		330	
ecommendation	#:	330	/19



NOV 1 3 2019

THIS ITEM

# THE CORPORATION OF THE TOWNSHIP OF TINY COMMITTEE OF THE WHOLE RECOMMENDATION

COUNCIL APPROVED

Meeting Date: October 28, 2019

Moved by:

Minto 88

Carried:

Seconded by: Wishart

Signed:

THAT Confidential Planning & Development Report PD-057-19 regarding the Teedon Pit Extension Application and corresponding information as provided by the Township's consultants, be received;

AND THAT staff proceed as directed, with PD-057-19 to be made public in nature after the November 13, 2019 Regular Meeting of Council.



# CONFIDENTIAL PLANNING & DEVELOPMENT REPORT PD-057-19

TO:

Mayor Cornell and Members of Council

FROM:

Shawn Persaud, Director of Planning & Development

Tim Leitch, Director of Public Works

DATE:

October 28, 2019

RE:

Application:

Teedon Pit Extension

Aggregate Resources Act Application

Owner(s)/Applicant(s):

CRH Canada Group Inc.

Legal Description:

North Part of Lot 80, Concession 1 O.S.

THIS ITEM WENT

OCT 2 8 2019

OF THE WHOLE

(Appendix 1)

Municipal Address:

2 Darby Road

File:

'19/D05 (DS #62762)

Roll No.

1-029-00

## **RECOMMENDATION:**

It is recommended that Council receive this report and attached peer review letters as information and an update as to the status of the application.

## **BACKGROUND:**

On January 22, 2019, the Township received notification of the Aggregate Resources Act (ARA) application entitled "Teedon Pit Extension" made to the Ministry of Natural Resources and Forestry (MNRF) by CRH Canada Group Inc. (CRH). The application included the following supporting studies/reports:

- Summary Statement Report, dated January 2019, prepared by Brian Zeman, MHBC Planning
- Natural Environment Level 1 and 2 Technical Report, dated January 2019, prepared by Goodban Ecological Consulting Inc.
- Acoustic Assessment Report, dated January 2019, prepared by Theakston Environmental
- Hydrogeological Assessment, dated January 8, 2019, prepared by GHD
- Stage 1 and 2 Archaeological Assessment Report, dated May 2011, prepared by The Central Archaeology Group Inc. and letter dated June 24, 2011 from

- the Ministry of Tourism and Culture stating that the Ministry concurs with the recommendations of the report that there are no further archaeological concerns for the subject property.
- Site Plans dated January 2019, prepared by Brian Zeman, MHBC Planning of the Existing Features, Operational Plan, Rehabilitation Plan, and Cross Sections.

The Engineering Reports were peer reviewed by R. J. Burnside & Associates Limited (Burnside), Township Engineering Consultant and Aercoustics Engineering Limited (Aercoustics), Engineering Noise Consultant retained by Burnside. The Environmental Report was peer reviewed by the Severn Sound Environmental Association (SSEA).

Confidential Planning & Development Report PD-018-19 was presented to Council at the February 28, 2019 Committee of the Whole meeting. This report provided a summary of the ARA Application and recommended Township comments to the MNRF based on the peer reviews. As a result, Motion #077/19 was approved by Council and reads:

"WHEREAS the Committee of the Whole considered Confidential Planning & Development Report PD-018-19 regarding the Teedon Pit Extension Application by CRH Canada Group Inc.;

**AND WHEREAS** the matter was forwarded to the February 28, 2019 Regular Meeting of Council due to its time sensitive nature;

**NOW THEREFORE BE IT RESOLVED THAT** staff be directed to provide comments to the Ministry of Natural Resources and Forestry as outlined in the peer review letters, to be included on the March 11, 2019 Committee of the Whole Meeting in anticipation of the March 25, 2019 comment deadline;

**AND THAT** Confidential Report PD-018-19, including appendices, be made public in nature."

As per the above Motion, staff drafted the comment letter and it was included on the March 11, 2019 Committee of the Whole agenda. As a result, Recommendation #085/19 was approved by Council and reads:

"THAT upon consideration of the Township draft letter to the Ministry of Natural Resources and Forestry regarding the Teedon Pit Extension Application by CRH Canada Group Inc., it was recommended the letter be amended as per the March 11, 2019 Committee of the Whole Meeting;

**AND THAT** the revised letter be presented at the March 25, 2019 Regular Committee of the Whole Meeting for formal consideration prior to its submission to the Ministry of Natural Resources and Forestry as the Township's formal comments on the application."

As per the above Motion, staff revised the comment letter and it was included on the March 25, 2019 Committee of the Whole agenda. As a result, Motion #100/19 was approved by Council and reads:

"WHERAS Council considered the Township of Tiny's draft comments regarding the Aggregate Resources Act Teedon Pit Extension Application by CRH Canada Group Inc.;

**NOW THEREFORE BE IT RESOLVED THAT** staff be directed to provide the letter, as presented, to the Ministry of Natural Resources and Forestry as the Township's formal comments on the application."

The final letter (Appendix 2) was circulated in its final form to the MNRF as the Township's formal comments on the Teedon Pit Extension ARA Application.

By way of letter dated, June 20, 2019, CRH provided a response to the Township's comments (Appendix 3). This letter was accompanied by the following supporting studies/reports:

- Category 1 Permit-to-take Water Renewal Application Supporting Hydrologic and Hydrogeologic Study, dated January 19, 2018, prepared by GHD
- 2018 Domestic Well Survey, dated April 26, 2018, prepared by GHD
- Memorandum, dated May 2, 2019, prepared by Theakston Environmental
- Memorandum, dated June 21, 2019, prepared by Goodban Ecological Consulting Inc.

Both Burnside, Aercoustics and the SSEA have peer reviewed the response information from CRH and their consulting group and have provided the following updated peer review letters as a result:

- Peer Review Letter dated, September 11, 2019 from Mr. Dave Hopkins, P. Geo., Burnside with comments related to Hydrogeological matters (Appendix 4).
- Peer Review Letter dated September 11, 2019 from Mr. Henry Centen, P. Eng., P. Geo., Burnside with comments related to traffic matters (Appendix 5).
- Peer Review Letter dated September 11, 2019 from Mr. Cecil Gratrix, C.E.T., Burnside with comments related to site operation matters (Appendix 6).
- Peer Review Letter dated July 10, 2019 from Mr. Derek Flake, P. Eng., Aercoustics with comments related to noise matters (Appendix 7).

 Peer Review Letter dated September 27, 2019 from Ms. Michelle Hudolin, Wetlands and Habitat Biologist, SSEA with comments related to environmental matters (Appendix 8).

## **ANALYSIS:**

Township staff will be providing these peer review letters to CRH and the MNRF following the presentation of this Report to Council. This will allow CRH to continue to address the Township's concerns.

The next LPAT Pre-hearing Conference is scheduled for November 21, 2019. The purpose of this telephone conference call is for the Applicant/Appellant (CRH) to advise the Tribunal of the status of the ARA Application and discuss next steps including notice, and the further scheduling of an in-person Pre-hearing Conference.

## **FINANCIAL IMPLICATIONS:**

Costs associated with the peer review are cost recoverable from the owner as part of the ARA application.

Legal costs are the responsibility of the Township.

## RELATIONSHIP TO STRATEGIC PLAN:

- Deliver Efficient and Exceptional Municipal Services
- Healthy Environment and Sustainable Community Planning

## **CONCLUSION:**

It is recommended that staff continue to work with the Township peer review consultants to review all updated information provided by the proponent and update Council accordingly.

