



**THE CORPORATION OF THE TOWNSHIP OF TINY**

Meeting Date: **January 27, 2020**

Moved by: MINTOFF

Carried: 4-0

Seconded by: WISHART

Defeated: \_\_\_\_\_

Signed: [Signature]

**WHEREAS** Council reconsidered Confidential Planning and Development Report PD-004-20 regarding the Teedon Pit Extension Application;

**NOW THEREFORE BE IT RESOLVED THAT** staff be directed to proceed with the recommendations in PD-004-20;

**AND FURTHER THAT** staff include the following comments in the letter to the Ministry of Natural Resources and Forestry and CRH Canada Group Inc;

1. That the Township is fundamentally opposed to the extraction and washing of aggregate in environmentally sensitive areas.
2. That there is presently a groundwater study being undertaken by Dr. Cherry, et al and that the findings of this report be taken into consideration by the Province prior to the issuance of any further licenses.

**AND FURTHER THAT** Report PD-004-20 and Closed Session Meeting Minutes dated January 13, 2020, as approved, and January 27, 2020, once approved, be made public in nature.



TOWNSHIP OF / CANTON DE  
**Tiny**

THIS ITEM WENT

JAN 13 2020

TO COMMITTEE  
OF THE WHOLE

**CONFIDENTIAL**  
**PLANNING & DEVELOPMENT REPORT PD-004-20**

**TO:** Mayor Cornell and Members of Council

**FROM:** Shawn Persaud, Director of Planning & Development  
Tim Leitch, Director of Public Works

**DATE:** January 13, 2020

**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.  
(Appendix 1)  
Municipal Address: 2 Darby Road  
File: '19/D05 (DS #62762)  
Roll No. 1-029-00

---

**RECOMMENDATION:**

It is recommended that Council:

1. Receive this report and attached peer review letters as information;
2. Direct staff to submit a response letter to the MNRF and CRH with the outstanding issues as outlined in this Report; and
3. Direct staff to work with Barriston to prepare Minutes of Settlement and report back to Council if all outstanding matters are resolved.

**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 Aeroustics Engineering Limited (Aeroustics), 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:

**"WHEREAS** 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 objection letter (Appendix 2) was provided to the MNRF as the Township's formal comments on the Teedon Pit Extension ARA Application.

CRH provided a letter response dated June 20, 2019, to the Township's comments and 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.

Confidential Planning & Development Report PD-057-19 was presented to Council at the October 28, 2019 Committee of the Whole meeting. This report provided a summary of the Burnside, Aeroustics and the SSEA peer reviews of the CRH response letter and supporting studies/reports. As a result, Motion #330/19 was approved by Council and reads:

**"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."

The above Report and peer reviews were provided to the MNRF and CRH as the Township's updated comments on the Teedon Pit Extension ARA Application.

### **ANALYSIS:**

CRH provided a letter response dated November 13, 2019 (Appendix 3) to the Township's comments and was accompanied by the following supporting studies/reports:

- Memorandum, dated August 29, 2019, prepared by Goodban Ecological Consulting Inc.
- Traffic Impact Study, dated October 4, 2019, prepared by C.F. Crozier & Associates Inc.
- Letter, dated September 25, 2019, prepared by GHD regarding Professional Opinion Regarding Neighboring Domestic Wells
- Letter, dated September 23, 2019, prepared by GHD regarding Response to Hydrogeological Comments
- Sign-off, dated October 25, 2019, from MECP regarding Whip-poor-will

In addition, the Township has received a copy of a letter dated December 19, 2019, from the MNRF formally withdrawing their objection to the ARA application (Appendix 4).

Burnside 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 December 19, 2019 from Ms. Michelle Hudolin, Wetlands and Habitat Biologist, SSEA advising that all comments related to natural heritage matters have been addressed (Appendix 5).
- Peer Review Letter dated December 20, 2019 from Mr. Dave Hopkins, P. Geo., Burnside advising that all comments related to hydrogeological matters have been addressed (Appendix 6).
- Peer Review Letter dated December 20, 2019 from Mr. Cecil Gratrix, C.E.T., Burnside advising that all comments related to site operation matters have been addressed (Appendix 7).
- Peer Review Letter dated December 20, 2019 from Mr. Cecil Gratrix, C.E.T., Burnside advising that all comments related to noise matters have been addressed (Appendix 8).
- Peer Review Letter dated December 20, 2019 from Mr. Henry Centen, P. Eng., P. Geo., Burnside with comments related to traffic matters (Appendix 9).

The Township has received a letter, dated January 3, 2020, from CRH, providing a formal update on the ARA Application process and providing a comment deadline of January 30, 2020 for the Township to provide comments on any outstanding matters (Appendix 10).

Based on the January 3, 2020 letter, Township staff have prepared a draft letter, which outlines the outstanding items that require additional attention (Appendix 11). This letter would constitute the Township's formal comments outlining all remaining outstanding matters.

The majority of the technical matters outlined in the March 25, 2019 Township objection letter have now been addressed, thus consideration should be given to settling the LPAT appeal with CRH. Staff would recommend that Council give direction to prepare Minutes of Settlement should CRH resolve the outstanding traffic matters.

The next LPAT Pre-hearing Conference teleconference is scheduled for May 22, 2020 for an update on the ARA application process. An in-person Pre-hearing Conference is scheduled for August 2020 in order to finalize the procedural order and issues list.

#### **OPTIONS/ALTERNATIVES:**

1. Direct Staff as recommend in this Report; or
2. Take other action as directed by Council.

#### **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:



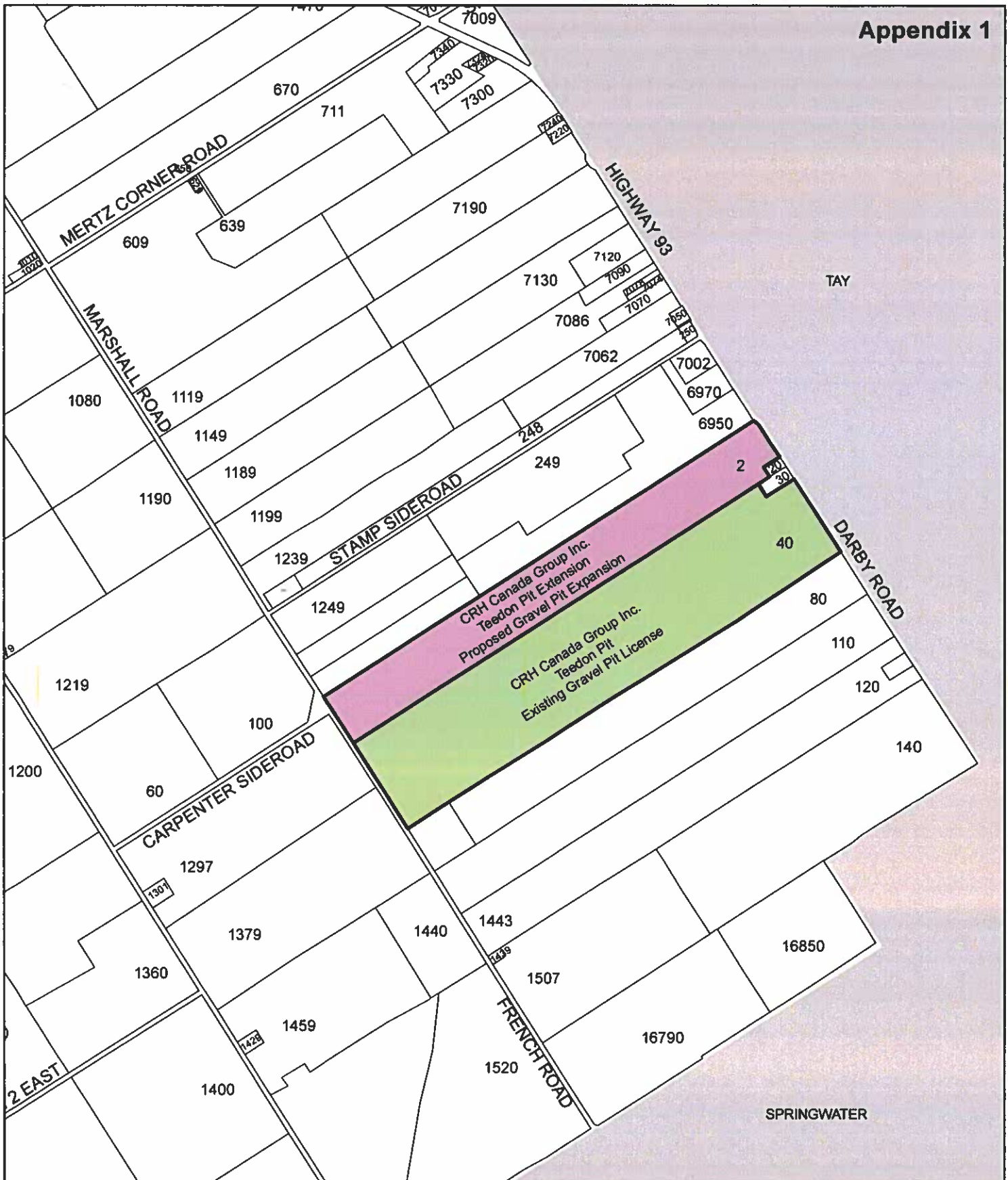
---

Doug Luker, CAO

**Attachments:**

- Appendix 1: Subject Property Map
- Appendix 2: Township Objection Letter to ARA Application
- Appendix 3: CRH Response to Township Comments
- Appendix 4: MNRF Letter
- Appendix 5: SSEA Peer Review Letter
- Appendix 6: Hydrogeological Peer Review Letter
- Appendix 7: Site Operations Peer Review Letter
- Appendix 8: Noise Peer Review Letter
- Appendix 9: Traffic Peer Review Letter
- Appendix 10: Letter from CRH
- Appendix 11: Draft Letter from the Township





This map, either in whole or in part, may not be reproduced without the written authority from the County of Simcoe.  
 Copyright County of Simcoe Land Information Network Cooperative © LINC 2019. Produced (in part) under licence from © Teranet Enterprises Inc. and its suppliers all rights reserved, and Members of the Ontario Geospatial Data Exchange.  
 This map is not a plan survey.  
 For information call (705) 526-4204 or visit [www.tiny.ca](http://www.tiny.ca)

Scale: 1:20,000

0 200 400 600 800 Meters

Date Printed: 12-20-19

## Legend

- Existing Gravel Pit
- Proposed Gravel Pit
- Parcel Fabric







TOWNSHIP OF/CANTON DE  
**Tiny**

## Appendix 2

130 BALM BEACH ROAD WEST  
TINY, ONTARIO L0L 2J0  
(705) 526-4204 1-866-939-8469  
FAX (705) 526-2372  
[www.tiny.ca](http://www.tiny.ca)

March 25, 2019

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

- 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.
- 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 Aeroustics 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).
  - 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.
  - 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 COMMENTS**

- 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:
  - 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 post-planting 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](mailto:dluker@tiny.ca))

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

David Parks, Director Planning, Development and Tourism ([David.Parks@simcoe.ca](mailto:David.Parks@simcoe.ca))

Cecil Gratrix, R. J. Burnside & Associates ([Cecil.Gratrix@rjburnside.com](mailto:Cecil.Gratrix@rjburnside.com))

Julie Cayley, Severn Sound Environmental Association ([JCayley@severnsound.ca](mailto:JCayley@severnsound.ca))

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

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





## Appendix 3

CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

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

November 13, 2019

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.)**

Thank you very much for meeting with CRH on September 12, 2019 to discuss the status of the Township's technical review and we appreciated your acceptance of our October 4, 2019 follow up responses. On October 29, 2019 we received and reviewed the following peer review comments: Burnside Hydrological Peer Review dated September 11, 2019; Burnside Traffic Impact Peer Review dated September 11, 2019; Aeroustics Acoustic Peer Review dated July 10, 2019; Burnside Site Operation Peer Review dated September 11, 2019; and Severn Sound Environmental Association Natural Environment Peer Review dated September 27, 2019. Enclosed in attachment one is a chart summarizing the current status of the technical issues and additional CRH responses. Can the Township please provide these responses and attachments to the Township peer review team for confirmation that this addresses all outstanding issues.

