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APPLICATION STATUS REPORT

To: Township of Guelph/Eramosa Council

From: Elizabeth Howson, MCIP, RPP, Macaulay Shiomi Howson Ltd. (MSH)

Meeting

Date: August 12, 2014

Subject: Zoning By-law Amendment Application Township File ZBA 09/12

James Dick Construction Ltd. - Hidden Quarry Proposal

Executive Summary

The proposed Hidden Quarry application raises a number of complex technical issues which have been under review by the Township and its consultants, as well as other agencies and the public since December 2012. Significant analysis and review have been undertaken, however, in order to achieve the Township's objective of a complete and comprehensive review of the application as a basis for any decision by Council with respect to the proposal, additional work is required. Some of this work is on-going, while other reviews must still be initiated. Further, submissions and responses continue to be received and these will be reviewed and an appropriate response determined. Some of the additional submissions currently under review include hydrogeological and haul route comments from the Region of Halton, a review of the cultural heritage study by the Township consulting team, submissions on behalf of CRC with respect to hydrogeology, air quality, blasting and other issues. Additional studies which will be carried out as part of the ongoing review process include a review by the Township consulting team of the visual impact package submitted by the applicant, and submission of an assessment of potential impacts on agricultural operations by the applicant.

Report

1. Purpose

The Township of Guelph/Eramosa received an application under the Planning Act from James Dick Construction Ltd.(JDCL) to amend the Township's Comprehensive Zoning By-law 57/1999 to permit a quarry. The Township deemed the rezoning application complete on December 7, 2012. JDCL is proposing to establish a Category 2 quarry (quarry with

extraction below the proposed water table) with a Class 'A' license under the Aggregate Resources Act (ARA). JDCL has also submitted an application to the Ministry of Natural Resources (MNR) under the Aggregate Resources Act (ARA).

The proposed development raises a number of complex technical issues which have been under review by the Township and its consultants, as well as other agencies and the public since December 2012. The process included a statutory public meeting in March 2013. The Township's objective is to ensure that a complete and comprehensive review of the application is carried out as a basis for any decision by Council with respect to the proposal.

The purpose of this report is not to make any determination as to the appropriateness of the application, but rather to summarize the review undertaken to date and make recommendations on the next steps in the on-going review for Council's information and consideration. The report briefly discusses the background to the application and the review process, and then outlines the status of the technical review of each of the technical reports submitted by the applicant, followed by a discussion of input received from the public and additional reports and input requested by the public. The report concludes with recommendations with respect to the approach to the on-going review of the application.

2. Background Summary

The subject site is approximately 39.4 hectares (100 acres) in size and located in the northeast quadrant of Highway 7 and 6th Line. Approximately 24.8 hectares (61.3 acres) of the site is proposed to be used for extraction of aggregate material. The proposed quarry would include extraction above and below the established groundwater table at a rate of up to 700,000 tonnes of aggregate material annually. There will be an on-site processing plant for crushing, washing and screening and the material will be shipped off-site via 6th Line and Highway 7.

In support of the application, in addition to a Planning Report, the applicant submitted a number of reports regarding specific technical issues as required by the Township. Table 1 lists the issues and related reports and additional submissions to date provided in response to comments.

Table 1 JDCL Technical Reports			
Technical Issue	Reports and Additional Submissions/Responses		
Hydrogeology	 Level I and II Hydrogeological Investigation Hidden Quarry Rockwood, Ontario, Harden Environmental Services Ltd. September 2012 Responses to Comments included in comment matrix date March 12/13 Letter to GRCA from Harden, "Response to GRCA Comments regarding Hidden Quarry", March 13, 2013 Letter to from Harden, Summary of Drilling and Testing of M15, June 7, 2013 		



Table 1			
JDCL Technical Reports			
Technical Issue Reports and Additional Submissions/Responses			
	 Letter to JDCL from Harden, "MOE Comments Hidden Quarry", July 15, 2013 Letter to JDCL from Harden, Hydrogeological Summary Report for Township of Guelph Eramosa, September 5, 2013 Letter to Burnside, Response to Burnside Review of Hydrogeological Summary, January 14, 2014 Letter to Burnside, Response to Burnside Review of Summary of Drilling and Testing Of New Well M15 at Hidden Quarry, January, 14, 2014 Letter to JDCL from Harden, "Timeline for Changes to Monitoring Plan", February 5, 2014 Letter to GRCA from JDCL, "Response to GRCA Letter dated April 23, 2014 regarding revised materials Hidden Quarry", June 6, 2014. Letter to R.J. Burnside and Associates Limited from Harden, "Letter – Response to Burnside Review of Summary of Drilling and Testing of New Well M15 at Hidden Quarry SiteHarden Response to Burnside Review of Hydrogeological Summary, June 10, 2014 Letter to the Region of Halton from JDCL, "Zoning By-law Application 09/12 Hidden Quarry: Part 1, Concession 6, Township of Guelph/Eramosa, County of Wellington", August 1, 2014 		
Natural Environment	 Level II Natural Environment Technical Report, GWS Ecological & Forestry Services Inc. in association with Gray Owl Environmental Inc. (GWS), August 2012 Letter to GRCA from Harden, "Response to GRCA Comments regarding Hidden Quarry", March 13, 2013 Letter to JDCL from GWS, "Hidden Quarry- Response to MNR Comments", May 27,2013 Letter to County of Wellington from GWS, "Hidden Quarry", September 6, 2013 Letter to GRCA from GWS, "Hidden Quarry Site Meeting Notes", September 17, 2013 		
Air Quality	 Air Quality Assessment, RWDI, September 6, 2012 Letter to JDCL from RWDI, "RWDI Response to Airzone One Ltd. Screening-Level Review Air Quality Assessment for the Proposed Hidden Quarry", June 6, 2014 		
Traffic	 Traffic Impact Study, Cole Engineering, April 2012 Revised Traffic Impact Study, Cole Engineering, November 2013 Revised Traffic Impact Study, Cole Engineering, December 2013 Letter to JDCL from Cole Engineering, "Response to April 7, 2014 Comments Eramosa Quarry Township of Guelph-Eramosa, April 17, 2014 		
Noise/ Blast Vibration	 Noise Impact Study, Hidden Quarry, Aercoustics Engineering Limited, November 2012 		



