
MEMORANDUM

To: Town of Hudson, Planning Board

Cc: Brian Groth, Planning Director

From: Hayley Palazola, Lowell Road Property Owner, LLC

Subject: Response to Planning Board and Public Comments from Oct. 10th Hearing & Nov 6th Site Walk

Date: December 15, 2021

The purpose of this memorandum is to provide responses to the comments made by the Town of Hudson Planning Board members and the Public during the October 20, 2021 Site Plan Application Public Hearing and the November 6, 2021 Planning Board site walk for the proposed development at 161 Lowell Road Hudson, NH.

TRAFFIC

1. Concerns surrounding the sound impacts from Truck activity with the suggestion that signage be place on site and notes on the plan that no jake brakes are allowed and backup alarms should utilize “white noise” alarms.

The applicant has agreed to install signage and encourage future tenants to use “White Noise” back up alarms and to place a note on the plan.

The Sound Study of 161 Lowell Road, Hudson, NH accounts for continuous heavy trucks traveling to and from the facility, trucks idling in the loading dock areas prior to leaving the facility, and the impulsive sounds from traditional backup alarms in the loading dock areas when trucks are arriving to the facility. And those impacts were found to not create a nuisance condition and to fully comply with the Town Ordinance. Any further mitigation (e.g. signage or “white “noise” alarms) would result in lesser impacts.

2. Concerns were expressed about truck traffic at night in and out of the site as well as truck idling all night

In conformance with the Town by laws, Truck traffic will be restricted on town roads from the hours of 7pm-6am. We also completed a Noise Study with a conservative approach using assumptions the facility would not restrict truck traffic to those hours and includes truck idling. Even with these additional assumptions, the proposed warehouse remains compliant with the Town’s noise ordinance. The applicant has agreed to install signage and encourage truck drivers to limit idling time.

3. Truck Idling and Diesel Fumes

The project will fully comply with U.S. Environmental Protection Agency (EPA) Clean Air Act (CAA). New Hampshire regulations help to minimize the health and environmental impacts of idling by establishing a limit on the amount of time that engines are permitted to idle. If the outside temperature is above 32 ° F, maximum idling time is 5 minutes.

Furthermore, the project assumes that each idling truck will be limited to ten (10) minutes per the Town Ordinance (per §249-4(J)(2)).

4. Would the applicant consider restricting shift times of the warehouse operation to outside of the Town's peak roadway hours?

The applicant has agreed to restrict future tenant's shift schedule and shift changes to occur outside of the Town's peak roadway hours.

5. Can the applicant obtain examples of the current examples of warehouse shifts that occur at 6am and end at 2pm, including local warehouse activity?

The applicant examined two large warehouses currently operating in NH: the Walmart Distribution Center in Raymond, and the UPS/Pratt & Whitney logistics warehouse in Londonderry. At the UPS facility, they use staggered shifts with primary arrival times spread over two or three hours starting at 6am, and departure times starting at 3pm. In the case of Walmart, they also have staggered shifts, with the primary daytime arrivals starting at 4am and departures starting at 3pm.

6. Concerns over the validity of 55 total trips during the p.m. peak hours and the breakout between cars versus trucks. Isn't this dependent on shift times?

The roadway peak hour was measured by 2019 traffic counts in the HLC study. It shows the am roadway peak is 715-815am; and the pm roadway peak is 415-515 pm. NHDOT has 24-hour counts taken in 2017 (the most recent pre-COVID data) that show the am peak at 7-8am, and pm peak at 5-6pm.

The peak traffic generated by the project occurs at shift change, which the applicant has agreed to schedule during off-peak hours. Our model shift schedule shows the am shift change at 5-6am (145 new trips), and the pm shift change at 2-3pm (275 new trips). At these hours, the traffic volume on Lowell Road drops by nearly 600 vehicles in the am, and nearly 800 in the pm. Thus even with higher shift change volume, there is substantially less total traffic on the corridor at these times than during the roadway peak hours.

7. Concerns surrounding three intersections on Lowell Road, especially Flagstone and Executive Drive and the accuracy of the dispersion of the traffic study. Concerns about the wait time being off base from practical experience in that Flagstone Drive and Lowell Road.

The traffic into the site was distributed as follows: 15% to/from the north, 85% to/from the south.

