



TERMS OF REFERENCE

PEER REVIEW OF
NATURAL ENVIRONMENT, HYDROGEOLOGY, AIR QUALITY
AND ACOUSTIC ASSESSMENT MPACT REPORTS

FOR

REGIONAL OFFICIAL PLAN AMENDMENT APPLICATION 2014-008

AND

ASSOCIATED UXBRIDGE OFFICIAL PLAN AMENDMENT (OPA 55)
AND ZONING BY-LAW AMENDMENT APPLICATIONS (ZBA 2014-05)

VICDOM SAND AND GRAVEL (ONTARIO) LTD.

TOWNSHIP OF UXBRIDGE

DRAFT - August 2014

The following Terms of Reference have been prepared in response to a need by the Region to review the following:

1. Natural Environment Level 1 and level 2 Assessment Report;
2. Hydrogeological Assessment and Groundwater Water Table Evaluation;
3. Air Quality and Lighting Assessment Reports; and
4. Acoustic Assessment Report.

The proponent has made formal applications to amend the Durham Regional Official Plan, the Township of Uxbridge Official Plan and the Township of Uxbridge Zoning By-law. As well, the proponent will be submitting an application to the Ministry of Natural Resources for an aggregate license for the new pit.

In accordance with policies approved by the Council of the Regional Municipality of Durham, an independent analysis of the studies submitted by the proponent is required to assess the potential environmental impacts of this proposal, the effectiveness of mitigation measures associated with the application, and the subsequent rehabilitation of the site.

The peer reviewer will be expected to identify any conflicts of interest and to work in close consultation with the Region of Durham, the Township of Uxbridge and the Lake Simcoe Region Conservation Authority.

1. APPLICATION

- 1.1 On July 15, 2014, Skelton Brumwell & Associates, on behalf of VicDom Sand and Gravel (Ontario) Ltd. submitted an application to amend the Durham Regional Official Plan to permit a new 18.9 hectare (46.7 acre) aggregate pit operation, which is situated on the northwest corner of Lake Ridge Road (RR 23) and Goodwood Road (RR21) in the Township of Uxbridge. The new pit is situated immediately south of the existing Miller Aggregate pit operated by VicDom. The new pit will utilize the entrance, scales and scale house in the Miller pit.

- 1.2 The subject site consists primarily of agriculture lands and a farmhouse. The area surrounding the subject site includes rural residential dwellings, agricultural lands a large forested area, existing aggregate pits and a Region of Durham (Scugog) maintenance depot.
- 1.3 A Class A (Category 3 – Pit Above Water) Aggregate License application will be submitted for the subject site in the near future. The sand and gravel deposits are reported to extend to depths of at least 40 metres. The site is estimated to have approximately 5.6 million tonnes of sand and gravel.

2. PROVINCIAL POLICY AND REGIONAL OFFICIAL PLAN CONTEXT

- 2.1 The subject lands are designated “Oak Ridges Moraine – Countryside Area” in the Durham Regional Official Plan. Regional Plan policy requires an amendment for any new pits or expansion of existing pits or quarry operations, beyond the identified Resource Extraction Areas identified on Schedule ‘A’ and described on Schedule ‘E’ – Table ‘E1’. An application for an aggregate expansion must be accompanied by technical studies that assess potential effects on natural heritage features and functions, groundwater and surface water resources, as well as noise and air quality impacts on surrounding residents.
- 2.2 The Oak Ridges Moraine Conservation Plan (ORMCP) permits mineral aggregate operations within the Countryside Area designation, subject to protecting the ecological and hydrogeological integrity of the site.
- 2.3 The Provincial Policy Statement, 2014 (PPS) encourages the establishment of new aggregate resource extraction areas, provided issues of public health, public safety and environmental impacts can be addressed. In addition, progressive rehabilitation of a resource extraction area, which mitigates negative impacts to the extent possible, is required.

