

# **HUDSON LOGISTICS CENTER**

## **SITE PLAN APPLICATION SP#04-20**

### **STAFF REPORT #17**

**SITE:** 43 Steele Road; Map 234, Lots 5 & 34 and Map 239, Lot 1

**ZONING:** General – 1 (G-1) and Business (B)

**PURPOSE OF PLANS:** Proposed commercial development consisting of three (3) new distribution and logistics buildings with associated access ways, parking, stormwater/drainage infrastructure, and other site improvements. And, to relocate a lot line between Map 234, Lot 5 and Map 234, Lot 34 and then to consolidate Map 234, Lot 5 with Map 239, Lot 1.

#### **ATTACHMENTS**

- A. Revised Draft of conditions of Site Plan decision. Track Changes and Clean Copy.
- B. Exhibit A – Scope and Schedule – Impact Mitigation and Exactions.

#### **PROJECT MEETING TIMELINE**

1. **April 21, 2020** - The application was submitted to the Planning Board.
2. **May 6, 2020, 7:00pm** – The Planning Board declared this application to be a Development of Regional Impact, pursuant to RSA 36:55.
3. **May 27, 2020, 7:00 pm**– The first public meeting was held, during which the Planning Board accepted jurisdiction over the application and conducted a public hearing. The public comment portion of the meeting began at approximately 9:00pm and ended shortly after 11:00pm with 34 people offering questions and comments. 43 written comments were also provided to the Planning Board and entered into the public record.
4. **June 13, 2020, 9:00 am** – Site Walk conducted.
5. **June 24, 2020, 7:00 pm** – The application was deferred to the July 22, 2020 meeting.
6. **July 22, 2020, 7:00 pm** – The second meeting was held, during which the applicant provided a status update on their plan revisions and additional studies and the Planning Board began their deliberation. The Planning Board decided to move forward with topic-based meetings. The meeting was continued to August 12, 2020 with the focus of this meeting to be fiscal impact and property value analysis.
7. **August 12, 2020, 7:00 pm** – The topic of this meeting concerned financial implications: property values analyses and fiscal impact on the Town. Two analyses of property value impacts were presented. The Town’s peer review consultant on the subject, Applied Economic Research provided preliminary feedback and commentary on these studies. Public comment was received from 10:15pm to 11:00pm, meeting curfew. The meeting was continued to August 26, to address the Fiscal Impact Study.

8. **August 26, 2020, 7:00 pm** – The meeting was deferred at applicant’s request due to scheduling conflict, to September 9.
9. **September 9, 2020, 7:00 pm** - Continuance of Fiscal Impact Study presentation from August 12. Public comment was continued from the August 12th meeting, from 7:03pm to 7:25pm. The meeting was continued to October 21, 2020 to address traffic.
10. **October 21, 2020, 7:00 pm** – The meeting was deferred by the Planning Board to November 18, 2020.
11. **November 18, 2020, 7:00 pm** – The applicant presented their traffic proposal including mitigation strategies. NHDOT and the Town’s traffic peer review consultant, VHB also testified. Public comment was received 10:25pm to 10:44pm, to be continued at the next meeting.
12. **December 16, 2020, 7:00 pm** – Meeting deferred to December 30, 2020 due to potential Covid exposure at Community Center during another committee’s meeting. It was later determined that there was no risk of exposure.
13. **December 30, 2020, 7:00 pm** – Continuation of traffic public input from November 18, 2020. . Public input was received from 7:02pm to 8:32pm. The applicant presented further detail on traffic.
14. **January 13, 2021, 7:00 pm** – The meeting was deferred by the Planning Board to January 27, 2021.
15. **January 27, 2021, 7:00 pm** – The applicant presented site plan details, Stormwater design and screening strategies. Public input was received from 9:45pm to 10:45pm.
16. **February 10, 2021, 7:00 pm** - Continuation of site plan public input from January 27, 2021. Public input was received from 7:05pm to 8:13pm. The applicant presented their Conditional Use Permit application for Wetlands Overlay District and wildlife habitat report.
17. **February 27, 2021, 7:00 pm** – The applicant presented building height, an update to real estate market analysis and sound study. Continuation of site plan public input from January 27, 2021. Public input was received from 9:13pm to 10:29pm.
18. **March 10, 2021, 7:00 pm** – The applicant presented the lot line adjustment, and public comment was received from 7:09pm to 7:19pm. Department heads for the Police Department, Fire Department and Public Work gave testimony to the Board regarding the impact this proposal may have on their operations. The applicant presented clarifications to outstanding questions, proposed an impact mitigation plan, and closed their case.

19. **March 24, 2021, 7:00 pm** – This meeting was dedicated to public comment. Public comment was received from 7:36pm to 10:37pm. The Chair closed oral public comment on the project while providing an additional week for written public comment.
20. **April 7, 2021, 7:00 pm** – Public comment was received on the Lot Lin Relocation until 7:08pm. The Planning Board approved the Lot Line Relocation application. The Planning Board began deliberations on the Conditional Use Permit and Site Plan applications. The meeting was continued to April 21, 2021.
21. **April 21, 2021, 7:00 pm** – The Planning Board deliberated the proposed conditions of the Conditional Use Permit application and then approved the application. The Board continued deliberating conditions of a site plan decision and continued the meeting to May 5, 2021.

### **STAFF COMMENTS**

At the April 21, 2021 meeting some Planning Board members requested a manner in which to ensure the adequacy and efficacy of the sound fence. In response, Member Veloso and Staff drafted an additional condition, #25.d in **Attachment A**. This condition sets forth a contingency plan in the event that the sound fence does not accomplish its projected goal.

Air quality was another issue raised at the April 21, 2021 meeting. Subsequently, staff spoke with Liz Hendrick, CCM, Senior Consultant – Air Quality of Tetra Tech, the Town’s peer review consultant on the matter. Ms. Hendrick found that a “pre vs. post air” quality study would be very difficult to measure and suggested it is unnecessary due to the small impact resulting from this proposal. To measure “pre vs. post”, the study would require no change to the environs between the time of baseline measurement and post construction, effectively requiring a moratorium on development and traffic patterns in the Hudson/Nashua region. Secondly, isolating this site from its environs may not be achievable. Lastly, Ms. Hendrick is unaware of the existence of any outdoor air purifying towers.

### **DRAFT MOTIONS**

**Attachment A** is the latest version of a draft decision on the site plan application with conditions 1 through 70. Notable changes/additions include:

- Condition #3 – to prevent deviation into other types of e-commerce centers with different traffic and operational characteristics.
- Condition #25.d – to ensure the efficacy of the sound fence.
- Conditions #68 – In response for the request for a sidewalk from Rena Avenue to Wal-Mart Boulevard.
- Condition #69 – to affirm the Applicant’s commitment to fund improvements to the Wason Road intersection.
- Condition #70 – language revised per Town Counsel.

**Attachment B** is draft Exhibit A to a potential development agreement that defines the scope and schedule of the impact mitigation and exactions

Site Plan Decision DRAFT -- May 5, 2021  
***Track Changes Copy***

**APPROVE the site plan application:**

I move to approve the Site Plan application for the Hudson Logistics Center; prepared by: Langan Engineering & Environmental Services, Inc., 888 Boylston St., Boston, MA 02116; prepared for: Hillwood Enterprises, L.P, 5050 W. Tilghman St., Suite 435, Allentown, PA 18104; and, Greenmeadow Golf Club, Inc., C/O Thomas Friel, 55 Marsh Rd., Hudson, NH 03501; dated April 21, 2020; last revised March 10, 2021; subject to, and revised per, the following stipulations:

1. All stipulations of approval shall be incorporated into the ~~Notice of Decision~~Development Agreement, which shall be recorded at the HCRD, together with the Plan.
2. The “Applicant” refers to Hillwood Enterprises, L.P., 5050 W. Tilghman Street, Suite 435, Allentown, Pennsylvania 18104, c/o Brian Kutz, Vice President - Development, the Applicant with respect to this Decision, its successors and assigns.
- ~~2.3.~~This decision hereby approves the use of the three warehouse distribution facility buildings including associated accessory uses, as non-sort facilities, as defined by the “Trip Generation Manual, 10<sup>th</sup> Edition Supplement”, dated February 2020 by the Institute of Traffic Engineers. Any use other than a non-sort facility shall be deemed a new use and/or change of use, and shall be subject subject to site plan review and approval by the Planning Board.
- ~~3.4.~~A cost allocation procedure (CAP) shall be paid prior to the issuance of a Certificate of Occupancy for each building as follows: \$944,885.75 for Building A, \$713,890.80 for Building B, and \$376,189.24 for Building C.
- ~~4.5.~~Subject to final administrative review by the Town Planner and Town Engineer.
- ~~5.6.~~The plan shall be Ssubject to receiving an Alteration of Terrain Permit and Wetlands Permit from NH DES.
- ~~6.7.~~The plan shall be Ssubject to approval of the traffic mitigation plan by NH DOT.
- ~~7.8.~~Construction activities involving this plan shall be limited to the hours between 7:00 A.M. and 7:00 P.M., Monday through Saturday. No exterior construction shall occur on Sunday.
- ~~8.9.~~For purposes of this site plan approval, the term “active and substantial development or building” shall mean the construction of the site improvements on the Property

relating to Building A and Building B, to include construction of Green Meadow Drive and the access to Walmart Boulevard, construction of the fire lanes, utilities, and corresponding stormwater facilities, all as to be shown on the construction phasing plan approved by the Town Planner as described above.

~~9.10.~~ “Substantial completion” shall be defined as completion of Buildings A and B.

~~11.~~ Per HR 276-4, the Applicant shall post with the Town of Hudson a performance surety in an amount to be approved by the Town Engineer in a form approved by the Town Attorney, if necessary.

~~12.~~ No construction vehicles shall park or stand on residential streets. The use of Steele Road by construction vehicles shall cease upon establishment of the proposed access ways.

~~10.13.~~ The proposed buildings shall require an approved sprinkler system. The Hudson Fire Department upon review of the building plans shall conduct this review. This requirement is in accordance with the International Building Code (IBC) and Hudson Town Code (HTC), current revision, Chapter 21O, Article VI. Any fire protection system shall be monitored by an approved fire alarm system.

~~11.14.~~ The final plans shall be amended to include the following:

- a. Note 18 on Sheet CS003 shall be amended to provide that “all proposed utilities will be located underground except as waived by the Planning Board.”
- b. Note 39 on Sheet CS003 shall be deleted and replaced with the following: “All signs are subject to approval by the Zoning Administrator/Code Enforcement Officer prior to installation thereof.”

c. The Planning Board requests the applicant not to install street lighting along Steele Road, and a plan note shall reflect this condition.

d. Sheet CS 119 shall be amended to remove the light pole fixture from the shoreland protection area.

e. The final plan set shall properly index Sheet CP 125, which was misplaced in the most recent revision plan set.

f. Shall be subject to any comments and adjustments as required by the NHDES.

e-g. A temporary turnaround for emergency vehicles shall be installed at the westerly terminus of the Steele Road access easement outside the shoreland protection area, until such time as the design, permitting and

installation of the permanent infrastructure such as a turnaround, or other infrastructure that the Town or Fire Department desires within the shoreland protection area is complete as described in Condition #47 below.

The following shall be completed prior to the issuance of a building permit for Building A and/or B:

- ~~12.15.~~ The Applicant shall meet with the Fire Chief and Town Planner to review and develop a schedule for the implementation of the Fire Chief's recommendations and requirements described in the Fire Chief's March 2, 2021 Memorandum to Brian Groth, Town Planner. Notwithstanding the timing of the implantation of the Fire Chief's recommendations in his March 2, 2021 memorandum and in this decision, the Fire Chief (in consultation with the Town Planner and the Applicant), may modify the timing of the implementation of such requirements.
- ~~13.16.~~ Prior to the issuance of a building permit the applicant shall secure a contract and pay in full for a tower truck with the design, vendor and construction schedule approved by the Hudson Fire Chief, utilizing funds identified in Condition #70. Timing of this deliverable may be modified with the Hudson Fire Chief's approval.
- ~~14.17.~~ Prior to the issuance of a building permit the applicant shall meet with the Hudson Fire Chief to identify technical rescue training programs and equipment needs as identified by the Hudson Fire Department, utilizing funds identified in Condition #70. The applicant shall pay for this additional training and equipment in entirety. Timing of this deliverable may be modified with the Hudson Fire Chief's approval.
- ~~15.18.~~ The Inspectional Services Division and Planning Department shall be provided with a construction schedule, which shall include the details, timing, construction phasing plan, and related safety measures for the demolition and construction of the on-site and off-site improvements.
- ~~16.19.~~ The Applicant shall schedule a pre-construction meeting with the Town Engineer and other Town Staff.
- ~~17.20.~~ The Applicant shall provide the Town Planner and Town Engineer for its review and approval a phased construction plan for Green Meadow Drive so that no detour to the Mercury Systems building (267 Lowell Rd) is required during the construction of the roadway.
- ~~18. No construction vehicles shall park or stand on residential streets. The use of Steele Road by construction vehicles shall cease upon establishment of the proposed access ways.~~

~~19.21.~~ The earthen berm and sound fence shall be constructed prior to the issuance of any building permit of Building A and/or Building B.

~~20.22.~~ The Applicant shall construct and stabilize the earthen berm as designed at the height and length shown in drawings to mitigate potential sound and visual impacts.

~~21.23.~~ The Applicant shall install an approximately 2,000-foot-long noise control fence along the spline of the proposed earthen berm as designed and presented.

~~22.24.~~ The Applicant shall install an approximate  $\pm 785$ -foot-long fence as designed and presented near the southeastern corner of Building C to mitigate potential visual impacts and noise to off-site residential receptors.

~~23.25.~~ The sound fence shall meet the following requirements to be confirmed by the Town Engineer:

- a. The fence needs to be solid, without openings, and a minimum surface weight of 7 lbs/SF.
- b. Appropriate materials of construction for the fence to include natural, non-reflective materials such as wood or wood composite.
- c. The fence must be designed to resist wind load and will have engineered footings.

e.d. In the event the sound fence fails to meet the standards set forth in the sound study, the Applicant, at their sole expense, shall remediate the fence to ensure full compliance with said standards, which shall be confirmed by the Town Engineer.

The following shall be completed prior to the issuance of a building permit for Building C:

~~24.26.~~ Prior to the issuance of a building permit for Building C, a post opening traffic assessment subsequent to the opening and normal operations of Buildings A and B shall be conducted by the Applicant. This assessment must confirm the Project's proposed traffic mitigation as evaluated in the submitted traffic impact study ("TIS"), if necessary. This information will be provided to the Town Planner to confirm the actual operations of the two buildings. No additional Planning Board action is required.

~~25.27.~~ The post opening traffic evaluation ~~will~~shall be conducted during a period of the Building A & B operations that mimic the period evaluated in the TIS. The study is anticipated to be undertaken within six months after the commencement of full operations of Building A and Building B, or other period agreeable to the Applicant and the Town Planner.

~~26.28.~~ The Applicant shall present the post opening traffic evaluation to the Town Planner and Town Engineer, and if requested, to a peer review firm selected by the

town and paid for by the Applicant, all for the purpose of confirming the TIS recommendations.

~~27.29.~~ If the post-opening traffic evaluation identifies post-occupancy operating conditions which identify operational impacts differing from those identified in the TIS, the Applicant may be required to perform additional mitigation to the extent permitted by the Town in cooperation with NHDOT.

~~28.30.~~ The Applicant shall provide evidence to the Town Planner and Code Enforcement Officer demonstrating that Building C shall comply with the Building Height limitations as required by the Zoning Ordinance.

~~29.~~ ~~The proposed building will require an approved sprinkler system. The Hudson Fire Department upon review of the building plans shall conduct this review. This requirement is in accordance with the International Building Code (IBC) and Hudson Town Code (HTC), current revision, Chapter 210, Article VI. Any fire protection system shall be monitored by an approved fire alarm system.~~

~~30.31.~~ Steele Road ~~will~~shall be addressed as indicated in plan notes, or by other lawful means.

Conditions related to construction practices:

~~31.32.~~ There shall be weekly construction meetings scheduled and available for attendance by Town staff until such time as Inspectional Services reasonably determines that weekly inspections, or less frequent or no further scheduled meetings are necessary.

~~32.33.~~ The Applicant shall pay for the cost of locating a construction trailer on the site (with appropriate HVAC, electrical, and other utilities) to support a work space for the Town of Hudson Inspectional Service and Land Use Divisions. The Applicant shall also pay for the retention of inspector(s) solely for the purpose of inspecting the construction and project for the duration of the project as reasonably agreed by the Applicant and Fire Chief. The inspectional services trailer shall be located on the site within thirty (30) days after notice by the Inspectional Services Division to the Applicant, but not later than the commencement of construction of the first building foundation, and remain on the site until the Certificate of Occupancy is issued for the last building or as otherwise agreed between the Applicant and Fire Chief.

~~33.34.~~ All new gas, telephone, cable, electric and other utilities, except for temporary utilities, shall be installed underground as specified by the respective utility companies unless otherwise waived, or except for so called "green utility boxes" or other aboveground poles or structures as may be required by the utility companies, and except as may otherwise be temporarily required to effect the movement and



operation of any other temporary improvements. If final locations of appurtenant equipment to these utilities (e.g. transformer pads) not shown on the Plans materially impact the design, the Applicant and/or Project Owner shall provide such details of such modification to the Town Planner for review.

34.35. Additional stormwater and infiltration testing shall be performed during construction to complete the design, and all infiltration testing results shall be submitted to the engineer of record, the Town Planner, the Town Engineer, and the NHDES Permitting Department for review.

35.36. A blasting permit ~~will~~shall be required for any blasting on the site in accordance with the Hudson Town Code, Chapter 202.

36.37. During construction, ~~the Applicant shall submit~~ plans for controlling fugitive dust during excavation and construction include mechanical street sweeping, wetting and/or misting portions of the site during periods of high wind, and careful removal of debris by covered trucks.

37.38. The construction contract ~~will~~shall provide measures to be used by contractors to reduce potential emissions and minimize impacts. These measures are expected to include:

- a. Using wetting agents on area of exposed soil on a scheduled basis;
- b. Using covered trucks to transport any debris or other materials to or from the site;
- c. Monitoring of actual construction practices to ensure that unnecessary transfers and mechanical disturbances of loose materials are minimized;
- d. Minimizing storage of debris on the site; and
- e. Periodic street and sidewalk cleaning with water to minimize dust accumulations.
- f. Limit maximum travel speeds on unpaved areas; and
- g. Provide wheel wash stations to limit trackout of soil during the excavation phase.

38.39. Construction equipment engines ~~will~~shall comply with requirements for the use of ultra-low sulfur diesel (ULSD) in off-road engines. The construction contractor will be encouraged to use diesel construction equipment with installed exhaust emission controls such as oxidation catalysts or particulate filters on their diesel engines.

39.40. All trucks leaving the site ~~must~~shall have all dirt/mud removed from the wheels and undercarriage of the truck prior to leaving the site. In addition, any loads containing soil for off-site disposal ~~will~~shall be covered.

~~40.41.~~ Construction vehicles and equipment ~~will~~ shall not be permitted to be washed in the streets outside of the Project site. Excess water from the wheel wash stations ~~will~~ shall be managed and catch basins in the surrounding street will be protected from potential runoff from the cleaning operations.

~~41.42.~~ The Applicant shall encourage contractors to use proper emission controls, use of clean fuels, control of truck and equipment idling times.

The following shall be completed prior to the issuance of a Certificate of Occupancy for Building A and/or Building B:

~~42.43.~~ Prior to the issuance of a final certificate of occupancy for Building A and/or Building B, a L.L.S. certified "As-Built" site plan shall be provided to the Town of Hudson Planning Department confirming that Building A and/or Building B, as appropriate, conform to the Plan.

~~43.44.~~ The Applicant shall coordinate with the Fire Department on the appropriate location and type of gate for use on Steele Road, and coordinate the Fire Department's access requirements through such gate, to reach and use the Steel Road Easement.

~~44.45.~~ The Applicant shall convey conservation easements for the 30 +/- acres along the Merrimack (the "Merrimack River Conservation Easement"), as well as the 90 +/- acres along the easterly side of the Property (the "Eastern Conservation Easement"), in a form acceptable to the Town Planner and Town Attorney.

~~45.46.~~ The Eastern Conservation Easement shall not allow access to the general public but the use shall be strictly limited to rights for the Conservation Commission (or its agents) to enter and access the conservation easement Areas for the sole purpose of monitoring and maintaining the Eastern Conservation Easement areas.

~~46.47.~~ As a part of the proposed Merrimack River Conservation Easement, the Applicant shall also grant a public trail easement where, once completed, the public's use of the trail easement for passive recreation purposes (walking, jogging, bicycling, and cross country skiing, snowshoeing) shall be limited between dawn and dusk. The limits of the public trail easement shall extend from the northern boundary of the Property, adjacent to Merrimack River and the Circumferential Highway bridge, and running southerly within said conservation easement to the southerly boundary of the Property located within the conservation easement. The Town has the right, but not the obligation, to design, permit, construct, repair and maintain such trail improvements as deemed necessary for the purposes described above, subject to any permits, approvals or conditions which may be imposed by the NHDES.

~~47.48.~~ The Applicant shall convey a 30-foot-wide non-exclusive easement to the Town which extends from Steele Road westerly to the Merrimack River as depicted on the Site Plan. The easement shall not allow access to the general public, except for the

area of the easement located within the 250-foot shoreland area for the trail easement purposes described in Condition ~~No. 5#46~~ above, but the use of the easement shall otherwise be strictly limited to Town of Hudson and its emergency services personnel to access the Merrimack River for water withdrawal or other public safety uses, and for the Town of Hudson Conservation Commission members for purposes of using said easement for access for purposes of monitoring compliance with the landscape requirements contained within the Merrimack River Conservation Easement as described in the Decision, and thereafter, for purposes of maintaining the vegetation within the Merrimack River Conservation Easement, as needed. Access over this easement area shall be restricted utilizing the existing swing gate on the existing driveway, with use of the gate to be coordinated with emergency services. This gate is noted to remain on drawings CS100 and CS120. As a part of this easement, the applicant grants the town an easement, of sufficient size, from the end of the constructed access drive, through the 250-foot shoreland area, to the river, allowing the town the right, but not the obligation, to design, permit, and install the infrastructure, such as a turn around, or other infrastructure the Town and Fire Department require within said 250-foot shoreland boundary as deemed necessary for the emergency services purposes described above, through a design, permitting and construction process separate from the Applicant's permitting process. The language of the easement is subject to the Town Planner's and Attorney's approval, and shall include a temporary easement to allow for the construction of improvements described in Condition #11.g above.

~~48.49.~~ A General State Permit (GSP) for Internal Combustion Engines – Emergency Generators or Fire Pump Engines ~~is shall be~~ required for each unit to be included for Building A and Building B for the backup power emergency generators in accordance with ENV-A-610, and shall be secured prior to the issuance of a certificate of occupancy for each building.

~~49.50.~~ The off-site roadway improvements depicted in the Traffic Impact Study and Conceptual Off-Site Improvement Plans ~~to shall~~ be substantially completed, such that the impact of the development's traffic is addressed.

The following shall be completed prior to the issuance of a Certificate of Occupancy for Building C:

~~50.51.~~ Prior to the issuance of a final certificate of occupancy for Building C, a L.L.S. certified "As-Built" site plan shall be provided to the Town of Hudson Planning Department confirming that the Building C site conforms to the Plan.

~~51.52.~~ A General State Permit (GSP) for Internal Combustion Engines – Emergency Generators or Fire Pump Engines ~~is shall~~ required for each unit to be included for Building C for the backup power emergency generators in accordance with ENV-A-610, and shall be secured prior to the issuance of a certificate of occupancy for each building.

~~52.53.~~ HVAC equipment plans for Building C shall be consistent with Buildings A and B, keeping in mind acoustical performance to ensure project noise goals are met in compliance with Hudson Ordinances.

Other conditions:

~~53.54.~~ Upon completion of construction, evidence of retained contractor's Salt Application Certification under the NHDES Green SnowPro Certification Program shall be submitted to the Town Planner.

~~54.55.~~ The Applicant shall be obligated to maintain the paved portions of the Steele Road Easement from the paved limits of the easement along the westerly end of the site, easterly to the Steele Road gate.

~~55.56.~~ The Applicant shall provide additional evergreen landscaping for the purposes of screening 267 Lowell Road.