Respectfully,

Report prepared and submitted by:

Shawn Persaud, BA, MCIP, RPP Director of Planning and Development #

Tim Leitch, P. Eng. Director of Public Works

Financial Implications Reviewed by:

Doug Taylor, Director of Finance and

Administration/Treasurer

Report approved by:

Doug Luker, CAC

#### Attachments:

Appendix 1: Subject Property Map

Appendix 2: Township Formal Comment Letter to the MNRF

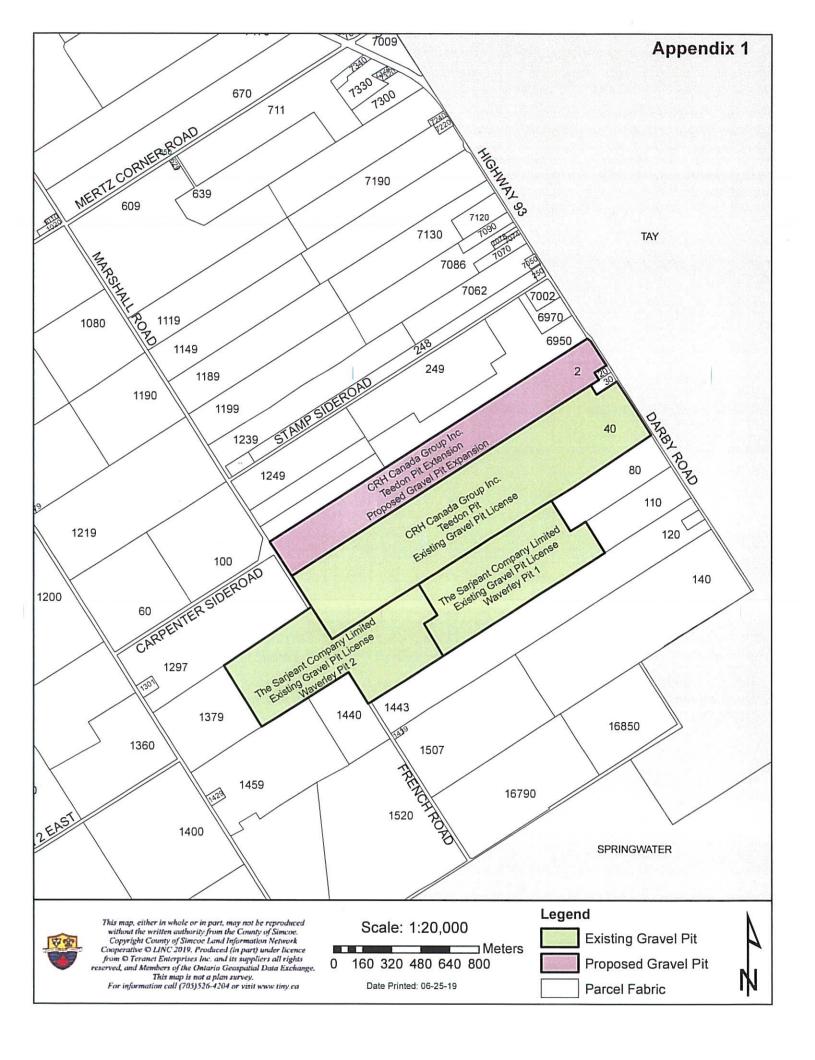
Appendix 3: CRH Response to Township Comments

Appendix 4: Hydrogeological Peer Review Letter

Appendix 5: Traffic Peer Review Letter

Appendix 6: Site Operations Peer Review Letter

Appendix 7: Noise Peer Review Letter Appendix 8: SSEA Peer Review Letter





130 BALM BEACH ROAD WEST TINY, ONTARIO LOL 2J0 (705) 526-4204 1-866-939-8469 FAX (705) 526-2372 www.tiny.ca

March 25, 2019

Ministry of Natural Resources and Forestry, Midhurst District 2284 Nursery Road Midhurst, ON L9X 1N8 (MidhurstAgg@Ontario.ca)

Cedarhurst Quarries and Crushing Limited (c/o CRH Canada Group Inc.) 2300 Steeles Avenue West, 4<sup>th</sup> Floor Concord, ON L4K 5X6 (Jessica.ferri@ca.crh.com)

RE: Township of Tiny Comments on Proposed Teedon Pit Extension North Part of Lot 80, Concession 1 O.S. (Roll #1-029-00)

Thank you for the opportunity to provide comments on the proposed Teedon Pit Extension Application under the *Aggregate Resources Act*. Confidential Planning & Development Report PD-018-19 regarding the Teedon Pit Extension Application was presented to Council at the Committee of the Whole meeting dated February 28, 2019 and Motion # 077/19 was approved and reads:

"WHEREAS the Committee of the Whole considered Confidential Planning & Development Report PD-018-19 regarding the Teedon Pit Extension Application by CRH Canada Group Inc.,

**AND WHEREAS** the matter was forwarded to the February 28, 2019 Regular Meeting of Council due to its time sensitive nature;

NOW THEREFORE BE IT RESOLVED THAT staff be directed to provide comments to the Ministry of Natural Resources and Forestry as outlined in the peer review letters, to be included on the March 11, 2019 Committee of the Whole Meeting in anticipation of the March 25, 2019 comment deadline;

**AND THAT** Confidential Report PD-018-19, including appendices, be made public in nature."

Planning & Development Report PD-018-19 and Motion #077/19 are attached to this letter for your information.

The Township is not satisfied that all matters related to this proposal have been satisfactorily addressed for the reasons stated in this letter, and is therefore objecting to the Application.



The Township has retained R. J. Burnside & Associates Limited (Burnside), Aercoustics Engineering Limited (Aercoustics), and the Severn Sound Environmental Association (SSEA) to peer review the following documentation submitted in support of the Application:

- Aggregate Resources Act Summary Statement and the Site Plan drawings, prepared by MHBC Planning Urban Design & Landscape Architecture, dated January 2019;
- Acoustic Assessment Report, prepared by Theakston Environmental Control, dated January 2019;
- Hydrogeological Assessment, prepared by GHD, dated January 8, 2019; and
- Natural Environment Level 1 and 2 Technical Report (NETR), prepared by Goodban Ecological Consulting Inc., dated January 2019

This letter has been divided into five main theme areas: hydrogeological, traffic, noise, site operation, and natural heritage.

## **HYDROGEOLOGICAL COMMENTS**

- The hydrogeological assessment completed by GHD does provide some additional information on the geology in the vicinity of the sump pond/wash pond, however there is no discussion on how water levels in the ponds relate to levels in the local aquitard, the Newmarket Till and the Upper Thorncliffe.
- The addition of the new wells improves the understanding of the geology on the existing
  pit site and in the proposed pit extension area. The following additional information is
  required for Burnside to complete their peer review:
  - A table showing the dates that the manual water level data was collected and hydrographs showing the results for each well;
  - Borehole logs for the wells so that the geology can be seen at each location. Based on the cross sections, it appears that the sump pond/wash pond is effectively isolated from the underlying aquifer. The borehole logs would assist us with the interpretation of the extent of the silt and clay aquitard; and
  - A "regional" cross section that includes the reported depths of the wells reportedly impacted by previous operations at the quarry.
- The GHD Assessment does not address previous comments made by the Township as part of the Official Plan Amendment and Zoning By-law Amendment applications (2015), Teedon Pit Site Plan Amendment application (2016), and Permit to Take Water application (2018).
- Burnside recommends that:
  - The current condition of nearby domestic wells be established, including the well depth and condition of the casing/screen, the well yield and general water quality.
  - Manual monitoring be done at least monthly and that Automatic Water level
     Recorders (AWLR's) be installed so that the peak spring water levels in 2019 can be

- captured and used to confirm that the proposed Teedon Pit Extension pit floor elevation is 1.5 m above the high-water table.
- o An additional monitoring well be installed between MW9-18 and MW8-18 to provide data on the water table as there are no other wells on the Teedon Pit Extension property that are completed in the sand aquifer. Similarly, an additional well should be installed along the eastern edge of the proposed extraction area. Wells on the Teedon Pit to the south should be included in the monitoring program.
- o The Monitoring Program should include provisions to modify operations in the event the pit floor is less than 1.5 m above the water table.
- Additional data be collected using AWLR's to confirm the water table elevation until the Teedon Pit Extension begins operations. Water level collection only began in June 2018 and may have missed peak spring water levels.
- Testing be completed to evaluate the connection between the existing wash pond and the underlying aquifer. This may require the installation of additional shallow monitoring wells near the wash pond so that the water table can be monitored, and vertical gradients can be calculated. If it is found that the pond has the potential to impact groundwater water quality/quantity, then consideration should be given to the installation of a liner.