3. REVIEW OF TECHNICAL REPORTS

- 3.1 The peer review consultant will be responsible for conducting the following major tasks:
 - Review the applicant’s proposal and supporting studies and drawings;

- Attend a site visit to become familiar with the natural features and functions of the site and adjacent areas;
- Evaluate the completeness and accuracy of the information provided in the supporting studies;
- Evaluate the completeness of the findings in the technical reports regarding the assessment of the proposed impacts of the new pit;
- Evaluate the effectiveness and appropriateness of proposed mitigation measures, monitoring programs and remediation measures; and
- Identify any gaps in information, whether the information requires further clarification and/or whether additional information is required.

3.2 The peer review consultant will evaluate the adequacy and completeness of the information regarding existing conditions of **natural heritage features and functions**, including but not limited to:

- The adequacy and completeness of the information provided on vegetation communities on the site and adjacent areas, their environmental functions, connectivity within and off-site, and the occurrence of endangered, rare and threatened species.
- The adequacy and completeness of the information provided on wildlife and fish habitat opportunities, wildlife movement corridors and linkages, species utilization of the site, and the occurrence of endangered, rare and threatened species.
- The adequacy and completeness of the information provided on the Rehabilitation Plans with reference to compatibility on site and with adjacent lands within 120 metres.

3.3 The peer review consultant will evaluate the adequacy and completeness of the **hydrogeological information** provided related to the existing conditions of this site and adjacent area, including but not limited to:

- Existing landforms and soils as related to maintaining the recharge capabilities and water quality of the aquifers in the area;
- Direction of groundwater flow;
- Discharge and recharge areas;

- Storage capacities (soil stratigraphy/aquifers); and
 - Groundwater quantity and quality.
- 3.4 The peer review consultant will evaluate the adequacy and completeness of the information regarding existing conditions of **hydrological features and functions** of the site and adjacent area including, but not limited to:
- Wetlands located on-site and on adjacent areas;
 - Surface area runoff and water balance;
 - Stormwater management techniques and criteria to be used; and
 - Surface water quantity and quality.
- 3.5 The peer review consultant will evaluate the adequacy and completeness of the information provided regarding the potential environmental impacts and mitigation measures to be considered on natural heritage, hydrological and hydrogeological features and functions, including woodlands and wetlands, connectivity, habitat values, endangered, rare and threatened species, groundwater and surface water resources on the site and within adjacent areas.
- 3.6 The peer review consultant will evaluate the information provided regarding the potential site-specific and cumulative impacts of the operations on neighboring domestic wells (existing and approved), and any other major water takers within the area of influence.
- 3.7 The peer review consultant will evaluate the applicant's proposed protection, mitigation, monitoring and remediation measures, and recommend modifications, if required, to address:
- Natural heritage/hydrological features and functions, both on-site and on adjacent areas;
 - Surface water quality and quantity;
 - Groundwater quality and quantity;
 - Rehabilitation plans and future integration of the site with surrounding uses.
- 3.8 The peer review consultant will evaluate the adequacy and completeness of the information provided on **noise sources**, including:

- Evaluation of all noise sources;
 - Identification of all noise receptors;
 - Evaluation of recommended noise controls and cumulative impacts on site and surrounding areas; and
 - Any other mitigation measures to be considered.
- 3.9 The peer review consultant will evaluate the adequacy and completeness of the information provided on **airborne emissions/dust and lighting**, including:
- Compliance with Provincial Standards prescribed under the Aggregate Resources Act; and
 - Mitigation measures for airborne emissions.
- 3.10 Based on the review, the peer review consultant will provide an assessment / opinion as to whether the applicant's proposal conforms to the prescribed provisions of the PPS, the ORMCP, the Durham Regional Official Plan, the Township of Uxbridge Official Plan and the Aggregate Resources Act, as applicable.

The peer review consultant will have regard for any comments provided by the Lake Simcoe Region Conservation Authority (LSRCA) and will also determine whether the information provided in the background studies is complete and accurate, and assess whether the mitigation/monitoring/remediation measures proposed are appropriate.