~~56.57.~~ The buildings ~~will~~shall have internal refuse control and dumpsters and compactors directly connected to the building, and occupying loading dock bays. There ~~are~~shall be no freestanding dumpsters elsewhere on the site. Therefore the trash removal activity will be very similar to other truck activity on the site.

~~57.58.~~ The recommendations in the March 2, 2020 Memorandum to Brian Groth, Town Planner, from Robert Buxton, Fire Chief, ~~are~~shall be implemented and comply with the conditions contained therein relating to fire suppression and public safety to the reasonable satisfaction of the Fire Chief, and written Fire Department acknowledgement of compliance with such recommendations shall constitute satisfaction of this condition.

~~58.59.~~ The Project shall comply with the vehicle idling requirements of New Hampshire regulation ENV-A-1100, as amended, unless otherwise exempt.

~~59.60.~~ The Applicant shall equip all terminal tractors with smart, ambient sensing, multi-frequency back-up alarms.

~~60.61.~~ All water and sewer infrastructure requirements shall be provided in accordance with Town's regulations and guidelines in coordination with the Town Engineer.

~~61.62.~~ All Tier II reporting requirements shall be followed each year for all facilities if there will be inside or outside storage above the exempt amounts of hazardous materials, liquids or chemicals presenting a physical or health hazard as listed in the International Building Code, Sections 307, 414 or 415.

~~62.63.~~ All storage either inside or outside of hazardous materials, liquids or chemicals presenting a physical or health hazard as listed in NFPA 1, Section 20.15.2.2 shall be in accordance with the applicable portions of the following:

- a. NFPA 13, Standard for the Installation of Sprinkler Systems
- b. NFPA 30, Flammable and Combustible Liquids Code;
- c. NFPA 308, Code for the Manufacture and Storage of Aerosol Products
- d. NFPA 230, Standard for the Fire Protection of Storage;
- e. NFPA 430, Code for the Storage of Liquid and Solid Oxidizers;
- f. NFPA 432, Code for the Storage of Organic Peroxide Formulations; and,
- g. NFPA 434, Code for the Storage of Pesticides.

~~63.~~64. The fire alarm system shall be connected to the Hudson Fire Department's municipal fire alarm system or a substantially equivalent system in accordance with the Hudson Town Code, Chapter 210. A site plan detailing the aerial or underground layout to the municipal fire alarm connection must be provided before the utilities are completed for this project.

~~64.~~65. Any required fire alarm system component ~~must~~shall remain accessible and visible at all times.

66. Upon commencement of operations of the completed improvements, drivers ~~will~~shall be allowed to take their Federal Motor Carrier Safety Administration (FMCSA) Hours of Service Regulations required non-driving interruptions and off-duty break periods on the Property.

67. Based upon the Town Engineer's recommendations, the Stormwater Management and Erosion Control Plan (SMECP) is hereby approved as the Project complies with Chapter 290, and the property owner of record shall record at the Registry of Deeds documentation sufficient to provide notice to all persons that may acquire any property that the property is subject to the requirements and responsibilities described within the approved SMECP, including the operation and maintenance requirements and all BMPs.

68. The Applicant agrees to provide \$250,000 to the Town of Hudson's sidewalk fund for the purpose of funding a sidewalk along the easterly side of Lowell Road extending from Rena Avenue to Wal-Mart Boulevard. In the event these funds are not used in this location, these funds may be used for general sidewalk purposes consistent with the purposes of this fund.

69. The Applicant agrees to fund the following potential future improvements at the town intersection of Lowell Road/Wason Road/Flagstone Drive as identified in the Traffic Impact Study, dated September, 2020. The Applicant shall fund the physical improvements in the form of an escrow account with \$100,000 increments up to \$1,000,000, as needed and requested by the Engineering Department, which may include:

- a. Widening the northbound approach to provide an exclusive left-turn lane, three through lanes and two exclusive right-turn lanes;
- b. Widening the eastbound approach to provide a shared left-turn/through lane and two exclusive right-turn lanes;
- c. Widening to provide an additional northbound receiving lane on the north side of the intersection that becomes an exclusive right-turn lane into the Market Basket plaza; and,
- 65.d. Installing variable lane usage signing/controls for the northbound approach to allow for two exclusive left-turn lanes, two through lanes and two exclusive right-turn lanes during the weekday morning commuter peak to account for the high volume of left-turning traffic onto Flagstone Drive.

~~66. In agreement with the Applicant and the Planning Board hereby assesses the following off-site exaction fees in the total amount of \$7,750,000.00, to be paid by the Applicant to offset the impacts caused by the development and for the purposes presented by the Applicant at the March 10, 2021 Planning Board hearing. These are to be paid on a schedule and in a manner consistent with a proposal to be provided by the Applicant, as reviewed and approved by the Town Planner, Town Administrator and Town Counsel.~~

70. The Applicant has voluntarily offered to provide funding to the Town as set forth in the *Scope and Schedule - Impact Mitigation and Exactions*, which is attached hereto, to be assessed as exactions and as a condition of approval. The Planning Board hereby assesses said fees in the total amount of \$7,750,000.00, which shall be paid by the Applicant to offset the impacts caused by the development. These fees are described in full detail in the document entitled “*Scope and Schedule - Impact Mitigation and Exactions*,” which shall be included as Exhibit A to the Development Agreement, to be recorded at the HCRD. The Applicant agrees that the fees are properly assessed as off-site exactions as permitted by applicable law.

Site Plan Decision DRAFT - May 5, 2021

***Clean Copy*****APPROVE the site plan application:**

I move to approve the Site Plan application for the Hudson Logistics Center; prepared by: Langan Engineering & Environmental Services, Inc., 888 Boylston St., Boston, MA 02116; prepared for: Hillwood Enterprises, L.P, 5050 W. Tilghman St., Suite 435, Allentown, PA 18104; and, Greenmeadow Golf Club, Inc., C/O Thomas Friel, 55 Marsh Rd., Hudson, NH 03501; dated April 21, 2020; last revised March 10, 2021; subject to, and revised per, the following stipulations:

1. All stipulations of approval shall be incorporated into the Development Agreement, which shall be recorded at the HCRD, together with the Plan.
2. The “Applicant” refers to Hillwood Enterprises, L.P., 5050 W. Tilghman Street, Suite 435, Allentown, Pennsylvania 18104, c/o Brian Kutz, Vice President - Development, the Applicant with respect to this Decision, its successors and assigns.
3. This decision hereby approves the use of the three warehouse distribution facility buildings including associated accessory uses, as non-sort facilities, as defined by the “Trip Generation Manual, 10<sup>th</sup> Edition Supplement”, dated February 2020 by the Institute of Traffic Engineers. Any use other than a non-sort facility shall be deemed a new use and/or change of use, and shall be subject subject to site plan review and approval by the Planning Board.
4. A cost allocation procedure (CAP) shall be paid prior to the issuance of a Certificate of Occupancy for each building as follows: \$944,885.75 for Building A, \$713,890.80 for Building B, and \$376,189.24 for Building C.
5. Subject to final administrative review by the Town Planner and Town Engineer.
6. The plan shall be subject to receiving an Alteration of Terrain Permit and Wetlands Permit from NH DES.
7. The plan shall be subject to approval of the traffic mitigation plan by NH DOT.
8. Construction activities involving this plan shall be limited to the hours between 7:00 A.M. and 7:00 P.M., Monday through Saturday. No exterior construction shall occur on Sunday.
9. For purposes of this site plan approval, the term “active and substantial development or building” shall mean the construction of the site improvements on the Property relating to Building A and Building B, to include construction of Green Meadow Drive

and the access to Walmart Boulevard, construction of the fire lanes, utilities, and corresponding stormwater facilities, all as to be shown on the construction phasing plan approved by the Town Planner as described above.

10. "Substantial completion" shall be defined as completion of Buildings A and B.
11. Per HR 276-4, the Applicant shall post with the Town of Hudson a performance surety in an amount to be approved by the Town Engineer in a form approved by the Town Attorney, if necessary.
12. No construction vehicles shall park or stand on residential streets. The use of Steele Road by construction vehicles shall cease upon establishment of the proposed access ways.
13. The proposed buildings shall require an approved sprinkler system. The Hudson Fire Department upon review of the building plans shall conduct this review. This requirement is in accordance with the International Building Code (IBC) and Hudson Town Code (HTC), current revision, Chapter 21O, Article VI. Any fire protection system shall be monitored by an approved fire alarm system.
14. The final plans shall be amended to include the following:
  - a. Note 18 on Sheet CS003 shall be amended to provide that "all proposed utilities will be located underground except as waived by the Planning Board."
  - b. Note 39 on Sheet CS003 shall be deleted and replaced with the following: "All signs are subject to approval by the Zoning Administrator/Code Enforcement Officer prior to installation thereof."
  - c. The Planning Board requests the applicant not to install street lighting along Steele Road, and a plan note shall reflect this condition.
  - d. Sheet CS 119 shall be amended to remove the light pole fixture from the shoreland protection area.
  - e. The final plan set shall properly index Sheet CP 125, which was misplaced in the most recent revision plan set.
  - f. Shall be subject to any comments and adjustments as required by the NHDES.
  - g. A temporary turnaround for emergency vehicles shall be installed at the westerly terminus of the Steele Road access easement outside the shoreland protection area, until such time as the design, permitting and installation of the permanent infrastructure such as a turnaround, or



other infrastructure that the Town or Fire Department desires within the shoreland protection area is complete as described in Condition #47 below.

The following shall be completed prior to the issuance of a building permit for Building A and/or B:

15. The Applicant shall meet with the Fire Chief and Town Planner to review and develop a schedule for the implementation of the Fire Chief's recommendations and requirements described in the Fire Chief's March 2, 2021 Memorandum to Brian Groth, Town Planner. Notwithstanding the timing of the implantation of the Fire Chief's recommendations in his March 2, 2021 memorandum and in this decision, the Fire Chief (in consultation with the Town Planner and the Applicant), may modify the timing of the implementation of such requirements.
16. Prior to the issuance of a building permit the applicant shall secure a contract and pay in full for a tower truck with the design, vendor and construction schedule approved by the Hudson Fire Chief, utilizing funds identified in Condition #70. Timing of this deliverable may be modified with the Hudson Fire Chief's approval.
17. Prior to the issuance of a building permit the applicant shall meet with the Hudson Fire Chief to identify technical rescue training programs and equipment needs as identified by the Hudson Fire Department, utilizing funds identified in Condition #70. The applicant shall pay for this additional training and equipment in entirety. Timing of this deliverable may be modified with the Hudson Fire Chief's approval.
18. The Inspectional Services Division and Planning Department shall be provided with a construction schedule, which shall include the details, timing, construction phasing plan, and related safety measures for the demolition and construction of the on-site and off-site improvements.
19. The Applicant shall schedule a pre-construction meeting with the Town Engineer and other Town Staff.
20. The Applicant shall provide the Town Planner and Town Engineer for its review and approval a phased construction plan for Green Meadow Drive so that no detour to the Mercury Systems building (267 Lowell Rd) is required during the construction of the roadway.
21. The earthen berm and sound fence shall be constructed prior to the issuance of any building permit of Building A and/or Building B.

22. The Applicant shall construct and stabilize the earthen berm as designed at the height and length shown in drawings to mitigate potential sound and visual impacts.
23. The Applicant shall install an approximately 2,000-foot-long noise control fence along the spline of the proposed earthen berm as designed and presented.
24. The Applicant shall install an approximate  $\pm 785$ -foot-long fence as designed and presented near the southeastern corner of Building C to mitigate potential visual impacts and noise to off-site residential receptors.
25. The sound fence shall meet the following requirements to be confirmed by the Town Engineer:
  - a. The fence needs to be solid, without openings, and a minimum surface weight of 7 lbs/SF.
  - b. Appropriate materials of construction for the fence to include natural, non-reflective materials such as wood or wood composite.
  - c. The fence must be designed to resist wind load and will have engineered footings.
  - d. In the event the sound fence fails to meet the standards set forth in the sound study, the Applicant, at their sole expense, shall remediate the fence to ensure full compliance with said standards, which shall be confirmed by the Town Engineer.

The following shall be completed prior to the issuance of a building permit for Building C:

26. Prior to the issuance of a building permit for Building C, a post opening traffic assessment subsequent to the opening and normal operations of Buildings A and B shall be conducted by the Applicant. This assessment must confirm the Project's proposed traffic mitigation as evaluated in the submitted traffic impact study ("TIS"), if necessary. This information will be provided to the Town Planner to confirm the actual operations of the two buildings. No additional Planning Board action is required.
27. The post opening traffic evaluation shall be conducted during a period of the Building A & B operations that mimic the period evaluated in the TIS. The study is anticipated to be undertaken within six months after the commencement of full operations of Building A and Building B, or other period agreeable to the Applicant and the Town Planner.
28. The Applicant shall present the post opening traffic evaluation to the Town Planner and Town Engineer, and if requested, to a peer review firm selected by the town and paid for by the Applicant, all for the purpose of confirming the TIS recommendations.
29. If the post-opening traffic evaluation identifies post-occupancy operating conditions which identify operational impacts differing from those identified in the TIS, the

Applicant may be required to perform additional mitigation to the extent permitted by the Town in cooperation with NHDOT.

30. The Applicant shall provide evidence to the Town Planner and Code Enforcement Officer demonstrating that Building C shall comply with the Building Height limitations as required by the Zoning Ordinance.

31. Steele Road shall be addressed as indicated in plan notes, or by other lawful means.

Conditions related to construction practices:

32. There shall be weekly construction meetings scheduled and available for attendance by Town staff until such time as Inspectional Services reasonably determines that weekly inspections, or less frequent or no further scheduled meetings are necessary.

33. The Applicant shall pay for the cost of locating a construction trailer on the site (with appropriate HVAC, electrical, and other utilities) to support a work space for the Town of Hudson Inspectional Service and Land Use Divisions. The Applicant shall also pay for the retention of inspector(s) solely for the purpose of inspecting the construction and project for the duration of the project as reasonably agreed by the Applicant and Fire Chief. The inspectional services trailer shall be located on the site within thirty (30) days after notice by the Inspectional Services Division to the Applicant, but not later than the commencement of construction of the first building foundation, and remain on the site until the Certificate of Occupancy is issued for the last building or as otherwise agreed between the Applicant and Fire Chief.

34. All new gas, telephone, cable, electric and other utilities, except for temporary utilities, shall be installed underground as specified by the respective utility companies unless otherwise waived, or except for so called "green utility boxes" or other aboveground poles or structures as may be required by the utility companies, and except as may otherwise be temporarily required to effect the movement and operation of any other temporary improvements. If final locations of appurtenant equipment to these utilities (e.g. transformer pads) not shown on the Plans materially impact the design, the Applicant and/or Project Owner shall provide such details of such modification to the Town Planner for review.

35. Additional stormwater and infiltration testing shall be performed during construction to complete the design, and all infiltration testing results shall be submitted to the engineer of record, the Town Planner, the Town Engineer, and the NHDES Permitting Department for review.

36. A blasting permit shall be required for any blasting on the site in accordance with the Hudson Town Code, Chapter 202.

37. During construction, the Applicant shall submit plans for controlling fugitive dust during excavation and construction include mechanical street sweeping, wetting and/or misting portions of the site during periods of high wind, and careful removal of debris by covered trucks.
38. The construction contract shall provide measures to be used by contractors to reduce potential emissions and minimize impacts. These measures are expected to include:
  - a. Using wetting agents on area of exposed soil on a scheduled basis;
  - b. Using covered trucks to transport any debris or other materials to or from the site;
  - c. Monitoring of actual construction practices to ensure that unnecessary transfers and mechanical disturbances of loose materials are minimized;
  - d. Minimizing storage of debris on the site; and
  - e. Periodic street and sidewalk cleaning with water to minimize dust accumulations.
  - f. Limit maximum travel speeds on unpaved areas; and
  - g. Provide wheel wash stations to limit trackout of soil during the excavation phase.
39. Construction equipment engines shall comply with requirements for the use of ultra-low sulfur diesel (ULSD) in off-road engines. The construction contractor will be encouraged to use diesel construction equipment with installed exhaust emission controls such as oxidation catalysts or particulate filters on their diesel engines.
40. All trucks leaving the site shall have all dirt/mud removed from the wheels and undercarriage of the truck prior to leaving the site. In addition, any loads containing soil for off-site disposal shall be covered.
41. Construction vehicles and equipment shall not be permitted to be washed in the streets outside of the Project site. Excess water from the wheel wash stations shall be managed and catch basins in the surrounding street will be protected from potential runoff from the cleaning operations.
42. The Applicant shall encourage contractors to use proper emission controls, use of clean fuels, control of truck and equipment idling times.

The following shall be completed prior to the issuance of a Certificate of Occupancy for Building A and/or Building B:

43. Prior to the issuance of a final certificate of occupancy for Building A and/or Building B, a L.L.S. certified "As-Built" site plan shall be provided to the Town of

Hudson Planning Department confirming that Building A and/or Building B, as appropriate, conform to the Plan.

44. The Applicant shall coordinate with the Fire Department on the appropriate location and type of gate for use on Steele Road, and coordinate the Fire Department's access requirements through such gate, to reach and use the Steel Road Easement.
45. The Applicant shall convey conservation easements for the 30 +/- acres along the Merrimack (the "Merrimack River Conservation Easement"), as well as the 90 +/- acres along the easterly side of the Property (the "Eastern Conservation Easement"), in a form acceptable to the Town Planner and Town Attorney.
46. The Eastern Conservation Easement shall not allow access to the general public but the use shall be strictly limited to rights for the Conservation Commission (or its agents) to enter and access the conservation easement Areas for the sole purpose of monitoring and maintaining the Eastern Conservation Easement areas.
47. As a part of the proposed Merrimack River Conservation Easement, the Applicant shall also grant a public trail easement where, once completed, the public's use of the trail easement for passive recreation purposes (walking, jogging, bicycling, and cross country skiing, snowshoeing) shall be limited between dawn and dusk. The limits of the public trail easement shall extend from the northern boundary of the Property, adjacent to Merrimack River and the Circumferential Highway bridge, and running southerly within said conservation easement to the southerly boundary of the Property located within the conservation easement. The Town has the right, but not the obligation, to design, permit, construct, repair and maintain such trail improvements as deemed necessary for the purposes described above, subject to any permits, approvals or conditions which may be imposed by the NHDES.
48. The Applicant shall convey a 30-foot-wide non-exclusive easement to the Town which extends from Steele Road westerly to the Merrimack River as depicted on the Site Plan. The easement shall not allow access to the general public, except for the area of the easement located within the 250-foot shoreland area for the trail easement purposes described in Condition #46 above, but the use of the easement shall otherwise be strictly limited to Town of Hudson and its emergency services personnel to access the Merrimack River for water withdrawal or other public safety uses, and for the Town of Hudson Conservation Commission members for purposes of using said easement for access for purposes of monitoring compliance with the landscape requirements contained within the Merrimack River Conservation Easement as described in the Decision, and thereafter, for purposes of maintaining the vegetation within the Merrimack River Conservation Easement, as needed. Access over this easement area shall be restricted utilizing the existing swing gate on the existing driveway, with use of the gate to be coordinated with emergency services. This gate is noted to remain on drawings CS100 and CS120. As a part of this easement, the applicant grants the town an easement, of sufficient size, from the end of the constructed access drive, through the 250-foot shoreland area, to the river, allowing

the town the right, but not the obligation, to design, permit, and install the infrastructure, such as a turn around, or other infrastructure the Town and Fire Department require within said 250-foot shoreland boundary as deemed necessary for the emergency services purposes described above, through a design, permitting and construction process separate from the Applicant's permitting process. The language of the easement is subject to the Town Planner's and Attorney's approval, and shall include a temporary easement to allow for the construction of improvements described in Condition #11.g above.

49. A General State Permit (GSP) for Internal Combustion Engines – Emergency Generators or Fire Pump Engines shall be required for each unit to be included for Building A and Building B for the backup power emergency generators in accordance with ENV-A-610, and shall be secured prior to the issuance of a certificate of occupancy for each building.
50. The off-site roadway improvements depicted in the Traffic Impact Study and Conceptual Off-Site Improvement Plans shall be substantially completed, such that the impact of the development's traffic is addressed.

The following shall be completed prior to the issuance of a Certificate of Occupancy for Building C:

51. Prior to the issuance of a final certificate of occupancy for Building C, a L.L.S. certified "As-Built" site plan shall be provided to the Town of Hudson Planning Department confirming that the Building C site conforms to the Plan.
52. A General State Permit (GSP) for Internal Combustion Engines – Emergency Generators or Fire Pump Engines shall required for each unit to be included for Building C for the backup power emergency generators in accordance with ENV-A-610, and shall be secured prior to the issuance of a certificate of occupancy for each building.
53. HVAC equipment plans for Building C shall be consistent with Buildings A and B, keeping in mind acoustical performance to ensure project noise goals are met in compliance with Hudson Ordinances.

Other conditions:

54. Upon completion of construction, evidence of retained contractor's Salt Application Certification under the NHDES Green SnowPro Certification Program shall be submitted to the Town Planner.
55. The Applicant shall be obligated to maintain the paved portions of the Steele Road Easement from the paved limits of the easement along the westerly end of the site, easterly to the Steele Road gate.

56. The Applicant shall provide additional evergreen landscaping for the purposes of screening 267 Lowell Road.
57. The buildings shall have internal refuse control and dumpsters and compactors directly connected to the building, and occupying loading dock bays. There shall be no freestanding dumpsters elsewhere on the site. Therefore the trash removal activity will be very similar to other truck activity on the site.
58. The recommendations in the March 2, 2020 Memorandum to Brian Groth, Town Planner, from Robert Buxton, Fire Chief, shall be implemented and comply with the conditions contained therein relating to fire suppression and public safety to the reasonable satisfaction of the Fire Chief, and written Fire Department acknowledgement of compliance with such recommendations shall constitute satisfaction of this condition.
59. The Project shall comply with the vehicle idling requirements of New Hampshire regulation ENV-A-1100, as amended, unless otherwise exempt.
60. The Applicant shall equip all terminal tractors with smart, ambient sensing, multi-frequency back-up alarms.
61. All water and sewer infrastructure requirements shall be provided in accordance with Town's regulations and guidelines in coordination with the Town Engineer.
62. All Tier II reporting requirements shall be followed each year for all facilities if there will be inside or outside storage above the exempt amounts of hazardous materials, liquids or chemicals presenting a physical or health hazard as listed in the International Building Code, Sections 307, 414 or 415.
63. All storage either inside or outside of hazardous materials, liquids or chemicals presenting a physical or health hazard as listed in NFPA 1, Section 20.15.2.2 shall be in accordance with the applicable portions of the following:
  - a. NFPA 13, Standard for the Installation of Sprinkler Systems
  - b. NFPA 30, Flammable and Combustible Liquids Code;
  - c. NFPA 308, Code for the Manufacture and Storage of Aerosol Products
  - d. NFPA 230, Standard for the Fire Protection of Storage;
  - e. NFPA 430, Code for the Storage of Liquid and Solid Oxidizers;
  - f. NFPA 432, Code for the Storage of Organic Peroxide Formulations; and,
  - g. NFPA 434, Code for the Storage of Pesticides.
64. The fire alarm system shall be connected to the Hudson Fire Department's municipal fire alarm system or a substantially equivalent system in accordance with the Hudson Town Code, Chapter 210. A site plan detailing the aerial or underground layout to the municipal fire alarm connection must be provided before the utilities are completed for this project.

65. Any required fire alarm system component shall remain accessible and visible at all times.
66. Upon commencement of operations of the completed improvements, drivers shall be allowed to take their Federal Motor Carrier Safety Administration (FMCSA) Hours of Service Regulations required non-driving interruptions and off-duty break periods on the Property.
67. Based upon the Town Engineer's recommendations, the Stormwater Management and Erosion Control Plan (SMECP) is hereby approved as the Project complies with Chapter 290, and the property owner of record shall record at the Registry of Deeds documentation sufficient to provide notice to all persons that may acquire any property that the property is subject to the requirements and responsibilities described within the approved SMECP, including the operation and maintenance requirements and all BMPs.
68. The Applicant agrees to provide \$250,000 to the Town of Hudson's sidewalk fund for the purpose of funding a sidewalk along the easterly side of Lowell Road extending from Rena Avenue to Wal-Mart Boulevard. In the event these funds are not used in this location, these funds may be used for general sidewalk purposes consistent with the purposes of this fund.
69. The Applicant agrees to fund the following potential future improvements at the town intersection of Lowell Road/Wason Road/Flagstone Drive as identified in the Traffic Impact Study, dated September, 2020. The Applicant shall fund the physical improvements in the form of an escrow account with \$100,000 increments up to \$1,000,000, as needed and requested by the Engineering Department, which may include:
  - a. Widening the northbound approach to provide an exclusive left-turn lane, three through lanes and two exclusive right-turn lanes;
  - b. Widening the eastbound approach to provide a shared left-turn/through lane and two exclusive right-turn lanes;
  - c. Widening to provide an additional northbound receiving lane on the north side of the intersection that becomes an exclusive right-turn lane into the Market Basket plaza; and,
  - d. Installing variable lane usage signing/controls for the northbound approach to allow for two exclusive left-turn lanes, two through lanes and two exclusive right-turn lanes during the weekday morning commuter peak to account for the high volume of left-turning traffic onto Flagstone Drive.



