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January 4, 2018

Re: **Preliminary Review** - Development of Regional Impact – Hard Rock Development, Proposed Commercial Excavation

Dear Committee Members:

Per NH RSA 36:55, a Development of Regional Impact means any proposal before a local land use board which in the determination of such local land use board could reasonably be expected to impact on a neighboring municipality.

Per the Town of Barrington, on October 16, 2018 a declaration of potential regional impact was approved by the Planning Board for the Hard Rock Development application for site plan approval related to a proposed sand and gravel excavation and conditional use permit related to impacts to the wetland buffer (Tax Map #263, Lots 13.1, 13.2, 18, & 19) located on Pierce Road in the “Regional Commercial” zoning district.

The Strafford Regional Planning Commission (SRPC) received formal notice from the Town of Barrington of said *Development of Regional Impact* on October 25, 2018. Per the Town of Barrington, notices were also sent to the City of Dover, the Town of Lee, the Town of Madbury, the Town of Durham, the University of New Hampshire, and the City of Portsmouth. On that date, SRPC also received draft meeting minutes for the October 16, 2018 meeting of the Town of Barrington Planning Board. SRPC has subsequently received one set of large-scale plans entitled “Hard Rock Excavation, prepared by Jones & Beach Engineers, Inc. and dated May 7, 2018. SRPC has also accessed publicly-available application materials via the Town of Barrington’s website.

Transportation, Access, and Parking
1) Will the proposed development cause an increase in motor vehicle traffic or other traffic that will impact the safety of the transportation system?
2) Will the proposed development cause an increase in motor vehicle traffic or other traffic that will increase congestion on the transportation system in the adjacent town?
3) Will the proposed development create the need for infrastructure improvements?
4) Will the development result in inadequate emergency access?
5) Does the development meet minimum local parking standards or are there provisions for other modes that reduce the need for parking?
6) Does the plan provide for safe access within the development for all modes (ADA compliance, sidewalks, crosswalks, lighting)?
Comments: The current application does not appear to include trip generation estimates. A 2016 traffic count showed average annual daily traffic of 14,192 trips on NH 125 at a point approximately 3000 feet south of Pierce Road. Additional vehicle trips generated from the proposed development are unlikely to significantly affect traffic patterns; however, the increased amount of heavy machinery entering and leaving the site may damage local transportation infrastructure of smaller local roads in Barrington and surrounding communities. The Town should consider asking for additional information regarding trip generation for employees and delivery/removal of excavation materials, such as number and size of vehicles, peak trip generation times, and heavy machinery travel routes. This information will determine



where the heavy machinery will be traveling and if the current road network can handle the additional wear and tear.

The applicant has stated that road construction will abide by NHDOT and Barrington Town road and bridge construction specifications. According to the Barrington, NH Site Plan Review Regulations, “all access shall be designed to accommodate prospective traffic and meet requirements of the Zoning Ordinance, Subdivision Regulations, and all other applicable town and state regulations including those of the Barrington Fire Department.” Abiding by these regulations will ensure accessibility to emergency response vehicles in an emergency situation.

Conflicts with Policies, Plans, and Programs - Noise

- 7) Will the development expose persons to or generate noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies?
- 8) Will the development expose persons to or generate excessive ground borne vibration or ground borne noise levels?
- 9) Will the development substantially and permanently increase ambient noise levels in the project vicinity above existing levels?
- 10) Will the development substantially increase temporary or periodic ambient noise levels in the project vicinity above existing levels?
- 11) Is the development located within an airport zone or within two miles of an airport or airfield, where the project would expose residents or employees in the project area to excessive noise levels?

Comments: Section 7.1.2 of the Town of Barrington Zoning Ordinance limits noise levels to 75 decibels at all property lines. Section 7.1.1 indicates that no ground-borne vibration that is discernible without the aid of instruments is permitted beyond a lot-line. If blasting of rock will be necessary for the operation of this site, the applicant should provide information from their blasting contractor regarding the decay of noise and vibration affirming compliance with these provisions.

Hazardous Materials or Substances

- 12) Will the development create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- 13) Will the development create a significant hazard to the public or the environment through the reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- 14) Will the development produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school?
- 15) Will the development be located on a site that is included on a list of hazardous materials sites compiled by the NH Department of Environmental Services and, as a result, would it create a significant hazard to the public or the environment?

Comments: Processed materials from excavation/mining sites are often transported by trucks for construction materials to be used for fill, bedding, subbase, etc. and do not pose a significant hazard to the public or environment. If the proposed development expects to use light charge blasting, the Planning Board should ensure water quality measures be taken to protect water quality and reduce impacts.

