APPENDIX	<
to	
REPORT	PLAN2019-016

FILE NO. 006-02-009

The Corporation of the City of Kawartha Lakes

Planning Report

Report Number PLAN2014-014

Date: March 5, 2014 Time: 1:00 p.m.
Place: Council Chambers
Ward Community Identifier: Oak Ridges Moraine – Ward 16
Subject: To permit the expansion of an existing Class A - Category 3 F above water table with ancillary uses and to amend various zonin provisions (VicDom Sand and Gravel).
Author/Title: Diana Keay, Planner 2 Signature:
Recommendations:
RESOLVED THAT Report PLAN2014-014, VicDom Sand and Gravel – D06-02-009, be received;
THAT the proposed rezoning application, D06-02-009, submitted by MHBC Planning, Urban Design and Landscape Architecture on behalf of VicDom Sand and Grave (Ontario) Ltd. be referred back to staff for further review and processing; and
THAT all interested portion be notified of Councille decision
THAT all interested parties be notified of Council's decision.
19
Department Head:
Corporate Services Director / Other:
Chief Administrative Officer:

Background:

The subject lands are located within the Oak Ridges Moraine on the south east side of Highway 115 and fronts onto Boundary Road. Durham Region (Municipality of Clarington) is located to the south of the subject lands. The owner currently operates a sand and gravel pit to the west of the subject site. This site has a total licenced area of approximately 21 ha. with 17.014 ha. of this approved for extraction and is operating no closer than 1.5 m. above the water table. This site has been operating since 1953. The owner is proposing to expand the existing operation to the east encompassing an additional 35 ha of land with a total extraction area of 18.5 ha. and no closer than 1.5 m. above the water table. The current maximum limit of extraction on site is 554,000 tons/year. The proposed maximum limit with the expansion would increase to 700,000 tons/year.

The current operation is accessed via the existing haul route on Boundary Road. This road is shared between the City of Kawartha Lakes and the Municipality of Clarington however, is it maintained by Clarington. Boundary Road will continue to operate as the haul route for the proposed expansion and therefore, no alternative route is proposed. Also, outbound truck traffic will travel westbound via Highway 115.

The surrounding land uses includes Highway 115 to the north, the existing Manvers Pit to the west, agricultural and residential lands to the east and the Ganaraska Forest and a residential lot to the south. Two residential dwellings exist in close proximity to the proposed pit. The dwelling located to the east of the proposed expansion is approximately 35 m. from the proposed site and the dwelling to the south is approximately 50 m. from the proposed site.

Owner: VicDom Sand and Gravel (Ontario) Ltd.

Applicant: MHBC Planning, Urban Design and Landscape

Architecture

Legal Description: Concession 1 Part Lot 15

Official Plan: Oak Ridges Moraine Linkage Area in the City of

Kawartha Lakes Oak Ridges Moraine Policy Area

(VCOP No. 104)

Zoning: Oak Ridges Moraine Linkage Area in the Oak Ridges

Moraine Zoning By-law 2005-133

Site Size: 34.8 ha (86 acres)

Site Servicing: No buildings are proposed and therefore, servicing is

not required

Adjacent Uses: North: Highway 115

East: Agricultural and residential

South: Ganaraska Forest and residential West: existing pit operation

Rationale:

The owner is proposing to operate in four phases for extraction and rehabilitation. Appendix 'B(1)' and 'B(4)' provides the operation and final rehabilitation plan. The site extraction will occur according to demand of product and once extraction of a phase is exhausted, the site will be rehabilitated and move to the next phase. The current use on the proposed site is agricultural. According to the Planning Report prepared by MHBC, the site produces winter wheat. As a result, the owner will rehabilitate the site to agricultural to protect for this use in the future.

The owner has applied for a licence under the Aggregate Resources Act (ARA) and therefore, these applications are being processed concurrently. However, a licence will not be issued unless the appropriate zone is approved and in effect.

The current (and proposed) pit operates above the water table and therefore, a permit to take water from the Ministry of the Environment is not required.

The property is being reviewed under the policies of the Oak Ridges Moraine Conservation Plan. A number of studies have been submitted by the owner in support of the application. These include the following:

- 1. Planning Report and ARA Summary Statement prepared by MHBC Planning, Urban Design and Landscape Architecture and dated October, 2013.
- 2. Level 1 and Level 2 Natural Environment Technical Report prepared by Golder Associated and dated May, 2013.
- 3. Cultural Heritage Study prepared by MHBC Planning, Urban Design and Landscape Architecture and dated September, 2013.
- 4. Stage 3 Archaeological Assessment prepared by Golder Associates and dated June, 2011.
- 5. Water Resources Assessment prepared by Golder Associates and dated March 2013.
- 6. Revised Traffic Impact Study prepared by Cole Engineering and dated August 2013.
- 7. Noise Impact Study prepared by Golder Associates and dated October, 2013.
- 8. Operation Plan 2a and 2b and Rehabilitation Plan prepared by MHBC Planning, Urban Design and Landscape Architecture and dated October 3, 2013.

Applicable Provincial Policies:

The property contains natural heritage features (Significant Woodlands) and aggregate resources which in the Growth Plan for the Greater Golden Horseshoe

(GPGGH) and Provincial Policy Statement (PPS) are considered valuable and should be protected.

The Growth Plan:

Section 4.2 Policies for Protecting what is Valuable -

Section 4.2.1 – Natural Systems

Section 4.2.1.1 of the GPGGH provides that the Minister of Public Infrastructure Renewal in consultation with municipalities and other stakeholders will identify natural systems and where appropriate develop additional policies for their protection.

Section 4.2.1.3 provides that planning authorities are encouraged to identify natural heritage features and areas that compliment, link, or enhance natural systems.

Section 4.2.3 – Mineral Aggregate Resources

Section 4.2.3 in the Growth Plan provides that Ministers of Public Infrastructure Renewal and Natural Resources will work with municipalities, producers of mineral aggregates resources and other stakeholders to identify resources and develop long term strategies ensuring wise use, conservation, availability and management of mineral aggregate resources and to also identify opportunities for resource recovery and rehabilitation.