We trust that this information adequately addresses the Township's outstanding comments. CRH will now update the site plans with the commitments as outlined in this letter, and provide a copy to the Township and MNRF.

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

Respectfully submitted,

**Jessica Ferri, MCIP, RPP**  
Manager, Policy and Planning  
CRH Canada Group Inc.

**Attachments:**

1. Figure 1 – CRH Response
2. Memorandum prepared by Goodban Ecological Consulting Inc., 2018 and 2019 Surveys for Eastern Whip-poor-will, August 29, 2019
3. Traffic Impact Study prepared by C.F. Crozier & Associates Inc., October 4, 2019
4. Letter prepared by GHD regarding Professional Opinion Regarding Neighboring Domestic Wells, September 25, 2019
5. Letter prepared by GHD regarding Response to Hydrogeological Comments #1, #2, and #3f, September 23, 2019
6. Sign-off from MECP regarding Whip-poor-will memo dated October 25, 2019



CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
www.crhcanada.com

Figure 1: CRH Response

	Township Comment	CRH Response June 20, 2019	Status of Issue Based on September 12, 2019 Meeting	Peer Review Responses provided to CRH October 29, 2019	CRH Response Nov 7, 2019
<b>Hydrogeological</b>					
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.	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 Teedon Pit titled "Category 1 Permit-to-take-Water Renewal Application – Supporting Hydrologic and Hydrogeologic Study".	CRH maintains the position that the wash plant is unrelated to the extension application. The wash plant and pond are located on the existing pit and is governed by MECP. If MECP does not permit the renewal of the existing permit, CRH will still proceed with the extension application as proposed. At our September 12, 2019 meeting, the Township requested the borehole logs for all drill holes in the vicinity of the wash pond, cross section drawings and a memo from GHD summarizing the reasons that the washing operation will not adversely impact wells. As requested, please see attached letters from GHD: • Letter dated September	Additional comments from Burnside dated September 11, 2019:  "Although the wash pond 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	The wash plant and pond are located on the existing pit and is governed by MECP. If MECP does not permit the renewal of the existing permit, CRH will still proceed with the extension application as proposed. At our September 12, 2019 meeting, the Township requested the borehole logs for all drill holes in the vicinity of the wash pond, cross section drawings and a memo from GHD summarizing the reasons that the washing operation will not adversely impact wells. CRH submitted this requested information on October 4, 2019. Please see attached letters from GHD: • Letter dated September 25, 2019



CRH Canada Group Inc.  
 2300 Steeles Ave W, 4<sup>th</sup> floor  
 Concord, Ontario  
 L4K 5X6 Canada

T. 905-761-7100  
 F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

			25, 2019 regarding Professional Opinion Regarding Neighboring Domestic Wells <ul style="list-style-type: none"> <li>Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f</li> </ul>	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 <a href="https://www.dufferinaggregates.com/resourcecentre">https://www.dufferinaggregates.com/resourcecentre</a> 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 documents that addresses impacts of the wash pond."	regarding Professional Opinion Regarding Neighboring Domestic Wells <ul style="list-style-type: none"> <li>Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f</li> </ul>
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	Please refer to the GHD report mentioned above as it addresses the requested information.	See response to Item 1 for the outstanding items the Township has requested.	Additional comment from Burnside September 11, 2019:  "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	The PTTW report is not part of the extension application. CRH has provided this requested information on October 4, 2019. Please see attached letters from GHD: <ul style="list-style-type: none"> <li>Letter dated September 25, 2019 regarding Professional</li> </ul>



CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	<p>review:</p> <ul style="list-style-type: none"> <li>• A table showing the dates that the manual water level data was collected and hydrographs showing the results for each well;</li> <li>• 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</li> <li>• A "regional" cross section that includes the reported depths of the wells reportedly impacted by previous operations at the quarry.</li> </ul>			<p>of the wash pond and would be helpful in confirming the presence of silt/clay aquitard that may be present."</p>	<p>Opinion Regarding Neighboring Domestic Wells</p> <ul style="list-style-type: none"> <li>• Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f</li> </ul>
3(a)	Burnside recommends that:	The proposed Teedon Pit Extension is an above water pit. GHD concluded	Requested information has been provided. See response to Item 1.	Additional comment from Burnside September 11, 2019:	The extension application is for a Category 3 Pit above the water table.



CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	<p>• 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.</p>	<p>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.</p>		<p>"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 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."</p>	<p>Neighbour well complaints are unrelated to extraction above the water table. For information purposes CRH has provided the Township with all additional work done completed by CRH. In addition, CRH forwarded the MECP letters that concur with the study's findings that well complaints are not caused by existing Teedon Pit operations. CRH has provided this information on October 4, 2019. Please see attached letters from GHD:</p> <ul style="list-style-type: none"> <li>• Letter dated September 25, 2019 regarding Professional Opinion Regarding Neighboring Domestic Wells</li> <li>• Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f</li> </ul>
--	--	--	--	--	---





CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

3(b)	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>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.</p>	Item resolved.
3(c)	<ul style="list-style-type: none"> <li>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</li> </ul>	<p>CRH commits to revise the Teedon Pit Extension site plans to include the additional following note:</p> <p>"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".</p> <p>The additional monitoring wells referenced above will be added to Note #42</p>	Item resolved.





CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	monitoring program.	and to the monitoring well schematic on the Teedon Pit Extension operations plan.	
3(d)	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>The Teedon Pit Extension operations plan Note #44 already indicates that operations will be modified based on measured water levels. Note #44 states:</p> <p>"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."</p>	Item resolved.
3(e)	<ul style="list-style-type: none"> <li>Additional data be collected using AWLR's to confirm the water table elevation until the Teedon Pit Extension</li> </ul>	<p>As noted in response to 3(b) and 3(c), the AWLR loggers have already been installed and Note #42 on the Teedon Pit</p>	Item resolved.



CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	begins operations. Water level collection only began in June 2018 and may have missed peak spring water levels.	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)	<p>• 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.</p>	<p>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".</p>	See response to Item 1.	<p>Additional comment from Burnside September 11, 2019:</p> <p>"The wash pond will be used to wash material from the proposed pit expansion and the comment above should be addressed."</p> <p>The reference to the "comment above should be addressed" is the same comment as shown in the left column.</p>	<p>No washing of aggregates is proposed on the extension property. Please refer to the response to Item 1.</p>



CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

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

[www.crhcanada.com](http://www.crhcanada.com)

#### Traffic

4(a)	<p>The Application material did not include a Traffic Impact Study, however it did include some traffic-related information.</p> <ul style="list-style-type: none"><li>• 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</li></ul>	<p>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 &amp; Darby Road. This will be completed and submitted to the Township for review.</p>	<p>Enclosed please find a copy of the traffic impact study prepared by C.F. Crozier &amp; Associates Inc. dated October 4, 2019.</p>
------	---	--	--



CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	<p>determining the revised traffic impact.</p> <ul style="list-style-type: none"> <li>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.</li> </ul>				
4(b)	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>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 along Darby Road to</p>	<p>Enclosed please find the TIS and please note the following information - The Township has agreed to install No Stopping signs along Darby Road at CRH's expense. CRH also commits to cover the cost</p>	<p>Additional comment from Burnside September 11, 2019:</p> <p>"The anticipated TIS report should confirm the measures proposed to address the potential for off-</p>	<p>CRH suggests the Township install "no parking" signs along Darby Road at CRH's expense. CRH also commits to cover the cost for paid OPP officers to monitor and ticket trucks in the</p>



CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	<p>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.</p> <p>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.</p>	<p>for paid OPP officers to monitor and ticket trucks in the event the No Stopping signs are not being adhered to. CRH also commits to communicate the hours of operation to its customers and truck drivers to prevent trucks from arriving prior to 5 am.</p> <p>As discussed at our meeting, during peak hours at the existing pit, there have been 20 trucks (40 truck trips) per hour and subject to approval of the extension, this will now be the maximum trips permitted in any given hour.</p>	<p>site queuing, as well as confirm whether off-site queuing has been observed under existing operations.</p> <p>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."</p>	<p>event the No Stopping signs are not being adhered to.. CRH continues to commit to communicate the hours of operation to its customers and truck drivers to prevent trucks from arriving prior to 5 am.</p> <p>As discussed at our meeting on September 12, 2019, during peak hours at the existing pit, there have been 20 trucks (40 truck trips) per hour and subject to approval of the extension, this will now be the maximum trips permitted in any given hour.</p>
--	---	--	--	--





CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

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

[www.crhcanada.com](http://www.crhcanada.com)

4(c)	<p>• 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.</p>	<p>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.</p>	<p>No application has been submitted and there are no plans to submit such an application.</p> <p>Although no application has been submitted, the Teedon Pit site plans will only permit a maximum of 15 trucks (30 truck trips) per hour prior to 7:00 am and 20 trucks (40 truck trips) per hour during daytime hours. This is the maximum number of trucks that can exist on the site per hour regardless of the origin of trucks.</p>	<p>Additional comment from Burnside September 11, 2019:</p> <p>"The anticipated TIS report should confirm CRH's position with respect to the potential interconnection between 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."</p>	<p>No application has been submitted and there are no plans to submit such an application.</p> <p>Although no application has been submitted, the Teedon Pit site plans will only permit a maximum of 15 trucks (30 truck trips) per hour prior to 7:00 am and 20 trucks (40 truck trips) per hour during daytime hours. This is the maximum number of trucks that can exist on the site per hour regardless of the origin of trucks.</p>
Noise					
5(a)	<p>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.</p>	<p>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</p>	Item resolved.		





CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

		encourages the Township to post no stopping signs 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)	<p>The following additional information is required for Aercoustics to complete their peer review:</p> <ul style="list-style-type: none"> <li>•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.</li> </ul>	CRH confirms that this is feasible based on the planned loader sizes and required safety and labour laws.	Item resolved.



CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	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).		
5(c)	<ul style="list-style-type: none"> <li>Restrictions on the number of permitted equipment and maximum sound level permitted should be incorporated in the licensing document.</li> </ul>	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.	Item resolved.
5(d)	<ul style="list-style-type: none"> <li>Modelling parameters for the surrounding foliage such as height of trees and elevation of the ground relative to the</li> </ul>	Please see attached memorandum from Theakston Environmental.	Item resolved.



CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	existing topography at each point of the foliage object should be provided.		
5(e)	• Confirmation is required to be provided that the noise reduction due to foliage is reasonable for 12 months.	Please see attached memorandum from Theakston Environmental.	Item resolved.
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.	Item resolved.
<b>Site Operation</b>			
6.	The Operational Plan - Imported Materials, Note 50 specifies that "where	Note #49 on the proposed Teedon Pit Extension operations plan, states	Item resolved.



CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	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."	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."			
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.	Item resolved.  CRH commits to further revise the Teedon Pit Extension site plans to prohibit the storage of asphalt in the extension.		
8.	The Rehabilitation Plan - Tree Planting Schematic proposes an agricultural use in the pit floor, however, fertilizers and	There are several areas within the Township where agriculture is within 1.5m of the water table. To enhance biodiversity	Item resolved.		



CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	<p>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.</p>	<p>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.</p>			
<b>Natural Environment</b>					
9.	<p>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</p>	<p>MNR 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 MNR.</p>			<p>Please see the attached email providing confirmation from MECP that they have no concerns related to the whip-poor-will survey.</p>



CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

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

[www.crhcanada.com](http://www.crhcanada.com)

	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.				
10.	<p>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:</p> <ul style="list-style-type: none"><li>• Amphibian Breeding Habitat (Woodland) -</li></ul>	See attached memorandum from Goodban Ecological Consulting.	Item resolved.		





CRH Canada Group Inc. T. 905-761-7100  
2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
Concord, Ontario  
L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

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



CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	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."	Item resolved.  As requested CRH will change the "should" to "shall". The revised note will read:  "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."
12.	Survival assessments for rehabilitation tree planting of setbacks and side slopes:	Note #7 on the Teedon Pit Extension Rehabilitation Plan already requires a one (1) and two (2) year assessment. CRH	Item resolved.



CRH Canada Group Inc. T. 905-761-7100  
 2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
 Concord, Ontario  
 L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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 post-planting species diversity.</li> </ul>	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.	
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	Tree Clearing Schematic Note #3 on the proposed Teedon Pit Extension Operations Plan indicates that "as extraction progresses north tree clearing shall occur as required to advance extraction and minimize the disturbed area". The	Item resolved.



CRH Canada Group Inc. T. 905-761-7100  
2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
Concord, Ontario  
L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

	<p>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.</p>	<p>Management Plan is focussed on the enhancement of trees that will remain and trees to be planted. Management plans for trees to be removed is not beneficial to the site.</p> <p>The trees proposed for the rehabilitation planting are appropriate. Tree Planting Schematic (Reforestation of Side Slopes) Note #4 on the proposed Teedon Pit Rehabilitation Plan will be revised to include the following at the end of the note:</p> <p>"...or other appropriate species recommended by a qualified ecologist at the time of planting."</p>	
--	--	---	--



CRH Canada Group Inc. T. 905-761-7100  
2300 Steeles Ave W, 4<sup>th</sup> floor F. 905-761-7200  
Concord, Ontario  
L4K 5X6 Canada [www.crhcanada.com](http://www.crhcanada.com)

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:

	Township Comment	CRH Response June 20, 2019	Status of Issue Based on September 12, 2019 Meeting
14	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.	See response to issue 3(a).
15	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.	Item resolved.
16	The proponent should provide additional information such as cross sections to confirm that the monitoring wells are completed at similar depths as domestic	Please see response to comment #3(a) on page #2 of this response.	See response to Issue 1.





**CRH Canada Group Inc.**  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

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

[www.crhcanada.com](http://www.crhcanada.com)

	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.		
17	An appropriate on-site monitoring network will eliminate the need for on-going 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.	See response to 3(b), 3(c), 3(d) and 15.

**Ministry of Natural  
Resources and Forestry**

Midhurst District Office  
2284 Nursery Road  
Midhurst, ON, L9X 1N8  
Tel: 705-725-7500  
Fax: 705-725-7584

**Ministère des Richesses  
naturelles et des Forêts**

Bureau de district Midhurst  
2284 rue Nursery  
Midhurst, ON, L9X 1N8  
Tél: 705-725-7500  
Téléc: 705-725-7584

---

December 19, 2019

CRH Canada Group Inc  
2300 Steeles Avenue West - 4th Floor  
Concord, ON  
L4K 5X6

**ATTENTION: Jessica Ferri, Manager, Policy and Planning**

Dear Ms. Ferri:

**SUBJECT: Proposed Teedon Pit Extension: Request for Change in Applicant  
Aggregate Resources Act, Category 3, Class A Licence Application  
(Pit Above Water), North ½ of Lot 80, Con. 1, W.P.R. and Part of  
Original Road Allowance Between Lots 80 and 81, Con. 1, W.P.R.  
Township of Tiny, County of Simcoe**

The Ministry of Natural Resources and Forestry (MNRF) has received confirmation from MHBC that the Ministry of Environment, Conservation and Parks (MECP) has accepted the updated survey information for Eastern whip-poor-will and that MECP has no outstanding concern for this species or its habitat as it relates to the Teedon Pit Extension application.

Also, as per our letter dated December 16, 2019 to your company, our ministry has granted the Applicant Name Change request from Cedarhurst Quarries and Crushing Limited to CRH Canada Group Inc. for the Teedon Pit Extension application. We no longer require that the combined tonnage in Note 3 of the Operational Plan be removed.

These were the two outstanding concerns that our office identified in our March 25, 2019 objection letter which have now been resolved. We withdraw our ministry's objection to this application.

Regards,



Kim Benner  
District Planner  
Midhurst District  
(705) 725-7534  
[kim.benner@ontario.ca](mailto:kim.benner@ontario.ca)

c.c. Brent Armstrong, Midhurst District, MNRF



### 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](mailto:MHudolin@severnsound.ca) Website: [www.severnsound.ca](http://www.severnsound.ca)

December 19, 2019

Shawn Persaud  
Director of Planning & Development  
Corporation of the Township of Tiny  
130 Balm Beach Road West  
Tiny ON L0L 2J0

Dear Mr. Persaud,

**RE:** Review of updated 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 November 13, 2019, the Severn Sound Environmental Association (SSEA) has reviewed the following:

- CRH Canada Group Inc.'s October 4, 2019 Response Letter, which is an update to the June 20, 2019 Response Letter.
- Goodban Ecological Consulting Inc.'s August 29, 2019 memorandum [included as Attachment 1 of the Response Letter] regarding 2018 and 2019 Surveys for Eastern Whip-poor-will (hereafter referred to as Whip-poor-will Memo).
- Goodban Ecological Consulting Inc.'s December 18, 2019 email regarding forest management.

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

#### Response Letter item #9

The letter states that the item has been resolved, and that the Whip-poor-will Memo has been submitted to the Ministry of Environment, Conservation and Parks (MECP). As indicated in our September 27, 2019 letter, the SSEA defers to the Province on Species At Risk (SAR) and the Endangered Species Act, including with regards to whip-poor-will.

1. 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. Documentation that confirms that MECP has reviewed and is satisfied with the whip-poor-will surveys should be provided for the Township's files.

#### Response Letter item #10

3. This item was addressed by SSEA comments provided in our September 27, 2019 letter, which indicated that sufficient additional information and clarification on potential Significant Wildlife Habitat was provided: namely that the proposed extraction area does not qualify as Amphibian Breeding Habitat (Woodland) or Woodland Area-Sensitive Bird Breeding Habitat as defined by the Province. However, SSEA noted that these areas are still within the area that the consultant identified as 'Recommended Significant Woodland Boundary'.

#### Response Letter item #11

4. As per our September 27<sup>th</sup> letter, SSEA is satisfied with the response that CRH will commit to adding a note to the Operation Plan, provided that 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. As per our September 27<sup>th</sup> letter, 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*". As a result of discussions between SSEA and Goodban Consulting, CRH Canada Group Inc. has agreed to make the following updates to the Operational Plan (Sheet 2 of 4 of the Site Plans):

- Add a note to the Forest Edge Management Schematic:  
THE PROPOSED FOREST EDGE MANAGEMENT MEASURES WITHIN FOREST EDGE MANAGEMENT ZONES 'A' AND 'B' WILL COMMENCE WITHIN THREE (3) YEARS OF LICENCE ISSUANCE.
- Add a general note regarding invasive species monitoring and control:  
PRIOR TO AND DURING EXTRACTION, THE EXTRACTION AREA AND IMMEDIATELY ADJACENT LANDS OWNED BY CRH CANADA GROUP INC. WILL BE PERIODICALLY MONITORED FOR THE PRESENCE OF INVASIVE PLANT SPECIES. CONTROL MEASURES WILL BE IMPLEMENTED AS REQUIRED UNDER THE DIRECTION OF A QUALIFIED ECOLOGIST. CONTROL MEASURES MAY INCLUDE CUTTING WOODY STEMS AND TREATING STUMPS WITH HERBICIDE, SPOT APPLICATION OF HERBICIDE TO CONTROL NEWLY ESTABLISHED INVASIVE SPECIES AND/OR USE OF TARPS/COVERS TO KILL OFF INVASIVE GROUNDCOVER SPECIES.

The SSEA is satisfied with this response, provided that the second note above is modified by the addition of "or other established best management practices" at the end of the note. This additional monitoring and management for invasive species will reduce their on- and off-site impacts, and promote native biological diversity and habitat in 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".

In summary, the SSEA defers to provincial ministries (MNRF and MECP) regarding Response Letter item #9. Items #10 and #12 have been satisfactorily resolved, and items #11 and #13 have been resolved, provided that minor changes are made to the wording as noted above.

If you have any questions, please contact me.

Sincerely,



Michelle Hudolin  
Wetlands & Habitat Biologist





December 20, 2019

**Via: Email**

Timothy Leitch, P.Eng  
Director of Public Works  
Township of Tiny  
130 Balm Street West  
Tiny ON N0L 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 (dated March 25, 2019) 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. The most recent peer review comments were provided to CRH Canada Group Inc. (CRH) in a Burnside letter dated September 12, 2019.

CRH, by letter dated November 13, 2019 provided a table summarizing the current status of the technical issues and additional CRH responses.

Listed below are the Township's March 25, 2019 comments, CRH June 20 and November 7, 2019 responses and Burnside's September 11, 2019 comments. The Burnside review comments of the CRH November 13, 2019 responses are shown in italics.