70. The Applicant has voluntarily offered to provide funding to the Town as set forth in the *Scope and Schedule - Impact Mitigation and Exactions*, which is attached hereto, to be assessed as exactions and as a condition of approval The Planning Board hereby assesses said fees in the total amount of \$7,750,000.00, which shall be paid by the Applicant to offset the impacts caused by the development. These fees are described in full detail in the document entitled “*Scope and Schedule - Impact Mitigation and Exactions*,” which shall be included as Exhibit A to the Development Agreement, to be recorded at the HCRD. The Applicant agrees that the fees are properly assessed as off-site exactions as permitted by applicable law.

*Scope and Schedule – Impact Mitigation and Exactions*

**STEM Program for CTE: \$3 million**

Intent: To provide annual funding for a period of ten years for STEM related activities and/or training at the Palmer CTE School.

Payable: \$300,000 annual payments for 10 years beginning at time of issuance of first Certificate of Occupancy (C.O.) and recurring on that anniversary. Payments to be made to SAU 81. In lieu of the foregoing scheduled annual payments, payments may be made according to such terms as may be mutually agreed upon between the School Board and the Applicant, including, by way of example, a single lump sum payment at an agreed upon present value.

**Riverfront Recreation: \$1.5 million**

Intent: To identify, plan, design, construct and procure necessary equipment related to public recreation & an emergency services boat ramp associated with the Merrimack River.

Payable: \$500,000 annual payments for 3 years beginning at time of issuance of first C.O. and recurring on that anniversary.

**Shoreline Improvement: \$500,000**

Intent: To identify, plan, design, construct and procure necessary equipment related to public recreational trails along the Merrimack River, including within the easement area identified in the Applicant's plans.

Payable: payable at time of issuance of first C.O.

**Public Safety: \$1 million**

Intent: To provide the Fire and Police Department's with training and equipment necessitated by the development.

Payable: Prior to issuance of building permits for Building A and/or B. Timing of this deliverable may be modified with the Hudson Fire Chief's and Police Chief's approval.

**Fire Department Platform Truck: \$1.4 million**

Intent: To procure a platform truck needed to service the proposed buildings.

Payable: prior to issuance of building permits for Building A and/or B. Timing of this deliverable may be modified with the Hudson Fire Chief's approval.

**Master Planning: \$200,000**

Intent: To provide funding to the Hudson Planning Board and Planning Department to conduct Master Planning activities, including public outreach.

Payable: \$100,000 annual payments for 2 years beginning at time of first building permit either Building A or B, and recurring on that anniversary.

**Community Fee: \$100,000**

Intent: To support the Town of Hudson's Community Grants program.

Payable: at time of first C.O.

**Regional Hazardous Materials Program: \$50,000**

Intent: To support the regional Hazmat program.

Payable: at time of first C.O.

## Dubowik, Brooke

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**From:** pgrol@aol.com  
**Sent:** Friday, April 16, 2021 2:57 PM  
**To:** Groth, Brian; McGrath, Marilyn; Planning; Coutu, Roger  
**Subject:** Road Maintenance Question for Hillwood

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**EXTERNAL: Do not open attachments or click links unless you recognize and trust the sender.**

At the April 7 PBM the question of road maintenance was discussed. Hillwood's response was that it was the State of NH responsibility therefore not a Hudson problem.

The thing they didn't address was with thousands of loaded trucks traveling on Lowell road Sagamore road, the Sagamore bridge and the route 3 ramps 365 days a year how often will repairs be required..

According to statistics available on line one tractor trailer does 10,000 times more damage than a car and is equivalent to over 9000 cars per trip.

This would make one wonder how often we will see LANE CLOSED signs up for road repair on these critical roadways. These repairs are not usually a quick fix especially when the bridge is involved.

Does Hillwood have a traffic mitigation plan for when this situation arises? ( alternate routes ? )

The repair may be a state responsibility but the resulting traffic problem belongs to Hudson.

I would appreciate this question be asked of Hillwood at one of the upcoming meetings.

Thank you  
Paul Groleau  
18 Fairway Drive  
42 year resident of Hudson

## Dubowik, Brooke

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**From:** Linda Zarzatian <zarzatian@gmail.com>  
**Sent:** Sunday, April 18, 2021 7:28 PM  
**To:** ~BoS; Groth, Brian; Planning  
**Subject:** sewer and hillwood for green meadow

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**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Dear Board Members,

I would like to make another plea to save our town.

When I awake in the middle of the night and do not hear traffic or trucks it is a wonderful thing. I truly hope and pray it can stay that way for all of us in southern Hudson. We definitely have plenty of traffic many many times during each day, but once in a while, at say 2 or 3 in the morning, we have a reprieve from massive traffic and it is so so sweet.

If this distribution center is approved we will never ever have a moment of stillness and little traffic again. It is just mind boggling that we may have to have massive traffic and all the noise and pollution from said traffic, 24 hours a day, 7 days a week, 365 days a year. We will not be able to sleep at night. Not sleep at night. That is not conducive to our health and well being here in Hudson.

This can not happen. You have to take into consideration the residents ability to sleep at night. We must be able to sleep at night. It is a simple right of ours. It is well known that if this facility is built we will not be able to sleep at night for many many reasons. You know all the reasons. Please save us from this possibility. Deny the project. Have the hours of operations cease between 11pm and 7am. We need and have a right to sleep in our homes at night.

Once this facility is in operation and everyone is aware that they are over all the limits of all our rules and regulations, then what? What will you do then? Close the facility? This is very dangerous for all residents. This facility, of this massive size, needs to be away from this town and all it's residents.

I would really, really, really, like to know if any one of you board members could foresee you living where we are in southern Hudson with this facility as your neighbor. I think not. That being said please decide on the validity of all they are proposing as if you lived as an abutter of the golf course, where they want to erect this monstrosity.

Please, very seriously, consider all the residents of this town, how many residents are opposed to this project, and why they are opposed to it, when you are deciding on our quality of life here in Hudson.

Our quality of life here in Hudson will be diminished so greatly. There will be continued traffic, noise and pollution every hour of every single day for the rest of our lives if we continue to live here with Amazon, and who knows who else in the 3rd building.

Many of us have chosen to retire here, that is why we feel so strongly about the ruination of our neighborhood and town. We can not believe this is even a possibility. How could this happen here, a wonderful small country town. Amazon? Come on, can you think of anything worse? I can not. It is a known fact that

Amazon treats their employees so poorly. Only a complete desperate person would look for employment with Amazon.

Please reconsider the sewer allocation for Green Meadow. The first Denied vote was legally binding, nothing new was presented by Hillwood or Green Meadow, therefore the second vote is null and void. I thank you for postponing your decision until the resident's lawyer is present for that very important meeting. I feel it is imperative to listen carefully to all the facts she presents on the sewer topic.

I have done all I can to get my point across as simply as I possibly can during this entire proposed project and all its many meetings. As you see the coronavirus is up front and center and the residents lawyer has contracted it. That is the reason I have not been at these meetings. I have always felt that there was a high risk of contracting the virus as we were told not to go into buildings, etc etc. But no one postponed this most important request to develop the Green Meadow Golf Course into the largest distribution center in Northern New England while a life threatening pandemic was killing people all over the world. No, this project was of the utmost importance and it just couldn't wait till we the residents of Hudson could come to all the meetings and feel safe. Many people did attend, but many many more would have, if not for the pandemic. I still feel this was a poor decision. Hillwood was thrilled they just kept trying to push this through as soon as possible. It is quite clear they have a time table they must meet and they will fight to meet that time table as hard as they can. This can not be rushed through. I have heard many board members state that they have not had enough time to go through all of the paperwork. They need time.

I trust you have the very best interest of the town and all its residents and will make the right decision for all of us. The money they are dangling will not give us a safe and healthy life here in Hudson, it is only money. Money cannot buy happiness. Truth, safety, respect, peace and quiet for all human life and wildlife should be the consideration for all of us residents in Hudson.

Thank you for continuing to hear me.

Sleepless in Hudson

## Dubowik, Brooke

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**From:** Mary Palmer <fized@msn.com>  
**Sent:** Sunday, April 18, 2021 2:22 PM  
**To:** Planning  
**Subject:** Planning Board Appreciation

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EXTERNAL: Do not open attachments or click links unless you recognize and trust the sender.

Dear Planning Board Members,

I would like to personally thank the Board for all of their hard work during the deliberations of the Hillwood Project site plan.

This is a huge undertaking at any time, but during a pandemic it is certainly admirable. I realize your time is so valuable and that you have your lives and jobs and you all are willing to give the town of Hudson so much of your spare time. It is much appreciated.

Looking back over the meeting of April 7, I particularly want to commend the Board for beginning the deliberation process with a number of pertinent questions that would ultimately impact our town and all of southern New Hampshire forever...forever. The applicant should meet our codes and not be tailored to meet their needs. I commend Chairman Malley for addressing the applicant when asked what the vote timetable would be. It will be voted when ALL of the town of Hudson's questions, comments and concerns are addressed. Thank you. If that schedule does not please the applicant then Hillwood is certainly free to go elsewhere.

I also commend Mr. Coutu, Mrs. McGrath, Mr. Dumont, Mr. Van de Veen, Mr Velosa and Mr. Oates for voicing their serious concerns at various meetings about the horrendous impact on traffic this project will bring. And it will. Thank you.

I would also like to make a comment about the behavior of one Planning Board member and that is Mr Ulery. I too have noticed that through this year, Mr Ulery has been at the least distracted by his cell phone or at the worst been bored, tired or just plain disinterested. This project is the largest one that will ever affect New Hampshire and I am offended by Mr Ulery' lack of interest but also by the comments he made on Facebook, during the April 7th meeting when he was supposed to be paying attention!

I too, as well as Mrs Vurgaropulos, commented why he was on Facebook instead of listening to the meeting he was in. And he basically told me that I didn't know what I was talking about and that he had done his research. I am paraphrasing because Mr. Ulery has since deleted the comment. He not only answers questions during meetings, he also posts clips about various things having nothing to do with this Hillwood project. It's usually about music or American politics or freedom of speech.

Now I'm all for multitasking, but not while your tasked with this job at hand. And because of his dismissive answers to the public when questioned, I believe he should vacate his seat on the Planning Board immediately. If he's not interested in what's going on, I for one am not interested in his service.

Thank you all very much.

Respectfully submitted.

Mary Palmer

## Dubowik, Brooke

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**From:** John Dubuc <johnnygd24@gmail.com>  
**Sent:** Tuesday, April 20, 2021 8:04 PM  
**To:** Planning; ~BoS; Malizia, Steve; Groth, Brian  
**Subject:** HLC Concerns  
**Attachments:** JDubuc\_April13\_2021\_Comments.docx; JDubucNoiseConcerns1March2021.docx

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**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Good Evening Team,

I want to thank most of the Planning Board Members for an engaging meeting on April 7, 2020. There were some tough questions by many board members that began to really look at the impact that this facility will have on the Town of Hudson and our residents. My hope is that you will continue with these hard hitting questions and will look in depth on the issues that many residents have brought to your attention regarding this Massive Industrial Complex.

I read an Boston Globe article about Needham Officials attempting to block Amazon from a site on Rt. 128. The president of the Chamber of Commerce stated "That's really the gateway to Needham" and "You want something aspirational to appear in that spot, not a big warehouse with trucks coming in at all hours of the day"

You could change the Town of Needham and put Hudson in that statement. Do we really want folks entering Hudson from Exit 2 (the Gateway to Hudson) to see Massive 50 Foot Buildings where a Beautiful Golf Course exists right now. And they will have plenty of time to see the buildings with all of the additional time they will be waiting in the traffic that will be generated by this project.

I want to speak about something that I took exception to at the Planning Board meeting and want to bring to your attention in case you are not aware of it. On quite a few of the items that were brought up by Planning Board members, the Board would ask Hillwood if they were agreeable to the items.

I do not feel that the Planning Board should be asking Hillwood if they agree with items that the Board members are concerned about. If an item needs to be changed, the board should make the changes and not "check" with Hillwood if this is OK. As a resident it appears to me that Hillwood is defining the Conditions and not the Planning Board.

I also felt that Hillwood was attempting to bully the Planning Board into speeding up the process through multiple "asks" to add additional meetings and also asking when the process would be completed.

Mr. Malley did an incredible job managing the meeting and also pushing back on Hillwood when they attempted to speed up the process. I am concerned that they will be rushing this again on April 20, 2021 Planning Board meeting and the project will be rushed with so many outstanding questions.

You began to speak about the residents' concerns and I hope that the Berm that was designed too low for the abutters and the sound study that did not account for the sound travelling over the river. I want to point out also that the generators have little obstruction to the River and the Sound Study calls for "acoustical metal panels, or other hybrid system" and Hillwood is proposing a Wood Wall, these do not appear to be the same to me.

We now also know about the 90 Unit Development on Lowell Road that was approved before the traffic study was done, the Planning Board should require a new traffic Study to incorporate the known traffic that should have been included in the beginning.

One last thing that I want to mention is the "non-sort" Buildings will be delivering items to local Amazon customers. The Fall River Amazon Non-Sort large items facility General Manager stated that they deliver 80,000 to 200,000 boxes per day!

I have attached my letter that I spoke about at the BOS meeting, please read this and take this into consideration as you are working on this project.

Thank you for all you do and for looking out for Hudson and our residents.

John Dubuc  
11 Eagle Drive



Good Evening Selectboard Members,

My name is John Dubuc and I have lived at 11 Eagle Drive since 2002 with my family.

I wanted to begin by letting you know that the majority of Planning Board members that you have appointed did an incredible job beginning to really look into all of the issues and questions surrounding the massive Hillwood\Amazon project that is being proposed for the beautiful Green Meadows Golf Club. I bring this up because you appoint these members and should look at how they handle themselves and the questions that they ask during tough decisions like this before you decide to reappoint them to this important board.

I want to thank the chair, Mr. Malley for allowing the board members to ask some tough questions and particularly for letting the developer know that the Planning Board will not be rushed and bullied into making a quick decision without well thought out questions and also adding conditions that are good for the Town of Hudson and our residents. I used the word bullied because I saw the attempt from this developer to rush this process and bully the Planning Board into a quick decision, bully is defined as (seek to harm, intimidate or coerce) and please remember that it is the person who is listening that determines if it is bullying not the one who acts, I was one of the folks listening and felt this was bullying. I have been frustrated with the developer not answering questions that residents have asked throughout the process and not listening to the residents' views. I was especially troubled when we asked to make reasonable changes to the Berm\Soundwall. Instead of addressing our concerns we were told that the Structure (as the developer called it) was reasonable. At the last Planning Board meeting Selectman Coutu had a great exchange about the sound wall and why the residents will still be seeing the tops of the buildings. I could not believe that the developer asked what would have more visual impact the fence or the buildings, if Hillwood would have reached out and engaged with the abutters to work on a mutually beneficial solution for the neighborhood and the proposed development Mr. Coutu would not have had to ask that question. I hope that the Planning Board heard this and will require a redesign of this Berm Sound fence and the residents can answer this question that the developer asked, what do you want to see, a Fence or a Building, I know what my answer would be, a well-designed berm to block the buildings.

I also want to talk about Traffic and how this development is going to frustrate Hudson residents in their daily commute. The developer stated that they did not know about the 90 unit apartment complex on Lowell Road that is close to being completed. Now that we do, why are we allowing this traffic study that we know is wrong to still be used. I would hope that the Town is requiring a new traffic study to be commissioned as a stipulation before any approvals are granted. I have stated this before, I am still receiving my Amazon Prime shipments within 2 days of placing the order so we can all agree that there is no rush to get this project approved. An updated traffic study should be a requirement. We need to update the original study that the developer stated did not include the traffic from the Hudson residents that will be living in and commuting from these 90 apartments. We owe our newest residents a roadway that will not be fraught with delays and frustrating traffic from all of the Tractor Trailers, Box Trucks and workers travelling the back roads of Hudson and our neighboring communities if this development is approved.

The last thing that I want to speak about is the Sewer Allocation that was given to Hillwood at the January 26, 2021 Selectboard Meeting. This vote was taken after a vote on January 12, 2021 to deny sewer access.

The vote to reconsider should never have been taken. All of the information was available during the first vote and the developer presented what they wanted to and a vote was taken to deny the sewer. Information was not withheld from the developer and they chose what to present on January 12, 2021.

I will again state that the Public Works administrative assistant, The Town Engineer Elvis Dhima and the developer have all stated that the property is outside of the sewer district.

Our Sewer Ordinance is clear on how to allocate, the development:

Is not a community facility, such as hospitals and public utilities

Is not essential for the public health, safety and welfare of Hudson. I cannot see how any reasonable person would state that a non-sort distribution center is essential for the public health, safety and welfare of the Town of Hudson. Please look at Amazons website and ask yourself how patio furniture, outdoor equipment or rugs are essential for the public health, safety and welfare for the Town of Hudson, it is not!

Thank you for providing me the opportunity to speak today. Please right this wrong regarding the sewer vote and follow our Sewer Ordinance that states:

Before the Town of Hudson undertakes an expansion of its wastewater treatment system beyond the existing system boundary, the Town must first provide sewer to all land uses within the presently serviced region and then the Town can plan for possible expansion of the wastewater treatment system to those areas outside of the presently serviced area. Fix the Sewer District if it is wrong, don't just grant access when property is not in the district and give away this limited resource.

Oh, I forgot to speak about the impact of an Amazon Non Sort Distribution Facility. A CNET.com article of The Fall River facility, which is 1.2 Million Square Feet (or 26 Football Fields) stated that they ship Curtain Rods, brooms and even javelins (for track and field) and the manager of the facility stated that these are all shipped within 2 days. Mr, Hanna also stated that this non sort facility ships 80,000 to 100,000 boxes per day and that number can nearly double during the peak holiday season. I hope that this clarifies a little for you what an Amazon non sort facility that ships large items will be shipping, 80,000 to 200,000 boxes per day according to the Fall River General Manager Rich Hanna, wow. This is not what I envisioned for Hudson, I hope that you agree with me.

Good Morning,

I am writing this morning to let you know some concerns that I have with the Sound Study.

With a project his size, it is quite concerning that the neighborhoods around this proposed development may be disrupted 24 Hours a Day, 7 Days a Week, 365 Days a Year. I know that you are all invested in Hudson and want to do the right thing for our Town and I hope that you will commission a more comprehensive INDEPENDENT sound study to ensure we get this right.

1. The OAA Sound Study December 1, 2020 does not list the Microphone and Shroud that was used when the Background Testing was performed
  - a. This is required for "Certified Class 1" Testing, which is called out in the Hudson Town Sound Ordinance 249-3(B)
2. A windscreen is required when outdoor measurements are taken according to the manufacturer's instructions
  - a. The report does not indicate that a Windscreen was utilized. This should have been included in a comprehensive report if it was a part of the testing
3. The Sound Meter must be "calibrated before and after each set of measurements" (Hudson Town Ordinance 249-3(D)(2))
  - a. The report states," The sound level meters were calibrated before and after deployment" and "Weather details for a weather monitor in the area and calibration certificates for survey equipment are included in the Appendix"
  - b. The calibration reports included in the report do not show any calibrations on Aug 6 – 10, 2020
  - c. The calibration reports included have dates between 10 Months and 1 Year/1 Month before testing was performed
4. Town Ordinance 249-3(D)(7) states: Impulsive noise shall be made with the sound-level meter set for fast C-weighting response (This is REQUIRED)
  - a. The report does not indicate that Impulsive noises were measure with the fast C-weighted response.
  - b. The reports states:
    - i. To meet the requirements and standards of Noise Limit 10, site activities including horns and certain idling activities will need to be complied with to ensure that no prohibited noise generating activities are undertaken.
    - ii. Assuming these performance standards are complied with, we conclude the Project will have no issues with meeting these Noise Limits under the Noise Ordinance.
    - iii. Why are these assumptions made and what happens if they do not comply?
    - iv. Information about C-weighted sound:
      1. The C-weighted sound level does not discriminate against low frequencies and measures uniformly over the frequency range of 30 to 10,000 Hz. This weighting scale is useful for monitoring

sources such as engines, explosions, and machinery. The sound levels measured with these two weightings have units of “dBA” and “dBC”, respectively

5. Sound over the water

- a. Sound will travel over water for long distances and can also be amplified. The Sound Study did not account noise travelling over the water. The building sides that are facing the water have minimal items that will absorb or stop the sounds and many neighborhoods about the river and will be exposed to sound that have NOT been taken into effect. We do not know if the Town Sound Ordinance will be violated for sound over the river
- b. The generators for Buildings A and B are on the River Facing side and what will the impact be for a sound source that have a sound power level of 114dbA with no sound wall along the river to block the noise, Again, the Sound Study did not measure sound over the river so we do not know this impact
  - i. My neighborhood can hear the Nashua HS Band Practicing at the Pheasant Lane mall. We can hear this at the end of Eagle drive, far away from the river. This is an enjoyable sound, the sound of 625kW Generators is not a pleasant sound
- c. Noise Control Fence
  - i. The Sound Study notes the following for the fence
    1. Note that to be effective, the sound fence needs to meet the following requirements
      - a. The fence needs to be solid, without openings, and be of sufficient surface weight to force sound to travel over or around the fence and not leak through it. A recommended minimum surface weight for the fence is 7 lbs/ft<sup>2</sup>
      - b. Appropriate materials of construction for the fence include 5 /8-inch thick sheet steel piling, precast or poured-in-place concrete, acoustical metal panels, or other hybrid system specifically manufactured for the purpose
    2. Please see #2 above “acoustical metal panels, or other hybrid system specifically manufactured for this purpose”
      - a. The fence that was shown during the February 24, 2021 Planning Board meeting by the developer was a wooden fence
      - b. John Plante from Langan showed a Wooden or Wood Composite Sound Fence “keeping with the rural nature”
      - c. He did not state that this is a Hybrid System as required by the Sound Study
    3. If the Berm was sufficiently high enough to block the buildings, would the sound fence be required?

6. Berm

- a. The developer showed the Sight Line study to show no buildings would be seen. As you all saw in my markup, many neighbors will see the buildings from their second-floor rooms and neither the Berm or Sound Wall will block any sound to these second-floor homes.

- b. It makes sense that “If you can see it, You can hear it”
- c. The developer spoke about the Berm at the February 24, 2021 Planning Board Meeting and stated according to Town Ordinance there must be a “Reasonably effective buffer”
  - i. I believe that a “Reasonably Effective Buffer” means that no resident should be able to see the buildings and all of the items on top of the building from their second floor
  - ii. This does not seem unreasonable to me and many more residents, living next to a golf course and then having 2.5 Million Square Feet of Industrial Warehouses built.
  - iii. I am still upset that when this was pointed out, the developer did not ask to work with us, instead they told you that this was reasonable, I disagree with them and so should you
  - iv. This is for YOU THE BOARD to determine and NOT the developer, Hillwood should not be telling the board that a Berm and Sound Fence that does not buffer the neighbors abides by the Ordinance. Hillwood cannot read determine what is reasonable, that is your job with input from the neighbors that will need to live with this unsightly Industrial Warehouse for eternity

I know this was a lot of information and I have included it as an attachment which may be easier to read.

I hope that you will get answers to these issues to ensure Hudson is making the right decision for the Town, its residents and the future of Hudson. Please do not vote on anything until all of these outstanding questions and concerns are resolved. I know that I am not the only one with questions but once this project is approved and construction begins the project cannot be undone.

Thank you,

John Dubuc

11 Eagle Drive

## Dubowik, Brooke

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**From:** Xenophon Vurgaropoulos <xen.vurgaropoulos@gmail.com>  
**Sent:** Tuesday, April 20, 2021 1:45 AM  
**To:** Planning  
**Subject:** April 21, 2021 Planning Board Questions & Concerns.  
**Attachments:** Elvis Dhima to Adam Crepeau - Email August 12, 2020.pdf; atch\_d\_town\_engineer\_memo\_re\_utility\_and\_traffic\_questions (1).pdf; March 24th Meeting Questions.docx

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Good Afternoon Hudson Planning Board,

My name is Xenophon Vurgaropoulos of 5 Muldoon Drive, Hudson NH, 03051.

