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Sent via email to pebblebeachaggregate@sympatico.ca and jeff.schosser@ontario.ca

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Jeff Schosser
Aggregate Inspector, Bracebridge Field Office
Ministry of Natural Resources and Forestry
1350 High Falls Road
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Dear Messrs. Villard and Schosser,

**Re: John Bacher Construction Limited Aggregate Permit Application
Geographic Township of McClintock, Part of Lots 11 & 12,
Concession 2, Township of Algonquin Highlands
Comments on Permit Application per MNRF Class EA**

Donnelly Law writes on behalf of our client, a concerned group of Harvey Lake Area Residents (“HLAR”) to register their comments with respect to the above-referenced aggregate permit application (Category 9 and 11) (the “Permit Application”) by John Bacher Construction Limited (the “Applicant”) in the Township of Algonquin Highlands (“Township”).

Although this is Crown land, the proponent has failed to establish the need to disrupt this sensitive area, in clear violation of the Township Official Plan Policy 5.5.8, which prohibits quarry activity within 1km of a Waterfront designation, such as Harvey Lake.

In brief, it is our client’s respectful submission that the Permit Application should be elevated to a minimum Category “C” Class Environmental Assessment (“EA”). The project ought not proceed as it poses a threat to the environment, the habitat of rare and threatened species, water quality, public safety, use and enjoyment of private property, and may also pose a significant impact to Aboriginal rights. The

project also contains numerous uncertainties regarding its potential impacts and proposed mitigation, as examined below. Further, Mr. Villard advised on July 29, 2017, that the Site Plan Notes are currently under revision.

Please note these comments and objections are based on an unconscionably short timeframe to review all available application materials, and include advice based on review of these materials by professionals with experience in the aggregate industry and a University of Toronto Associate Professor in the Department of Earth Sciences¹. As a result of the short timeframe for review in the summer holiday season, lack of agency comments and peer review, the possibility of changes to the application, new information being required of the Applicant, and a possible bump-up request to a different Class EA Category, HLAR could not formally retain consultants for on-the-record comments, putting citizens and nearby residents at a distinct disadvantage.

Our comments are organized in this correspondence as follows:

- Background Information
- Request for Notice and Comments
- HLAR's Detailed Comments on the Permit Application:
 - (a) *Effect of the operation on the environment*: Noise and Noise Impact Analysis; Dust and Dust Impact; Drainage; and Natural Heritage (including wetlands, turtles, amphibian breeding habitat)
 - (b) *Effect of the operation on nearby communities*: Visual Impact; Safety Concerns; and Noise
 - (c) *Municipal comments*
 - (d) *Suitability of progressive and final rehabilitation plans*
 - (e) *Possible effects on ground and surface water resources.*
 - (g) *Planning and land use considerations.*
 - (h) *Main haulage routes and proposed truck traffic to and from the site.*
 - (i) *Quality and quantity of aggregates on site.*
 - (j) *Size of the permitted area.*

¹ Dr. Sharon Cowling, University of Toronto, St. George Campus. Dr. Cowling reviewed the Hydrogeological Summary Statement and Natural Environment Report.

(k) *Applicant's past history of compliance.*

(l) *Environmental Assessment Act (EAA)*

(m) *Other matters considered appropriate:* MNRF Statement of Environmental Values; Ontario Wetland Strategy; Annual Maximum Tonnage; Non-Compliance with MNRF Policy: Cultural Heritage; Aboriginal Consultation

- Comments on Class Environmental Assessment Process and Categorization
- Request for Referral of Technical Reports to MOECC
- Conclusions

Background Information

Following amendments to the Permit Application, the proposed Extractive Area is 21.85 ha (53 a), with an extraction limit of 14.85 ha. This is an extremely large extraction footprint, comparable to some of the recently approved mega-quarries on the Niagara Escarpment, which undergo a comprehensive assessment process lasting several years. To put the Permit Application in its local context, aggregate operations in the vicinity range from 0.5 ha to a Ministry of Transportation ("MTO") Permit for a pit/quarry with licenced area of 11.9 ha.²

The annual extraction limit is now proposed to be 75,000 tonnes/year, for an unstated number of years of extraction. However, the Applicant has publicly given statements that 5,000 to 6,000 or 10,000 tonnes/year at the most is what is required for the local market and in keeping with current aggregate practice to limit the lifespan of extractive operations. The Permit Application is for extraction and processing of sand and gravel, and blasting and processing of bedrock, with a Haul Route at the entrance off McClintock Road onwards to Livingstone Road along Otter Lake.

² E.g. refer to MNRF data on aggregate operations in close proximity to the Permit Application: John Bacher Construction Limited, Pit Site ID 16023, 10,000t/a, licenced area of 2.96 ha; Township, Pit Site ID 10952, 20,000 t/a, licenced area of 1.64 ha; County of Haliburton, Pit Site ID 10951, 25,000t/a, licenced area of 2.12 ha; John Bacher Construction Limited, Quarry Site ID 15974, 1000 t/a, licenced area of 0.82 ha; Eric Doetsch/Henry Kurronen, Pit ID 10953, 2,000 t/a, licenced area of 0.5 ha; County of Haliburton, Pit Site ID 10955, 20,000 t/a, licenced area of 2.5 ha; B.O.R. Aggregate Company Incorporated, Pit Site ID 16667, 200 t/a, licenced area of 0.5 ha; Township of Lake of Bays, Pit Site ID 10825, 25,000 t/a, licenced area of 3.21 ha; Ministry of Transportation Northeastern Region, Pit/Quarry Site ID 401003, unlimited annual tonnage, licenced area of 11.9 ha; accessed online from MNRF "Pits and Quarries Online" at <<https://www.ontario.ca/environment-and-energy/find-pits-and-quarries>>.

All this industrial activity is proposed on public land, in a very sensitive natural environment. The proposed site contains a mineral conifer swamp and maple hardwood swamp, as well as a sparse treed bog and meadow marsh within the 120-metre adjacent lands. A Stratum 2 Deer Wintering Yard is present just outside of the adjacent lands, to the southwest of the proposed permit limit.

