P - Preferred typical section

NP - Not Preferred

No	Evaluation Criteria	Urban Cross Section					
		Option 1		Option 2		Option 3	
A. Technical Requirements							
A1	**Future Traffic Capacity** -- Will the option address capacity requirements?	The option addresses the capacity requirements for Year 2031 & 2041. The proposed centre median provides the flexibility to add a left turn lane or a two-way left turn lane. These turn lanes add residual capacity to through lanes.	P	The option addresses the capacity requirements for Year 2031 & 2041. The proposed centre median provides the flexibility to add a left turn lane or a two-way left turn lane. These turn lanes add residual capacity to through lanes.	P	The option addresses the capacity requirements for Year 2031 & 2041. There is no center median proposed for this option. The vehicle waiting to turn left will impede the flow of through traffic thus affecting capacity of through lanes.	NP
A2	**Active Transportation** -- Will the option provide opportunity to implement pedestrian and cyclists infrastructure?	This option includes multiuse path (MUP) on both sides of the corridor for active transportation. A MUP provides two-way travel shared path between bikes and pedestrians. Within urban neighbourhoods an MUP performs better than dedicated cycling facilities by providing a safe space for cyclists with a wide range of skill levels and abilities including children, novice adults and the elderly. A MUP provides flexibility to bikers in both directions and therefore avoid unnecessary crossing of the street.	P	This option provides a separate 1.8 m wide cycle path and sidewalk for different users. Both the facilities are separated by a 3.5 m boulevard. The separated bike and pedestrian facilities are the most desirable active transportation facilities where bike and pedestrian volumes are much higher. Areas such as Central Business District (CBD) or areas along transit-oriented communities/development.	NP	This option includes multiuse path (MUP) on both sides of the corridor for active transportation. A MUP provides two-way travel shared path between bikes and pedestrians. Within urban neighbourhoods an MUP performs better than dedicated cycling facilities by providing a safe space for cyclists with a wide range of skill levels and abilities including children, novice adults and the elderly. A MUP provides flexibility to bikers in both directions and therefore avoid unnecessary crossing of the street.	P
A3	**Consistency** -- Will the option provide consistency with other road projects surrounding the study area?	The proposed Cross Section includes a MUP on both sides of the corridor. This will provide seamless continuation of active transportation facilities being consistent with other widening projects on Mayfield Road (Region of Peel) and Chinguacousy Road (City of Brampton) south of Mayfield Road.	P	The proposed option includes separate bike path and a sidewalk which is an inconsistent cross section with respect to other projects within the vicinity. This option may cause confusion amongst the users.	NP	The proposed Cross Section includes a MUP on both sides of the corridor. This will provide seamless continuation of active transportation facilities being consistent with other widening projects on Mayfield Road (Region of Peel) and Chinguacousy Road (City of Brampton) south of Mayfield Road.	P
A4	**Safety** -- Will the option address safety concerns through the corridor?	Provides a center median separating the opposing traffic lanes. The proposed centre median provides the flexibility to add a left turn lane or a two-way left turn lane when required. The turn lanes provide safer operation by minimizing the rear-end collisions. This option will include multi use paths for vulnerable road users (VRU). However, the multi use paths will accommodate both pedestrian and cyclist which may pose circumstantial safety concerns, but being a mixed environment, as stated above it provides a safe space for cyclists with a wide range of skill levels and abilities.	P	Provides a center median separating the traffic lanes. The proposed centre median provides the flexibility to add a left turn lane or a two-way left turn lane when required. The turn lanes provide safer operation by minimizing the rear-end collisions. This option will include sidewalk and a designated bike path for vulnerable road users (VRU). No conflicts between the pedestrians and the cyclist is anticipated due to separate facilities, however, being a dedicated bike ROW with high speed bikes, the separate bike tracks may not be attractive for less-experienced cyclists including children, novice adults and the elderly.	NP	This option will not provide a center median. The Option will include multi use paths for vulnerable road users (VRU). However, the multi use paths will accommodate both pedestrian and cyclist which may pose circumstantial safety concerns, but being a mixed environment, as stated above it provides a safe space for cyclists with a wide range of skill levels and abilities.	P