All traffic from the north enters at Friars Drive. Traffic to/from the south enters in proportion to existing traffic patterns: the three Sagamore Park entrance signals based on counted traffic volumes at each intersection. This means approximately 43% of cars and 10% of trucks will enter at Flagstone; 17% of cars and no trucks will enter at Hampshire, and 26% of cars and 80% of trucks will enter at Executive. The remaining cars (15%) and trucks (10%) enter from the

north at Friars. See attached typical full-day shift schedule showing anticipated trips for each hour.

8. Disagreement about the 45 second delay on Executive Drive and request a more detailed explanation of how that was reached and how it works in practice.

These analyses are performed in a standard way using methods and procedures documented in the Highway Capacity Manual (HCM) developed by the Transportation Research Board ("TRB"). The TRB serves as an independent adviser to federal agencies on technical questions, including traffic analyses for streets and intersections. The delay figure using HCM software for NBL turns at Executive in the PM is actually 35 sec. In the AM, the delay is 65 sec, which reflects a significant improvement over no-build condition due to proposed mitigation timing adjustments. See tables in the Report on pages 28 and 30.

The model results reflect average conditions over the peak hour. In practice, delays for any approach can be shorter or longer than average, depending on how many vehicles arrive during that particular cycle. Variations are common in busy corridors where intersections can occasionally back up into one another. The traffic volumes and methodology used in this report were peer reviewed by the Town's independent peer review consultant. The HLC report used as the basis for No-Build traffic volumes was also peer reviewed by the Town's consultant as well as NHDOT.

9. Concern that the worse case scenario that all truck traffic proceeds down to the south end of the park and exits at the intersection of Flagstone and Lowell Rd where traffic congestion is the worst. Need more detailed actual review and through process to whether that intersection can accommodate a heavier load of traffic given that is it likely to occur.

It is unlikely that all exiting traffic would use Flagstone during peak hour conditions when other, more direct routes are available. However, we examined the impacts assuming all exiting SB trucks did turn right at Flagstone: there would be approximately 6 seconds of additional RT delay in the am peak, and less than 1 second of additional delay in the pm peak.

10. Concerns over the total delay on the corridor of Lowell Road at Peak p.m. traffic hour being more than several minutes and the addition of this traffic will substantially increase that.

Our study shows that No-Build travel time during the pm roadway peak from Sagamore Bridge to Pelham Road averages 327 seconds (5.5 minutes); in the Build case, the average increase is about 1 second. In the SB direction, No-Build travel time is 324 seconds (5.4 minutes), increasing in the Build case by about 2 seconds.

During the am roadway peak, No-Build travel time averages 246 seconds (4.1 minutes) in the NB direction, and 363 seconds (6.0 minutes) in the SB direction. In the Build case, the average NB delay increases by less than 1 second, and the SB delay increases by about 9 seconds.

11. The 1% impact on existing traffic of 2,300 seems to be lowballing the number.

On Lowell Road near Friars Drive, future year pm peak hour traffic is 2,316 trips. The project generates 39 new trips here, or 1.6% of this total. At Sagamore Bridge, pm peak hour traffic is 7,386 trips. The project generates 47 new trips here, or 0.6% of this total. These numbers have been peer reviewed and accepted by the Town's independent consultant.

- 12.** Road structure is currently overburdened and this project, even though projected to have a small percentage increase will only make it worse to the point of unacceptability.

Peak hour traffic along Lowell Road is between 2000-7500 vehicles per hour. Traffic from this development adds 50 and 55 trips to Lowell Road during am and pm peak hours, respectively. This level of new traffic falls within normal day-to-day traffic variations, and has little impact on the corridor. Typical impacts at each intersection are less than 1 sec of delay for through movements, and queue length increases of one car or less.

Even at the Sagamore Bridge intersection, which carries the most project-related traffic, this project adds less than one new vehicle per cycle at the signal, and the impacts even at the Sagamore Bridge interchange are negligible. These impacts have been peer reviewed and accepted.

- 13.** Traffic Study has no creditability as actual use of Lowell Road reflects much worse traffic than the traffic study reflects as to wait times at each intersection.

The Traffic Study has been peer reviewed and accepted. Review of intersection delays have also been reviewed and accepted. Actual delays to through movements on the corridor is comparable to predicted delays, as verified by actual drive times.

- 14.** Did the traffic study include the new proposed housing at the intersection of Friar's Drive and Lowell Road as well as any new housing or new projects which were recently approved but not yet constructed and therefore not included in any actual traffic counts?