Table 1			
JDCL Technical Reports			
Technical Issue	Reports and Additional Submissions/Responses		
	Blast Impact Analysis, Explotech, November 19, 2012		
	 Noise Impact Study, Aercoustics Engineering Limited, May 24, 		
	2013		
	Letter to JDCL from Aercoustics Engineering limited, "Response to		
	Peer Review from Novus Environmental Inc. for Proposed Hidden		
	Quarry in Rockwood, Ontario, dated April 8, 2013", May 24, 2013		
Archaeology	Stage I-II Archaeological Assessment, York North Archaeological		
	Services Inc., August 31, 2012		
Cultural Heritage	Cultural Heritage Resource Assessment (1), George Robb		
	Architect, June 2013		
Visual	Visual Impact Study JDCL		
Site Plans	Site Plans were submitted as part of the ARA application		
	Revised Site Plans submitted to the Township June 2014		

3. Status of Technical Review

The status of the technical review of each issue by the Township and other agencies to date is outlined in the following sections, together with a recommendation with respect to any additional work or input required.

Table 2 Summary of Status of Technical Review		
Issue	Status	
Hydrogeology	 Under review by Township Consultant and Region of Halton 	
	Review complete MNR, MOE, GRCA	
Natural	Under review Region of Halton	
Environment	 Review complete Township Consultant, MNR, GRCA, County 	
Traffic	Under review by Region of Halton	
	Review complete Township Consultant, MTO	
Noise/Blast	Review complete Township Consultant, Union Gas	
Vibration		
Archaeology	Review complete Ministry of Tourism, Culture and Sport	
Cultural Heritage	Under review by Township Consultant	
Visual	To be reviewed by Township Consultant	

3.1 Hydrogeology

3.1.1 Township

Review Summary



R.J. Burnside (Burnside), the Township's consultant, reviewed the initial submission by Harden Environmental Services Ltd (Harden) entitled "Level I and II Hydrogeological Investigation" on behalf of Guelph Eramosa Township (GET). The Burnside comments were provided to GET in a letter dated- January 11, 2013. A meeting was held on January 29, 2013 with the proponent and their technical representatives to discuss the technical review comments prepared by Burnside. James Dick Construction Ltd (JDCL) provided response comments to the Burnside and agency comments in a planning matrix dated March 12, 2013 which was circulated by Cuesta Planning. Burnside also received copies of various correspondence between JDCL, Harden and various agencies including MOE and GRCA for information purposes.

Burnside met with representatives from JDCL and Harden on the Hidden Quarry site on April 16, 2013 in order to select a location for new well M15 and also to look at existing features. Burnside was also present at the Hidden Quarry site to observe portions of the drilling and testing of M15 in May 2013.

Harden submitted a report entitled "Summary of Drilling and Testing of M15" dated June 7, 2013. Burnside met with Harden, JDCL, and GET on August 1, 2013 to review the results of Drilling and Testing of M15 and to confirm the expectations for further response to peer review comments. Harden submitted a report to JDCL entitled Hydrogeological Summary Report for Township of Guelph Eramosa dated September 5, 2013.

Burnside on behalf of GET provided comments on the Hydrogeological Summary report and the Summary of Drilling and Testing of M15 report in two letter reports addressed to Harden on November 12, 2013. These were in turn responded to by Harden in correspondence to Burnside dated January 14, 2014.

Harden provided a proposed timeline for changes to the Monitoring Plan and attached a Revised Monitoring Program and Contingency Measures (January 2014) in correspondence to JDCL dated February 5, 2014. The revised monitoring program was included in the January 14, 2014 Harden letter and as a result, a formal review of the February 5, 2014 correspondence was not required.

A Burnside letter dated April 8, 2014 replied to the January 14, 2014 Harden Letter regarding Summary of Drilling and Testing of M15 and provided specific comments on the outstanding issues. In a summary statement, it was noted that the level of on-site data has been improved but further additional assessment and background data collection is required to reduce the number of variables. Burnside recommended that the monitor well construction/testing/sampling and domestic well survey be completed as soon as possible to improve the understanding of the bedrock aquifer. Further correspondence forwarded by Burnside to Harden dated April 9, 2014 regarding the Hydrogeological Summary Report (Harden letter of January 14, 2014) noted that Burnside's primary concerns are the potential for impact on the water levels in the upgradient domestic wells, the potential for water quality impacts in the down gradient wells and potential impacts to Rockwood Well 4. Although additional information had been provided, Burnside indicated that the predictions regarding the response of the fracture systems in the bedrock aquifer need to be confirmed through ongoing data collection and a thorough investigation of nearby domestic wells.



Review Status

Harden has provided their latest response to Burnside comments in correspondence dated June 10, 2014. Burnside is completing a review of this latest submission and will be formalizing comments in the near future. GET has also received related comments regarding the Hydrogeological implications of the proposed quarry from the Region of Halton as discussed in Section 3.1.5 below, and Burnside is currently reviewing those comments and the Harden response on behalf of GET and will provide a formal comment in the near future.

3.1.2 Ministry of Environment (MOE)

Review Summary

MOE provided formal comments to JDCL on July 3, 2013 and to JDCL's consultant, Harden Environmental Services Ltd. (Harden) on October 10, 2013 with respect to the Level I and II Hydrogeological Investigation. MOE's input was separated into surface water and groundwater review and comments and a range of matters were identified for additional review. Harden responded to the MOE comments in a letter to JDCL on July 15, 2013. MOE in their comments of October 10, 2013 indicated that their comments regarding surface water had been addressed, and, in particular that "the risk for significant environmental impact in regards to Tributary B and the Northwest Wetland are perceived to be low". With respect to groundwater, MOE note that they agree with "Harden's assessment of the groundwater thermal impacts of the proposed quarry on the Brydson Spring and the Blue Spring Creek" and "that groundwater movement in the bedrock is mainly controlled by fractures and not by karst features."

Review Status

MOE indicates in their October 10, 2013 letter that "the surface water and groundwater outstanding items have been addressed to MOE satisfaction."