The Provincial Policy Statement:

Section 1.1 – Managing and Directing land Use to Achieve Efficient Development and Land Use Patterns

Section 1.1.1 - Healthy, livable and safe communities are sustained by:

- a) promoting efficient development and land use patterns which sustain the financial well being of the Province and municipalities over the long-term.
- c) avoiding development and land use patterns which may cause environmental or public heath and safety concerns.

Section 1.7 – Long-Term Economic Prosperity

Section 1.7.1 – Long Term Economic prosperity should be supported by:

a) optimizing the long-term availability and use of land, resources, infrastructure and public service facilities.

e) planning so that major facilities (such as extraction activities) and sensitive land uses are appropriately designed, buffered and/or separated from each other to prevent adverse affects form odour, noise, and other contaminants, and minimize the risk to public health and safety.

Section 2.0 – Wise Use and Management of Resources

Section 2.1 – Natural Heritage:

Section 2.1.4 provides that development and site alteration shall not be permitted in or adjacent to significant woodlands unless it can be demonstrated that there will be no negative impacts on the natural features or their ecological functions.

Section 2.5 - Mineral Aggregate Resources

Section 2.5.1, 2.5.2.1, 2.5.2.2, 2.5.2.4 provide the following:

- Mineral aggregate resources shall be protected for long-term use;
- As much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible;
- Extraction shall be undertaken in a manner which minimized social and environmental impacts;
- Mineral aggregate operations shall be protected from development and activities that would preclude or hinder their expansion or continued use or which would ne incompatible for reasons of public health, public safety or environmental impacts.

Section 2.5.3 – Rehabilitation:

Progressive and final rehabilitation shall be required to accommodate subsequent land uses, to promote land use compatibility, and to recognize the interim nature of extraction.

The GP and PPS are supportive of protecting and permitting extraction of aggregate resources. The applicant has submitted various reports and studies to address any environmental impacts and any impacts to public health and safety. These reports and studies have been circulated to the appropriate authority and are currently under review.

Also, aggregate operations are also reviewed by the Ministry of Natural Resources (MNR) and the Ministry of the Environment (MOE) under the Aggregate Resources Act. Additional information and further review will be required at the provincial level prior to the issuance of a licence. Any sensitive environmental features will require a permit from the MNR as well.

Oak Ridges Moraine:

The property is located within the Oak Ridges Moraine and therefore, subject to the policies contained in the following documents:

- City of Kawartha Lakes Oak Ridges Moraine Policy Area -Amendment Number 104 to the Victoria County Official Plan (VCOP No. 104);
- The Oak Rides Moraine Conservation Plan (ORMCP); and,
- The Oak Ridges Moraine Zoning By-law 2005-133 (ORM ZBL).

It should be noted that the ORMCP provides a series of policies that in certain instances conflict with the VCOP No. 104 and ORM ZBL policies and provisions. The ORMCP provides within the introduction section on page 8 that where a conflict occurs, the ORMCP is the prevailing document. Also, Section 33 (1) and (2) of the ORMCP provides that the VCOP No. 104 and the ORM ZBL shall not contain provisions that are more restrictive than the ORMCP. As a result, any policies and/or provisions which create a conflict will be addressed in this report and in some cases will be considered as part of the review for amendment.

VCOP No. 104

The Property is designated Oak Ridges Moraine Linkage Area (ORMLA) in the VCOP No. 104. This designation promotes connectivity of Key Natural Heritage Features (KNHF) and to maintain and where possible restore and improve open space linkages and the ecological integrity of the ORMCP. This designation permits various uses including mineral aggregate operations which are subject to various policies within the plan.

The property is also identified in the VCOP No. 104 to be within the following areas:

- Schedule 4 Aggregate Potential: Sand and Gravel Resource
- Schedule 5 Natural Heritage Features: Significant Wildlife
- Schedule 6 Significant Woodlands: Woodlands
- Schedule 8 Aquifer Vulnerability: High Aquifer Vulnerability
- Schedule 9 Landform Conservation Area: Category 2

Each Schedule above is also addressed in the ORMCP which will be discussed later in this report.

As per Schedule 4 above, the property is identified to comprise sand and gravel resource. The owner as a result is proposing to expand the existing operation to the west of the property for extraction.

Significant Woodlands and Wildlife are considered KNHF as outlined in Section 5.2, Section 22 and Table 1 of the VCOP No. 104 and the ORMCP. The

Significant Woodlands are located on the north east corner of the site and traverse north south through the middle of the site. Significant Wildlife has been identified on the south side of the site, adjacent to the Ganaraska Forest. These KNHF are subject to the ORMCP and will be addressed simultaneously.

Schedule 8 - Aquifer Vulnerability is discussed in Section 5.5 of the VCOP No. 104. This section includes a list of various uses that are prohibited in this area and does not include mineral aggregate operations. As a result, the use is permitted. Also, areas of high aquifer vulnerability are subject to Section 42 of the ORMCP.

Schedule 9 - Landform Conservation Area is addressed in Part 6 of the VCOP No. 104 and provides that development applications are subject to the policies contained in Section 30 or the ORMCP.

Section 7.2 – Natural Linkage Area provides that the following Sections from the ORMCP will also apply to ORMLA with respect to mineral aggregate operations:

Section 33 – Restricted re: agricultural, mineral aggregates, wayside pits;

Section 35 – Mineral Aggregate Operations and Wayside Pits; and,

Section 36 – Comprehensive Rehabilitation Plans

Each section above will be discussed in further detail below.

Oak Ridges Moraine Conservation Plan (ORMCP):

The ORMCP contains six parts and this report will discuss various policies contained within the first four parts as they relate to this application. These parts includes: Part 1 - General (land use information), Part 2 - Land Use Designations, Part 3 - Protecting Ecological and Hydrological Integrity (this includes KNHF and Landform Conservation Areas) and Part 4 - Specific Land Use Policies (mineral aggregate operations).

As provided in Schedule 9, Landform Conservation area - Category 2 exists on the west side of the proposed site. Landform Conservation areas are subject to the policies contained within Section 30 of the ORMCP. However, Section 30 (7) provides that these policies do not apply to mineral aggregate operations and therefore, are permitted.

