



Peer Review – Prism Economics and Analysis' Economic Benefits Study – Upper's Quarry – Third Submission Comments

Joint Agency Review Team (City of Niagara Falls, Niagara Region, and Niagara Peninsula Conservation Authority)

May 2, 2024

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Sean Norman
Senior Planner
Planning and Development Services
Regional Municipality of Niagara
1815 Sir Isaac Brock Way
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Dear Sean Norman:

Re: Peer Review – Prism Economics' Economic Benefits Study – Upper's Quarry -)
Third Submission Comments

The following provides our observations and peer review with respect to the revised submission of the Prism Economics' Economic Benefits Study following the second round of comments from Watson & Associates Economists Ltd. (Watson) and the Joint Agency Review Team (JART). A revised report, undertaken by Prism Economics, has been submitted and is dated April 2024.

1. Introduction

The Joint Agency Review Team (JART) is currently undertaking a review of an application for a new aggregate quarry site in Niagara Falls (Upper's Quarry). The JART is comprised of representatives from the City of Niagara Falls, Niagara Region, and the Niagara Peninsula Conservation Authority (N.P.C.A.). As part of the submission package submitted by Walker Aggregates (the applicant), a financial impact analysis and an economic benefits analysis was to be completed. The JART retained Watson & Associates Economists Ltd. (Watson) to conduct a peer review of the submitted analysis. The following provides a summary of the comments and responses made and received throughout the process to date:

- First submission of Economic Benefits Study – October 2021
- Watson initial comment response letter - November 2022
- Second submission of Economic Benefits Study – February 2023
- Watson submission of second comment response letter – September 2023
- Third submission of Economic Benefits Study – April 2024

This letter provides Watson's comments on the second submission of the Economic Benefits Study. These comments have been provided in a summary table to indicate previous comments and responses by the applicant.



Third Submission Comments

No.	Comment	Applicant Response	Watson Response to Second Submission
1	Initial Comment In general, the report focusses on revenues the municipalities will receive (e.g. property taxes, TOARC fees, etc.). With respect to municipal expenditures, no identification of operating or capital costs have been included. Although this was not explicitly included in the terms of reference submitted as part of the pre-consultation process, consideration should be given to addressing this information to support the decision-making process. Consideration should be given to Regional Official Plan 14.D.5 which states “...Where an Amendment is proposed to the Regional Official Plan, the Region shall consider the following criteria in evaluating the Amendment...viii. The effect of the proposed change on the financial, health, safety, and economic sustainability of the Region...” as well as City of Niagara Falls Official Plan policy Part 4 Section 2.6 “When considering an amendment to the Official Plan, Council shall consider the following matters. ...2.6.7 The financial implications of the proposed development...” Second Submission Comments No additional information on impacts to operating costs were provided. The Planning Justification Report, Page 5 states the following: <i>For the past 17 years, Walker has acquired land in the City of Niagara Falls, Region of Niagara where high quality bedrock is situated for the purpose of establishing a new quarry. The proposed quarry is located just over 2 kms south of Walker's other quarry in the City of Niagara Falls which is nearing depletion.</i> <i>For this purpose, Walker is applying for amendments to the Niagara Region Official Plan, the City of Niagara Falls Official Plan, and the City of Niagara Falls Zoning By-law under the Planning Act to permit the mineral aggregate quarry operation on the “proposed quarry site” or “subject lands”...</i> <i>As stated, this quarry is being proposed as a continuation of existing operations. This was further reflected in the February 17, 2022 meeting with the applicant's consultants. As such, if there is no incremental employment arising from the site (i.e. the same number of employees at the other site work at this site), and no additional capital costs are required, then assuming no</i>	The project is not proposed as a continuation of existing operations but as a separate operation on a separate property and should be considered on its own merits. Walker owns numerous properties and operations in the Region with one operation not necessarily dependent on the other but are instead dependent on the finite underlying resource that they extract in that location. The nearest Walker property to the site is not depleted and is expected to continue operations for approximately five (5) years after this site, if approved, enters production. Since the project is a separate operation and not a continuation, it is not the case that no operating and capital costs will exist for the project. Rather, any potential costs that have been identified are not be imposed on the City and Region. If the proposed applications and licence are approved, Walker is committed to, for example: • all necessary capital upgrades required for the sole purpose of the quarry and to accommodate quarry traffic including upgrades at the intersection of Upper's Lane and Thorold Townline Road will be at Walker's expense. Walker is committed to enter into a legal agreement with the Region and/or City to cover the necessary costs associated with these capital upgrades. • any relocation of existing utilities and /or the introduction of new utilities required to serve or accommodate the quarry will be at the expense of Walker and Walker is committed to enter into any necessary agreements with utility providers. • all mitigation and monitoring requirements set out on the ARA Site Plans and are associated with the proposed quarry on and where agreed to by other landowners off site will be the responsibility of Walker. The policy test that triggered the JART's request for the Economic Study in the first place was in the City OP as follows: “Policy 7.4 Uses of land and the creation of lots not related to agricultural uses are not permitted in the Good General Agriculture Area. However, Council may consider a site specific amendment to this Plan to remove lands from the Good General Agriculture designation for non-agricultural use where it has been demonstrated that the use cannot be accommodated in a non-agricultural designation. In addition, the siting of a non-	If the project is to be reviewed as a standalone operation, then there will be additional employment on the site, as well as additional truck traffic. As such, and consistent with best practices in undertaking these analyses, additional operating costs should be identified. Best practices in preparing these analyses include a review of the municipalities' financial information returns and reviewing the operating costs (Schedule 40) on a per capita and per employee basis. The operating costs for all municipal services are then applied to the new employees to estimate the impact to the municipalities. This can be observed in publicly available studies undertaken for other quarry applications in Niagara Region and in Halton Region (as examples). Non-tax revenues are also reviewed and calculated in a similar manner. The Applicant Response notes “It is anticipated that the proposed quarry will provide economic benefits to the Region and City and will have a net positive impact on the Region and City's finances.” however, without the review of operating costs, this statement cannot be verified.