3.1.3 Ministry of Natural Resources (MNR)

Review Summary

The Guelph District Office of MNR provided formal comments to JDCL on April 15, 2013, July 11, 2013 and November 6, 2013 with respect to the Level I and II Hydrogeological Investigation, as well as the Level II Natural Environment Technical Report and the Site Plans. The MNR comments with respect to hydrogeology did not address "any potential impact on water supply" (April 15, 2013 Letter). The comments requested clarification with respect to proposed monitoring, contingency measures and a statement regarding runoff.

Review Status

In both their July and November letters, MNR indicated that "The Ministry has no further concerns in regards to the Hydrogeological Investigation."

In a meeting between the



Township and MNR on July 23, 2014, MNR advised that no additional comments will be submitted.

3.1.4 Grand River Conservation Authority (GRCA)

Review Summary

GRCA submitted comments related to the Level I and II Hydrogeological Investigation, as well as the Level II Natural Environment Technical Report and the Site Plans. Initial detailed comments were submitted on January 31, 2013 to the Township with respect to the zoning application. Additional comments were provided to MNR on April 15, 2013 with respect to the ARA application which also reflected the input received from Harden in a letter dated March 13, 2013. Subsequently, GRCA provided comments on November 4, 2013, March 28, 2014, April 23, 2014, July 8, 2014 related to a range of hydrogeological and natural environmental issues, as well as flooding. On July 29, 2014, GRCA indicated that they had "no objection to the application being taken forward for consideration."

Review Status

GRCA in their letter of July 29, 2014 indicated that they had "no objection to the application being taken forward for consideration" but that they would "be open to review and comment on additional information circulated by the Township." Burnside to monitor ongoing review and advise if additional input should be solicited from GRCA.

3.1.5 Region of Halton, Town of Milton and Town of Halton Hills

Review Summary

The Region of Halton, with the support of the Town of Milton and the Town of Halton Hills, submitted initial comments in July 5, 2013 which requested a number of additional studies including revisions to the Level I and II Hydrogeological Investigation. In a further letter dated July 28, 2014, technical comments were provided with respect to key hydrogeological matters, focusing on water resources and potential sensitive receptors within Halton Region. This letter is described as being in addition to the earlier letter. JDCL responded to the July 28th letter in a letter to the Region dated August 1, 2014.

Review Status

The Region of Halton will need to review the response from JDCL to their July 28th comments and establish whether the response satisfies their concerns, or whether additional information and/or study is required. As part of this process, a determination will need to be made with respect to the request for related additional studies in the Region's original July 5, 2013 letter.



3.2 Natural Environment

3.2.1 Township

Review Status

Burnside reviewed for the Township the initial submission by GWS Ecological & Forestry Services Inc. in association with Gray Owl Environmental Inc.) (GWS) which was submitted on behalf of JDCL, and dated August 2012. Burnside original comments with respect to the Natural Environment were included in a peer review comment letter dated January 13, JDCL submitted a response to the Natural Environment comments provided by Burnside in a Planning Comment Matrix dated March 12, 2013 and numbered 31 through 33 in that matrix. Correspondence was issued by GWS dated May 27, 2013 to JDCL which provided a response to MNR comments regarding the Level II Natural Environment Technical Report. A site meeting including a walk through the site was arranged for June 7, 2013 and was attended by representatives of JDCL, Harden, GRCA, Wellington County, MNR, Stovel Associates, GWS and Burnside. Site meeting notes were prepared by JDCL and circulated on July 9, 2013 and later revised to include additional comments from GRCA and Wellington County and recirculated on August 22, 2013. GWS provided comments to the County of Wellington in correspondence dated September 6, 2013 and to GRCA in correspondence dated September 17, 2013 to address concerns raised by Wellington and GRCA respectively.

Burnside reviewed the various responses contained within the planning comment matrix as well as the information gathered during the site meeting/visit and the comments provided to various agencies (Wellington, GRCA and MNR) and from this prepared our correspondence dated April 7, 2014 which indicated that Burnside felt that JDCL had adequately addressed concerns related to the Natural Environment at the Hidden Quarry including protection of Wetlands as well as Species at Risk and their habitat. It is noted that Burnside has reserved the right on behalf of GET to carry out additional review if new information is provided.

Review Summary

Burnside have indicated that in their opinion JDCL has adequately addressed concerns related to the Natural Environment at the Hidden Quarry including protection of Wetlands as well as Species at Risk and their habitat, subject to additional review if new information is provided.

3.2.2 Ministry of Natural Resources

Review Summary

As noted above, the Guelph District Office of MNR provided formal comments to JDCL on April 15, 2013, July 11, 2013 and November 6, 2013 with respect to the Level II Natural Environment Technical Report, as well as the Level I and II Hydrogeological Investigation and the Site Plans. The MNR initial April comments with respect to natural environment identified a number of questions and additional considerations to be addressed related to



matters such as natural heritage features, amphibians, wetlands, woodlands and species at risk. A response to the MNR comments, a further submission was provided by GWS, JDCL's consultant dated May 27, 2013 and a site visit was carried out on June 7, 2013 attended by representatives of MNR, GRCA, County of Wellington and the Township. Additional comments were submitted by MNR in July related to the stream status, loss of woodlands and species at risk. With respect to Site Plans – Rehabilitation Plans the Ministry comments indicate that they approve "the details given on reforestation procedures and follow-up monitoring." Further to the July comments, MNR undertook additional review. Through this review it was concluded that the wetland in the centre of the subject site is not part of the Eramosa River-Blue Springs Creek PSW, while the wetland adjacent to the 6th Line is part of the PSW. In addition, it was concluded that surveys of amphibians, bats, snakes, turtles, birds and insects were carried out using appropriate protocols and that the concerns related to Species- at -Risk had been addressed. Consequently, in their letter of November 6, 2013, MNR identified no further concerns with the Natural Environment Report.

Review Status

In their November 6, 2013 letter, MNR indicated that "The Ministry has no further concerns in regards to the Natural Environment Report." The letter also indicated that "the Ministry approves the details given on reforestration procedures and follow-up monitoring" with respect to the Site Plans – Rehabilitation Plans. In a meeting with Ministry staff on July 23, 2014, MNR advised that no additional comments will be submitted.