During the public input meeting on March 24, 2021, I spoke to the planning board and asked the questions below, and to my knowledge not been discussed or answered publicly as of yet.

I respectfully request that the Planning Board have a public conversation about the communications that Town Engineer Elvis Dhima has had about the Hudson Logistics Center with Govoner Sununu's Policy Advisor Adam Crepeau in the below outlined email between them on August 12, 2020.

- ***Email: Hudson NH - Hudson Logistics Center Items: August 12, 2020, between the Town Engineer Elvis Dhima and Governor Sununu's Policy Advisor Adam Crepeau, Elvis is asking for a meeting with DOT / BEA.***

*Elvis Dhima makes the following statements.*

***"The project is currently struggling with the traffic portion because of existing issues in Hudson."***

***"We can waste time with small traffic mitigations that won't work or deal with the elephant in the room and look at the real solution." (Referencing the Hudson Boulevard)***

*The Hudson Boulevard is proposed as a must-build for the HCL to succeed, but the town has no funding.*

*The Hudson Boulevard cost proposal shows a BUILD Grant Request:*

*BUILD Grant Funding - \$25,000,000*  
*Town/Local Funding - \$20,000,000*  
*\$45,000,000*

*The 2020 Budget shows the Hudson Boulevard as Warrant Article K and shows it needing a vote of (3/5); I cannot find the board vote passing this to secure the funding for the project. The 2021 Proposed Budget doesn't speak about any funding request for the Hudson Boulevard project.*

**Question:** *Where will Hudson get this \$20,000,000 to fund this project?*

**Question:** *If the Hudson Boulevard is critical to the HLC project's success, why has it not been a focus of conversation for the planning board?*

In response to the question in the email above, Mr. Dhima sends the attached message in an Interoffice Memorandum to the Planning Board.

The problem I see with this reply to the answer is that Mr. Dhima references the Email **from August 13, 2020**, but the Email chain is dated and Starts with him **on August 12, 2020**. Next, he states "In addition, Hudson Boulevard was mentioned as a friendly reminder to the state regarding the fact that it's currently in the 10 year plan."

By reading the first page of the email chain, you can see that Mr. Dhima the Subject Line is "Hudson NH - Hudson Logistic Center Items" and Starts the email with "Below are the two items Hudson needs assistance with at this time" (Please read the complete email chain attached)



From: Dhima, Elvis <edhima@hudsonnh.gov>  
Sent: Wednesday, August 12, 2020 4:57 PM  
To: Crepeau, Adam <Adam.Crepeau@nh.gov>  
Subject: Hudson NH - Hudson Logistic Center Items

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Adam

It was a pleasure speaking with you earlier

Below are the two items Hudson needs assistance with at this time

1. Is NHDOT willing to have an agreement with the Town regarding day to day operations on 4 intersections along Lowell Road, please see attachment A.
2. NHDOT is the current owner of the Right of Way of the old Circumferential Highways (Lowell Road to Route 111). Is NHDOT still willing to allow a two lane road, please see attachment B, if we come up with the funding?

Thank you

Elvis

Elvis Dhima, P.E.  
Town Engineer

Town of Hudson, NH  
12 School Street  
Hudson, NH 03051  
Phone: (603) 886-6008  
Mobile: (603) 318-8286



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**INTEROFFICE MEMORANDUM**

**TO: Hudson Planning Board**

**CC: Brian Groth , Town Planner**

**FROM: Elvis Dhima, P.E., Town Engineer**

**DATE: March 30, 2021**

**RE: Planning Board Meeting March 24, 2021 - Green Meadow Public Input**

“There were references to an email I sent to Mr. Crepeau , on August 13, 2020 regarding traffic. At the time of the email, the applicant was still working on the traffic mitigation plans which have been submitted and reviewed by our consultant and NH Department of Transportation. In addition, Hudson Boulevard was mentioned as a friendly reminder to the state regarding the fact that it’s currently in the 10 year plan. Hudson Logistic Center and Hudson Boulevard are two separate matters and I believe that Hudson Logistic Center can operate without Hudson Boulevard in place.”

-----  
I am not sure why the Town Engineer would be asking the Governor's Policy Advisor for Funding for the Hudson Boulevard if he was mentioning it as a "friendly reminder"? This appears to be the primary focus of the whole communication with Mr. Crepeau; in fact, very next email that Mr. Dhima receives from Mr. Crepeau in this email, Mr. Crepeau ask him how the Hudson Boulevard is

related to item #2 in his email and ask where the Town of Hudson will get the funding for the project? (\$20,000,000)

I hope you will publicly speak to the topic in this email and the questions asked during the March 24, 2021 Meeting. I feel that these are some important questions, and there is a lot of money that could be coming from the Town of Hudson to fund a project that appears to be closely related to the success of the HLC Project, and the public is unaware of.

When the town Engineer says that the only solution to the Traffic Problem in Hudson for the Hudson Logistics Center to work is a giant Highway through the middle of the Town, there may be an issue with the HLC project itself.

I hope you will consider having a public conversation about this concern and the rest of the questions asked during the March 24th, 2020 Meeting.  
(Supporting documents are attached.)

Thank you for your time,  
Xen Vurgaropulos

**Formella, John**

**From:** Dhima, Elvis <edhima@hudsonnh.gov>  
**Sent:** Monday, August 17, 2020 1:40 PM  
**To:** Crepeau, Adam  
**Cc:** Groth, Brian; Morin, Dave; Malizia, Steve  
**Subject:** RE: Hudson NH - Hudson Logistic Center Items

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Adam

We will take the 9:30 am Meeting August 21<sup>st</sup>

Below is the list of people that will attend

Town Consultant, VHB, Kennedy, Marty [mkennedy@VHB.com](mailto:mkennedy@VHB.com)  
Town Administrator, Malizia, Steve [smalizia@hudsonnh.gov](mailto:smalizia@hudsonnh.gov)  
Town Engineer [edhima@hudsonnh.gov](mailto:edhima@hudsonnh.gov)  
Planning Board Chairman Timothy Malley [tmalley@tjmalleyelectric.net](mailto:tmalley@tjmalleyelectric.net)  
Town Planner, Groth, Brian [bgroth@hudsonnh.gov](mailto:bgroth@hudsonnh.gov)  
BOS Chairman, Morin, Dave [dmorin@hudsonnh.gov](mailto:dmorin@hudsonnh.gov)

Scope of the Meeting

1. Is NHDOT willing to have an agreement with the Town regarding day to day operations on 4 intersections along Lowell Road, please see attachment A.
2. NHDOT is the current owner of the Right of Way of the old Circumferential Highways (Lowell Road to Route 111). Is NHDOT still willing to allow a two lane road, please see attachment B, if we come up with the funding?

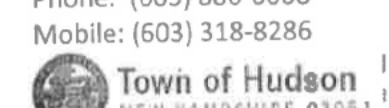
In addition, this meeting is only with the Town's staff and representatives,

Thanks again for putting this meeting together in such a short notice

E

*Elvis Dhima, P.E.*  
*Town Engineer*

Town of Hudson, NH  
12 School Street  
Hudson, NH 03051  
Phone: (603) 886-6008  
Mobile: (603) 318-8286



**From:** Crepeau, Adam [<mailto:Adam.Crepeau@nh.gov>]  
**Sent:** Monday, August 17, 2020 1:15 PM

1

**To:** Dhima, Elvis <edhima@hudsonnh.gov>  
**Subject:** RE: Hudson NH - Hudson Logistic Center Items

Hi Elvis,

I spoke with the team at DOT and BEA to try to find a time that is amenable for everyone. We landed on 9:30 AM this Friday, August 21<sup>st</sup>. If this works, I will ask DOT to send out Zoom invites to you and your team. Please provide all names and email addresses of those who will be attending the meeting.

Best,

Adam

**From:** Dhima, Elvis <edhima@hudsonnh.gov>  
**Sent:** Monday, August 17, 2020 11:12 AM  
**To:** Crepeau, Adam <[Adam.Crepeau@nh.gov](mailto:Adam.Crepeau@nh.gov)>  
**Cc:** Groth, Brian <[bgroth@hudsonnh.gov](mailto:bgroth@hudsonnh.gov)>  
**Subject:** RE: Hudson NH - Hudson Logistic Center Items

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Adam

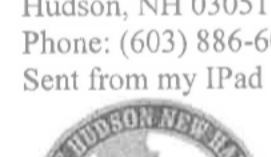
I hope all is well

Any feedback from DOT

Thank you

E

Elvis Dhima P.E.  
Town Engineer  
12 School Street  
Hudson, NH 03051  
Phone: (603) 886-6008  
Sent from my iPad



**From:** Dhima, Elvis  
**Sent:** Thursday, August 13, 2020 9:41 AM  
**To:** Crepeau, Adam <[Adam.Crepeau@nh.gov](mailto:Adam.Crepeau@nh.gov)>  
**Subject:** RE: Hudson NH - Hudson Logistic Center Items

Adam

2

The project is currently struggling with the traffic portion because of the existing issues in Hudson

We believe that by providing the bypass, it will provide relief along Lowell Road and other networks in Town and make room for the proposed additional traffic

Basically, we can either waste time with small traffic mitigations that won't work or deal with the elephant in the room and look at the real solution.

If the traffic doesn't work, no support from the state plus not a real commitment from the applicant to make traffic work, Planning Board could possibly not approve it as is at this time

Hudson will have the same issue with the next developer, if this project doesn't happened

Let me know if you have any questions or if the above makes sense

Thanks for all your help

E

*Elvis Dhima, P.E.*  
*Town Engineer*

Town of Hudson, NH  
12 School Street  
Hudson, NH 03051  
Phone: (603) 886-6008  
Mobile: (603) 318-8286



**From:** Crepeau, Adam [<mailto:Adam.Crepeau@nh.gov>]  
**Sent:** Thursday, August 13, 2020 9:10 AM  
**To:** Dhima, Elvis <edhima@hudsonnh.gov>  
**Subject:** RE: Hudson NH - Hudson Logistic Center Items

Hi Elvis,

Thank you for sending these materials. I have sent these to NH DOT as well for their review.

I'm interested to know how #2 is directly/indirectly related to the Hudson Logistics Center and how the town intends to come up with the funding for the project.

Best,

Adam

**From:** Dhima, Elvis <edhima@hudsonnh.gov>  
**Sent:** Wednesday, August 12, 2020 4:57 PM  
**To:** Crepeau, Adam <[Adam.Crepeau@nh.gov](mailto:Adam.Crepeau@nh.gov)>  
**Subject:** Hudson NH - Hudson Logistic Center Items

3

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Adam

It was a pleasure speaking with you earlier

Below are the two items Hudson needs assistance with at this time

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# TOWN OF HUDSON

## Engineering Department



12 School Street • Hudson, New Hampshire 03051 • Tel: 603-886-6008 • Fax: 603-594-1142

### INTEROFFICE MEMORANDUM

TO: Hudson Planning Board  
CC: Brian Groth , Town Planner  
FROM: Elvis Dhima, P.E., Town Engineer  
DATE: March 30, 2021  
RE: Planning Board Meeting March 24, 2021 - Green Meadow Public Input

Mr. Chairman,

This is my response related to public meeting listed above. We are not waiving the soil testing requirements, only the schedule of when that will be done. The main reason for doing the soil testing during construction is because of safety reasons. Some of the soil tests are approximately 20 feet below existing grade, due to proposed cuts. We won't be able to send town staff to witness the data log, 20 feet below grade. The soil testing confirmation will be done during construction, once the proposed grade has been established. The burden of the redesign falls on the applicant, if the field data does not match assumed design soil data.

There were discussions related to the slopes of the drainage pipe less than 2 percent. The reason for the relief is because this site is approximately 0.8 miles deep and approximately 0.9 miles wide. If minimum two percent is used throughout the site it would result in drainage structures, such as catch basins and manhole to be extremely deep resulting in unnecessary maintenance and inspection issues. In addition, all drainage components are private and their maintenance will be responsibility of the property owner, not Town of Hudson.

There were discussion about relief related to less than minimum 4 foot of cover for drainage pipe through the site. The minimum cover for corrugated HDPE pipes is 1 foot, as specified by the manufacturer. All drainage pipes will be privately owned and their maintenance will be responsibility of the property owner, not Town of Hudson.

There were references to an email I sent to Mr. Crepeau , on August 13, 2020 regarding traffic. At the time of the email, the applicant was still working on the traffic mitigation plans which have be submitted and reviewed by our consultant and NH Department of Transportation. In addition, Hudson Boulevard was mentioned as a friendly reminder to the state regarding the fact that it's currently in the 10 year plan. Hudson Logistic Center

and Hudson Boulevard are two separate matters and I believe that Hudson Logistic Center can operate without Hudson Boulevard in place.

Good evening,

My name is Xenophon Vurgaropoulos of 5 Muldoon Drive, Hudson, NH. Thank you for allowing me the time to speak tonight.

I have many concerns about this project, but I would like to bring up a few concerning communications. I want to read some points of interest in my research and then ask my questions.

- **Email: Hudson NH - Hudson Logistics Center Items:** August 12, 2020, between the Town Engineer Elvis Dhima and Governor Sununu's Policy Advisor Adam Crepeau, Elvis is asking for a meeting with DOT / BEA.

Elvis Dhima makes the following statements.

*"The project is currently struggling with the traffic portion because of existing issues in Hudson."*

*"We can waste time with small traffic mitigations that won't work or deal with the elephant in the room and look at the real solution."* (Referencing the Hudson Boulevard)

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The Hudson Boulevard cost proposal shows a BUILD Grant Request:

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Town/Local Funding - \$20,000,000

\$45,000,000

The 2020 Budget shows the Hudson Boulevard as Warrant Article K and shows it needing a vote of (3/5); I cannot find the board vote passing this to secure the funding for the project. The 2021 Proposed Budget doesn't speak about any funding request for the Hudson Boulevard project.

**Question:** Where will Hudson get this \$20,000,000 to fund this project?

**Question:** If the Hudson Boulevard is critical to the HLC project's success, why has it not been a focus of conversation for the planning board?

- **Email: BOS voted 4-0 to remove Cole:** November 5, 2020, between Gary Fredrick of Hillwood, Senior VP / Marketing Leader, and Micheal Bergeron of DRED (Department of Resources and Economic Development.)

Gary Fredrick asks Micheal Bergeron to share this information with Governor Sununu and makes a statement, "so much for mob rule."

**Question:** Why does the Governor need this information? Is it appropriate to communicate directly with the Governor on local issues?

- **Email: Governor's Office to the Chairman Mr. David Morin of the BOS:** September 9, 2020, The Governor appears to be applying inappropriate pressure to the Board of Selectman to pressure the Planning Board to pass the HLC Project.

•  
**"It is clear that the town is struggling to obtain additional funding and is looking for assistance to fund the Hudson Boulevard project."**

**"Pending approval of the HLC proposal by the planning board, the state is committed to the immediately begin development of the preliminary design and engineering phase of the Hudson Boulevard project. It is important to note that given our current strained economic conditions, the timeframe in which the funding is available is limited and requires immediate approval by the town."**

**Question:** Is it appropriate communication?

**Question:** Why does it appear that a \$45,000,000 project is being worked on behind the scenes of the HLC project.

Thank you for your time.

## Dubowik, Brooke

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**From:** Christopher Thatcher <clthatch@gmail.com>  
**Sent:** Wednesday, April 21, 2021 7:24 PM  
**To:** Planning; ~BoS  
**Cc:** McGrath, Marilyn  
**Subject:** 4-21-2021 Planning Board Meeting

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**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Dear members of the Planning Board and BOS,

In listening to the Planning Board meeting and it is disturbing that a motion was made to approve this project, even the conditional use permit. Sam's club received more scrutiny than this project did from the Planning Board.

I implore you to take additional time to review and question this project there are SO many outstanding items that have not been addressed, how could you even consider a conditional use permit!?

Mr. Malley, you indicated that this would take as long as it needed, I implore you to not let Hillwood rush this process and drive the show as it has been,

Mr. Coutu, you told the public you were just getting started on your questions?! Why rush and approve, even conditionally something that is not ready yet!

Sincerely, Chris Thatcher



## Dubowik, Brooke

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**From:** John Dubuc <johnnygd24@gmail.com>  
**Sent:** Wednesday, April 21, 2021 3:49 PM  
**To:** Planning; ~BoS; Malizia, Steve; Groth, Brian  
**Subject:** Sam's Club Discussion  
**Attachments:** Sams\_Club\_Memo\_March12\_1991.pdf

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**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Team,

I found this interesting document that has relevance to your discussions that are going on with the HLC.

During the Sam's Club Project, the Town Engineer, Michael Gospodarek, sent a memo to the Executive Administrator Fred Snider and stated this:

"Can it be expected that a decision that could affect the Town of Hudson for the next fifty years be made within three weeks."

We are two weeks since the last Planning Board meeting and this project far exceeds the size and scope of the Sam's Club project.

Please use the words that Michael Gospodarek wrote in 1991 and take your time to answer all of the residents' concerns and require reasonable changes to the Berm so that the abutters do not see these massive buildings and can enjoy "All Floors" of their homes. I know that you all have questions regarding traffic, wetlands and if this project is for the good of Hudson and is compliant with the Towns Long Range Plans. Don't let this monstrosity be the "Gateway to Hudson"

If three weeks was too quick for the Sam's Club project it surely is too quick for the HLC proposal.

Thank you again for all that you are doing for us all,

--  
John Dubuc  
11 Eagle Drive



# TOWN OF HUDSON

Department of Public Works and Development

12 School Street

Hudson, New Hampshire 03051

603/886-6005



## MEMORANDUM

TO: Fred Snider, Executive Administrator  
FROM: Michael Gospodarek, Town Engineer *ms*  
DATE: March 12, 1991  
RE: Walmart/Sam's Site Plan  
Map 5 Lot 39, 40, 41, 42

Susan Pelkey informed and submitted to me on March 8, 1991, a set of plans relating to this project for review. As in accordance with your memo, I have budgeted time for this review. An expedited review is to occur on this project, other projects are placed on hold or slowed down so that Walmart/Sam's can get their approvals in time to open by November 1991. A proposed schedule has been presented by the developer, this same schedule has been modified at least twice within the last 45 days. I have seen the developer discuss plans before the Planning Board and Conservation Commission only to have them change in three weeks requiring input from both Town bodies again. I found out that preliminary traffic studies were presented to the State back in October of 1990. Based upon the special meeting and site walks, I feel that we are making a good faith effort to accommodate this proposal.

I now take issue with this project and feel that staff needs to move more slowly on this project. I have freed up twenty hours this week to spend solely on this project. The Planning board application and submittal is incomplete and many issues were left unaddressed. There are no drainage calculations and no real sewer proposal. The plans have all the rim and pipe inverts on all catch basins, pipe sizes and slopes are represented, detention area areas are proposed along with their relative grading. All of the items that are the direct result of drainage calculations are present, but no calculations submitted.

I can only assume that either these calculations exist and the developer does not want a detailed review or they do not exist and these plans will change to accommodate these new calculations.

The sanitary sewer issue was raised with the developer approximately three weeks ago. At this meeting, Peter Holden was willing to donate to the Town a sewer metering device to establish down stream capacities and review the gravity sewer options. My concerns were raised at this meeting. I find it curious that on 3-11-91 the project manager calls me up to discuss details and how to sewer this site.

Can it be expected that a decision that could affect the Town of Hudson for the next fifty years be made within three weeks. Once again, I am placed in an uncomfortable position on this project.

All I have heard has been how Walmart is willing to work with the Town, all I have seen has been conceptual plans, incomplete submittals and changes.

It is my opinion based on past performance, that this developer plans on backing this division against a wall by supplying all the information as late as possible. Expedited reviews only help the developer and his Engineers and not the Town. I will continue to work on this project but I will no longer place it as a top priority.

- cc: Michael Reynolds
- Susan Snide
- Jim Hankins
- Robert Brown

## Dubowik, Brooke

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**From:** John Dubuc <johnnygd24@gmail.com>  
**Sent:** Wednesday, April 21, 2021 9:02 PM  
**To:** Planning; ~BoS; Malizia, Steve; Groth, Brian  
**Subject:** Re: Sound Wall

---

**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

I also want to include the Sound Study that clearly spells out the materials... This is from your December 2020 meeting.

Install a 550-foot-long noise control fence as proposed around the southeastern corner of Building C, carried to a height of 15 feet above grade, to mitigate Building C truck activity noise to off-site residential receptors. Note that to be effective, the sound fence needs to meet the following requirements:

ρ The fence needs to be solid, without openings, and be of sufficient surface weight to force sound to travel over or around the fence and not leak through it. A recommended minimum surface weight for the fence is 7 lbs/ft<sup>2</sup>

ρ Appropriate materials of construction for the fence include 5/8-inch thick sheet steel

piling, precast or poured-in-place concrete, acoustical metal panels, or other hybrid system specifically manufactured for the purpose.

ρ The fence, being solid, must be designed to resist wind load and will require engineered footings.

Thank you...

Sent via [BlackBerry Hub+ Inbox for Android](#)

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**From:** johnnygd24@gmail.com  
**Sent:** April 21, 2021 20:33  
**To:** planning@hudsonnh.gov; bos@hudsonnh.gov; smalizia@hudsonnh.gov; bgroth@hudsonnh.gov  
**Subject:** Sound Wall

All,

The Sound Study clearly spells out the material. It is frustrating that the Applicant is wordsmithing this Sound Study.

Sorry for bothering during the meeting but it is frustrating sitting and hearing this.

Thank you...

Sent via [BlackBerry Hub+ Inbox for Android](#)

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**From:** [johnnygd24@gmail.com](mailto:johnnygd24@gmail.com)  
**Sent:** April 21, 2021 15:49  
**To:** [planning@hudsonnh.gov](mailto:planning@hudsonnh.gov); [bos@hudsonnh.gov](mailto:bos@hudsonnh.gov); [smalizia@hudsonnh.gov](mailto:smalizia@hudsonnh.gov); [bgroth@hudsonnh.gov](mailto:bgroth@hudsonnh.gov)

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**Subject:** Sam's Club Discussion

Team,

I found this interesting document that has relevance to your discussions that are going on with the HLC.

During the Sam's Club Project, the Town Engineer, Michael Gospodarek, sent a memo to the Executive Administrator Fred Snider and stated this:

"Can it be expected that a decision that could affect the Town of Hudson for the next fifty years be made within three weeks."

We are two weeks since the last Planning Board meeting and this project far exceeds the size and scope of the Sam's Club project.

Please use the words that Michael Gospodarek wrote in 1991 and take your time to answer all of the residents' concerns and require reasonable changes to the Berm so that the abutters do not see these massive buildings and can enjoy "All Floors" of their homes. I know that you all have questions regarding traffic, wetlands and if this project is for the good of Hudson and is compliant with the Towns Long Range Plans. Don't let this monstrosity be the "Gateway to Hudson"

If three weeks was too quick for the Sam's Club project it surely is too quick for the HLC proposal.

Thank you again for all that you are doing for us all,

--

John Dubuc  
11 Eagle Drive

## Dubowik, Brooke

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**From:** Linda Zarzatian <zarzatian@gmail.com>  
**Sent:** Wednesday, April 21, 2021 12:35 PM  
**To:** ~BoS; Groth, Brian; Planning  
**Subject:** hillwood

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**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Good afternoon all board members,

Regarding laws, rules and regulations that need to be adhered to:

The Selectboard is required to deliberate on whether or not the proposed project is or is not essential for the:

- 1.. PUBLIC HEALTH OF THE TOWN OF HUDSON
- 2.. PUBLIC SAFETY OF THE TOWN OF HUDSON and,
3. PUBLIC WELFARE OF THE TOWN OF HUDSON.

Those regulations need to be met.

Clean air, not polluted, safety on our roads, room to drive alongside 18 wheelers on our back roads, and noise control, being able to hear yourselves talk and live in our neighborhoods.

If these are regulations, which I imagine they are, then this project does not adhere to said regulations.

The statistics that they are providing on all these topics are not accurate or correct. The percentages they are using for these statistics are at 40% capacity. That does not adhere to the truth regulations I am sure are in place. You can not make a decision within the rules and laws and regulations if the figures are not at full capacity. Why did they come up with 40%? Why not 50%, 60%, 70%, 80% or truthfully 100% capacity, because I am sure that is the goal, 100% capacity.