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	incremental operating costs would be a fair assumption. This should be noted in the analysis.	agricultural use shall be supported by qualified evidence demonstrating matters of need for the proposed use over the next 20 years, poor soil capability and suitability of the site for the proposed development, no disruption of natural areas, effects on adjacent properties and financial impact on the City. The requirements of the Provincial Policy Statement and the Regional Niagara Policy Plan also shall be satisfied. All non-agricultural uses satisfying these policy requirements shall be subject to site plan review to regulate the extent of the use and mitigate any impact the use may have on adjacent lands. This Policy generally applies to any amendment to the Official Plan that proposes non-agricultural uses in the Good General Agriculture Area. It is anticipated that the proposed quarry will provide economic benefits to the Region and City and will have a net positive impact on the Region and City's finances. The proposed quarry uses are not anticipated to have any impact on the Region's or City's capital programs.	
2	Initial Comments With respect to the anticipated tonnage of aggregate to be extracted, the study provides that a maximum of 1.8 million tonnes may be extracted annually, whereas on average the production may equate to 1.3 million tonnes annually. However, through initial conversations, it appears this site may act as a replacement of existing quarry operations at another site owned by the applicant. As a result, it should be identified if the amount to be extracted from the new site is in addition to existing amounts or will replace current levels of extraction. Second Submission Comments As noted in Watson's response to item number 1, the Planning Justification Report and the conversations with the applicant's consultants confirm this site is being proposed as a result of the depletion of the existing quarry. The purpose of the Economic Benefits Study is to assist the municipalities in determining the additional revenues and economic benefits received. As this appears to be a continuation of existing quarry activities at another site, this should be clarified with respect to the average extraction from the other site. That is, if the average extraction from this site is 1.3 million tonnes of aggregate and the previous site was 1.0 million tonnes of aggregate, then the incremental benefit to the municipalities is 0.3 million tonnes of aggregate. This figure could then be used as the incremental tonnage upon which the economic benefits would be assessed. Otherwise, if	The project is not proposed as a continuation of existing operations but as a separate operation on a separate property and should be considered on its own merits.	If the site is to be considered separately, see comments to other items.