The sparse treed bog is considered to be significant habitat as it is a rare ecosystem in Ecoregion 5E. The meadow marsh is also considered to be significant wildlife habitat, as it serves as a significant amphibian breeding habitat, with confirmed breeding of spotted salamanders on site. Water flows east through the conifer swamp into the unnamed stream, which flows south into Harvey Lake. Harvey Lake is the drinking water source for HLAR. HLAR residences are very close to the proposed aggregate operation, within 200 metres of the proposed Permitted Area.

Request for Notice and Comments

We request further notice regarding all Ministry decisions regarding the Permit Application and all new documentation from the Applicant. Specifically, we request to be provided with a copy of the following:

- Record of Ministry determination of Class EA category. This includes the project description, completed screening table, and supporting rationale;
- All notices provided pursuant to the Class EA requirements;
- All Ministry and partner ministry comments (e.g. the Ministry of Natural Resources and Forestry (“MNR”), Ministry of the Environment and Climate Change (“MOECC”), etc.); and
- All updated and new technical reports.

HLAR’s Detailed Comments on the Permit Application

HLAR’s detailed concerns are outlined below, organized according to considerations of the Ministry per the *Aggregate Resources Act* (“ARA”) and associated Standards and policies. These detailed comments inform HLAR’s submissions on project categorization per the Class EA.

Per ARA clause 42(1)(a) and MNR Policy No. A.R. 4.00.03 (the “Public Interest Policy”), HLAR respectfully submits that the issuance of the permit would be contrary to the public interest. While we understand MNR Staff will not be in a position at the end of this comment period to formulate a recommendation on refusal or issuance of the permit, we raise the following issues of concern based on the Public Interest Policy requirements to inform the Ministry’s Class EA classification.

(a) *Effect of the operation on the environment*

The potential effects on the environment have not been sufficiently studied and documented in order to ascertain whether the potential impacts may be mitigated. This reason alone warrants MNR's categorization of the Permit Application as a minimum Category "C" environmental assessment per the applicable Class EA.

Noise and Noise Impact Analysis:

HLAR supporters live in proximity to the proposed aggregate operation, with one residence within 200 metres of the proposed permit area. The proposed site is a Class 3 Area per the MOECC Environmental Noise Guideline NPC-300 ("NPC-300"). Residents describe Harvey Lake as a serene, tranquil lake, with a small nestled community along its peaceful shores, dominated by the sounds of nature, with next to no motorboat activity. The loudest residents are loons.

HLAR has been advised that the *Noise Impact Analysis, Bacher Construction Limited, McClintock Quarry/Pit*, Project 116-0419 (4 April 2017), prepared by Valcoustics Canada Ltd. (Keni Mallinen, B.A. Sc., CRM, and John Emeljanow, B. Eng., P.Eng.) (the "Noise Report") assessment and proposed shielding is insufficient. HLAR consulted two professionals with expertise in aggregate operations, including an experienced quarry operator and acoustical engineer.

The Noise Report relies on numerous flawed assumptions. The *Blast Impact Analysis, McClintock Quarry, Part Lot 11 and 12, Concession 2, MNR District of Bracebridge, County of Haliburton* (27 July 2017), by Explotech Engineering Ltd. ("Blast Impact Analysis"), makes predictions based on drill performance in limestone and not gneiss, the rock on the proposed site, which is twice as hard as limestone. This is a critical oversight.

The noise modelling must rely on the worst-case scenario, being when the drill has not yet penetrated the harder gneiss rock while using the suitable drill. As the Noise Report does not consider these operational conditions, it is faulty and inadequate. The Blast Impact Analysis recommendations, included in the site plan conditions, advise for 12-months of information gathering to develop site-specific attenuation.

Given the close proximity of the proposed operation to points of reception (residents) and hardness of the rock, the Noise Report must determine with greater precision the predicted sound level from the equipment to be used on site. We note that Noise Report Recommendation #3 acknowledges this

shortcoming in the Report's assessment. This is a critical issue given the close proximity to residences and must be resolved forthwith.

As the Noise Report states, the processing plant will exceed the NPC-300 limit the noise for the Class 3 area and requires shielding (unspecified in report and site plan conditions). We respectfully submit there is nothing in the application that justifies this bending of the rules for a private developer operating on public lands.

The end use of the extracted aggregate must also be confirmed. The rock type on site is extracted in other quarries for use as flagstone. However, extraction for flagstone relies on different equipment and requires more drill holes prior to blasting, impacting any modelled noise levels. It is standard practice to require a Market Analysis for all quarries on private land, this case should be no different. Our clients have a sophisticated understanding of the local aggregate market and are at a complete loss as to why this operation is proposed at this location, in such proximity to residents, wetlands and a designated waterfront.

The Noise Report must also account for the "ground effect" on the hard surface of the Canadian Shield, which creates a sound wave 3-4 dB higher than other typical aggregate surfaces. Sound calculations must account for this condition. Therefore, additional information is required to determine whether the Noise Report is based on worst case conditions, as it appears it is not.

Contrary to Noise Report Recommendation #6, the Applicant proposes (in modifications presented July 29, 2017), to conduct drilling when there are no leaves on the trees. This is unacceptable to Harvey Lake recreational use landowners who use their residences year-round, thereby leaving a short drilling period in the month of May that would even slightly allow them to reasonably enjoy their properties. This condition must therefore be modelled in the Noise Report.

HLAR is concerned with the lack of detail provided for the berm required for noise mitigation. Given the insufficient quantity of berm construction material on site, and the proposed annual extraction rate (10,000 t/a), the berm cost may be prohibitive to the operator as material must be imported on-site. To the best of our knowledge, berm dimensions have not been determined and the berm would be located on higher ground than the HLAR cottages, potentially creating a negative visual impact, which has yet to be examined. Further, the Applicant has stated it does not intend to construct this sound barrier. This is confirmed in proposed Site Plan Condition 1.31.

The berm is not included on the site plan drawings, although the Phase 2 extraction area is included.