### **Township Comment #1 - March 25, 2019**

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.

#### **CRH Response – June 20, 2019**

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 Teedon Pit titled

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

**CRH Response - Status of Issue Based on September 12, 2019 Meeting**

CRH maintains the position that the wash plant is unrelated to the extension application. The wash plant and pond are located on the existing pit and is governed by MECP. If MECP does not permit the renewal of the existing permit, CRH will still proceed with the extension application as proposed. At our September 12, 2019 meeting, the Township requested the borehole logs for all drill holes in the vicinity of the wash pond, cross section drawings and a memo from GHD summarizing the reasons that the washing operation will not adversely impact wells. As requested, please see attached letters from GHD:

- Letter dated September 25, 2019 regarding Professional Opinion Regarding Neighboring Domestic Wells
- Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f.

**Burnside Response – September 11, 2019**

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 a 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.

**CRH Response – November 13, 2019**

The wash plant and pond are located on the existing pit and is governed by MECP. If MECP does not permit the renewal of the existing permit, CRH will still proceed with the extension application as proposed. At our September 12, 2019 meeting, the Township requested the borehole logs for all drill holes in the vicinity of the wash pond, cross section drawings and a memo from GHD summarizing the reasons that the washing operation will not adversely impact wells. CRH submitted this requested information on October 4, 2019. Please see attached letters from GHD:

- Letter dated September 25, 2019 regarding Professional Opinion Regarding Neighboring Domestic Wells
- Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f.

### **Burnside Response**

*GHD drilled four additional boreholes (BH1-18 to BH4-18) and installed three additional monitoring wells (MW6-18, MW6R-18 and MW7-18) in the vicinity of the sump pond to provide information on the stratigraphy in the area. MW5-18 was drilled further to the east near PW1-09. Each of the new monitoring locations and existing well MW1 were equipped with data loggers. Monitoring wells MW8-18, MW9-18, MW10S-18 and MW10D-18 were installed on the proposed expansion site. Borehole logs were provided for all the new wells and Cross-sections A to A' and B to B' were prepared to show the geology beneath the site and a conceptual hydrogeologic model was provided. An additional cross section was provided that includes domestic wells and their reported depths. Water level hydrographs were provided.*

*GHD hydrogeologic cross-sections A-A' and B-B' show the relative location and completion depth of the Sump Pond compared to nearby monitoring wells and boreholes. The Sump Pond and nearby shallow monitoring wells (MW1 and MW7-18) and boreholes (BH2-18 and BH3-18) are all completed within the Local Aquitard Unit. Deeper monitoring wells in the vicinity of the Sump Pond (MW6-18 and MW6R-18) are both completed within the Upper Aquifer Unit, specifically the Middle Thorncliffe Unit.*

*The monitoring wells completed in the Local Aquitard Unit (MW1 and MW7-18) are approximately 259.5 m AMSL. The Sump Pond water elevation was about 263.8 on July 18, 2019. The nearby deeper monitoring wells completed in the Upper Aquifer Unit (MW6-18 and MW6R-18) have July 18, 2019 groundwater elevations of approximately 238 m AMSL. The monitoring wells completed within the Local Aquitard Unit (Thorncliffe Silt and Clay) have groundwater elevations over twenty metres higher than those completed in the Upper Aquifer Unit (Middle Thorncliffe).*

*The GHD borehole logs and cross sections confirm that the wash pond is underlain by fine-grained soils. The thickness of these soils is about 20 m in the area of the pond (MW6-18) and at least 25 m further to the north at MW10-18.*

*A conceptual hydrogeologic model for the site is included as Attachment B to the September 23, 2019 letter. The model indicates it would take water 19.5 to 34 years to travel vertically through the aquitard and then horizontally through the Upper Aquifer to reach the nearest domestic well. GHD concludes that silt cannot move with groundwater as groundwater moves from one point to another.*

*The Township March 25, 2019 comment has been addressed satisfactorily.*

### **Township Comment #2 - March 25, 2019**

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.

**CRH Response – June 20, 2019**

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

**CRH Response - Status of Issue Based on September 12, 2019 Meeting**

See response to Item 1 for the outstanding items the Township has requested.

**Burnside Response – September 11, 2019**

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.

**CRH Response – November 13, 2019**

The PTTW report is not part of the extension application. CRH has provided this requested information on October 4, 2019. Please see attached letters from GHD:

- Letter dated September 25, 2019 regarding Professional Opinion Regarding Neighboring Domestic Wells
- Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f.

***Burnside Response***

*See response to Township comment #1 above. The Township March 25, 2019 comment has been addressed satisfactorily.*

**Township Comment #3a - March 25, 2019**

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.

**CRH Response – June 20, 2019**

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 – September 11, 2019**

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.

#### **CRH Response – November 7, 2019**

Neighbour well complaints are unrelated to extraction above the water table. For information purposes CRH has provided the Township with all additional work done completed by CRH. In addition, CRH forwarded the MECP letters that concur with the study's findings that well complaints are not caused by existing Teedon Pit operations. CRH has provided this information on October 4, 2019. Please see attached letters from GHD:

- Letter dated September 25, 2019 regarding *Professional Opinion Regarding Neighboring Domestic Wells*
- Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f.

#### **Burnside Response**

*The September 25, 2019 GHD letter "Professional Opinion Regarding Neighboring Domestic Well Complaints – Teedon Pit Extension" documents previous investigations on domestic wells in the area of the Teedon Pit completed by GHD and others.*

#### **2015 Alpha Environmental Services Inc. (Alpha) Investigation**

*Alpha conducted a well survey which included 27 wells and identified four residents who indicated that they had water quality/quantity concerns. Alpha concluded that the wells are shallow and too far from the pit to be impacted by the settling ponds and sump pond. Alpha also noted that the shallow overburden contains a significant amount of silt.*

#### **2015 Ministry of Environment, Conservation and Parks (MECP) assessment**

*The MECP reviewed water interference complaints from three residents. The MECP concluded that the water takings at the Teedon Pit were not responsible for the residential well impacts. The MECP indicated that poor well construction and/or maintenance may be the cause for the presence of silt in the wells.*

#### **2017 Ontario Water Well Services Inc. (OWWS) Domestic Well Survey and Water Quality Sampling Event**

*OWWS completed domestic well surveys for five wells in the vicinity of the pit. Water quality samples were collected from 5 nearby domestic wells by a licensed water well contractor. Water quality was found to be consistent with data contained in published regional groundwater quality reports. None of the wells had evidence of silt at the time of the survey.*



### **2018 GHD domestic well survey**

*GHD completed a domestic well survey for wells within 1,000 m of the Teedon Pit. 78 properties were visited, and 38 residents completed a domestic well survey form with the GHD representative. GHD classified wells less than 20 m deep as "shallow", and as "deep" if they were more than 20 m deep. GHD indicated that previous testing of PW1-09 indicated a zone of influence of 300 m from the well. GHD located 10 wells within the 300 m zone of influence and concluded that since only the deep wells would be impacted by pumping of PW1-09, only four wells would be affected. Since the 4 wells have substantial available drawdown GHD concluded that the operation of MW1-09 would be highly unlikely to result in quantity interference effects.*

*Eleven of the residents reported silt issues with their wells. GHD concluded that the thick section of aquitard material underlying the settling ponds and sump pond would provide protection to the deep aquifer. A hydrogeologic model developed for the site using data collected from on-site monitoring wells indicates that it would take about 19 to 34 years for water leaking from the sump and settling ponds to travel vertically through the local aquitard and then horizontally through the Upper Aquifer to reach the nearest domestic well. As a result, GHD concurred with Alpha and the MECP that the silt issues in domestic wells were not the result of aggregate washing at the Teedon pit.*

*Domestic wells in the area have been investigated by two consultants, a water well contractor and the MECP with all concluding that the Teedon Pit has not caused the silt issues in the nearby wells.*

*Based on the data collected during the various well surveys and the geologic/hydrogeologic information provided in the November 13, 2019 CRH letter, it is Burnside's opinion that the aggregate washing operations at the existing pit are not the source of the silt in the domestic wells.*

*The Township March 25, 2019 comment has been addressed satisfactorily.*

### **Township Comment #3b - March 25, 2019**

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.

### **CRH Response – June 20, 2019**

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.

### **CRH Response - Status of Issue Based on September 12, 2019 Meeting**

Item resolved.

### **Burnside Response – September 11, 2019**

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.

**CRH Response – November 13, 2019**

Item resolved.

***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

**Township Comment #3c - March 25, 2019**

Burnside recommends that:

- 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.

**CRH Response – June 20, 2019**

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.

**CRH Response - Status of Issue Based on September 12, 2019 Meeting**

Item resolved.

**Burnside Response – September 11, 2019**

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

**CRH Response – November 13, 2019**

Item resolved.

***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

**Township Comment #3d - March 25, 2019**

Burnside recommends that:

- 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.

**CRH Response – June 20, 2019**

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."

**CRH Response - Status of Issue Based on September 12, 2019 Meeting**

Item resolved.

**Burnside Response – September 11, 2019**

GHD Response satisfactorily addresses Burnside Comment.

**CRH Response – November 13, 2019**

Item resolved.

***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

**Township Comment #3e - March 25, 2019**

Burnside recommends that:

- 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.

**CRH Response – June 20, 2019**

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.

**CRH Response - Status of Issue Based on September 12, 2019 Meeting**

Item resolved.

**Burnside Response – September 11, 2019**

GHD Response satisfactorily addresses Burnside Comment.

**CRH Response – November 13, 2019**

Item resolved.

***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

**Township Comment #3f - March 25, 2019**

Burnside recommends that:

- 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.

**CRH Response – June 20, 2019**

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”.

**CRH Response - Status of Issue Based on September 12, 2019 Meeting**

See response to Item #1 (Township Comment #1 - March 25, 2019).

**Burnside Response – September 11, 2019**

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.

**CRH Response – November 13, 2019**

No washing of aggregates is proposed on the extension property. Please refer to the response to Item 1 (Township Comment #1 - March 25, 2019).

***Burnside Response***

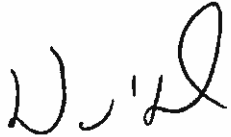
*The Township March 25, 2019 comment has been addressed satisfactorily through the addition of a number of wells on the site, monitoring of water levels and the calculation of vertical gradients as documented in the September 23, 2019 GHD letter.*

## Summary

The studies and responses provided by CRH indicate that the water originating from the sump and settling ponds would take from 19.5 to 34 years to reach the nearest domestic well and as a result, operations that began in 2009 could not have impacted nearby domestic wells. The substantial thickness of silt and clay beneath the ponds act as a barrier to downwards movement of water.

Yours truly,

**R.J. Burnside & Associates Limited**



Dave Hopkins  
Senior Hydrogeologist  
DH:sc

Other than by the addressee, copying or distribution of this document, in whole or in part, is not permitted without the express written consent of R.J. Burnside & Associates Limited.