## TRAFFIC COMMENTS

- The Application material did not include a Traffic Impact Study, however it did include some traffic-related information.
- In order to determine the impacts on Darby Road and on the Highway 93 intersection, a Traffic Impact Study (TIS) must be provided. It is acknowledged that the licensed extraction rate and truck volumes are not proposed to increase, however the length that the pit will be in operation will change. Based on the maximum annual extraction volume of 600,000 tonnes, it will take an additional 17 years of operation to exhaust the Teedon Pit Extension supply (assuming the existing Teedon Pit is near the end of its life). This should be a consideration in determining the revised traffic impact.
- The alignment of Darby Road has a sharp bend at its intersection with Highway 93. The sight distances at this intersection are limited by the horizontal alignment on Highway 93. The traffic operations at the intersection of Darby Road and Highway 93 should be confirmed in the TIS. Safety issues (collision history) should be reviewed for the haul route (and intersection) to determine if there have been any incidents from the existing Teedon Pit operations.
- A scenario with 15 trucks idling close to the entrance before 5:00 am will impact the functionality of Darby Road in this area. This matter needs to be addressed.
- It is noted that the Township has been approached by the Sarjeant Company Limited regarding a proposal to use the existing CRH entrance for their two pits. It is the

Township's understanding that no formal application has been made to the MNRF relative to this proposal.

#### **NOISE COMMENTS**

- The nighttime sound level limits are based on a predictable worst case hour during the period between 7:00 pm and 7:00 am. This means that shipping operations from 5:00 am to 7:00 am would meet the Ministry sound level limits.
- CRH plans to load and ship materials from the pit starting at 5:00 am. The nighttime sound level limits are based on a predictable worst-case hour during the period between 7:00 pm and 7:00 am. This means that shipping operations from 5:00 am to 7:00 am would meet the Ministry sound level limits.
- A scenario with 15 trucks idling close to the entrance of the pit was modelled and it was found to have the potential to cause an objectionable noise impact. This matter needs to be addressed.
- The following additional information is required for Aercoustics to complete their peer review:
  - o The operator should confirm that a 10 m high working face, which was modeled in all worst-case scenarios that forms an integral part of the noise control design, can be maintained at all times and is feasible in the context of the planned front-end loader sizes, according to safety (working face structure) and labour laws (i.e. permitted height above the top of extended bucket).
  - Restrictions on the number of permitted equipment and maximum sound level permitted should be incorporated in the licensing document.
  - Modelling parameters for the surrounding foliage such as height of trees and elevation of the ground relative to the existing topography at each point of the foliage object should be provided.
  - Confirmation is required to be provided that the noise reduction due to foliage is reasonable for 12 months.
  - o There are acoustic barrier requirements and other noise controls outlined in the noise study which apply to the existing Licence. It should be confirmed whether requirements and noise controls will be implemented on the existing Licence and whether they will be feasible to implement and/or enforce.

## SITE OPERATION

 The Operational Plan – Imported Materials, Note 50 specifies that "where the imported material is not being placed within 1.5 metres of the surface, the criteria under Table 1 for Sodium absorption ratio and electrical conductivity do not have to be met." With the local groundwater sensitivity, we would recommend that Note 50 be replaced with "No

- fill shall be imported and disposed of at the site other than to establish slopes as specified in the Rehabilitation Plan."
- Considering the above noted point, the Township recommends that asphalt recycling be removed as a permitted use at the existing licensed Teedon Pit.
- The Rehabilitation Plan Tree Planting Schematic proposes an agricultural use in the pit floor, however, fertilizers and other agricultural chemicals used for normal farming practices may negatively impact the aquifer especially considering the final depth of extraction will be a maximum of 1.5 metre above the established groundwater table. It is recommended that the rehabilitation plan be revised to remove this proposed use and replace it with a tree planting plan.

## NATURAL HERITAGE COMMMENTS

- Table 2 of the NETR lists Species At Risk (SAR) with potential to occur in the study area. Since this table does not include endangered bats, it is not clear that SAR bats and their habitat (e.g., snags/cavity trees suitable for bat roosting or maternity sites) were considered in the preparation of the NETR, and clarification or additional information may be required. The SSEA defers to the Ministry of Natural Resources and Forestry (MNRF) on issues related to the Endangered Species Act, and understands that MNRF will be reviewing the proposal.
- The NETR references the MNRF's Significant Wildlife Habitat Technical Guide (2000), and indicates that the Significant Wildlife Habitat (SWH) Criteria Schedules for Ecoregion 6E (MNRF 2015) were also consulted. The SWH Ecoregion Schedules provide specific criteria for identifying candidate and confirmed SWH. Clarification is required regarding the following types of SWH:
  - o Amphibian Breeding Habitat (Woodland) according to the NETR, swamp community SWDM4a is within approximately 120 m of the proposed extraction area (see Figure 5), and several amphibian species including wood frog, spring peeper and gray treefrog were documented on site (section 5.4). As per the SWH Ecoregion Schedule, if these amphibians are present in sufficient numbers, the wetland plus a 230m radius of woodland area would be considered SWH and the NETR would have to address any potential negative impacts. The NETR does not discuss whether or not this area qualifies as candidate or confirmed SWH, and further information is required.
  - Woodland Area-Sensitive Bird Breeding Habitat area-sensitive bird species were documented in the NETR at station 3 and 4 (see Attachment E, Point Count Data Summary), however these station locations were not included in the SWH mapping shown on Figure 8. Further explanation is required.
- Planting as proposed for Forest Edge Management should include follow-up survival assessments of planted stock. Replacement planting should be undertaken, if necessary due to poor stock survival.
- Survival assessments for rehabilitation tree planting of setbacks and side slopes:

- Survival assessments should be done at years one, two and five (free-to-grow assessment), as is currently the practice of tree planting agencies like Trees Ontario/Forests Ontario, rather than just in the first and second year after planting as indicated in the NETR.
- The bullet regarding replacement planting if survival is less than 60% should be modified to indicate that 60% survival of each species is required to ensure postplanting species diversity.
- The SSEA would like to be provided with information on the projected timing of
  extraction for the site. If extraction is anticipated to be a considerable ways off, then
  management of forested areas on site may be appropriate; in addition, the species
  proposed for use in rehabilitation planting should be re-assessed at a later date, to
  ensure that they are still appropriate and practical for climate and site conditions,
  according to the best available information at that time.

If you have any questions with respect to this correspondence please do not hesitate to contact the undersigned.

Sincerely,

THE CORPORATION OF THE TOWNSHIP OF TINY

Shawn Persaud, BA, MCIP, RPP, Director of Planning & Development

Tim Leitch, P. Eng. Director of Public Works

CC: Members of Council

Doug Luker, CAO for the Township of Tiny (dluker@tiny.ca)

Sue Walton, Director of Legislative Services/Clerk for the Township of Tiny (swalton@tiny.ca)

David Parks, Director Planning, Development and Tourism (David Parks@simcoe.ca)

Cecil Gratrix, R. J. Burnside & Associates (Cecil.Gratrix@rjburnside.com)

Julie Cayley, Severn Sound Environmental Association (JCayley@severnsound.ca)

Hon. Bruce Stanton, MP, North Simcoe (bruce.stanton@parl.gc.ca)

Hon. Jill Dunlop, MPP, Simcoe North (jill.dunlopco@pc.ola.org)



T. 905-761-7100F. 905-761-7200

www.crhcanada.com

June 20, 2019

Mr. Shawn Persaud Township of Tiny 130 Balm Beach Road West Tiny, ON L0L 2J0

Dear Mr. Persaud:

RE: Letter of Objection to an Application for a Category 3 Class A Licence under the Aggregate Resources Act – North ½ of Lot 80, Concession 1, W.P.R & Part of Original Road Allowance between lots 80 and 81, Concession 1, W.P.R, Township of Tiny, County of Simcoe (Cedarhurst Quarries and Crushing Limited (c/o CRH Canada Group Inc.)

During the notification and consultation period for the above-noted pit the Township of Tiny submitted an objection letter dated March 25, 2019 with comments on the proposed Teedon Pit Extension.

The comments included in Township of Tiny's letter dated March 25, 2019 are outlined in the left column with a response in the right column.

