Appendix G

Evaluation of Alternatives

Appendix G - Municipal Servicing Alternative Evaluations

This appendix includes detailed comparative evaluations for Stormwater Management, Storm Sewer and Transportation Network Infrastructure. Below is a summary of evaluations as well as the corresponding reference figures. Green highlighted cells present those alternatives that are preferred for each specific evaluation criteria.

Infrastructure Solution	Table Number	Reference Figure
Stormwater Management Solutions – East Pelton and CR42 SPA	Table G-1	Figure 5-1 (SSMPS MP Report)
Stormwater Management for Lauzon Parkway/County Road 42	Table G-2	Figure A5-2A and Figure A5-2B (Figure Appendix)
Stormwater Management Configurations for Lauzon Parkway/County Road 42	Table G-3	Figure A5-2C (Figure Appendix)
Alternative Solutions for Storm Sewers	Table G-4	Figure 5-2 (SSMPS MP Report)
Collector Road Network Alternative Evaluation	Table G-5	
Problem/Opportunity 1: North -South Capacity in the West	Table G-6	
Problem/Opportunity 2: N-S Capacity in the East	Table G-7	
Problem/Opportunity 3: East-West Collector Alignment	Table G-8	
Problem/Opportunity 4: Additional East-West Connection to Walker Road	Table G-9	
Problem/Opportunity 5: Traffic Management on Baseline Road	Table G-10	

1.0 Stormwater Management Alternatives

1.1 Table G-1: Evaluation of Stormwater Management Solutions – East Pelton and CR42 SPA

Table G-1: Evaluation of Alternative Solutions for Stormwater Management

Criteria	Do Nothing (No Ponds)	Option 1a: Wet Ponds	Option 1b: Wet Ponds with LIDs	Option 2a: Dry Ponds with On-site Quality Control Measures	Option 2b: Dry Ponds with On-site Quality Control and LIDs
Manage Flood Risk					
To what extent can the alternative address surface flooding?	Poorly. Only current level of development may be protected.	Very Well. Will decrease surface flooding risks in downstream watercourses.	Same as Option 1a.	Same as Option 1a.	Same as Option 1a.
Preference	Least Preferred	Most Preferred	Most Preferred	Most Preferred	Most Preferred
Protect Quality of Life					
Is there potential property that would be required?	Acquisition of private property is not required.	Moderate land requirement.	Greater land requirement to accommodate ponds and LID measures.	Moderate land requirement.	Greater land requirement to accommodate ponds and LID measures.
What are the potential impacts to cultural heritage (archaeology and built heritage)?	Low. No additional ground disturbance will be required to maintain existing conditions.	High level of ground disturbance results in highest impact potential. Stage 2 archaeological assessments will be required. Low potential for impact to build heritage features.	Similar to Option 1a with greater construction footprint due to the implementation of LIDs.	High level of ground disturbance results in highest impact potential. Stage 2 archaeological assessments will be required. Underground quality control measures will be required and require additional disturbance areas. Low potential for impact to build heritage features.	Similar to Option 2a with greater construction footprint due to the implementation of LIDs.
What are the potential construction related impacts to the public/ community? (Noise, dust, vibration)	Low. No immediate impacts due to no immediate construction activities.	Moderate. Construction of pond facility will result in noise, vibration and dust impacts to adjacent properties.	Same as Option 1a.	Same as Option 1a.	Same as Option 1a.
What are the potential construction related	None.	Lowest.	Moderate.	Low.	Highest

Criteria	Do Nothing (No Ponds)	Option 1a: Wet Ponds	Option 1b: Wet Ponds with LIDs	Option 2a: Dry Ponds with On-site Quality Control Measures	Option 2b: Dry Ponds with On-site Quality Control and LIDs
impacts? (Municipal Capital Works impacts)		Ponds will be constructed prior to occupation. Protection of existing open drains will need to be implemented.	Ponds will be constructed prior to occupation. Low Impact Development will have some additional construction impacts due to additional time and project complexity and will require occasional refurbishment/reconstruction during the lifecycle.	Ponds will be constructed prior to occupation. On-site quality control measures will be required across the community, needed to replace wet pond quality control	Ponds will be constructed prior to occupation. On-site quality control measures will be required across the community, needed to replace wet pond quality control Low Impact Development will have some additional construction impacts due to additional time and project complexity and will require occasional refurbishment/reconstruction during the lifecycle.
Are there long term operation impacts on local residents and businesses?	Medium. Individual developers will need to provide their own SWM facilities which will require operational impacts directly on property owners. Does not have the benefit of maintaining on regional facilities as requires resources to maintain multiple localized facilities.	Lowest. Minimal maintenance of the SWM infrastructure including landscape and maintenance of water fowl mitigation features.	Moderately High. Minimal maintenance of the SWM infrastructure including landscape and maintenance of water fowl mitigation features. Low Impact Development controls across the community will require regular maintenance.	Moderately High. Minimal maintenance of dry ponds including landscaping and maintenance of the dry pond footprint. Additional maintenance for upstream quality control infrastructure such as oil and grit separators.	Highest. Minimal maintenance of dry ponds including landscaping and maintenance of the dry pond footprint. Additional maintenance for upstream quality control infrastructure such as oil and grit separators. Low Impact Development controls across the community will require regular maintenance.
Are there potential recreation opportunities?	No.	Yes. Trail corridors along pond facilities will support local opportunities.	Same as Option 1a	Same as Option 1a	Same as Option 1a
Preference	Most Preferred	More Preferred	Least Preferred	Less Preferred	Least Preferred
Be Cost Effective and Provide Value					

Criteria	Do Nothing (No Ponds)	Option 1a: Wet Ponds	Option 1b: Wet Ponds with LIDs	Option 2a: Dry Ponds with On-site Quality Control Measures	Option 2b: Dry Ponds with On-site Quality Control and LIDs
What is the relative cost of the alternative?	None. All costs will be the responsibility of private property owners.	Moderately Low. Centralized facilities are cost-effective to construct and maintain. Requires a number of pump stations.	High. Centralized facilities are cost-effective to construct and maintain. Requires a number of pump stations. Low Impact Development controls increase capital costs to the project.	Moderate High. Centralized facilities are cost-effective to construct and maintain. Requires a number of pump stations. Additional quality control measures required for wet ponds.	Highest. Centralized facilities are cost-effective to construct and maintain. Requires a number of pump stations. Additional quality control measures required for wet ponds. Low Impact Development controls increase capital costs to the project.
Are there opportunities to reduce overall cost and/or reduce costs to taxpayers?	Not Applicable. Do nothing alternative will not result in increased costs to taxpayers.	Yes. Centralized facilities are cost-effective to construct and maintain.	No. Centralized facilities are cost-effective to construct and maintain, however this option involves additional costs for LID controls. .	No. Centralized facilities are cost-effective to construct and maintain, however this option involves additional costs for extra quality controls needed to manage dry ponds.	No. Centralized facilities are cost-effective to construct and maintain, however this option involves additional costs for extra quality controls needed to manage dry ponds and LID controls.
What is the local economic benefit?	Low While development could commence sooner (with no infrastructure works having to be done in advance), SWM measures will need to be implemented on private property reducing the developable area.	Moderate. Stormwater management facilities will provide increase recreational opportunities, reduced noise pollution and increase adjacent property values.	Same as Option 1a.	Same as Option 1a.	Same as Option 1a.

Criteria	Do Nothing (No Ponds)	Option 1a: Wet Ponds	Option 1b: Wet Ponds with LIDs	Option 2a: Dry Ponds with On-site Quality Control Measures	Option 2b: Dry Ponds with On-site Quality Control and LIDs
What is the level of complexity for construction and operation? (Capital developments)	Low. No construction and as-is operation.	Lowest. Wet ponds are relatively the least complex to construct.	High. Use of LIDs poses additional complexities. Windsor Essex SWM guidelines noted challenges related to LID design and implementation including budgetary constraints to meet operation and maintenance demands, ownership and restrictive covenants on private properties, and space constraints in right of ways to achieve pre-treatment and to avoid utilities.	Moderate. Dry ponds are relatively the least complex to construct however additional upstream quality management systems can be complex for these large drainage areas.	Highest. Use of LIDs and upstream quality control poses additional complexities. Windsor Essex SWM guidelines note challenges for LIDs including budgetary constraints to meet operation and maintenance demands, ownership and restrictive covenants on private properties, and space constraints in right of ways to achieve pre-treatment and to avoid utilities.
What is the level of complexity for construction and operation? (Local developments)	High. Private landowners will be responsible for construction and operation of on-site quantity and quality control measures. Maintenance of on-site quality control measures may require inspection and oversight by the City to ensure proper operation and to receive credit in MECP. Due to existing conditions of drainage infrastructure, developments may require localized pumping stations to achieve outlet to existing drainage infrastructure (open drains).	Low. Quality and quantity stormwater management requirements are met and therefore facilities are not required as part of localized developments.	Similar to Option 1a, however, added complexity to implement LIDs, similar to Capital Development criteria above.	High. Reliance on implementing quality control measures upstream of the SWM ponds adds complexity. Quality control measures add cost, operation and maintenance demands, and space constraints.	Similar to Option 2a
Preference	Less Preferred	Most Preferred	Least Preferred	Less Preferred	Less Preferred

