. Candy Hill/Plympton is districted to Nixon which is further north.
- The study should also show fire apparatus accessibility turning left out of development onto Hudson Road as well as onto Concord Road. Sudbury may need to rely on other towns to the north and east to respond to emergency calls at the development.

Please see further questions and concerns on traffic safety on the following pages and Appendix C for illustrations of various Unexamined Traffic Safety Scenarios.

### Historic Impact

Sudbury Station is proposing to build the town's largest-ever development in an area absolutely not suited for any development, our historic town center -- an area that lacks the infrastructure for 500 new cars, is not close to public transportation, and is not even comparably in line with existing density and settlement patterns. We do not believe the current design, plan, and density are reflective of the surrounding historic district's architecture, scale, and relationship with the landscape. We hope that the areas of the development within the Historic District will remain under the Historic District Commission's purview. Landscaping, lighting, signage, and other elements at both entrances will be a part of and their design should reflect harmony with the District.

The developer is requesting waivers from HDC jurisdiction down to visual elements such as landscaping, lighting, and signage. In their marketing materials and descriptions of the project they often refer to the history of the area, the historic setting of Town Center, and draw architectural "inspiration" from local vernacular. They economically benefit from their location within the district (see studies by Donovan Rypkema on the economic benefits of local historic districts). They therefore should have to participate

in the District to the extent that HDC jurisdiction does not affect the economic feasibility of the project. No economic harm exists from HDC review over design elements such as lighting, landscaping, and signage.

- Will the developer agree to keep the 300' of their property, which is currently in the historic district, under the purview of the HDC for signage and landscaping? The developer's attorney indicated they would be open to this in a meeting with the HDC although their most recent list of submitted waivers specifically asks that signage not be under the jurisdiction of the HDC.
- The developer has asked for a waiver from Historic District Commission oversight. Does this extend to 30 Hudson which is a contributing building in the Town Center Historic District? If HDC jurisdiction is waived for this structure what would prevent the developer (or future owner of the development) from tearing down or significantly altering the house in the future?
- The first 300' of the project at both Hudson and Concord Road are within the Historic District, which has jurisdiction over landscaping, signage, and structures (in addition to buildings). In this case, the road is a structure. We do not believe the visual affect of the access roads has been properly evaluated. At Hudson Road, according to submitted plans, the width of the road at it's widest point (where it meets Hudson Road) measures to be more than 50' (this is conservative, it actually looks higher when compared to the measurement scales on the drawings).
- Have the 3D views of the Hudson Road entrance been revised to show the 3 lanes plus island shown
  in the traffic study recommendations? Rather than minimizing the entrance, this configuration will
  make the entrance a dominant feature, and expose more of the buildings from Hudson Rd. The
  entrance appears to service a shopping mall or corporate complex, rather than a "village" tucked
  away.
- If built as proposed, Sudbury Station will be the largest and densest residential development in Sudbury's history, and will be more than twice the size of the current largest residential development (Longfellow Glen at 120 units/202 bedrooms, on Route 20). It is more than three times the size of existing 40B projects approved or built in Sudbury. 250 units are proposed on 12.38 acres of land (the actual building site). Assuming 500 residents, the person/acre density ratio is 40 persons/acre (12.38 ac \* 40 people/acre = 495 people). In comparison, the town of Sudbury has 18,317 people In 15,744 acres, or a people/acre ratio of approx. 1.2/acre. Thus, the proposed development (not counting the agricultural land which cannot be built on) is 17 times denser than the average town density.
- We are concerned about light pollution in the cemetery and historic town center in the evenings and in the winter once there is less foliage. What are the lighting plans? How will light and noise pollution, particularly at night and in the winter months, affect the sense of place and integrity of the Town Center Historic District? We understand the Avalon/Meadow Walk developer has committed to addressing light pollution and would expect the developer of Sudbury Station to do the same.
- Will the developer submit a project notification form to the Massachusetts Historical Commission?
   We have been awaiting clarification on this question; the expected filing of a PNF was noted in the PAL review.
- Given the large impact on the cemetery, the developer should submit specific landscape plans to help mitigate the presence of townhouses and multi-story apartment buildings on the cemetery.
- As mentioned in the mitigation section, 18 months of construction will take a toll on the surrounding Historic District, including some of the Town's oldest and most prominent historic resources. The longevity of historic buildings is directly tied to ongoing maintenance. Therefore building cleaning should be provided to neighboring homes, First Parish Church, the Presbyterian Church, among other historic structures which will feel the effects of construction dust and debris over time.
- Similarly, the cemeteries and grave markers should benefit from mandated cleaning by the developer. Many of the stones in the historic sections have been recently cleaned, restored, and repaired in the last several years, to help maintain the cemeteries integrity and preservation.