The Traffic study included all known developments as of the Traffic Scoping meeting with the Town Planning and Engineering Departments. These projects included the Friars Drive Apartments and the 100,000-sf addition at 36 Executive Drive. The report also includes current and pending construction projects on the corridor: CMAQ project and HLC mitigation improvements.

- 15.** Reliance upon the HLC Traffic counts is unacceptable in that the applicant should perform its own actual.

The HLC Traffic study was peer reviewed and approved by the Town's peer reviewer, Nashua Regional Planning, and the State NHDOT. It was determined at the applicant's Traffic Scoping meeting Town authorities that the extensively reviewed and approved HLC traffic study should be used as the starting point for the applicant's study.

- 16.** The peak traffic time on Lowell Road is more than one hour and the Planning Board should look carefully at multiple hours of peak traffic and note the impact of this project on peak hours on either side of the established peak hour.

The roadway peak hour was measured by 2019 traffic counts in the HLC study. It shows the am roadway peak is 715-815am; and the pm roadway peak is 415-515 pm. NHDOT has 24-hour counts taken in 2017 (the most recent pre-COVID data) that show the am peak at 7-8am, and pm peak at 5-6pm.

The peak traffic generated by the project occurs at shift change, which the applicant has agreed to schedule during off-peak hours. Our model shift schedule shows the am shift change at 5-6am (145 new trips), and the pm shift change at 2-3pm (275 new trips). At these hours, the traffic volume on Lowell Road drops by nearly 600 vehicles in the am, and nearly 800 in the pm. Thus even with higher shift change volume, there is substantially less total traffic on the corridor at these times than during the roadway peak hours.

- 17.** What is to prevent this center from being a logistics center with significant greater traffic impact.

The application is based upon a particular proposed use and any approval would be conditioned upon such use. Any change to that use would require a new traffic study and review by the planning board and the Town's peer review consultant and subject to approval under site plan review.

- 18.** Where are 720 employees at shift change, coming and going from and what will be the traffic for these employees at the peak shift? What is the impact on local roads at peak shift changes?

The peak traffic generated by the project occurs at shift change, which the applicant has agreed to schedule during off-peak hours. Our model shift schedule shows the am shift change at 5-6am (145 new trips), and the pm shift change at 2-3pm (275 new trips). At these hours, the traffic volume on Lowell Road drops by nearly 600 vehicles in the am, and nearly 800 in the pm. Thus even with higher shift change volume, there is substantially less total traffic on the corridor at these times than during the roadway peak hours.

- 19.** If the trucks are limited to traffic between 6:00 a.m. and 7:00 p.m., how is it that the traffic impact study shows trucks arriving at 6:00 a.m.? How will they get there if they are not allowed to be on local roads?

The traffic study does not show trucks arriving to the project location before 6am.

- 20.** What is the basis of the data used in the ITE trip generation modeling to establish that the use and the data is accurate?

The data is reflected in the ITE Trip Generation Manual (10th edition, published 2017) as Land Use Code (LUC) 154 – “High-Cube Transload/Short-Term Storage Warehouse”, as amended in a supplement issued by the ITE High-Cube Warehouse Supplement in February 2020.

- 21.** How long ago was the data for the ITE study established?

The most recent version of the ITE High-Cube Warehouse Supplement was published in February 2020.

- 22.** There is a need for further explanation of validity of the ITE trip generation data.

The Institute of Transportation Engineers (ITE) is an international membership association of transportation professionals who work to improve mobility and safety for all transportation system users and help build smart and livable communities. With over 16,000 members across 75 countries, ITE has been the standard among traffic engineers and US Department of Transportation for almost a century. ITE is the lead SDO for ITS Standards with American Association of State Highway

Transportation Officials (AASHTO) and National Electrical Manufacturers Association (NEMA) as partners and with support from the ITS Joint Program Office (ITS JPO) in the US Department of Transportation's (USDOT). The ITE's "Trip Generation Manual" has been in common use by traffic professionals for many decades, and is now almost universally accepted by federal agencies, state DOTs, cities, and towns across the country and New Hampshire.

23. Why should a waiver of the required parking of 482 be given to allow only 362 parking spaces? Where will the other cars park at shift changes?