Criteria	Do Nothing (No Ponds)	Option 1a: Wet Ponds	Option 1b: Wet Ponds with LIDs	Option 2a: Dry Ponds with On-site Quality Control Measures	Option 2b: Dry Ponds with On-site Quality Control and LIDs
Protect the Natural Environment					
What are the environmental effects of the alternative?	Neutral. No anticipated change in environmental impact.	Positive. Meets water quality treatment requirements. Central pond corridor incorporates naturalized green infrastructure.	Positive. Exceeds water quality treatment requirements, as Low Impact Development controls provide redundant, additional treatment capacity. Central pond corridor incorporates naturalized green infrastructure.	Neutral. Dry ponds and on-site quality controls may not meet local water quality treatment requirements. Maintenance of on-site quality control measures may require inspection and oversight by the City to ensure proper operation. Central pond corridor incorporates naturalized green infrastructure.	Neutral. Dry ponds and other controls may not meet local water quality treatment requirements. Maintenance of on-site quality control measures may require inspection and oversight by the City to ensure proper operation and to receive credit in MECP Environmental Compliance Approval. Low Impact Development controls limits water balance impacts of urbanization. Central pond corridor incorporates naturalized green infrastructure.
Will there be impacts to species at risk (SAR)?	Lowest No anticipated change in impact.	Moderate. Some SAR found within study area, however mitigation strategies can be implemented to reduce impact.	Same as Option 1a.	Same as Option 1a.	Same as Option 1a.
Is there an opportunity to protect natural spaces?	No.	Yes. Central pond corridor can be integrated with adjacent natural spaces. Provides opportunity to implement a Natural Heritage System (NHS).	Same as Option 1a	Same as Option 1a	Same as Option 1a
Preference	More Preferred	Most Preferred	Most Preferred	Least Preferred	Least Preferred

Criteria	Do Nothing (No Ponds)	Option 1a: Wet Ponds	Option 1b: Wet Ponds with LIDs	Option 2a: Dry Ponds with On-site Quality Control Measures	Option 2b: Dry Ponds with On-site Quality Control and LIDs
Support the Creation of a Complete Community					
Does the alternative support a self-sufficient community?	No. Dependency on adjacent infrastructure for quantity control.	Yes. SWM services are provided in the local community. Quality and quantity control will be provided within the local community – no impacts upstream or downstream.	Same as Option 1a.	Same as Option 1a.	Same as Option 1a.
Preference	Least Preferred	Most Preferred	Most Preferred	Most Preferred	Most Preferred
Protect Health and Safety					
Will this alternative reduce risk associated with flooding?	No. No change to current conditions.	Yes. Flood control criteria will reduce risks associated with flooding in watercourses and drains.	Same as Option 1a.	Same as Option 1a.	Same as Option 1a.
Will this alternative improve safety?	No change to current conditions.	Safety considerations to mitigate waterfowl habitat required to mitigate risk associated with the proximity to the Windsor Airport. Wet ponds are more attractive to waterfowl.	Same as Option 1a.	Safety considerations to mitigate waterfowl habitat required to mitigate risk associated with the proximity to the Windsor Airport. Dry ponds are relatively less attractive to waterfowl.	Same as Option 2a.
Preference	Most Preferred	Less Preferred	Less Preferred	Less Preferred	Less Preferred

Criteria	Do Nothing (No Ponds)	Option 1a: Wet Ponds	Option 1b: Wet Ponds with LIDs	Option 2a: Dry Ponds with On-site Quality Control Measures	Option 2b: Dry Ponds with On-site Quality Control and LIDs
Align with Existing Infrastructure and Studies					
How compatible is the alternative with existing and surrounding infrastructure?	Not Applicable	Very compatible. The option is compatible with upstream and downstream drainage systems.	Same as Option 1a	Same as Option 1a	Same as Option 1a
Preference	Least Preferred	Most Preferred	Most Preferred	Most Preferred	Most Preferred
Build in Resiliency					
How does the infrastructure alternative address climate change?	Does not address climate change.	Adaptation: SWM facilities incorporate design safety factors to account for potential higher future rainfall intensities. Mitigation: Naturalized pond corridors promote carbon sequestration (e.g., approx. 0.26 tC/hectare/year for recreational open space).	Similar to Option 1a. Additional quality control and quantity control benefits from the additional LIDs.	Similar to Option 1a.	Similar to Option 1b.
Preference	Least Preferred	Less Preferred	Most Preferred	Less Preferred	Most Preferred
Build in Flexibility					
What is the potential for phasing the infrastructure alternative?	Low. No SWM plan will have negative impacts on downstream areas. This option will not include a comprehensive servicing plan (which would have provided a framework for all municipal servicing needs including other water, wastewater and transportation servicing needs). Phasing of development may increase in complexity and have limitations.	High. SWM facilities can be phased to accommodate each service area. The secondary plan areas have been subdivided into sub-drainage areas that each have an individual outlet to the existing drain network. Development upstream will not have impacts to the downstream system as phasing occurs.	Moderately High Location LIDs may be required upstream of the pond locations and therefore will need to be phased in along with upstream right-of-way and storm network implementation.	Moderate. Location of upstream quality control measures may be required upstream of the pond locations and therefore will need to be phased in along with upstream right-of-way and storm network implementation.	Low Location of upstream quality control measures LIDs may be required upstream of the pond locations and therefore will need to be phased in along with upstream right-of-way and storm network implementation.

Criteria	Do Nothing (No Ponds)	Option 1a: Wet Ponds	Option 1b: Wet Ponds with LIDs	Option 2a: Dry Ponds with On-site Quality Control Measures	Option 2b: Dry Ponds with On-site Quality Control and LIDs
How flexible and adaptable is the alternative to change in development patterns or storm design criteria?	Existing infrastructure is not flexible to change.	Less Flexible. Drainage catchment may be retrofitted with Low Impact Development controls in the future if required.	Most Flexibility. Low Impact Development controls in the catchment may be increased in capacity in the future if required.	Less Flexible. Drainage catchment may be retrofitted with Low Impact Development controls in the future if required.	Moderately Flexible. Dry ponds may be converted to wet ponds in areas where land is available (e.g., adjacent corridor). Low Impact Development controls in the catchment may be increased in capacity in the future if required.
Does the alternative allow us to accommodate future population and employment growth?	No. Lack of capacity within stormwater management facilities and existing floodplain area will negatively impact the possible future population and employment growth (impacting area available for development). Requirement for developments to have localized stormwater quantity and quality controls will impact the developable lands available thus reducing the achievable growth.	Yes. Future population and employment growth are accommodated by stormwater controls under this option.	Yes. Future population and employment growth are accommodated by stormwater controls under this option.	Yes. Additional quality control infrastructure may be required to accommodate future population and employment growth are accommodated by stormwater controls under this option.	Yes. Additional quality control infrastructure may be required to accommodate future population and employment growth are accommodated by stormwater controls under this option.
Preference	Least Preferred	Most Preferred	Most Preferred	Less Preferred	Less Preferred
Overall Preference					
Overall Preference	Less Preferred	Most Preferred Solution	More Preferred Solution	Less Preferred	Less Preferred

1.2 Table G-2: Evaluation of Alternative Solutions for Stormwater Management for Lauzon Parkway/County Road 42

Table G-2: Evaluation of Alternative Drainage Area Scenarios

Criteria	Do nothing: No Stormwater Management - Lauzon Parkway or Drainage Area North of CR42	Option A: Stormwater Management For the Lauzon Parkway and Drainage Area North of CR42	Option B: Stormwater Management For Drainage Areas North and South of CR42
Manage Flood Risk			
To what extent can the alternative address surface flooding?	Lowest flood protection. Additional runoff resulting from road and development would not meet minimum Regional and Provincial SWM requirements or support road improvements. Additional runoff would discharge to the Little River uncontrolled.	High flood protection. SWM Controls will reduce runoff to greater than pre-development conditions to meet regional and provincial SWM requirements. Additional runoff would be controlled prior to discharge to the Little River Drain. Runoff would be over-restricted beyond existing conditions to provide a greater level of service and meet existing SWM guidelines.	High flood protection. Same as Option A.
Preference	Least Preferred	Most Preferred	Most Preferred
Protect Quality of Life			
Is there potential private property that would be required?	No private property north of CR42 would be required for SWM needs.	Highest overall requirement of private property acquisition to accommodate SWM. In addition to road drainage, this option does not permit for the reduction of SWM corridors on private owned lands.	Moderate requirement of private property acquisition to accommodate SWM. Less private property requirements compared to Option A. This option permits for the reduction of SWM corridors on private owned lands, south of CR42. More privately-owned lands can be used for development.
What are the potential impacts to cultural heritage (archaeology and built heritage)?	Low. No additional ground disturbance will be required to maintain existing conditions.	High. Ground disturbance is required within areas identified as high potential and therefore Stage 2 archaeological assessments will be required in advance of any ground disturbance. Low potential for impact to build heritage features.	High. Same as Option A.
What are the potential construction related impacts to the public/ community? (Noise, dust, vibration)	Low. No immediate impacts due to construction activities.	High. Construction of SWM facilities will occur prior to development of lands. Sediment and erosion control will be required throughout construction and as required in advance of vegetation maturing. Construction of facilities outside of the municipal right-of-way will require minimal disruption to traffic.	High. Same as Option A.

