



Infrastructure Services

Prepared for	Council-in-Committee	Report No.	IS-21-2022
Agenda Date	June 20, 2022	File No.	360201

Subject	DOUGLASTOWN THIRD ACCESS PRE-DESIGN REVIEW
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Resolutions	
THAT	Council receives Wood PLC's Douglastown Third Access Report for information purposes; and further
THAT	Council directs staff to prepare a supplemental budget request for consideration in the 2023 General Levy Budget Deliberations for the Baker Road Widening Municipal Class Environmental Assessment study in the amount of \$120,000.

Relation to Council's 2018-2022 Corporate Strategic Plan	
Priority:	2: Sustainable Infrastructure for the Future
Strategic Objective:	Maintaining and Investing in sustainable infrastructure that services the entire community and builds a strong, vibrant and attractive community

List of Stakeholders	
	1) Mayor and Council of the Town of Fort Erie 2) Ratepayers of the Town of Fort Erie 3) Roadway users in the Town of Fort Erie 4) Wood Environment & Infrastructure Solutions, a Division of Wood Canada Limited

Prepared by:	Submitted by:	Approved by:
<i>Original Signed:</i>	<i>Original Signed:</i>	<i>Original Signed:</i>
Robert D. Judd, P.Eng. Municipal Engineer – Infrastructure Renewal	Kelly M. Walsh, P.Eng. Director, Infrastructure Services	Chris McQueen, MBA Chief Administrative Officer

Purpose of Report

The first purpose of this report is to advise Council of the results of the Douglastown Third Access Pre-Design Review.

The second purpose of this report is to request Council direction on submission of the Baker Road Widening Municipal Class Environmental Assessment for consideration in the 2023 Budget, in order to move forward with improving access to the Douglastown neighbourhood.

Analysis

Background

The Douglastown neighbourhood is currently accessed by two roads, Baker Road and Black Creek Road. A portion of Black Creek Road is a given road with a substandard road allowance width that limits the Town's ability to make improvements by widening the road cross section or adding sidewalks. Recent (2019) development related construction activity resulted in the closure of Baker Road for an extended period and this diverted all Douglastown traffic onto Black Creek Road.

Council directed staff to investigate options for a third access to Douglastown and Wood Environment & Infrastructure Solutions was retained to conduct the Douglastown Third Access Pre-Design Review.

Appendix '1' to this administrative report provides a map of the project area.

This engineering assignment included the following Project Objectives:

- Provide review and evaluation of options and alternatives that can provide a Third Access to the Douglastown neighbourhood. The evaluation considered development planning implications, environmental constraints and mitigation, approvals required, property acquisition, cost estimates, class environmental assessment requirements and other criteria identified by the Consultant.
- Document the review of Alternative Solutions and methods of implementing the Alternative Solutions that can provide a Third Access to the Douglastown neighbourhood.
- To provide a set of recommendations for the Town that identifies next steps, planning requirements and anticipated budget funding that will guide the Town in proceeding with subsequent steps to implement a third access or to provide additional and redundant road capacity.

Douglastown Third Access Pre-Design Review

The Review evaluated the following:

- 1) A road link to connect Netherby Road and Black Creek Road, between the Queen Elizabeth Way (QEW) Highway and Niagara Parkway
 - A. *Road within Phase 1 of Black Creek Signature Subdivision (new development north of Baker Road)*

- B. Road within Phase 2 of Black Creek Signature Subdivision*
- C. Road within vacant land (0-17508) adjacent the north side of Black Creek Signature Phase 2*
- D. Road within vacant land south of Baker Road*
 - 1D-1 New road between Faith Reformed Church and Black Creek Community Centre*
 - 1D-2 New road south of Faith Reformed Church*
 - 1D-3 New road through Spring Creek Estates*
- 2) A Crossing over Black Creek and connection to Switch Road
 - A. Extending Baker Road*
 - B. Opposite of Sewage Pump Station*
 - C. Extending Canfield Crescent*
 - D. Extending River Trail Crescent*
- 3) A Crossing over Black Creek and connect to Shagbark Lane
 - A. Extend Black Creek Road*
- 4) Provide more capacity on Baker Road
 - A. Widen Baker Road, between Netherby Road to Black Creek Road, to a four-lane cross section*
- 5) A Crossing over the Queen Elizabeth Way (QEW) Highway
 - A. Extend Black Creek Road, over the QEW, to connect with Townline Road.*

All access alternatives, except for 4A are based on the Town's typical two lane urban cross section with 20m wide road allowance.

