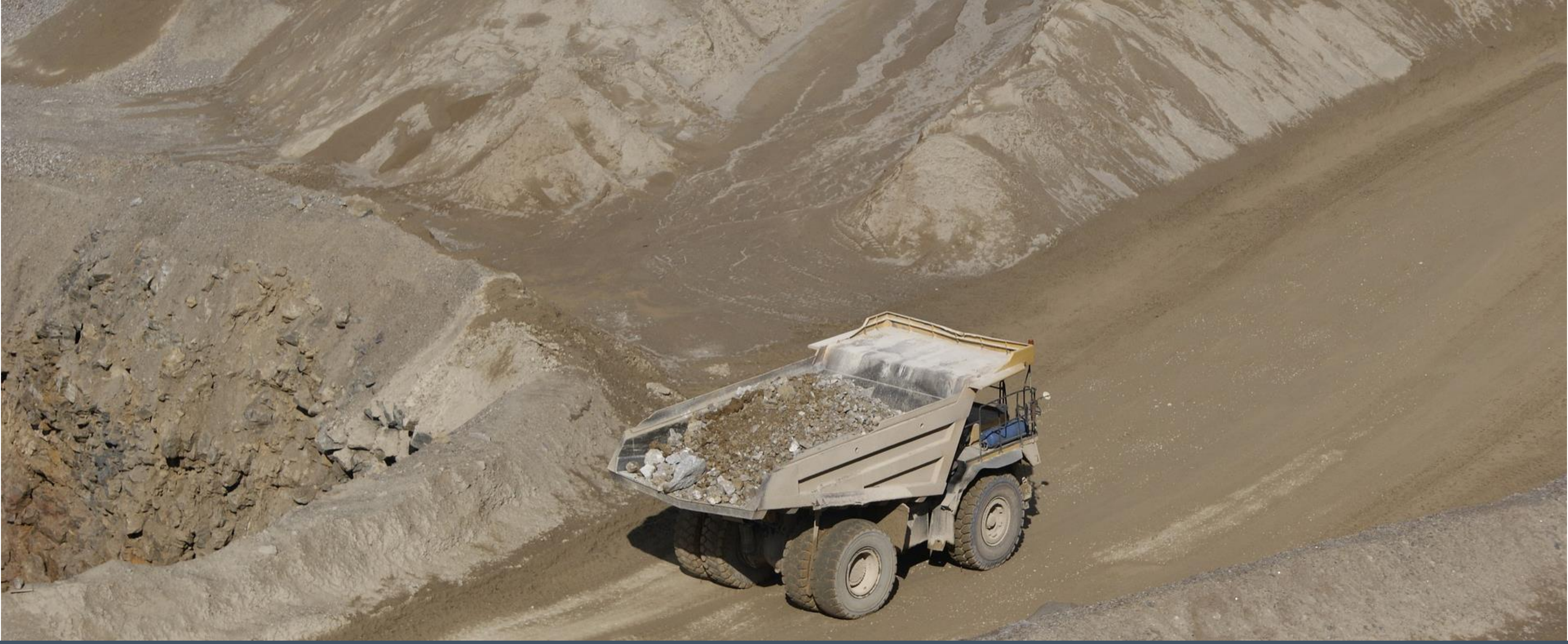

Peer Review – Financial Impact Study – Nelson Quarry Expansion

Joint Agency Review Team (City of Burlington, Regional Municipality of Halton, Niagara Escarpment Commission, and Conservation Halton)

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February 8, 2021

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Joe Nethery
Manager, Community Planning
Planning Services, Legislative & Planning Services
Halton Region
1151 Bronte Road
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Dear Mr. Nethery:

Re: Peer Review – Financial Impact Study for the Nelson Quarry Expansion

The following provides our preliminary observations and peer review with respect to the financial impact analysis included in the May 2020 submission package. This review will be updated further upon completion of peer reviews by consultants with respect to other disciplines (e.g. hydrogeological, transportation/traffic, etc.). These subsequent peer reviews may identify additional items that should be considered in the final financial impact analysis.

1. Introduction

The Joint Agency Review Team (JART) is currently undertaking a review of an application for expansion of the Nelson Quarry in the City of Burlington. The JART is comprised of representatives from the City of Burlington, Regional Municipality of Halton, the Niagara Escarpment Commission, and Conservation Halton. As part of the submission package submitted by Nelson Aggregates Co. (Nelson), a financial impact analysis was to be completed. The JART retained Watson & Associates Economists Ltd. (Watson) to conduct a peer review of the financial impact analysis. The following provides Watson's peer review discussion and detailed analysis (provided in Appendix A) with respect to the submission entitled; "Financial Impact Study Proposed Burlington Quarry Extension, Nelson Aggregates Co." and dated April 2020.