### **Retaining Wall**

The developer proposes a 750' long retaining wall at the rail trail that will be close to 20' high in some areas. No structural design of this wall has been presented. The engineering of this wall is critical- a collapse would risk the structures above as well as endanger people on the rail trail below. It will be subject to considerable hydrostatic pressure and possible undermining due to the concentrated discharge of the stormwater and sewage systems uphill from the wall. If the wall has typical drainage to

relieve hydrostatic pressure, this drainage will constantly wet the rail trail creating dangerous conditions including icing. A significant portion of the wall's length is shown as a snow storage area for the largest parking lots. Plowing large quantities of snow against and on top of the wall will subject it to additional unpredictable stresses including those from impact, weight, and freeze/thaw.

### Snow Storage & Use of Salt

We are concerned for the lack of detail on the snow storage plan and no written proposal detailing snow removal from the site.

- The snow storage plans show snow storage along the edge of the parking lot along the retaining wall (to the west of Building 2). Given the proposed height of the retaining wall will snow storage create a safety hazard in this area if, A) snow mounds exceed the height of safety railings, B) if snow builds up is there danger of falling snow to the area down below, and C) how will snow melt affect the rail trail below in terms of ice and water collecting on the trail? Given the lack of open play space in the development, it is likely that children will play on the snow banks, which could result in a deadly fall on to the rail trail 20-30' below.
- Snow storage is shown along the sides of the access road on Peter's Way. Will salt be used to treat the road? How will the use of salt and build up of snow in this area affect the nearby wetlands and Mine Brook?
- Given the importance of unimpeded sight-distance into traffic at both access roads how will the heights of snow banks be managed? How will the developer ensure snow banks don't pile up within the sight lines across neighboring properties on Hudson Road?

### **Community Needs**

The implications of this project will be far reaching: from the impact this development will have on Sudbury's historic core in terms of loss of open space, loss of integrity to our historic center, cemeteries, increases in traffic, strain on our infrastructure, the introduction of new night noise and light pollution, and the estimated 18+ months of construction — one thing is for sure, this development will not fade into the hillside, as the developers would like us to believe.

We are supporters of affordable housing and have even asked the developer privately if he would consider increasing the number of affordable units to above 25%. In his own words, he told us, "I want to make it clear that Sudbury Station is, first and foremost, a luxury rental community which will have incorporated into it affordable housing." In that vein, we find the offer of the use of a public restroom, a water fountain, and an air pump for a rail trail project (that may or may not materialize) to be underwhelming and disappointing.

### **Abutters**

In their application the developer did not provide a list of certified abutters, per the ZBA's Supplemental Rules for Comprehensive Permits, Section 3.2.9. As there was no list, there was also no map indicating abutters as also required.

- Why was a certified list of abutters not included in the application?
- Were abutters officially notified about the ZBA hearings prior the meeting in February 2016?

### Fiscal Impacts

We understand the fiscal impact of the development is not a decision-making factor in the ZBA's review of this project. We would like to state for the record, however, we doubt the positive fiscal impact purported by the developer.

There was no Town peer review of Sudbury Station's submitted financial impact report. Fortunately, the Town was faced with a concurrent 40B application for Avalon/Meadow Walk which did undergo peer review of their financial impact analysis. Given that both projects are planned for 250 rental units a fair comparison can be made and large financial discrepancies appear between the two.