All the options have property acquisition requirements. Some are within greenfield development such as Spring Creek Estates and Black Creek Signature Phase 2. Other options require acquisition of one or more properties with existing homes, along with private lands to create road allowances.

Appendix '2' to this administrative report provides a map showing the location of the access alternatives.

Appendix '3' to this administrative report provides details on the evaluation criteria. A maximum of 60 points is possible.

Option 4A - *Widen Baker Road, between Netherby Road to Black Creek Road, to a four-lane cross section*, received the highest score of 53 points. The next best scored options are those involving a new municipal road intersection on Netherby Road, between the QEW ramps and Baker Road. Options 1D-1, 1D-2, 1D-3 scored 44, 43 and 42 points respectively. Option 1D-3 has the new road connecting to Netherby Road within the Spring Creek Estates lands.

Staff discussions with Ministry of Transportation, Highway Corridor Management Section have found that the Ministry has designated Netherby Road from the QEW Highway ramp to Baker Road as "controlled-access highway" and as such, the Ministry

will not permit any new access, at any location, along Netherby Road from the highway ramp to Baker Road. This includes a right in/right out or an emergency access. Accordingly, staff see little value in pursuing Options 1D-1, 1D-2, and 1D-3.

The two options (1A and 1B) through the Black Creek Signature development each scored 39-points. The other remaining options had scores in the 27 to 32-point range.

Appendix '4' to this administrative report provides a summary of the evaluation results and estimated cost of each option.

The estimated construction cost for Option 4A is \$590,000 plus estimated design costs of \$100,000. Other options ranged in cost from \$380,000+ to \$18,500,000. The cost estimates do not include costs for property acquisition or for relocation of municipal services or utility works, as they are unknown at this time but may be in the \$100,000+ range for simple relocations.

Next Steps

Should Council wish to proceed with the next step in the process, a new project for the Baker Rd road widening to implement Option 4A should be considered in the Town's 2023 budget deliberations.

A road widening project to implement Option 4A would be subject to a Municipal Class Environmental Assessment (Class EA). Option 4A will require a 7.0 m widening to the Baker Rd road allowance. Appendix '5' to this administrative report provides a sketch of Option 4A with the widening is shown as 3.5m on each side of the road. In consideration of property requirements, it is recommended that the project follow a Schedule 'B' process. During the Class EA to determine the best way to implement the road widening, other alternatives such as widening only on the south side can be examined. On street parking can also be reviewed.

The two options (1A and 1B) through the Black Creek Signature development can also be further reviewed as part of this Class EA. It is recommended that the draft plan conditions be revised to include consideration of Option 1B and 1C (to implement Option 1B, some property will be required from lands adjacent to Black Creek Signature, in the vicinity of Black Creek Road). As Phase 1 of this development is already registered, Option 1A would be subject to a Class EA. A road through Phase 2 can be approved through Planning Act mechanisms. It should also be noted that Option 1B is subject to further archeological investigations, as a stage 3 study has been recommended for this site, which may preclude this option from being viable.

While not a separate road access, staff anticipate that the additional and redundant road capacity will allow any future construction work on Baker Road, after it has a four-lane cross section, to be staged such that one travel lane in each direction can be generally maintained without long term full road closure and shorter term one lane traffic with temporary traffic control can be generally maintained during the work.

Financial/Staffing Implications and Accessibility (AODA) Implications

Staff have considered accessibility impacts and expect that no new barriers will be created due to the proposed works.

To move forward, a project for the Baker Road road widening to implement Option 4A should be considered as a supplemental budget request in the Town's 2023 General Levy budget deliberations. The project would be for the engineering services to complete a Municipal Class Environmental Assessment (Class EA) for the road widening of Baker Road to provide a four-lane cross section. The estimated cost of the engineering assignment is \$120,000.

It is anticipated the EA will also consider new road connections to Black Creek Road from Black Signature Phase 1 and 2 as alternative solutions to provide additional and redundant road capacity for ingress/egress from the Douglastown area.