As board members you have to abide by the law and rules and regulations, so should Hillwood, The simplest of rules and regulations should be 100% honesty. I do not see that with their presentation. Therefore, you have every right to continually strive for the:

"THE TRUTH AND NOTHING BUT THE TRUTH SO HELP US GOD!"

Simple common sense with regards to everything, rules, laws, regulations, meetings, conversations, etc., etc.

I continue to state that Covid has put a big strain on all these meetings, for the public and our input. I believe, all considering, everyone is doing the best they can, but, think about it. Even the ex-police officers involved in the George Floyd case will not be having their day in court until August, August, due to the COVID PANDEMIC, But, not Hudson, we have to address the largest facility proposed for the state during this pandemic. Even an event the world has been watching is put on hold till August, think about it.

Again, we just want to be able to:

' LIVE FREE OR DIE''

Rules, laws, regulations, they are all there for the well being of us human beings that are trying to live, that's all, just live in a safe and healthy environment.

Amazon will not allow a safe and healthy environment for our wild life and our human life due to all they bring with them. No matter what rules they adhere to, they will change the life in Hudson in an unsafe way and everyone knows that.

Thanking you in advance for all your consideration in this life changing matter.

Sleepless in Hudson

## Dubowik, Brooke

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**From:** Hudson New Hampshire <noreply@hudsonnh.gov>  
**Sent:** Wednesday, April 21, 2021 12:44 PM  
**To:** Dubowik, Brooke  
**Subject:** Form submission from: Contact a Board or Committee

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**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Thank you. Your submission has been received. Submitted on Wednesday, April 21, 2021 - 12:44pm Form:  
Contact a Board or Committee Form ID: 42624 Submission ID: 21151 Your Contact Information

First Name Lisa

Last Name Johnson

Phone Number 781-983-1855

Email lisajohnson22@aol.com

Select the Board or Committee you would like to contact Planning Board

Question/Comments you'd like to share

PLEASE be brave and vote for the quality of your town!! By voting this in, you would contribute only to the town filling itself as an industrial park. PRIDE OF PLACE does not mean that you have an Amazon Distribution center as the first thing a newcomer sees in town! It means you still have the integrity to be strong and keep the beauty of the riverfront as its gateway. VOTE NO TO Amazon please!



## Dubowik, Brooke

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**From:** Chris Mulligan <pineglen3@gmail.com>  
**Sent:** Thursday, April 22, 2021 12:29 PM  
**To:** Groth, Brian; Planning; ~BoS  
**Subject:** Hudson Logistics

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**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Last night's Planning Board Meeting was sad and unfortunate for the Town of Hudson.

It appears that a majority of the Board has made their mind up and will approve this project. Not really a surprise as I believe that most of the Board members had made their decision back in May 2020 and have simply gone through the motions.

You have chosen to believe estimates and modeling provided by Hillwood and their hired experts that have continually used numbers that have been questioned throughout. To be clear, the methodology is not questioned but the numbers being used as part of that process certainly are. Each and every time questions have been asked about these numbers, there has been lack of factual information for verification. Although some Board members have asked questions, they have not pressed for specifics when none have been provided. Hillwood simply falls back to their standard response of "based on our analysis" or "per industry standard". I believe we have learned through this process that this complex is nowhere near "standard" and that even the developer referred to this development as a prototype. Actual traffic counts at other facilities were requested and not provided and this was not pressed by any Board member. Similarly, no Board member has requested or received the weight and dimension requirements for a "large" package that will be delivered directly to homes from this facility. It is my understanding that a "large" package could be anything weighing over 25 pounds. If that is the case, this facility will absolutely be a high volume last mile facility no matter what Hillwood/Amazon chooses to call it.

You have also chosen to believe Hillwood's property expert and have failed to obtain additional opinion and a final report from the expert that the town hired. To hear Board members state that they actually believe that living next to a 365/24/7 warehouse and trucking facility will not have a significant impact on the value of homes was disheartening to say the least. I can't even comprehend how anyone can even suggest that. Even in the current market, a house near an 365/24/7 industrial complex does not have the same value as one that is not. It will certainly sell in this market but the value will still take a hit. I would implore the Board to obtain an updated and final report from the expert that you hired.

The Board also seemed to have a desire to rush through the waivers. The two that I was surprised passed were the size and number of parking spaces. It is fine and good that the current proposed tenant does not feel they need so many spaces but what about the next tenant and the one after that. To allow such a huge discrepancy between what is required by town code and what you have now approved is simply wrong. This will impact potential future tenants and has now established precedent for future developments in this town.

I will also remind you that Hillwood's own expert verified last night that the prevailing winds at this site come from the Northwest and blow towards the Southeast right into the abutting neighborhood and those that surround the Ayers Pond area. Something to consider when discussing how sound, pollution and construction debris will carry and impact quality of life within these neighborhoods.

Although I would hope that you will slow this process down while you request and obtain factual information, I tend to doubt that you will. If past meetings and Board member comments are any indication, you will simply continue to believe what is being whispered in your ear by the developer. Unfortunately, like the story of the emperor and his new clothes, it will be the Board and the Town of Hudson left standing naked in the street while Hillwood and Amazon laugh all the way to the bank.

Chris Mulligan  
5 Fairway Dr

## Dubowik, Brooke

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**From:** Chris Mulligan <pineglen3@gmail.com>  
**Sent:** Thursday, April 22, 2021 7:04 PM  
**To:** Groth, Brian; ~BoS; Planning  
**Subject:** Hudson Logistics

---

**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Relative to last night's Planning Board Meeting I would like to raise a few things.

On the site plan Decision Draft Clean Copy #56

This should clearly indicate the applicant/tenant will not be allowed to conduct trash removal activities during the overnight hours in accordance with current town regulations. Despite what some members believe, the process of moving and replacing roll off dumpsters is quite loud and typically involves a multi-step process. An empty receptacle is brought in and rolled off the truck. The truck then picks up or drags the full dumpster out of the way. The driver then drags or moves the empty dumpster in place. Finally the truck loads the full dumpster onto the truck and drives away. These units are all heavy and made of metal and are not quiet as they are moved about. No resident of Hudson should have to listen to this process while they are trying to sleep.

There were several comments made that all experts that have reviewed the traffic study including the DOT have agreed with the methodology used. I would agree that most have agreed with the methodology, but what they have never been asked is if they agree with the original numbers provided by Hillwood and Amazon. These numbers that are being provided by Hillwood have been suspect and questioned by many from the very beginning of this process. If the initial numbers being used in the methodology are not correct, then every analysis and modeling that is done is not correct. For some reason this board has been reluctant and unwilling to demand the applicant to base their studies on 100% utilization or even 80% utilization. Members are suggesting that they are basing decisions on the "best" information you can get which is not a true statement. You can get additional if you demand it. You are currently basing decisions on assumptions provided by the applicant. Most businesses operate at 80% - 100% utilization, why would you not have the analysis and modeling be based on that if the applicant can't provide factual data. All studies and data provided by the applicant are based on assumptions and estimates.

For a board member to suggest decisions can't be based on assumptions, then I am guessing this proposal can't and will not pass.

When questioned about back up alarms at night, the applicant could not provide any commitment that this will not happen. I would place the police department on notice right now that they will be receiving a significant amount of calls requiring a response.

The Chairman actually indicated that he has never seen a traffic study in this town that has failed. I would ask that if the current traffic situation from Dracut Rd all the way to T-Bones is not a complete failure, I'm not sure what is. If traffic studies for this corridor were submitted and passed by the Planning Board, they obviously should not have been as they were not appropriate.

As Mr. Coutu suggested, the town has decibel meter but in speaking with the town engineer early in this process it does not work. The town must obtain a working sound measuring device prior to any approval is given for

this project as board members are suggesting this will be residents only recourse if the noise levels become burdensome.

Chris Mulligan  
5 Fairway Dr.

## Dubowik, Brooke

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**From:** Chris Mulligan <pineglen3@gmail.com>  
**Sent:** Thursday, April 22, 2021 7:36 PM  
**To:** Groth, Brian; Planning; ~BoS  
**Subject:** Hudson Logistics

---

**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

A few thoughts on last night's Planning Board Meeting.

I agree with the suggestion for sidewalks and crosswalks in area between Dracut Road and Walmart Blvd for use by pedestrians and a 4 foot shoulder for cyclists. This would ensure safety in this area especially with the anticipated increased traffic. The town should not be concerned with the costs to the applicant for these additions and they should require that the traffic studies be modified and adjusted to accommodate these additions to the plan. The safety of residents in this area should be a primary consideration when considering traffic and if there are additional costs and additional studies required then these should be requested from the applicant.

The air quality testing that was discussed is a great idea and the costs for this should be the responsibility of the applicant. Hillwood's expert, although doing his best to not answer several direct questions, did indicate that site monitoring can be done but it would be very involved and very expensive. Once again the Planning Board should not be trying to save Hillwood money, but no matter what the cost, you should be concerned with the air quality and safety of it's residents.

With respect to property values, I am not certain how any member of the Board can possibly believe that a home abutting an 365/24/7 industrial complex will not lose value or have significantly less value than one that is not. Whether a golf course or not, there is not an industrial complex there right now. Talk to your expert that you hired and have him provide an updated and final report on this issue. I believe if given a choice, a potential buyer is not going to buy a house abutting an industrial complex if there is a similar house elsewhere. The seller will have to take less in order to sell. Pretty basic real estate knowledge.

Diane Mulligan  
5 Fairway Dr

April 23, 2021

To Planning Board Members

RE: Monitoring & Enforcement Stipulations for Noise – Hudson Logistics Center

The Planning Board is currently in deliberations concerning the Hudson Logistics Center Project. I do not see where issues of monitoring and enforcement concerning noise / sound issues has been fully vetted by the Planning Board in previous deliberations.

Findings of Fact: Construction Hours: 7 AM to 7 PM, Monday thru Saturday; Operation Hours: 24/7/365

Monitoring: For any monitoring to be effective a baseline has to be established. This baseline for sound measurements has to be performed by a well calibrated acceptable device. The device has to be operated by a trained individual authorized by the Town to do so. Additionally, constant, sufficient in quantity measurement locations have to be established and agreed upon for pre and post monitoring comparisons before construction or normal operations start at the site.

I do not see where the Applicants Sound Report, Peer Review experts and Planning Board have addressed the above issues in sufficient detail to protect the public. I respectfully request the Planning Board to do so in your deliberations prior to voting on this project and establish in specific detail what is required during construction and operations on this site in the Site Plan notes and Development agreement to address this. While doing so please remember the Findings of Fact concerning hours the public will be subjected to noise related issues. We cannot go home to find relief or avoid any possible noise problems because we will already be in our houses. Please keep remembering 24/7/365.

Enforcement: I do not see where the Planning Board has even deliberated on who will actually enforce any noise ordinance monitoring violations during construction or 24/7/365 operations. Stipulations should establish how often monitoring measurements will be taken and what powers if any the Town authorize, technically equipped and trained representative will have to obtain immediate compliance if violations are observed. Also, partly Mr. Coutu could not get relief from his construction noise example he gave at the 04/21/2021 Planning Board meeting because no onsite representative had the authority to address it. The Planning Board should stipulate a contact be available onsite during construction (estimated 15 months) who has the authority and power to remedy any IMMEDIATE noise complaints. This should also be a requirement during operations for all three buildings. It appears to me who ever the Town designated person doing the monitoring will not have any legal power to seek immediate relief of any noise violations observed or recorded. I respectfully request the Planning Board to obtain legal advice from the Town Legal Counsel on how to address that problem. This is more than a complaint to the police department to be resolved situation. Technical proof of noncompliance is a major issue.

The Planning Board should also deliberate on who the public can contact for immediate enforceable relief of noise issues. The only real option available to the public at the moment is multi-month court proceedings to resolve a single noise issue that needs immediate abatement. Please error on the side of protecting the public health and safety of the Hudson community in your findings, stipulations and Development Agreement conditions.

Thank You for your consideration of the above

James Crowley

4 Fairway Drive

## Dubowik, Brooke

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**From:** Janice Morin <janicemmorin@gmail.com>  
**Sent:** Friday, April 23, 2021 8:38 PM  
**To:** Planning  
**Subject:** Fwd: Hillwood Project

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EXTERNAL: Do not open attachments or click links unless you recognize and trust the sender.

----- Forwarded message -----

From: **Janice Morin** <[janicemmorin@gmail.com](mailto:janicemmorin@gmail.com)>  
Date: Fri, Apr 23, 2021 at 6:23 PM  
Subject: Hillwood Project  
To: <[planning@hudsonnh.gov](mailto:planning@hudsonnh.gov)>

Dear Planning Board Members,

I am a longtime resident of Manchester, New Hampshire, but I was born and grew up in Tyngsboro Massachusetts.

I frequently traveled Dracut and Lowell Roads and have watched Hudson grow and build up over the years. After moving to Manchester, I often came back through Hudson to Tyngsboro to care for my aging parents. I have been met with increasing traffic to where Lowell Rd is beyond accessible between certain hours of the day and also certain times of the year.

I cannot believe that you are even giving this plan any consideration at all. It will completely paralyze the area. Two of my brothers live in the area, as well as another sister in law and several nieces and nephews. I've been told that this project is going to be one of the largest centers of this sort in the world!! Are you kidding me? In little Hudson NH? Lowell Rd cannot handle traffic now! It will create a nightmare, not only for the near future, but for many years to come. Tractor trailer trucks have taken over the highways, we certainly do not need them taking over the tiny lead in roads getting to the highways. There will be no way to access the establishments on that street and they will surely lose business, if not completely go out of business. Not a wise move for Hudson at all!

Each night since I've heard about this proposal I've prayed to God that He will not allow this project to go forth and destroy his beautiful land for cement, metal, concrete and traffic...unbearable traffic...traffic that has nowhere to go but sit.

Please, please for the sake of all of Southern New Hampshire reject this proposal soundly and save the future of Hudson!  
And New Hampshire! Lowell Rd has all the traffic it can possibly handle right now!

Thank You!

Sincerely,

Janice M Morin

Very concerned NH citizen



## Dubowik, Brooke

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**From:** Mary Palmer <fized@msn.com>  
**Sent:** Saturday, April 24, 2021 6:26 PM  
**To:** Planning  
**Subject:** Hillwood / Amazon Proposal  
**Attachments:** NJ Amazon Traffic problems.html; PB Rejects Amazon Plan.html; Traffic Burdens from Warehouses.html

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**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Dear Planning Board Members:

Thank you for your continued diligence in exploring the effects this massive project will have on our town.

As you contemplate your decisions, here are some articles that can be pulled off the internet when you Google:

"Traffic Around Amazon Logistics Centers"

These are just a few examples of the dozens, maybe even hundreds of articles against having a large-scale Logistics Center wedged

in between 2 neighborhoods and a river, with the only access in or out a small already overcrowded road system.

And these studies are done on centers that are FRACTIONS of what is being proposed in Hudson. It's impossible to find any articles supporting

the traffic impact from an Amazon facility...anywhere!! So I am, as you should also be, very very skeptical of any study, NHDOT or others that says

that this will not adversely impact Hudson and all of Southern NH forever!

Here are some of the quotes from these articles, if you do not care to read them all.

" Traffic grinds to a halt when the fulfillment center's more than 4000 employees are going in and out during rush hour."

( Lowell Rd is already a parking lot during rush hours!)

"This company's fulfillment center, called the busiest warehouse on the planet is located on New Canton Way in the township..."

( This Hudson proposed one is bigger!)

" Children cannot get to school, residents cannot pull out, and this has become a very serious public safety issue"

( This one will be a worse public safety issue)

" According to the police department crash data there have been 25 accidents that can be attributed to the workers coming to and from the Amazon

warehouse over the past six weeks, compared to just one accident in the previous six weeks."

(Let that sink in... 25 accidents!!! We saw the horrific accident last week on Dracut Rd! Do we need more of that??)

And from another article:

" Were trying to draw the line in the sand. Someone's got to stand up to Amazon," Brennan said, "They come in and do what they want, and pay very little attention to the little guy."

( Let's not let Amazon walk all over Hudson...we're better than that, we're smarter than that!)

And from another article from Milford, which sorely regrets their decision to allow Amazon in:

" The seemed to think they were road warriors," he said, adding, "for many (Amazon Drivers) stop signs appeared optional."

( Really?? Let's not only clog the roads with these tractor trailer trucks, but they don't obey traffic rules??? Nice!)

And from a very astute Planning Board member that rejected an Amazon facility proposal:

"The impact on traffic will be much worse than it is today," Francis Carasco, planning board member said. "It would be bumper to bumper. We put up with a lot right now in the area."

(He should see Lowell Rd in the now beautiful town of Hudson!")

So, you see what's happening around New England and New Jersey alone and there are more studies from Chicago, New York, California to name a few.

If they approved the application, they regretted it. Nothing good comes of this. Let's be like the smart towns and cities that rejected Amazon applications on traffic alone! We sure do have enough of our share of traffic now and we can't afford any more!! It's just not smart or safe, bottom line!

Please vote no for the Hillwood/ Amazon Proposal

Sincerely,

Mary Palmer

26 Chalifoux Rd  
Hudson, NH

# Legally Sociable

Pleasant Musings on Sociology, McMansions and Housing, Suburbs and Cities, and Miscellaneous Errata.

## The massive traffic generated by an Amazon fulfillment center

Posted on December 3, 2015 by legallysociable

Labor practices in Amazon's warehouses may be one issue but another issue for nearby residents is the traffic around the facilities (<http://www.fox5ny.com/news/55473441-story>):

*Traffic grinds to a halt for miles when the fulfillment center's more than 4,000 employees are going in and out of the facility during rush hour.*

*Robbinsville Mayor Dave Fried is threatening to sue Amazon over the traffic that's clogged area roads after a senior official failed to show at a meeting to discuss the problem...*

*The company's fulfillment center, called the "busiest warehouse on the planet" is located on New Canton Way in the township...*

*In a statement on the township website Fried says: "Children cannot get to school, residents cannot pull out of their driveways, and this has become a very serious public safety issue. According to police department crash data, there have been 25 accidents that can be attributed to workers coming to and from the Amazon warehouse over the past six weeks, compared to just one accident over the previous six weeks."*

A common NIMBY concern about new developments is the traffic generated. Nearby residents complain about the traffic associated with schools, churches, shopping centers...basically, any sort of new development, particularly in more residential areas. Sometimes, these concerns seem like a stretch: a smaller church is really going to disturb local streets all week long? Yet, traffic can truly be an issue for an area if the roads can't handle all the new volume. This Amazon facility in New Jersey is a good example: all the sudden, thousands of vehicles are now flooding local roads at relatively short periods. This is why the staggered start and stop times might be a good solution; roads are often constructed to handle rush hour type flows but they typically only happen twice a day and the roads sit empty for much of the rest of the day. (Carpooling might be another good suggestion – how many Amazon workers drive solo? – but getting Americans to do this consistently is quite difficult.)

This is also a good reminder of the physical world footprint of an online company like Amazon. The products may come through the mail but all the infrastructure happens somewhere and affects various communities.

This entry was posted in [Gadgets and Technology](#), [Sociology](#), [Transportation](#) and tagged [Amazon.com](#), [carpool](#), [NIMBY](#), [roads](#), [rush hour](#), [traffic](#), [trucking](#). Bookmark the [permalink](#).

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LODI

## Lodi planning board rejects warehouse application after hearing residents' concerns

**Kristie Cattafi** NorthJersey

Published 11:47 a.m. ET May 23, 2018 | Updated 4:29 p.m. ET May 23, 2018

LODI — A developer's plan to build a pair of sprawling warehouses along the backyards of a residential neighborhood was rejected Tuesday night.

It was opposed by many residents in the already heavily industrialized neighborhood nestled between routes 80 and 46 near the state Motor Vehicle Commission's site on Gregg Street.

"I want to cry," Debbie Grasso, a Shady Lane resident where the project would have come 33 feet away from her backyard, said. "I know they will probably appeal it, but we made it through the first hurdle and we'll keep going."

Neighbors along the proposed site shared concerns over contamination, flooding, air and noise pollution, and the only thing standing in the way of approval were two sign variances.

However, planning board members said they couldn't ignore the effect on an area that already floods, an increase of traffic, safety concerns and not knowing who will occupy the space and rejected the application unanimously.

The applicant, Black Creek Group, a subsidiary of IPT Acquisitions LLC, a Colorado-based real estate investment trust, intended to build two warehouses. One would have been 90,000 square feet. The other would have been 200,385 square feet and 47 feet tall. The warehouses would have been permitted to operate 24 hours a day.

The warehouses would have held up to six tenants, but Black Creek Group representatives said they would have preferred two occupants.

Initially, Black Creek Group's plan would have required a waiver from the board that would have allowed it to build a parking lot with fewer spaces than the borough's zoning regulations

permit, but Black Creek Group representatives agreed to comply with the requirements of a minimum of 379 spaces, said Jim Murray, senior vice president of Black Creek Group.

Board members said a traffic study predicting an increase of 506 vehicles in the area seemed skewed without knowing the tenants and hours of operations.

"The impact on traffic will be much worse than it is today," Francis Carrasco, planning board member said. "It would be bumper to bumper. We put up with a lot right now in the area."

Councilman Vincent Martin, who also sits on the planning board, said he couldn't ignore the fact that trucks would still use side streets even if it wasn't permitted.

"No matter how many signs there are, trucks will still come down Garibaldi Avenue, I can guarantee that," Martin said. "To me that's not a safe way to access the property or get into it."

The property borders Sutton Avenue and Route 80 to the north, industrial facilities to the south and residential properties to the west.

**Previous:** Lodi residents fighting warehouse project over flooding, traffic, contamination concerns

**Business:** Lodi nightclub Rise, previously known as Chicago, Sound Garden, shuts doors after 36 years

**Schools:** Lodi superintendent sick time payout could be more than \$177,000 under new contract

The 20-acre property also borders residential homes along Shady Lane, Pearl Court, Yolanda Place, Trudy Drive and Lorelei Terrace.

Residents had been fighting the application for months and have been going door-to-door to inform neighbors.

"We are thrilled," Nancy Cardone a resident who lives down the street from the property said. "We fought hard for this and Lodi made the right decision."

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Int J Environ Res Public Health. 2020 May; 17(9): 3208.

Published online 2020 May 5. doi: [10.3390/ijerph17093208](https://doi.org/10.3390/ijerph17093208)

PMCID: [PMC7246477](#)

PMID: [32380726](#)

# **Opening a Large Delivery Service Warehouse in the South Bronx: Impacts on Traffic, Air Pollution, and Noise**

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## **Abstract**

Mott Haven, a low-income neighborhood in New York City, suffers from increased air pollution and accommodates several industrial facilities and interstates. In 2018, a large delivery service warehouse opened. Our objectives are to characterize black carbon (BC), fine particulate matter (PM<sub>2.5</sub>), and noise in the community; model changes in traffic due to the facility opening; and estimate associated BC and noise changes.

BC, PM<sub>2.5</sub>, and noise were measured at eight sites pre-opening, and traffic counted continuously at two sites (June 2017–May 2019). An interrupted time series model was used to determine facility-related changes in traffic. Post-opening changes in traffic-related BC/noise were estimated from regressions of BC/noise with traffic flow. Mean (SD) pre-warehouse measures of BC and PM<sub>2.5</sub> were 1.33 µg/m<sup>3</sup> (0.41) and 7.88 µg/m<sup>3</sup> (1.24), respectively. At four sites, equivalent sound levels exceeded the EPA's recommended 70 dBA limit. After the warehouse opening, traffic increased significantly, predominantly at night. At one site, the greatest change for trucks occurred 9PM-12AM: 31.7% (95%CI [23.4%, 40.6%]). Increased traffic translated into mean predicted increases of 0.003 µg/m<sup>3</sup> (BC) and 0.06 dBA (noise). Though small, they negate the substantial decrease the community seeks. Our findings can help communities and policymakers better understand impacts of traffic-intensive facilities.

**Keywords:** traffic related air pollution, traffic flow, black carbon, noise, environmental justice, natural experiment

## 1. Introduction

Environmental justice concerns arise when vulnerable neighborhoods are overburdened with environmental exposures, including heavy traffic and industrial facilities, which can negatively impact air quality. The health effects of air pollution have been shown to be differentially harmful, such that worse outcomes are observed for populations with lower socio-economic status (SES) and ethnic and racial minorities [1,2,3]. This evidence suggests that local governments should preferentially target these neighborhoods for pollution reduction, but unfortunately this does not always happen, e.g., because of political or economic influences. The Mott Haven and Port Morris neighborhoods in New York City (NYC), comprised primarily of individuals with lower SES and who are largely ethnic and racial minorities [4], are an example of this occurrence. In 2018, an additional trucking-intensive facility was opened at the invitation of state and local government, potentially halting the NYC-wide trend of air pollution reduction [5,6] for this vulnerable and overburdened community.