3.2.3 Grand River Conservation Authority (GRCA)

See discussion under Section 3.1.4

3.2.4 Region of Halton, Town of Milton and Town of Halton Hills

Review Summary

The Region of Halton with the support of the Town of Milton and the Town of Halton Hills submitted initial comments in July 5, 2013 which requested a number of additional studies including revisions to the Natural Environment Technical Report to reflect the policies of the Greenbelt Plan and the zone of influence for the quarry. The Region has advised that further comments will be provided on the natural environment. These comments are anticipated in August 2014.

Review Status

Once comments on the natural environment are received from the Region of Halton, they will be reviewed by JDCL and a response provided. As part of this process, a determination will need to be made with respect to the request in the Region's original July 5, 2013 letter for revisions to the Natural Environment Report. Burnside to monitor on-going review and advise if additional input should be solicited from GRCA.



3.2.5 County of Wellington

Review Summary

The County retained Williams & Associates Forestry Consultants Ltd. to review background material related to vegetation and wildlife. The consultant concluded in a letter dated June 13, 2013 that "the proposed project would have limited negative impacts" on the woodland functions. GWS responded to his comments in a letter of September 6, 2013 to the County. The County indicated their support for the measures identified in the GWS letter in an email of September 12, 2013 to GWS.

Review Status

The focus of the County's input has been with respect to the natural environment. Their email of September 6, 2013 indicated that they would be supportive of the following ecological measures being incorporated as part of the license request as proposed by JDCL:

- retain existing vegetation until just prior to extraction;
- promptly restored completed extraction areas to an ecological after-use to specified in the Progressive Rehabilitation Plan; and
- plant a mix of coniferous/deciduous trees (with a min. spacing of 3 metres) in the area of the 6th Line to increase forest density in an attempt to provide an effective natural corridor in the north and west side of the property.

3.3 Air Quality

3.3.1 Township

Review Summary

Burnside, in particular their Technical Group Leader, Air and Noise, reviewed on behalf of the Township, the initial submission by RWDI which was prepared for submission with the application by JDCL.

The original submission documents supporting the JDCL application for the Hidden Quarry included an Emission Summary and Dispersion Model (ESDM) which was included in a document entitled "Proposed Hidden Quarry, Township of Guelph Eramosa, Wellington County, Final Report, Air Quality Assessment", and dated September 6, 2012. It is noted that the report followed the MOE A-10- Procedure for preparing an ESDM report. Burnside indicates that the air dispersion model used is an acceptable air dispersion model and produces results that are acceptable to the MOE. The final report document followed the format recommended by the MOE for similar documents. Further, Burnside indicates that the assumptions made within the document (e.g. contaminant of concern)were reasonable and represented worse case scenarios and were still within acceptable limits. Consequently Burnside saw nothing in the ESDM which would indicate that the site could not receive an Environmental Compliance Approval (ECA) as noted in the overall review comments of January 13, 2013.



Review Status

Burnside has indicated that that the air quality review was based on reasonable assumptions and there was nothing in the ESDM which would indicate that the site could not receive an Environmental Compliance Approval.

3.4 Traffic

3.4.1 Township

Review Summary

Burnside reviewed on behalf of the Township of Guelph Eramosa, the submission by Cole Engineering entitled "Eramosa Quarry, Draft Traffic Impact Study" dated April 2012. The draft report generally considered traffic operation at the access onto the 6th Line, as well as the intersections of Highway 7/6th Line and Highway7/5th Line. Initial review comments were provided by Burnside to GET dated January 11, 2013. Issues raised at that time generally related to the need for MTO involvement and comments, traffic counts and trip generation, operational improvements at the intersections, required upgrades to the 6th Line and conformance to geometric design standards. Responses from JDCL in the planning matrix document of March 12, 2013 generally agreed with comments provided, and provided or undertook to provide additional information.

JDCL informed Burnside and GET during August, 2013 that there had been ongoing discussions with MTO and that a revised Traffic Impact Study as well as comments from MTO would be forthcoming. Further that JDCL would be responding to issues raised by the Region of Halton.

Burnside received directly from JDCL a revised Traffic Impact Study dated November, 2013, as well as comments from Diana Beaulne of the MTO dated September 30, 2013. Burnside later received a revised Traffic Impact Study Report dated December 2013 which corrected two typographical errors in two figures. The revised Traffic Impact Study document and the comments from MTO were reviewed by Burnside on behalf of GET and comments provided in correspondence addressed to the municipality dated April 7, 2014. Generally the outstanding issues identified relate to the operational improvements required to address intersection turning movements and upgrades to the 6th Line

Review Status

TIS is generally satisfactory subject to specific recommendations which will have to be addressed as a condition of approval:

- Upgrading 6th Line
- Eastbound left turn lane at intersection of Highway 7/6th Line
- Need for analysis of the warrant for a left hand turn lane at Highway 7/5th
- Westbound right turn lane at Highway 7/6th Line and placement of truck entrance signs



3.4.2 Ministry of Transportation (MTO)

Review Summary

MTO originally provided comments April 18, 2013. Additional comments were provided May 28, 2013, September 30, 2013, October 16, 2013 and December 10, 2013. On February 3, 2014, MTO advised that they had no objections to the application. "However, should the re-zoning be approved, all MOE, MNR, MTO and Aggregate Resources Act rules and regulations and policies must be adhered to." MTO also set out a list of additional requirements should the application be approved related to site plan, geometric design, legal agreement and letter of credit, stormwater management report and updated traffic report.

Review Status

In an email of February 3, 2014, MTO indicated that they had no objections to the rezoning.

3.4.3 Region of Halton, Town of Milton and Town of Halton Hills

Review Summary

The Region of Halton with the support of the Town of Miton and the Town of Halton Hills, based on an update to them on the status of the application, reiterated in an email dated July 15, 2014 an earlier request for JDCL to submit a Haul Route Study for the proposed Hidden Quarry. Regional Staff request that the Term of Reference for this study be submitted to the Region, the Town of Milton, and the Town of Halton Hills for review and approval prior to the study's commencement. Discussions with the Region, Milton and Halton Hills staff indicate that the primary concern is an increase in truck traffic through urban areas (e.g. Acton). Burnside is aware of the concerns raised by the Region of Halton and member municipalities with respect to truck traffic generated by the proposed quarry and the anticipated haul route. Burnside is currently preparing a draft Terms of Reference for a study/report which will be required of JDCL to address the haul route issues.