	Comment	Response
	Hydrogeol	ogical
1.	The hydrogeological assessment completed by GHD does provide some additional information on the geology in the vicinity of the sump pond/wash pond, however there is no discussion on how water levels in the ponds relate to levels in the local aquitard, the Newmarket Till and the Upper Thorncliffe.	on the adjacent Teedon Pit. Discussion on how the ponds relate to the geology is not related to the pit extension application. For reference, we have included an electronic copy of the report prepared by GHD for the Teedon
2.	The addition of the new wells improves the understanding of the geology on the existing pit site and in the proposed pit extension area. The following additional information is required for Burnside to complete their peer review:  • A table showing the dates that the manual water level data was collected	mentioned above as it addresses the



CRH Canada Group Inc. **CRH Canada Group Inc.**2300 Steeles Ave W, 4<sup>th</sup> floor **T.** 905-761-7100 **F.** 905-761-7200 Concord, Ontario L4K 5X6 Canada

T. 905-761-7100

3(c)	<ul> <li>An additional monitoring well be installed between MW9-18 and MW8-</li> </ul>	CRH commits to revise the Teedon Pit Extension site plans to include the
3(b)	• Manual monitoring be done at least monthly and that Automatic Water level Recorders (AWLR's) be installed so that the peak spring water levels in 2019 can be captured and used to confirm that the proposed Teedon Pit Extension pit floor elevation is 1.5 m above the high-water table.	AWLR's have already been installed in all the monitoring wells at both the Teedon Pit and the proposed extension lands. CRH commits to revising Note #42 on the proposed Teedon Pit Extension operations plan to reflect the Town's request to have AWLRs loggers installed and for the wells to be monitored monthly.
3(a)	Burnside recommends that:  • The current condition of nearby domestic wells be established, including the well depth and condition of the casing/screen, the well yield and general water quality.	The proposed Teedon Pit Extension is an above water pit. GHD concluded that there would be no impact to local wells. To date there have been three (3) domestic well surveys completed: the first in 2015 was completed by Alpha Environmental where 27 wells were included; the second in 2017, was conducted by GHD on behalf of CRH where 5 were included; and the third, in 2018 included 78 domestic well surveys which was also conducted by GHD on behalf of CRH. For your information we have also included this report titled "2018 Domestic Well Survey" electronically.
	and hydrographs showing the results for each well;  • Borehole logs for the wells so that the geology can be seen at each location. Based on the cross sections, it appears that the sump pond/wash pond is effectively isolated from the underlying aquifer. The borehole logs would assist us with the interpretation of the extent of the silt and clay aquitard; and  • A "regional" cross section that includes the reported depths of the wells reportedly impacted by previous operations at the quarry.	



T. 905-761-7100F. 905-761-7200

	18 to provide data on the water table as there are no other wells on the Teedon Pit Extension property that are completed in the sand aquifer. Similarly, an additional well should be installed along the eastern edge of the proposed extraction area. Wells on the Teedon Pit to the south should be included in the monitoring program.	additional following note:  "One year prior to extraction commencing, two additional monitoring wells shall be installed. One between MW9-18 and MW8-18 and the second shall be installed along the eastern edge of the extraction area".  The additional monitoring wells referenced above will be added to Note #42 and to the monitoring well schematic on the Teedon Pit Extension operations plan.
3(d)	The Monitoring Program should include provisions to modify operations in the event the pit floor is less than 1.5 m above the water table.	The Teedon Pit Extension operations plan Note #44 already indicates that operations will be modified based on measured water levels. Note #44 states: "Extraction shall remain 1.5 metres above the established water table. In the event the water level data indicates the maximum depth of extraction is less than 1.5 metres above the established water table, the maximum depth of extraction shall be adjusted accordingly to maintain the 1.5 metre depth."
3(e)	Additional data be collected using AWLR's to confirm the water table elevation until the Teedon Pit Extension begins operations. Water level collection only began in June 2018 and may have missed peak spring water levels.	As noted in response to 3(b) and 3(c), the AWLR loggers have already been installed and Note #42 on the Teedon Pit Extension Operations Plan will be revised to reflect this, the requirement for monthly monitoring, as well as the addition of the 2 monitoring wells.
3(f)	• Testing be completed to evaluate the connection between the existing wash pond and the underlying aquifer. This may require the installation of additional shallow monitoring wells near the wash pond so that the water table can be monitored, and vertical gradients can be calculated. If it is found that the pond has the potential to impact groundwater water	The testing and monitoring requirements for the wash pond are not related to the Teedon Pit Extension and are subject to the PTTW application process. For reference refer to the GHD report titled "Category 1 Permit-to-take-Water Renewal Application — Supporting Hydrologic and Hydrogeologic Study".



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quality/quantity, then consideration should be given to the installation of a liner.

#### **Traffic**

- 4(a) The Application material did not include a Traffic Impact Study, however it did include some trafficated information.
  - In order to determine the impacts on Darby Road and on the Highway 93 intersection, a Traffic Impact Study (TIS) must be provided. It is acknowledged that the licensed extraction rate and truck volumes are not proposed to increase, however the length that the pit will be in operation will change. Based on the maximum annual extraction volume of 600,000 tonnes, it will take an additional 17 years of operation to exhaust the Teedon Pit Extension vlagus {assuming the existing Teedon Pit is near the end of its life). This should be a consideration in determining the revised traffic impact.
  - · The alignment of Darby Road has a sharp bend at its intersection with Highway 93. The sight distances at this intersection are limited by the horizontal alignment on Highway 93. traffic operations The at intersection of Darby Road Highway 93 should be confirmed in the TIS. Safety issues (collision history) should be reviewed for the haul route (and intersection) to determine if there have been any incidents from the existing Teedon Pit operations.

CRH requested, commits conducting Traffic Impact a which Assessment will assist in the determining maneuverability conditions of Darby Road and will assess the intersection at Highway 93 & Darby Road. This will be completed and submitted to the Township for review.

4(b)
 • A scenario with 15 trucks idling close to the entrance before 5:00 am will impact the functionality of Darby Road

A scenario with 15 trucks idling close to the entrance before 5:00 am is a scenario that should not occur. CRH



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in this area. This matter needs to be addressed.

encourages the Township to post no stopping signs along Darby Road to prevent this from occurring. CRH is prepared to cover the costs for the signage. If there are concerns related to the existing pit or proposed pit CRH remains committed to work with the Township and surrounding residents to ensure this is not happening. If required, CRH could open its gates earlier to avoid truck queuing on Darby Road.

Item #5 from the Township of Tiny Staff Report (dated February 28, 2019) notes that there is no basis given for the estimate of 20 trucks incoming and ongoing from the pit on the worst peak hour. The model prepared in the Acoustic Assessment Report identified 20 trucks (40 passes) as being the maximum amount of trucks permitted in order to comply with MECP NPC-300 for Class 2 and 3 areas.

It is noted that the Township has been approached by the Sarjeant Company Limited regarding a proposal to use the existing CRH entrance for their two pits. It is the Township's understanding that no formal application has been made to the MNRF relative to this proposal.

The potential Sarjeant proposal is unrelated to the proposed Teedon Pit Extension. As previously discussed with the Township, this scenario would require major site plan amendment under the Aggregate Resources Act to both Sargent and CRH's existing Teedon Pit site plans. No application has been made to the MNRF and if ever an application was to be submitted, the Township, County, and the public would be circulated for comment.

#### Noise

5(a) A scenario with 15 trucks idling close to the entrance of the pit was modelled and it was found to have the potential to cause an objectionable noise impact. This matter needs to be addressed.

CRH is unclear why the Township's noise peer reviewer modelled this scenario. As noted above, a scenario with 15 trucks idling close to the entrance before 5:00 am is a scenario that should not occur. CRH encourages the Township to post no stopping signs



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		along Darby Road to assist in preventing this from occurring. CRH is prepared to cover the costs for the signage. If there are concerns related to the existing pit or proposed pit CRH remains committed to working with the Township and surrounding residents to ensure this is not happening. If required, CRH could open its gates earlier to avoid truck queuing on Darby Road.
5(b)	The following additional information is required for Aercoustics to complete their peer review:  •The operator should confirm that a 10 m high working face, which was modeled in all worst-case scenarios that forms an integral part of the noise control design, can be maintained at all times and is feasible in the context of the planned front-end loader sizes, according to safety (working face structure) and labour laws (i.e. permitted height above the top of extended bucket).	CRH confirms that this is feasible based on the planned loader sizes and required safety and labour laws.
5(c)	Restrictions on the number of permitted equipment and maximum sound level permitted should be incorporated in the licensing document.	As requested, CRH commits to including the equipment list and its associated maximum sound power into the proposed site plans and under the section titled "Equipment to be used Onsite and Noise/Air Mitigation". In addition, this equipment list and sound power readings are identified in Section 2.0 of the Acoustical Assessment Report.
5(d)	<ul> <li>Modelling parameters for the surrounding foliage such as height of trees and elevation of the ground relative to the existing topography at each point of the foliage object should be provided.</li> </ul>	Please see attached memorandum from Theakston Environmental.