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	the extraction level is the same, this should be noted to provide the municipalities with full information.		
3	Initial Comment With respect to the economic impacts, the employment and salary information appears to have been undertaken appropriately using the Statistics Canada input-output multipliers. However, the calculations should be provided in further detail to allow the JART to review the specifics. Second Submission Comments As noted in Watson's response to item number 1, the Planning Justification Report and the conversations with the applicant's consultants confirm this site is being proposed as a result of the depletion of the existing quarry. The purpose of the Economic Benefits Study is to assist the municipalities in determining the additional revenues and economic benefits received. As this appears to be a continuation of existing quarry activities at another site, this should be clarified with respect to the average extraction from the other site. That is, if the average extraction from this site is 1.3 million tonnes of aggregate and the previous site was 1.0 million tonnes of aggregate, then the incremental benefit to the municipalities is 0.3 million tonnes of aggregate. This figure could then be used as the incremental tonnage upon which the economic benefits would be assessed. Otherwise, if the extraction level is the same, this should be noted to provide the municipalities with full information.	The calculations rely on proprietary data and are not available for distribution.	The applicant notes that the information is proprietary, however, it is best practice in undertaking these types of analyses to include the assumptions that go into the modelling calculations. For example, the 2 other publicly available applications for quarry sites in the Region include estimated sales and purchases which were used to estimate the employment and wages.
4	Initial Comment Additionally, as the new proposed site is located on the border of Niagara Falls and Thorold, the study should include financial and economic benefits for the City of Thorold as well as the City of Niagara Falls and the Region as per the comments included in the pre-consultation agreement. Second Submission Comments The updated report includes economic benefits for the City of Thorold. As there is no property located in the City of Thorold, there is no change to assessment or tax revenue. As such, this comment has been addressed in the study. Note, however, that as per item 3 above, the detailed calculations were not provided.	The calculations rely on proprietary data and are not available for distribution.	This item has been addressed as noted. No further comments.
5	Initial Comment Aggregate Production - The report provides that the maximum annual extraction limit is 1.8 million tonnes of aggregate, with an anticipated average extraction amount of 1.3 million tonnes annually. However, through initial discussions with the applicant, it appears this new quarry site may be replacing the existing quarry site which is approximately 2.5 km away. As a result, the	As set out under Section 2.5.2.1 of the PPS, any type of supply/demand analysis is not a requirement for long-term resource supply notwithstanding the availability, designation or licensing for extraction of mineral aggregate resources and therefore, a net impact analysis would not be appropriate in this case and is, accordingly, beyond the Terms of Reference approved for the proposed applications.	As noted in previous items, if this project is to be reviewed separately, utilizing the 1.3 million tonnes annually would be reasonable. However, as noted in other items, incremental operating costs should be identified along with the net impact to the municipal tax budgets.