Review Status

A draft terms of reference for a Haul Route Study is being prepared by Burnside on behalf of the Township to address the issues identified by the agencies. It should be reviewed with the agencies and the applicant before the applicant's transportation consultant proceeds with the study. It will then be circulated for review.



3.5 Noise /Blast Vibration

3.5.1 Township

Review Summary

Novus Environmental (Novus) carried out a peer review of the initial Noise Impact Study prepared by Aercoustics Engineering Ltd. (AEL) and the Blast Impact Analysis prepared by Explotech Engineering Ltd. (Explotech), both dated November 19, 2012. In their initial comments of April 8, 2013, Novus concurred with the blast vibration report, including the recommendations for blast monitoring. They further recommended that the blast record information be made available to the Township for its review in the presence of any vibration complaints. With respect to the noise, Novus recommended in the April 8, 2013 comments that a number of issues be addressed. An updated report was prepared by AEL dated May 24, 2013, together with a response to the Novus comments. Novus reviewed these documents and indicated that they were satisfied that "noise levels from the proposed quarry operation will meet the applicable guideline limits at all noise-sensitive points of reception." However, Novus recommended that as a condition of approval the development be subject to a third party acoustical audit in the first year of operation to confirm the conclusions of the study.

Review Status

The review of the noise and blasting impacts analyses by Novus concluded that the analyses and conclusions were satisfactory subject to blast monitoring, provision of blast record information to the Township and a third party acoustical audit in the first year of operation.

3.5.2 Union Gas

Review Summary

Union Gas in a letter of May 7, 2013 identifies a number of conditions related to their pipeline and notes that JDCL have indicated that these conditions can be met.

Review Status

Union Gas requires that vibrations at the pipeline remain below 50mm/sec (proposed as 12.5 mm/sec) and that blasting not occur within 30 metres of the pipeline (proposed at 200 metres).

3.6 Archaeology

Review Summary

A Stage I-II Archaeological Assessment was carried out by York North Archaeological Services Inc., August 31, 2012. The report identifies an area on the west side of the site



south of the former pit (AjHa-50 James D. site) as the only area where historic archaeological resources were located. It has been identified as requiring a Stage 3 assessment. JDCL has agreed to conduct a Stage 3 assessment once MNR has signed off on their application for the Category 2 Class "A" quarry.

The report has been reviewed by the Ministry of Tourism, Culture and Sport. In a letter dated November 7, 2012, the Ministry advises that the "ministry is satisfied that the fieldwork and reporting for the archaeological assessment is consistent with the ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences."

Review Status

The Ministry of Tourism, Culture and Sport has advised that they are satisfied with the archaeological assessment. The Stage 3 assessment will be carried out as a condition of approval of the license.

3.7 Cultural Heritage

Review Summary

A Cultural Heritage Resource Assessment was carried out by Mr. Peter Stewart of George Robb Architect. The submission did not appear to have been subject to any review by the Township or other agency. Unterman McPhail Associates, Heritage Resource Management Consultants (Unterman McPhail) were requested to carry out a review of the submission. They did not identify any significant issues with the report, but suggested that some of the existing information in the report be amplified. This information will be provided to JDCL as a basis for revisions to the report.

Review Status

The Cultural Heritage Resource Assessment be revised based on the input from Unterman McPhail and resubmitted to the Township.

3.8 Visual

Review Summary

JDCL submitted a "Visual Impact Package". The submission was prepared by JDCL in response to a request from the Township. The submission does not appear to have been subject to any review by the Township or other agency. To assess the submission a review by a landscape architect and/or architect to confirm the accuracy of the presentation would be appropriate.



Review Status

The submission has not been subject to review. A landscape architect and/or architect should be retained by the Township to confirm the accuracy of the submission and comments should be provided to JDCL.

4. Public Input and Review

Significant input has been received, and continues to be received, from the general public and stakeholder groups at the public meeting and in submissions to Council as well as written submissions to the Township. Through the technical review by the Township and other agencies all the matters of concern are being considered including issues related to hydrogeology, blasting, air quality, traffic, and natural environment and the input will be addressed in the final report. However, the Concerned Residents Coalition (CRC) has also chosen to retain consultants who have made submissions with respect to the key issues identified by the public, specifically hydrogeology, species at risk and air quality. In addition, a submission was received on August 5, 2014 from one of the consultants which relates to a range of issues (e.g. a request for a fish community and aquatic habitat baseline survey, transportation, rock quality tests, implications for equestrian exercise tracks, increased surface and groundwater monitoring). The CRC has also made submissions with respect to risks related to mining and the Dolime Quarry. Finally, a request has been made by the CRC for additional studies. These issues and input are summarized in the following section, together with the status of their review as an indicator of how the public input is being considered.

4.1 Hydrogeology

4.1.1 Input and Review Summary

A key concern of the public is with water quality and quantity, particularly as it affects private wells. The CRC retained Mr. Garry Hunter with respect to these issues. A presentation and written submission was made to GET Council on behalf of the CRC by Mr. Hunter which set out a number of questions and requests for documentation. A copy of the Response to the Hunter comments was provided to MSH in a memo from JDCL dated July 8, 2014. Burnside has reviewed the Hunter submissions and the JDCL response on behalf of GET and found the response to be reasonable. The response from JDCL should be made available to CRC for their information, and will be considered by Burnside in their on-going review of the application.

4.1.2 Input and Review Status

The response from JDCL to the CRC submission should be made available to CRC for their information, and will be considered by Burnside in their on-going review of the application.



4.2 Natural Environment

4.2.1 Input and Review Summary - Species-at-Risk

CRC retained Dr. Bill McMartin with respect to Species-at-Risk. Dr McMartim conducted one site visit on July 2, 2014, although he did not follow normal professional protocol in accessing the site. He identified one barn swallow, a species which he indicates as being designated "Threatened" by Environment Canada's Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as part of his site visit. He also provides general commentary regarding other potential species at risk including Snapping Turtle, Blanding's Turtle and the Eastern Wood-Pewee. MNR has reviewed the submissions by GWS on behalf of JDCL with respect to Species-at-Risk and indicated that they are satisfied with the findings. However, the additional information should be provided to JDCL for review and response. In addition, it should also be provided to Burnside for comment and to MNR and GRCA for information.