The applicant has added 4 additional spots on the revised plan set to include 366 parking spaces. Based on the proposed shift schedule for the warehouse included in the Traffic Analysis, the largest shift schedule will be 140 employees, with the next largest shift at 125 employees. We believe that 366 parking spaces is sufficient to allow for a full shift change with additional spaces and limits environmental impacts. The applicant has demonstrated they can include 840 parking spaces but would require additional grading, tree clearing and impervious coverage.

24. The number of cars going into the parking lot in and out in a 24-hour period should be stated and considered.

See attached typical full-day shift schedule showing anticipated trips for each hour.

25. Shouldn't there be a prohibition of truck back up during the evening hours, given that there will be no truck traffic on local roads, and yet the warehouse will be operating on three shifts, won't there be truck back up occurring all night long with the sound warning devices going off?

Based on the proposed shift schedule and limitations on town roads, the applicant does not expect to have truck idling and backing up during the late night and early morning hours. Although the proposed facility is open 24/7, based on our experience with other similar warehouse uses, vast majority of the activities occur inside the warehouse preparing for the next day's shipments.

SITE DESIGN

26. Proposed berm elevation is at 168 after site work is complete while paving elevation is at 161. Request is to raise the berm as much as possible with additional landscaping and/or fencing at the top of the berm.

The berm along Hickory Street residential development has been raised to 20' above the existing grade with a 6' stockade fence on top. In addition, we have eliminated the trailer parking and additional employee parking along the Hickory Street, removing 34,900 SF of pavement and retained the hill in its entirety and 4.6 acres of additional wooded buffers surrounding the development.

27. Concerns about protection of the open space remaining after development and whether or not deed restrictions, covenants or gifting of land easement area to Conservation Commission is possible.

The applicant is proposing a protective covenant along the Fox Hollow Development and the Hickory Street Development that would limit tree clearing and, topography changes within 100' of the buffer.

- 28.** Question whether the owner would agree to maintain an area along the river to allow extension of a river walk, subject to security issues.

The applicant would prefer not to create public access to its property but is willing to allow a limited easement area along the river to allow the Town to connect to existing trails, subject to security and liability concerns.

- 29.** Why so many docks and will there be 100% utilization of docks all day long as trucks are coming and going or is there actually going to be a different type of use than projected?

The amount of loading docks does not directly correlate to the amount of truck traffic in and out of the proposed project site. The amount of dock doors shown on the plan is for critical for the operation of warehouse and distribution users for inventory management and efficiency. Often times a truck will be parked at a loading door for days at a time while its waiting to be loaded and depart from the warehouse. Products arrive to the warehouse and are stored and/or sorted and then placed in loading areas on the opposite side of the facility to be distributed into different trucks. The general idea behind a cross-dock is to minimize the amount of handling required to get materials from suppliers to manufacturers and finished products from the manufacturer to the business customers. Also, instead of having to load or unload several trucks in a day, one truck will arrive with a consolidated shipment from several suppliers, saving you valuable labor hours.

In addition, because the proposed project is a speculative building, it has been designed to maximize flexibility for future tenants.

- 30.** 200 foot buffer under the Ordinance is insufficient to protect the neighbors from impacts due to lights, noise, etc., and the Planning Board should consider requiring additional buffer and mitigation of lights and noise.

The applicant believes that the ordinance requirements are sufficient. The lighting is designed to comply with the Town's ordinances and the applicant will also comply with the Town's noise ordinances.

- 31.** Request for a higher berm, recognizing that the Hudson Logistics Center agreed to raise the berm up and put a 10 foot sound wall at the top.

The applicant has increased the landscape berm behind Hickory Street to 20' above the existing grades and added an additional 6' stockade fence to the berm.

- 32.** Requests that the hill behind 10 Hickory be retained in its entirety and that the parking area which requires cutting of the hill be relocated elsewhere on the site.

The applicant has removed the proposed trailer storage parking and additional employee parking and retained the hill behind 10 Hickory in its entirety.

- 33.** The landscape overview plan reflects that one-half of the natural trees are being cut and restoration will be inadequate to replace the same.

The applicant has revised the plan to retain an additional 4.6 acres of wooded buffers for a total of 66% green space remaining on the 75 acre parcel. In addition the applicant has committed to a protective covenant surrounding the riverfront area and 100' wide along Hickory Street and Fox Hollow Condominium's residential 200' buffer.