2. Review of Submission

The following provides a discussion with respect to the financial impact study submitted by Nelson and identifies areas that were properly addressed as well as areas that require further analysis.

2.1 Introduction

In general, the financial impact study focusses on revenues the municipalities will receive (e.g. property taxes, TOARC fees, etc.) however, does not discuss the anticipated expenditures in any detail. Further, the financial impact study appears to be based on an economic impact analysis completed in 2008. As the economic impact study is 13 years old, it is suggested that newer data be utilized in this assessment.

2.2 Discussion by Section

The following provides a review and discussion of the information provided in the financial impact study organized by sections as they relate to the study.

2.2.1 Introduction

This section summarizes the development location, existing properties in the proposed extraction areas, tonnage of aggregate anticipated to be extracted each year, plans for the rehabilitation of the extensions, and a summary of items the financial impact study will address.

Watson Review

It is unclear if the average extraction amount of one million tonnes per year will be in addition to current extraction levels or replacing some portion of the existing extraction amounts. This should be clarified in the analysis.

2.2.2 Undertaking of Financial Commitments

This section identifies specific financial commitments for which Nelson agrees to take responsibility. These include two main cost components:

- A crossing upgrade on No. 2 Sideroad: This crossing upgrade is required for the trucks to access the Southern Extension from the main quarry. It is indicated that the cost to upgrade this crossing would be funded by Nelson along with the ongoing operating costs and maintenance of the crossing.
- Water Supply: It is noted that Nelson would be responsible for the cost of any replacement water supply if it has been impacted by the quarry. This section details the complaint process if there is an issue and the temporary solutions that would be employed until the local residents' well supply is restored.

<u>Watson Review</u>

With respect to the upgraded crossing on No. 2 Sideroad, a description of what work is expected to be undertaken along with the estimated costs should be identified in the analysis.

With respect to the water supply, it is unclear if there are potential impacts that should be considered. We would await the peer reviews being undertaken by the consulting team to determine if there are financial impacts that need to be addressed.

2.2.3 Road Crossings

Section 3.0 of the analysis identifies various examples of road crossings for aggregate quarries.

<u>Watson Review</u>

There are various crossing types identified here, so it is not clear which type will be constructed for the Nelson expansion.

2.2.4 Maintenance of Roads

Section 4.0 of the financial impact analysis notes that the trucks from the proposed extensions will utilize the existing entrance/exit and haul route. This section further states that no fees can be charged with respect to the additional costs due to the increased truck traffic.

Watson Review

It is unclear as to whether the anticipated extractions (one million tonnes per year) are in addition to the current level of extraction or if these extractions are replacing the current level of extractions. If the level of extraction is higher than the current level, this would impact the road base, traffic, etc. through higher truck volumes on the haul routes. We would await the peer reviews from the consulting team to advise on potential capital impacts.

2.2.5 Financial Considerations

This section identifies anticipated tax revenues, aggregate fees, employment estimates, and spin-offs to local businesses. Further, this section also notes that the existing quarry does not utilize most of the public services and infrastructure provided by the Region and the City.

Watson Review

- Tax Revenues: The anticipated tax revenues are provided on an annual basis however; they are based on 2008 information (as identified in the Altus report). These revenues should be updated based on more recent assessment values as well as the current tax rates. Moreover, as the quarry extensions will be on existing development land, the tax revenue lost should also be identified, providing for a net annual tax revenue realized.
- Assessment Adjustments: Historically, MPAC provides assessment adjustments to residential properties within 1km of quarries. The proposed quarry extensions may reduce assessed values of residential properties, thus reducing tax revenues. This should be included in the analysis.
- Aggregate Licence Fee: This appears to be based on 2019 rates. These rates were updated for 2021 from 19.8 cents/tonne to 20.8 cents/tonne. This revenue estimate should be updated using the most recent available data.
- Employment Estimates: In regard to their lands, the employment estimates are based on their observed number of employees however, it is unclear if these are in addition to existing employees or just a restatement of existing (i.e. due to a shift in extraction efforts to the extension from the existing quarry). Further, as the West extension will replace the existing Burlington Springs Golf Course, there would be some loss of employment. This could include anywhere from 10 to 20

full-time equivalent employees. Further, as the South extension replaces existing farmland, potential agricultural employment may be impacted. This information should be included in the analysis.