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	report should identify if the development of this quarry is a continuation of existing operations or would result in 1.3 million tonnes of aggregate in addition to the current site. Second Submission Comments As noted in Watson's response to item number 1, the Planning Justification Report and the conversations with the applicant's consultants confirm this site is being proposed as a direct result of the depletion of the existing quarry. The purpose of the Economic Benefits Study is to assist the municipalities in determining the additional revenues and economic benefits received. As this appears to be a continuation of existing quarry activities at another site, this should be clarified with respect to the average extraction from the other site. That is, if the average extraction from this site is 1.3 million tonnes of aggregate and the previous site was 1.0 million tonnes of aggregate, then the incremental benefit to the municipalities is 0.3 million tonnes of aggregate. This figure could then be used as the incremental tonnage upon which the economic benefits would be assessed. Otherwise, if the extraction level is the same, this should be noted to provide the municipalities with full information.	The project is a separate operation on a separate property. If approved, there will be at least approximately five (5) years where the two quarries will be operating at the same time. However, if the resource is depleted, there will be no revenue or benefit to the City and Region from the WBQ once it is depleted. If resource is not available close to market as proposed by the Upper's Quarry applications, it will alternatively need to be trucked in from a longer distance at a higher cost to offset higher haulage fees.	
6	Initial Comments Employment Impacts: a. The report notes the use of the Statistics Canada Input-Output multipliers. This approach is consistent with best practices in this field. However, the assumptions and approach to the calculations have not been identified. The anticipated construction price for the initial employment impacts has been identified at \$23 million, however, the assumption of ongoing revenues has not been provided. Further, if this site will be a replacement for the current site, the report should identify that these operations are a continuation of existing employment levels, with the addition of direct and indirect employment related to construction of the site. Second Submission Comments The report states the following: Economic multipliers calculated from Statistics Canada's Supply-Use tables were applied to revenue projections, to provide estimates for employment and wages. Those multipliers calculate Provincial impacts; a base analysis was further performed on the impact estimate at the 4-digit NAICS level in order to define the size of regional capture of those effects.	As discussed, the project is not proposed as a continuation of existing operations but as a separate operation on a separate property and should be considered on its own merits.	The applicant notes that the information is proprietary, however, it is best practice in undertaking these types of analyses to include the assumptions that go into the modelling calculations. For example, the 2 other publicly available applications for quarry sites in the Region include estimated sales and purchases which were used to estimate the employment and wages.