As mentioned above, Section 42 addresses High Aquifer Vulnerability. Similar to the VCOP No. 104, this section provides a list of prohibited uses which does not include mineral aggregate operations. As a result, the use is permitted.

This site contains and is adjacent to KNHF's, specifically Significant Woodlands and Significant Wildlife. Section 22 (2) – Key Natural Heritage Features of the ORMCP provides that any development or site alteration within a KNHF shall be

prohibited except for management of wildlife, forest and fish, conservation and erosion or flood control projects, transportation, infrastructure and utilities and low intensity recreation. However, Section 22 (3) provides that any proposed uses within the area of influence (120 m.) of a KNHF may be considered through a natural heritage evaluation. This evaluation must demonstrate that there would be no negative impacts to the KNHF and demonstrate how connectivity will be maintained between features. This section is discussed further under Section 35 (4) below.

The proposed operation is located in a KNHF (Significant Woodlands) and within 120 m. of both identified KNHF's and therefore, a Natural Heritage Evaluation is required. Also, where a Significant Woodland exists, the ORMCP requires a 30 m. buffer from the base of the outmost tree trunk. The owner retained Golder Associates to prepare a Level 1 and Level 2 Natural Environmental Technical Report. This report identified any significant species, analyzed the potential impacts on the KNHF's as a result of the proposed operation and provided recommendations based on the findings. This is discussed in further detail below.

Conversely, Section 35 – Mineral Aggregate Operation and Wayside Pits of the ORMCP provides a set of policies that must be met in order to obtain application approval. This includes operations within the ORMLA and operations located on a site that contain or are adjacent to KNHF's.

Section 35 (c) provides that any KNHF located in or adjacent to a mineral aggregate operation will ensure the health, diversity, size and connectivity is maintained and where possible improved or restored.

Section 35 (2) provides that mineral aggregate operations must demonstrate the following for approval:

- Compliance with Section 35 (1) the relevant subsection is 35 (c) as mentioned above;
- No extraction within 1.5 m. of the water table;
- Extraction will be completed as quickly as possible;
- The site will be rehabilitated

Section 35 (3) also provides that mineral aggregate operations located in ORMLA must maintain connectivity by excluding areas of the site at all times from operation that:

- Is at least 1.25 km wide;
- Lies outside the active portions of the site; and,
- Connects parts of the ORMLA outside of the operation.

Section 35 (4) provides that despite Section 22 (2) – which prohibits this use within KNHF's, a mineral aggregate operation is permitted if:

- The KNHF is occupied by a young plantation or early succession habitat and the applicant can demonstrate the following:
 - Long-term ecological integrity of the Plan Area is maintained, and where possible restored or improved; and,
 - The extraction will be completed and rehabilitated as soon as possible

Finally, Section 36 of the ORMCP indicates that a comprehensive rehabilitation plan is required after extraction is exhausted. The owner and municipalities are encouraged to work together to develop these plans and ensure its implementation.

The Level 1 and Level 2 Natural Environmental Technical Report prepared by Golder Associates discuss the Significant Wildlife and Significant Woodland features on site. Level 1 of the report identifies two potential species that may occur in the area known as the Gray Fox and the Monarch Butterfly. The report provides that the natural physical features including lack of on site water and dense bush creates difficulties for the gray fox to establish a permanent habitat. As a result, it is unlikely that the gray fox would habitually occur in this area. As a result, further analysis in Level 2 was not required. The monarch butterfly is observed as likely to occur on or adjacent to the site and is considered as a species of special concern. Goldenrod which is a food source for the butterfly was observed on site however, Milkweed, the required flower for egg-laying was not observed on site. There were no large concentrations of the monarch butterfly on site, only limited numbers. As Goldenrod is abundant throughout the region, local occurrence is not considered significant. Based on this information, further analysis was carried over to Level 2.

Level 2 provides that the Significant Woodlands do not qualify as a young plantation or early succession habitat and therefore, must be protected. As a result, the proposed operation will remain outside of this area save and except a 20 m. wide roadway providing access from the existing operation to the proposed. The report also provides that in Golder Associates opinion, the tree species on site do not possess the qualities or characteristics of a Significant Woodland due to their cultural original however, are classified on the basis of the species presence in the linkage area. Based on this information, the report recommends a 15 m. buffer from the proposed extraction area rather than the required 30 m. buffer as stipulated in the ORMCP. A geotechnical analysis will be required to maintain this proposed buffer and prevent erosion.

The Planning Report prepared by MHBC provides that the current use of the site is agricultural and is currently being farmed. The land is not considered prime agricultural within the VCOP No. 104 or OMAFRA mapping. The owner proposes to rehabilitate the site back to agricultural in order to re-establish the use. There will be no extraction within 1.5 m. of the water table and although, it is the intent

of the owner to extract the material as quickly as possibly, the market demand will dictate the timeline.

The Planning Report and the Level 1 and 2 Natural Environmental Technical Report provide that the proposed operation meets the criteria as set out in the ORMCP.

Staff is currently reviewing the reports in detail taking into consideration the reduced buffer and the 20 m. roadway. Further review and analysis is required.

Aggregate Secondary Plan (ASP):

Aggregate Secondary Plan Steering Committee:

The Steering Committee for Aggregate Secondary Plan was formed and has been working since the beginning of 2013 towards resolving the following matters as part of the secondary planning exercise:

- Updating and refining Aggregate Resource Reserve mapping;
- Establishing detailed study requirements for aggregate applications that consider the scale of operation and location;
- Establishing detailed monitoring requirements;
- Establishing preferred haul routes and addressing their connection to haul routes in adjacent municipalities; and,
- Determining the review process and type of applications needed to consider new aggregate operations in areas identified as Aggregate Resource Reserve.

Staff estimates that the policies will be completed for consideration by Council before end of Q2, 2014.

The policies contained within the ASP will not apply to the ORM as this area has its own plan however; the City is working to ensure that all aggregate operations including haul routes are processed consistently and conform to and is consistent with provincial policies.