Criteria	Do nothing: No Stormwater Management - Lauzon Parkway or Drainage Area North of CR42	Option A: Stormwater Management For the Lauzon Parkway and Drainage Area North of CR42	Option B: Stormwater Management For Drainage Areas North and South of CR42
What are the potential construction related impacts? (Municipal Capital Works impacts)	Low. SWM facilities will not be required in advance of the Lauzon Parkway and CR42 Road Improvements.	High SWM Facilities will be constructed in conjunction with the Lauzon Parkway and CR42 Road Improvements. SWM Facilities are required prior to support develop areas north of CR42 SWM facility is in closer proximity to the proposed development lands.	Highest SWM Facilities will be constructed in conjunction with the Lauzon Parkway and CR42 Road Improvements. SWM Facilities are required prior to developing areas north and south of CR42, therefore greater length of sewer including crossing CR42 will be required to service first phases of development.
Are there long term operational impacts on local residents and businesses?	Low.	Moderately High. Pond maintenance will be required including landscape and maintenance of waterfowl mitigation features. Regular inspection will be required.	Moderately High. Pond maintenance will be required including landscape and maintenance of waterfowl mitigation features. Regular inspection will be required.
Are there potential recreational opportunities?	Yes A continuous recreational trail network will be located within the SWM management corridors.	Yes, same as 'Do Nothing'.	Yes, same as 'Do Nothing'.
Preference	Most Preferred	Less Preferred	Less Preferred
Be Cost Effective and Provide Value			
What is the relative cost of the alternative?	Lowest. Marginally smaller SWM Facilities would be required to only service developable areas and not incorporate road drainage.	Highest. Regional and centralized SWM facilities are cost-effective to construct and maintain. More cost-effective than Option B due to this being a smaller sized facility. The overall SWM Strategy cost is comparable to Option B, however property acquisitions costs would be greater overall. Less relative cost for trunk storm sewers compared to Option B.	High. Regional and centralized SWM facilities are cost-effective to construct and maintain. Requires a larger sized facility than Option A. The overall SWM Strategy cost is comparable to Option A, however property acquisitions costs would be less overall. Relatively higher cost for trunk storm sewers required to direct drainage for areas south of CR42 to north facility compared to Option A.
Are there opportunities to reduce overall cost and/or reduce costs to taxpayers?	No direct impact to taxpayers.	Costs to implement the Lauzon Parkway Improvements and stormwater management facilities will be part of the City's Capital Woks Plan.	Costs to implement the Lauzon Parkway Improvements and stormwater management facilities will be part of the City's Capital Woks Plan.

Criteria	Do nothing: No Stormwater Management - Lauzon Parkway or Drainage Area North of CR42	Option A: Stormwater Management For the Lauzon Parkway and Drainage Area North of CR42	Option B: Stormwater Management For Drainage Areas North and South of CR42
What is the local economic benefit?	Low. Discharging uncontrolled flows to the Little River will have negative impacts downstream increasing the risk of flooding, property damage, and drain maintenance. Will not benefit developable lands.	High. Shared regional SWM facility will provide an outlet for all development areas and a consolidated operation and maintenance plan can be implemented. Implementation of the ponds will allow development to proceed and fulfill local market needs.	Highest. Same as Option A, however permits a relatively higher amount of developable land during the initial build-out timeframe.
What is the level of complexity for construction and operation? (Capital projects)	None.	Low Offline facility can be constructed with minimum impact to existing drains and infrastructure. Shortest and smallest trunk storm sewers are required. Less complex than Option B, as the storm sewer routing will be in closer proximity to the downstream SWM Facility outlet. SWM facility will be required prior to the planned reconstruction of 9th Concession Road.	Low. Same as Option A. Longer and largest and trunk storm sewers are required to drain areas that are comparatively further from the downstream SWM facility. SWM facility will be required prior to the planned reconstruction of 9th Concession Road.
What is the level of complexity for construction and operation? (Private development)	Highest. Shallow drainage outlets will require onsite pumping or limited development. High operational complexity due to greater reliance on private flood protection measures.	Moderately Low. SWM facilities will not require private property operation or maintenance of SWM facilities.	High. Same as Option A, however due to the proximity of the pond to development areas, additional cost and coordination required in advance of property development south of CR42.
Preference	Most Preferred	Least Preferred	Less Preferred
Protect the Natural Environment			
What are the environmental effects of the alternative?	Negative. Directing water directly to the Little River without quality or quantity treatment will have negative environment effects.	Positive. Meets water quality treatment requirements. Does not control water balance, however, there are no local requirements, and limited opportunities to efficiently recharge groundwater and reduce SWM runoff volumes.	Same as Option A.
Will there be impacts to species at risk (SAR)?	Less construction related impacts to SAR. Reduced opportunity to provide habitat to offset impacts of development and maintain natural corridor connectivity.	Pond is proposed adjacent to existing SAR habitat areas. Existing drains and associated natural environment corridors will provide habitat to offset impacts of proposed work.	Same as Option A however the footprint of the pond is larger and has a relatively greater impact and need for mitigation.

Criteria	Do nothing: No Stormwater Management - Lauzon Parkway or Drainage Area North of CR42	Option A: Stormwater Management For the Lauzon Parkway and Drainage Area North of CR42	Option B: Stormwater Management For Drainage Areas North and South of CR42
Will the proposed SWM protect Provincially Significant Wetlands (PSW)?	Development will need to maintain minimum regulatory separation from natural areas as well as complete necessary assessments to demonstrate PSWs will not be impacted.	SWM facilities will be designed to minimum regulatory setbacks from all PSW lands. Treed buffer areas are required along PSWs. Facilities will provide addition buffer between PSWs and development lands.	Similar to Option A, however opportunity to provide more protection than Option A due to greater footprint of designated area.
Is there an opportunity to protect natural spaces?	Development will need to maintain minimum regulatory separation from natural areas.	Yes. SWM facilities will provide a boundary between developable lands, drains and natural corridors. Solution provides an opportunity to protect natural areas beyond the minimum regulatory separation. SWM corridor can be integrated with adjacent natural spaces.	Similar to Option A, however opportunity to provide more protection than Option A due to greater footprint of designated area.
Preference	Least Preferred	More Preferred	Most Preferred
Support the Creation of a Complete Community			
Does the alternative support a self-sufficient community?	No. Increased risk associated with flooding downstream areas if local runoff is not controlled. Reliance required on individual property owners for mitigation flood risks.	Yes. SWM services are provided in the local community. Quality and quantity control will be provided within the local community – no impacts upstream or downstream.	Yes. Same as Option A.
Preference	Least Preferred	Most Preferred	Most Preferred
Protect Health and Safety			
Will this alternative reduce flood risk and standing water with developable areas?	No. Increase in flood risk with uncontrolled flows entering the Little River Drain.	Yes. Flood control criteria will reduce risks associated with flooding in watercourses and drains as well as allow ponding in development areas to be controlled to acceptable levels.	Yes. Same as Option A.
Will this alternative improve public safety?	No. Developable lands and roadways are vulnerable to back-ups of the Little River drain and therefore could cause increase flooding impacting emergency access.	Yes. The SWM drainage network and end of pipe facility will be designed to reduce upstream surface flooding during major rain events. Implementation of the SWM drainage network and end of pipe facility, coupled with maintenance of minimum flood protection elevations, will minimize surface flooding and allow for safer travel on roadways and maintain emergency access.	Yes. Same as Option A.

Criteria	Do nothing: No Stormwater Management - Lauzon Parkway or Drainage Area North of CR42	Option A: Stormwater Management For the Lauzon Parkway and Drainage Area North of CR42	Option B: Stormwater Management For Drainage Areas North and South of CR42
Are there safety related risks associated with the proximity to the Windsor International Airport (WIA)?	Minimal risks associated with proximity to WIA.	Proposed SWM facilities will need to be implemented to mitigate water fowl habitat. Maintenance of measures and monitoring of effectiveness will need to be done over the lifecycle of the facility.	Same as Option A.
Preference	Least Preferred	More Preferred	More Preferred
Align with Existing Infrastructure and Studies			
How compatible is the alternative with existing and surrounding infrastructure?	Least compatible. The option is not compatible with upstream and downstream drainage systems. Impacts the capacity of the Little River due to controlled release of increased runoff.	Most compatible. The option is compatible with upstream and downstream drainage systems. SWM Ponds provides the most direct overland flood route.	Compatible. This option requires large trunk storm sewer crossing CR42 to direct drainage to pond. Large trunk sanitary sewer and storm sewer do not conflict but minimal flexibility to revise storm sewer depths. Overland flood routing cannot cross CR42 and therefore overland flow for areas south of CR42 will need to drain to P4.
Preference	Least Preferred	Most Preferred	Less Preferred
Build in Resiliency			
How does the infrastructure alternative address climate change?	Least resilient to climate change.	SWM facilities incorporate design safety factors to account for potential higher future rainfall intensities.	Same as Option A.
Preference	Least Preferred	Most Preferred	Most Preferred
Build in Flexibility			
What is the potential for phasing the infrastructure alternative?	Low. Phasing of development may increase in complexity and have limitations.	Moderate. SWM facility construction can be phased to accommodate each service area. The areas have been subdivided into sub-drainage areas that have an individual outlet to the existing drain network. Development upstream will not have impacts to the downstream system as phasing occurs.	High. With the construction of this solution, two areas would be ready for development, both the north and south side of County Road 42, as opposed to Option A that can only service the north side of County Road 42. This allows a higher yield development upon construction of this pond which is expected to occur soon within the SSMSP staging plan.
How flexible and adaptable is the alternative to change?	Least Flexible.	More Flexible.	Less Flexible.