Of additional concern is the lack of inclusion of precise operating procedures in the proposed site plan to control noise (e.g. berm location and detail, equipment models with noise limits for drill, processing plant crusher, periods of no blasting/drilling as proposed, and potential 7 a.m. to 7 p.m. operations as stated at the July 29, 2017 public meeting). The Site Plan does not require the use of alternatives to back up beepers, which are commonly used (e.g. hissing noise in place of a beep). The Province should take great care not to permit nuisance activities on public land, particularly so close to sensitive receptors such as cottagers trying to enjoy nature with their children and grandchildren.

Sound emission monitoring and auditing must be required for the site to confirm whether equipment is being operated to meet NPC-300, with reporting to MNRF. This monitoring, auditing and reporting should occur every time new equipment is brought and used on site.

To confirm compliance with NPC-300, an aggregate permit should not be issued or considered without a better assessment of actual on-site blasting and noise conditions, and modelling of proposed noise mitigation measures. The required mitigation must then be specified in the Site Plan Conditions.

We also request consideration of the impact of noise on wildlife. For example, Dr. Cowling raises the potential impact of blasting on natural biological processes on the species at risk present on and adjacent to the site, e.g. Blanding's Turtle.

Dust and Dust Impact:

The Applicant may be putting public health and natural heritage features and functions at risk. No technical report on dust and air quality impact was required. Therefore, the possible impacts are unknown. We request an emission dispersion summary and modelling report for the fugitive sources of dust from haul roads, stockpiles, proposed recycling operation, and local sources due to drilling, blasting and crushing. This is commonly required for aggregate operations.

There are properties within hundreds of metres of the proposed operation that may be impacted. Such scientific assessment is typically required for aggregate operations and should be undertaken here. While primary and secondary dust collectors are proposed Site Plan Conditions, their efficacy is not addressed. Site Plan Condition 1.21 states the stockpiles will not be vegetated.

We note that the Ontario Municipal Board (“OMB”) has denied aggregate applications for lack of consideration of worst case air quality impacts relying on the best data available to model possible impacts to air quality:

With regard to dust the Board finds possible discharges of fine particulate matter and crystalline silica in excess of MOE guidance documents (Ambient Air Quality Criteria) that will not be cured under the Capital Best Management Practices Plan. That Plan suggests awaiting for visual dust clouds to appear the size of one third of a commercial vehicle before watering takes place (no water taking at this site is proposed). There is questionable coordination with admitted subcontracting and with the exemption condition sought to permit night loading and shipping to meet urgent provincial contracts and specifications.³

A Dust Impact Analysis will also provide necessary information to assess potential impacts of dust on natural heritage features and functions on and adjacent to the site. Dr. Cowling recommends consideration of the impacts of dust on known and potential amphibian breeding habitat in the study area (wetland and woodland), turtle habitat and life cycle, and on water quality, turbidity, physical accumulation, water-level decline, etc. for all on-site and adjacent wetlands in the potentially impacted area. For example, the dust release rates may have a negative impact on smaller wetlands with lower (or no) flushing rates, with deposition of quarry/pit sediment disrupting species breeding and nesting process, and the wetland feature itself.

Dr. Cowling recommends the impact analysis of dust on natural heritage features and functions include literature review on impacts of dust and turbid water to amphibian breeding, bog and other wetland types, and specific ecological functions identified for the site and adjacent lands. HLAR also notes for the Applicant that Dr. Cowling is willing to provide her assistance in the decision-making processes for this application, through the supervision of a student researching the impact of dust on small wetlands.

Drainage:

Drinking water should never be put at risk. The site’s natural water drainage occurs mainly towards the meadow marsh and unnamed tributary to Harvey Lake. However, no drainage plan is included but for vague consideration in Site Plan Condition 1.19. It is unclear, given the underlying rock formation, whether the water can percolate through the rock. Further, there is no assurance that pumped water will be directed to an area without negatively

³ *Capital Paving v. Wellington (County)*, [2010] O.M.B.D. No. 9, at para. 36.

impacting on surrounding water bodies, if these areas are not selected by scientific study and assessment.

Blasting on the site will use ammonium nitrate fuel oil (“ANFO”) to break the rock⁴. There is no consideration of the environmental impact of using this fuel on a site with no stormwater management plan or device that is in close proximity to a rare ecosystem, several wetlands, and Harvey Lake. Harvey Lake is the drinking water source for HLAR. ANFO alternatives are available and must be required in the Site Plan Conditions, if the permit is approved.

In summary, pending further review by our client, their experts and the Ministry, there is little confidence in the proposal and its protection scheme for drinking water. Numerous children and seniors populate the lake for long stretches during the year; these populations should not be placed at risk.

Natural Heritage:

Harvey Lake and the subject site contains a diverse range of habitats and species. Crown land, managed by the Province on behalf of the public, containing these high natural heritage values should never be compromised.

HLAR notes the following information gaps in the *Natural Environment Report Level 1 & 2, Category 9 and Category 11 Aggregate Permit, Part of Lot 11, Concession 2, McClintock Township* (November 2016), by Fri Ecology Services (April McCrum) (the “Environmental Report”).

The Environmental Report is based on an erroneous premise, that the area of extraction will be limited to the northeastern limits of the permit boundary (see page 3). Please advise whether this will be corrected, as the operational plans clearly show extraction to the southernmost boundary, within 200 metres of residences.

The Environmental Report predates some and does not refer to the other technical reports prepared in support of the Permit Application. For example, the Environmental Report does not address the potential impact of the use of ANFO on-site for blasting, which may lead to contamination of groundwater and/or surface water.

The Environmental Report does not address any possible impact on the change in surface water flow for the final elevation, in particular to the

⁴ Explotech Engineering Ltd., *Blast Impact Analysis, McClintock Quarry, Part Lot 11 and 12, Concession 2, MNR District of Bracebridge, County of Halliburton* (27 July 2017) [“Blast Impact Report”] at p. 8; and comments by Mr. David Villard at the July 29, 2017 public meeting.

tributary to the south. Recommendations and conclusions on the possibilities for progressive rehabilitation are absent. The risks and impacts of flyrock, dust and blasting on species at risk and the environment are not considered. The 10-metre high berm proposal is not considered in the Environmental Report, which may have impacts on local drainage.