191220\_Teedon\_HydrogeologicalPeerReview\_CRH Nov 13 2019 Letter  
20/12/2019 1:43 PM





December 20, 2019

**Via: Email**

Timothy Leitch, P.Eng.  
Director of Public Works  
Township of Tiny  
130 Balm Street West  
Tiny ON N0L 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 dated March 25, 2019 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 site operation issues resulting from the proposed expansion. The most recent peer review comments were provided to CRH Canada Group Inc. (CRH) in a Burnside letter dated September 11, 2019.

CRH, by letter dated November 13, 2019 provided a table summarizing the current status of the technical issues and additional CRH responses.

Listed below are the Township's March 25, 2019 comments, CRH June 20 and November 7, 2019 responses and Burnside September 11, 2019 comments. The Burnside review comments of the CRH November 13, 2019 response are shown in italics.

### **Township Comment #1 - March 25, 2019**

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.”

### **CRH Response – June 20, 2019**

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 – September 11, 2019**

CRH Response satisfactorily addresses Burnside Comment.

### **CRH Response – November 13, 2019**

Item resolved.

### ***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

## **Township Comment #2 - March 25, 2019**

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 – June 20, 2019**

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

### **Burnside Response – September 11, 2019**

The response suggests that asphalt storage and recycling would not be permitted by the MNRF as it not noted on the proposed Teedon Pit Extension site plans.

### **CRH Response – November 13, 2019**

Item resolved. CRH commits to further revise the Teedon Pit Extension site plans to prohibit the storage of asphalt in the extension.

### **Burnside Response**

*The Township March 25, 2019 comment has been addressed satisfactorily.*

## **Township Comment #3 - March 25, 2019**

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 – June 20, 2019**

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 – September 11, 2019**

CRH Response satisfactorily addresses Burnside Comment.

**CRH Response – November 13, 2019**

Item resolved.

**Burnside Response**

*The Township March 25, 2019 comment has been addressed satisfactorily.*

We trust that you will find the above to be in order. 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

Other than by the addressee, copying or distribution of this document, in whole or in part, is not permitted without the express written consent of R.J. Burnside & Associates Limited.



## Appendix 8

December 20, 2019

**Via: Email**

Timothy Leitch, P.Eng.  
Director of Public Works  
Township of Tiny  
130 Balm Street West  
Tiny ON N0L 2J0

Dear Mr. Leitch:

**Re: Teedon Pit Extension  
CRH Canada Response to Township March 25, 2019 Letter of Objection  
Noise Peer Review  
Township of Tiny, County of Simcoe, Ontario  
Project No.: 300031221.0000**

The Township of Tiny (Township) submitted a letter of objection dated March 25, 2019 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.

Aercoustics Engineering Ltd. (Aercoustics) was retained by R.J. Burnside & Associates Limited (Burnside) on behalf of the Township to complete a peer review of noise issues, which could result from the proposed expansion. The most recent peer review comments were provided to CRH Canada Group Inc. (CRH) in an Aercoustics letter dated July 10, 2019.

CRH, by letter dated November 13, 2019 provided a table summarizing the current status of the technical issues and additional CRH responses.

Listed below are the Township's March 25, 2019 comments, CRH June 20 and November 7, 2019 responses and Aercoustics July 10, 2019 comments. The Burnside review comments of the CRH November 13, 2019 response are shown in italics.

### **Township Comment #1 - March 25, 2019**

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 Response – June 20, 2019**

No response provided.

**Aeroustics Response – July 10, 2019**

Aeroustics has no further concerns or comments.

**CRH Response – November 13, 2019**

No response provided.

***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

**Township Comment #2 - March 25, 2019**

**CRH Response – June 20, 2019**

No response provided.

**Aeroustics Response – July 10, 2019**

Aeroustics has no further concerns or comments.

**CRH Response – November 13, 2019**

No response provided.

***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

**Township Comment #3 - March 25, 2019**

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 Response – June 20, 2019**

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 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.

**Aeroustics Response – July 10, 2019**

Aeroustics has no further concerns or comments.

#### **CRH Response – November 13, 2019**

Item resolved.

#### ***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

#### **Township Comment #4a - March 25, 2019**

The following additional information is required for Aeroustics 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 Response – June 20, 2019**

CRH confirms that this is feasible based on the planned loader sizes and required safety and labour laws.

#### **Aeroustics Response – July 10, 2019**

Aeroustics has no further concerns or comments.

#### **CRH Response – November 13, 2019**

Item resolved.

#### ***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

#### **Township Comment #4b - March 25, 2019**

The following additional information is required for Aeroustics to complete their peer review:

- Restrictions on the number of permitted equipment and maximum sound level permitted should be incorporated in the licensing document.

#### **CRH Response – June 20, 2019**

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.



**Aeroustics Response – July 10, 2019**

Aeroustics has no further concerns or comments.

**CRH Response – November 13, 2019**

Item resolved.

***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

**Township Comment #4c - March 25, 2019**

The following additional information is required for Aeroustics to complete their peer review:

- 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.

**CRH Response – June 20, 2019**

Please see attached memorandum from Theakston Environmental.

**Aeroustics Response – July 10, 2019**

Aeroustics has no further concerns or comments.

**CRH Response – November 13, 2019**

Item resolved.

***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

**Township Comment #4d - March 25, 2019**

The following additional information is required for Aeroustics to complete their peer review:

- Confirmation is required to be provided that the noise reduction due to foliage is reasonable for 12 months.

**CRH Response – June 20, 2019**

Please see attached memorandum from Theakston Environmental.

**Aeroustics Response – July 10, 2019**

Aeroustics has no further concerns or comments.

**CRH Response – November 13, 2019**

Item resolved.

***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

**Township Comment #4e - March 25, 2019**

The following additional information is required for Aeroustics to complete their peer review:

- 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 Response – June 20, 2019**

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.

**Aeroustics Response – July 10, 2019**

Aeroustics has no further concerns or comments.

**CRH Response – November 13, 2019**

Item resolved.

***Burnside Response***

*The Township March 25, 2019 comment has been addressed satisfactorily.*

We trust that you will find the above to be in order. 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

Other than by the addressee, copying or distribution of this document, in whole or in part, is not permitted without the express written consent of R.J. Burnside & Associates Limited.

191220\_Teedon\_Noise\_CRH Nov 13 20109 letter  
20/12/2019 10:17 AM



December 20, 2019

**Via: Email**

Timothy Leitch, P.Eng.  
Director of Public Works  
Township of Tiny  
130 Balm Street West  
Tiny ON N0L 2J0

Dear Mr. Leitch:

**Re: Teedon Pit Extension  
CRH Canada Response Letter Dated March 25, 2019  
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 dated March 25, 2019 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. The most recent peer review comments were provided to CRH Canada Group Inc. (CRH) in a Burnside letter dated September 12, 2019.

CRH by letter dated November 13, 2019 provided a table summarizing the current status of the technical issues and additional studies to respond to the outstanding technical issues, including a Traffic Impact Study (TIS) prepared by C.F. Crozier & Associates Inc, dated October 4, 2019.

Listed below are the Township's March 25, 2019 comments, CRH June 20 and November 7, 2019 responses and Burnside September 11, 2019 comments. The Burnside review comments of the CRH November 13, 2019 response are shown in *italics*.

### **Township Comment #1, 2 & 3 - March 25, 2019**

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 (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 – June 20, 2019**

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 – September 11, 2019**

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.

#### **CRH Response – November 7, 2019**

Enclosed please find a copy of the traffic impact study prepared by C.F. Crozier & Associates Inc. dated October 4, 2019.

#### ***Burnside Response***

*A TIS has now been provided and comments provided in a subsequent section to this letter. The Township March 25, 2019 comment has been addressed satisfactorily.*

#### **Township Comment #4 - March 25, 2019**

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 – June 20, 2019**

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 – September 11, 2019**

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.

### **CRH Response – November 7, 2019**

CRH suggests that the Township install "no parking signs on Darby Road at CRH's expense. CRH also commits to cover the cost for paid OPP officers to monitor and ticket trucks in the event the No Stopping signs are not being adhered to. CRH continues to commit to communicate the hours of operation to its customers and truck drivers to prevent trucks from arriving prior to 5 am.

As discussed on September 12, 2019, during peak hours at the existing pit, there have been 20 trucks (40 truck trips) per hour and subject to approval of the extension, this will now be the maximum trips in any given hour.

### ***Burnside Response***

*Burnside's September 11, 2019 review comment has been partially addressed. Additional information has been provided in the TIS, however further clarification is required (see TIS comments below). The CRH response matrix notes that "No Stopping" signs will be installed on Darby Road, together with OPP enforcement, if required. In addition, CRH has confirmed that communication will be made to drivers/clients to prevent arrivals outside of the operating hours of the pit. We have assumed the OPP enforcement of "No Stopping" would be paid for by CRH.*

*Burnside recommends that the TIS include the Documented CRH policy and procedures to prevent the arrivals and parking of trucks prior to 5 am. This should be made available should a complaint come to the Township so a documented follow up be provided.*

### **Township Comment #5 - March 25, 2019**

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 – June 20, 2019**

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 – September 11, 2019**

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.

#### **CRH Response – November 7, 2019**

No application has been submitted and there are no plans to submit such an application.

Although no application has been submitted, the Teedon Pit site plans will only permit a maximum of 15 trucks (30 trucks trips) per hour prior to 7:00 am and 20 trucks (40 truck trips) per hour during daytime hours. This is the maximum number of trucks that can exist on the site per hour regardless of the origin of trucks.

#### ***Burnside Response***

*CRH has confirmed that there are no plans to submit an application for a potential interconnection. The Township March 25, 2019 comment has been addressed satisfactorily.*

#### **Burnside Comment #1 – December 20, 2019**

*The traffic counts that were used for the traffic operational analysis (i.e., Level of Service, Left Turn Lane Warrant analysis) do not capture the traffic from the Pit Extension.*

*The peak hour counts on Darby Road do not show any heavy trucks during the peak hours analyzed. Considering that CRH has acknowledged that there have been 40 two-way truck trips during peak hours and that this will be the maximum in any given hour, a sensitivity analysis should be provided in the TIS to consider this maximum. This may impact the external road improvements required on both Darby Road and Highway 93.*

*We also note that the TIS proposes widenings along Darby Road and a recovery taper along Highway 93 to facilitate turning movements at the intersection of Darby Road / Highway 93.*

*Burnside recommends that:*

- *a sensitivity analysis be provided in the TIS to consider this maximum. This may impact the external road improvements required on both Darby Road and Highway 93;*
- *comments / approvals be provided from the Ministry of Transportation (MTO) for the TIS and proposed highway improvements;*
- *CRH enter into a Road Improvement Agreement for Darby Road with the Townships of Tiny and Tay, which would include but not be limited to detail design drawings and securities.*



## **Burnside Comment #2 – December 20, 2019**

*The TIS concludes that left turn lane warrants are not met on Highway 93, based on the low percentages of left turn movements at the intersection of Darby Road / Highway 93.*

*Burnside suggests that the analysis should be based on equivalent cars (i.e., factor of 2 for large trucks), together with a more realistic estimate of peak period turns that may be generated from the pit. Left turn lane warrants may be met under such conditions.*

*Burnside recommends that:*

- *The TIS include an analysis based on equivalent cars (i.e., factor of 2 for large trucks).*

We trust that you will find the above to be in order. Should you have any questions, please contact the undersigned.