A5	**Municipal Services (Storm, Sanitary & Water)** -- Will the option accommodate future servicing requirements?	This option will include space for conventional municipal utilities such as storm, sanitary sewer and watermain underneath the future road. The option provides an opportunity such as a 3.5 m boulevard space for implementing best management practices for Stormwater Management such as bioswales and etc. Use of bioswales will increase the amount of water to infiltrate and evaporate and decrease the total amount of runoff into the proposed conventional stormwater drainage system.	NP	This option will provide similar benefits as to Option 1. The option is slightly different than Option 1 in terms of a larger impervious area due to separate sidewalk and cycle path facilities.	NP	This Option is better than Option 1 & 2 due to less impervious areas throughout the corridor. There is no separate sidewalk and cycle path facilities and also there is no median lane which reduces the overall impervious area substantially. Also, it provides a much larger boulevard space (5.0 m) as compared to 3.5 m in Option 1 & 2 for implementing best management practices for Stormwater Management.	P
A6	**Transit** -- Will the option provides an opportunity to implement transit along the corridor?	All three options provide an equal opportunity for us to implement transit system. However, a 4 m separation between traffic lanes and MUP provides a better opportunity than the Option 2, to accommodate bus stop pads and shelters. The MUP being at rear of the bus-stop, the boarding and alighting passengers will not interact with bikes and pedestrians. Such interference free operation is more desirable for inline bus stops where bus blocks the traffic lanes.	P	All three options provide an equal opportunity for us to implement transit system. This option proposes a 1.8 m wide bike track at 1.0 m away from the curb. As such not enough space available between the bike track and roadway for providing bus pad and shelter. The bikes on bike track will have conflict with passenger operations, which will have to be mitigated through traffic control measures; not a desirable configuration.	NP	All three options provide an equal opportunity for us to implement transit system. This option has the same separation between MUP and traffic lane as compared to Option 1. It provides similar opportunities to accommodate passenger pads and bus shelters.	P
A7	**Utilities** -- Will the option provide opportunity to include existing and new utilities along the corridor.	All three options provide an equal opportunity to provide sufficient space for future utility relocation work.	P	All three options provide an equal opportunity to provide sufficient space for future utility relocation work.	P	All three options provide an equal opportunity to provide sufficient space for future utility relocation work.	P
Summary		Selection based on the above categories	P	Selection based on the above categories	NP	Selection based on the above categories	P
B. Natural Environment							
B1	**Terrestrial Wildlife and Vegetation (including Species at Risk)** -- Potential to impact area wildlife and Species at Risk (SAR)	Some tree removal may be required including sensitive native Honey Locust trees. Tree removal may affect potential SAR bat habitat. Adequate avoidance and/or mitigation can be implemented for the above. Center lane median provides potential for additional tree and or shrub plantings and therefore provides an opportunity to recover the tree loss along the corridor for widening and add to natural environment.	P	This Option is similar to Option 1 in potential impacts and benefits.	P	This Option is similar to Option 1 & 2 in terms of potential impacts along the corridor. The Option does not provide any center median for additional tree planting that will contribute to natural environment.	NP
B2	**Fisheries / Aquatic** -- Potential to impact fish habitat and aquatic features.	Watercourse crossing are present in the study area. Potential to impact fish and fish habitat at watercourse crossings due to culvert replacements needed to accommodate road widening.	P	This option will have the same impact as comparted to Option 1 & 3.	P	This option will have the same impact as comparted to Option 1 & 2.	P
B3	**Wetlands** -- Potential to impact existing vegetation.	Etobicoke Creek Headwater Wetland Complex present. Other wetlands present at watercourse crossings. Potential to impact wetlands and watercourse crossings due to culvert replacement needed to accommodate road widening.	P	This option will have the same impact as comparted to Option 1 & 3.	P	This option will have the same impact as comparted to Option 1 & 2.	P