**CRH Canada Group Inc.**2300 Steeles Ave W, 4<sup>th</sup> floor **T.** 905-761-7100 **F.** 905-761-7200 Concord, Ontario L4K 5X6 Canada

5(e)	<ul> <li>Confirmation is required to be provided that the noise reduction due to foliage is reasonable for 12 months.</li> </ul>	Please see attached memorandum from Theakston Environmental.
5(f)	• There are acoustic barrier requirements and other noise controls outlined in the noise study which apply to the existing Licence. It should be confirmed whether requirements and noise controls will be implemented on the existing Licence and whether they will be feasible to implement and/or enforce.	CRH has submitted a minor site plan amendment to MNRF to permit the construction of the acoustic berms and restrict the location of the genset trailer on-site so that this can be completed immediately.
	Site Opera	ation
6.	The Operational Plan - Imported Materials, Note 50 specifies that "where the imported material is not being placed within 1.5 metres of the surface, the criteria under Table 1 for Sodium absorption ratio and electrical conductivity do not have to be met." With the local groundwater sensitivity, we would recommend that Note 50 be replaced with "No fill shall be imported and disposed of at the site other than	Note #49 on the proposed Teedon Pit Extension operations plan, states that "clean inert fill may be imported to facilitate the establishment of side slopes." CRH confirms that we will modify this note and add a new note to the rehabilitation page to state that "no fill shall be imported and disposed of at the site other than to establish slopes as specified in the Rehabilitation Plan."
	to establish slopes as specified in the Rehabilitation Plan."	
7.	Considering the above noted point, the Township recommends that asphalt recycling be removed as a permitted use at the existing licensed Teedon Pit.	An asphalt recycling note does not exist on the proposed Teedon Pit Extension site plans and is unrelated to the extension application.
8.	The Rehabilitation Plan -Tree Planting Schematic proposes an agricultural use in the pit floor, however, fertilizers and other agricultural chemicals used for normal farming practices may negatively impact the aquifer especially considering the final depth of extraction will be a maximum of 1.5 metre above the established groundwater table. It is recommended that the rehabilitation plan be revised to remove this proposed use and	There are several areas within the Township where agriculture is within 1.5m of the water table. To enhance biodiversity after extraction is complete, CRH will commit to revise Note #5 and Note #6 on the proposed Teedon Pit Extension Rehabilitation Plan to reflect the continuation of the setback and slope tree planting to the pit floor.



**CRH Canada Group Inc.**2300 Steeles Ave W, 4<sup>th</sup> floor

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	replace it with a tree planting plan.	
	8	
	Natural Envir	onment
9.	Table 2 of the NETR lists Species At Risk (SAR) with potential to occur in the study area. Since this table does not include endangered bats, it is not clear that SAR bats and their habitat (e.g., snags/cavity trees suitable for bat roosting or maternity sites) were considered in the preparation of the NETR, and clarification or additional information may be required. The SSEA defers to the Ministry of Natural Resources and Forestry (MNRF) on issues related to the Endangered Species Act, and understands that MNRF will be reviewing the proposal.	MNRF is satisfied with the work related to Species at Risk as it relates to the Endangered Species Act with the exception of whip-poor-will surveys. CRH has committed to do the whip-poor-will surveys this spring/ early summer and provide the survey results to MNRF.
10.	The NETR references the MNRF's Significant Wildlife Habitat Technical Guide (2000), and indicates that the Significant Wildlife Habitat (SWH) Criteria Schedules for Ecoregion 6E (MNRF 2015) were also consulted. The SWH Ecoregion Schedules provide specific criteria for identifying candidate and confirmed SWH. Clarification is required regarding the following types of SWH:  o Amphibian Breeding Habitat (Woodland) - according to the NETR, swamp community SWDM4a is within approximately 120 m of the proposed	See attached memorandum from Goodban Ecological Consulting.
	extraction area (see Figure 5), and several amphibian species including wood frog, spring peeper and gray treefrog were documented on site (section 5.4). As per the SWH Ecoregion Schedule, if these amphibians are present in sufficient numbers, the wetland plus a 230m radius of woodland area would be considered SWH and the NETR would	



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have to address any potential negative impacts. The NETR does not discuss whether or not this area qualifies as candidate or confirmed SWH, and further information is required.

o Woodland Area-Sensitive Bird Breeding Habitat - area-sensitive bird species were documented in the NETR at station 3 and 4 (see Attachment E, Point Count Data Summary), however these station locations were not included in the SWH mapping shown on Figure 8. Further explanation is required.

11. Planting as proposed for Forest Edge Management should include follow-up survival assessments of planted stock. Replacement planting should be undertaken, if necessary due to poor stock survival.

CRH will commit to adding the following to the forest edge management zone A and B on the Teedon Pit Extension operation plan:

"The forest edge management zones shall be monitored for survival in the first, second and fifth years after planting. Replacement planting should be undertaken if survival is less than 60% for each species."

- 12. Survival assessments for rehabilitation tree planting of setbacks and side slopes:
  - Survival assessments should be done at years one, two and five (freeto-grow assessment), as is currently the practice of tree planting agencies like Trees Ontario/Forests Ontario, rather than just in the first and second year after planting as indicated in the NETR.
  - The bullet regarding replacement planting if survival is less than 60% should be modified to indicate that

Note #7 on the Teedon Pit Extension Rehabilitation Plan already requires a one (1) and two (2) year assessment. CRH commits to modifying this note to also require the five (5) year assessment. In addition, the note will be modified to require 60% survival of each species.



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	60% survival of each species is required to ensure post-planting species diversity.	
13.	The SSEA would like to be provided with information on the projected timing of extraction for the site. If extraction is anticipated to be a considerable ways off, then management of forested areas on site may be appropriate; in addition, the species proposed for use in rehabilitation planting should be reassessed at a later date, to ensure that they are still appropriate and practical for climate and site conditions, according to the best available information at that time.	extraction progresses north tree clearing shall occur as required to advance extraction and minimize the disturbed area". The Management Plan

In addition, item #3 from the Township of Tiny Staff Report (dated February 28, 2019) also included additional comments from the Burnside peer review response dated February 15, 2019 (Appendix #5 of Staff Report) regarding recommendations 1, 2, 3 and 4 from Burnside's February 24, 2016 letter to the Township. The recommendations are addressed below:

	Recommendation	Response
1	The current condition of nearby domestic wells should be established, including the well depth and condition of the casing/screen, and the well yield and general water quality. The work should be completed by the proponent using an independent qualified consultant.	Please see response to comment #3(a) on page #2 of this response.



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2	The monitoring network at the Teedon Pit should be expanded to include a staff gauge in the wash pond, a nested well with screens completed at a variety of depths (to monitor change in gradients during use of the wash pond), along with a number of wells completed in the aquifer(s) that are used by domestic wells in the area. A professional geoscientist (or equivalent) should be present during the drilling of the wells to describe the geology and select the intervals for monitoring well completion.	Please see response to comment #1 on page #1 of this response.
3	The proponent should provide additional information such as cross sections to confirm that the monitoring wells are completed at similar depths as domestic wells in the area and will provide the necessary information to confirm that aquifers used by domestic wells are not being adversely impacted by the use of the well or wash pond on-site.	Please see response to comment #3(a) on page #2 of this response.
4	An appropriate on-site monitoring network will eliminate the need for ongoing monitoring of domestic wells.	Since 2016, modifications have been made to the monitoring network. Please refer to the revised ARA site plans for the updated monitoring network as well as the proposed modifications outlined in this letter to the monitoring network.

We hope that this information adequately addresses the comments received during the process. As the additional information becomes available we will provide to the Township for review. The updated ARA site plans will also be provided to the Township to confirm the agreed upon modifications.

If you have any questions, please do not hesitate to call.