The applicant's landscape plan includes planting 106 Deciduous trees, 205 evergreen trees, 537 deciduous shrubs, 482 evergreen shrubs and 260 groundcover shrubs.

- 34.** The parking area proposed behind 10 Hickory stops at the 200 foot buffer line, but the topographic changes require cutting significant amounts of the hill and request that this area be redesigned to preserve as much of the hill and natural tree cover as possible.

The applicant's revised site design preserves the hill and tree cover.

- 35.** 200 foot buffer includes thinly wooded trees and the noise from idling trucks, diesel exhaust, light, bay loading docks and back up noises will not be shielded.

The applicant's sound study reflects the noise impacts will be less than the maximum allowed by the Town's noise ordinance.

- 36.** The wooded area which is a buffer between Sagamore Park and Fox Hollow will be completely destroyed leaving no buffer to Fox Hollow development.

The applicant's revised plan retains the hill along Hickory in its entirety and revised grading plan retains an additional 4.6 acres of additional wooded buffers surrounding the development.

- 37.** There are significant wildlife species on the property that will lose their habitat.

The Wildlife study found that no recorded occurrences for sensitive species were identified, and none were observed on site during the site visitation. With that said, the applicant has proposed 66% of green space of the 75 acre lot will remain. In addition, the applicant has agreed to adopt a declaration of covenants for conservation for approximately 21.5 acres in a manner to preserve the valuable wildlife habitats.

- 38.** The wetlands around the area of the creek and pond should be protected more than shown on the plan.

The proposed site plan does not have any wetland impacts or wetland buffer impacts.

- 39.** There should be a forest management plan for the remaining open space acreage.

The applicant's protective covenant as proposed will allow forest management under the supervision of a licensed forester for the removal of dead or damaged trees or removal of vegetation.

- 40.** There should be an Army Corps study for impacts on the brook.

The design of the project site does not include any impacts to the brook and there is no impact to the brooks buffer zones.

- 41.** Concern over potential blasting particularly behind Fox Hollow given the cut/fill plan.

The results of the Geotech investigation, test probes and recent ledge probes, confirm it does not appear blasting will be needed for the construction of the proposed building.

42. Is the lighting proposed “dark sky”?

The proposed lighting design includes LED, dark sky friendly lighting with full cutoffs.

43. Shouldn't there be a prohibition of truck back up during the evening hours, given that there will be no truck traffic on local roads, and yet the warehouse will be operating on three shifts, won't there be truck back up occurring all night long with the sound warning devices going off?

Based on the proposed shift schedule and limitations on town roads, the applicant does not expect to have truck idling and backing up during the late night and early morning hours. Although the proposed facility is open 24/7, based on our experience with other similar warehouse uses, vast majority of the activities occur inside the warehouse preparing for the next day's shipments.

In addition, truck traffic is limited on town roads between the hours of 6am-7pm.

44. What are the setbacks from the edge of the parking lot to the river? What are the setbacks from the edge of the parking lot to the embankment top of the river?

The setback from the edge of the parking lot/driveway is 1/4 mile. The setback from the edge of the parking lot to the top of the river embankment is a little less than 1/4 mile.

45. Request to add trails to allow neighbors to go from residential across the property down to the river.

The applicant is committed to a restrictive conservation covenant for the riverfront areas and 100' inside the 200' residential setback. In our experience, public trails sound like a good idea in the theory but result in the general public walking behind residential abutters backyards where they previously were not allowed. Therefore no walking trails are proposed.

46. The building height calculation is wrong in that the loading docks, the finished floor area calculation is based upon an averaging whereas in some instances it is higher and therefore the peak roof area will be higher than 50 feet off of the ground level at that point.

The applicant reconfirmed the calculations for building height are correct.

47. Why should a waiver of the required parking of 482 be given to allow only 362 parking spaces? Where will the other cars park at shift changes?

The applicant has added 4 additional spots on the revised plan set to include 366 parking spaces. Based on the proposed shift schedule for the warehouse included in the Traffic Analysis, the largest shift schedule will be 140 employees, with the next largest shift at 125 employees. We believe that 366 parking spaces is sufficient to allow for a full shift change with additional spaces. The applicant has demonstrated they can include 840 parking spaces but would require additional grading, tree clearing and impervious coverage.

OTHER COMMENTS:

48. Will there be a meeting for residents to discuss with the applicant their concerns and ask for a resolution of concerns?