4.2.2 Input and Review Status- Species-at-Risk

The submission from Dr. Bill McMartin, should be forwarded to JDCL for review and response by their environmental consultant. In addition, the submission and JDCL response should also be provided to Burnside for information and comment and to MNR and GRCA for information with comments invited.

4.3 Air Quality

4.3.1 Input and Review Summary

CRC retained Airzone One Ltd. (Airzone) to review the report "Proposed Hidden Quarry Air Quality Assessment" prepared by RWDI AIR Inc. for JDCL. Airzone provided:

- "a "how-to" guide for AQA for aggregate operations;
- "screening-level review of RWDI report"; and,
- answered "questions posed by CRC.

RWDI prepared a response to the Airzone submission dated June 6, 2014 which expresses concerns with the Airzone submission. An independent evaluation of the Airzone submission and RWDI response should be carried out. Burnside should be requested to review and comment on both the Airzone submission and RWDI response. The material should also be provided to MOE for information with comments invited.

4.3.2 Input and Review Status

The Airzone submission and RWDI response should be provided to Burnside for their review and comment. The material should also be provided to MOE for information with comments invited.



4.4 Risks of Mining/Comparison between Dolime Quarry (DQ) and Hidden Quarry (HQ)

4.4.1 Input and Review Summary

Mr. William Hill of CRC made a presentation to Council with respect to the risks involved in mining on October 21, 2013 (e.g. fly rock). In addition, Mr. Hill provided a memorandum dated July 22, 2014 related to a comparison between Dolime Quarry (DQ) and Hidden Quarry (HQ). The memorandum was developed to clarify "the question of whether the two projects are similar enough to justify mining of the HQ based on the criteria derived from the proponents' experience in the DQ". The memorandum also addressed related issues (e.g. flyrock). JDCL submitted a response in a letter dated July 22, 2014 to the second submission. The Township's consultants Novus should be requested to review and comment on the Hill submission and JDCL response.

4.4.2 Input and Review Status

The Township's consultants Novus should be requested to review and comment on the Hill submission and JDCL response.

4.5 Mega-Quarry Application –Related Issues

4.5.1 Input and Review Summary

CRC forwarded to the Township on July 30, 2014, a document entitled "Technical Review On Behalf of Nottawasaga Valley Conservation Authority of Supporting Documentation Provided by Highland Companies in Support of Their Application to the Ministry of Natural Resouces (MNR) For a Category 2, Class A License Under The Aggregate Resources Act", Melancthon Township, May 2014 prepared by SLR. This was provided to them by their consultant, Garry Hunter. The cover email indicates that "Table 1 is very important to review as many of the concerns the CRC raised about the Hidden Quarry application are also of concern in the Megaquarry application. Garry also drew our attention to Sec D.3 beginning on pg. 44 and specifically pages 50-54 with respect to blasting and fisheries. There is no similar information in the HQ application."

There are significant differences between the current application and the Melancthon application with respect to size, complexity, location and environment. It is questionable therefore how applicable the information provided is to the current application. However, the submission has been provided to Burnside and the applicant for their information.

The cover email also indicates:

"Our group is concerned that with the recent purchase of the land adjacent to the site and other aggregate applications that are being submitted to council.... we may have a megaquarry in our community."

The application that is under review is specific. There is no indication of any proposed expansion or "megaquarry". If such an expansion should occur it would require submission



of additional applications under the Planning Act and ARA and a detailed review including full public consultation would be required. It is not possible or appropriate to evaluate something that has not yet been, and may never be, proposed.

Further, the use of the term "mega-quarry" would not appear to be applicable in the GET context given the accepted definition of such a use. The State of the Aggregate Resource in Ontario Study (SAROS), Paper 2: Future Aggregate Availability and Alternatives Analysis prepared by MHBC, includes a discussion of Mega-Quarries. It indicates that the criteria for such a quarry are reserves of at least 150 million tones and an annual production capacity of 5-10 million tonnes (compared with 12 million tonnes and extraction of 700,000 tonnes for the proposed Hidden Quarry). The Report goes on to indicate that one of the primary challenges for establishing a mega-quarry for Southern Ontario would be "the significant land acquisition required" given the degree of parcel fragmentation. An extraction area of 280 hectares at a 20 metre extraction depth was estimated as being required for a "mega-quarry".

4.5.2 Input and Review Status

The information submitted by CRC regarding the proposed Melancthon Quarry should be provided to Burnside and JDCL for their information.

4.6 Additional Studies

4.6.1 Input and Review Summary

In a submission of May 1, 2014 to Council, CRC requested additional meetings and studies. They elaborated on this request at a meeting on May 22, 2014. The submission is listed in Table 3 together with the proposed direction:

	Table 3			
	CRC Requests for Additional Meetings and Studies			
	CRC Submission	Proposed Direction		
•	Burnside Meeting: We believe that some of the concerns raised by CRC have been affirmed by the Burnside Hydrogeological Summary Report. However, we are concerned about the conclusions, and the process by which they arrived at them, in their Traffic Impact and Natural Environment Summary Reports. We believe that an opportunity to discuss these issues with Burnside personnel is essential at the earliest possible date.	Upon completion of the additional review by Burnside with respect to natural environment, air quality, and transportation a meeting can be arranged with CRC to		
•	Peer Reviews: We again request that peer reviews of the Visual Impact and Cultural Heritage studies submitted by	As noted above, a review of the Cultural Heritage Study has been carried out and a review of the Visual Impact Study is		