Oak Ridge Moraine Zoning By-law Compliance (ORM ZBL):

The property is zoned Oak Ridges Moraine Natural Linkage Area (ORMLA) in the ORM ZBL. This zone does not permit mineral aggregate operations and therefore, an application was submitted for consideration. In addition to the use other amendments are require for consideration based on Section 6 - Special Provisions of the ORM ZBL. This include, parking to be located on the existing operation lands to the west, permitting a 20 m. wide roadway connecting the existing and proposed pit through the Significant Woodlands and to permit the use on lands containing KNHF.

The following Schedules are contained within the ORM ZBL and identify special features on site:

- Schedule C has identified Natural Heritage Features (NHF) within the southeast corner of the proposed operation site. This may include ANSI/Wetland features.
- Schedule D has identified the entire site to be within an Area of High Aguifer Vulnerability
- Schedule E has identified a portion of the west side of the property to be within a Landform Conservation Area – Category 2.
- Schedule F has identified Significant Woodlands surrounding most of the site beyond what is identified in the VCOP No. 104 Schedule 6.

Schedule D and E contain provisions which are identical to the policies within the ORMCP and VCOP No. 104. The list of prohibited uses in the Area of High Aquifer Vulnerability does not include mineral aggregate operations. Also, the provisions of the Landform Conservation Area – Category 2 do not apply to mineral aggregate operations.

Section 6.9 of the ORM ZBL restricts the type of uses permitted on existing lots of record containing one or more NHF. A mineral aggregate operation is not a permitted use. Also, this section indicates that any proposed land use change required under the Planning Act, requires an amendment. Schedule C has identified ANSI/Wetland features on site that is not consistent with the ORMCP. As this is a conflict and the ORM ZBL may not establish provisions that are more restrictive than the ORMCP, the ORCMP prevails. Therefore, the owner is seeking an amendment to this section that adds mineral aggregate operations as a permitted use and changes the NHF boundary to exclude the subject site on Schedule C.

Section 6.10 provides similar restrictions as Section 6.9 regarding Significant Woodlands. Although, it is the intent to protect the majority of the Significant Woodlands by excluding these lands from extraction, the applicant is proposing to create a 20 m. wide roadway. As a result, an amendment is required.

Further review and analysis of the reports concerning the proposed amendments is required and ongoing by staff.

Other Alternatives Considered:

No other options were considered at this time.

Financial Considerations:

There are no financial considerations unless Council's decision to adopt, or its refusal to adopt the requested amendment, is appealed to the Ontario Municipal

Board. In the event of an appeal, there would be costs, some of which may be recovered from the applicant.

Relationship of Recommendations To Strategic Priorities:

Council has identified four strategic priorities which include enhancing tourism, managing aggregates, developing a knowledge-based economy, and creating connections. This application supports the "managing aggregates" priority by providing for the use and extraction of aggregate resources within the City of Kawartha Lakes in appropriate locations and within prescribed operational requirements and restrictions.

Review of Accessibility Implications of Any Development or Policy:

Not applicable

Servicing Comments:

The proposed use does not require water or sanitary services and therefore, is not being considered in this report. If however, the owners decide to drill a well for dust control purposes, the Health Unit will be contacted at that time. Also, if the amount of water taking is more than 50,000 L/day a permit is required by the MOE. The owner has provided that if a new well is installed for dust control purposes this amount will not be exceeded.

Consultations:

Notice of this application was circulated to the prescribed persons within a 500 metre radius, agencies, and City Departments which may have an interest in the proposed application. As of the writing of this report, staff has received the following comments:

Staff received a phone call from a resident at 16 Micro Road located directly east of the proposed operation inquiring about the notice. The resident indicating she objects to the application and was concerned about truck traffic on Micro Road. Staff advised the resident that the existing entrance on Boundary Road will be used to access the site and no new access is being proposed. Also, staff informed the resident that an open house will be required and what this entails. The owners will be submitting a letter of objection and advised staff that they will attend the March 5, 2014 Planning Committee meeting.

Ministry of Transportation on December 18, 21013 provided they have no concerns with the application.

Health Unit on December 13, 2013 indicated that they do not need to perform a site visit as no development is proposed.

Emergency Services Department on December 19, 2013 provided they have no comments.

Engineering Division on January 24, 2014 indicated they have no concerns.

Alderville First Nations on December 13, 2013 stated that there will be minimal impact and have no concerns.

Georgina Island on January 14, 2014 would like to be kept informed and circulated on the application.

Hiawatha First Nations on February 7, 2014 indicated that they have no concerns.

The Otonabee Region Conservation Authority on January 14, 2014 provides that although they generally support the application they recommend that the 30 m. buffer from the Significant Woodlands be maintained as opposed to the proposed 15 m. buffer as recommended by Golder Associates. Also, the Level 1 and Level 2 Natural Environmental Technical Report does not provide sufficient information to demonstrate that the proposed 20 m. wide roadway will maintain the requirements in the natural heritage reference manual, and thus the PPS, and as a result more information is required.

Municipality of Clarington requires more time for review and will submit their comments as soon as possible.

Development Services – Planning Division Comments:

Supporting Studies:

The applicant submitted various studies in support of the application. The recommendations of each study are attached as an appendix for information purposes save and except the Traffic Impact Study (TIS) which is contained within the body of this report.

The Noise Study prepares by Golder Associates provides various mitigation measures to ensure the operation is in compliance with the noise guidelines as established by the MOE. These mitigation measures have been included in the overall plan and application submitted to the MNR under the ARA. Appendix 'C' outlines these measures.

A Water Resource Assessment was also prepared by Golder Associates to determine any potential impacts to ground and surface water as a result of the

proposed operation. The report provides that there are no groundwater dependent natural features on site and the site does not contain any water wells or sensitive natural features that will be affected by the proposed operation. The site will not require a permit to take water and the operation will be approximately 2 m. above the water table but no less than 1.5 m. as required in the ORMCP. The report has included a list of mitigation measure as a precaution and is attached as Appendix 'D' to this report.