The Mott Haven and Port Morris neighborhoods experience higher than average air pollution, with an annual average fine particulate matter (particles with aerodynamic diameter ≤ 2.5 µm; PM<sub>2.5</sub>) level of 8.6 µg/m<sup>3</sup>, greater than both the Bronx borough wide average (7.8 µg/m<sup>3</sup>) and the NYC average (7.5 µg/m<sup>3</sup>) [4]. Traffic related pollution, including both air pollution and noise, is of particular concern, as multiple interstate highways run through the South Bronx, and approximately 20% of all preschool to 8th grade students attend a school within close proximity to a major highway [7]. Healthwise, Mott Haven has a very high incidence of child asthma emergency department visits, at 647 visits per 10,000 children aged 5 to 17, compared to the Bronx (410 visits) and NYC (223 visits) [4]. Other health concerns include elevated obesity, diabetes, and hypertension rates [4], which can be exacerbated by air pollution, and disturbances and health effects from traffic-related noise. In addition, Mott Haven has nearly double the rate of pedestrian injury hospitalizations than NYC as a whole, at 43 versus 23 hospitalizations per 100,000 people [4].

Consumer goods are increasingly purchased online and then delivered to consumers, where the last leg of delivery typically involves ground transportation via delivery trucks. These trucks take the goods from a distribution center to the customers, while larger trucks deliver the goods to the distribution center. Little is known about how this shift in commerce affects air quality and human health, or about how the opening of such a facility can impact a local community through traffic related air pollution, noise and congestion. Despite high air pollution and asthma rates, in 2012, an online grocery delivery service warehouse was promised more than \$100 million in New York City and State subsidies to relocate its food distribution facility to the Mott Haven area of the South Bronx, before any public hearing on the matter [8].

The proposed move was controversial. While some elected officials favored the move, members of the local community, including the community organization South Bronx Unite (SBU), were concerned about additional truck traffic and associated adverse impacts on air pollution, pedestrian and bicyclist safety, and community health, as evidenced by discussion in the local newspaper [9,10]. The Mott Haven area already has multiple



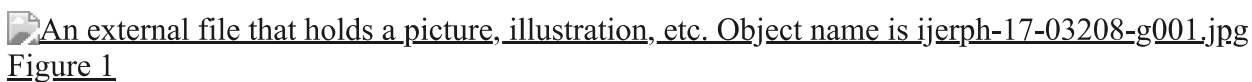
major sources of air pollution, including two large interstates, a large food distribution hub in nearby Hunts Point that handles food for the entirety of NYC, and two waste transfer stations, one of which receives municipal waste for the entire Bronx borough. The community argued that they could not shoulder additional truck traffic in their environmentally overburdened community, potentially resulting in further negative health consequences. They also argued that the assessment of the environmental impacts of the proposed facility should not have been based on an environmental impact statement (EIS) that (1) was 19 years old [11], (2) that failed to consider PM<sub>2.5</sub> (since PM<sub>2.5</sub> was not added to the U.S. National Ambient Air Quality Standards until 1997), and (3) that failed to take into account substantial increases in residential inhabitants to the area, including as a result two rezonings [12].

In response to community concerns, our goal is to quantify the impact of the opening of the online grocery delivery service warehouse on traffic related pollution, including traffic flow, air pollution, and noise pollution. The objectives of this study are to: (1) characterize levels of traffic pollution, including vehicle volume, BC levels, and noise levels, in a community already heavily affected by traffic; (2) model changes in traffic flow as a result of the opening of an online grocery delivery service warehouse in the neighborhood; and (3) estimate increases in traffic-related BC and noise due to increased traffic volume after the warehouse opening. Our study approach is original, because we collected traffic radar data before and after an intervention in order to assess associated impacts on diurnal traffic patterns, air pollution, and noise in a residential community. To the best of our knowledge, our study is the first one in which traffic increases due to the opening of a trucking-intensive operation in a low-income, highly populated neighborhood were measured.

## 2. Methods

### 2.1. Overview

This study examines a natural experiment that occurred in the South Bronx region of NYC: the opening of a new online grocery delivery service warehouse. A map of the study site, including the locations of the warehouse and monitors for traffic counting, air quality measures, and noise, is shown in [Figure 1](#). Construction of the exterior of the warehouse was completed in the Fall of 2016 or even earlier. The community expected the warehouse to start operating in 2017. Pre-warehouse opening measures were therefore collected for air quality and noise in 2017. The warehouse eventually opened in the summer of 2018, probably gradually ramping up its capacity. Post-warehouse opening measures were not collected, because modeling based on the traffic increase projected in the environmental assessment (EA) and the mobile-source contributions to levels of BC (a tracer for traffic-related air pollution) we determined from pre-opening data [13] indicated that the raw post-opening BC and PM levels would not be necessarily higher than the pre-opening ones due to variability in meteorological conditions and background pollution levels. Traffic counts were continuously collected throughout the study period, providing for pre- and post-warehouse opening measures. Changes in traffic flow were used to estimate changes in air quality and noise, based on the relationships between traffic and pollutants in the pre-opening period [13].

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[Figure 1](#)

Study site, including locations used for traffic counting, air quality measures, and noise measures.

### 2.2. Monitoring Sites

Measurements were taken at eight monitoring sites, “Sites 1–8.” The number in the Site ID indicates the order in which sites were taken into operation. [Table 1](#) summarizes selected characteristics of the sites. Outdoor air was sampled through windows of residential homes (Sites 2, 3, 5, 6) and businesses (Site 1) facing a street, from the rooftop of a warehouse (Site 4), and from the rooftops of two common-usage areas in New York City Housing Authority (NYCHA) housing (Sites 7–8). The study was approved by the Columbia University Institutional Review Board. Informed consent was obtained from study participants (Sites 1–6) while a license agreement was executed between Columbia University and NYCHA. All sites were identified by our community partner

SBU. The eight sites differ in their horizontal distance to the nearest road, traffic volume of that road according to the New York State Department of Transportation [14], functional classification codes according to the New York State Department of Transportation [15], and elevation (Table 1).

**Table 1**

Characteristics of PM<sub>2.5</sub> and noise monitoring locations.

Site	Distance from Curb [m]	Height [m]	Mounting Type	AADT †	Road Class (NYS Code)
1	6 *	7	Window	10,013	Minor arterial (16)
2	6	3	Window	NA	Local road (19)
3	6	4	Window	~9000	Principal arterial interstate (11)
4 PM <sub>2.5</sub>	8	9	Flat roof	~1500	Local road (19)
4 Noise	0	2	Light pole		
5	12	8	Window	6863	Minor arterial (16)
6	6	4	Window	24,991	Principal arterial other (14)
7	7	6	Flat roof	NA	Local road (19)
8	25	6	Flat roof	6863	Minor arterial (16)

† AADT = Annual average daily traffic; NA = Not available; \* Distance from motorized vehicle lanes, which are separated from the building through a bicycle lane and a sidewalk.

At Sites 1–6, measurements were taken before the warehouse opened, from May to October 2017. At Sites 7 and 8, measurements were taken from July to October 2018. It is possible that the warehouse was already partially operational during that period of time. We would have preferred to make measurements at Sites 7 and 8 also in the summer of 2017; however, at the time we did not yet have permission from NYCHA to install the monitors.

Noise and air monitors were collocated at the study sites, unless otherwise specified. All air monitors sampled outdoor air with inlets roughly 2–3 feet from outside walls or rooftops even when monitors were located inside residences. The air and noise monitors for Site 1 were located on the second floor of a business building near a one-lane one-way street in a mixed-use area. A school and playground were located on the opposite side of the building. At Site 2, the devices were located on the first floor of a residential building located on a one-lane one-way street. Devices at Site 3 were placed on the third floor of a residential building located on a one-lane one-way street that for the most part receives traffic from an interstate off-ramp. The air monitor at Site 4 was placed on the rooftop of a warehouse located on a one-lane one-way street, while the noise monitor was attached to a light pole directly above the street. At Site 5, both monitors were again placed on the third floor of a residential building, this time located at an intersection in a mixed-use area. The devices at Site 6 were located on the second floor of a residential building at a two-way four-lane street in a mixed-use area. At Sites 7 and 8, devices were located on rooftops of common-use spaces of two large residential complexes owned by NYCHA.

Sites 3 and 4 were selected to monitor traffic because they are vastly different from each other. Site 3 is an exit ramp from one of the interstates that run through Mott Haven, US Interstate I-87, and serves as a high traffic throughput location. Site 4 is a small one-way street and serves a much smaller traffic flow, chiefly as a route to the Harlem River Yards industrial area, of which the online grocery delivery warehouse is a part. The radar counters for both sites were mounted on streetlight poles and captured one-way traffic at each location.

## 2.3. Air Quality, Traffic, and Noise Monitoring

### 2.3.1. Air Quality

At the eight study sites, we obtained integrated BC and PM<sub>2.5</sub> concentrations of outdoor air using custom Columbia University sampling boxes, which contain two 7 L/min vacuum pumps (Medo, model VP0465), each controlled by a timer for exact on off control and a counter for elapsed run time. Flow rates between 1.0 and 2.0 L/min can be chosen through a needle valve. A different needle valve can be installed for 4 L/min. Boxes can run indefinitely on wall power but are typically used for 7–28 day deployments. At five of the eight sites (Sites 1–3, 5, 6), the sampling boxes were placed indoors with sampling lines passing through a window unit that fits in double hung windows [16]. At the other sites (Sites 4, 7, 8), the sampling boxes were placed outdoors on a rooftop inside a plastic storage container that had holes at the bottom for the sampling line and the electrical power cord.

For all units, outdoor air was pumped at a constant flow rate of 1.5 L/min through a size-selective inlet with a 2.5 µm cut point (triplex cyclone by BGI) with particles collected onto 37-mm Teflon filters (Pall). For PM<sub>2.5</sub> levels, filters were pre- and post-weighed on a microbalance after being equilibrated in a temperature-humidity controlled environment for at least 24 hours [17]. For BC, filter deposits were analyzed optically [18]. Elapsed time counters together with the time logs from the field technicians changing the filters allowed us to identify potential power outages, which would have biased inferred BC and PM<sub>2.5</sub> levels.

Sites 1–6 were visited about every two weeks, whereas Sites 7–8 about every four weeks (due to lack of resources). Integrations were done for the time period between site visits, ranging from 12 to 20 days for Sites 1–6 and 26 to 28 days for Sites 7–8.

### **2.3.2. Traffic**

Traffic radar devices (Armadillo traffic counter, Houston Radar) were operational from June 1, 2017 to May 5, 2019 at Sites 3 and 4. These devices record time and date of the detection, speed, and class for each vehicle it observes. We define vehicle class as follows: large vehicles (length > 7 m) represent “trucks,” the combination of small (length < 4 m), medium (4m < length < 7 m), and large vehicles represent “total vehicles,” and “cars” represent small and medium vehicles (or total vehicles minus trucks). The radar devices’ event logs can be used to ascertain truck, vehicle, and car flow in units of count/time period. For more information about the traffic collection locations or radar devices, please see Hilpert et al. [13].

### **2.3.3. Noise**

Sound intensity levels were measured as a metric of noise. Measurements were taken with sound level loggers (Extech model 407760), because this model has been used in a previous study of noise levels in NYC [19]. The loggers allowed measuring equivalent sound levels at a sampling rate of either 50 ms, 500 ms, 1 s, 2 s, 5 s, 10 s, or 60 s. While we would have preferred to use the smallest rate of 50 ms in order to capture short duration but very loud and harmful sounds, we chose 10 s to allow the logger’s internal memory to store 15 days of sound level data, corresponding approximately to the period of time between visits of Sites 1–6. For comparison with EPA environmental noise level limits [20], A-weighted sound levels (dBA) were recorded. Sound-level meters were calibrated before field deployment at 94 dB using an Extech 407766 Sound Calibrator. Noise levels measured close to building facades were not corrected for the presence of facades (Sites 1, 2, 3, 5, and 6) as described in guidelines by the International Organization for Standardization [21,22] because these corrections are intended to estimate environmental noise levels away from buildings [22].

## **2.4. Statistical Analyses**

For all statistical analyses, the warehouse opening date was conservatively estimated to be October 1, 2018, although it is possible that the warehouse opened before this time or gradually. If the warehouse did open before October 1, 2018, our choice would bias our results towards the null. We selected this conservative estimate to ensure that measures defined as occurring post-warehouse opening captured any traffic change after the facility

had begun operation and did not represent a traffic change from construction work that might have possibly occurred within the facility.

### 2.4.1. Objective 1: Characterizing Traffic Pollution

Pre-warehouse opening air pollution levels were characterized through time-integrated BC and PM<sub>2.5</sub> levels, which represent averages over the period of times between site visits ranging from 12 to 28 days. We note that for Sites 7 and 8, data collection of air measures ended on October 3, 2018, three days past our pre-warehouse opening designation. We interpret these averaging periods as pre-opening, however, because the majority of days in the sampling period occurred in the pre-opening time window. To allow for consistency with air pollution measures, for each site and each time period between site visits, an equivalent sound level was obtained from the 10-s resolution noise-level data  $L_{eq,10s}$  collected between the visits through

$L_{eq,10} = 10 \log_{10} \left( \frac{1}{N} \sum_{i=1}^N L_{eq,10s}(t_i) \right)$  where  $N$  is the number of sound level samples taken [23]. The date range of the sound-level data often did not correspond exactly with the date range of the air pollution measures. This happened when the time between visits exceeded 15 days (due to memory limitations in the sound level loggers) or when the battery of the sound monitor was depleted before a site visit (78% of visits). For comparison with the EPA noise-level limit of 70 dbA, we calculated for each site the equivalent sound level for all days for which measurements were taken for 24 h,  $L_{eq,tot}$ . Moreover, we stratified this time period by time of week (weekday/weekend), and time of day (day 7 AM–10 PM and night 10 PM–7 AM) and calculated equivalent sounds levels  $L_{eq,weekday}$ ,  $L_{eq,weekend}$ ,  $L_{eq,daytime}$ , and  $L_{eq,night}$  for these four subperiods.

Descriptive statistics of traffic counts, including means and standard deviations (SD), were calculated for eight three-hour time windows before and after the facility opened: midnight to 3 AM, 3 AM to 6 AM, 6 AM to 9 AM, 9 AM to noon, noon to 3 PM, 3 PM to 6 PM, 6 PM to 9 PM, and 9 PM to midnight. Comparing 3-h instead of daily flows has two advantages: first, traffic data for an entire day does not need to be discarded or interpolated if only a small data gap exists (only the three-hour window needs to be adjusted), e.g., due to download of data from the radar devices; second, this choice allows us to study diurnal changes in traffic and understand corresponding impacts on the community. In addition, we chose 3-h windows over 1-h windows because choice of the time window is to some extent arbitrary and hourly plots looked too busy.

### 2.4.2. Objective 2: Model Changes in Traffic Flow

To assess potential changes in traffic flow due to the opening of the online grocery delivery service warehouse, we used an interrupted time series model (ITS) [24] for traffic radar data collected continuously throughout the study period (Sites 3 and 4). Warehouse opening was coded as a binary variable  $X_t$ : value of 1 indicates warehouse open (October 1, 2018 and after), and value of 0 indicates warehouse not open (prior to October 1, 2018). We calculated traffic flows (trucks or total vehicles per time period) at a three-hour temporal resolution corresponding to the time windows used for the descriptive traffic statistics.

One generalized linear model was created for each of the eight time windows and for each study site with continuous traffic radar data (Sites 3 and 4), for ease in interpretation. We used quasi-Poisson distributions because our outcome was over-dispersed count data (traffic flows). All models were adjusted for day of the week (DoW, categorical 7-level variable) and long-term and seasonal trends (LTST) using a harmonic term with two sine/cosine pairs and a 12-month period:  $N_t = \beta_0 + \beta_1 t + \beta_2 X_t + \beta_3 DoW + \beta_4 LTST$  where  $N_t$  is a 3-hourly traffic count,  $\beta_0$  is the baseline traffic flow at  $t = 0$ ,  $\beta_1$  is the change in traffic for the passage of an additional day (the pre-warehouse opening trend in traffic),  $\beta_2$  is the change in traffic following the opening of the warehouse  $X_t$  (the  $\beta$  of interest),  $\beta_3$  is the change in traffic due to day of week, and  $\beta_4$  is the change in traffic due to long-term and seasonal trends. We note that the harmonic terms we used to describe seasonal traffic changes (LTSD) were also used to model weekly noise levels of urban road traffic [25]. To compare our modeled average flows of vehicles and trucks due to the warehouse opening with the numbers presented in the EA form filed on behalf of the online grocery delivery service warehouse in connection with its NYC subsidy application [26], we used the models to estimate for Sites 3 and 4 the times series of segregated traffic flows from October 2018–May 2019

attributable to the warehouse opening. These time series were obtained by subtracting the traffic flow time series from the ITS model prediction with the facility being opened on October 1, 2018 from the time series predicted for the hypothetical case in which the facility did not open. For each 3-hour time window and each site, we then obtained the average change in traffic flow during the post-opening period (October 2018-May 2019) for weekends and weekdays separately, as this was the way it was estimated in the EA. In total 32 models were created; given the strong effect sizes and consistent results we observed, we thought this number was appropriate and did not require *p*-value adjustment [27]. All confidence intervals are provided.

### 2.4.3. Objective 3: Estimating Increases in BC and Noise

To examine how pre-warehouse opening traffic affected sound levels at Sites 3 and 4, we fitted regression models to the measured 15-min time series of the traffic flow and noise. Regressions were performed for sound intensity levels *I* because, for physical reasons, sound intensity levels rather than decibels scale linearly with traffic flows [28,29]. We fitted the following models to the measured data:

$$(1) \quad I(t)/I_0 = \lambda_{car} Q_{car}(t) + \lambda_{tr} Q_{tr}(t) + s(t)$$

and

$$(2) \quad I(t)/I_0 = \lambda_{tot} Q_{tot}(t) + s(t)$$

where *I* is the sound intensity level with units of W/m<sup>2</sup> averaged over 15 min, *t* is time,  $I_0 = 10^{-12}$  W/m<sup>2</sup> is the threshold of hearing intensity level,  $Q_{car}(t)$  is the car flow,  $Q_{tr}(t)$  is the truck flow, and  $Q_{tot}(t)$  is the total vehicle flow (cars and trucks). All flows were determined from the traffic radar event logs for 15-min observational windows like in the traffic-BC analysis performed by Hilpert et al. [13]. Therefore, all time-dependent variables in Equations (1) and (2) are defined for 15-min observational windows. The spline  $s(t)$  with three degrees of freedom accounts for potential very slow drifts of the sound-level monitors. The 15-min sound intensity level *I* is related to the 15-min equivalent sound levels through  $Leq,15min = 10 \log_{10}(I/15min/I_0)$  where  $Leq,15min$  can be calculated from the measured 10-sec sound levels  $Leq,10s$  [23].

We fit the first model given by Equation (1) because it uses the segregated traffic counts obtained by the traffic radar. We fit the second model given by Equation (2) for comparison to existing or future traffic-sound level data only including  $Q_{tot}$ . Our models are either consistent with [30,31] or very similar to [32,33] other regression models for traffic-related sound levels.

For the regressions, Gamma generalized linear models (GLMs) [34] with a logarithmic link function were used, because sound intensity levels  $I(t)$  were not normally distributed. As model residuals could not be expected to be normally distributed, we used the DHARMA package [35] to produce interpretable residual plots. To examine potential collinearity between the predictor variables, the car and truck flows  $Q_{car}(t)$  and  $Q_{tr}(t)$ , we determined Pearson correlation coefficients between the time series of  $Q_{car}(t)$  and  $Q_{tr}(t)$ .

The regression coefficients  $\lambda_{car}$  and  $\lambda_{tr}$  can be used to estimate changes in sound intensity level due to changes in segregated traffic flows through the linear terms of a Taylor series expansion of Equation (1):  $\Delta I/I_0 = \lambda_{car} \Delta Q_{car} + \lambda_{tr} \Delta Q_{tr}$  where  $\Delta I$  is the change in sound intensity level due to changes in the flows of cars,  $\Delta Q_{car}$ , and of trucks,  $\Delta Q_{tr}$ . For the 15-min equivalent sound levels, a similar relationship exists:  $\Delta Leq,15min = (\partial Leq,15min / \partial Q_{car}) \Delta Q_{car} + (\partial Leq,15min / \partial Q_{tr}) \Delta Q_{tr}$  where  $\partial Leq,15min / \partial Q_{car} = 10 \lambda_{car} I_0 / I$  and  $\partial Leq,15min / \partial Q_{tr} = 10 \lambda_{tr} I_0 / I$  represent slope coefficients, which in contrast to the Taylor series for *I* depend on the sound level itself (through the denominator *I*). To get a sense of the general impacts of changes in traffic on equivalent sound levels  $Leq,15min$ , we approximated for each site *I* by its median  $I_{50}$  and report for each site  $\partial Leq,15min / \partial Q_{car} = 10 \lambda_{car} I_0 / I_{50}$  and  $\partial Leq,15min / \partial Q_{tr} = 10 \lambda_{tr} I_0 / I_{50}$  in units of dB/(100 h<sup>-1</sup>) which reflect the change in

dBA for a change in traffic volume of 100 vehicles per hour. Similarly, we estimate changes in  $L_{eq,15min}$  due to changes in total vehicle flow through  $dL_{eq,15min}/dQ_{tot}=10\lambda_{tot} I0/I50$ .

To examine how traffic associated with the opening of the online grocery store affected BC levels at Sites 3 and 4, we used regression coefficients from the BC-traffic analysis previously performed at Sites 3 and 4 [13]. That study examined how BC levels measured in real time with aethalometers depended on various measured traffic characteristics [13].

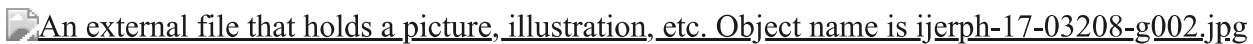
To estimate the increase in BC associated with the increased traffic from the opening of the warehouse, we multiplied the average change in traffic flow for each site (estimated as part of Objective 2, as described above) by the calculated BC coefficients from Hilpert et al. [13] to arrive at estimates of increases due to the traffic change from the facility, for Sites 3 and 4. Similarly, to estimate the increase in noise associated with the increased traffic flow, we multiplied the average change in traffic flow for each site by the noise coefficients appearing in Equation 1, for Sites 3 and 4.

Analyses were conducted with MATLAB version R2017b and R version 3.5.1 [36]. The R packages tidyverse [37] and lubridate [38] were used for data management, and patchwork [39] was used for some plots.

### 3. Results

#### 3.1. Objective 1: Levels of Traffic Pollution

Measures of noise, BC, and  $PM_{2.5}$  before the opening of the online grocery delivery service warehouse are shown in Figure 2, averaged over the period of times between site visits; approximately 2 weeks for Sites 1–6 and 4 weeks for Sites 7–8. Noise varied substantially from 60.3 dBA to 77.6 dBA, with Sites 2 and 7 having generally lower noise levels than the other six sites. BC levels also demonstrated higher variability, ranging from  $0.69 \mu g/m^3$  in September of 2018 at Site 7 to a high of  $2.99 \mu g/m^3$  in late June at Site 6.  $PM_{2.5}$  ranged from  $4.95 \mu g/m^3$  in September at Site 7 to  $10.58 \mu g/m^3$  in mid-July, also at Site 1. The mean measured value for all sites and time periods was  $7.88 \mu g/m^3$  (SD = 1.24) for  $PM_{2.5}$  and  $1.33 \mu g/m^3$  (SD = 0.41) for BC.  $PM_{2.5}$  and BC were somewhat correlated at all sites, ranging from 0.40 to 0.89.

 Figure 2

Time-integrated noise (top panel), black carbon (BC, middle panel), and particulate matter size 2.5 ( $PM_{2.5}$ , bottom panel) measurements at the eight study sites. Measures are averaged over the period of times between site visits; approximately 2 weeks for Sites 1–6 and 4 weeks for Sites 7–8.