All discussions with residents will be held at the public hearing to allow for other neighbors and abutters to hear the answers to the resident's questions.

49. When will the residents have a chance to see the wildlife study and will there be an explanation of how there isn't going to be an adverse impact on existing wildlife?

The Wildlife study has been made available to the Town and is currently being updated to reflect the reduced project area plan. The Wildlife study found that no recorded occurrences for sensitive species were identified, and none were observed on site during the site visitation.

50. Concern over noise impact in that Town Ordinance will not allow greater than 10 dB increase over ambient levels.

The Town Ordinance limits the increase of the background noise level to no more than ten (10) dBA in any receptor area at any time of day (per §249-4(D)). The Sound Study of 161 Lowell Road, Hudson, NH by Tech Environmental, Inc. prepared October 15, 2021, revised November 3, 2021 per peer review comments and findings, and revised again December 2, 2021 per peer review comments and findings, demonstrates that the proposed warehouse development will comply with the Town Ordinance limits for increases in the background noise level. Specifically, the sound study concludes that the resulting change in background noise level would range from +0 dBA to +2 dBA at the surrounding residential areas, which are less than the Town Ordinance allowable limit of +10 dBA.

51. Is this building too big for the lot?

The proposed site includes 66% green space. The minimum required green space is 35%.

52. During the public hearing of the Hudson Logistics Center, the police and fire provided testimony that there would be no impact. Has there been any conversation with police and fire as to potential impact on emergency services for this site?

The applicant has prepared a fiscal impact analysis and includes a section on impacts on Town's services including Police, Fire and EMS calls. Based on existing warehouses within the Sagamore Industrial Park, we expect the police and fire calls to be minimal, Seven (7) Police calls, Six (6) Fire calls, and Six (6) EMS calls annually. Additionally, there has been no adverse comments received by the Fire or Police departments in connection with this project.

53. The green space remaining is not valuable green space in that it is a result of preserving area around the brook so that no wetland impacts will be made. Resulting green space is therefore artificial.

The applicant is committed to a protective conservation covenant of 100' wide of the 200' residential buffer along the Hickory Street and the Fox Hollow Condominium residential sides of the proposed project, as well as 19.00 acres of land near the river for a total of 21.5 acres.. In addition, the applicant is respecting the 200' residential buffers and additional buffers where

possible. The revised plan submitted by the applicant on Nov 23 2021 retains an additional 202,500 SF or 4.64 acres of natural wooded buffers.

- 54.** Will there be an adverse impact on emergency vehicle response time due to this project?

There have been no adverse comments received by the Fire or Police Departments in connection with this proposed project.

- 55.** The fiscal impact study needs to be carefully reviewed for the accuracy of revenues versus expenses in that no one really knows what the expenses might be.

The applicant engaged a planning consultant with extensive experience in fiscal impact analysis across New Hampshire. His fiscal impact analysis is based upon review of actual similar developments in the area and region and experience with various police and fire departments.

- 56.** Why can't the existing empty buildings in Sagamore Park be somehow utilized for redevelopment for a project of this size rather than taking out all of the trees and wildlife on the empty land?

The existing empty buildings within the Sagamore Industrial Park are only temporarily vacant and not for sale. They include 2nd and 3rd generation manufacturing space with low clear heights and inefficiencies for warehouse users. Our proposed project is a modern distribution facility designed to attract today's market of industrial tenants.

- 57.** What will be the impact on abutting property values?

The surrounding abutting properties are currently assessed based on their proximity to General zoned land and the Sagamore Industrial Park which allows for our project's proposed use. The Town's master plan anticipated this use, therefore values based upon a known future use will not change strictly because that permitted use is constructed. Particularly where the use complies with the restrictions of light and sound ordinances and where additional mitigation as proposed here is incorporated in the planned development. Based on these statements, we do not believe the abutting property values will be impacted. In addition, the new tax revenue generated from our proposed project alone will add significant value to the Town's overall tax base and annual budgets. Communities that experience economic growth and increased budgets for spending on schools, infrastructure, town departments historically result in higher home values.

- 58.** Did the sound study consider that trucks will be idling extended periods of time, with multiple trucks on site (75 parking spaces are shown) and that the impact of cutting down the hill will allow greater sound transmission?