B4	**Surface Water and Groundwater** -- Potential to impact surface water and groundwater resources?	This Option will improve groundwater. The Option proposes 12.0 m of ROW space (3.5 m Blvd. on west sided + 3.5 m Blvd. on east side and 5.0 m median space) for plantation and implementation of best management practices for stormwater management. The option will improve ground water recharge by infiltration through a bio-swale medium.	P	This Option will be similar to Option 1.	P	This Option will be slightly less favourable than Option 1 & 2 due to less pervious area by removing the center median. The total pervious areas available is 10.0 m as comparted to 12.0 in Option 1 & 2.	NP
Summary		Selection based on the above categories	P	Selection based on the above categories	P	Selection based on the above categories	NP
C. Cultural Environment							
C1	**Archaeological** -- Will the option impact area archaeological resources?	Some parts of the study area have potential for impacts. A Stage 2 archaeological investigation will be required to confirm. All options will have same impact.	P	Some parts of the study area have potential for impacts. A Stage 2 archaeological investigation will be required to confirm. All options will have same impact.	P	Some parts of the study area have potential for impacts. A Stage 2 archaeological investigation will be required to confirm. All options will have same impact.	P
C2	**Built Heritage & Cultural Heritage** -- Will the option impact area-built heritage resources?	Anticipated impacts to cultural resources present can be mitigated through various measures. All options will have same impact.	P	Anticipated impacts to cultural resources present can be mitigated through various measures. All options will have same impact.	P	Anticipated impacts to cultural resources present can be mitigated through various measures. All options will have same impact.	P
Summary		Selection based on the above categories	P	Selection based on the above categories	P	Selection based on the above categories	P
D. Social Environment							
D1	**Property Impacts** -- Will the option require property acquisition?	Property acquisition will be required on both sides of Chinguacousy Road to obtain a 36.0m right of way. All options will have same impact.	P	Property acquisition will be required on both sides of Chinguacousy Road to obtain a 36.0m right of way. All options will have same impact.	P	Property acquisition will be required on both sides of Chinguacousy Road to obtain a 36.0m right of way. All options will have same impact.	P
D2	**Aesthetics** -- Will the option impact the area visually?	The option has been designed to include a plantation median through sections of the corridor. The median and boulevards will be planted with trees or shrubs to improve aesthetics along the corridor.	P	The option has been designed to include a plantation median through sections of the corridor. The median and boulevards will be planted with trees or shrubs to improve aesthetics along the corridor. This Option will be similar to Option 1.	P	The option does not have a plantation median, however the boulevards and design is not anticipated to degrade the aesthetics of the area.	NP
D3	**Access Management** -- Will the option provide better access to existing and future private properties?	The center median will provide a safe and better access to existing and future properties on both sides of the corridor.	P	The center median will provide a safe and better access to existing and future properties on both sides of the corridor. This Option will be similar to Option 1.	P	This option will require turning vehicles to stop in through lane and wait for their right of way before turning into private property. This option may be very unsafe in many situations.	NP
D4	**Noise and Vibration** -- Will the option impact noise levels during construction and the long term?	This option provides opportunity to plant additional trees in the median which will provide additional resistance to noise and vibration level.	P	This option provides opportunity to plant additional trees in the median which will provide additional resistance to noise and vibration level. This Option will be similar to Option 1.	P	This option will create additional noise as compared to other two options.	NP