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	However, without the details of the calculations, it is not possible for JART to review the assumptions to confirm accuracy and/or provide comment. Additionally, with respect to Watson’s response to item number 1. The additional employment should be identified relative to the existing operations this quarry will replace.																																
7	Initial Comments Assessment Assumptions - In estimating the assessment to be generated from the expansion of the quarry, Prism notes that they used the Income Approach in estimating the assessment, however, no calculations have been provided. Detailed calculations on the Income Approach estimate should be provided to allow the JART to undertake a review of the calculations. Based on the report, the total assessed value is \$44.6 million. When applied to the total acres of the property (262.67 acres), the total assessed value per acre is \$170,000. This estimate appears exceedingly high. The following provides for a comparison of quarries in various areas of Southern Ontario: <table><tr><th>Municipality</th><th>Address</th><th>Total Assessed Value</th><th>Total Acres</th><th>Assessed Value per Acre</th></tr><tr><td>Niagara Falls</td><td>2841 Garner Road</td><td>4,161,000</td><td>406.77</td><td>10,229</td></tr><tr><td>Port Colborne</td><td>Concession Road 2</td><td>1,204,000</td><td>180.83</td><td>6,658</td></tr><tr><td>Lincoln</td><td>3614 Victoria Ave</td><td>2,548,000</td><td>250.66</td><td>10,165</td></tr><tr><td>Hamilton</td><td>834 Brock Road</td><td>6,061,000</td><td>666.35</td><td>9,096</td></tr><tr><td>Burlington</td><td>1775 King Road</td><td>1,652,000</td><td>111.16</td><td>14,861</td></tr></table> Source: MPAC PropertyLine Database As noted in the above sample of quarry properties, the assessed values per acre range from a low of \$6,658 to a high of \$14,861. Therefore the assessed value of \$44,600,000 (or \$170,000 per acre) is significantly higher. Rather than taking the Income Approach, in Watson’s opinion, it would be more appropriate to undertake a survey of assessed values of quarries. Further, it is most appropriate to review the assessed value of quarry properties in the Region, rather than quarries in other regions. As part of the Assessment Act, section 44 (3) (b) notes that land valuation will have reference to the value of similar lands in the vicinity and make adjustments to maintain equity with these lands. As a result, a survey of quarry properties in the Region should be undertaken in estimating the assessed value. Note that if the assessed value per acre was based on the 2841 Garner Road property (currently owned by the applicant), then the total assessed value would be approximately \$1.1 million. Additionally, MPAC provides assessment adjustments to residential properties abutting and within 1km of quarries. The proposed quarry may reduce assessed values of residential	Municipality	Address	Total Assessed Value	Total Acres	Assessed Value per Acre	Niagara Falls	2841 Garner Road	4,161,000	406.77	10,229	Port Colborne	Concession Road 2	1,204,000	180.83	6,658	Lincoln	3614 Victoria Ave	2,548,000	250.66	10,165	Hamilton	834 Brock Road	6,061,000	666.35	9,096	Burlington	1775 King Road	1,652,000	111.16	14,861	No incremental operating or capital costs have been identified for this project that will be borne by the City and Region to include in the analysis.	This item is in reference to the assessment and tax revenue, not incremental operating or capital costs. However, this was addressed in item 8. No further comments.
Municipality	Address	Total Assessed Value	Total Acres	Assessed Value per Acre																													
Niagara Falls	2841 Garner Road	4,161,000	406.77	10,229																													
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	properties in the area, thus reducing tax revenues. This should be included in the analysis. Finally, the loss of existing assessment and tax revenue should be included in the report. Second Submission Comments The revised report states that the Industrial land value is estimated based on an average of comparable sites in Southern Ontario. This value is \$11,088 per acre. There is no listing of the applicable sites used to determine this value. However, it is noted that this amount is within the range that Watson provided in the initial response. Adjustments to residential properties related to proximity to the quarry site have been addressed. The loss of existing assessment and tax revenue has not been identified.										
8	Initial Comments Tax Class Assumptions - The analysis assumes that the proposed quarry will be assessed as 100% industrial. This includes the licensed area, extraction area, and remaining areas. In our experience and based on the regulations to the Assessment Act, the industrial assessment (IT) applies to the extraction area, residential assessment (RT) would generally apply to the remaining licensed area, and any remaining lands may be assessed as farmland (FT) and/or managed forests (TT). This is provided in the following diagram: Total Site Area Assumed FT / TT Licensed Area Assumed RT Extraction Area Assumed IT	Taxes from the baseline scenario (where the property is not developed) is relatively small. Using the same analytical approach (that is, keeping tax rates and property valuations contemporaneous with the existing assessment) has the values as the following: <table><tr><th>Recipient of Fee</th><th>Baseline Tax Amount</th></tr><tr><td>City of Niagara Falls</td><td>\$ 3,879</td></tr><tr><td>Niagara Region</td><td>\$ 4,808</td></tr><tr><td>Education</td><td>\$ 1,114</td></tr></table> These values are significantly less than the difference between the high and low-impact scenarios. As requested, enclosed is an updated Report providing the reduction for the existing property tax revenue generated from the properties listed in Figure 2 of the Planning Justification Report.	Recipient of Fee	Baseline Tax Amount	City of Niagara Falls	\$ 3,879	Niagara Region	\$ 4,808	Education	\$ 1,114	Comment addressed. No further comments.
Recipient of Fee	Baseline Tax Amount										
City of Niagara Falls	\$ 3,879										
Niagara Region	\$ 4,808										
Education	\$ 1,114										



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	We would note that this would be a fair assumption as the actual assessment class would depend on the use of the land as per the Assessment Act. For example, if the use is farming by a bona-fide registered tenant farmer then it might be FT otherwise, if farmed it could be RT at farmland assessment rates. The same would apply for the Managed Forest portions if the owner applies to the Ministry of Natural Resources and Forestry for the TT tax class consideration. The report only provides the total site area and does not identify the licensed area or extraction area. As a result of assuming industrial assessment only, the tax revenue has been overestimated since the tax rate for industrial properties is higher than that of residential and farm/managed forests. This should be recalculated to align with the Assessment Act. We would note that this would be a fair assumption as the actual assessment class would depend on the use of the land as per the Assessment Act. For example, use is farming by a bona-fide registered tenant farmer then it might be FT otherwise, if farmed it could be RT at farmland assessment rates. The same would apply for the Managed Forest portions if the owner applies to the Ministry of Natural Resources and Forestry for the TT tax class consideration. The report only provides the total site area and does not identify the licensed area or extraction area. As a result of assuming industrial assessment only, the tax revenue has been overestimated since the tax rate for industrial properties is higher than that of residential and farm/managed forests. This should be recalculated to align with the Assessment Act. Second Submission Comments Based on the figures in the Planning and Justification report, the overall calculation estimates appear to provide a reasonable range of tax revenue. There is no reduction for the existing property tax revenue generated from the properties listed in Figure 2 of the Planning and Justification Report. This should be provided based on the properties identified.		
9	Initial Comment Annual Aggregate Levy Fees - The report does not provide the details of the calculations for the aggregate licensing fee and is unclear. The aggregate licensing fee identified in the text is the 2020 rate and the percentage allocation to the City of Niagara Falls is incorrect. However, applying the correct percentages and 2022 rates, provides a similar result to that shown in Table 4 of the report.	No Comment	As noted in previous items, if the project is to be considered a standalone project, then the calculations provided are appropriate.