Criteria	Do nothing: No Stormwater Management - Lauzon Parkway or Drainage Area North of CR42	Option A: Stormwater Management For the Lauzon Parkway and Drainage Area North of CR42	Option B: Stormwater Management For Drainage Areas North and South of CR42
		The surrounding areas are not designated for development. Future pond expansion is possible and can be integrated into the proposed open space.	Less area is available to allow this pond to expand in the future.
Does the alternative allow us to accommodate future population and employment growth?	No. Lack of capacity within SWM management facilities and existing floodplain area will negatively impact the possible future population and employment growth (impacting area available for development). Requirement for developments to have localized SWM quantity and quality controls will impact the developable lands available thus reducing the achievable growth.	Yes. Future population and employment growth are accommodated by SWM controls under this option.	Yes. Same as Option A. This option services more area than the other options, accommodating more future population and employment growth.
Preference	Least Preferred	Less Preferred	Most Preferred
Overall Preference	Least Preferred	Less Preferred	Most Preferred Solution

1.3 Table G-3: Evaluation of Alternative Stormwater Management Facility Configurations for Lauzon Parkway/County Road 42

Table G-3: Evaluation of Alternative Stormwater Management Configurations for Lauzon Parkway/County Road 42

Criteria	Option B1: Wet Ponds - One Linear Pond	Option B2: Wet Ponds - Two Parallel Ponds	Option B3: Dry Ponds and Underground Quality Control	Option B4: Underground Quality and Quantity
Manage Flood Risk				
To what extent can the alternative address surface flooding?	Well. Wet Pond will be sized to meet Climate Change storm criteria. Outlet SWM pump station will ensure controlled outflow to Little River does not post risk of flooding to downstream areas.	Same as Option B1.	Same as Option B1.	Same as Option B1.
Preference	Most Preferred	Most Preferred	Most Preferred	Most Preferred
Protect Quality of Life				
Is there potential property that would be required?	Moderate footprint size. Limits some development area along the future roadway and industrial/commercial development area north of CR42.	Smallest footprint. Provides the most development area along the future roadway and industrial/commercial development area north of CR42.	Same as Option B1.	Largest footprint, but can accommodate aboveground amenities in the designated open space areas. In developable areas, could use underground storage areas for large parking areas. Limits the level of development that can be accommodated north of CR42.
What are the potential impacts to cultural heritage (archaeology and built heritage)?	Moderate Footprint. No impact to cultural heritage features. Area considered high potential for Archaeological Resources. A Stage 2 assessment is required.	Same as Option B1.	Same as Option B1.	Same as Option B1.
What are the potential construction related impacts to the public/ community? (Noise, dust, vibration)	Moderate. Wet Pond will result in construction related impacts such as noise, dust and vibration. Pond will be constructed prior to the development of the lands.	Same as Option B1.	High Construction Impact. Large construction scope area.	Highest Construction Impact. Largest construction scope area.

Criteria	Option B1: Wet Ponds - One Linear Pond	Option B2: Wet Ponds - Two Parallel Ponds	Option B3: Dry Ponds and Underground Quality Control	Option B4: Underground Quality and Quantity
Are there long term operational impacts on local residents and businesses?	Moderate. Wet Pond requires sediment removal as needed to maintain quality control capabilities. Wet Pond maintenance will be required including landscape and maintenance of water fowl mitigation features. Regular inspection will be required.	Same as Option B1.	Moderately High. Underground facilities require more frequent sediment removal. Sediment removal is more difficult for closed underground systems, but are constructed with inspection ports for sediment removal via vacuum truck. Regular cleanout of oil and grit separators and underground water quality chamber units is required to maintain quality control. Pond maintenance will be required including landscape. Monitoring and maintenance of water fowl mitigation measures is less for dry ponds.	High. Underground facilities require more frequent sediment removal. Sediment removal is more difficult for closed underground systems, but are constructed with inspection ports for sediment removal via vacuum truck. Regular cleanout of oil and grit separators and underground water quality chamber units is required to maintain quality control. No maintenance related to water fowl mitigation measures is required.
Are there potential recreational opportunities?	Yes, active transportation facilities will be integrated into the stormwater corridors.	Same as Option B1.	Same as Option B1.	Same as Option B1.
Preference	More Preferred	Most Preferred	Less Preferred	Less Preferred
Be Cost Effective and Provide Value				
What is the relative cost of the alternative?	Moderate.	Similar cost to Option B1.	Moderately High.	Highest Cost.
Are there opportunities to reduce overall cost and/or reduce costs to taxpayers?	Low. Costs for Wet Pond will be shared between developers based on development land areas as well as the City to drain municipal ROW Areas.	Low. Same as Option B1.	Low. Less relative opportunity to reduce cost compared to Option B1. All quality control infrastructure will need to be implemented at the onset of development.	Moderate. Greatest opportunity to utilizing excess soil onsite.
What is the local economic benefit?	Limits some development area along the future roadway north of CR42 and along CR42.	Provides the most development area along the future roadway, north of CR42 and along CR42.	Same as Option B1.	Same as Option B1.
What is the level of complexity for construction?	Moderate level of complexity.	Same as Option B1.	Higher level of complexity in comparison to Option B1 and B2.	Same as Option B3.
What is the level of complexity for operation?	High. Wet Pond maintenance will be required including landscape and maintenance of	Same as Option B1.	Moderate. Dry Pond maintenance will be required including landscape. Monitoring and	Moderately High. Regular cleanout of oil and grit separators and underground water quality chamber

Criteria	Option B1: Wet Ponds - One Linear Pond	Option B2: Wet Ponds - Two Parallel Ponds	Option B3: Dry Ponds and Underground Quality Control	Option B4: Underground Quality and Quantity
	water fowl mitigation features. Regular inspection will be required over the lifetime of the facility.		maintenance of water fowl is less for dry ponds. Regular cleanout of oil and grit separators and underground water quality chamber units is required to maintain quality control.	units is required to maintain quality control.
Preference	More Preferred	Most Preferred	Less Preferred.	Least Preferred
Protect the Natural Environment				
What are the environmental effects of the alternative?	Wet Pond to be designed to provide a minimum “Normal” quality control level, as per Regional SWM Guidelines. Wet Pond can be integrated into the municipal drainage system and natural environment corridor. Less frequent sediment removal needed.	Same quality level as Option B1. Wet Pond can be integrated into the municipal drainage system and natural environment corridor. Less frequent sediment removal needed.	Same quality level as Option B1. Dry Pond can be integrated into the municipal drainage system and natural environment corridor. Frequent sediment removal needed. Sediment removal process is more difficult.	Same quality level as Option B1. Surface area above underground facility will need to be integrated into the natural environment corridor. Most frequent sediment removal needed. Sediment removal process is more difficult.
Will there be impacts to species at risk?	Does not impact existing species at risk. Natural environment corridor shall be implemented to provide habitat.	Same as Option B1.	Same as Option B1.	Same as Option B1.
Will the proposed stormwater management protect Provincially Significant Wetlands (PSW)?	Highest protection. This solution provides the highest level of protection for the existing Provincially Significant Wet Land areas by providing an additional buffer from those areas to the developable areas beyond what is considered minimum.	High Protection.	Same as Option B1.	Moderate Protection.
Is there an opportunity to protect natural spaces?	Yes. Opportunity to protect natural spaces along the existing Little River Drain.	High Protection.	Same as Option B1.	Less Protection. Most impact during construction and limits natural features with deeper rooting that can be accommodated above underground facility.
Preference	Most Preferred	Most Preferred	Less Preferred	Least Preferred

Criteria	Option B1: Wet Ponds - One Linear Pond	Option B2: Wet Ponds - Two Parallel Ponds	Option B3: Dry Ponds and Underground Quality Control	Option B4: Underground Quality and Quantity
Protect Health and Safety				
Will this alternative reduce flood risk and standing water with developable areas?	Yes, SWM facilities must be designed to meet minimum SWM Guidelines. Additional freeboard in the ponds will reduce risk of standing water beyond the established level of service.	Same as Option B1.	Same as Option B1.	Yes, SWM facilities must be designed to meet minimum SWM Guidelines however does not provide any additional level of service compared to Option B1.
Will this alternative improve safety?	Least safe alternative. Necessary signage, safety devices and community education required to mitigate risk of drowning. Permanent water features introduce risk of water fowl habitat. Necessary features to discourage use of those the ponds are required to be implemented and monitored over the life of the facility. Adaptive management to mitigate these risks.	Same as Option B1.	Safer than Options B1 and B2. After the maximum 48 hours pump station drawdown period, minimal open water areas should be present.	Most safe Option. No surface depression and all SWM underground, reducing the risk of a trip and fall hazard.
How will alternative impact safety related to risks associated with the proximity to the Windsor International Airport.	Permanent water features introduce risk of water fowl habitat. Necessary features to discourage use of those the ponds are required to be implemented and monitored over the life of the facility. Adaptive management to mitigate these risks. Maximum 48 hour draw down period to reduce wet area.	Same as Option B1.	Dry ponds will not have permanent wet areas and therefore would need to incorporate necessary measures to discourage “stop off” areas for water fowl. Maximum 48 hour draw down period to reduce wet area.	Flat open space required to accommodate underground infrastructure would need to incorporate necessary measures to discourage “stop off” areas for water fowl.
Preference	Least Preferred	Least Preferred	Most Preferred	Most Preferred
Align with Existing Infrastructure and Studies				
How compatible is the alternative with existing and surrounding infrastructure?	Compatible. This option requires large trunk storm sewer crossing CR42 to direct drainage to pond.	Same as Option B1.	Same as Option B1. Not consistent with the Upper Little River Watershed Drainage Master Plan and Stormwater Management Study (Ongoing).	Same as Option B1. Not consistent with the Upper Little River Watershed Drainage Master Plan and Stormwater Management Study (Ongoing).

Criteria	Option B1: Wet Ponds - One Linear Pond	Option B2: Wet Ponds - Two Parallel Ponds	Option B3: Dry Ponds and Underground Quality Control	Option B4: Underground Quality and Quantity
Preference	Most Preferred	Most Preferred	Less Preferred	Less Preferred
Build in Resiliency				
How does the infrastructure alternative address climate change?	Most Resilient. Wet Pond has additional freeboard (distance between the high water line and the top of pond bank) that will provide additional storage capacity to accommodate changes to climate and storm intensity that the level of service (1:100 year storm). Opportunity to expand the pond footprint within open space areas if required.	Same as Option B1.	Less Resilient. Dry Pond has freeboard that will provide additional storage for storm events greater that the level of service (1:100 year storm). Opportunity to expand the pond footprint within open space areas if required. Additional underground quality control infrastructure would need to be implemented to provide quality for greater runoff requirements.	Least Resilient. Additional underground quantity and quality control infrastructure would need to be implemented to provide quality for greater runoff requirements. Would require a comparatively greater footprint.
Preference	Most Preferred	Most Preferred	Less Preferred	Less Preferred
Build in Flexibility				
What is the potential for phasing the infrastructure alternative?	Yes. Wet Pond can be phased to accommodate development phasing. Pump station outlet will need to be constructed to operate under phased conditions.	Same as Option B1.	Yes. Dry Pond and underground quality units can be phased to accommodate development phasing.	Yes. Underground quality units can be phased to accommodate development phasing.
How flexible and adaptable is the alternative to change?	Most Flexible. Wet Pond has freeboard that will provide additional storage for storm events greater that the level of service (1:100 year storm). Opportunity to expand the pond footprint within open space areas if required.	Same as Option B1.	Less Flexible. Dry Pond has freeboard that will provide additional storage for storm events greater than the level of service (1:100 year storm). Opportunity to expand the pond footprint within open space areas if required. Additional underground quality control infrastructure would need to be implemented to provide quality for greater runoff requirements.	Least Flexible. Additional underground quantity and quality control infrastructure would need to be implemented to provide quality for greater runoff requirements.