- Spin-off Employment: This assessment appears to be based on the 2008 analysis conducted by Altus Group. As this study is 13 years old, this information should be updated.
- Use of Services: The report states that the quarry does not utilize most municipal services. However, the quarry does receive benefit from the availability of other services such as police, fire, ambulance, etc. which, similar to many other businesses and residents, use these services as required. There would be some additional increase in operating costs that should be considered and quantified.

2.3 Areas for Further Analysis

As noted above, there are a number of items that should be reviewed further, pending completion of the peer reviews by the consulting team. These include:

- Water Supply: It is unclear if there may be any potential impacts and what the financial implications would be. It is noted that the proximity to the community of Mount Nemo and the Mount Nemo Christian Nursing Home should be taken into consideration.
- Road Network: There are no impacts identified with respect to the increased truck traffic. This should be reviewed further upon the peer reviews being completed by the consulting team. If there is additional truck traffic due to increased extraction volumes, this may result in impacts to the roads along the haul route (either capacity or maintenance).
- Road Crossing: Although Nelson plans to incur the capital and maintenance costs of the road crossing, the specific works being undertaken have not been identified. These should be identified and quantified in the study.
- Impacts on Other Services: There was no estimation of the incremental operating costs for other services such as fire, police, ambulance, etc. These costs to the City and the Region should be estimated and included in the annual financial impact to the municipalities;

- Tax Revenue: The revenues were based on 2008 data and should be updated. Additionally, the loss of tax revenue for the existing uses should be estimated and netted from the tax revenue calculations.
- Overall Financial Impact: The financial impact study does not provide an overall financial impact to the municipalities. The study provides information for revenues, while neglecting to assess the incremental costs. A fulsome annual net financial impact to each municipality should be estimated.

In addition to the above, a review of the other peer review documents will need to be undertaken to assess any impacts to municipal services not identified in the financial impact study. This would include any impacts on roads, water, sanitary, or other municipal services and may include identification of additional capital and/or operating costs.

3. Aggregate Resource Manual Study Requirements

The Region's Aggregate Resource Manual identifies a number of studies that must be undertaken in completing an application submission. This includes a financial impact study. The following provides a list of the requirements identified in the manual (as presented on page 30 and 31 of the document) and our commentary with respect to how each item was addressed.

3.1 Purpose of the Financial Impact Study

1. To demonstrate that the proposal will have a minimal negative financial impact on the Region or taxpayers from the cost of providing services such as road maintenance, long term monitoring and replacement water supplies among other matters.

   Watson Review

   The financial impact analysis discusses the road needs with respect to the crossing on No. 2 sideroad, however, does not address the financial impact on the road network due to increased truck traffic. The study notes that fees cannot be charged for maintenance of the roads along haul routes but does not estimate the financial impact to the City and the Region. Any increases in extraction and truck traffic should be confirmed and incorporated into the analysis.

With respect to water supply, the report addresses the responsibility of providing temporary water supply solutions, however, it is unclear of broader potential impacts. Based on a review of the consultant team's submissions, this may need to be reviewed.

2. To demonstrate that extraction will occur in a manner that minimizes social, economic and environmental impacts.

   Watson Review

   The financial impact study does not appear to address the social or environmental impacts.

3. To demonstrate that there will be no public costs associated with the proposal throughout extraction, complete rehabilitation and any long term continuing mitigation and monitoring requirements, and to demonstrate that there will be adequate securities put in place, through an agreement or legislation, to ensure that the public and agencies will not be put at financial risk as a consequence of the approval.

   Watson Review

   In our opinion, the study does not demonstrate there will be no public cost associated with the application. Although there is mention of TOARC fees and other revenues paid to the municipalities, the study fails to address the increased expenditures that will be incurred.

4. To demonstrate to what degree the proposal will create direct and indirect financial benefits or costs to the municipalities affected.

   Watson Review

   As noted above, the study notes anticipated revenues but does not provide an analysis with respect to additional municipal costs.

5. To demonstrate what financial benefits to the community may be created as a consequence of the approval.

   Watson Review

   The study does provide that a number of indirect jobs may be created as well as that a large portion of the aggregate goes to businesses in the Halton Region.