Further analysis is required for the Level 1 and Level 2 Natural Environmental Technical Report. The concerns raised by ORCA must be addressed and Staff requires clarification regarding the information pertaining to the Monarch Butterfly. Level 1 of the report provides that there is an abundant source of Goldenrod throughout the region however; the analysis is carried over to Level 2 without further discussion. The consultant should provide whether the area containing this food source should be preserved as the Monarch Butterfly is considered a species of special concern. The recommendations from this report have been attached as Appendix 'E' for information.

A Traffic Impact Study was prepared by Cole Engineering. The TIS confirms that the site will be accessed via the current entrance on Boundary Road. No other access has been contemplated at this time. The road is jointly shared between The City of Kawartha Lakes and the Municipality of Clarington however, Clarington maintains the road. The report provides that all truck traffic will be leaving westbound on Boundary Road and has direct access to Highway 115. The study has concluded that the total trips generated by truck traffic will include 20 trips per peak hour in the morning and 20 trips in the peak hour during the afternoon. No impacts are anticipated, additional lanes are not warranted and that the current site access will continue to operate in excellent levels of services under future total traffic conditions (2018 horizon). The report recommends the following to be incorporated on site:

- Access on Boundary Road should be redesigned to accommodate a single inbound/outbound lane. This will include a stop sign and stop bar and require a minimum of 15 m. radius and a 9 m. wide throat at the entrance
- Signage including truck entrance warning and oversized truck entrance are recommended on the property
- The daylight triangle on the corner of Boundary and Micro Road should be maintained as per the ZBL.

The TIS acknowledges that the City is currently undertaking a haul route study however; there are no draft policies available at this time.

As per ORCA's comments, consideration should be given to relocating the proposed internal haul route outside of the Significant Woodland. Further discussion and analysis is required.

The site must adhere to the dust control requirements as set out in the ARA Provincial Standards. The Planning Report provides that the owner will conform to these requirements and has been demonstrated in the ARA submission.

Cultural Heritage and Archaeological Assessments were prepared by MHBC and Golder Associates. Both studies concluded that no significant cultural heritage features or evidence of archaeological findings were observed on site. Based on the City's database, there are no heritage buildings in the area that are designated. The Archaeological Assessment was submitted to the Ministry of Tourism, Culture and Sport for review. A letter was prepared by the Ministry on June 12, 2012 indicating that they are satisfied with the information in the report.

Proposed Pit Expansion and Proposed Amendments:

The application proposes to change the zone category from ORMLA to Oak Ridges Moraine Mineral Extraction Exception One (ORMME-1) Zone. This will permit a mineral aggregate operation and ancillary uses to the operation. The applicant is also proposing to amend Section 6.9 and 6.10 of the Special Provisions which will permit an aggregate operation located within a Significant Woodland and a NHF (ANSI/Wetland). These changes would also result in amending Schedule C to change the NHF boundary line to exclude the proposed operation site.

Staff agrees that an exception zone is appropriate as the proposed amendments are site specific. Staff will continue to process the application based on these proposed amendments to the ORM ZBL.

Open House:

The owner is required to hośt an open house for the public in order to present information about the project and answer or address any questions, concerns or inquiries. The applicant has agreed to hold an open house prior to any recommendation on this application to planning committee. The owner will be responsible for appropriately advertising, securing a venue and hosting the meeting.

Aggregate Resources Application:

The applicant is required to and has submitted an ARA application for the proposed pit to the Ministry of Natural Resources (MNR) for consideration. Any planning approvals and conditions imposed by the City will be reported to the MNR through the site plan and licence review process. Both the City and the public will have an opportunity for input into the site plan conditions at that time.

Conclusion:

Staff will continue to review of the application and supporting studies specifically, the Level 1 and Level 2 Natural Environmental Technical Report. The applicant must address the comments by ORCA and provide clarification to planning staff on the Level 2 analysis. Also, the owner is required to host an open house for the public prior to staff recommendation. Based on the information contained in this report, staff respectfully recommends that the application be referred back to staff for further processing.

Attachments:

