Proposed Burlington Quarry Expansion
JART COMMENT SUMMARY TABLE – Progressive and Final Rehabilitation Monitoring

Please accept the following as feedback from the Burlington Quarry Joint Agency Review Team (JART). Fully addressing each comment below will help expedite the potential for resolutions of the consolidated JART objections and individual agency objections. **Additional, new comments may be provided once a response has been prepared to the comments raised below and additional information provided**.

	JART Comments (February 2021)	Reference	Source of Comment	Applicant Response	JART Response
Report/Date: Progressive and Final Rehabilitation Monitoring Study, April 2020				**Author: MHBC**	
1.	Among other impacts, the proposed after-use should address whether the use generates vehicular traffic impacts, demands for additional water and wastewater services, and demands parking on site or nearby.	General	City of Burlington		
2.	Both the AIA and the Rehabilitation and Monitoring Study should assess the impact of the future use of the subject lands, once proposed extraction activities have been exhausted. How would compatibility with surrounding agricultural operations and normal farm practices be achieved? How would it impact MDS requirements?	General	City of Burlington		
3.	Reliance on ongoing dewatering should be further detailed with respect to the financial and operational impacts of such a plan, as well as costs and other potential risks in the event of system failure.	General	City of Burlington		
4.	While it is understood that it is a requirement to plan for after use of the subject lands, there is no interest by Burlington, at this time, to entertain discussions of future transference of ownership to a public authority.	General	City of Burlington		
5.	It is noted that a property not currently in agricultural use does not restrict it from such a use in the future, especially if it is located within a prime agricultural area.	General	Niagara Escarpment Commission		
6.	Whether or not the proposed after-uses are appropriate or possible will be predicated on the effectiveness of the progressive rehabilitation program. As the report notes once a quarry license is surrendered it must be re-designated through a subsequent NEPA application. It is at this time that the lands are assessed against the criteria for designation found under Part 1 of the NEP and an appropriate designation applied.	General	Niagara Escarpment Commission		
7.	The report notes that it is anticipated by the applicant that the lands resulting from the rehabilitation would achieve a mix of land uses designations (ENA, EPA, ERA). It is noted that a number of uses proposed within the after-use plan would not be permitted within these designations. While inclusion within NEPOSS and the submission of a Park Management Plan could be a path to address this, it is noted that NEPOSS lands must be within the public realm necessitating ownership of the lands by a public body. On-going discussions and assessment of the rehabilitation would be required throughout the foreseeable future; the after-uses will be reasonably considered through this work and once the license has been abandoned.	General	Niagara Escarpment Commission		
8.	Staff recommends the Progressive and Final Rehabilitation/Monitoring Study be revisited and updated once significant issues with the Level 1 and Level 2 Natural Environment Technical Report, Surface Water Assessment, Phase 1 and 2 Hydrogeological and Hydrological Study, other reports and After Use have been resolved.	General	Conservation Halton		
9.	Ecological monitoring should be undertaken to ensure that mitigation measures are working as proposed and to ensure that the quarry is not impacting the natural environment. As per the Region's Aggregate Resources Reference Manual, monitoring of the NHS should be included. Current monitoring of ecological features that may be impacted and mitigated for by the proposed development is not included. Recommend that this be incorporated into the report.	General	Conservation Halton		

10.	The report identifies Conservation Halton as a potential future landowner for the rehabilitated site. No formal discussion has taken place with Conservation Halton on future land ownership, and consideration for any future CH park land has no bearing on Conservation Halton's review role as a member of the JART team.	General	Conservation Halton		
11.	Recommended rehabilitation option RHB1, as shown on the Site Plan, requires perpetual pumping to maintain artificially low groundwater levels. An alternative (RHB2) has been proposed with resulting fish habitat impact concerns. No cost benefit analysis of impacts of the alternative rehabilitation scenario has been provided. The overall impact of the two rehabilitation scenarios on the subwatershed does not appear to have been considered in this analysis nor has the cumulative impact of the existing quarry been considered.	General	Norbert M. Woerns		
12.	No discussion on the need to integrate the rehabilitation and closure plan of the proposed expansion with that of the existing quarry. The Progressive and Final Rehabilitation Monitoring Study provides detailed information on the rehabilitation of the proposed extension. Information is lacking on the relationship of the proposed extensions to the approved rehabilitation plan for the existing quarry.	General	Norbert M. Woerns		
13.	There is no discussion of the maintenance requirements of the proposed land use for the preferred recommended rehabilitation option and the potential affects on surface water and groundwater quality.	General	Norbert M. Woerns		
14.	The rehabilitation plan does not explain how the West Extension area will be integrated with the existing quarry to achieve the preferred rehabilitation Scenario 1 (RHB1).	General	Norbert M. Woerns		
15.	The rehabilitation monitoring plan includes only monitoring of surface and ground water – no terrestrial monitoring of habitat or monitoring of wildlife to determine if the rehabilitated wildlife habitat features are functioning according to their specified purposes. Monitoring of biota should be included.	General	North-South Environmental Inc.		
16.	The Plan relies heavily on pumping of water from the quarry to replace any surface water deficits that may affect wetlands in the future. This is discussed in the Adaptive Management Plan comments.	General	North-South Environmental Inc.		
17.	Unclear on why the revision of the current rehabilitation plan is contingent on the approval of the extension- further details regarding this connection would be appreciated. Neither the current nor the proposed rehabilitation plans include any agricultural lands- please provide an explanation. For example, there are 162.0 hectares of grasslands proposed- why isn't this proposed for agricultural use? A number of the uses proposed in the after-use vision in Figures 6 to 9 are active, not passive, recreational uses (i.e. soccer/baseball fields, amphitheatre, volleyball courts, skate park etc.) and would not be considered compatible with the City's land use objectives for the Rural Area. For example, subsection 2.1.2 e) of the Burlington Official Plan, 1997: To allow only passive recreational uses that are compatible with rural land uses and the preservation of natural features and prime agricultural areas.	Page 4 Section 2.0. Overview of the Burlington Quarry Extension, Last 2 Paragraphs	City of Burlington		
18.	The report notes that the 4.0 hectares proposed for an off-site ecological enhancement plan are currently in active agricultural production. Are these lands within a prime agricultural area? If they are to be permanently taken out of production through the creation of habitat for endangered species, these lands should be included within the Agricultural Impact Assessment. Given the lack of proposed agricultural uses within the rehabilitation plan, why are there no proposed off-site agricultural enhancements to mitigate the adverse impacts to the Agricultural System?	Page 17 Section 4.0. Rehabilitation and After Use Policy Analysis, 2nd Bullet	City of Burlington		