The Environmental Report does not describe survey methods used.

i. Wetlands

The Environmental Report states “no impacts” to individual wetlands are expected, given the proposed 30-metre buffer. The source of the proposed uniform buffer for the various wetland types and sizes is not substantiated with reference to scientific principles, Ministry policy or scientific literature. The buffer size does not consider the potential impacts of aggregate operations in close proximity to wetlands on wetland features and functions (e.g. dust impact (see above)). Further, wetland functions and the connections between the various wetlands within the permitted area and adjacent lands, and local area, are not discussed. For example, does wildlife use the proposed site for travel?

HLAR would like to know if the MNR conducted a site visit, and if so, the details of the site visit activities, e.g. whether wetland boundaries were surveyed and marked, etc.

Dr. Cowling advises the Environmental Report and proposed mitigation measures must be revisited to consider the potential specific impacts of aggregate operations on this feature (e.g. blasting, traffic, dust, vibration, deposition of particulate in wetlands, etc.).

ii. Turtles

The Environmental Report confirmed the proposed site and adjacent lands serve as potential wintering area for snapping turtle, and habitat of threatened species (Blanding’s turtle). Dr. Cowling recommends the Environmental Report be revised to include a literature review of potential impacts of dust, turbidity, and aggregate operations on turtle habitat, as well as information on the life history of the turtle species, in order to better assess the potential impacts and adequacy of 30-metre buffer zones, in particular for nesting and basking areas of the Blanding’s Turtle. For example, there are studies on Blanding’s Turtles in nearby Algonquin Provincial Park and Bancroft, documenting the species’ movement between wetlands and other aquatic areas⁵.

⁵ MNR, *Blanding’s Turtle General Habitat Description*, accessed online at <https://www.ontario.ca/page/blandings-turtle-general-habitat-description>.

The Environmental Report does not consider use of the permitted site for travel by the threatened Blanding's Turtle, or Snapping Turtle. HLAR is concerned there are additional potential impacts on the confirmed turtle species that have been overlooked in the Report.

Additional mitigation measures for the turtles may be required after a more thorough consideration of these species and their habitat needs. Dr. Cowling advises the Environmental Report and proposed mitigation measures must be revisited to consider the potential specific impacts of aggregate operations on these species (e.g. blasting, traffic, dust, vibration, deposition of particulate in wetlands, etc.).

iii. Amphibian Breeding Habitat

The Environmental Report lists known and potential amphibian breeding habitat (meadow marsh and maple hardwood wetland, respectively). Dr. Cowling advises that the Environmental Report and proposed mitigation measures must be revisited to consider the potential specific impacts of aggregate operations on this feature (e.g. blasting, traffic, dust, vibration, deposition of particulate in wetlands, etc.).

(b) Effect of the operation on nearby communities

MNRF Policy 4.00.03 notes many of these concerns may be mitigated through prescribed conditions; however, the conditions must be specific to the proposed operation and surrounding site conditions.

Visual

HLAR requests a Visual Impact Assessment be undertaken to determine the potential impact on the community of the proposed noise mitigation berm.

Safety Concerns

Public safety is not adequately safeguarded to date. Strong safety concerns are identified even by the Applicant, who indicates as a Site Plan Condition that “flyrock from the face will be away from structures as much as possible”. Accordingly, operations have been designed to follow a general North to South retreat.⁶ Our client has great concerns that once the Applicant reaches Phase II, the residents of Harvey Lake will be in direct danger from fugitive fly rock.

⁶ Explotech Engineering Ltd., *Blast Impact Analysis, McClintock Quarry, Part Lot 11 and 12, Concession 2, MNR District of Bracebridge, County of Halliburton* (27 July 2017) [“Blast Impact Report”] at p. 15.

Noise

Noise impact has not been appropriately considered, discussed above in “(a), Noise and Impact Analysis”.

(c) *Municipal comments*

HLAR requests the Applicant’s comments and proposal address the Township’s concerns, as identified in the Township Council Resolution dated August 7, 2017, and the same for any comments from the County of Haliburton.

(d) *Suitability of progressive and final rehabilitation plans*

The Applicant provides no description of its proposal for progressive and final rehabilitation. HLAR requests evidence that the site can be restored to its former use and condition, per MNRFP policy. This is not addressed in the Environmental Report. Site Plan Conditions 1.34-1.35 are extremely vague. HLAR requests details on the proposed rehabilitation plans, and estimated timeframe for such activities.

(e) *Possible effects on ground and surface water resources.*

The Permit Application is for an area adjacent to several wetland types, streams, and Harvey Lake, which is the drinking water source for nearby residents. Natural on-site drainage is mainly towards Harvey Lake, with some flow to the southwest of the site.

The *Groundwater Summary Statement, Bacher Construction Pit and Quarry, Township of Algonquin Highlands (Former McClintock TWP.), Haliburton County, Ontario* (24 October 2016), by Waters Environmental Geoscience Ltd. (Peter A. Richards, M.Sc., P.Eng.), (the “Hydrogeological Summary Statement”) does not address impacts to surface water, and recommends additional study for proposed pit/quarry elevations near surface water features.

HLAR are not confident that the Hydrogeological Summary Statement demonstrates no negative impacts, as it is only a summary report that does not take into consideration potential fractures from blasting, which would have an undeniable impact, as the groundwater flows naturally to Harvey Lake.

As acknowledged by MNRFP in applicable Policy 4.01.04, assessing hydrogeology and groundwater flow in this type of rock formation is very

difficult. The Hydrogeological Summary Statement does not include the test pit and borehole data, making peer review by the MNR (or MOECC) and others difficult.

The impact on groundwater is also difficult to predict, as anticipated rock fractures from blasting (back break and breakage from subdrilling and blasting) may potentially cause new and numerous routes to both ground water and surface water. Such impacts have not been considered in the reports, including the Environmental Report.