	Table 3 CRC Requests for Additional Meetings and Studies		
CRC Requests for Addition		Proposed Direction	
	he applicant be undertaken.	recommended.	
th b o ir ir re p	Blasting Impacts: We have submitted horough reports assessing the likely plasting impacts of the proposed operations, and have highlighted the nadequacy of the proponent's blasting impact study and the peer review eceived by the Township. We strongly ecommended that a more extensive oper review by an expert company such as Golder Associates be undertaken.	See discussion in Section 4.4.	
for on the form of	created with the submission -Economic impacts: We have twice made a case or an assessment of economic impacts of the proposed quarry operation on the lownship and its residents. In our April of delegation to Council, we again raised the question of compensation for those nearby agri-businesses that will likely be adversely affected should the quarry operation be implemented. While the lownship's previous planning consultants and the conomic of the new consultants arrived out, they did acknowledge that the Township might shoose to have one conducted. In light of the new consultants carrying the quarry application file, we are reiterating our view that an economic impact assessment be carried out and the issue of compensation for damages by the proponent be addressed. Meeting with CRC Economic Impacts/Agricultural Assessment: At the May 22 nd meeting it was indicated that the economic Impact Report should look at matters such as potential impacts on property value and resulting loss of assessment, the risks to agri-businesses and infrastructure impacts. Finally, an agricultural Assessment was requested in	The PPS establishes in Section 2.5.2.1 that "As much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible. Demonstration of need for mineral aggregate resources, including any type of supply/demand analysis shall not be required, notwithstanding the availability, designationor licensing for extraction of mineral aggregate resources locally or elsewhere." At the same time, Section 2.5.2.2 states that: "Extraction shall be undertaken in a manner which minimizes social, economic and environmental impacts." The evaluation of the application to date is designed to ensure that Section 2.5.2.2 is addressed. It assumes that if impacts on key factors such as air quality, hydrogeology and natural environment are minimized, then social, economic and environmental impacts will also be minimized. The CRC primary focus appears to be on the determination of adverse economic impacts and in particular on nearby agri-businesses, on the assumption that there will be adverse impacts as a result of environmental impacts (e.g. hydrogeology, air quality). However, if	
o T d ir a c o o o a o p A n E n p a a	operation be implemented. While the Township's previous planning consultants did not recommend that an economic impact analysis be carried out, they did acknowledge that the Township might shoose to have one conducted. In light of the new consultants carrying the quarry application file, we are reiterating our view that an economic impact assessment be carried out and the issue of compensation for damages by the proponent be addressed. Meeting with CRC Economic Impacts/Agricultural Assessment: At the May 22 nd meeting it was indicated that the Economic Impact Report should look at matters such as potential impacts on property value and resulting loss of assessment, the risks to agri-businesses and infrastructure impacts. Finally, an	mineral aggregate resources locally or elsewhere." At the same time, Section 2.5.2.2 states that: "Extraction shall be undertaken in a manner which minimizes social, economic and environmental impacts." The evaluation of the application to date is designed to ensure that Section 2.5.2.2 is addressed. It assumes that if impacts on key factors such as air quality, hydrogeology and natural environment are minimized, then social, economic and environmental impacts will also be minimized. The CRC primary focus appears to be on the determination of adverse economic impacts and in particular on nearby agri-businesses, on the assumption that there will be adverse impacts as a result of environmental impacts	

	Table 3			
	CRC Requests for Additional Meetings and Studies			
	CRC Submission	Proposed Direction		
		the development would not be		
		recommended for approval given the policies of the PPS. It would appear more		
		• •		
		appropriate therefore given the particular concerns with agricultural uses, to request		
		JDCL to identify the agricultural operations in		
		proximity to the proposed quarry in		
		consultation with MSH/Burnside and to		
		provide, based on their work to date, an		
		assessment of potential impacts on adjacent		
		agricultural operations and how they are		
		being addressed to minimize the impacts on		
		those uses. This would be a "double check"		
		to ensure that the special needs of these		
		uses are being protected. The results of this		
		work would then be reviewed by MSH,		
		Burnside and Novus.		
•	Cumulative Impacts -At the May 22,	Burnside have advised that due to the		
	2014 meeting, it was also suggested that	distance between the sites there will be no		
	a report on cumulative impacts should be	cumulative impacts related to hydrogeology		
	considered related to the Dolmine pit	which would be a key consideration in any assessment of cumulative impacts. This		
	and Tri-City application.	would also be true for other factors such as		
		air quality and noise. Therefore, such a		
		study is not considered appropriate.		
•	Well Monitoring: We have requested	As noted Burnside and the Region of Halton		
	that the applicant be required to carry	have requested well monitoring and the		
	out a more extensive well monitoring	review and resolution of this issue is on-		
	program, a view which is shared by the	going.		
	Burnside consultants. We note that, in			
	its correspondence to the Township, the			
	Region of Halton (letter to Ms.			
	Meaghen Reid, copied to Janice			
	Sheppard, dated July 5, 2013 over the signature of Brian Hudson,			
	Senior Planner) also requested			
	additional studies including a detailed			
	Baseline Well Survey for lands within			
	1,000 m of the quarry site. As we have			
	explained, such a program is required to			
	establish a valid baseline for nearby			
	domestic wells and the municipal well #4			
	which we understand may be			
	commissioned in the foreseeable future.			
	We are very interested to know how the			



Table 3			
-	nal Meetings and Studies		
CRC Submission Township proposes to deal with this	Proposed Direction		
matter.			
• Document Management: As Dan noted in his email, we were disappointed that we were not alerted to the Burnside summary reports and that we did not have the opportunity to make direct input on all of the issues considered as Burnside arrived at their conclusions. As we continue to investigate the critical issues—including some that relate to traffic impacts and site hydrogeology—we believe that we can assist the Township by making the results of our investigations available. In particular, the correspondence between the applicant's consultants and Burnside that led to their conclusions would be of particular interest to us, including (we understand) correspondence between Harden and Burnside copied to Janice Sheppard dated January 14, 2014.	The Township continues to make available material on their website as it becomes available. However, it has become apparent that with all the correspondence, one point of contact needs to be established for all reports, submissions and other material related to the application. It is recommended that the Township establish one person to be that point of contact and that all material from the applicant and the Township's consultants, and agencies be directed to that contact. That person will be responsible for making sure that any material which is required to be posted on the website is put up and any other distribution of the documents occurs.		
Finally, in light of the Township retaining Elizabeth Howson as the planning consultant for this file, we request through you a meeting with her to review the issues on which CRC has commented.	A meeting was held with CRC on May 22, 2014 as requested. On going communications from CRC have also been provided to Ms. Howson.		