Appendix 'A' - Location Map

Appendix 'B' - Existing Features

Appendix 'B(1)' - Operational Plan 2a

Appendix 'B(2)' - Operation Plan 2b

Appendix 'B(3)' - Final Rehabilitation Plan

Appendix 'B(4)' - Cross Sections

Appendix 'C' - Noise Study Recommendations

Appendix 'D' – Water Resource Assessment Recommendations

Appendix 'E' - Level 1 and Level 2 Natural Environmental Technical Report



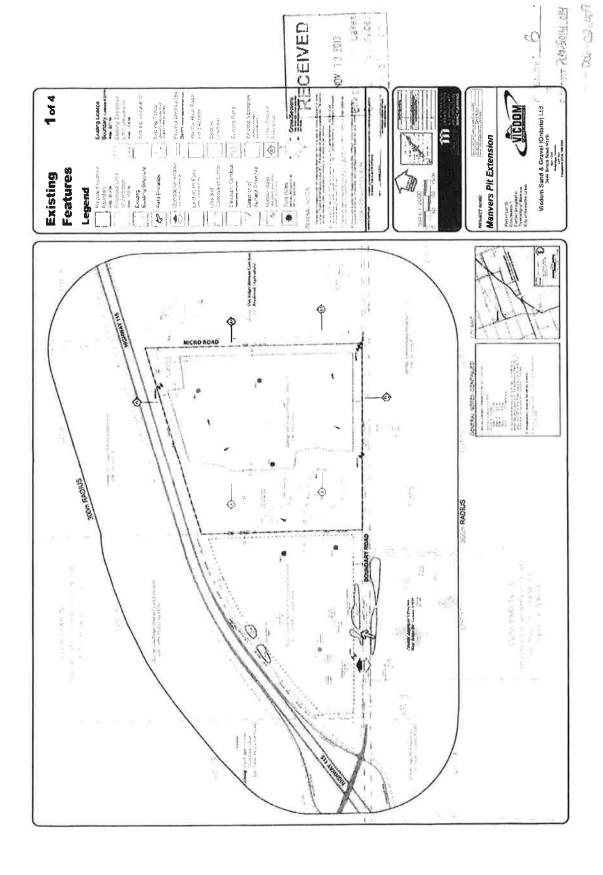
Phone: 705-324-9411 ext. 1368

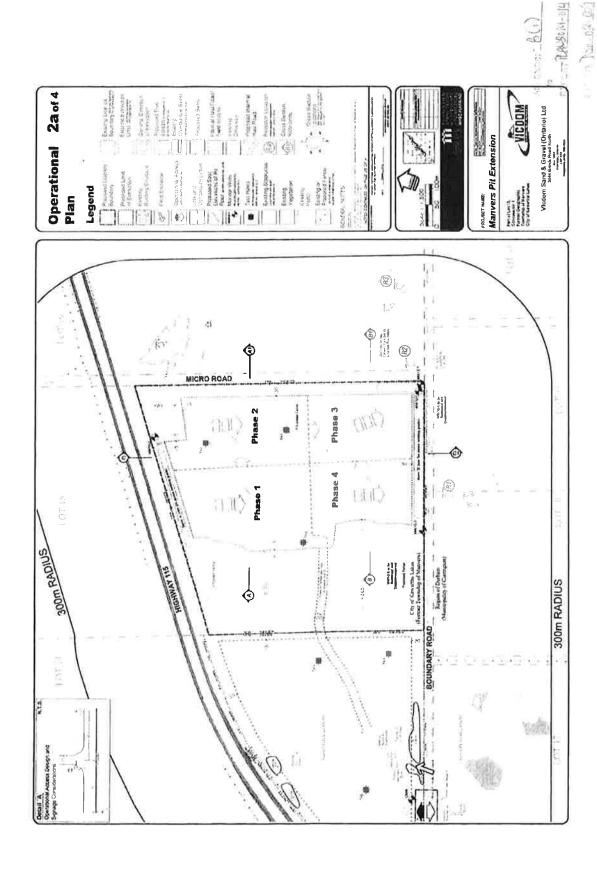
E-Mail: dkeay@city.kawarthalakes.on.ca

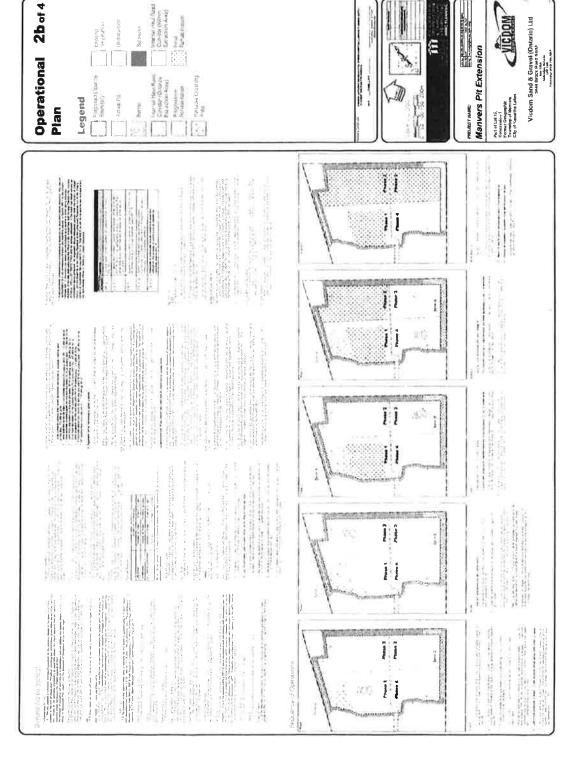
Department Head: Ron Taylor Department File: D06-02-009

APPENDIX" A "
to
REPORT PLANSOIM-DIM
FILE NO. Dub-02-609

		FILE NO. 120 E
Con. 2	'Geographic To	wnship of Manvers'
Sandy Hook	Rd	
Lot 14	Lot 15	Fee Rd Lot 16
Con. 1	Highway 115	
LAND ALSO OWNED BY APPLICANT	SUBJECT	Micro Rd
(benedout)	'Municipal	Boundary Rd ity of Clarington'