In terms of next steps, should the project be approved by Council as part of the 2023 Budget, a Request for Proposal (RFP) can be issued in 2023 to retain a consultant for the Class EA. Further, if the Baker Road widening is the preferred alternative, design could occur in 2024, with utility relocations occurring in later 2024 and construction in 2025.

Consultant procurement will be in accordance with the provisions of the Town of Fort Erie Purchasing Policy By-law No. 2010-002 and Council approval will be requested through future administrative report to award the consulting assignment.

Policies Affecting Proposal

By-law No. 124-2019 adopted Council's 2018-2022 Corporate Strategic Plan. Sustainable Infrastructure for the Future is a priority in the plan. This project supports the ongoing Sustainable Infrastructure Priority in addressing the Strategic Objective of "Maintaining and investing in sustainable infrastructure that serves the entire community and builds a strong, vibrant and attractive community".

Budget Policy By-law No. 127-09, as amended, governs preparation of the budget.

Comments from Relevant Departments/Community and Corporate Partners

All relevant departments were consulted and their comments have been incorporated into this report.

Communicating Results

To date, no Public Information Centre (PIC) or public consultation has been done for this project. As many of the Review alternatives have property acquisition requirements and high costs, the public consultation was deferred until the future Municipal Class Environmental Assessment and Planning Act activities are undertaken. The proposed Schedule "B" Class EA is mandated to have at least two points of public consultation.

Alternatives

Council has the option of not providing the recommended direction for future budget consideration for a Class EA and conclude the study with no further action towards a third access or redundant road capacity.

In lieu of widening Baker Road, Council has the option to direct staff to investigate improving Black Creek Road, between River Trail and the Niagara Parkway, to a modern two lane urban cross section with curb & gutter and sidewalk which may address Council's concerns about a proper alternate ingress/egress. This review was not part of the scope of work for Wood PLC. This will require property acquisition to establish a 20m wide road allowance but would address many concerns put forward by the community concerning road safety.

Conclusion

Retrofitting new roadways into existing neighbourhoods is always challenging, especially when acquisition of one or more properties with existing homes is required. Option 4A does not require outright purchase and demolition of an existing house or homes.

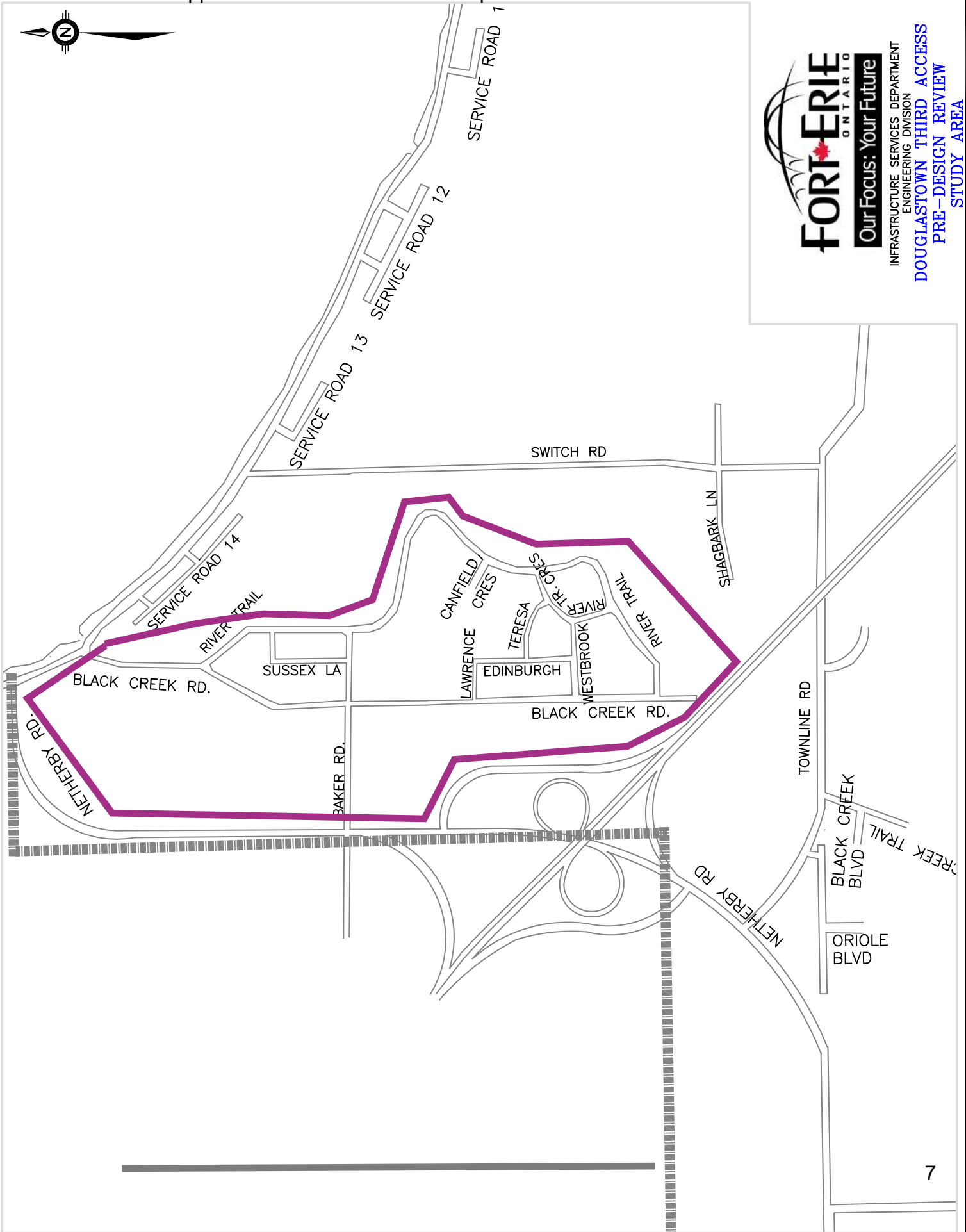
The recommended Class EA should provide further guidance on the most equitable way to implement a third access or to provide additional and redundant road capacity to the Douglastown neighbourhood.