The two reports differ greatly in the estimated number of school children (K-12). Avalon/Meadow Walk

estimates 65 school children, while Sudbury Station estimates only 43 children on average. Sudbury Station has a greater number of 2BR units than Avalon/Meadow Walk and is walkable to schools and outdoor amenities -- making it a more desirable rental location for families with children. Further the fiscal report for Sudbury Station only looks at one comparable development, Concord Mews, while the report for Avalon looks at multiple comparisons. We do not believe that Concord Mews is in a desirable location for families with children, and therefore is not at all comparable.

Other significant differences are found when comparing the fiscal analysis of Sudbury Station to that of Avalon's: the estimated assessed value, the estimated property tax, and estimated municipal service costs are all significantly different despite both being 250 units. Sudbury Station also does not consider important non-school costs, such as recreation, additional town government, and traffic mitigation costs.

There is a significant chance this project will, at full capacity, ultimately be a financial drain on Town resources.

### ADA Access

Weare concerned about the lack of plannign for ADA accessiblity, from parking spaces to mobility between spaces, throughout the site.

### **APR Land**

In working sessions and letters to teh ZBA the developer and his attorney have asserted that the 26-acre parcel land under APR agreement are not protected in perpetuity. This matter was litigated by the MA Land Court in 2003 and the APR was declared valid and perpetual.<sup>7</sup>

### Other

- At 250 units this would be the largest and densest residential development in Sudbury's history. Does
  Sudbury have the appropriate town staff to oversee the proper construction of such a large project? Does this create the need for additional staff during the construction phase and how is this
  expense covered?
- Where will garbage be stored and how frequently will it be removed?

### **Closing Comments**

We are appreciative of the many volunteer hours you have spent in reviewing this application, working with Town staff, and working with the development team. Thank you for your time in reading our letters, hearing our concerns, answering questions, and encouraging citizen engagement in this process.

Respectfully submitted,

Cate Blake, Peakham Road
Janie Dretler, Goodman's Hill Road
Laurie Eliason, Concord Road
David Hornstein, Candy Hill Road
Amrita Nichols, Old Lancaster Road
Michael O'Malley, Plympton Road
Scott Smigler, Plympton Road
Taryn Trexler, Concord Road

On behalf of Oppose Sudbury Station

<sup>7</sup> Please see Massachusetts Land Court, Civil Action 01-0027, Misc. Case No. 268003, August 4, 2003.

### APPENDIX A

**Construction Management and Mitigation** 

### **Construction Mitigation**

### 1) Site work and associated truck traffic:

### a) Tree removal:

Approx. 12.4 acres of land will be clear cut. At a New England forest density average of 400 trees per acre, 4,960 trees will be removed. At 45 trees per truckload, there will be 110 truckloads of tree removal, plus return trip, equals 220 log trucks.

### b) Earth removal:

Claussen estimates removal of 2000 yards of fill. Our estimate is approx. double that (our calculations are on record at the ZBA, the developer has not provided any basis or calculations for their estimate). 2000 yards equals 143 truckloads, plus return trips equal 286 trucks related to earth removal.

### c) Concrete Trucks:

Total estimated concrete:

- 115,000' building footprint. Parking slabs assume 4" thick= 115,000/3= 38,333/27= 1419 yards concrete
- Foundation walls @10" thick x 4700' perimeter x 8'high plus footings = 4000 yards concrete
- Retaining wall 750' x 21' x avg 16" plus footing = 1112 yards concrete
- Total concrete: 6,531 yards/10 yds/truck = 653 concrete trucks x2 (return) = 1306 concrete truck trips

### Subtotal: 220 log trucks, 286 dump trucks, 1306 concrete trucks = 1811 trucks

In addition to the estimated 1811 truck trips detailed above, there will be approx. 400 round trips for vehicles delivering gravel, concrete, building materials, etc. In addition there will be heavy equipment delivery of earth moving equipment, cranes, etc. We believe that actual number of heavy truck trips to and from the site will be well over 3000.