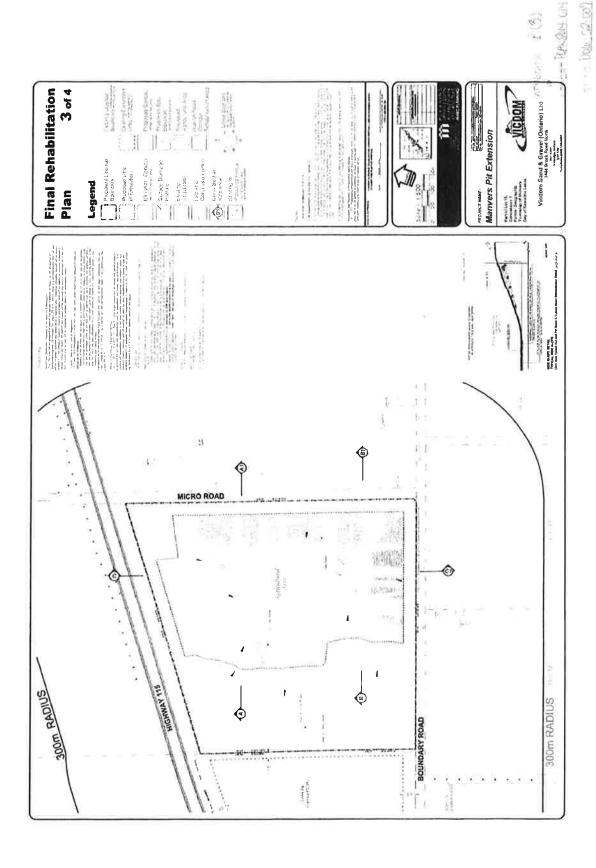


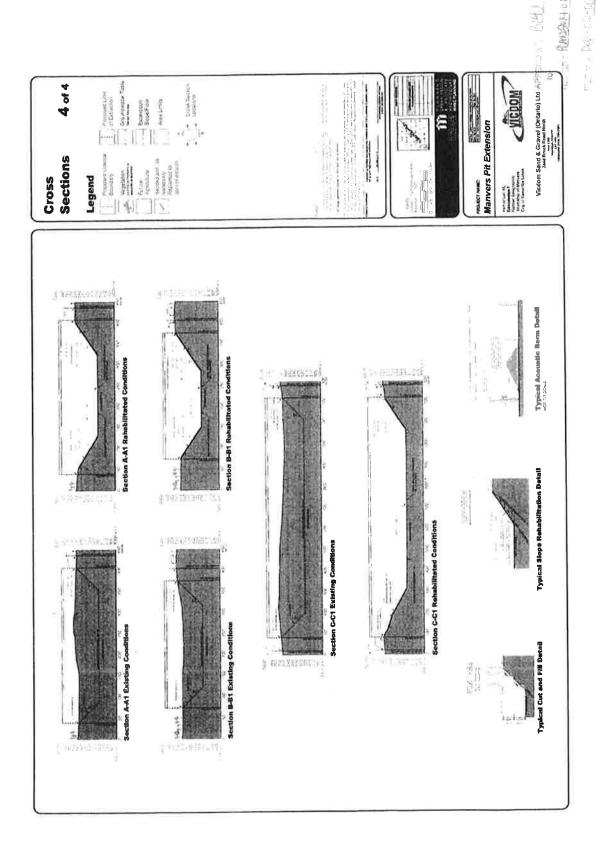




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NOISE IMPACT ASSESSMENT PROPOSED AGGREGATE PIT LICENSING

8.0 GENERAL PIT OPERATIONS NOISE CONTROLS

The following summarizes general pit operation noise controls and assumptions that should be followed in all of the operational sequences of the proposed extraction area:

- the portable crushing plant will be located in the existing pit or in the northwest corner of the extension as indicated in Figure 2;
- use of the portable crushing plant in the extension area will be on the final pit floor elevation;
- where possible, stockpiles should be placed to act as a barrier, shielding the POR locations from the noise emitted by the portable crushing plant;
- general extraction outlined in Figure 3 will be followed;
- the front end loaders, screening plants, excavator, and articulated trucks will generally operate within 30 m of the extraction face;
- pit equipment will be consistent to those listed in Table 1;
- pit equipment will satisfy overall sound power levels summarized in Table 1;
- equipment will be maintained in good condition;
- on-site road-ways will be maintained to limit noise resulting from trucks driving over ruts and pot-holes;
- a berm will be installed along the south and southeast borders of the limit of extraction;
- the berm will have a minimum height of 5 m above existing grade; and
- the berm will be installed prior to commencing the extraction of Phase 3.

APPENDIX "_____"
to

REPORT PLANSOIN-DIY

FILE NO. 200-02-009



APPENDIX D
to REPORT PLANDOIU-014
FILE NO. DO6-02-009

MANVERS PIT EXTENSION WATER RESOURCE ASSESSMENT

9.3 Post-Development Water Quality

Upon rehabilitation the pit will be returned to agricultural/pasture end use. One of the key differences between pre- and post-extraction is the reduction in unsaturated zone thickness above the water table through the removal of the overlying sand and gravel resource. It is often perceived that this reduction in unsaturated zone thickness will reduce the time for nitrates and/or pathogens to travel from the new ground surface to a hypothetical off-site receptor, in some cases reducing the overall "filtering capacity" of a site. Travel through the saturated zone, however, is typically ignored whereas the majority of filtering actually occurs within the saturated zone. While there will be loss of some attenuating capacity with the removal of the unsaturated resource at the proposed extension, there will still be saturated zone filtering capabilities remaining as extraction at the Site will remain above the water table. In addition, the return of the land to agricultural practices will coincide with the surrounding land uses (i.e., agricultural) and any future concentrations of nitrates and/or pathogens that may be introduced to the groundwater through future farming practices would be similar to the already established environs. Soil conditioning will be carried out on rehabilitated portions of the property that will be used as agricultural land in the future, and agricultural BMPs would be carried out if found to be necessary.

Groundwater quality samples should be taken on an annual basis during operations and continue for a period of two years after final rehabilitation of the Site has taken place.

10.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are provided in support of a licence application for the Manvers Pit Extension property:

- The resource found in the property is considered to be of primary significance according to ARIP mapping for the area.
- 2) No water wells or sensitive natural environment features will be affected by the extraction of the resource on Site to 2 m above the seasonally high water table. There were no groundwater dependent natural environment features identified during the course of the investigations used to support the licence application.
- 3) There will be no alteration to any surface water features as a result of extraction on the property.
- 4) The acquired baseline characteristics of water quality at selected monitoring wells provide a basis for comparison of any subsequent testing, both during extraction and after rehabilitation.
- 5) There are currently no plans for water taking to occur on the Extension Site.
- 6) Rehabilitation to an agricultural end use will allow for the return of the land to approximate pre-extraction conditions. The rehabilitated land is not anticipated to increase the opportunity for contamination to be introduced. In addition, the total setback from the water table will be approximately 2 m across the entire property once soils have been placed for agricultural after use.

Considering the above conclusions, no adverse hydrogeological impacts associated with this licence application are anticipated. As such, a Level 2 Hydrogeological Study is not required.



MANVERS PIT EXTENSION WATER RESOURCE ASSESSMENT

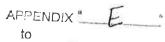
The following recommendations are provided in order to support the licence application for the Manvers Pit Extension property:

- Quarterly groundwater level monitoring shall be carried out on monitoring wells MW10-2, MW12-1 and the
 monitoring well in the adjacent Manvers Pit (CMW), in order to ensure maximum depth of extraction is at
 least 1.5 m above the water table on the property.
- 2) MW10-1 and MW10-3 no longer need to be monitored as a perched water table has not been identified in this area of the property (i.e., along the southern boundary). As such, both wells shall be properly decommissioned in accordance with the Ontario Water Resources Act.
- 3) No fuel storage will occur on this Site. All refueling of equipment shall occur in the fuel spill containment area in the existing Manvers Pit and in accordance with the existing Spill Contingency Plan. The only exception to this is for processing structures which cannot readily be relocated. Such structures may be refueled within the expansion pit provided that the refueling activity utilizes portable spill containment facilities approved by the MOE. A portable spill containment facility, approved by the MOE, shall be installed on-Site prior to such equipment or structures being operated.
- 4) Water quality monitoring shall take place in monitoring wells MW10-2, MW12-1 and the CMW well annually during operations and for a period of two years after final rehabilitation of the property has taken place.
- 5) Final rehabilitation of the property will include sloping of the ground surface towards the centre of the Site to encourage infiltration of water within the Site and eliminate the potential for off-Site runoff.