The Applicant has not proposed any coherent site plan conditions, having cut and pasted only conclusions from the Hydrogeological Summary Statement, without reflecting its recommendations. No contingency plan is indicated in the Site Plan Conditions, including financial assurance, etc. Frequent, routine monitoring and reporting on the depth of excavation should be a site plan condition to ensure excavation does not extend below 1.5-2.0 metres above the water table.

A diagram is required to show the exact depth of excavation permitted for the entire proposed site, rather than a vague 12-metre range.

The Hydrogeological Summary Statement at page 5 cautions that “for the site to operate as an above water table operation, care must be taken to ensure the depth of excavation is limited in the vicinity of any nearby surface water feature.” This indicates a very delicate balancing act to ensure no damage to groundwater and surface water. The Hydrogeological Summary Statement continues, “[...]pit/quarry base elevations in the immediate vicinity of this surface water feature may require adjustment in order to maintain the required freeboard between the pit base and the local watertable surface associated with these surface water fetures.” HLAR requests this be confirmed prior to consideration of the Application by the Ministry.

Therefore, additional investigation of groundwater flow and conditions, and review of the test pit/borehole data is needed to ensure no adverse impacts.

Contrary to Policy 4.01.04, the Timbercraft Consultation Inc. and Pebble Beach Aggregate Summary Statement Report does not confirm whether the testing for water table elevation occurred during a seasonal high.

Please also refer to our comments above in “(a) Drainage” and “(a) Natural Heritage”.

(g) *Planning and land use considerations.*

The Minister must strive to keep with the intent of the Provincial Policy Statement (“PPS”) and be consistent with municipal comments, and address their concerns.

Under the *Planning Act* subsection 6(2), MNR is required to consult with municipalities in considering aggregate permits. Per Policy 4.00.03, MNR may wish to be consistent with municipal comments, and address the concerns of the Township.

The County of Haliburton Official Plan 2017 (adopted but not yet approved) Policy 6.3.5 identifies mineral aggregate uses as Class III industrial uses, and requires a minimum setback from the property line of 300 metres. The Permit Application is within the required setback area, and its potential influence area of 1000 metres captures most if not all residences on Harvey Lake. Therefore, per this policy, appropriate studies must be conducted for the influence area (e.g. dust and air quality, traffic, noise and vibration).

Township Official Plan section 5.5.8 states a new Aggregate Quarry shall be limited to 1 km from the Waterfront designation (Harvey Lake). However, the proposed site is a mere 170 metres from Harvey Lake.

The proposed site is also in close proximity to the unnamed tributary and identified meadow marsh, which is zoned “Environmental Protection” (Township Zoning By-law, 03-22, Schedule G3).

Importantly, Township Council passed a resolution clearly stating its position that the Applicant obtain appropriate planning permissions for the new aggregate operation:

That the MNR include, as a condition of the application, that the proponent conform to Policy 5.5.7 of the Township’s Official Plan and successfully obtain from the Township an Official Plan amendment and Zoning By-Law amendment prior to any work on the site related to the proposed expansion.

Please advise whether the Applicant will address the above land use planning considerations and, if so, how?

(h) Main haulage routes and proposed truck traffic to and from the site.

HLAR advises the proposed haul route has in the recent past included school bus travel for local children. The route is very hilly with many sharp turns, winding roads, and limited sight lines. HLAR is concerned with the risk haul trucks pose to the traveling public.

HLAR requests an expert report determine and assess the impacts of the proposed operation on the local road network, need for entrance upgrades, road conditions/geometry and safety concerns, possible need for alternate routes, and other potential traffic implications. This report would then be shared with HLAR and the public. This analysis should then be peer reviewed by MNR or the appropriate commenting agency with necessary expertise (e.g. the County or Township).

Township Council Resolution dated August 7, 2017 requests a Pavement Design Review be completed by the Applicant to determine the potential impacts on municipal infrastructure, which have not been assessed by the Applicant to date. HLAR echoes this request.

The Applicant produced no traffic impact report or clear estimate of the number of trucks based on the Permit Application. At the July 29, 2017 public meeting, the Applicant advised 300-400 trucks would be expected if annual tonnage is 6,000-8,000. This estimate raises many questions. For example, is it based on return trips (ingress and egress as one trip)? What is the worst case scenario if truck traffic is limited to certain months of the year? Etc.

HLAR requests responses to the above issues.

(i) Quality and quantity of aggregates on site.

Blasting a sensitive natural feature should not occur. Most particularly it should be strictly prohibited without the clearest of demonstration of need. Gneiss rock is extremely abundant in Ontario. MNR Policy 4.00.03 recommends “suitable” information on the sufficiency of aggregate quality and quantity be provided to support permitting of the site.

The Permit Application lacks any information to determine whether there is sufficient quality and quantity of material for an aggregate permit, per MNR Policy. While the Applicant originally proposed extraction of 285,000 t/a, the Applicant publicly stated at the Public Meeting that it requires 10,000 t/a, thereby calling into question the need for the proposed 53-acre site. There are several pits and quarries in close proximity to the proposed

site with similarly low extraction limits, but of much smaller size, and a very small market in proximity to the site.

The rock formation on proposed site is not unique and could likely be extracted from less environmentally sensitive areas, and at a greater distance from sensitive receptors.

(j) *Size of the permitted area.*

Per MNR Policy 4.00.03, the size of the permit area should reflect the availability of the resource and nature of deposit. No Bedrock Quality Assessment was completed for the Permit Application. Therefore, there is no indication of the suitability of the site for future commercial applications. There is no estimate of the total quantity of resource available above the water table.

(k) *Applicant's past history of compliance.*

We request disclosure of any past history of the Applicant with compliance issues, whether uncovered by MNR or disclosed by the Applicant in Annual Reports. The Applicant operates at least several aggregate operations in the area. We note Existing Permit #16023 to the north east of the site, as indicated on the Site Plan Drawings, was granted to the Applicant for a similar maximum annual tonnage (10,000) but for a much smaller area of 2.96 ha.