4.6.2 Input and Review Status

In response to the requests from CRC for additional meetings and studies, in addition to the directions outlined in Section 3 of this report, the following directions are proposed:

- A meeting be held with Burnside to review their conclusions with respect to natural environment and transportation; and,
- JDCL be requested to provide, based on their work to date, an assessment of potential impacts on adjacent agricultural operations and how they are being addressed to minimize their impacts on those uses. MSH/Burnside to be consulted on identification of agricultural operations. This will be reviewed by the MSH, Burnside and Novus.



4.7 Other Issues

4.7.1 Input and Review Summary

Additional submissions continue to be received including two submissions from the general public the week of August 5, 2014 and an additional submission from Mr. Garry Hunter on behalf of CRC on August 5, 2014. The CRC Hunter submission relates to the Site Plans and a variety of matters as follows;

- Fish Community and Aquatic Habitat Baseline Survey of Brydson Creek
- Rock Quality
- Transportation
- Blasting
- Vacant Lots of Record
- Equestrian Exercise Tracks
- Surface and Groundwater Monitoring
- Brydson Creek Base Flow Monitoring

4.7.2 Input and Review Status

As additional public submissions are received, including the August 5, 2014 submission from CRC – Hunter, MSH/Burnside will identify the appropriate approach to review. Generally this will involve forwarding the submissions to JDCL for response, and a review of submission and response by the appropriate Township consultant and circulation to agencies for information with comments invited.

5. Review Process – Next Steps

The proposed development raises a number of complex technical issues which have been under review by the Township and its consultants, as well as other agencies and the public since December 2012. Significant analysis and review have been undertaken, however, in order to achieve the Township's objective of a complete and comprehensive review of the application as a basis for any decision by Council with respect to the proposal, additional work is required. Some of this work is on-going, while other reviews must still be initiated. Further, submissions and responses continue to be received and these will continue to be reviewed and an appropriate response determined. Table 4 outlines the additional work and its status as of August 7, 2014.

Table 4 Review Process – Next Steps August 7, 2014		
Issue	Required Action	Responsibility
Hydrogeology	Burnside to complete review of latest submission from Harden on behalf of JDCL dated June 10, 2014.	Burnside
	Burnside to complete review of comments from Region of Halton and JDCL response. Burnside to monitor on-going review and advise if	



	Table 4			
	Review Process - Next Steps August 7, 2014			
Issue	Required Action	Responsibility		
	additional input should be solicited from GRCA.			
	Region of Halton to review response from	Halton		
	JDCL/Harden to the Region's hydrogeology			
	comments and provide response.			
	MSH/Burnside to monitor on-going Halton Region	MSH/Burnside		
	review and requirements for additional studies or			
	other work arising from review.			
	Provide JDCL response to Hunter initial questions	Township		
	on behalf of CRC.			
Natural	Region of Halton is to provide comments with	JDCL		
Environment	respect to the natural environment in August			
	2014. They would be reviewed by GWS on			
	behalf of JDCL.			
	Burnside to review of comments from Region of	Burnside		
	Halton and JDCL response.			
	Burnside to monitor on-going review and advise if			
	additional input should be solicited from GRCA.			
	MSH/Burnside to monitor on-going Halton Region	MSH/Burnside		
	review and requirements for additional studies or			
	other work arising from review.	ID OI		
	Provide CRC McMartin submission to JDCL for	JDCL Downside		
	comment. Also provide submission and JDCL	Burnside		
	response to Burnside for information and			
	comment, and to MNR and GRCA for information with comments invited.			
	Burnside to meet with CRC upon completion of	Burnside		
	additional review.	Duitiside		
Air Quality	Provide Airzone submission and RWDI response to	Burnside		
All Quality	Burnside for their review and comment. The	Darrisiac		
	information should also be provided to MOE for			
	information with comments invited.			
Traffic	In response to a request from the Region of	Burnside		
	Halton, a draft terms of reference for a haul route			
	study is being prepared by Burnside. It will then			
	be reviewed with the applicant and Region, Halton			
	Hills and Milton before being finalized.			
	JDCL will be responsible for having the haul route	JDCL		
	study will be carried out.			
	The haul route study will be reviewed by Burnside	Burnside/Halton/		
	and the Region, Halton Hills and Milton.	Halton Hills/Milton		
	Burnside to meet with CRC upon completion of	Burnside		
	additional review.			
Noise/Blast	Novus to be requested to review and comment on	Novus		
Vibration	the CRC Hill submission and JDCL response.			



Table 4		
Issue	Review Process – Next Steps August 7, 201 Required Action	Responsibility
Cultural Heritage	George Robb Architect on behalf of JDCL review the comments from Unterman McPhail and revise the Cultural Heritage Assessment as appropriate.	JDCL
Visual	A review of the Visual Impact Package to confirm accuracy of the submission be carried out by a landscape architect/architect on behalf of the Township.	MSH
	JDCL review input and revise Visual Impact Package if required.	JDCL
Agriculture	JDCL be requested to provide, based on their work to date, an assessment of potential impacts on adjacent agricultural operations and how they are being addressed to minimize impacts on those uses. MSH/Burnside to be consulted on identification of agricultural operations.	JDCL
	Review of agricultural assessment by MSH/Burnside/Novus.	MSH/Burnside/Novus.
Other Action	As additional public submissions are received, including August 5, 2014 submission from CRC – Hunter, MSH/Burnside will identify the appropriate approach to review. Generally this will involve forwarding the submissions to JDCL for response, and a review of submission and response by the appropriate Township consultant and circulation to agencies for information with comments invited.	MSH/Burnside
	Information submitted by CRC regarding Melancthon Quarry to be forwarded to Burnside and JDCL for their information.	Township
	Correspondence – establishment of one point of contact (Township planner) for all reports, submissions and other material related to application.	Township

6. Recommendation

That the Application Status Report of August 12, 2014 with respect to Zoning By-law Amendment Application Township File ZBA 09/12 James Dick Construction Ltd. – Hidden Quarry Proposal be RECEIVED.