Criteria	Option B1: Wet Ponds - One Linear Pond	Option B2: Wet Ponds - Two Parallel Ponds	Option B3: Dry Ponds and Underground Quality Control	Option B4: Underground Quality and Quantity
Does the alternative allow us to accommodate future population and employment growth?	Yes. Future population and employment growth are accommodated by SWM controls under this option.	Same as Option B1.	Yes. Some ability to expand underground quality infrastructure is possible.	Limited ability to expand underground quality and quantity control infrastructure is possible. Consideration for future expansion areas could be accommodated in open space areas but would be limited in developable areas where buildings/or other infrastructure is already established.
Preference	Most Preferred	More Preferred	Less Preferred	Less Preferred
Overall Preference	More Preferred	Most Preferred	Less Preferred	Less Preferred

2.0 Storm Sewer Alternative Evaluations

2.1 Table G-4: Evaluation of Alternative Solutions for Stormwater Servicing

Criteria	Option 1: Do Nothing	Option 2: Traditional Storm Sewer Network	Option 3: Combined Open Drain and Storm Sewer Network
Manage Flood Risk			
To what extent can the alternative address surface flooding?	This alternative will not address surface flooding on a greater secondary plan area.	Highest The municipal storm sewer system will be designed to convey a 1:5 year return period and mitigate surface flooding within municipal ROWs to acceptable depths under the 1:100 year storm.	Same as Option 2.
Preference	Least Preferred	Most Preferred	Most Preferred
Protect Quality of Life			
Is there potential property that would be required?	No. It is assumed that the existing municipal drains, roadside drains and storm sewers would remain in place.	Yes. Property requirements would be consistent with corridors required for other linear infrastructure (transportation development, water distribution, etc.)	Yes. Property requirements would be consistent with corridors required for other linear infrastructure (transportation development, water distribution, etc.), however a wider ROW will be required to accommodate width of open drains.
What are the potential impacts to cultural heritage (archaeology and built heritage)?	Low. No additional ground disturbance will be required to maintain existing conditions.	High. Ground disturbances and construction will be designed to maintain integrity of cultural heritage assets. Studies will identify areas of concern.	Highest. Ground disturbances and construction will be designed to maintain integrity of cultural heritage assets. Studies will identify areas of concern. This solution has comparative greater impact than Option 2 due to the need for a greater ROW.
What are the potential construction related impacts?	None. No construction required.	Highest level of impact. Construction of storm sewer network will require ground disturbance varying in depth along entirety of network. Longest expected construction timeline.	High level of impact. Construction of sewer network will require ground disturbance varying in depth along entirety of network. Level of disturbance required to construct open drains is less than storm sewer construction.

Criteria	Option 1: Do Nothing	Option 2: Traditional Storm Sewer Network	Option 3: Combined Open Drain and Storm Sewer Network
Are there long term operation impacts on local residents and businesses?	Yes. Operation for open ditches will require routine maintenance. Any localized facilities with private property development areas would require routine maintenance for proper operation.	No. Operational activities will be minimal.	Yes. Open ditches will require routine maintenance.
Preference	Most Preferred	Less Preferred	Least Preferred
Be Cost Effective and Provide Value			
What is the relative cost of the alternative?	No cost.	Highest cost. Construction of underground sewer facilities carry the highest construction cost.	Moderate cost. Underground sewer facilities will carry a higher construction cost, however surface drains will have a lower construction cost than underground.
Are there opportunities to reduce overall cost and/or reduce costs to taxpayers?	No controls in place for quality or quantity of flow may increase cost to taxpayers as a result of flood risk.	Low maintenance costs associated with storm sewer network. Reduced potential cost as a result of risk of flooding.	Some maintenance costs will be incurred to maintain the open drains. Increased costs to taxpayers. Reduced potential cost as a result of risk of flooding.
What is the local economic benefit?	Low. Development can commence sooner (with no infrastructure works having to be done in advance), however developable area is lesser than other alternatives.	Maximizes developable lands. Storm sewer network can be constructed within the proposed road right-of-way, requiring no additional space.	Provides increase in developable lands. Where storm sewer network is constructed, developable lands will be maximized, however where open drains are maintained they will require land area which cannot be used for development.
What is the level of complexity for construction and operation? (Capital infrastructure works)	Low. No additional construction is required.	Moderate. Moderate construction complexity for storm sewer network. Low anticipated operational requirements for storm sewers.	Moderate. Greatest construction complexity for storm sewer network. Low anticipated operational requirements for storm sewers. Moderate operational requirements for open drains.
What is the level of complexity for construction and operation? (Development infrastructure works)	High. Ultimate buildout will require construction and operation of stormwater facilities throughout the developments. Existing drainage scheme will result in requirement for pumping stations throughout developments to achieve positive drainage. Localized facilities will be required throughout development area.	Low. Sufficient drainage and stormwater management will be provided by the proposed capital works. Minimal infrastructure will require construction/ operation at the development level.	Same as Option 2.
Preference	Less Preferred	Most Preferred	Less Preferred

Criteria	Option 1: Do Nothing	Option 2: Traditional Storm Sewer Network	Option 3: Combined Open Drain and Storm Sewer Network
Protect the Natural Environment			
What are the environmental effects of the alternative?	Low impacts.	Moderate impacts. Removal of existing open drains may remove natural areas, however drains provide minimal natural benefits due to maintenance requirements. End-of-pipe facilities can be used to mitigate losses of natural areas (drains). Natural Heritiage Areas will be not disturbed.	Moderate/Low impacts. Removal of existing open drains may remove natural areas, however drains provide minimal natural benefits due to maintenance requirements. Maintenance of some open drains may mitigate some losses. Natural Heritage Areas will be not disturbed.
Will there be impacts to species at risk?	None.	Moderate. Some species at risk found within open drains in the study area. Removal of open drains will result in negative impact to species at risk. Due to type of species found, mitigation may be possible through transplanting or utilization of pond areas.	Same as Option 2.
Is there an opportunity to protect natural spaces?	None.	Stormwater management facilities will provide opportunity for naturalization and select species habitat (for the exception of avian species due to airport safety restrictions)	Same as Option 2.
Preference	Most Preferred	Less Preferred	Less Preferred
Support the Creation of a Complete Community			
Does the alternative support a self-sufficient community?	No. Dependency on adjacent infrastructure for quantity control.	Yes. Localized storm sewers will convey storm water flows to management facilities provided in the local community. Quantity control and storage reduces downstream risk of flooding.	Same as Option 2.
Preference	Less Preferred	Most Preferred	Most Preferred

Criteria	Option 1: Do Nothing	Option 2: Traditional Storm Sewer Network	Option 3: Combined Open Drain and Storm Sewer Network
Protect Health and Safety			
Will this alternative reduce health risk?	No. Existing road-side facilities carry risk to public safety due to topographical and water hazard. Localized facilities will be required to be designed to minimize risk of creating habitat for waterfowl, which increases risk at the adjacent airport lands.	Yes. Reduced number of open drains (risk to public safety due to topographical and water hazard). New stormwater pond facilities and remaining open drains will be designed such that risk to public safety is minimized, through consideration of side slopes and pond depths. Pond facilities will further be designed to minimize waterfowl habitat to minimize risk to adjacent airport lands.	Moderate. Open drains will remain, which pose a risk to public safety due to topographical and water hazard. Where possible, open drains can be redesigned to reduce risk (in greenspace areas). New stormwater pond facilities will be designed such that risk to public safety is minimized, through consideration of side slopes and pond depths. Pond facilities will further be designed to minimize waterfowl habitat to minimize risk to adjacent airport lands.
Preference	Less Preferred	Most Preferred	More Preferred
Align with Existing Infrastructure and Studies			
How compatible is the alternative with existing and surrounding infrastructure?	Development stormwater systems may not be compatible with shallow municipal drains. Municipal drains are typical designed to convey a 1:2 year return period, however local storm sewer systems are required to be designed to convey a 1:5 year return period, greater than the receiving drain (outlet).	Compatible. New infrastructure will be designed to accommodate existing features where congruent with development plans.	Same as Option 2.
Preference	Less Preferred	Most Preferred	Most Preferred
Build in Resiliency			
How does the infrastructure alternative address climate change?	Existing infrastructure (drains) will not address climate change. Localized developments will be required to construct stormwater quantity and quality facilities that provide resiliency to climate change.	Infrastructure is designed with capacity safety factor to increase resiliency. Design inputs consider increased storm flows as a result of climate change. Traditional storm sewer network servicing solutions provides the opportunities to design sewers with more resilient design.	Same as Option 2.
Preference	Less Preferred	Most Preferred	Most Preferred