19.	The rehabilitation plan notes that rehabilitation back to an agricultural use is not required based on the applicable policies, but does not speak to the following Niagara Escarpment Plan policy: in prime agricultural areas, where rehabilitation to the conditions set out in (g) and (h) above is not possible or feasible due to the depth of planned extraction or due to the presence of a substantial deposit of high quality mineral aggregate resources below the water table warranting extraction, agricultural rehabilitation in the remaining areas will be maximized as a first priority. The report only quotes the amount of prime agricultural land in production (12.7 hectares). The policy framework for the protection of prime agricultural lands is not contingent on whether the lands are in active production. In the absence of a refinement to the Provincial and Regional prime agricultural area mapping, the City continues to consider the golf course lands in the Western Extension as prime agricultural, regardless of their current use. Further, it has not been established that the golf course lands are beyond rehabilitation to an agricultural use in future. The full amount of prime agricultural lands being removed should also be referenced here, for complete context.	Page 17 Section 4.0. Rehabilitation and After Use Policy Analysis, 1st Paragraph (after bullets)	City of Burlington		
20.	This section indicates that during operations and until surrendering the licence, the licensee is required to operate in accordance with the Adaptive Management Plan, prepared by EarthFX Inc., Savanta and Tatham Engineering, dated April 2020, as may be amended from the time to time with approval from MNRF, in consultation with NEC, Region of Halton, City of Burlington and Conservation Halton. It is being noted that all JART comments related to natural environment, surface water, hydrologic, hydrogeologic and related assessments, and all respective comments concerning adaptive management plan (AMP) and site plan would need to be addressed first. As such, tables included in Section 6 of this report are considered preliminary/incomplete [refer to some comments/examples below].	Page 22 Section 5.1.6. Adaptive Management Plan	Halton Region		
21.	There is no discussion on how the applicant will provide 'confirmation that any long-term monitoring, pumping or mitigation will not result in a financial liability to the public.' This appears to be a requirement of surrendering the ARA Aggregate Licence. Given uncertainties of the effectiveness of proposed mitigation measures this should be demonstrated prior to approval of the licence application for quarry expansion.	Page 22 Section 5.2. Final Rehabilitation, Point 8	Norbert M. Woerns		
22.	The groundwater monitoring (Table 2) corresponds to Table 10: On-Site Groundwater Monitoring and Evaluation Program in Section 7.1 of the AMP (April 2020); both tables itemize proposed monitoring locations for the proposed South and West Extension areas. Any comments related to groundwater monitoring program in the assessment studies, AMP, and site plan should be addressed and applied accordingly to respective tables and text in this study.	Page 26 Section 6.1 Groundwater Monitoring Program, Table 2	Halton Region		
23.	Table 3 in this study correspond to Table 11 - Groundwater Quality Parameters in the AMP (April 2020). Any comments related to groundwater monitoring program in the assessment studies, AMP, and site plan should be addressed and applied accordingly to respective tables and text in this study.	Page 27 Section 6.1 Table 3	Halton Region		
24.	Information contained in Section 6.2 and Tables 4, 5, 6 of this study reflect information in Section 7.2 –Surface Water Monitoring Program and Tables 13, 14, 15 in the AMP (April 2020). Both sets of tables are essentially the same as the AMP's Tables 4, 5, 6 concerning the existing monitoring program. In designing monitoring programs for natural features, there should be close interlinkage between a receptor [specific wetland, stream, creek, spring, vernal pool, etc.] and designated surface water monitoring location. As such, any comments related to surface water monitoring program in the applicable assessment studies, AMP, and site plan should be addressed and applied accordingly to respective .text in this study.	Pages 27-28 Section 6.2 Surface Water Monitoring Program Tables 4, 5, 6	Halton Region		

	Ecological/biological-type monitoring is missing in the proposed monitoring plan and is considered a major gap. Any monitoring associated with natural environment should be linked to its features and functions and should include monitoring of efficacy of any potential/acceptable water management system designed to protect or provide support to key natural systems components as per relevant comments concerning the applicable assessment studies, AMP, and site plan.				
25.	It is also noted that Streamflow and Water Temperature Thresholds (AMP's Table 7) and Wetland Hydroperiod Thresholds (AMP's Table 8) are not included in AMP's Section 7 - Compliance Monitoring and Assessment or Section 6.2 of this study.	Pages 27-28 Section 6.2 Surface Water Monitoring Program Tables 4, 5, 6	Halton Region		
26.	Information contained in Section 6.3 in this study corresponds to Section 7.3 – Post-Extraction Monitoring Program in the AMP (April 2020). Any comments related to post-extraction monitoring program in the assessment studies, AMP, and site plan should be addressed and applied accordingly to respective text in this study.	Page 29 Section 6.3 Post-Extraction Monitoring Program Page 29	Halton Region		