Yours truly,

**R.J. Burnside & Associates Limited**



Henry Centen, P.Eng.  
Senior Transportation Engineer  
HC:sc

Other than by the addressee, copying or distribution of this document, in whole or in part, is not permitted without the express written consent of R.J. Burnside & Associates Limited.



CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

## Appendix 10

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

[www.crhcanada.com](http://www.crhcanada.com)

January 3, 2020

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

**Mr. Tim Leitch**  
**Township of Tiny**  
130 Balm Beach Road West  
Tiny, ON L0L 2J0

Dear Sirs:

**RE: Letter of Objection to a CRH Canada Group Inc. Application for a Category 3 Class A Licence under the Aggregate Resources Act - North 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**

---

During the Aggregate Resources Act notification and consultation period for CRH Canada Group Inc.'s ("CRH") proposed Teedon Pit Extension we received an objection letter from the Township of Tiny with comments on our application. In response to the comments raised regarding the application this letter is intended to:

- Provide an update on the application;
- Provide a list of unresolved issues;
- Detail attempts to resolve the issues;
- Provide recommendations in an effort to resolve outstanding concerns; and
- Provide you a 20 day response period in accordance with the provisions of the Aggregate Resources Act.

### **Application Process**

In 2011, Cedarhurst Quarries and Crushing Limited submitted an Aggregate Resources Act application to extend the existing Teedon Pit. The application was deemed complete by the Ministry of Natural Resources and Forestry on April 13, 2012. The application was for a Category 3 Class A Licence, pit above water. The proposed licensed area was 42.6 ha and the extraction area was 39.0 ha.

In 2012, the Township of Tiny commissioned peer reviews of the natural environment, noise, and water resources reports. As a result of that review



**CRH Canada Group Inc.**  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

revisions were made to the application and the extraction area was reduced from 39 ha to 30 ha.

Based on the revisions to the application in 2012, the Township's natural environment and noise peer reviewer comments were addressed. The Township's water resources peer reviewer also confirmed that an above water gravel pit which includes a requirement to maintain extraction 1.5 m above the water table will protect groundwater resources. The Township's peer reviewer requested additional monitoring wells to confirm the location of the water table.

In 2017, CRH acquired the Teedon Pit and proposed Teedon Pit Extension and assumed responsibility of the proposed application on behalf of Cedarhurst Quarries and Crushing Limited.

Dufferin Aggregates is a division of CRH. Dufferin Aggregates is a supplier of aggregates for the construction industry in Ontario. We operate more than 20 sites, including quarries, sand pits and distribution yards to supply crushed stone, sand and gravel, recycled concrete and recycled asphalt. We are proud to have supplied high quality aggregate for many infrastructure projects, as well as a variety of smaller projects for local landowners.

When CRH assumed responsibility of the application we commissioned updated technical reports and reviewed the application. As part of our review we agreed to install 7 additional monitoring wells in 2018 to better characterize the subsurface hydrogeological conditions and to allow additional monitoring of the water table. Currently there are a total of 11 wells that are monitored on the Teedon Pit and Extension properties.

Based on the updated technical reports the application was significantly reduced to address agency and public comments on the application. The license area was reduced to 15.3 ha and the extraction area reduced to 13.5 ha. This represents a 65 % reduction from the original 2011 application. See attached figure which illustrates the changes to the proposed application area.

On February 7, 2019 CRH commenced the formal agency and public notification period for the Aggregate Resources Act application to permit the Teedon Pit Extension. The final day to file objections was March 25, 2019. During that period there were 178 valid objections filed which included a return mailing address. This included objections from the Ministry of Natural Resources and Forestry and the Township of Tiny.

On August 15, 2019 CRH initiated a notification period to change the name of the applicant from Cedarhurst Quarries and Crushing Limited to CRH. This process



CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

concluded September 30, 2019. CRH received one (1) objection from a member of the public who is already an objector to the application.

### Status of Township of Tiny Comments & Review

Since the Township of Tiny provided comments on the proposed Teedon Pit Extension on March 25, 2019, there have been efforts by CRH to resolve the technical concerns raised by the Township and their Peer Review Team.

On June 20, 2019, CRH provided an initial response letter to the Township's comments, with a subsequent meeting held between the Township and CRH on September 12, 2019 to discuss outstanding concerns.

Following this meeting, additional peer review comments from the Township were provided to CRH on October 29, 2019. CRH provided further response to these comments in a November 7, 2019 letter and CRH anticipates that this submission appropriately addresses all outstanding technical comments from the Township.

Below is a complete summary of the comments raised by the Township, as well as the status of all outstanding issues as outlined in the November 7<sup>th</sup> submission:

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
<b>Hydrogeological</b>				
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.	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 Teedon Pit titled "Category 1 Permit-to-take-Water Renewal Application – Supporting Hydrologic and Hydrogeologic Study".  CRH maintains the position that the wash plant is unrelated to	Although the wash pond 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	The wash plant and pond are located on the existing pit and is governed by MECP. If MECP does not permit the renewal of the existing permit, CRH will still proceed with the extension application as proposed. At our September 12, 2019 meeting, the Township requested the borehole logs for all drill holes in the vicinity of the wash pond, cross section drawings and a memo from GHD summarizing the reasons that the washing operation will not adversely impact

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
		<p>the extension application. The wash plant and pond are located on the existing pit and is governed by MECP. If MECP does not permit the renewal of the existing permit, CRH will still proceed with the extension application as proposed. At our September 12, 2019 meeting, the Township requested the borehole logs for all drill holes in the vicinity of the wash pond, cross section drawings and a memo from GHD summarizing the reasons that the washing operation will not adversely impact wells. As requested, please see attached letters from GHD:</p> <ul style="list-style-type: none"> <li>Letter dated September 25, 2019 regarding Professional Opinion Regarding Neighboring Domestic Wells</li> <li>Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f</li> </ul>	<p>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 <a href="https://www.dufferinagregates.com/resource">https://www.dufferinagregates.com/resource</a> centre. 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 documents that addresses impacts of the wash pond.</p>	<p>wells. CRH submitted this requested information on October 4, 2019. Please see attached letters from GHD:</p> <ul style="list-style-type: none"> <li>Letter dated September 25, 2019 regarding Professional Opinion Regarding Neighboring Domestic Wells</li> <li>Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f</li> </ul>
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	Please refer to the GHD report mentioned above as it addresses the requested information.	The PTTW report does not include any information from the boreholes/monitoring wells drilled in 2018. Several of the boreholes/monitoring	The PTTW report is not part of the extension application. CRH has provided this requested information on October 4, 2019. Please see attached

	<b>Township Comment</b>	<b>CRH Response(s) June 20, 2019 &amp; September 12, 2019</b>	<b>Peer Review Responses</b>	<b>CRH Response November 7, 2019</b>
	<p>following additional information is required for Burnside to complete their peer review:</p> <ul style="list-style-type: none"> <li>• A table showing the dates that the manual water level data was collected and hydrographs showing the results for each well:</li> <li>• 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</li> <li>• A "regional" cross section that includes the reported depths of the wells reportedly impacted by previous operations at the quarry.</li> </ul>		<p>wells are in close proximity of the wash pond and would be helpful in confirming the presence of silt/clay aquitard that may be present.</p>	<p>letters from GHD:</p> <ul style="list-style-type: none"> <li>• Letter dated September 25, 2019 regarding Professional Opinion Regarding Neighboring Domestic Wells</li> <li>• Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f</li> </ul>
3 (a)	<p>Burnside recommends that:</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>	<p>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</p>	<p>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</p>	<p>The extension application is for a Category 3 Pit above the water table. Neighbour well complaints are unrelated to extraction above the water table. For information purposes CRH has provided the Township with all additional work done completed by CRH. In addition, CRH forwarded the MECP letters that concur with</p>





CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

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

[www.crhcanada.com](http://www.crhcanada.com)

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
		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.	deeper aquifer". GHD should use the water level and geologic information from all the wells on the existing 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."	the study's findings that well complaints are not caused by existing Teedon Pit operations. CRH has provided this information on October 4, 2019. Please see attached letters from GHD: <ul style="list-style-type: none"> <li>Letter dated September 25, 2019 regarding Professional Opinion Regarding Neighboring Domestic Wells</li> <li>Letter dated September 23, 2019 regarding Response to Hydrogeological Comments #1, #2, and #3f</li> </ul>
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.	Item resolved.	
3(c)	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	CRH commits to revise the Teedon Pit Extension site plans to include the additional following note:  "One year prior to extraction	Item resolved.	



**CRH Canada Group Inc.**  
 2300 Steeles Ave W, 4<sup>th</sup> floor  
 Concord, Ontario  
 L4K 5X6 Canada

T. 905-761-7100  
 F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

	<b>Township Comment</b>	<b>CRH Response(s) June 20, 2019 &amp; September 12, 2019</b>	<b>Peer Review Responses</b>	<b>CRH Response November 7, 2019</b>
	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.	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."	Item resolved.	
3(e)	Additional data be collected using AWLR's to confirm the water table elevation until the Teedon Pit Extension begins operations. Water	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	Item resolved.	