11.0 CLOSURE

Based on the foregoing considerations, it is our opinion that the extraction of the primary resource on the proposed Manvers Pit Extension property can be carried out with no appreciable hydrogeological effects on groundwater use in the surrounding area. Curricula Vitae of the individuals involved in the preparation of this report are provided in Appendix E.





REPORT PLANSO14-014 VICDOM MANVERS PIT LEVEL 1 AND LEVEL 2 NATURAL **ENVIRONMENT TECHNICAL REPORT**

Following extraction, the haul road will be de-compacted by subsoiling, top soil will be spread to a depth of 15 cm and the haul corridor will be planted with native trees and shrubs to restore the woodland connection between the north and south patches. To restore the haul road to a woodland condition, it is recommended that 400 whip-sized saplings of such native species as sugar maple, white birch (Betula papyrifera), white ash (Fraxinus americana), white pine and basswood, or others suited to the site conditions, be planted in a random mix within the limits of the road corridor. Individual tree stems should be a minimum of 3 m from each other and should not be planted in rows.

6.0 REHABILITATION CONSIDERATIONS

In addition to the restoration recommendations in the previous section, a phased approach to extraction will be developed. To the extent possible, progressive rehabilitation will occur by appropriately stabilizing and planting each extracted area as preparation is made for the next phase of extraction. Excavation of the site will meet the requirements of the ORMCP "Natural Linkage Area" (MMAH 2002) and rehabilitation will occur as expeditiously as possible. A rehabilitation plan has been prepared by MHBC as part of the licence application, with ecological input from this natural environment assessment. Where natural feature restoration occurs, the site will be restored to a level of equal or improved ecological values relative to the current ecological values.

To ensure that agricultural productivity is fully restored, top soil will be stripped and stored until it is returned to the former agricultural area. Following the replacement of top soil to a minimum depth of 15 cm, the restored area will be sown with a grass-legume seed mix to produce a 'green manure' crop that will be ploughed under to increase the organic content of the soil and improve soil structure. Grain crops, such as wheat or corn, are recommended in the first years following restoration, as they will most effectively permit the control of weeds in the restored fields.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The natural environment features within and adjacent to the site have been inventoried and assessed with respect to special conservation designations applied by the province (MMAH 2002; 2005; Ontario 2007; MMAH 2010), the City of Kawartha Lakes (2010), and the Otonabee Region Conservation Authority. The proposed development has been assessed for ecological implications under the ARA, ORMCP and PPS.

The natural heritage features of primary interest on the site are two woodland patches that are designated as "Significant Woodlands" (Kawartha Lakes 2010) and, under current policies, need to be protected. Golder is of the opinion that these features are not inherently significant on the basis of their condition, composition and quality. A conservation oriented protection strategy is recommended on the basis of the existing land use patterns in the area as well the current condition and local function of the woodlands. Due to current agricultural use, the edges of the woodlands have adapted to historical exposure to sun and wind. Golder recommends 15 m setbacks from the proposed extraction area as adequate protection. Golder is also of the opinion that removal and post-extraction enhancement of the woodland features on the site is feasible and should be considered by the Ministry and City of Kawartha Lakes. Under that scenario, the entire site could be rehabilitated as woodland, using a mix of native species that would increase the value of the site to wildlife and enhance its ecological contribution to and connectivity with the large area of woodland to the south.



VICDOM MANVERS PIT LEVEL 1 AND LEVEL 2 NATURAL ENVIRONMENT TECHNICAL REPORT

As presently proposed, final rehabilitation of the site will be to restore its potential productivity and return the lands in current agricultural use to that same use following extraction.

The specific recommendations identified in the report are as follows:

- 1. A 15 m buffer is required between the extraction limit and the significant woodland units identified in Section 5.1 and shown on Figure 2, herein. This setback will require geotechnically stable slopes, to be determined by a geotechnical analysis, in order to maintain the buffer and prevent erosion. The setbacks between the significant woodlands and the adjacent pit will be staked before extraction begins. The geotechnical analysis will be conducted before extraction reaches 50 m from the staked setback boundary.
- The internal haul road proposed to link the existing pit with the extension pit shall not be wider than 20 m and shall not be paved.
- Operational use of the internal haul road shall be restricted to daylight hours.
- 4. To the extent possible, a phased approach to rehabilitation shall be taken. Progressive rehabilitation of extracted areas will occur by appropriately stabilizing and planting with a short-term cover crop, such as a legume-grass mix, that is compatible with the proposed afteruse of each extracted area, as extraction operations move from one phase to another, as shown on the Site Plans.
- 5. Following extraction, as discussed in Section 6, any road metal, i.e. gravel placed to improve drivability, on the internal haul road shall be removed and the roadbed shall be de-compacted by subsoiling. Top soil shall be applied to a depth of at least 15 cm and the corridor shall be planted with a mix of native species, including sugar maple (*Acer saccharum*), white birch (*Betula papyrifera*), white ash (*Fraxinus americana*), white pine (*Pinus strobus*) and basswood (*Tilia americana*) and/or any other species acceptable to the Ministry of Natural Resources. To restore the woodland condition, a minimum of 400 whip-sized stems should be planted. Stems should be a minimum of 3 m apart and should be randomly placed, i.e. row planting should be avoided.
- 6. To ensure that agricultural productivity if restored (Section 6.0), ripping of the pit floor will take place and a minimum depth of 15 cm of top soil will be applied. The restored area will be sown with a grass-legume seed mix to produce a 'green manure' crop that will be ploughed under in the first year of agricultural use to increase the organic content of the soil and improve soil structure. Grain crops, such as wheat or corn, shall be planted in the first few years following restoration to most effectively permit the control of weeds in the restored agricultural field(s).