Impact of truck traffic on roads: A loaded concrete truck weighs 33 tons, a loaded log truck weighs 40 tons (a passenger car weighs 1.5 tons). Heavy trucks cause 10,000 times more damage to roads than passenger vehicles (https://truecostblog.com/2009/06/02/the-hidden-trucking-industry-subsidy/) At over 3000 trips, all routes used for construction vehicles will be significantly damaged and need repair. The heavy vehicles will also cause temporary damage (potholes, broken curbs) that may not be repaired before causing damage and potentially accidents to passenger vehicles). Much of the roadwork and associated amenities recently completed in the historic town center will be damaged and need replacement as a result of the construction vehicle usage.

Impact of truck traffic on public safety: A heavy truck uses 1.6 times the distance to stop as a passenger vehicle. At 40mph, it takes a heavy truck 170' to stop, compared to 124' for a passenger vehicle. Given the higher than average crash rate in the construction route area (see traffic safety section of this report), it is reasonable to assume that 3000 heavy truck trips will cause additional accidents, and given the vehicle weight, the accidents will be more severe. This heavy truck traffic will span about two years, including winter conditions that will further reduce visibility and stopping time/distance. The construction routes are highly used by school buses and pedestrians. The Peter Noyes school is in the middle of the construction route on both Old Sudbury and Concord Roads.

### Mitigation:

- 1. Baseline road conditions should be documented and funds escrowed from developer to repair construction and vehicle damage to roads, sidewalks, and other town and privately property.
- 2. Construction vehicle types must be identified by developer, and proof submitted that such vehicles can enter and exit construction entrances safely.
- 3. Police detail protocols must be established as to what type of vehicle and under what conditions (time of day, turning direction, type of vehicle) a police detail is needed to manage the safe entry and exit of large, heavy vehicles.

- 4. Construction vehicles should be prohibited from using roadways during peak school and commuting times extending from 7-9:30 a.m. and 3-6 p.m. to cover drop-off and pick-up at Noyes and Nixon (this would cover morning and extended day programs).
- 5. Town and local stakeholders (schools, churches, community organizations, etc.) should be able to petition the town/developer for "no construction days" on special occasions such as Harvest Fair at First Parish, Chickfest, Colonial Day, Tricky Feet at the local elementary schools, etc.

### 2) Dust:

### a) Damage to property:

Clearcutting over 12 acres and removing thousands of yards of fill will produce enormous amounts of dust, particularly if the weather is dry during the earth removal phase. Abutters on Hudson Road, adjacent to Peter's Way, cemetery plot owners, and Ti-sales will be affected as dust clouds settle on their properties. Dust can discolor exterior finishes, damage landscaping, clog drainage, and damage exposed equipment like AC condensers. Ti-sales stores much of their new material for sale outdoors in racks, which will likely be blanketed with dust.

### b) Risk to public health:

Many people, particularly children, can have severe reactions to airborne particulates. Both nearby churches have after school programs with children playing outdoors. These children, as well as Noyes students and children using the athletic field, are at risk from windborne dust.

### Mitigation:

- 1. All material should be wetted down during handling (digging, loading into trucks, etc).
- 2. 12' high fencing with dust control fabric should be erected around the entire site
- 3. 10 dust monitoring (air quality) stations should be established at regular intervals around the site. Reporting should be provided to the town on a daily basis. Pre-established fines should be enforced if dust exceeds pre-determined levels.
- 4. Truck washing stations should be established at construction exists. Tires and body of trucks and other construction vehicles must be washed clean of all dust and debris before leaving site. All loads must be completely covered.
- 5. Developer should clean streets, sidewalks, cemetery markers, and other landscape features weekly

### 3) Noise:

Noise should be regulated as follows:

- 1. Mufflers on all equipment including vehicles and machinery
- 2. Locate fixed machinery like generators in a designated zone away from abutters
- 3. Establish time limits for any construction activity 7-5 M-F, 9-5 Sat, including snow removal