Attachments

- Appendix '1' – Douglastown Third Access Pre-Design Review Project Area Map
- Appendix '2' – Douglastown Third Access Alternatives Map
- Appendix '3' – Douglastown Third Access Evaluation Criteria
- Appendix '4' – Douglastown Third Access Evaluation Summary and Estimated costs
- Appendix '5' – Sketch of Baker Road Widening and Typical Cross Section



INFRASTRUCTURE SERVICES DEPARTMENT
ENGINEERING DIVISION
DOUGLSTOWN THIRD ACCESS
PRE-DESIGN REVIEW
STUDY AREA



Douglastown Neighbourhood Third Access Options



Evaluation Criteria

To evaluate access options listed previously, an evaluation criteria was established to determine impacts to several key factors, presented in **Table 3-1** to evaluate the road access options:

Table 3-1: Evaluation Criteria for Alternative Alignments

Factor	Evaluation Criteria
Transportation	Effects on the existing roadway network Ability to meet geometric design guidelines Effects on travel time (i.e., increased or decreased travel time)
Social Environment	Effects on existing private properties Effects on or compatibility with future land use/development
Natural Environment	Effects on Environmental Protection Areas (Provincially Significant Wetlands) Effects on Environmental Protection Areas (Natural Hazards) Effects on Environmental Conservation Overlay (Wooded Areas) Effects on wildlife (including Species at Risk) Effects on fish and fish habitat (including Species at Risk)
Cultural Environment	Effects on lands identified to retain potential archaeological resources Effects on built heritage and cultural heritage landscapes
Engineering	Effects on existing and/or proposed infrastructure/utilities Complexity of construction, including staging and traffic disruption during construction
Economic Environment	Cost to acquire private properties (complete buyout or portion of properties) Cost to construct Cost to maintain

The options were assigned a score based on the scoring system presented in **Table 3-2**. Options represented by a full dark circle symbol were given the highest score where the evaluation criteria resulted in the lowest anticipated impacts, or highest benefits from the alternative. In cases where the option had the highest anticipated impact or lowest benefit according to the evaluation criteria, a lowest score represented by white circle with black outline was assigned. Options with moderate anticipated impacts and benefits received a moderate score, as represented by a half dark circle. Alternatives were also assigned scoring in a similar fashion based on cost criteria (i.e., highest cost = lowest benefits, and lowest cost = greatest benefits).