4. CONTRACT ADMINISTRATION

- 4.1 The Regional Municipality of Durham will be responsible for contract administration. The peer review will be administered by a Steering Committee. The Committee will be comprised of representatives from the Region of Durham Planning and Economic Development Department, the Region of Durham Health Department, a member of the Durham Environmental Advisory Committee, the Township of Uxbridge, the LSRCA, and the applicant and their consultant(s).
- 4.2 In addition to attending meetings with the Steering Committee, the peer review consultant shall be available, within reason, to discuss and present the findings of

the Study with members of the Steering Committee to assist in their understanding of the Study process and technical information.

5. PROCESS AND TIMING

- 5.1 In accordance with the estimate provided by the Peer Review Consultant, the review would be completed in accordance with Section 8.1b) of this Terms of Reference. The timeframe will begin on receipt of a contract from the Regional Municipality of Durham, signed by all parties.

6. TECHNICAL REPORTS

- 6.1 The following technical reports are attached for review:
- “Hydrogeological Assessment” and “Groundwater Water Table Elevation Proposed Utica Pit”, prepared by Genivar Inc.; dated July 2013 and May, 31, 2013
 - “Natural Environment Report Level I & II” prepared by Skelton Brumwell & Associates Inc.; dated May, 2014.
 - “Acoustic Assessment Report” prepared by Akoustic Engineering Ltd.; dated November 2013.
 - Air Quality Assessment Report and Lighting memorandum prepared by R.J. Burnside & Associates Ltd.; dated November 2013.

7. ATTENDANCE AT MEETINGS

- 7.1 The peer review consultant will be required to attend meetings, including, but not limited to the following:
- A meeting with the Steering Committee and applicant’s consultants on the site and to exchange information;
 - A meeting with the Steering Committee to present preliminary findings and a draft report;
 - A meeting with the Steering Committee to present a final findings report; and
 - A meeting before the Regional Planning Committee to answer questions regarding the final findings report (optional).

8. PROPOSAL FOR SERVICES

8.1 The Peer Review Consultant shall prepare a written proposal containing the following:

- a) A detailed description of the suggested approach to the peer review as outlined in these Terms of Reference:
 - Proposed work program
 - The requirements for any municipal staff, Conservation Authority resources and the applicant;
- b) A study schedule for the work to be undertaken for the peer review, including:
 - Expected commencement date
 - Expected length of peer review
 - Expected date for the submission of the draft report and final report;
- c) The name(s) of those persons who will undertake the following work:
 - Study co-ordination and management
 - Field work and analysis in each of the major environmental disciplines
 - Attendance at Steering Committee meetings and public meetings.
- d) Cost estimates for the peer review, including such matters as the cost of meetings, mileage, secretarial, telephone, fax, computer and printing costs. The Peer Review Consultant will furnish an itemized estimate of the costs of each component of the process. Any per diem rates and meeting rates for additional work not specifically covered in these terms shall also be provided. Additional work is to be described and costs are to be provided to the Region of Durham before additional work is commenced.
- e) A schedule of hourly rates and an estimate of the number of days that each member would spend on the peer review and a sum total of this time.

- f) A statement of disclosure that the Peer Review Consultant has no conflict of interests in undertaking the Study and shall refrain from undertaking future assignments, which may conflict or make use of confidential information obtained through this peer review.

9. DELIVERABLES

- 9.1 The Peer Review Consultant shall prepare the following documents in hard copy format and also on CD:

Reports:

- Draft Report 10 copies
- Final Report 10 copies

Text will be provided in Microsoft Word.

- 9.2 All original texts, maps, plates, data, reports and other materials or information collected or prepared by the Peer Review Consultant shall be considered municipal property and will be turned over to the Region, the Township and the Conservation Authority at the conclusion of the Study.

10. COST OVERRUN

- 10.1 All costs incurred by the Peer Review Consultant in the preparation of the Study and not specifically provided for in the Peer Review Consultant's proposal and authorization letter will not be the responsibility of the Region of Durham.

11. CONDITIONS

- 11.1 The Peer Review Consultant must not include restrictive or conditional statements to alter the intent of the Terms of Reference.
- 11.2 The Region will not execute an agreement with the Peer Review Consultant to undertake the peer review until such time as funding to cover the full cost of the peer review has been provided by the development proponent.