3.2 Objectives of the Financial Impact Study

1. To quantify the amount of assessment to be generated as a consequence of the approval of the application (compared to loss of existing use i.e. farmland).

   Watson Review

   The analysis utilizes outdated information to provide assessment and tax revenue estimates. Further, there is no identification of the assessment and tax revenue lost due to the change in use from existing developed lands.

2. To identify what the economic impacts may be.

   Watson Review

   The report provides a discussion on the economic impacts; however, this is based on a 2008 analysis.

3. To estimate how much in license fees will be provided to the affected municipalities.

   Watson Review

   This information was included in the study; however, it appears the study includes outdated rates. These should be updated.

4. To determine what impacts the additional truck traffic will have on the cost of providing maintenance on affected roads.

    Watson Review

    Although the report mentions that Nelson would be responsible for the maintenance of the road crossing on No. 2 Sideroad, there is no commentary or analysis with respect to the impacts on the broader road network due to increased truck traffic.

5. To determine whether the proposal if approved will impact on the timing and/or need for road improvements to be paid for by the municipality.

    Watson Review

    The study does not indicate if there will be road improvements required, however, this should be reviewed in concert with the peer review being conducted on the traffic impact analysis.

6. To identify the financial benefits that may occur generally as a consequence of the approval (i.e. TOARC payments for road improvements).

    Watson Review

    The study generally speaks to the financial benefits appropriately (except as noted above).

7. To identify the potential cost of any long-term monitoring and mitigation on the site and the responsibility for that monitoring and the liability to any public authority or agency associated with that responsibility.

    Watson Review

    The study does not identify the cost of any long-term monitoring and does not identify the responsibility or liability associated with the responsibility.

4. Watson's Approach to Financial Impact Analysis

4.1 Methodology Overview

The purpose of the financial impact analysis is to provide the municipalities with the financial impact on their tax-supported and rate-supported budgets.

The approach utilized by Watson was devised by the firm and used for over 35 years to evaluate fiscal impact for more than three dozen landowners, various quarries and mining operations, the Ministry of Municipal Affairs, the Ontario Land Corporation, Canada Mortgage and Housing Corporation (C.M.H.C.), and various municipalities.

Essentially, the methodology involves an operating and capital cost analysis. The operating cost analysis involves calculating the Region's and City's tax and non-tax figures with the addition of the proposed development. Note that for the purposes of the analysis, we would use the most recent Financial Information Return (F.I.R.) data as it provides the most up to date data on actual spending and received revenues for each municipality. The data for employment would be based on the confirmed net employment increase resulting from the quarry expansions. For the evaluation, revenues and expenditures attributable to the development would be estimated on an incremental basis. That is, revenue and expenditure dollars are assigned to the project, only in accordance with anticipated variations it would create from the base year, upon completion. Sunk costs would be ignored and service levels are planned as remaining generally constant.

The capital cost analysis discusses the funding sources available to the municipalities. This would include costs for all works required due to the development and include annual lifecycle cost estimates attributable to the development. The financing methods and the resultant charges involved are variable, depending on ultimate servicing solutions, municipal financial policy decisions and detailed benefiting area calculations.

Our full methodology is provided in Appendix A to this letter report and includes a schematic of the process. We recommend that the financial impact study follow this, or a similar approach to provide each municipality with a net financial impact on their tax-supported and rate-supported budgets.

4.2 Components of the Analysis

Based on the information available, we can provide some initial (limited) observations, which are provided herein. Further analysis may be undertaken once additional information is provided by either the applicant or other consulting staff.

4.2.1 Proposed Development Area and Associated Employment

The proposed development area is well defined and could be used for the financial analysis using Watson's methodology, however, as noted in previous sections, more review is required for the employment estimates. As Watson's approach utilizes the net incremental impacts, the net incremental employment would be required (i.e. additional employment from quarry, less the existing employment at the golf course and related to the farmland).

4.2.2 Operating Revenues and Expenditures

The operating revenues and expenditures would be based on the most recent F.I.R. data for Burlington and Halton, however, as the analysis would be based on a per employee approach, the net employment would be required to conduct the operating analysis. This would identify incremental costs for other services such as fire, police, ambulance, etc. Additionally, it would identify additional operating revenues such as fees, fines, etc.

4.2.3 Assessment, Tax Revenue, and Aggregate Licence Fees

As noted above, the information utilized for the assessment and tax revenue is based on 2008 information. Further, the aggregate licence fees are based on the 2019 rates. The following provides a summary of our estimates, using 2018 tax rate information (based on the latest available F.I.R. data) and 2021 aggregate fees.