**CRH Canada Group Inc.**  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

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

[www.crhcanada.com](http://www.crhcanada.com)

	<b>Township Comment</b>	<b>CRH Response(s) June 20, 2019 &amp; September 12, 2019</b>	<b>Peer Review Responses</b>	<b>CRH Response November 7, 2019</b>
	level collection only began in June 2018 and may have missed peak spring water levels.	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 quality/quantity, then consideration should be given to the installation of a liner.	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".	The wash pond will be used to wash material from the proposed pit expansion and the comment above should be addressed.  The reference to the "comment above" should be addressed" is the same comment as shown in the left column.	No washing of aggregates is proposed on the extension property. Please refer to the response to Item 1.
<b>Traffic</b>				
4(a) )	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,	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.  Enclosed please find a copy of the traffic impact study prepared by C.F. Crozier & Associates Inc. dated		



CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
	<p>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.</p> <p>• 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.</p>	October 4, 2019.		
4(b)	A scenario with 15 trucks idling close to the entrance before 5:00 am will impact the functionality of	A scenario with 15 trucks idling close to the entrance before 5:00 am is a scenario that should not occur.	The anticipated TIS report should confirm the measures proposed to address the potential for off-site	CRH suggests the Township install "no parking" signs along Darby Road at CRH's expense. CRH also



**CRH Canada Group Inc.**  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

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

[www.crhcanada.com](http://www.crhcanada.com)

	<b>Township Comment</b>	<b>CRH Response(s) June 20, 2019 &amp; September 12, 2019</b>	<b>Peer Review Responses</b>	<b>CRH Response November 7, 2019</b>
	Darby Road in this area. This matter needs to be addressed.	<p>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.</p> <p>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.</p> <p>Enclosed please find the TIS and please note the following information - The Township has agreed to install No Stopping</p>	<p>queuing, as well as confirm whether off-site queuing has been observed under existing operations.</p> <p>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.</p>	<p>commits to cover the cost for paid OPP officers to monitor and ticket trucks in the event the No Stopping signs are not being adhered to. CRH continues to commit to communicate the hours of operation to its customers and truck drivers to prevent trucks from arriving prior to 5 am.</p> <p>As discussed at our meeting on September 12, 2019, during peak hours at the existing pit, there have been 20 trucks (40 truck trips) per hour and subject to approval of the extension, this will now be the maximum trips permitted in any given hour.</p>



CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
		<p>signs along Darby Road at CRH's expense. CRH also commits to cover the cost for paid OPP officers to monitor and ticket trucks in the event the No Stopping signs are not being adhered to. CRH also commits to communicate the hours of operation to its customers and truck drivers to prevent trucks from arriving prior to 5 am.</p> <p>As discussed at our meeting, during peak hours at the existing pit, there have been 20 trucks (40 truck trips) per hour and subject to approval of the extension, this will now be the maximum trips permitted in any given hour</p>		
4(c)	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.	<p>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</p>	The anticipated TIS report should confirm CRH's position with respect to the potential interconnection between 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	<p>No application has been submitted and there are no plans to submit such an application.</p> <p>Although no application has been submitted, the Teedon Pit site plans will only permit a maximum of 15 trucks (30 truck trips) per hour prior to 7:00 am and 20 trucks (40 truck trips) per hour during daytime hours. This is the maximum number of trucks that can exist on the site per hour regardless of the origin</p>





**CRH Canada Group Inc.**  
 2300 Steeles Ave W, 4<sup>th</sup> floor  
 Concord, Ontario  
 L4K 5X6 Canada

T. 905-761-7100  
 F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
		<p>the public would be circulated for comment.</p> <p>No application has been submitted and there are no plans to submit such an application.</p> <p>Although no application has been submitted, the Teedon Pit site plans will only permit a maximum of 15 trucks (30 truck trips) per hour prior to 7:00 am and 20 trucks (40 truck trips) per hour during daytime hours. This is the maximum number of trucks that can exist on the site per hour regardless of the origin of trucks.</p>		of trucks.
<b>Noise</b>				
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.	<p>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 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</p>	Item resolved.	



CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

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

[www.crhcanada.com](http://www.crhcanada.com)

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
		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) )	<p>The following additional information is required for Aeroustics to complete their peer review:</p> <ul style="list-style-type: none"><li>•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).</li></ul>	CRH confirms that this is feasible based on the planned loader sizes and required safety and labour laws.	Item resolved.	
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	Item resolved.	



**CRH Canada Group Inc.**  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

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

[www.crhcanada.com](http://www.crhcanada.com)

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
		are identified in Section 2.0 of the Acoustical Assessment Report.		
5(d)	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.	Please see attached memorandum from Theakston Environmental.	Item resolved.	
5(e)	Confirmation is required to be provided that the noise reduction due to foliage is reasonable for 12 months.	Please see attached memorandum from Theakston Environmental.	Item resolved.	
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.	Item resolved.	
<b>Site Operation</b>				
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	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	Item resolved.	



CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
	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."	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."		
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.  CRH commits to further revise the Teedon Pit Extension site plans to prohibit the storage of asphalt in the extension.	Item resolved.	
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 replace it with a tree	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.	Item resolved.	



CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
	planting plan.			
<b>Natural Environment</b>				
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.		Item resolved.
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	See attached memorandum from Goodban Ecological Consulting.	Item resolved.	

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
	<p>following types of SWH:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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</li> </ul>			





**CRH Canada Group Inc.**  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
	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."		Item resolved.  As requested CRH will change the "should" to "shall". The revised note will read:  "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."
12.	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	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.	Item resolved.	



CRH Canada Group Inc.  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

	Township Comment	CRH Response(s) June 20, 2019 & September 12, 2019	Peer Review Responses	CRH Response November 7, 2019
	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 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.	Tree Clearing Schematic Note #3 on the proposed Teedon Pit Extension Operations Plan indicates that "as extraction progresses north tree clearing shall occur as required to advance extraction and minimize the disturbed area". The Management Plan is focussed on the enhancement of trees that will remain and trees to be planted. Management plans for trees to be removed is not beneficial to the site.	Item resolved.	

## Water Resources

Unrelated to the Teedon Pit Extension, the Township still had outstanding technical comments related to CRH's application to renew an existing Permit to Take Water for washing aggregate at the existing Teedon Pit.

The technical comments related to CRH's application to renew the existing Permit to Take Water at the existing Teedon Pit is unrelated to the Teedon Pit Extension application. These applications relate to different properties and have different approval authorities.

The approval authority for the Permit to Take Water application under the Ontario Water Resources Act is the Ministry of Environment and Conservation Parks. Based on the status of the Teedon Pit Extension application, the approval



**CRH Canada Group Inc.**  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

authority for the Planning Act application is the Township of Tiny and Aggregate Resources Act application is the Ministry of Natural Resources and Forestry (MNRF). Both of which are before the Local Planning Appeal Tribunal.

The Permit to Take Water application has no bearing on the proposed Teedon Pit Extension. The Teedon Pit Extension is an above water gravel pit and no aggregate washing or pumping of water is proposed at this site.

CRH has an existing Permit to Take Water at the Teedon Pit to wash aggregate. CRH has applied to renew this permit. The permit renewal application is consistent with the existing approved Permit and does not increase any permitted water takings

Related to aggregate washing at the Teedon Pit concern has been raised that the washing operation has caused intermittent siltation in some residential 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.

To assess the specific concerns raised by five (5) landowners regarding the siltation of their wells CRH retained a licensed well contractor to assess the wells where landowner access was permitted and GHD completed additional technical analysis.

The Ministry of the Environment Conservation and Parks reviewed concerns from residents, including the report prepared by Wilf Ruland, and confirmed that the existing Teedon Pit did not cause intermittent siltation of surrounding wells.

The Ministry of Environment Conservation and Parks has attributed the domestic well quality issues to the shallow silty nature of the shallow aquifer where the well is located and / or poor well maintenance. There are several potential causes of silt in wells which include corrosion of the well casing, liner or screen causing holes; failure of the annular or casing seal; scaling of the well screen (iron bacteria); improper or lack of well maintenance; silt vs. scale from hard water (two separate issues); improper well design or construction (slot size might be too large and a sandpack might not be part of well construction); and insufficient well development after construction.



**CRH Canada Group Inc.**  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

T. 905-761-7100  
F. 905-761-7200  
[www.crhcanada.com](http://www.crhcanada.com)

## **Next Steps**

To date, the Planning Act applications to permit the proposed Teedon Pit Extension (Township of Tiny Official Plan and Zoning By-law amendment) have been referred to the Local Planning Appeal Tribunal for a hearing. CRH has asked the tribunal to delay scheduling the hearing to allow time for the Aggregate Resources Act process to conclude. To finalize this process, CRH is required to provide the Township this formal response and a 20 day objector response period which concludes on January 30, 2020. The 20 day timeline for responses has been established by regulation by the Ministry of Natural Resources and Forestry and includes 5 calendar days from the date of the mailing to allow the registered mail to be received. After this period concludes, CRH is required to provide the Ministry of Natural Resources and Forestry a final report documenting the Aggregate Resources Act public and agency consultation process.

If there are any remaining objections to the Aggregate Resources Act application after the objector response period, CRH will request that the Ministry of Natural Resources and Forestry refer the application to the Local Planning Appeal Tribunal for a hearing to resolve the relevant outstanding issues. Both the Planning Act and Aggregate Resources Act applications would be considered at the same hearing since they deal with similar subject matters. If you remain an objector to the Aggregate Resources Act application you will receive further notice to commence scheduling the Local Planning Appeal Tribunal hearing and to determine if you want to participate in the tribunal hearing.

## **Summary**

This letter is being sent so CRH can conclude the Aggregate Resources Act process and fulfill Section 4.3.3.1 of the Provincial Standards, under the Aggregate Resources Act. This section requires us to provide a response to objector comments and advise objectors that they have 20 days from receipt of this letter to respond (no later than January 30, 2020) to both the Ministry of Natural Resources and Forestry and the applicant at the following addresses with recommendations that may resolve the Township's objection. As noted in the enclosed form, these recommendations must be delivered personally or by registered mail to the below addresses within the above noted 20 day period or it will be deemed that you no longer have a valid objection.

**Ministry of Natural Resources and Forestry**  
2284 Nursery Road  
Midhurst, ON, L9X 1N8  
Attention: Robert Herbst

**CRH Canada Group Inc.**  
2300 Steeles Avenue West, 4th Floor  
Concord, ON L4K 5X6  
Attention: Jessica Ferri



**CRH Canada Group Inc.**  
2300 Steeles Ave W, 4<sup>th</sup> floor  
Concord, Ontario  
L4K 5X6 Canada

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

[www.crhcanada.com](http://www.crhcanada.com)

We hope that this information adequately address the comments received during the process.

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

Respectfully submitted,

A handwritten signature in purple ink, appearing to read "J Ferri".