According to the EPA, sand and gravel excavation activity primarily produces emissions in the form of

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particulate matter (dust) and particulate matter less than 10 micrometers in aerodynamic diameter, which are often negligible. Some dryers may be sources of volatile organic compounds or sulfur emissions, depending on the type of fuel used to fire the dryer. With the exception of drying, emissions in the form of dust can be handled with appropriate control techniques. If dryers are going to be used on the proposed site, the Planning Board should request approximate emission totals.

The proposed excavation project is located on a site that is included on the NHDES list of hazardous materials. The site, American Truck (Liberty International Trucks) on 3 Pierce Road, is listed as having a non-sanitary holding tank with a low work load priority. NHDES lists this site as a risk due to its proximity to two wellhead protection areas. The Ambleside Mobile Home Park (Newton Plains Road) and Computer Resources (1037 Calef Highway) both have wellhead protection areas in close proximity to the site. The Computer Resources wellhead protection area crosses into three parcels (13.1, 18, and 19) of the proposed development.

SRPC is unable to determine whether the proposed activity on the site could result in a significant hazard to the public; the applicant should provide additional information regarding best management practices to prevent contamination with fuels, lubricants, and other chemicals used onsite. The Planning Board should be aware that sand and gravel deposits are permeable and very vulnerable to contamination. Special attention should be given during the permitting process to ensure that fuels and lubricants used by earth moving equipment are handled properly and the areas are secured against illegal dumping.

If blasting of bedrock will occur, the Planning Board may wish to seek additional guidance regarding contaminants frequently found in bedrock, such as arsenic or radon. The applicant should provide information from their blasting contractor regarding best management practices for groundwater monitoring and other mitigation or remediation strategies.

Ecology and Resources

16) Will the development have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the U.S. Fish and Wildlife Service?

17) Will the development have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the New Hampshire Department of Fish and Game or U.S. Fish and Wildlife Service?

18) Will the development have substantial adverse effect on federally protected wetlands as de-fined by Section 404 of the Clean Water Act (including, but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

19) Will the development interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

20) Will the development conflict with any local policies or ordinances protecting biological resources, such as a conservation easement, tree preservation policy or ordinance?

21) Will the development conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?

22) Will the development have a substantial adverse effect on Groundwater Quality?

23) Will the development have a substantial adverse effect on Air Quality?



Comments: According to the best available GIS data, the proposed site does not include a significant amount of highly ranked habitat or riparian habitat. The Wildlife Action Plan shows that the predominant habitat types are hemlock-hardwood-pine and Appalachian-oak-pine. Very few areas are delineated as high ranking habitat, and most of the site is categorized as supporting landscapes. According to the Land Conservation Plan for New Hampshire’s Coastal Watersheds, parts of the proposed site fall within the Creek Pond Marsh supporting landscape; the Creek Pond Marsh core area is outside the proposed site.

An analysis, completed by the Barrington Natural Heritage Committee in 2009, identifies the proposed site within a local protection priority site. This protection priority site is identified as unfragmented lands north of Route 4 and east of Mendum’s Pond. According to the analysis, this area is part of the largest block of unfragmented lands (over 3,000 acres) in Barrington; is home to ancient trees in the black gum swamp; provides wildlife and wildlife corridors; and offers recreational potential. The proposed site abuts the Samuel A. Tamposi Water Supply Reserve (SATWaRS). The reserve is managed by the town for the protection of drinking water and plant and animal resources -- including, moose, deer, bear, fisher, beaver, salamanders, turtles, frogs, Great Blue Herons, and many other birds. In addition, the reserve is home to the Atlantic White Cedar (rare in this area of the country). The communities of Dover, Madbury, Durham, Lee, Portsmouth, and the University of New Hampshire obtain a portion of their drinking water from the rivers originating on this land. The Planning Board should consider the potential impacts to wildlife that currently reside in the SATWaRS that are likely to be found on the proposed site.

While the proposed site is relatively dry, there are existing freshwater/shrub wetlands that will be impacted. The proposed development will be within the town’s 50ft buffer setback and will need a special permit for the construction of roadways. Barrington also has designated prime wetlands with a 100ft buffer. The Planning Board should ensure that no prime wetlands will be impacted. The Planning Board should ask the developer for additional information on appropriate erosion control measures prior to and during construction. Currently, a silt fence is being proposed – which is a sediment control practice, not necessarily an erosion control practice. The Planning Board should suggest that the developer reference erosion and sediment control best practices such as the New Hampshire Stormwater Manual Volume 3: Erosion and Sediment Controls during Construction (2008) and provide additional information.

Hazards – Public Health and Safety

24) Will the development expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides or flooding?

25) Will the development result in substantial soil erosion or loss of topsoil?

26) Will the development be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

27) Will the development be located on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for disposal of wastewater?