Criteria	Option 1: Do Nothing	Option 2: Traditional Storm Sewer Network	Option 3: Combined Open Drain and Storm Sewer Network
Build in Flexibility			
What is the potential for phasing the infrastructure alternative?	None. No new infrastructure with which to phase. Development will occur as approved.	Phasing of the infrastructure will be required. Low flexibility in phasing. Construction will be required to occur from downstream location, to allow for adequate outlet for new developments.	Same as Option 2.
How flexible and adaptable is the alternative to change?	Existing infrastructure is not flexible to change.	Some flexibility. Flexibility of storm sewer system is dependent on elevations of downstream facilities, ground, and required design elevations for pipes. Design is flexible however some constraints exist with existing ground conditions and required depths of pipes.	Same as Option 2, however private property development may be limited to the outlet depth which would require not permitting to use underground drainage systems or having individual lift stations.
Does the alternative allow us to accommodate future population and employment growth?	Low. Lack of capacity within stormwater management facilities, and extents of floodplain area (impacting area available for development) will negatively impact the possible future population and employment growth. Requirement for developments to have localized stormwater quantity and quality controls will impact the developable lands available thus reducing the achievable growth.	Moderate Storm sewer network will allow for adequate quantity and quality control of stormwater flows to accommodate growth. Developable area will be maximized through location of the underground storm sewers within the transportation right-of-way. Developable area will be maximized through adequate 100-year flow conveyance and thus reduction of floodplain area.	High Open drain systems can be expanded/altered to accommodate future changes to growth.
Preference	Least Preferred	More Preferred	More Preferred
Overall Preference			
Overall Preference	Less Preferred	Most Preferred Solution	Less Preferred

3.0 Transportation Network Alternative Evaluations

3.1 Table G-5: Transportation Network Alternative Evaluation (Level 1)

Criteria	Do Nothing (Not expanding the collector road network)	Option 1: Maintain Conceptual Road Network (Layout to remain consistent with previous studies)	Option 2 : Modify Conceptual Road Network (Modify Collector Road network to reflect current standards and improve connectivity)
Protect Quality of Life			
Is there potential property that would be required?	No.	Yes.	Yes.
What are the potential impacts to cultural heritage (archaeology and built heritage)?	Minimal Impacts	Additional archaeological assessments will be required for areas identified to be high potential for archaeological resources.	Additional archaeological assessments will be required for areas identified to be high potential for archaeological resources.
What are the potential construction related impacts?	Minimal Impacts	Typical road construction activities are expected. There is potential for construction to result in noise, dust, and access impacts to home owners and businesses adjacent to the corridor under construction. The city will minimize the length of construction to the extent possible, adhere to local noise by-laws and communicate construction timing.	Typical road construction activities are expected. There is potential for construction to result in noise, dust, and access impacts to home owners and businesses adjacent to the corridor under construction. The city will minimize the length of construction to the extent possible, adhere to local noise by-laws and communicate construction timing.
Are there long term operation impacts on local residents and businesses?	This option will make it difficult to travel between destinations within the study area. Any growth in or around the area would result in increased traffic.	This option will provide a road network that will support development growth.	Similar to Option 1, however this option will make it easier to travel throughout the study area.
Preference	Most Preferred	Least Preferred	Less Preferred
Be Cost Effective and Provide Value			
What is the relative cost of the alternative?	Minimal cost to maintain existing road network.	Similar cost for both options.	Same as Option 1.
Are there opportunities to reduce overall cost and/or reduce costs to taxpayers?	Not Applicable.	No.	Same as Option 1.
What is the local economic benefit?	Maintaining the existing roads will not support the economic growth and proposed development within the area.	Addition of collector roads will provide opportunity for connectivity within the community for all mode of traffic.	Same as Option 1 however this option will make it easier to access employment and businesses within the study area.

Criteria	Do Nothing (Not expanding the collector road network)	Option 1: Maintain Conceptual Road Network (Layout to remain consistent with previous studies)	Option 2 : Modify Conceptual Road Network (Modify Collector Road network to reflect current standards and improve connectivity)
What is the level of complexity for construction and operation?	Not Applicable.	Similar complexity for both options.	Same as Option 1.
Preference	Most Preferred	Least Preferred	Less Preferred
Protect the Natural Environment			
What are the environmental effects of the alternative?	No additional environmental impacts.	Significant construction will be required. The road network must cross environmental features and may result in removal of vegetation. Removal of vegetation shall be limited to the extent feasible, protect trees adjacent to the construction sites and implement other mitigation to minimize the temporary construction impacts. Bridges or habitat crossings will need to be incorporated to the proposed road design. The proposed Natural Heritage System is recommended to be implemented to protect, preserve and enhance environmentally significant natural features.	Same as Option 1.
Will there be impacts to species at risk?	No	Potential for impacts to SAR and consideration of how to mitigate impacts will be required.	Same as Option 1.
Is there an opportunity to protect natural spaces?	Yes, not implementing a collector road network will not pose impact on existing spaces.	Expansion of the road network requires crossing of existing and proposed natural environment areas. Considerations for crossings of facilities will be required to mitigate impacts of the heritage area.	Same as Option 1, however modifying the road network will allow for adjustments to be made to accommodate the proposed stormwater management corridors and proposed Natural Heritage System Areas.
Preference	Most Preferred	Less Preferred	Less Preferred
Support the Creation of a Complete Community			
Does the alternative support active modes of travel?	No, the existing rural road cannot accommodate other modes of travel.	Both options will add active modes of travel.	Same as Option 1.
Does the alternative support a self-sufficient community?	No, movement within the community is limited currently.	Travel between different neighbourhoods in the study area will be more difficult than Option 2.	Yes, as it will make is easier for residents to make internal trips within the study area.
Does the alternative provide an accessible solution?	No, the existing rural road does not provide accessible facilities.	Accessible sidewalks and crossings will be provided.	Same as Option 1.
Preference	Least Preferred	Less Preferred	Most Preferred

Criteria	Do Nothing (Not expanding the collector road network)	Option 1: Maintain Conceptual Road Network (Layout to remain consistent with previous studies)	Option 2 : Modify Conceptual Road Network (Modify Collector Road network to reflect current standards and improve connectivity)
Protect Health and Safety			
Will this alternative improve safety?	No, current road cross section is unsafe due to steep road side ditches, narrow road surfaces and no pedestrian/cycling facilities.	Neither option poses a risk or significantly reduces risk to health and safety.	Same as Option 1.
Preference	Least Preferred	Most Preferred	Most Preferred
Align with Existing Infrastructure and Studies			
How compatible is the alternative with existing and surrounding infrastructure?	Does not support constraints that may be posted on the surrounding road network.	The alternative is compatible with existing and surrounding infrastructure.	The alternative is compatible with existing and surrounding infrastructure.
Preference	Least Preferred	Most Preferred	Most Preferred
Build in Flexibility			
What is the potential for phasing the infrastructure alternative?	Not Applicable.	The option has the potential to phase infrastructure.	The option has the potential to phase infrastructure.
How flexible and adaptable is the alternative to change?	No, roadways cannot support the need to provide property drainage and overland flow routes for stormwater.	The option provides some flexibility to develop Sandwich South.	The option provides some flexibility to develop Sandwich South.
Does the alternative allow us to accommodate future population and employment growth?	No, roadways cannot support development growth.	This option is less suited to support growth as it is a less efficient network.	The option accommodates future growth.
Preference	Least Preferred.	Less Preferred	Most Preferred
Overall Preference			
Overall Preference	Less Preferred	Less Preferred	Most Preferred

3.2 Table G-6: Problem/Opportunity 1: North -South Capacity in the West

Criteria	Option 1: Widen Concession 7	Option 2 : Widen Concession 8
Protect Quality of Life		
Is there potential property that would be required?	Property may be required to expand the existing 20 metre right of way.	Property may be required to expand the current 20-22 metre right of way.
What are the potential impacts to cultural heritage (archaeology and built heritage)?	Additional archaeological assessments will be required for areas identified to be high potential for archaeological resources.	Additional archaeological assessments will be required for areas identified to be high potential for archaeological resources.
What are the potential construction related impacts?	Construction will impact home owners and businesses along the corridor	Construction will impact home owners and businesses along the corridor.
Are there long term operation impacts on local residents and businesses?	The East-West Arterial/Concession 7 intersection will be right in right out, limiting where this road can be accessed from.	This roadway is more central to the study area, making it useful to more residents, employees, and visitors.
Preference	Less Preferred	Most Preferred
Be Cost Effective and Provide Value		
What is the relative cost of the alternative?	Similar cost for both options.	Similar cost for both options.
Are there opportunities to reduce overall cost and/or reduce costs to taxpayers?	No.	No.
What is the local economic benefit?	This provides additional vehicular capacity for a smaller portion of the study area. Access to/from 7th Concession to/from the E/W Arterial is restricted to right-in/right/out only.	Improvements to 8th Concession will allow for a larger portion of the Sandwich South lands to benefit.
What is the level of complexity for construction and operation?	Crossing with existing railway will pose additional construction complexity.	Less complex than Concession 7.
Preference	Less Preferred	Most Preferred
Protect the Natural Environment		
What are the environmental effects of the alternative?	An existing drain runs along the west side of the road. Necessary aquatic habitat mitigation measures will be required.	8th Concession drain runs along the west side of the road. Necessary aquatic habitat mitigation measures will be required.
Will there be impacts to species at risk?	Potential for impacts to natural environmental features and consideration of how to minimize.	Potential for impacts to natural environmental features and consideration of how to minimize.
Is there an opportunity to protect natural spaces?	There are no natural spaces to protect. 7th Concession Road will be further from the Natural Environment System that is proposed within the SWM/Open Space Corridors.	There are no natural spaces to protect. 8th Concession Road will need to cross and be adjacent to Environment System that is proposed within the SWM/Open Space Corridors.
Preference	Most Preferred	Less Preferred