### 4) Vibration:

- 1. Conduct witnessed pre-construction survey of all abutters to establish baseline conditions
- 2. Conduct settlement monitoring of all adjacent structures

### 5) Runoff:

Clearcutting land on a slope can create potentially dangerous runoff and soil movement events including mudslides. This runoff could have serious effects on abutters and adjacent wetlands. Specific mitigation measures should be submitted by the developer that address a 100 year storm that occurs in the time period after land has been cleared and prior to the permanent stormwater retention structures being installed. This mitigation plan should be peer reviewed by a qualified engineer.

### 6) Blasting:

Although they currently believe otherwise, if this project should require blasting, what mitigation efforts will be extended to protect the historic resources listed above? Particularly older buildings and historic gravestones, which will be quite vulnerable.

# APPENDIX B Crash Data Analysis of Town Center Instersection

## Mass DoT Crash Data for Route 27 & Concord Road, 2010-2014 - Compared to MDM Traffic Consultant's Crash Data

**Source: MassDot Crash Portal** 

Crash Data Analysis - examined the intersection of Concord Road and Route 27 in Sudbury's Town Center. Crash data area was expanded to include a conservative estimate of where traffic queues during peak morning and evening travel times.



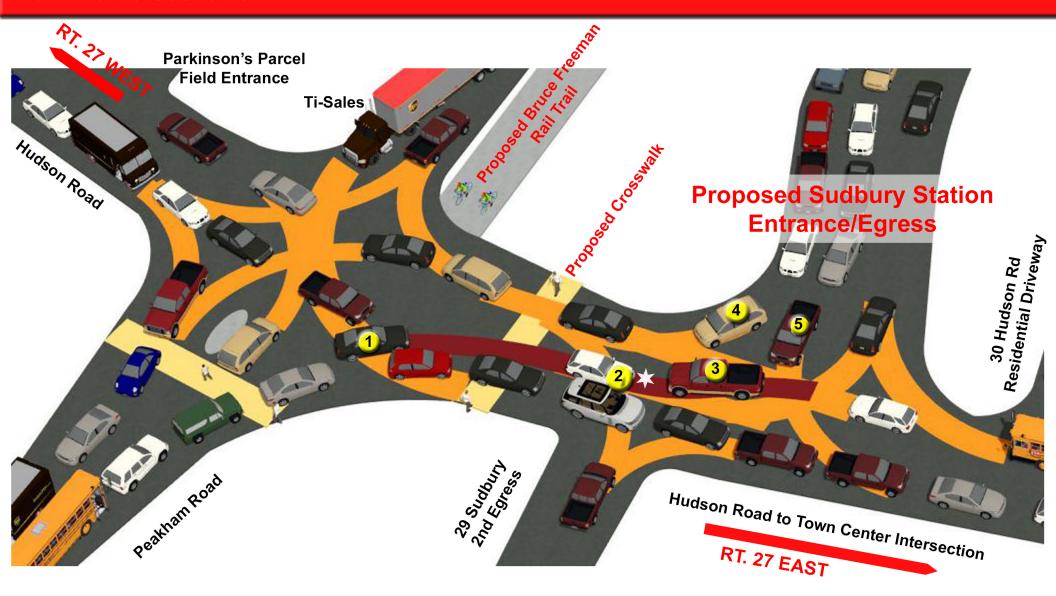
	Extended Crash Area	Developer's Crash Data
Data Category	Route 27 & Concord Road	Route 27 & Concord Road
Year		
2010	6	5
2011	11	9
2012	8	8
2013	7	4
<u>2014</u>	<u>11</u>	Not included
Total	43	n/a
Type		
Angle	18	
Rear-End	11	
Head-On	1	
Sideswipe	8	
Single Vehicle	5	
Other/Unknown	0	
Severity		
Property Damage Only	34	
Personal Injury	9	
Fatality	0	
Pedacylist	2 (both pedacyclist accidents include non-fatal injuries)	