In Table 2, we present the equivalent sound level for the entire measurement period and the median and interquartile range (IQR) for 15-min equivalent sound levels for each study site. Sites 1, 3, 5, and 6 exceeded the EPA’s recommended 70 dBA noise limit set to protect hearing. Daytime equivalent noise levels were generally higher than nighttime levels, except for Sites 4 and 6. Weekday equivalent noise levels were generally higher than weekend levels, except for Site 1.

**Table 2**

Descriptive statistics of sound levels.

Site	$L_{eq,15min}$	Median (IQR) (dBA)	$L_{eq,tot}$ (dBA)	$L_{eq,daytime}$ (dBA)	$L_{eq,night}$ (dBA)	$L_{eq,weekday}$ (dBA)	$L_{eq,weekend}$ (dBA)	Number of Whole Days
1		73.3 (71.4, 75.1)	75.0	75.5	74.0	74.9	75.2	129

Site	$L_{eq,15min}$ Median (IQR) (dBA)	$L_{eq,tot}$ (dBA)	$L_{eq,daytime}$ (dBA)	$L_{eq,night}$ (dBA)	$L_{eq,weeeday}$ (dBA)	$L_{eq,weekend}$ (dBA)	Number of Whole Days
2	61.1 (59.0, 63.3)	63.7	64.5	61.9	64.3	61.8	90
3	73.7 (72.3, 74.9)	74.0	74.2	73.9	74.3	73.6	93
4	67.4 (65.2, 69.6)	69.3	69.0	69.8	69.5	67.4	93
5	68.7 (67.2, 70.4)	70.4	70.3	69.6	70.5	68.9	84
6	70.4 (68.8, 72.4)	72.0	71.5	72.7	72.5	70.6	103
7	59.1 (57.5, 61.7)	65.9	66.7	65.1	66.7	64.3	42
8	63.3 (62.2, 64.8)	65.4	65.9	64.5	65.6	65.1	28

Descriptive statistics for truck and total vehicle counts before and after the warehouse opened are shown in [Table 3](#). Briefly, pre-opening 3-h window means ranged from a high of 268 trucks at Site 3 to a low of 6 trucks at Site 4. Mean vehicle count ranged from a high of 1446 at Site 3 to a low of 55 at Site 4. Post-opening means were in general slightly higher than pre-opening means, for both trucks and total vehicles. The time windows from 9 PM to midnight and midnight to 3 AM had the lowest traffic.

**Table 3**

Descriptive statistics for measured truck and vehicle counts before and after the opening of an online grocery delivery service warehouse in a South Bronx neighborhood.

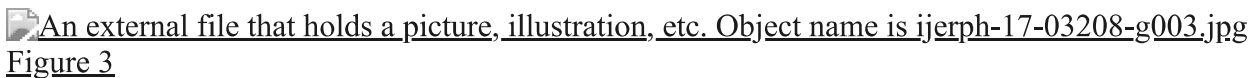
	Site 3 Mean Count (SD)		Site 4 Mean Count (SD)	
	Pre-Warehouse Opening	Post-Warehouse Opening	Pre-Warehouse Opening	Post-Warehouse Opening
<b>Trucks</b>				
Time Window				
Midnight to 3 AM	66.2 (28.1)	63.4 (23.9)	5.8 (3.1)	5.4 (3.5)
3 to 6 AM	126.8 (59.0)	137.8 (59.4)	11.4 (4.6)	10.7 (4.3)
6 to 9 AM	148.2 (68.0)	154.5 (67.3)	17.3 (8.7)	16.1 (8.5)
9 AM to 12 noon	217.8(102.4)	242.5 (109.4)	16.3 (7.8)	16.3 (7.9)
12 noon to 3 PM	268.3 (121.7)	303.6 (132.8)	17.0 (7.0)	19.3 (7.6)
3 to 6 PM	215.6 (96.9)	231.2 (102.3)	14.9 (6.2)	13.8 (5.7)
6 to 9 PM	104.6(43.4)	106.7 (45.1)	9.8 (4.3)	8.5 (4.0)
9 PM to Midnight	63.4(22.4)	65.1 (19.7)	7.6 (3.8)	10.4 (4.1)
<b>Vehicles</b>				
Time Window				
Midnight to 3 AM	492.7 (85.0)	470.6 (79.9)	55.0 (20.6)	54.6 (19.8)
3 to 6 AM	854.8 (282.1)	908.8 (266.4)	107.2 (36.5)	114.5 (34.8)
6 to 9 AM	1,294.4 (486.5)	1,354.0 (515.1)	215.5 (91.5)	224.9 (98.0)
9 AM to 12 noon	1,325.9 (363.5)	1,434.0 (390.7)	193.2 (71.9)	195.2 (76.8)
12 noon to 3 PM	1,445.7 (291.9)	1,538.8 (317.3)	202.7 (66.2)	216.6 (67.1)
3 to 6 PM	1,429.6 (258.7)	1,496.1 (264.8)	222.4 (87.0)	225.7 (79.9)
6 to 9 PM	1,078.1 (173.6)	1,139.6 (183.0)	126.8 (50.5)	116.1 (42.3)

	Site 3 Mean Count (SD)		Site 4 Mean Count (SD)	
	Pre-Warehouse Opening	Post-Warehouse Opening	Pre-Warehouse Opening	Post-Warehouse Opening
9 PM to Midnight	728.6 (137.4)	710.7 (111.1)	81.8 (29.7)	93.3 (26.8)

Note: Pre-warehouse Opening time period = June 1, 2017 through September 30, 2018; Post-warehouse Opening time period = October 1, 2018 through May 5, 2019.

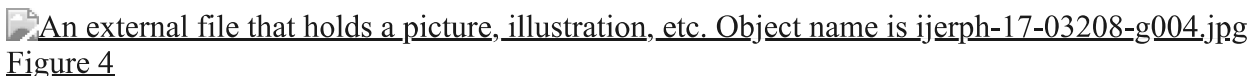
### 3.2. Objective 2: Modeled Changes in Traffic Flow

Results from ITS models comparing traffic flow before and after the warehouse opened for Sites 3 and 4, by vehicle type and time window, are shown in [Figure 3](#). We found statistically significant increases in truck flow for nearly all time windows for Site 3, with the highest occurring from 9 PM to midnight (Percent (%) Change = 31.7%, 95% CI = 23.4, 40.6%). The 9 PM to midnight window also showed the greatest increase for Site 4 (%Change = 27.7, 95% CI = 12.9, 44.5%), however, some time windows for this site also had significant decreases in truck flow. For total vehicles, Sites 3 and 4 each had significantly elevated total vehicle flow for the midnight to 3 AM (%Change = 12.7%, 95% CI = 7.9, 17.6% and 40.5%, 95% CI = 28.9, 53.3%, respectively) and 9 PM to midnight windows (%Change = 12.3%, 95% CI = 7.5, 17.3% and 28.1%, 95% CI = 17.5, 39.6%, respectively). In addition, the other two morning time windows for Site 4 also had significantly increased vehicle flow (6 to 9 AM and 3 to 6 AM windows).

 [Figure 3](#)

Percent change (points) and 95% confidence intervals (lines) in the truck flow at Site 3 (Panel A), truck flow at Site 4 (Panel B), total vehicle flow at Site 3 (Panel C), and total vehicle flow at Site 4 (Panel D) after the opening of an online grocery delivery service warehouse in a South Bronx neighborhood, compared to before the warehouse opened. Separate statistical models were completed for each three-hour time window; models controlled for day of the week and long-term and seasonal trends. Colors indicate the mean number of trucks or vehicles counted for a specific time window after the warehouse opened. Total vehicles include both cars and trucks.

Comparisons between the online grocery delivery service warehouse's EA and predictions from the ITS model for Sites 3 and 4 are shown in [Figure 4](#), separated by weekend/weekday, as done in the EA. The EA did not predict any additional vehicles or trucks traveling through Site 3, although the ITS models show substantial increases in flow for this site, for both weekends and weekdays. In contrast, the EA predictions in increased truck and vehicle flow for Site 4 are almost uniformly higher than those from the ITS models for both vehicles and trucks on weekends and weekdays. The only exceptions are for vehicle flow during the overnight time windows (9 PM to midnight and midnight to 3 AM), for which ITS models show greater total vehicle increases for both weekdays and weekends than predicted by the EA.

 [Figure 4](#)

Predicted values for increases in truck (teal) and total vehicle (pink) flow due to the opening of an online grocery delivery service warehouse, from our interrupted time series (ITS) models (dashed lines) and the environmental assessment (EA) form submitted by the delivery service before construction (solid lines), separated by site and weekend vs. weekday. Gray error bars for the ITS points represent the mean +/- the standard error. Total vehicles include both cars and trucks.

### 3.3. Objective 3: Increases in Traffic-Related BC and Noise



Results of the regression analyses used to estimate the contribution of segregated traffic flow  $Q_{car}$  and  $Q_{tr}$  to air and noise pollution are presented in [Table 4](#).

**Table 4**

Mobile source contributions to noise and black carbon. Confidence intervals are given in parentheses.

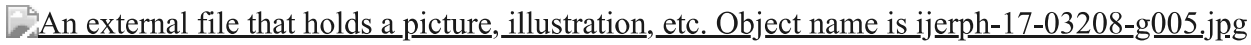
<b>Noise</b>						
<b>Model</b>	$\lambda_{tot}$ [h]	dLeq,15mindQtot [dBA / (100 h <sup>-1</sup> )]	$\lambda_{tr}$ [h]	$\partial\text{Leq,15min}/\partial Q_{tr}$ [dBA / (100 h <sup>-1</sup> )]	$\lambda_{car}$ [h]	$\partial\text{Leq}/\partial Q_{car}$ [dBA / (100 h <sup>-1</sup> )]
<b>Site 3</b>						
$Q_{tr} + Q_{car}$	–	–	60,275 *** (47,331, 73,219)	2.6	–1,679 (–5,161, 1,802)	–0.1
$Q_{tot}$	9175 *** (6,833, 11,518)	0.4	–	–	–	–
<b>Site 4</b>						
$Q_{tr} + Q_{car}$	–	–	138,191 *** (60,320, 216,063)	25.1	11,011 * (–335, 22,356)	2.0
$Q_{tot}$	21,181 *** (11,233, 31,129)	3.8	–	–	–	–
<b>Black Carbon</b>						
ln(BC)-traffic model	$\alpha_{tr}$ [µg/m <sup>3</sup> per 100 trucks/h]			$\alpha_{car}$ [µg/m <sup>3</sup> per 100 cars/h]		
<b>Site 3</b>						
Qtr+ Qcar+ Q <sup>-</sup> tot RS	–	–	0.15 *** (0.13, 0.18)	–	0.04 *** (0.03, 0.05)	–
<b>Site 4</b>						
Qtr+ Qcar+ Q <sup>-</sup> tot RS	–	–	0.21 *** (0.10, 0.31)	–	0.06 *** (0.03, 0.08)	–

Note: \*  $p < 0.05$ ; \*\*\*  $p < 0.001$ .

For Site 4, noise levels exhibited a significant dependence on the segregated traffic flows  $Q_{car}$  and  $Q_{tr}$ . The slope factor for trucks  $\lambda_{tr}$  was about 13 times higher than that for cars,  $\lambda_{car}$ , i.e., trucks contributed much more to noise levels than cars. The change in logarithmic sound-levels due to an additional 100 trucks per hour,  $\partial\text{Leq,15min}/\partial Q_{tr}$ , is also about 13 times higher than the corresponding change for cars,  $\partial\text{Leq,15min}/\partial Q_{car}$ . The slope factor for the total traffic flow,  $\lambda_{tot}$ , lies between the one for cars and trucks. For Site 3, noise levels depended significantly on only one out of the two segregated traffic flows.

[Figure 5](#) shows our estimations of BC and noise generated by the additional truck and car traffic from the facility. Values are relatively low, with a mean change in BC of 0.003 µg/m<sup>3</sup> (SD = 0.003) and 0.06 dBA (SD =

0.09) for noise. For Site 4, increases in noise were seen for early morning and late-night hours (from cars), whereas for Site 3 increases were highest around midday (from trucks).

  
Figure 5

Estimated change in black carbon (blue lines) and noise (red lines) from the average count of trucks and cars attributed to the opening of an online grocery delivery service warehouse at two study sites. Points where the line segment changes direction corresponding to the value at the start hour of a 3-h time window (i.e., the value at time = 0 corresponds to the value at Midnight for the Midnight to 3 AM time window). Gray error bars represent the mean +/- the standard error.

## 4. Discussion

### 4.1. Traffic Burden

In a community already experiencing a substantial burden of air pollution, we found significantly increased truck and vehicle flow at both monitoring sites after the opening of the online grocery delivery service warehouse, particularly for overnight time windows, on the order of 10% to 40% change (see [Figure 3](#)). This increase in traffic translated to a mean predicted increase in BC of  $0.003 \mu\text{g}/\text{m}^3$  and in noise of 0.06 dBA.

### 4.2. Environmental Injustice

While air pollution has been decreasing in NYC over time [[5,6](#)], we are concerned that specific communities, in particular those that already have higher than average amounts of pollutants from traffic and other sources, may benefit from this trend to a much smaller degree than others. Such communities are often comprised of people of color, have lower socio-economic status, and may have difficulty advocating for policy changes to support the health of their environment [[40](#)]. The Mott Haven neighborhood area is no exception to this trend; it has greater air pollution than both the Bronx borough and NYC, is predominantly Latino and of African descent, and has a high percentage of residents living in poverty [[4](#)]. In this case, the opening of a new distribution warehouse served to increase traffic, air pollution, and noise in a neighborhood already suffering from environmental injustice.

### 4.3. Black Carbon Burden

We estimated that the increase in truck and vehicle traffic resulted in a relatively small increase in BC. Prior studies have demonstrated an association between BC and asthma; a 2012 World Health Organization report on the health effects of BC found that a  $10 \mu\text{g}/\text{m}^3$  increase in black smoke ( $\sim 2.35 \mu\text{g}/\text{m}^3$  BC) [[41](#)] resulted in a 1.64% increase in asthma hospital admissions among children [[42](#)]. While the increase in black carbon we observed in the Mott Haven neighborhood was much less and may not translate to a measurable increase in asthma hospitalizations, the Mott Haven community already has some of the highest rates of childhood asthma emergency department visits in NYC [[4](#)].

### 4.4. Pre-existing Burdens

Important to consider in the decision to open a new warehouse or industrial facility in a neighborhood is the existing burden of negative health risk factors. Previous research suggests that the association between air pollution and health outcomes can be modified by socio-economic and race/ethnicity factors [[1,2,3](#)]. For example, a recent review found that risk for poor cardiovascular disease outcomes from air pollution was greatest among vulnerable populations, such as black individuals compared to whites, and those with low SES [[2](#)]. A study assessing the interaction of deprivation with  $\text{NO}_2$  and birth outcomes in NYC found an inverse

association between birth weight and NO<sub>2</sub> in the most deprived areas [3]. In addition, a study at the city level evaluating long-term PM<sub>2.5</sub> exposure and mortality found increased risk of mortality from PM<sub>2.5</sub> among cities with a greater percentage of the population living in poverty or without a high school diploma, and increased mortality among cities with a higher percentage of black inhabitants [1]. These risk factors are present in the Mott Haven neighborhood of the South Bronx, where pre-opening particulate pollution was already high and the community has lower SES and a high percentage of Hispanic and black residents [4]. Thus, we should be concerned that additional traffic might cause even worse health outcomes among the Mott Haven community than among residents of some other, more affluent areas. Rather than building facilities that increase traffic, a known risk factor for negative health outcomes including asthma, we advocate for the development of protective environmental structures such as public parks and open spaces [43]. Focus should be placed on reducing traffic exposure for neighborhoods similar to Mott Haven, rather than on allowing (even small) increases.

## 4.5. Environmental Assessment

Despite the large size of the new warehouse and the expected substantial increases in traffic, an EIS specific to this development was not submitted. Instead, a less extensive EA form was submitted to the NYC Industrial Development Authority on behalf of the distribution warehouse [26]. This EA relied on an EIS created in 1993, 19 years prior to its submission [11], with some supplementation to provide a traffic analysis comparison with the original statement [26]. We have compared modeled increases in truck and vehicle traffic at two sites with those predicted by the EA. We found that for one site (Site 4), identified in the EA as the route for 35% of incoming traffic [26], modeled traffic flow was below that predicted by the EA for all time windows except for midnight to 3 AM. The second site (Site 3) was not identified on the EA as a route [26]; however, it had increased truck and vehicle traffic at overnight time windows as well. The assumption of no warehouse-related traffic at Site 3 seems unrealistic, because that site is at the last exit ramp that vehicles traveling Southbound on I-87 can take to reach the main entrance of the warehouse. Thus, the EA likely inadequately identified areas of increased traffic, as it entirely missed an important interstate exit at which we observed traffic increases (Site 3), which is next to a residential street [13]. Since we had traffic radar systems installed at only two sites, we were unable to examine the EA's claim that total truck and vehicle increases caused by the warehouse in the entire street network would be similar to those predicted in the 1993 EIS. In addition, it is possible that as the warehouse grows and increases the number of trucks and vehicles needed to provide service, the currently observed increase in traffic will be exacerbated.

## 4.6. Noise Burden

In addition to reduced air quality and potentially increased adverse health effects, traffic related pollution also includes increased noise. We estimate an average noise increase of 0.06 dBA from the increased traffic due to the online grocery delivery service warehouse, although this is an average over all time windows and sites, and thus does not adequately represent the annoyance caused by short durations of louder traffic noise, such as those caused by blown vehicle horns or truck air brakes. Perhaps our plots of percentage of vehicle flow change versus time of the day (Figure 3) provide a better means of assessing annoyance, e.g., between 9 pm and midnight, we predicted a 32% and 28% increase in the number of trucks for Sites 3 and 4, respectively.

## 4.7. Comparison to Other Noise Studies

The noise levels we measured in the South Bronx are higher than levels measured in certain smaller cities such as Cáceres, a medium-sized city in Spain [44], and eight cities in the UK [45]. Our noise results are, however, consistent with those of other studies conducted in NYC. For example, one study assessing noise levels from traffic found an average 10-min noise level  $L_{eq,10 \text{ min}}$  of 69.3 dBA (+/- 4.1) [46]. A second study of 99 street sites in NYC found that the mean street noise level was 73.4 dBA, with substantial spatial variation (range 55.8-95.0 dBA) [47]. Our results are consistent with those studies; the equivalent sound levels  $L_{eq,tot}$  for our eight sites ranged from 63.7 to 75.0 dBA. It should be noted that some of these averages are already over the 24-h exposure limit of 70 dB identified by the EPA as the safe margin to prevent measurable hearing loss [20], and

thus further increases are undesirable. Another study of 56 sites in NYC [19] found that weekday noise levels were moderately higher than weekend levels (~2 dBA) which is consistent with our findings except for Site 1 where weekend levels were 0.3 dBA higher (see [Table 2](#)). That study also found daytime noise levels to be significantly higher than night levels, which is consistent with our study, except for Sites 4 and 6, but at these sites noise levels are only about 1 dBA higher.

Proximity to higher-traffic roads (as indicated by a lower value of the NYS code listed in [Table 1](#)) appears to be associated with higher noise levels. The four sites at which the 70 dBA limit was exceeded correspond to larger roads, as a comparison between the 5th and 6th column of [Table 1](#) and the 3rd column of [Table 2](#) shows. Our findings are consistent with a study in Guangzhou, one of China's largest cities [48].

We compared regression coefficients of our traffic-noise model given by Equation (1) to those measured for the model proposed by Cannelli et al. [30] and Cocchi et al. [31]. The ratio of the contribution from trucks and cars to noise which we determined for Site 4,  $\lambda_{tr} / \lambda_{car} = 12.6$ , can be compared to the ratio (denoted by  $\beta$  in their model) of 8 that Cannelli et al. [30] suggested for Italian roads. Our value is on the order of Canelli et al.'s, but higher. The difference could be due to differences in vehicle noise emission controls arising from geographic (Italy vs. the US) and temporal variation (Canelli et al. made their measurements 1979–1980).

#### **4.8. Other Traffic Burdens**

While we have focused extensively on the air and noise pollution impacts of traffic, increased truck and car traffic may have many other negative outcomes for a community. These include reducing the ability to comfortably walk or cycle on local streets, the potential for increases in traffic accidents or pedestrian and cyclist accidents, increased travel times around the neighborhood or to local businesses, and decreased access to natural resources such as waterfronts or parks, because traffic can make it unsafe for community members to cross roads or find parking.

#### **4.9. Limitations**

This study has several limitations. First, air quality and noise were only measured before the warehouse opened, and not after. However, our estimates for warehouse-related BC level increases are based on mobile-source contributions to BC levels which we previously derived from actual BC and traffic measurements [13] as well as the measured warehouse-related changes in traffic; and similarly our predicted changes in noise levels are based on mobile-source contributions to noise levels we determined in this work from actual noise and traffic measurements as well as the measured warehouse-related changes in traffic. Second, it is possible that unmeasured confounding could impact our results and bias our estimates of traffic increase resulting from the warehouse opening, if some other variable also impacted traffic at the same point in time in the study area. For example, construction of the warehouse could have increased traffic before the facility opened, biasing our results towards the null. Third, we conservatively estimated the opening of the warehouse as October of 2018, however it is possible that the facility opened earlier. If this is the case, we likely underestimate the increase in traffic as a result of the facility opening. Fourth, the facility may increase traffic further in the future if their business continues to grow, making our estimations of the impact of the facility on traffic even further underestimated. Fifth, we use a limited number of sites to estimate changes at the neighborhood level, but these sites may not be representative of the entire neighborhood, although they were chosen to represent different street sizes and housing types. Sixth, due to limited participant availability we could not always change air sampling filters on exactly the same weekdays thereby hampering comparisons between sites due to different ratios of weekend/weekday traffic; however, we do not expect this to be a major limitation, because all time periods between visits for Sites 1 through 6 contained two weekends, and for Sites 7 and 8 four weekends. Finally, our study may not be generalizable to other neighborhoods or cities with different neighborhood characteristics and traffic patterns.

### **5. Conclusions**

In a community already differentially impacted by high levels of air pollution, we found that the opening of an online grocery delivery service warehouse significantly increased truck and vehicle flow, especially for overnight time windows, and that for one traffic monitoring site, resulting changes were not adequately predicted by the facility's environmental assessment prior to construction. We estimate that these increases translate into small increases in black carbon and noise exposures for this neighborhood. However, even small increases are of concern because the community seeks to substantially decrease air pollution levels in their neighborhood, and incremental increases thwart their efforts to actuate such change. We suggest caution before building additional facilities in the area that may further increase traffic and its related pollution, as well as the submission of more thorough environmental assessments. Focus should be placed on decreasing traffic and pollution in overburdened communities, rather than incentivizing additional traffic-intensive facilities.

## Abbreviations

BC	Black carbon
EA	Environmental assessment
EIS	Environmental impact statement
ITS	Interrupted time series
NYC	New York City
PM <sub>2.5</sub>	Particles with aerodynamic diameter < 2.5 μm
SBU	South Bronx Unite
SES	Socio-economic status

## Author Contributions

M.H., S.N.C., and A.M.J. conceived the study design. M.H. and J.R. collected data. J.R. and S.N.C. completed laboratory analyses. J.A.S. and M.H. wrote the manuscript draft and conducted statistical analysis. M.-A.K. and A.D.-R. assisted with statistical design and analysis. D.H. and A.M.J. facilitated community outreach to identify sampling locations. All authors have read and agreed to the published version of the manuscript.

## Funding

This work was supported by NIEHS grant P30 ES009089 and R21 ES030093-01A1. JAS was supported by NIEHS grant T32 [ES007322](#). Additional support for filter weighing was provided by NIH grant S10OD016219-01.