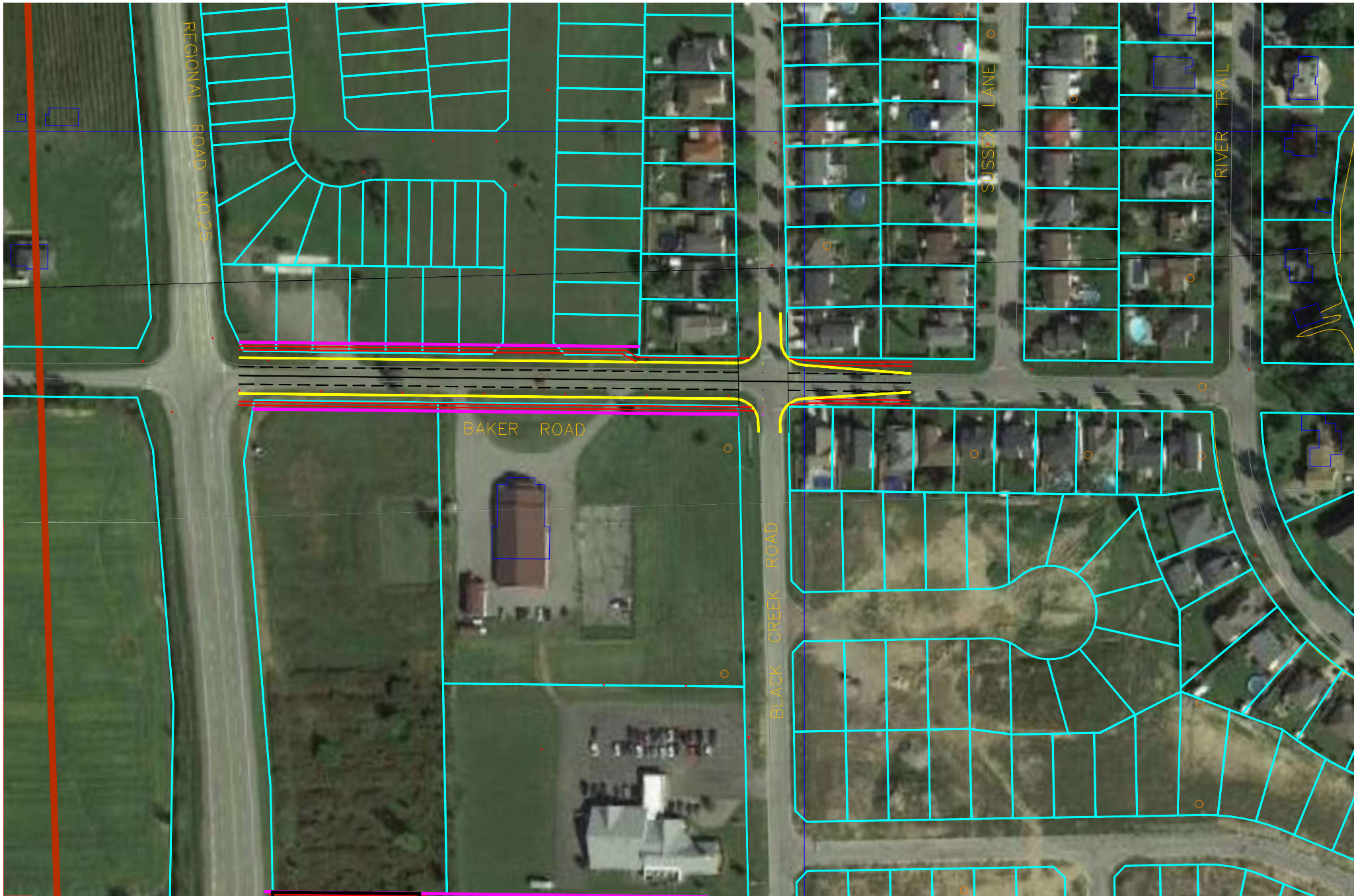
Table 3-2: Scoring System / Evaluation Scale

				
Highest negative impacts or lowest benefits	Higher negative impacts or lower benefits	Moderate negative impacts and benefits	Lower negative impacts or greater benefits	Lowest negative impacts or greatest benefits
Marked as '0'	Marked as '1'	Marked as '2'	Marked as '3'	Marked as '4'