Criteria	Option 1: Widen Concession 7	Option 2 : Widen Concession 8
Support the Creation of a Complete Community		
Does the alternative support active modes of travel?	Both options will add active modes of travel.	Both options will add active modes of travel.
Does the alternative support a self-sufficient community?	Access to/from 7th Concession at the East-West Arterial will be limited to right-in/right-out only, thus reducing access to the community.	Yes, as it will make it easier for residents to make internal trips within the study area.
Does the alternative provide an accessible solution?	Accessible sidewalks and crossings will be provided.	Accessible sidewalks and crossings will be provided.
Preference	Less Preferred	Most Preferred
Protect Health and Safety		
Will this alternative improve safety?	The urban road cross section include pedestrian and cycling facilities which will add to the safety of peds and cyclists.	The urban road cross section include pedestrian and cycling facilities which will add to the safety of peds and cyclists.
Preference	Equal	Equal
Align with Existing Infrastructure and Studies		
How compatible is the alternative with existing and surrounding infrastructure?	The alternative is compatible with existing and surrounding infrastructure.	The alternative is compatible with existing and surrounding infrastructure.
Preference	Equal	Equal
Build in Flexibility		
What is the potential for phasing the infrastructure alternative?	The option has the potential to phase infrastructure.	The option has the potential to phase infrastructure.
How flexible and adaptable is the alternative to change?	The option provides some flexibility in the development of Sandwich South.	The option provides increased flexibility to develop Sandwich South.
Does the alternative allow us to accommodate future population and employment growth?	Future growth will primarily be on the east side of 7th Concession only. Supports this growth only from C.R. 42 to the East-West Arterial.	The option accommodates future growth. Supports future growth on both sides of 8th Concession from C.R. 42 to Highway 401.
Preference	Less Preferred	Most Preferred
Overall Preference		
Overall Preference	Least Preferred	Most Preferred

3.3 Table G-7: Problem/Opportunity 2: N-S Capacity in the East

Criteria	Option 1: Widen Concession Road 10/County Road 17	Option 2: Widen Concession Road 9
Protect Quality of Life		
Is there potential property that would be required?	Property may be required to expand the existing 27 metre right of way. Greater number of homes/business fronting 10th Concession Road.	Property may be required to expand the existing 27 metre right of way.
What are the potential impacts to cultural heritage (archaeology and built heritage)?	None.	None.
What are the potential construction related impacts?	Construction will impact home owners and businesses along the corridor. Higher number of homes/business front 9th Concession Road than 10th Concession Road.	Construction will impact home owners and businesses along the corridor. Less number of homes/business front 9th Concession Road than 10th Concession Road.
Are there long term operation impacts on local residents and businesses?	The County Road 42/Concession 10 intersection will be right in right out, limiting where this road can be accessed from.	This roadway is more central to the study area, making it useful to more residents, employees, and visitors.
Preference	Less Preferred	Most Preferred
Be Cost Effective and Provide Value		
What is the relative cost of the alternative?	Similar cost for both options.	Similar cost for both options.
Are there opportunities to reduce overall cost and/or reduce costs to taxpayers?	No.	No.
What is the local economic benefit?	This provides additional vehicular capacity for a smaller portion of the study area.	Improvements to Concession Road 9 will allow for a larger portion of the Sandwich South lands to benefit.
What is the level of complexity for construction and operation?	Similar complexity for both options.	Similar complexity for both options.
Preference	Less Preferred	Most Preferred
Protect the Natural Environment		
What are the environmental effects of the alternative?	Watson drain runs along the west side of the road. Necessary aquatic habitat mitigation measures will be implemented.	9th Concession drain runs along the west side of the road. Necessary aquatic habitat mitigation measures will be required.
Will there be impacts to species at risk?	SAR habitat identified in the proximity of Baseline Road (Site No. 45).	SAR habitat not identified within the proposed right-of-way footprint.
Is there an opportunity to protect natural spaces?	There are no natural spaces to protect.	There are no natural spaces to protect.
Preference	Equal	Equal

Criteria	Option 1: Widen Concession Road 10/County Road 17	Option 2: Widen Concession Road 9
Support the Creation of a Complete Community		
Does the alternative support active modes of travel?	Both options will add active modes of travel.	Both options will add active modes of travel.
Does the alternative support a self-sufficient community?	Access to/from Concession Road 10 at County Road 42 will be limited to right-in/right-out only, thus reducing access to the community.	Yes, as it will make is easier for residents to make internal trips within the study area.
Does the alternative provide an accessible solution?	Accessible sidewalks and crossings will be provided.	Accessible sidewalks and crossings will be provided.
Preference	Less Preferred	Most Preferred
Protect Health and Safety		
Will this alternative improve safety?	The urban road cross section include pedestrian and cycling facilities which will add to the safety of peds and cyclists.	The urban road cross section include pedestrian and cycling facilities which will add to the safety of peds and cyclists.
Preference	Equal	Equal
Align with Existing Infrastructure and Studies		
How compatible is the alternative with existing and surrounding infrastructure?	The alternative is compatible with existing and surrounding infrastructure.	The alternative is compatible with existing and surrounding infrastructure.
Preference	Equal	Equal
Build in Flexibility		
What is the potential for phasing the infrastructure alternative?	The option has the potential to phase infrastructure.	The option has the potential to phase infrastructure.
How flexible and adaptable is the alternative to change?	The option provides flexibility to develop Sandwich South.	The option provides flexibility to develop Sandwich South.
Does the alternative allow us to accommodate future population and employment growth?	The option accommodates future growth, although provides decrease access to/from C.R. 42.	The option accommodates future growth.
Preference	Less Preferred	Most Preferred
Overall Preference		
Overall Preference	Less Preferred	Most Preferred

3.4 Table G-8: Problem/Opportunity 3: East-West Collector Alignment

Criteria	Option 1: Use Joy Road Right of Way	Option 2: Do Not Build Collector Between Concession Road 8 and North-South Collector to the East	Option 3: Curve North to Connect with East Pelton Collector	Option 4: Curve South to Connect with East Pelton Collector
Protect Quality of Life				
Is there potential property that would be required?	Yes. Joy Road has an inconsistent (roughly 10 metre) right of way that would need to be expanded.	No.	Yes, new right of way would need to be created.	Yes, new right of way would need to be created.
What are the potential impacts to cultural heritage (archaeology and built heritage)?	None.	None.	None.	None.
What are the potential construction related impacts?	Construction would be disruptive to residents of Joy Road.	None.	Construction would be required to build new roadway.	Construction would be required to build new roadway.
Are there long term operation impacts on local residents and businesses?	Heightened traffic volumes for residents of Joy Road.	The elimination of the only collector extending across the entire study area would increase traffic volumes on parallel roadways and increase traffic congestion.	Less direct path across the study area, but maintains connectivity within the study area.	Less direct path across the study area, but maintains connectivity within the study area.
Preference	Less Preferred	Less Preferred	Most Preferred	Most Preferred
Be Cost Effective and Provide Value				
What is the relative cost of the alternative?	Most expensive due to the purchase of developed property on Joy Road.	Least Expensive	Medium cost.	Medium cost.
Are there opportunities to reduce overall cost and/or reduce costs to taxpayers?	No costs.	No costs.	No costs.	No costs.
What is the local economic benefit?	Supports access to local businesses.	Increases traffic congestion on parallel roadways, leading to delays accessing local businesses.	Supports access to local businesses.	Supports access to local businesses.
What is the level of complexity for construction and operation?	Complex due to construction adjacent to developed property.	No construction.	Low.	Low.
Preference	Least Preferred	Less Preferred	Most Preferred	Most Preferred

Criteria	Option 1: Use Joy Road Right of Way	Option 2: Do Not Build Collector Between Concession Road 8 and North-South Collector to the East	Option 3: Curve North to Connect with East Pelton Collector	Option 4: Curve South to Connect with East Pelton Collector
Protect the Natural Environment				
What are the environmental effects of the alternative?	Necessary aquatic habitat mitigation measures will be implented at drain crossings.	No change to existing conditions.	Necessary aquatic habitat mitigation measures will be required at drain crossings.	Necessary aquatic habitat mitigation measures will be required at drain crossings.
Will there be impacts to species at risk?	Potential for impacts to natural environmental features and consideration of how to minimize.	No change to existing conditions.	Potential for impacts to natural environmental features and consideration of how to minimize.	Potential for impacts to natural environmental features and consideration of how to minimize.
Is there an opportunity to protect natural spaces?	Where roadways crossing drains or significant natural environment crossings, opportunities to implement habitat crossings shall be considered. Future planning studies required for collector road network shall future investigate and develop associated solutions.	There are no natural spaces to protect.	There are no natural spaces to protect.	There are no natural spaces to protect.
Preference	Least Preferred	Most Preferred	Least Preferred	Least Preferred
Support the Creation of a Complete Community				
Does the alternative support active modes of travel?	Yes, facilities for active modes would be included.	No, active modes would be diverted to parallel roads.	Yes, facilities for active modes would be included.	Yes, facilities for active modes would be included.
Does the alternative support a self-sufficient community?	Yes.	No, this option limits the opportunity to travel internally within the study area.	Yes.	Yes.
Does the alternative provide an accessible solution?	Accessible sidewalks and crossings will be provided.	Not Applicable	Accessible sidewalks and crossings will be provided.	Accessible sidewalks and crossings will be provided.
Preference	Most Preferred	Least Preferred	Most Preferred	Most Preferred
Protect Health and Safety				
Will this alternative reduce risk?	See below.	See below.	See below.	See below.
Will this alternative improve safety?	No option improves or reduces safety.	No option improves or reduces safety.	No option improves or reduces safety.	No option improves or reduces safety.
Preference	Equal	Equal	Equal	Equal