### Conditions

Dry	30
Wet	10
Snow	2
Not Reported	1
Time	
7:00 to 9:00 a.m.	8
4:00 to 6:00 p.m.	7
Rest of Day	
Time	
7:00 to 9:30 a.m.	13
4:00 to 7:00 p.m.	9
Rest of Day	

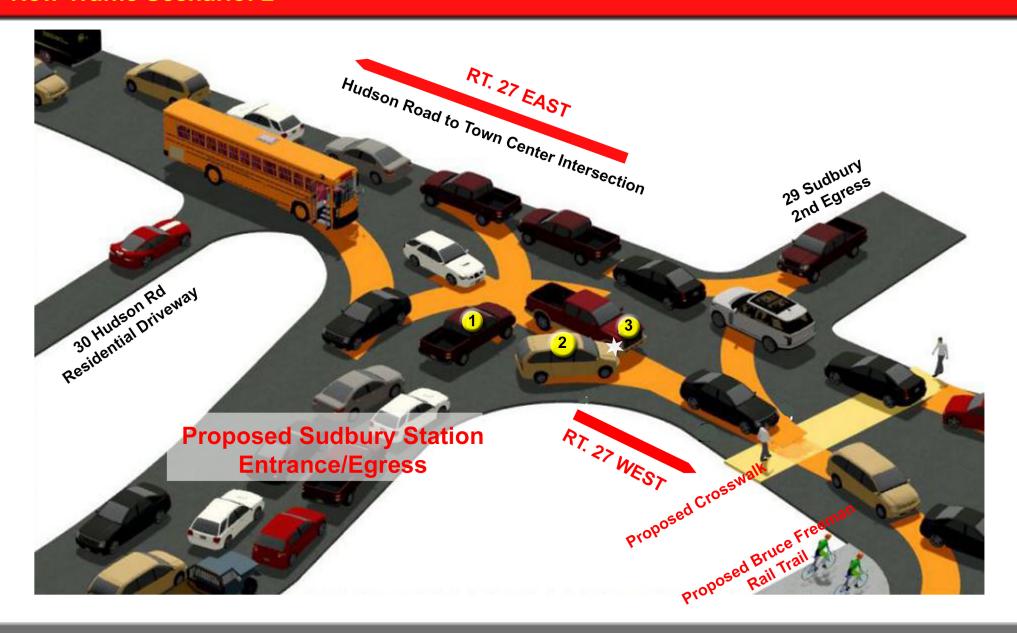
# APPENDIX C Unexamined Trafic Safety Scenarios

# The Village at Sudbury Station New Traffic Scenario: 1



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.