The Sound Study of 161 Lowell Road, Hudson, NH accounted for two (2) trucks idling along the north façade of the proposed warehouse development and two (2) trucks idling along the south façade (i.e. a total of four (4) idling trucks), which is consistent with the peak hour projections in the traffic study. Furthermore, the sound study assumes that each idling truck will be limited to ten (10) minutes per the Town Ordinance (per §249-4(J)(2)). This is a conservative approach for demonstrating compliance during late night/early morning hours, when truck traffic is presumably much less than the peak daytime hours.

The Sound Study results were computed using a sophisticated three-dimensional (3D) model for sound propagation and attenuation based on International Standard ISO 9613. The acoustic

model accounts for the proposed site grading and tree clearing for the warehouse development as illustrated in the revised site plans by The Dubay Group, Inc. dated November 23, 2021. Offsite terrain data used in the acoustic model was obtained from New Hampshire's Statewide Geographic Information System (GIS) Clearinghouse (NH GRANIT).

59. Will there be erosion caused by the runoff from the parking lots going towards the river?

No, the applicant has designed the plans to include proper storm drainage controls including possible runoff. The full engineered plan set is being reviewed by the Town's peer review consultant to ensure the stormwater designs meet all requirements and standards.

TRIP GENERATION SUMMARY: HUDSON FRIARS ROAD DISTRIBUTION BUILDING
(500,000 SF High-Cube Transload and Short-Term Storage Warehouse)

DAILY SHIFT SCHEDULE	353 ----- Total Employees ----->						56 <-- Total Trucks -->		Totals	Trips/hr	In	Out						
	Office Emp		Office Emp		Office Emp		Warehouse Emp							Warehouse Emp		Warehouse Emp		Trucks
	1st Shift 7a - 4p/8a - 5p		2nd Shift 4p - 12:30a		3rd Shift 12:30a - 7a		1st Shift 6a - 2:30p							2nd Shift 2:30p - 11p		3rd Shift 11p - 6a		All Shifts 6a - 9p
	In	Out	In	Out	In	Out	In	Out						In	Out	In	Out	In
12:00M - 1:00AM			8	4								4	8	12				
1:00AM - 2:00AM												0	0	0				
2:00AM - 3:00AM												0	0	0				
3:00AM - 4:00AM												0	0	0				
4:00AM - 5:00AM												0	0	0				
5:00AM - 6:00AM							140					140	0	140	<- AM Peak of Generator			
6:00AM - 7:00AM	10									60	5	15	60	75				
7:00AM - 8:00AM	6			4							5	5	11	9	20	<- Roadway Peak*		
8:00AM - 9:00AM											5	5	5	5	10			
9:00AM - 10:00AM											5	5	5	5	10			
10:00AM - 11:00AM											5	5	5	5	10			
11:00AM - 12:00N											4	2	4	2	6			
12:00N - 1:00PM											5	5	5	5	10			
1:00PM - 2:00PM											5	5	5	5	10			
2:00PM - 3:00PM							140	125			5	5	130	145	275	<- PM Peak of Generator		
3:00PM - 4:00PM		8									5	5	13	5	18			
4:00PM - 5:00PM		10									2	3	2	13	15	<- Roadway Peak*		
5:00PM - 6:00PM		6									5	5	5	11	16			
6:00PM - 7:00PM												5	0	5	5			
7:00PM - 8:00PM													0	0	0			
8:00PM - 9:00PM													0	0	0			
9:00PM - 10:00PM													0	0	0			
10:00PM - 11:00PM										60		60	0	60				
11:00PM - 12:00M								125				0	125	125				
	16	16	8	8	4	4	140	140	125	125	60	60	56	55	409	408	817 = Daily Trips	

NOTES:

- Assume Two (2) Tenants
- All trucks originate from offsite.
- Truck trailer storage at the site, no fleet parking
- Largest Shift Change overlap is Warehouse 1st to 2nd shift between 2pm-3pm: 125 (in) + 140 (out) = 265
- Lower Truck percentage is typ. due to truck operations scheduled to avoid peak periods.

Hudson Article II Traffic Regulations: Section 317-13 Trucks, commercial vehicles and heavy vehicles

No commercial truck traffic shall be permitted, except by special permit issued by the Town of Hudson, on any road in the Town of Hudson before 6:00 a.m. and after 7:00 p.m., unless otherwise specified under Subsection F, except on Route 111, Route 102, Route 3A and West Road.