Assessment and Tax Revenue

Watson's approach to estimating the anticipated additional assessment is to calculate the existing quarry's assessed value on a per acre basis. This per acre assessed value would be the assumed value for the West and South extensions. Subsequently, the additional assessment would be multiplied by the industrial tax rates for each municipality to estimate the anticipated tax revenues. Finally, the tax revenue from the existing properties would be netted from the calculations to arrive at a net incremental tax revenue. These calculations are provided as follows:

Table 1
Incremental Assessment
City of Burlington

Exisitng Quarry Assessed Value	$9,029,000
Existing Quarry Land Area (Acres)	546.01
Existing Assessed Value per acre	**$16,536**
Acres of Extensions	193.5
New Assessment Generated	**$3,199,779**

Note: the above assessed value per acre includes buildings. The current assessed value per acre for land only is $14,700. It is unclear if the extensions will include additional facilities. If they do not, the $14,700 per acre should be utilized to estimate new assessment generated.

Table 2
Existing Tax Revenue
City of Burlington

Property Type	Existing Assessment 2018$	2018 Tax Rate	Estimated Tax Revenue 2018$
Residential	$3,429,000	0.3098%	$10,624
Farmland	$1,706,000	0.0620%	$1,057
Golf Course			
Commercial	$321,000	0.4513%	$1,449
Residential	$2,046,000	0.3098%	$6,339
Managed Forest	$160,000	0.0775%	$124
Existing Tax Revenue Lost			**$19,593**

Table 3
Incremental Tax Revenue
City of Burlington

Property Tax Classes		Municipal Property Tax Revenue (2018$)
1. Property Tax		
Non-residential Growth		
Industrial Assessment (IT)		*3,199,779*
Property Tax Revenue	**0.7312%**	23,396
Total Industrial Property Tax Revenue		23,396
Less Existing Property Tax Revenue		19,593
TOTAL PROPERTY TAX REVENUE		**3,803**

Note: the above tax revenue calculation assumes all new assessment will be industrial. The submission should identify the estimated portion of new assessment related to each respective tax class (e.g. industrial vs. residential, etc.).

Table 4
Existing Tax Revenue
Halton Region

Property Type	Existing Assessment 2018$	2018 Tax Rate	Estimated Tax Revenue 2018$
Residential	$3,429,000	0.2676%	$9,177
Farmland	$1,706,000	0.0535%	$913
Golf Course			
Commercial	$321,000	0.3898%	$1,251
Residential	$2,046,000	0.2676%	$5,475
Managed Forest	$160,000	0.0669%	$107
Existing Tax Revenue Lost			**$16,923**

Table 5
Incremental Tax Revenue
Halton Region

Property Tax Classes		Municipal Property Tax Revenue (2018$)
1. Property Tax		
Non-residential Growth		
Industrial Assessment (IT)		*3,199,779*
Property Tax Revenue	**0.6316%**	20,208
Total Industrial Property Tax Revenue		20,208
Less Existing Property Tax Revenue		16,923
TOTAL PROPERTY TAX REVENUE		**3,285**

Note: the above tax revenue calculation assumes all new assessment will be industrial. The submission should identify the estimated portion of new assessment related to each respective tax class (e.g. industrial vs. residential, etc.).

As provided above, the incremental annual tax revenue anticipated would be $3,803 for the City of Burlington and $3,285 for Halton Region.

Note: further analysis should be provided regarding MPAC assessment adjustments for residential properties within 1km of the proposed expansion. This may reduce the estimated tax revenue further.

Aggregate Licence Fees

As provided under the Aggregate Resources Act and its regulations, aggregate operators pay an annual fee based on the tonnes of aggregate extracted from the quarry. The 2021 rates for Aggregate Permits authorized to remove more than 20,000 tonnes annually is 20.8 cents/tonne or $724, whichever is greater. The fees paid are distributed as follows:

- 3% to the Aggregate Resources Trust for rehabilitation and research;
- 61% to the City of Burlington;
- 15% to the Region of Halton; and
- 21% to the Crown.