CRH Canada Group Inc. 2300 Steeles Ave W, 4th floor F. 905-761-7200 Concord, Ontario L4K 5X6 Canada

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Respectfully submitted,

Jessica Ferri, MCIP, RPP Manager, Policy and Planning

CRH Canada Group Inc.

Cc:

Robert Herbst- MNRF Brian Zeman- MHBC

Kevin Mitchell

## Attachments:

1. Category 1 Permit-to-take Water Renewal Application - Supporting Hydrologic and Hydrogeologic Study.

2. 2018 Domestic Well Survey

3. Memorandum from Theakston Environment dated May 2, 2019

4. Memorandum from Goodban Ecological Consulting dated May 21, 2019

R.J. Burnside & Associates Limited 292 Speedvale Avenue West Unit 20 Guelph ON N1H 1C4 CANADA telephone (519) 823-4995 fax (519) 836-5477 web www.rjburnside.com



September 11, 2019

Via: Email

Timothy Leitch, P.Eng Director of Public Works Township of Tiny 130 Balm Street West Tiny, ON NOL 2J0

Dear Mr. Leitch:

Re: Teedon Pit Extension

CRH Canada Response to Township March 25, 2019 Letter of Objection

Hydrogeological Peer Review

Township of Tiny, County of Simcoe, Ontario

Project No.: 300031221.0000

The Township of Tiny (Township) submitted a letter of objection to an application for a Category 3 License under the Aggregate Resources Act for the proposed expansion of the Teedon Pit located in North ½ of Lot 80, Concession 1.

R.J. Burnside & Associates Limited (Burnside) was retained by the Township to peer review the hydrogeological documentation included with the application.

Burnside's comments on the hydrogeological issues were provided to the Township in our letter of February 15, 2019. The February 15, 2019 Burnside comments and subsequent Township comments, which were provided to the Ministry of Natural Resources and Forestry and CRH Canada Group Inc. (CRH) by Township letter dated March 25, 2019.

CRH by letter dated June 20, 2019 provided a response to the Township and Burnside comments. The Burnside response to the June 20, 2019 GHD comments appear in italics.

## HYDROGEOLOGICAL COMMENTS

#### 1. Burnside Comment

The hydrogeological assessment completed by GHD does provide some additional information on the geology in the vicinity of the sump pond/wash pond, however there is no discussion on how water levels in the ponds relate to levels in the local aquitard, the Newmarket Till and the Upper Thorncliffe.

## **GHD Response**

The sump and wash ponds are located on the adjacent Teedon Pit. Discussion on how the ponds relate to the geology is not related to the pit extension application. For reference, we have included an electronic copy of the report prepared by GHD for the

Timothy Leitch, P.Eng September 11, 2019

Project No.: 300031221.0000

Teedon Pit titled "Category 1 Permit- to -take- Water Renewal Application - Supporting Hydrologic and Hydrogeologic Study".

#### Burnside Response

GHD Response does not satisfactorily address Burnside Comment.

Although the wash ponds and sump are not located on the proposed new pit site, the wash ponds and sump will eventually be used to wash the aggregate extracted from the new pit. As result, the existing wash ponds and sump are integral to the operation at the proposed new pit. Therefore, their impact on groundwater and surface water resources in the area should be considered as part of the new pit application. The information presented in the PTTW renewal application documentation does not provide the necessary site- specific information to assess the impacts due to the on-going use of the wash pond and associated infrastructure to wash material from the proposed expansion. Burnside reviewed a January 8, 2019 GHD letter to CRH from GHD (Hydrogeological Assessment-Location of Water Table) which is available on https://www.dufferinaggregates.com/resourcecentre/#tab-id-6. The report provides Borehole logs for some of the holes drilled in 2018 and includes cross sections. This information should be presented in a stand- alone document that addresses impacts of the wash pond.

#### 2. **Burnside Comment**

The addition of the new wells improves the understanding of the geology on the existing pit site and in the proposed pit extension area. The following additional information is required for Burnside to complete their peer review:

- A table showing the dates that the manual water level data was collected and hydrographs showing the results for each well;
- Borehole logs for the wells so that the geology can be seen at each location. Based on the cross sections, it appears that the sump pond/wash pond is effectively isolated from the underlying aquifer. The borehole logs would assist us with the interpretation of the extent of the silt and clay aquitard; and
- A "regional" cross section that includes the reported depths of the wells reportedly impacted by previous operations at the quarry.

#### **GHD Response**

Please refer to the GHD report mentioned above as it addresses the requested information.

#### Burnside Response

GHD Response does not satisfactorily address Burnside Comment.

The PTTW report does not include any information from the boreholes/monitoring wells drilled in 2018. Several of the boreholes/monitoring wells are in close proximity of the wash pond and would be helpful in confirming the presence of the silt/clay aquitard that may be present.

Timothy Leitch, P.Eng September 11, 2019

Project No.: 300031221.0000

#### Burnside Comment

Burnside recommends that:

The current condition of nearby domestic wells be established, including the well
depth and condition of the casing/screen, the well yield and general water quality.

#### **GHD Response**

The proposed Teedon Pit extension is an above water pit. GHD concluded that there would be no impact to local wells. To date there have been three (3) domestic well surveys completed: the first in 2015 was completed by Alpha Environmental where 27 wells were included: the second in 2017, was conducted by GHD on behalf of CRH where five were included; and the third, in 2018 included 78 domestic well surveys which was also conducted by GHD on behalf of CRH. For your information we have also included this report titled "2018 Domestic Well Survey" electronically.

#### Burnside Response

GHD Response does not satisfactorily address Burnside Comment.

The majority of well concerns reported by residents were related to the presence of silt in their wells which many believed were the result of leakage from the wash pond. In their documentation of the domestic well survey GHD indicates the "the presence of the Local Aquitard would isolate the aggregate washing operations from the deeper aquifer". GHD should use the water level and geologic information from all the wells on the existing pit site and proposed expansion area to create cross sections that show the lateral and vertical extent of the Local Aquitard and how it relates to the domestic wells with reported siltation problems. Groundwater flow maps using the water level data from the site will be helpful in showing which domestic wells are downgradient of the existing and proposed site.

#### 4. Burnside Comment

Burnside recommends that:

 Manual monitoring be done at least monthly and that Automatic Water level Recorders (AWLR's) be installed so that the peak spring water levels in 2019 can be captured and used to confirm that the proposed Teedon Pit Extension pit floor elevation is 1.5 m above the high-water table.

#### **GHD Response**

AWLR's have already been installed in all the monitoring wells at both the Teeedon pit and the proposed extension lands. CRH commits to revising Note # 42 on the proposed Teedon Pit extension operations plan to reflect the Town's request to have AWLRs loggers installed and for the wells to be monitored monthly.

#### Burnside Response

The use of AWLRs will allow for peak water table levels at the site to be established. Once the Site Plan drawings have been amended to reflect the GHD Response, Burnside Comment will be satisfactorily addressed.

Timothy Leitch, P.Eng September 11, 2019 Project No.: 300031221.0000

#### 5. Burnside Comment

An additional monitoring well be installed between MW9-18 and MW8-18 to provide data on the water table as there are no other wells on the Teedon Pit Extension property that are completed in the sand aquifer. Similarly, an additional well should be installed along the eastern edge of the proposed extraction area. Wells on the Teedon Pit to the south should be included in the monitoring program.

#### **GHD Response**

CRH commits to revise the Teedon Pit extension site plans to include the additional following note:

"One year prior to extraction commencing, two additional monitoring wells shall be installed. One between MW9–18 and MW8–18 and the second shall be installed along the eastern edge of the extraction area".

The additional monitoring wells referenced above to be added to Note # 42 and to the monitoring well schematic on the Teedon Pit extension operations plan.

#### Burnside Response

The addition of the two wells will improve the understanding of the hydrogeology of the site. GHD Response satisfactorily addresses Burnside Comment.

#### 6. Burnside Comment

The Monitoring Program should include provisions to modify operations in the event the pit floor is less than 1.5 m above the water table.

#### **GHD Response**

The Teedon Pit extension operations plan Note# 44 already indicates that operations will be modified based on measured water levels. Note # 44 states: "Extraction shall remain 1.5 m above the established water table. In the event the water level data indicates the maximum depth of extraction is less than 1.5 m above the established water table, maximum depth of extraction shall be adjusted accordingly to maintain the 1.5 m depth".