# The Village at Sudbury Station New Traffic Scenario: 2

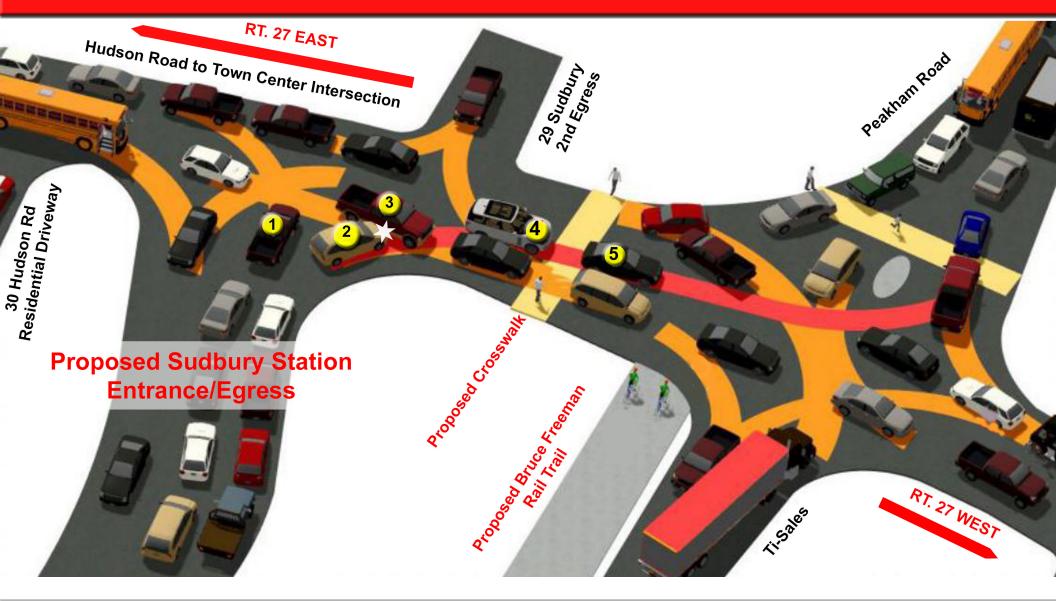


Vehicle 2 heading west out of the proposed Village at Sudbury Station, pulls forward beyond Vehicle 1 to see westbound vehicles on Hudson Road.

Vehicle 2 collides with Vehicle 3 (view of Vehicle 3 Is blocked by Vehicle 1).

# The Village at Sudbury Station New Traffic Scenario: 3

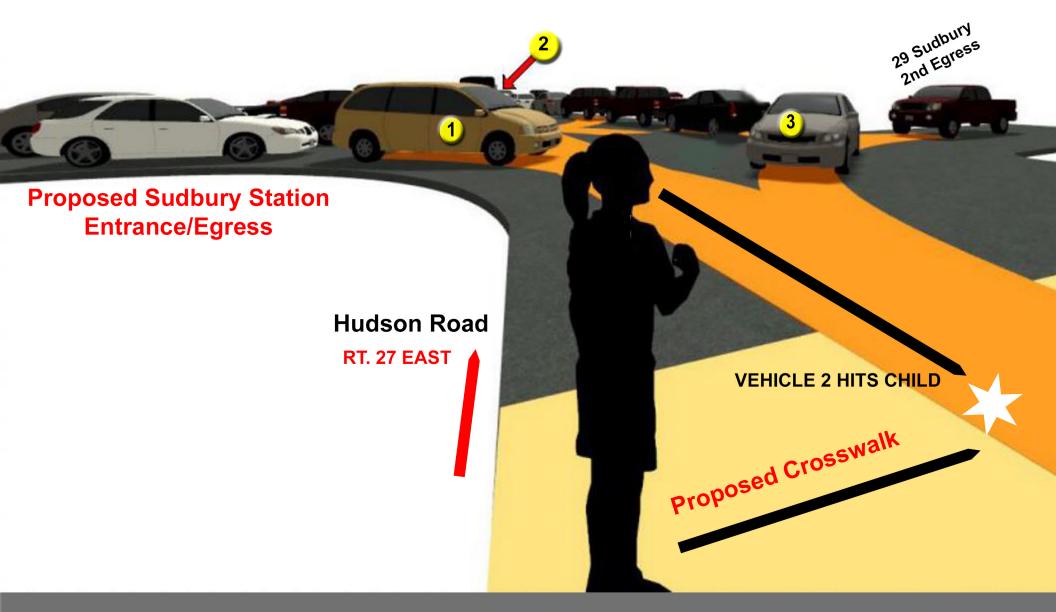
and 5 which are turning left on to Peakham Road.



Vehicle 4 and 5 turn right (west) out of the proposed Village at Sudbury Station development. They then want to turn left (south) on to Peakham Rd. These vehicles occupy the center of Hudson Rd as shown in red and cross the double center line into the east bound lane.

Vehicle 3, which is driving west from the town center intersection, veers to right to continue westbound on Hudson Road and to avoid Vehicle 4

Vehicle 2 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.



Child in proposed crosswalk crosses Hudson Road heading south. She sees Vehicle 1 and 3, but does not see Vehicle 2 heading westbound at 35 MPH.

**Vehicle 2 will reach her in 1.5 seconds.**