The Site Plan also indicates two smaller areas of existing excavation within the proposed extractive area. Were these two areas excavated by the Applicant, and if so, do they form part of the Existing Permit?

(l) *Environmental Assessment Act (EAA).*

This is addressed below, in order to respond directly to requirements and considerations per the MNR Class EA. We note additional time for comments may be required, given the nature of the technical reports and short timeframe. In particular, response time may often be difficult for First Nations, who have hundreds of similar notices to consider in a given year within their traditional territories.

(m) *Other matters considered appropriate.*

HLAR provides justification below for other matters to be considered with the Permit Application, in accordance with MNR Policy 4.00.03, as follows.

MNRF Statement of Environmental Values

Section 11 of the *Environmental Bill of Rights, 1993* broadly requires MNRF to consider its Statement of Environmental Values (“SEV”) “whenever decisions that might significantly affect the environment are made in the ministry.” [emphasis added]. As the proposed activities of the Permit Application may significant affect the environment, it is reasonable for the Ministry, and the Applicant, to consider the SEV in this case⁷.

Applied to this case, the following principles from the MNRF SEV must be considered for the Permit Application and Class EA categorization decision:

- “*A sound understanding of natural and ecological systems and how our actions affect them is key to achieving sustainability.*” The Permit Application technical reports do not demonstrate a sound understanding of the potential impacts to the natural and ecological systems on and adjacent to the proposed site (e.g. impact of predicted airborne particulate on wildlife and natural heritage features/functions). Additional information is required, as discussed above.
- “*As our understanding of the way the natural world works and how our actions affect it is often incomplete, MNRF staff should exercise caution and special concern for natural values in the face of such uncertainty.*” The precautionary approach is to be followed in face of uncertainty, such as the uncertain impacts from the Permit Application on rare and sensitive environments (e.g. bog). Therefore, greater setbacks from significant wildlife habitat and residences should be considered, in order to protect the environment.
- “*Those affected by proposed changes must have access to information and opportunities to provide input to decisions that affect their lives*”. While HLAR does have access to all technical reports to date, HLAR still requires access to all information necessary in order to provide meaningful input to decisions that will impact their residences. There are information gaps that must be addressed by the Applicant, discussed above.
- “*An ecosystem approach to managing our natural resources enables a holistic perspective of social, economic and ecological aspects and provides the context for integrated resource management.*” The Environmental Report does not adopt an ecosystem approach to considering the site and adjacent lands as a whole, but rather views

⁷ *Lafarge Canada Inc. v. Ontario (Environmental Review Tribunal, 2008 CanLii 30290 (Ont. Div. Ct.).*

these elements as discrete features. The social and economic aspects of the Permit Application have not been adequately studied, if at all, and must be prior to consideration of the Application.

- “*Rehabilitating degraded environments is an important aspect of resource stewardship.*” Therefore, additional consideration is required for the proposed progressive rehabilitation matters, as discussed above.

Ontario Wetland Policy

On July 20, 2017, the Province released A Wetland Conservation Strategy for Ontario 2017-2030⁸ (“Ontario Wetland Strategy”) and identified wetland conservation as a critical Province-wide goal. The Ontario Wetland Strategy recognizes the MNR must consider wetlands when making decisions per the ARA.⁹ Wetlands are integral components of the natural heritage and hydrologic systems, and are to be conserved using a precautionary approach with the following hierarchy: protection, mitigation, and restoration.¹⁰

The Permit Application proposes to retain the area of wetlands within the permitted area, but does not consider mitigation that may be required due to site operations (e.g. dust, blasting, drainage) or restoration after excavation. There is no description of the reciprocal relationship between the wetlands, ground and surface water features, nor of the relationship/connection between the various wetland types in the proposed Permit Area and adjacent lands.¹¹

HLAR requests additional information regarding impacts to wetland and the broader landscape, and consideration of Ontario’s Wetland Strategy for the Application.

Annual Maximum Tonnage

The impacts of the Permit Application also depend on the annual tonnage limit. HLAR requests a fixed annual limit of 10,000 tonnes/annum, as proposed by the Applicant on July 29, 2017.

Non-Compliance with MNR Policy: Cultural Heritage

MNR Policy 4.01.07 is clear: if a Stage 2 Archaeological Report is required, the Report is required to be submitted and approved by the Ministry of Tourism, Culture and Sport (“MTCS”) for a complete application.

⁸ Ontario Ministry of Natural Resources and Forestry, A Wetland Conservation Strategy for Ontario 2017-2030 (Toronto, ON: Queen’s Printer for Ontario, 2017).

⁹ *Ibid* at p. 11.

¹⁰ *Ibid* at p. 25.

¹¹ As required in the Wetland Conservation Strategy for Ontario, *ibid* at p. 31.

The Horizon Archaeology Inc. (Dayle A. Elder, MA), *Stage 1 Background Study of Bacher Construction Aggregate Pit, Part Lots 11 & 12, Concession 2, former Township of McClintock, Township of Algonquin Highlands, County of Haliburton* (14 September 2016) (the “Stage 1 Archaeological Report”) finds a High Potential Area outside of ESA protection zones, where a Stage 2 Archaeological Assessment is required.¹²

Therefore, a Stage 2 Report must be completed forthwith, or else the High Potential Area must be removed from the permitted extraction area on the site plan, with the appropriate buffer to protect any potential archaeological resources.

All High Potential Areas should be appropriately buffered, groundtruthed and clearly indicated on-site (including buffer) as outside the permitted area, a required Site Plan Condition, to prevent any unintentional disturbance.

We also note the Site Plan Drawings indicate the extraction limit within the northeastern Stage 2 Area. This line is required to be further set back. The Site Plan should also note the potential requirement for additional Stage 2 Reports, should the proposed area set aside as Blanding’s habitat be changed.

Further, the Stage 1 Archaeological Report does not consider the concept of a “cultural heritage landscape”. The definition for “cultural heritage landscapes” in the 2014 PPS is:

Cultural heritage landscape: means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Aboriginal community. The area may involve features such as structures, spaces, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Examples may include, but are not limited to, heritage conservation districts designated under the Ontario Heritage Act; villages, parks, gardens, battlefields, mainstreets and neighbourhoods, cemeteries, trailways, viewsheds, natural areas and industrial complexes of heritage significance; and areas recognized by federal governments.