## Conflicts of Interest

J.A.S., A.D.-R., M.-A.K., D.H., J.R., S.N.C. and M.H. declare no conflict of interest. A.M.J. is a community activist seeking to eliminate environmental injustice in the South Bronx. While he opposed the opening of the online grocery store warehouse, the environmental impacts of which this study assesses, and advocated for conducting this community-engagement study, he was not involved in data analysis and interpretation. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

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## Dubowik, Brooke

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**From:** Hudson New Hampshire <noreply@hudsonnh.gov>  
**Sent:** Saturday, April 24, 2021 11:05 AM  
**To:** Dubowik, Brooke  
**Subject:** Form submission from: Contact a Board or Committee

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**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Thank you. Your submission has been received. Submitted on Saturday, April 24, 2021 - 11:04am Form: Contact a Board or Committee Form ID: 42624 Submission ID: 21321 Your Contact Information

First Name Richard

Last Name DeRosa

Phone Number 6037181245

Email rlddmd@comcast.net

Select the Board or Committee you would like to contact Planning Board

Question/Comments you'd like to share

To: Mr. William Collins

Planning Board Secretary

Dear Mr. Collins:

I live at 5 Inspiration Path, Mission Pointe Condominium Association. I watched all of the meetings concerning the Hillwood/Amazon proposals with interest. I must say that I was very disappointed with your comments Wednesday night. It appears to me that you have little or no direct knowledge of the problems we, who live in south Hudson face daily concerning the traffic and congestion on Lowell Road. Do you live in this area? We live in a 62+ community - most of our owners are in their late 70's and 80's and I must say that the traffic issues present serious problems for our being able to negotiate the traffic lights at Oblate Drive and Lowell Road. We have approximately 4 seconds to make turns onto Lowell Road before the lights change. Cars presently speed through the intersection and there have been many accidents at that location. I wonder if you have ever witnessed the heavy traffic on Lowell Road during the morning and evening commuting hours. It is literally bumper to bumper traffic for several hours. I seriously question your support for the traffic studies done by the DOT and Hillwood. It's obvious to me that those studies were not done during these commuting hours. Adding 350 trailer trucks to this over-used road will create an untenable situation for our residents. The added traffic from the 90 apartments at the Friary Apartments will certainly add to the problems. Remember, all this traffic presently feeds into a two lane Lowell Road beyond the Presentation of Mary Academy resulting in bumper to bumper backups. How is it possible that you don't see this and simply accept the projects traffic studies. Selectman Coutu used the term "Common Sense". He lived in this area and along with the residents of this area know first hand the issues we face. Market Basket, Dunkin Donuts etc. all add to the present traffic problems. Why don't you see that adding the Amazon traffic will over tax this area and greatly disrupt the safety and tranquillity of this area. In addition to adding diesel pollution to the atmosphere. Instead of your blind support of the Project, come down here and see for yourself what's going on here now. "Common Sense" dictates that the proposal's traffic solution will never work! I suggest that the Planning Board force the State and its DOT to build the on/off ramps off of the Circumferential Bridge. Force Hillwood to pay for the ramps! Your responsibility is to the Town and its residents - not to the Amazon Project. It was so clear to me that you and several other members are not using common sense and are more concerned with this project getting approved rather than looking out for the homeowners and residents of this area. This project will greatly affect our town - once it's approved, there is no going back. The State built the Circumferential Bridge and all that traffic dumps

into Hudson. What has the State done with the rest of the project? It built the bridge into Hudson and that's it! Now you are going to compound the problem by allowing Amazon trucks to inundate this area. I invite you to see the caravan of trucks on Amherst Street at the old Building 19 site. It's non-stop. Is that what you want for Hudson? What about property values. You are blindly being sold a bill of goods by Hillwood. You are not looking out for what is best for our community. Please listen to Selectman Coutu and his "common Sense". He and we live in this area and know what is right. Thank you,

April 25, 2021

To Planning Board

RE: Current Earth Berm and sound wall deliberations

The Planning Board is currently in deliberations concerning the Hudson Logistics Center Project.

Please keep reminding yourselves the proposed Hudson Logistics Center proposal will be a major 24/7/365 operation. If the earth Berm and sound wall are too low I will have no relief from the 24/7/365 noise. During the 04/21/2021 meeting it appears the Planning Board members seem to put all their trust in studies supplied by the Applicant and peer reviewers. This is even after knowledgeable public testimony by the public has pointed out flaws in the reports and peer review analysis.

- Smolak & Passy Hillwoods lawyers maintain noise pollution is in compliance with applicable regulations. This can be contradicted by reviewing the Applicant's expert assumptions in the Sound Study performed by Ostergard Acoustical Associates (AAO) which has been updated and peer reviewed by Harris Miller, Miller & Hanson, Inc. (HMMH). The Applicant's EXPERT on SOUND (AAO) concludes that there is **NO** noticeable impact on adjacent residential properties based on his expert knowledge and numerous detailed CALCULATIONS. The peer reviewer (HMMH) has presented his conclusions and assumptions. For CONTRADICTION to both these expert conclusions simply read public record Attachment H, pages 108 to 112 in the 3/10/2021 Planning Board packet. There is a very technical letter (author Mr. Monk) concerning the lack of quality in the calculations used by the Applicant's Sound Expert (AAO) and assumptions and conclusions made by the peer reviewer (HMMH). Also it is easy to see obvious discrepancies in the Applicant's Expert (AAO) conclusions that a 24/7/365 mechanically generated noise will not cause more problems than what currently occurs on the golf course. The Planning Board should carefully review all documents presented to them, it is very unlikely the requirements of 249 Noise Ordinance are met. Public presentations at the 02/24/2021 Planning Board meeting also note faults with the sound study report.

At the last 04/21/2021 Planning Board meeting the Applicant's Engineers were supposed to investigate and report back on increasing the height of sound wall and visual protection to the public. I encourage the Planning Board to err on the side of the public in their decisions. Whatever decisions are made by Planning Board members please again remember the public will not get any relief if any are detrimental. The public will be subjected to it 24/7/365. There are no 24/7/365 comparisons to the unknowns presented by this massive project. Please do not subject any members of the public to unnecessary tire tread marks by being thrown under the bus by a well-meaning but detrimental decision for the future of the Town.

Finally, I do not know where any Planning Board members live. I do know where I live and going home to escape noise will not be an option for me that possibly you have. I will be next door to it 24/7/365 with no escape. Again please err on the side of protecting the public in your decisions.

Respectfully submitted

James Crowley  
4 Fairway Drive

## Dubowik, Brooke

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**From:** Chris Mulligan <pineglen3@gmail.com>  
**Sent:** Monday, April 26, 2021 5:21 PM  
**To:** Planning; ~BoS; Groth, Brian  
**Subject:** Amazon reps respond to traffic concerns at Northborough Selectmen meeting

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<https://www.communityadvocate.com/2021/02/23/amazon-reps-respond-to-traffic-concerns-at-northborough-selectmen-meeting/>

Interesting article about Northborough, MA Amazon facility which is the same type of facility being proposed in Hudson. Of interest is the Amazon representative that spoke to the Hudson Planning Board and specifically stated that Amazon facilities operate at 40% utilization, states in this article that the Northborough facility operates at 80% utilization. This is obviously a huge difference, and would have huge implications to the town of Hudson.

Numbers provided to Hudson by Amazon and Hillwood have been questioned from the start. The statement by Mr. Griggs in this article is a clear indication that you are basing decisions about this project on incorrect information.

Chris Mulligan

April 26, 2021

To Planning Board

RE: Full faith reliance of validity of Studies and peer reviews

The Planning Board is currently in closed deliberations concerning the Hudson Logistics Center Project. My concern is that members of the Planning Board seem to be currently confident that if a Report or Study has been peer reviewed once or multiple times that Hudson Town Code has been sufficiently met. No additional scrutiny or common sense is required or needed by Planning Board. I can see where after approximately 10 months of mountains of information that the Planning Board would feel due diligence has been achieved. Personally I do not know how you have found time to review all the data and carry on a normal life.

However, I cannot share in your confidence that since something has been peer reviewed everything is satisfactory. Another significant component of the review process to the Planning Board is public comment. Just because the review comment does not come from a person with many credentials does not mean it has no merits to be considered. To give you an example I am sure that everyone agrees Traffic has been peer reviewed and beaten to death by the NHDOT, Hudson's professional traffic consult and an independent professional traffic consultant. So what more can possibly exist to talk about?

As I mentioned earlier there is the public review element. Whether the Town wants to admit it or not they have a Right To Know (RTK) RSA 91 problem. Currently 8 videos of what is documented as most likely up to 80 videos of VISSIM capacity analysis results have been released to the public do to RTK efforts. So let us look at the information that may or may not have been available for peer review. First some background:

- NHDOT identified three critical segments on westbound Sagamore Bridge Road and two critical segments on eastbound Sagamore Bridge Road that would need to be evaluated in greater detail.
  - The public finds it interesting that the NHDOT main concern is limited to just segments of the Circumferential Highway aka Sagamore Bridge Road.
  - The public wonders why other segments of Lowell Road intersections do not warrant this high level of evaluation that are controlled by NHDOT. Surely Planning Board members have noticed traffic problems at other Lowell Road intersections.
- The Applicants traffic engineers (Langan) engage Stantec Consulting Services, Inc. (Stantec) to perform a VISSIM evaluation of merge and weave segments along Sagamore Bridge Road. These were used to make Level of Service (LOS) determinations.
  - VISSIM is an acronym for Visual Simulation modeling software that can produce reports and simulation videos of predicted traffic. However, the gold standard for traffic engineers is the Highway Capacity Manual HCM.
  - I find it fascinating that 75 percent of traffic will use Sagamore Bridge Road. Do you ever wonder were the other 25 percent is going? Not on Hudson back roads I hope.
  - The VISSIM model traffic input parameters include such things as: roadway layout, predicted traffic volumes, rates, vehicle type and quantities, and vehicle interactions during the merge and weaving maneuvers. By no means is this a conclusive list but the model can be subject to the professional bias of the person controlling the modeling.

I now want to point out items in the NHDOT Geometrics Engineer's 10/02/2020 review letter concerning the Traffic Impact Study (TIS). I will paraphrase some of what was written in Item 2 under the section titled Sagamore Bridge Road (Circumferential Highway) Corridor. However, please take extra time to reread the letter to verify my paraphrasing.

- QUOTE "The VISSIM modeling calibration uses a specific driver behavior profile for merging and weaving which implies the default driver behavior parameters were manipulated to produce better results. It seems unlikely drivers in this area are unusually polite." END OF QUOTE
- Item 4 in the same section of the letter compares LOS results between the Highway Capacity Manual software and VISSIM software.
  - The HCM software generates a Sagamore Westbound weave LOS of E for AM/PM traffic for 2032 No build and LOS of E&F for AM/PM traffic for 2032 Build.
  - So how do the VISSIM software intelligent extra courteous Sagamore Westbound drivers fare. The VISSIM software generates a Sagamore Westbound weave LOS of B for AM/PM traffic for 2032 No build and LOS of C for AM/PM traffic for 2032 Build.
- This is a drastic difference in LOS results between the two software programs used in the TIS. The HCM says find another route and the VISSIM says come on down no problem.
  - The reason I brought up the last point is because the NHDOT reviewer put into the peer review memo that the drivers seem to be extra courteous which indicates manipulation of the data. I'm sure in the 10 months of data all Planning Board members remember reading that.

So since the Applicant has expended so much time, effort and money on this special VISSIM traffic analysis which had multiple peer reviews the Planning Board should have full confidence in its results. Therefore, due diligence has been done and we should all rely on the experts with no additional questions asked. If so can I ask if any Planning Board member had the time or even an idea to dig deeper into this small segment of the traffic conundrum by even looking at the VISSIM videos? Well the other major component (public scrutiny) through Right To Know efforts finally can. Here is some things I have noticed:

- The August 20, 2020 Memo from Stantec to Langan Engineering (Applicants engineers) notes some of the following
  - The results are obtained from the average of ten (10) simulation runs. This would imply that for 2022 and 2032, AM and PM Peak Hour, and No Build and Build conditions. This yields 4 conditions of analysis for each year or 8 conditions total. However, Stantec states they ran 10 simulations for each condition for a total of approximately 80 simulations. The public only sees 8 simulation videos in the materials provided in the RTK request.
    - Are these 8 videos the best of the best?
    - Are these the only videos any peer review professional was able to see or had time to base their review opinions on?
    - Keep that thought in mind while you see after repeated efforts to obtain information the RTK inform public was finally allowed to view the 8 videos.
- Since this letter is already long let me take one video VISSIM for 2032 Build PM peak Hour (file: 2032 B PM CH Overview.mp4). The Build 2032 condition for Lowell Road north left turning onto west bound Sagamore Bridge Road is three (3) turning lanes. These 3 lanes taper back to two as you travel west on Sagamore Bridge Road. I strongly suggest you review the CONCEPTUAL drawing currently available to the Planning Board and public.

- In the video first notice the vehicles in the left most lane in the curve merge right while traveling through the curve. Common sense dictates you do not shift lanes while in a curve, you wait until you have traveled through the curve. Additionally, the lane shift these vehicles are making is in a pulse condition into the worst blind spot condition (curve arc) for doing such a maneuver. I will admit I am no expert traffic VISSIM modeling engineer but common sense indicates this is not an accurate modeling of actual vehicle behavior.
- Remember the video you are watching is probably the best of the best and most likely given the best peer review by NHDOT and other traffic consultant experts. If you are the VISSIM modeler again you would show the best video of the best. So follow the vehicles in the left most turn lane all the way through the curve into the taper lane proposed by Langan engineers. Two vehicles end up trapped and completely stopped at the end of the taper. Does this give you confidence that the LOS capacity analysis is correct for 2032 Build PM peak traffic? The traffic engineer will probably say we can always extend the length. So what is the problem? The problem is the modeling they have presented to the Planning Board has obvious flaws that anyone with simple common sense can see. This is what the largest proposed development to come to Hudson is based on.
- Somehow a few large trucks were depicted in the VISSIM models. However, the technical paper provided by the Applicants engineers concerning VISSIM modeling indicates more study has to be done for large trucks. So based on that and being willing to be impressed by the latest and greatest that current VISSIM can offer I watched these large trucks in the videos. Here is some of what this non-expert in traffic modeling noticed in the 2032 Build PM peak hour video sample:
  - The large truck shown is in the left turn lane of the three available so no tapering problems happen when the straight section of the Sagamore Bridge Road is reached. Makes me wonder if that is by chance or by bias modeling.
  - Notice how there are never any multiple large trucks clustered near each other. Will Amazon schedule all their large truck and other commercial industrial businesses to prevent this?
  - The large trucks seem to accelerate from a stopped position the same as a passenger vehicle.
  - The VISSIM video's always stop before you get to see any large trucks starting from a stopped position at the traffic light on Lowell Road north bound onto Sagamore Bridge Road west bound.
  - Since NHDOT didn't request it you do not get to see any stop and go pulsing traffic at the Walmart Blvd / Lowell Road intersection either.

I want you to note I stayed away from the traffic hot button issue of trip generation. All I really did was reread the TIS report and peer reviews by NHDOT and was finally able to watch a few VISSIM videos. None of which seemed to replace what tells me that with common sense will really happen traffic wise even after multiple peer reviews. Please do not put your blind faith in simply that multiple peer reviews have been completed so additional future due diligence by the Planning Board is never necessary.

James Crowley  
4 Fairway Drive



To: Hudson Planning Board from Steve and Kathy Martinek

We have been residents of our Town of Hudson for over 40 years. We are not experts in any of the critical areas of discussion for the Hudson Logistic Center (HLC) project like traffic, noise, environmental damage, and safety issues, but we are quite aware of how these issues will affect the quality of life of every resident of our Town of Hudson, not just in the Southern end of Hudson.

All three of our children went to Hudson schools and are now very successful adults with families and wonderful careers and lives. That is because of the culture and wonderful values they obtained in our town of Hudson. This development will change our legacy to any future generations in so many unknown ways.

We now have family that live in the Northboro, Mass. A town near both Rt 495 and Rt 20. We visit them often and hear their discussions on how the Amazon facility in their local area has affected their quality of life very negatively. The traffic and the constant issues with accidents happening because of the increase of trucks and cars speeding along their side roads near the schools and their Main Street, which happens to be Rt 20, have increased and created many dangerous situations for the residents of their town of Northboro. This distribution center is now proving to be a very negative “improvement” in their town. Too Late!!!

No going back!!! They are there to stay and they are taking over more and more underdeveloped land in the process. Please let us learn from these other towns.

These facts might be worth investigating to see what happens when a large distribution center comes to a town and takes it over in every aspect of its operation. They too were told by Amazon that these trucks and cars would not travel on any of the side roads. They too were “guaranteed” this fact and yet it is still happening, and they cannot stop it now that Amazon is “in”.

During this past year, we have attended every Planning Board meeting via local TV Channel 22, emails, and phone calls. Because of the Covid restrictions, we have not been attending these meetings in person, as we are sure many Hudson residents have felt the same for safety reasons. We have witnessed the hard work, effort, and time you all have put into the decision-making process for this HLC project. We truly thank you all for this.

Unfortunately, we can't remove the idea of the 24/7 – 365 days a year that this facility will operate from our thoughts. These issues keep us awake at night with worry. When we are outside listening to the sounds of nature in the mornings and evenings, it is apparent that these lovely sounds will disappear with all the construction and changes in the environment. We think, *there will never be any down time. Silence will be gone forever!*

The 24/7 365 days of operation a year, with traffic and the sounds coming from the trucks coming and going will *never stop*. The noise and gas fumes into the environment will *never stop*. There will never be any time when we will have *“quiet” or pure air* in the surrounding area of this development. *Not even the Airports operate on such high level time schedules.*

What next comes to mind is that you all decided when the Hudson Race track operators wanted to add another day of operation to their schedule, you all voted **NO** to that request. It was stated that the quality of life of the surrounding residents would be affected by the additional days. You were correct in that decision. The well being of the residents was considered then and the same consideration should be given to the neighborhoods in the HLC area.

Please, please review all the facts. We understand that every resident has the right to sell their property. We approve of progress and modernization in our Town, but this project is not the right one for our Town of Hudson. We have so much more to lose than the monetary gain by the approval of this HLC project. Please say **NO** to the Hudson Logistic Center.

Thank you.

Steve and Kathy Martinek

Birdie Lane - Hudson

## Dubowik, Brooke

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**From:** Jerome Bento <jeromejbento@gmail.com>  
**Sent:** Tuesday, April 27, 2021 10:40 PM  
**To:** Planning  
**Subject:** Planning Board May 5, 2021

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**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Please include in Packet for the May 5, 2021 Planning Board Meeting.  
Thank you

Planning Board Members,

As you continue your deliberation of the plans for the Hudson Logistics Center I ask that you review my items below and I respectively ask that you tighten the stipulations for these items.

I ask that you modify the stipulations to require the NHDOT Traffic plan to be 100% approved as presented to the Planning Board prior to the issuance of a building permit. (of course the best remediation course of action is ramps directly from the project to the Sagamore Bridge road).

I ask that you modify the stipulations to require the Traffic mitigation to be 100% implemented prior to issuance of the Occupancy Permit.

The current tree line only partially shields residences on Fairway and Eagle from the Golf Course. This tree line can not be considered consistently adequate to shield the project from the homes as in many areas the current tree line is very sparse.

The Berm must be of material that will either absorb sound, reflect back to the project, or both. The Berm must all be of sufficient height to block the buildings from view on both Fairway Drive and Eagle Drive.

BAE Systems was used by some Board members as a comparison for an industrial building in the neighborhood. BAE is not a 7x24 operation, has few trucks accessing the property and only has approximately 700 employees per State of NH. see link ( <https://www.nhes.nh.gov/elmi/products/cp/profiles-pdf/hudson.pdf>)

Real Estate values must be further reviewed with an eye toward a completed industrial site and the impact on values. Somewhere in the United States there must be a large industrial complex that has been built in a green area that is adjacent to a residential area. The Town peer reviewing should be able to help.

Thank you for all that you do for the Town of Hudson!

Jerome J. Bento  
7 Muldoon Dr  
Hudson, NH 03051

## Dubowik, Brooke

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**From:** Kathleen Crowley <crazykathy7@gmail.com>  
**Sent:** Tuesday, April 27, 2021 9:35 AM  
**To:** Planning

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HEALTH, WELFARE & SAFETY OF THE TOWN & CITIZENS, is this project compliant with this standard, I don't believe so it's an act of GREED from a corporation. You need to protect Hudson citizens, their future & their childrens futures, not Hillwood/Amazon greed. Many of these warehouses are popping up all over our country & devastating our environment, what will we look like & what will our childrens & grandchildrens environment look like ??? We moved here in the fall of 1987, Sanders was down the road, later became BAE, we were hardly aware they were there other than some employees who walked through the neighborhood on their lunch break, they have been friendly & good neighbors. They did not bring the noise,light & carcinogenic pollution that Hillwood promises. Hillwood has been unable to offer any example of similar projects in size &/or location, THERE AREN'T ANY, especially in a residential setting as we are in. As far as REAL ESTATE VALUE let me quote the Golden rule of real estate.....LOCATION, LOCATION LOCATION !!! This is an irresponsible site for this project. SOUND, a new study needs to be done prior to approval, this is important to the HEALTH, WELFARE & SAFETY TO ABUTTERS. Air study needs to be done & NOT in Concord, let's try to test some Hudson air. TRAFFIC plan IS INSANE, Hillwood is NOT solving our problem it is making it WORSE. Look at the plan they have layed out & imagine navigating lane changes & turns in the midst of a mass of semi-trucks, good luck. In an EMERGENCY will needed help be able to get there in a timely manner ??? It could be our life or the life of a child or family member, can't dodge those semi's too easily. HEALTH WELFARE & SAFETY. Will the proposed berm be adequate to block noise,light,pollution & CARCINOGENIC diesel fumes. HEALTH, WELFARE, SAFETY ??? How many citizens will become ill or die as a result of these fumes ? How many realize that blasting of bedrock will be needed to be done for this project, I have heard no conversations about this at all during any meetings. Green Meadow development homes should have preconstruction inspection of home foundations & polls prior to blasting doing this blasting & it should be paid for by Hillwood, PLEASE ADDRESS this issue. Hillwood has been dishonest, cagey & deceptive on so many levels, they CAN'T BE TRUSTED. We are TRUSTING our hard working officials to protect our town & citizens. Please remember our town & people HEALTH, WELFARE & SAFETY. Thank you for all the hard work & time put in on this, we depend on your good decisions. Kathleen Crowley 4 Fairway Dr.

## Dubowik, Brooke

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**From:** Ruth Sessions <ruthsessions03051@yahoo.com>  
**Sent:** Tuesday, April 27, 2021 3:44 PM  
**To:** Planning; McGrath, Marilyn; Coutu, Roger  
**Subject:** Comments & Concerns on Discussion of Hillwood Proposal at April 21-2021 PB Meeting

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**EXTERNAL:** Do not open attachments or click links unless you recognize and trust the sender.

Planning Board Members:

As a resident of Hudson and a licensed Real Estate agent, I'd like to comment on the statements made at the April 21st Planning Board meeting about the potential effect of the proposed Hudson Logistics Center on the values of homes in South Hudson. Chairman Malley commented that since the neighborhood near the golf course is already adjacent to an industrial complex (BAE Systems) to the South, there is no reason to believe that the Hudson Logistics Center would reduce property values of those homes. I'd like to point out the significant differences between how BAE Systems impacts the neighborhood and how the proposed HLC would impact it. Contrary to the HLC proposal, the BAE Systems complex:

- Has buildings that are not 4 stories tall, not as imposing.
- Has carefully landscaped and maintained grass and vegetation that provides a pleasant place where people enjoy walking.
- Has very few trucks coming/going, not spewing excessive diesel into the air, which also keeps the space pleasant.
- Does not operate 24/7/365.
- Is quiet most of the time, making no consistent intrusive noise.
- Provides jobs that are high-paying long-term salaried positions.
- Does not risk polluting the Merrimack River.
- Enhances rather than detracts from the neighborhood.

If the HLC proposal were more like BAE Systems, it would be a more appropriate addition to the area, but it is nothing like BAE Systems. From a real estate value perspective, the HLC would detract from local real estate

values by operating 24/7/365, having a large number of noisy tractor trailer trucks coming/going, intruding on air quality, adding significant light pollution at night, having a poor plan for storm water management that might ultimately harm the Merrimack River, bringing in low-paying jobs, and detracting from aesthetic charm in the area, ultimately reducing the quality of life in South Hudson.

In addition, as an agent who has worked with builders on new construction, in my experience, it is not unusual for a town to ask the builder to contribute in ways that enhance the town. Builders might be asked to put in sidewalks, bike paths, and landscaping features as well as to pay for other needs of the town. So, as a citizen of Hudson, I'd like to remind our Planning Board that they represent the town and its citizens, not the developer. The Hudson Planning Board should not be afraid to push back against a developer who comes across as entitled. Hillwood should be willing to meet any standard you ask them to meet, not the lowest possible standard. If you, for instance, insist it use data from the Nashua Airport in addition to data from the Concord Airport when determining noise or air quality impacts, Hillwood should be willing to do it. And it should be willing to do more if asked. So, don't be afraid to push Hillwood to do more; otherwise, you and all of Hudson may look back in the future with regret.

Sincerely,  
Ruth Sessions  
68 Schaefer Circle

----- *Ruth Sessions* 603/886-7355 | 603/809-3054