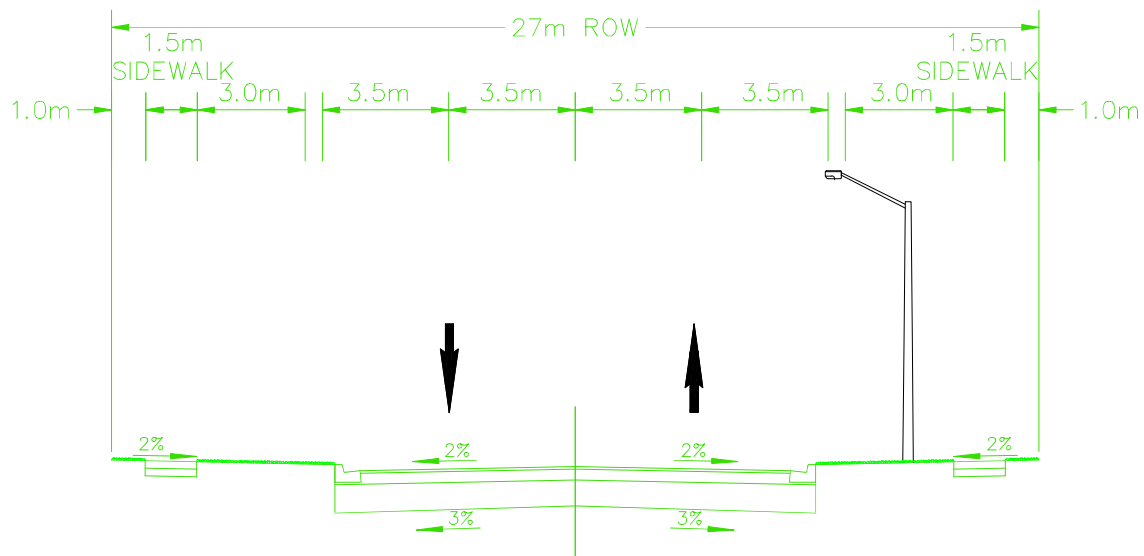
Douglastown Third Access Pre-Design Review Summary

Option	Description	Cost Estimate (in Millions)	Score	Rank
1A	New Road Connection to Black Creek Rd within Phase 1 of Black Creek Signature Subdivision	\$0.38 M	39	5
1B	New Road Connection to Black Creek Rd within Phase 2 of Black Creek Signature Subdivision	\$0.44 M	39	5
1C	New Road Connection between Netherby Road and Black Creek Rd within Vacant Land (0-17508) on North Side of Black Creek Signature Phase 2 Subdivision	\$0.61 M	28	12
1D-1	New Road Connection between Netherby Road and Black Creek Rd, between Faith Reformed Church and Black Creek Community Centre	\$0.46 M	44	2
1D-2	New Road Connection between Netherby Road and Black Creek Rd on South side of Faith Reformed Church	\$0.46 M	43	3
1D-3	New Road Connection between Netherby Road and Black Creek Rd through Spring Creek Estates	\$0.45 M	42	4
4A	Widen Baker Road, from Netherby Road to Black Creek Road, to a Four-lane Un-divided Cross Section	\$0.59 M	53	1
2A	Extending Baker Road from River Trail to Switch Road, with a New Bridge Crossing over Black Creek	\$3.985 M	32	7
2B	Extending New Road from River Trail to Switch Road, with a New Bridge Crossing over Black Creek at the Pumping Station	\$4.14 M	30	10
2C	Extending Canfield Crescent Easterly to Switch Road, with a New Bridge Crossing over Black Creek	\$3.86 M	31	8
2D	Extending River Trail Crescent Easterly to Switch Road, with a New Bridge Crossing over Black Creek	\$5.81 M	27	13
3A	Extend Black Creek Road in a Southeast Direction and Connect with Shagbark Lane, with a New Bridge Crossing over Black Creek	\$6.37 M	31	8
5A	New Crossing over the Queen Elizabeth Way A. Extend Black Creek Road, over the QEW, to connect with Townline Road	\$18.5 M	30	10

Note 1: Cost Estimates do not include Relocation of Underground Utilities (Water, Sewers, Telecommunications, Electrical) or Property Acquisition Costs



OPTION 4A



FOUR-LANE TYPICAL CROSS SECTION

FORT ERIE TRANSPORTATION SERVICES
DOUGLASTOWN THIRD ACCESS
Typical Cross Sections

CONSULTANT
DATE
SCALE
REF. No.