

July 17, 2020

David Welwood
Principal Planner
Planning, Development & Legislative Services
Region of Waterloo
150 Frederick St, 8th floor
Kitchener, Ontario N2G 4J3

Dear Mr. Welwood,

RE: Analysis of MHBC Response to Peer Review of Shantz Station Pit

The peer review I completed of MHBC's AIA for Shantz Station Pit and dated February 5, 2020, included 29 recommendations that I listed to, in my opinion, improve the AIA and associated site plans. On May 4, 2020, MHBC responded to these recommendations and satisfied the majority of the items that I had listed. The 29 recommendations were listed in a table and appended to my letter dated June 19, 2020 (table appended). There were six outstanding issues that were partially addressed or not addressed to my satisfaction. However, after a productive call with Mr. Pierre Chauvin and Ms. Caitlin Port of MHBC, these outstanding issues were addressed in an email I received on June 30, 2020 as follows:

Recommendation 6: As discussed, there has been public consultation on the proposed pit application in the form of the Planning Act public meeting on September 10, 2019 and the ARA Public Meeting on July 26, 2019. In both occasions, no concerns were raised with respect to truck traffic conflicts with farm equipment on Shantz Station Road. I confirm my understanding that this confirmation satisfies your outstanding concerns.

Recommendation 7: It was agreed that Capital would install signage at the pit exit and provide truck operators with specific direction for when they encounter farm traffic (i.e. trucks to yield to farm traffic) etc.

Recommendation 14: It was agreed that the rehab. plan will be updated to indicate the % grade of the side slopes.

Recommendation 17: I confirm that we have reviewed the soil budget calculations with Dave Hodgson, DBH Soil Services, and he is in agreement with the calculations provided.

Recommendation 22: It was agreed that the Site Plan note will be revised as recommended to include the word 'subsoil'. We will also correct the discrepancy in site plan note 1.3.2 to reflect the 0.15 metre topsoil/subsoil for the side slope areas.

Recommendation 26: It was agreed that the Site Plan notes and cross-sections will be updated to clarify that the final rehabilitated pit floor will remain at least 1.5 metres above the water table.

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Please review the appended table to reference my comments regarding the above listed recommendations.

I am satisfied with the email response and believe that these changes have adequately addressed all of the recommendations that I had identified in the peer review.

Please contact me if you have any questions. I can be reached by phone at 905 935-2161 or by email at sean@colvilleconsultinginc.com.

Sincerely,

A handwritten signature in blue ink that reads "Sean Colville". The signature is written in a cursive style and is positioned above a horizontal line.

Sean Colville, B.Sc., P.Ag.
Colville Consulting Inc.

Summary of Recommendations		
Peer Review Recommendation	Satisfactorily Addressed	Comment/Recommendation
1. Recommendation	Yes	
2. Recommendation	Yes	
3. Recommendation	Yes	
4. Recommendation	Yes	All land uses and farm operations within one kilometer of the proposed aggregate operation appear to have been identified and described.
5. Recommendation	Yes	
6. Recommendation	Partially	MHBC does address the comment related to potential traffic-related impacts on farms located along Shantz Station Road and point out that Capital Paving will be constructing a traffic lane which will improve safety and minimize potential impact of truck traffic on farm operations. However, it does not appear that consultation with farm operations located along Shantz Station Road has occurred to determine whether there are any farm practices that would be sensitive to truck traffic. MHBC does state that any disruption of farm operations “would be short lived and mitigated to the extent possible”.
7. Recommendation	Partially	MHBC states that trucks will “follow all Traffic Safety Act requirements which will be sufficient to minimize and potential conflicts with farm-related traffic”, and that no additional mitigation measures are required. While this may be true, as a best practice, in my opinion, Capital Paving could provide truck operators with specific direction when encountering farm traffic to enhance road safety.
8. Recommendation	Yes	
9. Recommendation	Yes	

Peer Review Recommendation	Satisfactorily Addressed	Comment/Recommendation
11. Recommendation	Yes	
12. Recommendation	Yes	
13. Recommendation	Yes	The monitoring plan appears to be comprehensive and for the most part satisfies Draft AIA Guidance Document. However, I would include a statement along the lines of "in cases where it has been demonstrated that rehabilitation efforts have not successfully achieved pre-extraction conditions, recommendations will be provided in the monitoring report to ameliorate problem areas and/or restore pre-extraction soil quality."
14. Recommendation	No	With regard to Point #3, Pages 4 of 5 (Rehab Plan) shows the final contours. 5 of 5 (X-Sections) show the pre and post grades. Neither indicate the percent slope which according to the AIA will be between 2 and 5%. Inclusion of the percent slope and direction of slope would be helpful to the reviewer and would confirm the information contained in the AIA.
15. Recommendation	Yes	
16. Recommendation	Yes	
17. Recommendation	No	Does not appear to have confirmed with DBH Soil Services that sufficient information was provided in the soil survey report to calculate the volumes of soil resources. AIA relies on the original data provided by DBH Soil Services. This should be adequate, but confirmation would have provided me with a higher level of comfort.
18. Recommendation	Yes	
19. Recommendation	Yes	
20. Recommendation	Yes	
21. Recommendation	Yes	

Peer Review Recommendation	Satisfactorily Addressed	Comment/Recommendation
22. Recommendation	No	<p>I consider my recommendation to include Subsoil in the headings for Notes 1.2.2, 1.2.10 and 1.3.2 on Site Plan 3 of 5 as a minor request. Including the term Subsoil in the heading of Note 1.2.2 improves the clarity of what soil resources are to be stripped and stockpiled, and to be used for rehabilitation purposes. Subsoil is included in the subsequent note, so for clarity in my opinion it should be included in the note heading.</p> <p>Note 1.2.10 does not include Subsoil. By omitting Subsoil from this note would suggest that there will be no need for temporary stockpiling of subsoil?</p> <p>Again, including the term Subsoil in the heading of Note 1.3.2 would improve clarity, but it is referred to in the body of the note.</p> <p>A discrepancy was identified between Site Plan Notes and MHBC's response to the peer review. MHBC's response to Recommendation No. 10 on page 9 states "Note that for the 3:1 side slope areas and reforested side slope areas, which will not be rehabilitated for agricultural production, we have assumed that 0.15metres of topsoil/subsoil will be used."</p> <p>Site Plan Note 1.3.2 states "Side slope and pit floor areas will be covered with a minimum 250mm of topsoil/organic matter."</p>
23. Recommendation	Yes	
24. Recommendation	Yes	
25. Recommendation	Yes	

Peer Review Recommendation	Satisfactorily Addressed	Comment/Recommendation
26. Recommendation	No	<p>The agricultural capability of lands is often influenced by the groundwater table. Where the GWT is less than 50 from the surface, the lands are generally classified as CLI Class 3W (W indicating wetness limitations). The rehabilitation goal for Shantz Station Pit is to return the lands to a CLI Class 2 level of productivity. To achieve this, the height of the GWT should be more than 50 cm from the surface.</p> <p>MHBC points out that the depth of extraction is shown on the site plans under Note 1.2.16 on page 3 of 5 as well as on the cross-sections on page 5 of 5. This is true. However, neither the Note nor the cross-section clearly state or show the maximum depth of extraction relative to the GWT. The cross-section appears to show that the maximum extraction depth relative to the GWT is the same as the rehabilitated floor which at a minimum should be at least 0.75 m above the maximum depth of extraction. A simple qualifying statement in the notes is all that is required.</p>
27. Recommendation	Yes	
28. Recommendation	Yes	
29. Recommendation	Yes	