Criteria	Option 1: Use Joy Road Right of Way	Option 2: Do Not Build Collector Between Concession Road 8 and North-South Collector to the East	Option 3: Curve North to Connect with East Pelton Collector	Option 4: Curve South to Connect with East Pelton Collector
Align with Existing Infrastructure and Studies				
How compatible is the alternative with existing and surrounding infrastructure?	The alternative is compatible with existing and surrounding infrastructure.	This option adds a gap to the transportation network.	The alternative is compatible with existing and surrounding infrastructure.	The alternative is compatible with existing and surrounding infrastructure.
Preference	Most Preferred	Least Preferred	Less Preferred	Most Preferred
Build in Flexibility				
What is the potential for phasing the infrastructure alternative?	This option does not need to be implemented immediately. It can be phased after a significant amount of development has occurred east of Concession Road 8.	Not Applicable.	This option does not need to be implemented immediately. It can be phased after a significant amount of development has occurred east of Concession Road 8.	This option does not need to be implemented immediately. It can be phased after a significant amount of development has occurred east of Concession Road 8.
How flexible and adaptable is the alternative to change?	Not flexible.	Not flexible.	Not flexible.	Not flexible.
Does the alternative allow us to accommodate future population and employment growth?	Yes.	This option reduces east-west road capacity, adding traffic volume to other east-west corridors.	Yes.	Yes.
Preference	Most Preferred	Least Preferred	Less Preferred	Most Preferred
Overall Preference				
Overall Preference	Least Preferred	Less Preferred	More Preferred	Most Preferred

3.5 Table G-9: Problem/Opportunity 4: Additional East-West Connection to Walker Road

Criteria	Option 1: Do Not Add Connection to Walker Road	Option 2: Add Connection to Walker Road
Protect Quality of Life		
Is there potential property that would be required?	No.	Yes, significant property acquisition will be required. Businesses will be disrupted or eliminated.
What are the potential impacts to cultural heritage (archaeology and built heritage)?	None.	None.
What are the potential construction related impacts?	None.	Construction will impact businesses on Concession Road 7 and Walker Road
Are there long term operation impacts on local residents and businesses?	The intersections at Walker Road/County Road 42 and Walker Road/East-West Arterial will perform poorly for vehicular traffic, causing delays.	A modest amount of traffic will be diverted from the Walker Road/County Road 42 and Walker Road/East-West Arterial intersections, improving travel times. However, the improvement is minimal.
Preference	Most Preferred	Least Preferred
Be Cost Effective and Provide Value		
What is the relative cost of the alternative?	No costs.	Expensive option due to construction, property acquisition costs and business losses.
Are there opportunities to reduce overall cost and/or reduce costs to taxpayers?	No costs.	No opportunity.
What is the local economic benefit?	None.	Some traffic will be diverted from the Walker Road/County Road 42 and Walker Road/East-West Arterial intersections, improving travel times and offering more opportunities to access local businesses. However, the improvement is minimal.
What is the level of complexity for construction and operation?	No construction.	Complex due to extensive property acquisition, creation of new right of way, and disruption to existing businesses.
Preference	Most Preferred	Least Preferred
Protect the Natural Environment		
What are the environmental effects of the alternative?	None.	Minimal, majority of the property to be acquired is fully developed. Necessary aquatic habitat mitigation measures will be required at drain crossings.
Will there be impacts to species at risk?	No impacts to species at risk.	Potential for impacts to natural environmental features and consideration of how to minimize.
Is there an opportunity to protect natural spaces?	Limited natural spaces to protect.	Limited natural spaces to protect.
Preference	Most Preferred	Least Preferred

Criteria	Option 1: Do Not Add Connection to Walker Road	Option 2: Add Connection to Walker Road
Support the Creation of a Complete Community		
Does the alternative support active modes of travel?	No. Active modes of transportation are supported on the East-West Arterial and County Road 42.	This option will add a corridor for active modes of travel in addition to the East-West Arterial and County Road 42.
Does the alternative support a self-sufficient community?	No.	Yes, by improving access to and from the study area, particularly if the corridor can extend across the study area.
Does the alternative provide an accessible solution?	No.	Accessible sidewalks and crossings will be provided.
Preference	Least Preferred	Most Preferred
Protect Health and Safety		
Will this alternative improve safety?	No.	Some traffic will be diverted from the Walker Road/County Road 42 and Walker Road/East-West Arterial intersections, lessening the opportunity for collisions at these congested intersections.
Preference	Least Preferred	Most Preferred
Align with Existing Infrastructure and Studies		
How compatible is the alternative with existing and surrounding infrastructure?	The alternative is compatible with existing and surrounding infrastructure.	Alternative would require implementation of a signalized intersection at Walker Road and would require an at-grade rail crossing.
Preference	Most Preferred	Least Preferred
Build in Flexibility		
What is the potential for phasing the infrastructure alternative?	Not Applicable.	This option can be phased based on development triggers, provided that the internal collector network aligns with the location of the connection.
How flexible and adaptable is the alternative to change?	There would be less redundancy or flexibility in the transportation network.	The option provides flexibility and builds redundancy into the road network in case of closures, construction, etc. on County Road 42 and East-West Arterial.
Does the alternative allow us to accommodate future population and employment growth?	Without this connection, some study area traffic can be accommodated, however the Walker Road/County Road 42 and Walker Road/East-West Arterial intersections will fail at a certain level of development.	This option lessens the traffic at the Walker Road/County Road 42 and Walker Road/East-West Arterial intersections, allowing more future growth. However, the benefit to traffic operations is minimal.
Preference	Least Preferred	Most Preferred
Overall Preference		
Overall Preference	Most Preferred	Least Preferred

3.6 Table G-10: Problem/Opportunity 5: Traffic Management on Baseline Road

Criteria	Option 1: Do Nothing	Option 2: Dead End Baseline Road at Concession Road 8	Option 3: Institute Traffic Calming Measures
Protect Quality of Life			
Is there potential property that would be required?	No.	No.	No.
What are the potential impacts to cultural heritage (archaeology and built heritage)?	None.	None.	None.
What are the potential construction related impacts?	None.	Small amount of construction to dead end road.	Construction required to add physical traffic calming measures will inconvenience residents.
Are there long term operation impacts on local residents and businesses?	Very high traffic volumes will use this corridor, disrupting existing residents.	Inconveniences residents, employees, and visitors travelling east-west across the study area, but drastically reduces traffic for residents of Baseline Road. Emergency access issues due to length of cul-de-sac.	Inconveniences residents, employees, and visitors travelling east-west across the study area, but modestly reduces traffic for residents of Baseline Road.
Preference	Less Preferred	More Preferred	Most Preferred
Be Cost Effective and Provide Value			
What is the relative cost of the alternative?	No costs.	Low cost.	Medium cost.
Are there opportunities to reduce overall cost and/or reduce costs to taxpayers?	No costs.	No costs.	No costs.
What is the local economic benefit?	None.	None.	None.
What is the level of complexity for construction and operation?	No construction.	Low.	Low.
Preference	Most Preferred	Less Preferred	Least Preferred
Protect the Natural Environment			
What are the environmental effects of the alternative?	None.	None.	None.
Will there be impacts to species at risk?	No impacts to species at risk.	No impacts to species at risk.	No impacts to species at risk.
Is there an opportunity to protect natural spaces?	There are no natural spaces to protect.	There are no natural spaces to protect.	There are no natural spaces to protect.
Preference	Equal	Equal	Equal

Criteria	Option 1: Do Nothing	Option 2: Dead End Baseline Road at Concession Road 8	Option 3: Institute Traffic Calming Measures
Support the Creation of a Complete Community			
Does the alternative support active modes of travel?	No. Active modes of transportation are supported on the East-West Arterial and C.R. 42.	Eliminating flow-through traffic on Baseline Road will enhance real and perceived safety for active modes.	Limiting flow-through traffic on Baseline Road will enhance real and perceived safety for active modes.
Does the alternative support a self-sufficient community?	No impact.	No impact.	No impact.
Does the alternative provide an accessible solution?	Accessible sidewalks and crossings will be provided.	Accessible sidewalks and crossings will be provided.	Accessible sidewalks and crossings will be provided.
Preference	Least Preferred	Most Preferred	Most Preferred
Protect Health and Safety			
Will this alternative improve safety?	No.	Eliminating flow-through traffic on Baseline Road will enhance real and perceived safety for active modes. Emergency access issues due to length of cul-de-sac.	Limiting flow-through traffic on Baseline Road will enhance real and perceived safety for active modes.
Preference	Less Preferred	Least Preferred	Most Preferred
Align with Existing Infrastructure and Studies			
How compatible is the alternative with existing and surrounding infrastructure?	The alternative is compatible with existing and surrounding infrastructure.	The alternative is compatible with existing and surrounding infrastructure.	The alternative is compatible with existing and surrounding infrastructure.
Preference	Equal	Equal	Equal
Build in Flexibility			
What is the potential for phasing the infrastructure alternative?	Not Applicable.	This option does not need to be implemented immediately. It can be phased after a significant amount of development has occurred east of Concession Road 8.	This option does not need to be implemented immediately. It can be phased after a significant amount of development has occurred east of Concession Road 8.
How flexible and adaptable is the alternative to change?	The option provides flexibility because nothing prevents Options 2 or 3 from being implemented in the future.	The option less flexibility because while reversing this decision in the future would be relatively inexpensive, the existing community may not be supportive of removing the dead end in the future.	The option has the least flexibility because reversing this decision in the future would require road work and the existing community may not be supportive of removing the traffic calming measures.

Criteria	Option 1: Do Nothing	Option 2: Dead End Baseline Road at Concession Road 8	Option 3: Institute Traffic Calming Measures
Does the alternative allow us to accommodate future population and employment growth?	Yes, no change to road capacity and does not encourage traffic to use other routes.	This option reduces east-west road capacity, adding traffic volume to County Road 42 and the East-West Arterial.	This option reduces east-west road capacity, adding traffic volume to County Road 42 and the East-West Arterial.
Preference	Most Preferred	Least Preferred	Less Preferred
Overall Preference			
Overall Preference	Least Preferred	Less Preferred	Most Preferred