As the financial impact study submitted notes that the average tonnes to be extracted from the quarry will be 1,000,000, the following provides a summary of the aggregate resource fees paid to each of the entities:

Allocation of Revenues	Allocation %	Allocation 2021 $
Aggregate Resources Trust	3%	$6,240
City of Burlington	61%	$126,880
Region of Halton	15%	$31,200
Crown	21%	$43,680

4.2.4 Capital Analysis

As noted in the previous sections, no specific capital needs were identified for this proposed development except for a crossing, to be paid for by Nelson. Further analysis needs to be conducted upon review of the submissions from the consulting team. Any capital items that may be required due to the increased truck traffic or water supply issues should be costed. If the municipalities will be ultimately responsible for any infrastructure, this amount should be analysed for ongoing lifecycle costs.

Further, broader lifecycle costs should be identified based on the City and Region's Development Charge Background Studies. As these studies identify growth-related capital needs for both the City and the Region as a whole, the incremental growth identified for this development should be apportioned their share of the growth-related lifecycle costs. This should also be included in the analysis upon further review of the consulting team submissions.

4.2.5 Net Financial Impact

The items noted in subsections 4.2.1 to 4.2.4 would then be summarized into a net financial impact on the tax-supported budgets and rate-supported (water and wastewater) budgets for both the City and the Region. As further information is still required, the net impact cannot be calculated at this time.

5. Summary of Initial Peer Review

Overall, the financial impact study appears to be lacking in a number of areas. The underlying information used to estimate the municipal revenues should be updated to reflect more recent information. Further, the submission focusses on the revenues and does not provide sufficient analysis on the expenditures. As a result, the net financial impact to each municipality cannot be estimated.

We would appreciate the opportunity for further review of the consulting team submissions to ascertain if any further capital works or operating impacts should have been addressed in the submission as these items would alter the net financial impact analysis.

Yours very truly,

WATSON & ASSOCIATES ECONOMISTS LTD.

Gary Scandlan
Managing Partner and Director, Municipal Finance

Appendix A
Conceptual Overview of the Model

Appendix A: Conceptual Overview of the Model

The ability to model development patterns and related costs and revenues is a key step in supporting more informed and better decision-making in relation to the long-term financial planning of a municipality. Generally, this analysis starts with the forecast of the anticipated development. It then allows for the estimation of population and employment to be generated as a result of this development and the amount of operating and capital needs.

The capital needs forecast is analyzed further to determine lifecycle costs to be borne by the Municipality. Operating expenses and revenues are forecast for the period based on current per capita/per employee program costs, based on information from the Financial Information Return. The result of this assessment is the forecast of the incremental net tax levy which when compared to the anticipated growth provides the net fiscal impact on the tax-supported budget and the rate-supported budget.

Figure A-1 provides a high-level schematic overview of the fiscal impact methodology along with development implications, which are described as follows:

Blue Boxes – the upper blue box denotes the anticipated development to be analyzed within the Municipality. The lower blue box denotes the forecast provided for the residential and non-residential growth components.

Purple Boxes – denote the capital infrastructure needs to service the anticipated development and existing residents/businesses. Growth-related capital may be provided in the Municipality’s most recent Development Charge Background Study or may be identified through review of the draft plan by municipal staff. For non-growth capital needs, the Municipality should review the draft plan and consider any other capital needs that may be required. Lifecycle costs associated with the capital works required are estimated for both direct and indirect lifecycle costs.

Green Box – denotes the additional operating expenditures anticipated over time. These costs can be assessed on two different bases, operating costs related to infrastructure and/or operating costs related to population/employment. The former identifies the specific operating costs anticipated to be incurred as additional infrastructure (i.e. roads, pipes, etc.). The latter identifies program expenditures which are linked to population and employment growth and are not area specific (e.g. fire services, police services, etc.). These cost estimates are obtained from the Municipality's most recent Financial Information Return.

Orange Boxes – denote anticipated operating revenues commensurate with development. The upper box identifies the additional assessment (and hence property taxation) anticipated as residential, commercial and industrial building activity occurs over the forecast period. The assessment forecast is based on current assessed values of anticipated development types, which are applied to the growth forecast projections. Weighted market value assessment is determined based on the municipality's current tax classifications and tax ratios. This new assessment gives rise to additional property tax revenue. The lower box identifies non-tax revenues such as user fees, aggregate licence fees, permits, licences, etc., which are anticipated to grow in concert with population and employment growth.

Yellow Box – denotes the overall financial implications for property taxes (and water/wastewater rates) over the forecast period. The real property tax and water/wastewater budget impacts are determined by applying the incremental increase in anticipated revenues less the incremental increase in anticipated expenditures.

Figure A-1
Fiscal Impact Analysis Methodology