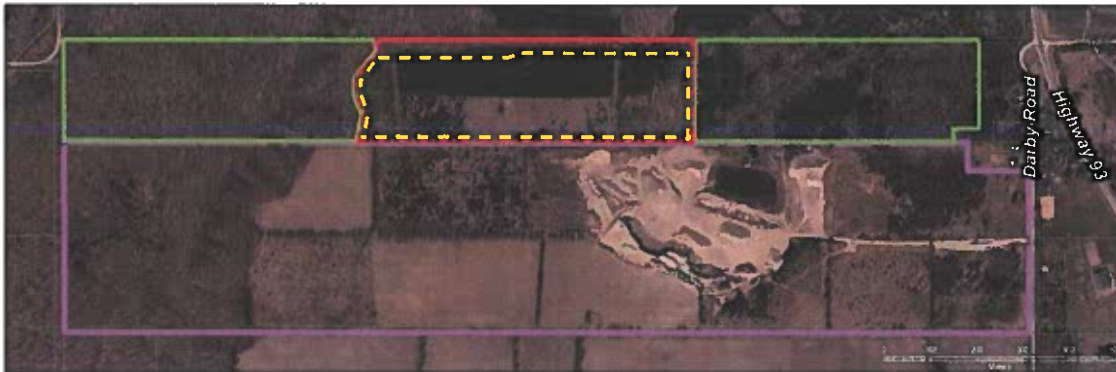
**Jessica Ferri, MCIP, RPP**  
**Manager, Policy and Planning**  
**CRH Canada Group Inc.**

**Cc: Robert Herbst- MNRF**  
**Brian Zeman- MHBC**

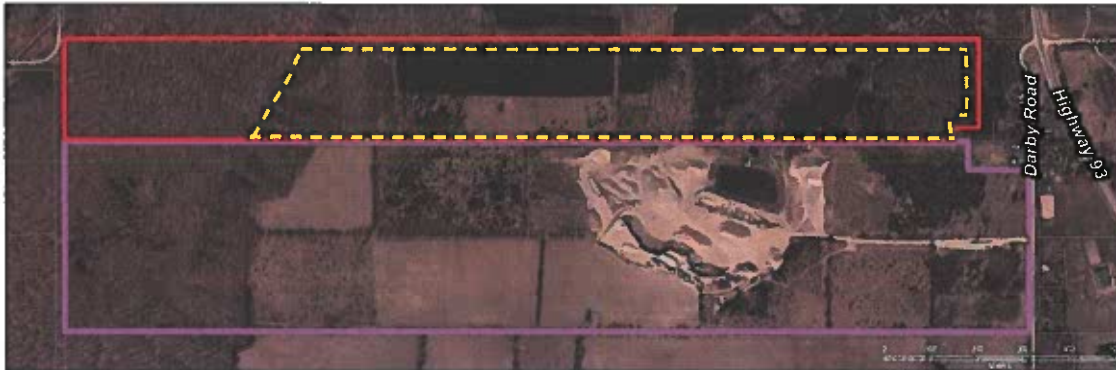
**Attachments: History of Application Figure**

# HISTORY OF APPLICATION

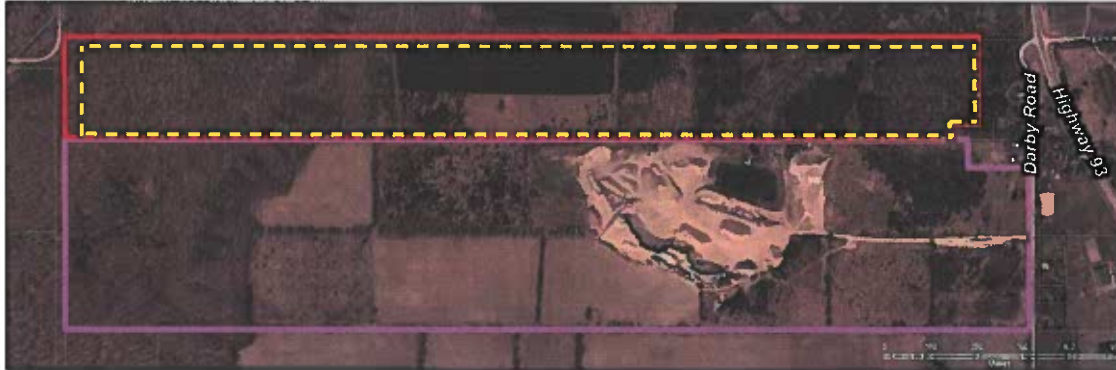
## 2018 CURRENT PROPOSAL



## 2013 REVISED PROPOSAL



## 2011 ORIGINAL PROPOSAL



### Legend

- EXISTING TEEDON PIT
- PROPOSED TEEDON PIT  
EXTENSION LICENSED BOUNDARY
- PROPOSED TEEDON PIT  
EXTENSION EXTRACTION AREA
- ADDITIONAL LANDS OWNED BY CRH  
- ENVIRONMENTAL BUFFER  
(NO EXTRACTION)

### SINCE 2011 APPLICATION:

**64% REDUCTION IN LICENSED AREA**  
**65% REDUCTION IN EXTRACTION AREA**

	LICENSED AREA	EXTRACTION AREA
<b>2011</b>	42.6 ha	39.0 ha
<b>2013</b>	42.6 ha	30.0 ha
<b>2018</b>	15.3 ha	13.5 ha



January 27, 2020

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

CRH Canada Group Inc.  
2300 Steeles Avenue West, 4<sup>th</sup> Floor  
Concord, ON L4K 5X6  
([Jessica.ferri@ca.crh.com](mailto:Jessica.ferri@ca.crh.com))

**RE: Aggregate Resource Act Application – Teedon Pit Extension  
Township of Tiny Updated Comments  
North Part of Lot 80, Concession 1 O.S. (Roll #1-029-00)**

---

Thank you for the opportunity to provide updated comments on the proposed Teedon Pit Extension Application under the *Aggregate Resources Act* (ARA).

The Township submitted an objection letter dated March 25, 2019, on the ARA application. The letter focused on comments in the following areas: hydrogeological, traffic, noise, site operation, and natural heritage.

The Township has been reviewing and commenting on all new submission material from the applicant in their effort to address the Township's objection comments. The Township has retained R. J. Burnside & Associates Limited (Burnside), Aercoustics Engineering Limited (Aercoustics), and the Severn Sound Environmental Association (SSEA) to peer review all technical material in support of the application.

Confidential Planning & Development Report PD-004-20 regarding the Teedon Pit Extension Application was presented to Council at the Committee of the Whole meeting dated January 13, 2020. This report provides the background relative to the Township's review of the application and the current status of comments. As a result of this report, Council Motion #000/20 was approved and reads:

**"WHEREAS** the Committee of the Whole considered Confidential Planning & Development Report PD-004-20 regarding the Teedon Pit Extension Application by CRH Canada Group Inc.;

**NOW THEREFORE BE IT RESOLVED THAT** staff be directed to provide comments to the Ministry of Natural Resources and Forestry as outlined in PD-004-20 prior to the January 30, 2020 comment deadline."

Planning & Development Report PD-004-20 is attached to this letter for your information.



Although the majority of the Township's comments have been addressed, the Township is not satisfied that all matters related to this proposal have been satisfactorily dealt with for the reasons stated in this letter.

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

### **HYDROGEOLOGICAL COMMENTS**

The Township's concerns regarding hydrogeology have been addressed. CRH has committed to making the following amendments to the proposed Teedon Pit Extension Site Plans:

- Revising Note #42 on the Operational Plan to reflect the Township's request to have AWLRs loggers installed and for the wells to be monitored monthly.
- Revising Note #42 and the monitoring well schematic on the Operational Plan to include the additional 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."

### **TRAFFIC COMMENTS**

Burnside has completed a peer review of the Traffic Impact Study (TIS) prepared by C.F. Crozier & Associates Inc, dated October 4, 2019.

- The CRH response notes that "No Stopping" signs will be installed on Darby Road, together with OPP enforcement, if required. In addition, CRH has confirmed that communication will be made to drivers/clients to prevent arrivals outside of the operating hours of the pit. We have assumed the OPP enforcement of "No Stopping" would be paid for by CRH. The Township requests that the TIS include the documented CRH policy and procedures to prevent the arrivals and parking of trucks prior to 5 am. This should be made available should a complaint come to the Township so a documented follow up be provided.
- The traffic counts that were used for the traffic operational analysis (i.e., Level of Service, Left Turn Lane Warrant analysis) do not capture the traffic from the Pit Extension. The peak hour counts on Darby Road do not show any heavy trucks during the peak hours analyzed. Considering that CRH has acknowledged that there have been 40 two-way truck trips during peak hours and that this will be the maximum in any given hour, a sensitivity analysis should be provided in the TIS to consider this maximum. This may impact the external road improvements required on both Darby Road and Highway 93. The TIS proposes widenings along Darby Road and a recovery taper along Highway 93 to facilitate turning movements at the intersection of Darby Road / Highway 93. The Township requests that:
  - a sensitivity analysis be provided in the TIS to consider this maximum. This may impact the external road improvements required on both Darby Road and Highway 93;
  - comments / approvals be provided from the Ministry of Transportation (MTO) for the TIS and proposed highway improvements;
  - CRH enter into a Road Improvement Agreement for Darby Road with the Townships of Tiny and Tay, which would include, but not be limited to, detail engineering design drawings and securities.

- The TIS concludes that left turn lane warrants are not met on Highway 93, based on the low percentages of left turn movements at the intersection of Darby Road / Highway 93. The analysis should be based on equivalent cars (i.e., factor of 2 for large trucks), together with a more realistic estimate of peak period turns that may be generated from the pit. Left turn lane warrants may be met under such conditions. The Township requests that the TIS include an analysis based on equivalent cars (i.e., factor of 2 for large trucks).

### **NOISE COMMENTS**

The Township's concerns regarding noise have been addressed. CRH has committed to making the following amendments to the proposed Teedon Pit Extension Site Plans:

- To include the equipment list and its associated maximum sound power 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.

In addition, CRH noted that they had submitted a minor site plan amendment to the 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. Confirmation from MNRF in this regard is requested by the Township to confirm that this has been completed.

### **SITE OPERATION**

The Township's concerns regarding site operations have been addressed. CRH has committed to making the following amendments to the proposed Teedon Pit Extension Site Plans:

- Revising the proposed Site Plans to prohibit the storage of asphalt in the extension.

### **NATURAL HERITAGE COMMENTS**

The Township's concerns regarding natural heritage have been addressed. CRH has committed to making the following amendments to the proposed Teedon Pit Extension Site Plans:

- Revising the Operational Plan to change the word "should" 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."
- Revising the Operational Plan to add a note to the Forest Edge Management Schematic: "The proposed forest edge management measures within forest edge management zones 'A' AND 'B' will commence within three (3) years of the license issuance."
- Revising the Operational Plan to add a general note regarding invasive species monitoring and control: "Prior to and during extraction, the extraction area and immediately adjacent lands owned by CRH Canada Group Inc. will be periodically monitored for the presence of invasive plant species. Control measures will be implemented as required under the direction of a qualified ecologist. Control measures may include cutting woody stems and treating stumps with herbicide, spot application of herbicide to control newly established invasive species and/or use of tarps/covers to kill off invasive groundcover species."

- Revising Note #4 on the Rehabilitation Plan to say "... or another appropriate species recommended by a qualified ecologist at the time of planting."
- Revising 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.

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](mailto:dluker@tiny.ca))  
Sue Walton, Director of Legislative Services/Clerk for the Township of Tiny ([swalton@tiny.ca](mailto:swalton@tiny.ca))  
David Parks, Director Planning, Development and Tourism ([David.Parks@simcoe.ca](mailto:David.Parks@simcoe.ca))  
Cecil Gratrix, R. J. Burnside & Associates ([Cecil.Gratrix@rjburnside.com](mailto:Cecil.Gratrix@rjburnside.com))  
Julie Cayley, Severn Sound Environmental Association ([JCayley@severnsound.ca](mailto:JCayley@severnsound.ca))  
Hon. Bruce Stanton, MP, North Simcoe ([bruce.stanton@parl.gc.ca](mailto:bruce.stanton@parl.gc.ca))  
Hon. Jill Dunlop, MPP, Simcoe North ([jill.dunlopco@pc.ola.org](mailto:jill.dunlopco@pc.ola.org))