Comments: There are no steep slopes (>25%) or FEMA floodplains on the proposed site, therefore the development is unlikely to result in any loss, injury, or death from landslides or flooding. It should be noted that there is a large floodplain on the northeastern side of Route 125. The existing delineation of this floodplain may have adjusted boundaries as a result of the updated floodplain mapping analysis that is currently underway. The Planning Board should review the preliminary floodplain maps to ensure that the floodplain boundaries remain outside the proposed site. As previously mentioned, the site looks to be

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relatively dry. Most of the soils on site are somewhat excessively drained and well drained and are unlikely to become unstable or result in off-site landslides or subsidence.

The depth of the water table is not clear from the submitted materials. Typically this is required information for excavation projects under RSA 155-E and local excavation regulations, and the Planning Board should advise the developer that future uses of the land could be limited if excavation extends too close to the water table. NHDES states that if the land is to be used for residential or commercial development after the gravel is removed, enough material should be left behind to allow for the construction of properly designed septic systems or alternative wastewater disposal systems.

Facilities

- 28) Will the development require new or expanded Fire protection facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards?
- 29) Will the development require new or expanded Law Enforcement facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards?
- 30) Will the development require new or expanded School facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards?
- 31) Will the development require new or expanded Parks facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards?
- 32) Will the development require new or expanded Solid Waste facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards?
- 33) Will the development cause an increase in new or expanded utilities, treatment facilities, storm water, water supplies, etc., that would result in a negative financial or environmental impact to the adjacent municipality?

Comments: The proposed excavation is in an area already developed with commercial uses along a high-traffic corridor. This development would not alter existing emergency services response times to the area, nor will it place additional burden on school, park, or utility facilities.

The applicant should provide additional information about the amount of water needed for excavation operations and whether that water would come from onsite wells or be imported to the site to ensure that water withdrawal onsite does not impact neighboring water supplies. The Town of Barrington has a stratified drift aquifer that runs the length of Route 125 and intersects with a small portion of this site. The Town of Barrington has an Aquifer Protection Overlay District that would apply to any development in that location. This section of aquifer has an estimated transmissivity of 2000 square feet per day.

The proposed excavation is subject to Alteration of Terrain review by NH DES, who will consider proposed storm water treatment to prevent negative impacts to offsite properties. The applicant has been asked to prepare a hydrogeological study to further inform review by the Planning Board and NH DES – this study should be made available to all communities named as abutters to satisfy any concerns these communities may have regarding negative financial or environmental impacts. We recommend that the

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Planning Board have this hydrogeological study reviewed by a qualified third party if they have any further concerns.

Scenic and Visual Character

- 34) Will the development convert Prime Farmland to non-agricultural use?
- 35) Will the development conflict with existing zoning for agricultural use?
- 36) Will the development involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?
- 37) Will the development have a substantial adverse effect on a scenic vista?
- 38) Will the development substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- 39) Will the development substantially degrade the existing visual character or quality of the site and its surroundings?
- 40) Will the development create a new source of substantial light or glare which would adversely impact day or nighttime views in the area?
- 41) Will the development conflict with any applicable land use plan, policy, or regulation including, but not limited to the Master Plan or Zoning Ordinance?

Comments: The application does not appear to significantly alter agricultural land, damage or affect scenic vistas, or alter visual character. Although agricultural uses are permitted by right in this zoning district, soils data shows that there is no prime farmland, farmland of statewide importance, or farmland of local importance within the development boundaries.

The Town may want to ask for intended hours of operation and intended use of artificial light to determine if light pollution will impact the surrounding areas. The proposed development does not appear to conflict with any land use plan, policy, or regulation.

Housing and Population Growth

- 42) Will the development induce substantial growth in an area, either directly (for example, by proposing new homes or businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- 43) Will the development displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- 44) Will the development displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?
- 45) Is the development compatible with existing or planned cross border development?

Comments: The proposed excavation is identified as a commercial operation on the submitted application. SRPC's understanding is that the excavation is proposed to be reclaimed as buildable parcels, and that Barrington's master plan and the site's current zoning in the Regional Commercial district make it most suitable for future commercial development.

The site is located approximately 1,500 feet from the Lee town line via NH 125, and approximately 1,200 feet from the Lee and Madbury town lines via Lee Oak/Newtown Plains Road. NH 125 from the Lee town line to the traffic circle is within Lee's Commercial zoning district and contains compatible

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commercial uses. Development in Lee and Madbury near Lee Oak/Newtown Plains Road is zoned in Lee's Residential Zone and Madbury's Residential/Agricultural district. However, the proposed excavation is unlikely to be less compatible with these uses than existing commercial operations along NH 125 in Barrington and Lee.