Policy 2.6.1 of the PPS and Policy 6.4.7 of the Township Official Plan require the conservation of “significant cultural heritage landscapes”. Horizon Archaeology Inc. notes the key archaeological Township

¹² See page 17.

Official Plan policies, and references a requirement by the County of Haliburton to contact the Algonquins of Ontario with regard to archaeology in the County, but it does not appear this was done.

Aboriginal Consultation

Ignoring the rights of Aboriginal communities is a fundamental constitutional error. To date, we see no evidence of consultation with Aboriginal communities, save for the 30-day notice period provided to the Williams Treaties First Nations. We are aware that several of the Williams Treaties First Nations do have their own individual consultation protocol, which must be respected.

The Ministry has delegated procedural aspects of consultation to the Applicant. We stress that the Ministry's duty to consult extends beyond the provision of notice. The nature of the asserted Aboriginal right dictates the degree of consultation required. The degree of consultation and accommodation required lies on a spectrum; that being the Crown's duty to consult and accommodate the asserted Aboriginal interest "is proportionate to a preliminary assessment of the strength of the case supporting the existence of the right or title, and to the seriousness of the potentially adverse effect upon the right or title claimed."¹³

A dubious or peripheral claim may attract a mere duty of notice, while a stronger claim may attract more stringent duties. That is, the degree of consultation may vary from notice to more meaningful involvement. The Archaeological Assessment Stage 1 does not consider the possibility of a cultural heritage landscape. PPS Policy 2.6.5 requires the MNR and the Township to consider the interests of conserving cultural heritage resources and archaeological resources. Policy 4.6 requires the PPS to be implemented in a manner that is consistent with section 35 of the *Constitution Act, 1982*.

Comments on Class Environmental Assessment Process and Categorization

Per the Ministry's Public Notice Requesting Input to a Screening Process correspondence, we provide summary comments on the appropriate Class EA category for the Permit Application, based on the above submissions regarding MNR policy on considerations for aggregate operations.

¹³ *Tsilhqot'in v. British Columbia*, [2014] 2 SCR 257 at para 17, citing *Haida Nation v. British Columbia (Minister of Forests)*, 2004 SCC 73, [2004] 3 SCR 511 at para 37.

The Ministry should assign the Permit Application to Category C or D for the following reasons¹⁴:

1. The concern of the local community regarding this project is high. In particular, the HLAR include the residences within 800 metres of the proposed Aggregate Site.
2. There is at least a medium potential for net negative effects, in particular on enjoyment of property (noise, dust, visual impacts), potential groundwater/drinking water impacts, and increased demands on infrastructure (Algonquin Highlands has requested a pavement study).
3. There is uncertainty associated with the prediction of effects of the proposed aggregation operation, including noise, traffic patterns and traffic infrastructure, view and aesthetics, air quality, ecological integrity, terrestrial wildlife, terrestrial habitat linkages (fragmentation). These effects require mitigation techniques tailored to the project, that are peer reviewed by the Ministry (e.g. species at risk, such as additional protective measures for the Blanding's turtle) and other relevant agencies (e.g. MOECC for noise/air quality/hydrogeology, DFO for fish habitat). These effects will be of unknown duration and frequency, as extraction is dependent on market conditions. Therefore, the effects will be of greater significance as they will be more spread out over the longer term.
4. Additional evaluation and information is required to fully define the project (proposed end use for extracted aggregate) and required mitigation techniques, if approved (e.g. noise). For example, the level of detail provided for rehabilitation is very low (Condition 1.34) and has neither been considered nor reviewed by the Applicant's consultant biologist. There is no detail provided on potential impacts on the environment from traffic or particulate matter (dust).
5. There appears to be potential for serious negative effects on species at risk and natural heritage features and functions, per gaps in the Environmental Report and Ministry knowledge of the area. As discussed in section (a), above, the aggregate operation would fragment diverse habitats from each other for an unknown but presumably lengthy period of time. The impacts of dust and noise (blasting) on species at risk, other wildlife and natural heritage features and functions has not been assessed.

¹⁴ Per Class EA Tables 3.1 (Screening Criteria) and 3.2 (Considerations for Assigning Projects to Categories).

6. The Permit Application contains a very high degree of vagueness and uncertainty in its assessments, predictions and proposed mitigation. This elevates the potential for negative net effects of the Permit Application.

The Permit Application and its associated technical reports do not demonstrate a high degree of certainty for predicted effects. One example is the Hydrogeological Summary Statement, which does not consider the potential for rock fractures or their impact on groundwater and surface water. The Noise Report depends on incorrect assumptions, and mitigation measures not agreed to by the Applicant. There is no high degree of certainty that effects will be appropriately mitigated, due to the need for additional information to address flaws and gaps in the technical reports (e.g. dust/particulate matter impact on the environment).

This uncertainty of impacts is compounded by the proposed Site Plan Conditions, which we also understand are currently being revised by the Applicant. The Site Plan Conditions use permissive, weak language, rather than clear mandatory language. E.g. Site Plan Condition 1.44 “...extraction activities should avoid excavations...”, rather than “extraction activities shall avoid excavations...”. This must be addressed.

Additional precision is required for many Site Plan Conditions. For example, how will wetland buffer areas or potential bat roosting trees be marked, to prevent unintended destruction? How will quarry staff be familiarized with species at risk? A comprehensive list may be provided at a later date, following updates to and new technical reports.

In contrast, Category B proposals have low to medium potential for significant net environment effects or public concerns, which is clearly not the case with the Permit Application. Unlike Category B proposals, the Permit Application’s effects are not well understood technically, nor are they minor in nature or short in duration. With regards to duration, there is no estimate of the lifespan of the aggregate operation, and Site Plan Condition 1.46 proposes the operation run 24 hours per day, seven days per week. This increases the time frame for effects.