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	The Government of Ontario website provides the following breakdown of how the fees are allocated: • Aggregate Resources Trust – 3% • Local Municipality (City of Niagara Falls) – 61% • Upper-tier Municipality (Niagara Region) – 15% • Crown (Province of Ontario) – 21% Based on the assumption that there will be 1.3 million tonnes extracted annually, the revenues would be as follows (based on 2021 and 2022 rates): <table><tr><th>Aggregate Levy Calculations</th><th>Percentage Allocation</th><th>2021 Fee/tonne \$0.208</th><th>2022 Fee/tonne \$0.213</th></tr><tr><td>Aggregate Resources Trust</td><td>3%</td><td>\$8,112</td><td>\$8,112</td></tr><tr><td>Niagara Falls</td><td>61%</td><td>\$164,944</td><td>\$164,944</td></tr><tr><td>Niagara Region</td><td>15%</td><td>\$40,560</td><td>\$40,560</td></tr><tr><td>Ontario</td><td>21%</td><td>\$56,784</td><td>\$56,784</td></tr><tr><td>Total</td><td></td><td>\$270,400</td><td>\$270,400</td></tr></table> Further, as the report is unclear if the extraction amounts from this site will be in addition to, or a continuation of, aggregate tonnages currently extracted, it is unclear if this revenue is in addition to the current revenue received or a continuation of revenues already received. This should be clarified in the report. Second Submission Comment Due to rounding, these numbers are slightly different than those calculated with 1.3 million tonnes of aggregate. These rounded numbers are reasonable estimates. As noted in item 1, the analysis should note that this is a replacement of existing revenues and not additional incremental revenue as compared to current revenues received.	Aggregate Levy Calculations	Percentage Allocation	2021 Fee/tonne \$0.208	2022 Fee/tonne \$0.213	Aggregate Resources Trust	3%	\$8,112	\$8,112	Niagara Falls	61%	\$164,944	\$164,944	Niagara Region	15%	\$40,560	\$40,560	Ontario	21%	\$56,784	\$56,784	Total		\$270,400	\$270,400		
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10	Initial Comments City Staff request confirmation if the property assessment are adjusted by MPAC in proximity to a quarry, and if so, the impact on property taxation. Second Submission Comments As noted above, this has been addressed as the buffer ensures no residential properties are abutting the quarry property.	No Comment	Item addressed																								



2. Summary of Third Submission Review

There are two main items that should be addressed before finalizing the Economic Benefits Study. These have been noted in the table above for JART's consideration and are summarized as follows:

- The applicant believes the site should be analysed as a standalone project, and not a continuation of existing operations. As such, additional analysis is required to review the additional operating costs and non-tax revenues from the additional direct employment. This is a best practice in undertaking these analyses.
- The applicant states that the information utilized in estimating the employment and income tax revenue impacts is proprietary, however, in the 2 other publicly available applications for quarry sites, full information was provided, and the calculations were shown in the reports. It is a best practice to show the calculations to allow for a review of the analysis to be undertaken.

Yours very truly,

WATSON & ASSOCIATES ECONOMISTS LTD.

Daryl Abbs
Managing Partner