#### Burnside Response

GHD Response satisfactorily addresses Burnside Comment.

#### 7. Burnside Comment

Additional data be collected using AWLR's to confirm the water table elevation until the Teedon Pit Extension begins operations. Water level collection only began in June 2018 and may have missed peak spring water levels.

#### **GHD Response**

As noted in response to 3(b) and 3(c), the AWLR loggers have already been installed and Note# 42 on the Teedon Pit extension operations plan will be revised to reflect this, the requirement for monthly monitoring, as well as the addition of the 2 monitoring wells.

Timothy Leitch, P.Eng September 11, 2019

Project No.: 300031221.0000

#### Burnside Response

GHD Response satisfactorily addresses Burnside Comment.

#### 8. Burnside Comment

Testing be completed to evaluate the connection between the existing wash pond and the underlying aquifer. This may require the installation of additional shallow monitoring wells near the wash pond so that the water table can be monitored, and vertical gradients can be calculated. If it is found that the pond has the potential to impact groundwater water quality/quantity, then consideration should be given to the installation of a liner.

#### **GHD Response**

The testing and monitoring requirements of the wash pond are not related to the Teedon Pit extension and are subject to the PTT W application process. For reference "refer to the GHD report titled Category 1 Permit to take Water Renewal Application – Supporting Hydrologic and Hydrogeologic Study".

#### Burnside Response

GHD Response does not satisfactorily address Burnside Comment.

The wash pond will be used to wash material from the proposed pit expansion and the comment above should be addressed.

Should you have any questions, please contact the undersigned.

Yours truly,

#### R.J. Burnside & Associates Limited

Dave Hopkins

Senior Hydrogeologist

DH:sgd

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September 11, 2019

Via: Email

Timothy Leitch, P.Eng. Director of Public Works Township of Tiny 130 Balm Street West Tiny ON NOL 2J0

Dear Mr. Leitch:

Re: Teedon Pit Extension

CRH Canada Response to Township March 25, 2019 Letter of Objection

Traffic Impact Peer Review

Township of Tiny, County of Simcoe, Ontario

Project No.: 300031221.0000

The Township of Tiny (Township) submitted a letter of objection to an application for a Category 3 License under the Aggregate Resources Act for the proposed expansion of the Teedon Pit located in North ½ of Lot 80, Concession 1.

R.J. Burnside & Associates Limited (Burnside) was retained by the Township to Peer review the traffic issues resulting from the proposed expansion.

Burnside's comments on the traffic issues were provided to the Township in our letter of February 15, 2019. The February 15, 2019 Burnside comments and subsequent Township comments, which were provided to the Ministry of Natural Resources and Forestry and CRH Canada Group Inc. (CRH) by Township letter dated March 25, 2019.

CRH by letter dated June 20, 2019 provided a response to the Township and Burnside comments. The Burnside response to the June 20, 2019 CRH comments appear in italics.

#### TRAFFIC COMMENTS

#### 1. Burnside Comment

The Application material did not include a Traffic Impact Study; however, it did include some traffic-related information.

In order to determine the impacts on Darby Road and on the Highway 93 intersection, a Traffic Impact Study (TIS) must be provided. It is acknowledged that the licensed extraction rate and truck volume are not proposed to increase, however the length that the pit will be in operation will change. Based on the maximum annual extraction volume of 600,000 tonnes, it will take an additional 17 years of operation to exhaust the Teedon Pit Extension supply

Timothy Leitch, P.Eng. September 11, 2019

Project No.: 300031221.0000

(assuming the existing Teedon Pit is near the end of its life). This should be a consideration in determining the revised traffic impact.

The alignment of Darby Road has a sharp bend at its intersection with Highway 93. The sight distances at this intersection are limited by the horizontal alignment on Highway 93. The traffic operations at the intersection of Darby Road and Highway 93 should be confirmed in the TIS. Safety issues (collision history) should be reviewed for the haul route (and intersection) to determine if there have been any incidents from the exiting Teedon Pit operations.

#### **CRH Response**

As requested, CRH commits to conducting a Traffic Impact Assessment which will assist in determining the maneuverability conditions of Darby Road and will assess the intersection at Highway 93 & Darby Road. This will be completed and submitted to the Township for review.

## Burnside Response

Acknowledged. MHBC's email of August 1, 2019 notes that the applicant hopes to submit the TIS by the end of August or early September.

#### 2. Township Comment

A scenario with 15 trucks idling close to the entrance before 5:00 a.m. will impact the functionality of Darby Road in this area. This matter needs to be addressed.

## **CRH Response**

A scenario with 15 trucks idling close to the entrance before 5:00 a.m. is a scenario that should not occur. CRH encourages the Township to post no stopping signs along Darby Road to prevent this from occurring. CRH is prepared to cover the costs for the signage. If there are concerns related to the existing pit or proposed pit CRH remains committed to work with the Township and surrounding residents to ensure this is not happening. If required, CRH could open its gates earlier to avoid truck queuing on Darby Road.

Item #5 from the Township of Tiny Staff Report (dated February 28, 2019) notes that there is no basis given for the estimate of 20 trucks incoming and ongoing from the pit on the worst peak hour. The model prepared in the Acoustic Assessment Report identified 20 trucks (40 passes) as being the maximum amount of trucks permitted in order to comply with MECP NPC-300 for Class 2 and 3 areas.

#### Burnside Response

CRH Response does not satisfactorily address Burnside Comment.

The anticipated TIS report should confirm the measures proposed to address the potential for off-site queuing, as well as confirm whether off-site queuing has been observed under existing operations.

The response suggests that the noise criteria will limit the truck volume to 40 trips in the peak hour. This maximum rate should be confirmed in the anticipated TIS and set out in the site plan agreement, along with monitoring provisions to ensure that this maximum is adhered to. The TIS should also provide an estimation of the peak hour truck trips that are currently experienced at the existing pit, to provide a sensitivity analysis as to whether the future traffic impacts are expected to increase, as compared to existing conditions.

## 3. Township Traffic Comment

It is noted that the Township has been approached by the Sarjeant Company Limited regarding a proposal to use the existing CRH entrance for their two pits. It is the Township's understanding that no formal application has been made to the MNRF relative to this proposal.

#### **CRH Response**

The potential Sarjeant proposal is unrelated to the proposed Teedon Pit Extension. As previously discussed with the Township, this scenario would require major site plan amendments under the Aggregate Resources Act to both Sarjeant and CRH's existing Teedon Pit site plans. No application has been made to the MNRF and if ever an application was to be submitted, the Township, County, and the public would be circulated for comment.

## Burnside Response

CRH Response does not satisfactorily address Burnside Comment.

The anticipated TIS report should confirm CRH's position with respect to the potential interconnection of the two pits, as well as whether such interconnection could have merit from a traffic impact perspective. It is noted that the Township does not support the joint use of the Darby Road entrance for interconnection of the Sarjeant and CRH pits.

Should you have any questions, please contact the undersigned.

Yours truly,

#### R.J. Burnside & Associates Limited

Henry Center

Henry Centen, P.Eng.

Senior Transportation Engineer

HC:ls

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R.J. Burnside & Associates Limited 128 Wellington Street West Suite 301 Barrie ON L4N 8J6 CANADA telephone (705) 797-2047 fax (705) 797-2037 web www.rjburnside.com



September 11, 2019

Via: Email

Timothy Leitch, P.Eng. Director of Public Works Township of Tiny 130 Balm Street West Tiny ON NOL 2J0

Dear Mr. Leitch:

Re: Teedon Pit Extension

CRH Canada Response to Township March 25, 2019 Letter of Objection

Site Operation Peer Review

Township of Tiny, County of Simcoe, Ontario

Project No.: 300031221.0000

The Township of Tiny (Township) submitted a letter of objection to an application for a Category 3 License under the Aggregate Resources Act for the proposed expansion of the Teedon Pit located in North ½ of Lot 80, Concession 1.

R.J. Burnside & Associates Limited (Burnside) was retained by the Township to Peer review the traffic issues resulting from the proposed expansion.

Burnside's comments on the site operation issues were provided to the Township in our letter of February 15, 2019. The February 15, 2019 Burnside comments and subsequent Township comments, were provided to the Ministry of Natural Resources and Forestry and CRH Canada Group Inc. (CRH) by Township letter dated March 25, 2019.