More comprehensive public and agency review is required for the Permit Application. Therefore, the project category must be elevated.

Request for Referral of Technical Reports to MOECC

Curiously, the Applicant’s Summary Statement did not identify the MOECC as an agency circulation contact. Therefore, it does not appear there will be qualified peer review of the Hydrogeology Summary Statement, Noise Report, Blast Impact

Report, or appropriate consideration of surface drainage issues. We urge the Applicant to have its application circulated for MOECC comment.

MNR Policy No. 4.01.01c requires notice to the MOECC Regional Office. Please confirm this notice was provided.

Further, per Policy No. 4.01.08, please advise why the Permit Application was apparently not circulated to the MOECC. We draw this conclusion from the fact the MOECC was not included in the list of commenting agencies. In our considerable experience, MNR does not have the same technical expertise on these issues as MOECC, which regularly processes applications related to hydrogeology, hydrology, drainage, air, and noise and vibration.

Conclusions

HLAR requests the Ministry assign the Permit Application to the Class EA Category “C” or “D”. This request is based on consideration of HLAR’s comments on the Permit Application.

We note MNR Policy 4.00.00 indicates requests for additional information, per subsection ARA 36(2), may be considered where exceptional circumstances relate to the application site. Exceptional circumstances do exist with this site. First, the proposed site is immediately adjacent to sensitive receptors. Second, the MNR has requested additional information to date, recognizing exceptional circumstances do exist (e.g. Hydrogeological Summary Statement). Third, the site and adjacent lands contain a high diversity of connected ecosystems, with species at risk present, a rare bog, significant wildlife habitat, potential endangered bat habitat, and fish habitat.

HLAR re-iterates its above requests regarding the need for additional information, including the following revised reports or new technical studies:

1. Revised Noise Report;
2. Revised Blast Impact Assessment;
3. Revised Environmental Report;
4. Revised Hydrogeological Summary Statement (full hydrogeological report);
5. Report on hydrology/surface drainage;
6. Particulate Matter/Dust Impact Analysis;
7. Bedrock Quality Assessment;
8. Market Analysis;
9. Visual Impact Analysis; and
10. Traffic Impact and Safety Analysis.

Harvey Lake Area Residents provide the following brief summary of key concerns from its submissions regarding the Application:

1. There are numerous technical deficiencies that must, at the very least, be addressed by the Applicant before the Application proceeds further including:
 - (i) Proposed noise mitigation shielding is insufficient for the sound receptors in extreme proximity to the operation;
 - (ii) Lack of dust modelling and lack of emission dispersion summary, in particular from fugitive sources of dust, at the Harvey Lake Cottage property lines (as the point of impingement), and corresponding impact on the natural environment;
 - (iii) The Blast Impact Analysis is flawed as it does not account for actual operating conditions;
 - (iv) As a result of errors in the Blast Impact Report, the Noise Report does not reflect worst-case conditions, as is required per NPC-300;
 - (v) Anticipated rock fractures from blasting (back break and breakage from subdrilling and blasting) causing potentially new and numerous routes to both ground water and surface water have not been considered;
 - (vi) The Applicant proposes use of high potential contaminant ANFO as the explosive, instead of more expensive environmentally-friendly gels, and does not assess the potential impact of ANFO on the environment;
 - (vii) Strong safety concerns that “overpressure and flyrock from the face will be away from structures as much as possible”. Accordingly, operations have been designed to follow a general North to South retreat. HLAR has great concerns that once the Applicant reaches Phase II, the residents of Harvey Lake will be in direct danger of flyrock;
 - (viii) Lack of a run-off prevention plan, relying instead on infiltration;
 - (ix) Proposed buffers for wetland and habitat protection on the proposed site and adjacent lands;

- (x) The potential for spills/transportation of contaminants via surface or groundwater to Harvey Lake, with no plans or Site Plan Conditions requiring routine monitoring and contaminant testing (e.g. benzene, toluene, ethylbenzene and xylene) testing;
 - (xi) Seeming lack of drilled monitoring wells on the proposed quarry site to monitor for groundwater and baseline chemistry and toxicity parameters for all four seasons (one full hydrological cycle) prior to operations;
 - (xii) Lack of a Storm Water Management plan or consideration of impacts to drainage and the environment;
 - (xiii) Lack of water treatment plan for spring pump-out, should infiltration constraints impact quarry operations;
 - (xiv) Lack of a Spills Contingency and Response plan;
 - (xv) Lack of water and dust sampling plans for those residents who require lake in-take water supplies; and,
 - (xvi) In general, the Site Plan Conditions are vague and there is lack of monitoring requirements for several media (noise, groundwater, surface water, vibration, airborne particulate matter);
2. Traffic Impct Analysis is required, given the characteristics of the proposed haul route (winding roads, limited sight lines, as well as lakeside roads, etc) and vague details on the operation.
 3. There are enough significant omissions in the Acoustic Assessment Report that residents, some of whom were not accounted for, cannot be guaranteed that their tranquil environment will be maintained and early morning calm enhanced.
 4. There has been no demonstration of no negative impacts to nearby Harvey Lake (a mere 170 metres away).
 5. The Permit Application directly contravenes 5.5.8 of the Township of Algonquin Highlands Official Town Plan and does not meet zoning requirements
 6. Aboriginal communities do not appear to have been consulted.

7. The revised operational plan calls for 75,000 tonnes annually; however, the Applicant states there is only a market for 10,000 tonnes/annum. The Applicant also requests an extremely large permitted area, relative to other aggregate operations in the area and market demand.
8. Due to proximity of residents, the Applicant proposed operations when leaves are on the trees –this would include the summer months when the large majority of residential property owners expect the reasonable enjoyment of their properties.

Please do not hesitate to contact me at 416-572-0464, or by email to david@donnellylaw.ca, cc'ing anne@donnellylaw.ca, [should you have any questions or comments concerning this correspondence.](#)

Yours truly,



David R. Donnelly

cc. MNR Minister
Township
County
Williams Treaties First Nations
Algonquins of Ontario