CRH by letter dated June 20, 2019 provided a response to the Township and Burnside comments. The Burnside response to the June 20, 2019 GHD comments appear in italics.

#### Site Operations

#### 1. Burnside Comment

The Operational Plan – Imported Materials, Note 50 specifies that "where the imported material is not being placed within 1.5 metres of the surface, the criteria under Table 1 for Sodium absorption ratio and electrical conductivity do not have to be met." With the local groundwater sensitivity, we would recommend that Note 50 be replaced with "No fill shall be imported and disposed of at the site other than to establish slopes as specified in the Rehabilitation Plan."

Timothy Leitch, P.Eng. Project No.: 300031221.0000

## **CRH Response**

Note 49 on the proposed Teedon Pit Extension operations plan, states that "clean inert fill may be imported to facilitate the establishment of side slopes." CRH confirms that we will modify this note and add a new note to the rehabilitation page to state that "no fill shall be imported and disposed of at the site other than to establish slopes as specified in the Rehabilitation Plan."

#### **Burnside Response**

CRH Response satisfactorily addresses Burnside Comment.

#### 2. Township Comment

Considering the above noted point, the Township would recommend that asphalt recycling be removed as a permitted use at the existing licensed Teedon Pit.

## **CRH Response**

An asphalt recycling note does not exist on the proposed Teedon Pit Extension site plans and is unrelated to the extension application.

#### Burnside Response

The response suggests that asphalt storage and recycling would not be permitted by the MNRF as it is not noted on the proposed Teedon Pit Extension site plans. Once the Site Plan drawings have been amended to reflect the CRH Response and note that it is a prohibited use, Burnside Comment will be satisfactorily addressed.

## 3. Burnside Comment

The Rehabilitation Plan – Tree Planting Schematic proposes an agricultural use in the pit floor, however, fertilizers and other agricultural chemicals used for normal farming practices may negatively impact the aquifer especially considering the final depth of extraction will be a maximum of 1.5 metres above the established groundwater table. It is recommended that the rehabilitation plan be revised to remove this proposed use and replace it with a tree planting plan.

#### **CRH Response**

There are several areas within the Township where agriculture is within 1.5 metres of the water table. To enhance biodiversity after extraction is complete, CRH will commit to revise Note 5 and Note 6 on the proposed Teedon Pit Extension Rehabilitation Plan to reflect the continuation of the setback and slope tree planting on the pit floor.

#### **Burnside Response**

CRH Response satisfactorily addresses Burnside Comment.

Timothy Leitch, P.Eng. Project No.: 300031221.0000

Should you have any questions, please contact the undersigned.

Yours truly,

## R.J. Burnside & Associates Limited

Cecil Gratrix, C.E.T., rcca Senior Project Manager

CG:sc

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Aercoustics Engineering Ltd. 1004 Middlegate Road, Suite 1100 Mississauga, ON L4Y 0G1 Tel: 416-249-3361 Fax 416-249-3613 aercoustics.com

July 10, 2019

Aercoustics Project #: 12115.01

## **Township of Tiny**

130 Balm Street West Tiny, Ontario L0L 2J0

ATTN:

Timothy Leitch, Director of Public Works

CC:

Shawn Persaud, Director of Planning & Development Cecil Gratix, R.J. Burnside & Associates Limited

Bob Rimrott, Aercoustics

Subject:

Peer Review for Teedon Pit Extension Responses

AAR prepared by F.H. Theakston Environmental Control

Aercoustics Engineering Ltd. (Aercoustics) was retained by R.J. Burnside to review the responses to the peer review comments for the Acoustic Assessment Report prepared by Theakston Environmental (Theakston). Aercoustics' peer review comments were issued in a letter dated February 18, 2019 and the responses were included in a Response Letter by CRH Canada Group Inc. (CRH), dated June 20, 2019, and an associated AAR Addendum Letter prepared by Theakston, dated May 2, 2019.

The purpose of our peer review is to provide our opinion on whether the report satisfactorily addresses the environmental noise impact issues. With the responses to the peer review comments relating to noise provided by CRH in Section 5(a) to 5(f) of the Response Letter, Aercoustics has no further concerns or comments about the feasibility of the proposed operation to comply with the applicable noise guidelines.

Sincerely,

**AERCOUSTICS ENGINEERING LIMITED** 

Derek Flake, P.Eng.





## Severn Sound Environmental Association

489 Finlayson St, PO Box 460, Port McNicoll ON L0K 1R0 **Phone** (705) 534-7283 | **Fax** (705) 534-7459

Email: MHudolin@severnsound.ca Website: www.severnsound.ca

September 27, 2019

Shawn Persaud Director of Planning & Development Corporation of the Township of Tiny 130 Balm Beach Road West Tiny ON LOL 2J0

Dear Mr. Persaud,

**RE:** Review of CRH Response to the Township's Objection Letter of March 25, 2019 for Proposed Teedon Pit Extension, Township of Tiny

In response to your request on August 2, 2019, the Severn Sound Environmental Association (SSEA) has reviewed the following documents:

- CRH Canada Group Inc.'s June 20, 2019 response (hereafter referred to as Response Letter) to the Township's objection letter of March 25, 2019.
- Goodban Ecological Consulting Inc.'s June 21, 2019 memorandum response to SSEA/Township comments on Significant Wildlife Habitat (hereafter referred to as SWH Memo).

The SSEA offers the following comments on the Natural Environment portion of the above responses.

#### Response Letter item #9

The letter states that "MNRF is satisfied with the work related to Species at Risk as it relates to the Endangered Species Act with the exception of whip-poor-will surveys. CRH has committed to do the whip-poor-will surveys this spring/early summer and provide the survey results to MNRF."

- Documentation that confirms that the Ministry of Natural Resources and Forestry (MNRF) is satisfied with the SAR work (excluding 2019 whip-poor-will surveys) should be provided for the Township's files.
- 2. The SSEA defers to the Province on Species At Risk (SAR) and the Endangered Species Act. The Ministry of Environment, Conservation and Parks (MECP) is now the ministry responsible for SAR, and the 2019 whip-poor-will information will need to be reviewed by MECP rather than the MNRF.

## Response Letter item #10

- 3. Sufficient additional information and clarification was provided in the SWH Memo with respect to potential Significant Wildlife Habitat, both Amphibian Breeding Habitat (Woodland) and Woodland Area-Sensitive Bird Breeding Habitat, namely:
  - a. Pond B is too small to be considered a candidate SHW for amphibian breeding, and Pond C is more than 283 m from the proposed extraction area, and swamp community SWDM4a is too ephemeral to support amphibian breeding, and thus no amphibian breeding woodland SWH is within the proposed extraction area.
  - b. The habitat, age and woodland composition in the vicinity of breeding bird survey Point Count Stations 3 and 4 was clarified. It was confirmed that these areas are predominantly coniferous plantation and do not contain "mature, closed canopy forests with multiple vegetation strata" and thus do not qualify as SWH for woodland area-sensitive breeding birds. However it should be noted that these areas are still within the area that the consultant identified as 'Recommended Significant Woodland Boundary'.

## Response Letter item #11

4. SSEA is satisfied with the response that CRH will commit to adding a note to the Operation Plan, <u>provided that</u> the word "should" is changed to "shall" in the proposed note, i.e.: "The forest edge management zones shall be monitored for survival in the first, second and fifth years after planting. Replacement planting shall be undertaken if survival is less than 60% for each species."

## Response Letter item #12

5. SSEA is satisfied with the response that CRH commits to modifying note #7 on the Rehabilitation Plan to include survival assessment at year five (5) in addition to years one (1) and two (2), and that the note will be modified to require 60% survival of each species.

## Response Letter item #13

- 6. The response states "Management plans for trees to be removed is not beneficial to the site". If tree removal within the next few years, this may have more validity than if extraction and tree removal is not for many years. If trees are to remain for decade(s), then standard forest management best practices could be used in the meantime for a variety of reasons, such as: management of invasive species to reduce their off-site impacts; improving biological diversity, and; providing habitat prior to removal of the woodland.
- 7. SSEA is satisfied with respect to the revision to note #4 on the Rehab Plan "...or other appropriate species recommended by a qualified ecologist at the time of planting".

If you have any questions, please contact me.

Sincerely,

Michelle Hudolin

Wetlands & Habitat Biologist