D5	**Climate Change / Qualitative Air Quality Assessment** -- Will the option impact air quality? How does the option impact climate change and how does climate change impact the option?	The design option is adequate to absorb the future traffic demand and facilitate smooth flow thus avoiding congestion and idling. The proposed bioswales will provide stormwater management in addition to the plantation median, which also provides carbon sequestration.	P	The design option is adequate to absorb the future traffic demand and facilitate smooth flow thus avoiding congestion and idling. The proposed bioswales will provide stormwater management in addition to the plantation median, which also provides carbon sequestration. This Option will be similar to Option 1.	P	The design option is adequate to absorb the future traffic demand and facilitate smooth flow thus avoiding congestion and idling. The proposed bioswales will provide stormwater management in a higher capacity than the other options due to the increase in size, however the design does not create a plantation median.	NP
Summary		Selection based on the above categories	P	Selection based on the above categories	P	Selection based on the above categories	NP
E. Economic Environment							
E1	**Property Acquisition Costs** -- Will the option require property acquisition?	A 36.0 m ROW will be required to implement this cross section.	P	A 36.0 m ROW will be required to implement this cross section. This Option will be same as other two.	P	A 36.0 m ROW will be required to implement this cross section. This Option will be same as other two.	P
E2	**Construction Costs** -- Will the option be expensive to construct?	Due to median construction and additional planting along the median, this option is relatively expensive than Option 3.	NP	This option will be the most expensive as compared to other two. It has two separate facilities (1.8 m sidewalk + 1.8 m bike path) which will increase the construction cost of the project.	NP	This option will be the least expensive as compared to other two because it has no median and less landscape plantation along the median will be required.	P
E3	**Operating & Maintenance Costs** -- Will the option be expensive to maintain?	This option will require higher maintenance cost due to plantation in median and along the boulevards.	NP	This option will have comparatively much higher maintenance cost than Option 1 & 3 and this is due to plantation in median and separate sidewalk and cycle path facilities.	NP	This option will be relative less expensive for maintenance cost as compared to Options 1 & 2.	P
E4	**Cost Savings** -- Will the option provides opportunity for future cost savings?	All three options are prepared based on 36.0 m ultimate ROW. Securing ultimate ROW will provide flexibility in future by acquiring the ROW now and not in future.	P	All three options are prepared based on 36.0 m ultimate ROW. Securing ultimate ROW will provide flexibility in future by acquiring the ROW now and not in future.	P	All three options are prepared based on 36.0 m ultimate ROW. Securing ultimate ROW will provide flexibility in future by acquiring the ROW now and not in future.	P
Summary		Selection based on the above categories	NP	Selection based on the above categories	NP	Selection based on the above categories	P
Overall Summary		Preferred typical section	19 P	Not Preferred	15 P	Not Preferred	15 P

P - Preferred typical section
NP - Not Preferred

No	Evaluation Criteria		Rehabilitation			
			Option A		Option B	
A. Technical Requirements						
A1	**Future Traffic Capacity** -- Will the option address capacity requirements?		The option provides enough capacity to sustain traffic beyond 2031 horizon, however depending upon the growth and increase in traffic demand, upgrades to corridor will be required prior to 2041.	P	The option provides enough capacity to sustain traffic beyond 2031 horizon, however depending upon the growth and increase in traffic demand, upgrades to corridor will be required prior to 2041.	P
A2	**Active Transportation** -- Will the option provide opportunity to implement pedestrian and cyclists infrastructure?		The option does not include any active transportation along the corridor.	NP	The option provides bike accessible shoulders along the corridor.	P
A3	**Consistency** -- Will the option provide consistency with other development by other municipalities?		This Option provides a consistent cross section with another existing corridor within Town of Caledon.	NP	This option is a consistent cross section with other corridor road reconstruction project completed by Town. The cross section is prepared based on the Town of Caledon's 2019 Development Charge (DC) Background Study. This is to implement bike accessible shoulders for network connectivity.	P
A4	**Safety** -- Will the option address safety concerns all the corridor?		The option will not improve safety conditions for motor vehicles or Vulnerable Road Users (VRU). The existing safety condition will remain as is.	NP	The option proposes bike accessible shoulders along the corridor which create a safe option for Vulnerable Road Users (VRU). The 1.5 m shoulders on both sides of the corridor will also offer a buffer space for motorists to maneuver in the case of an emergency or to pull off the road.	P
A5	**Transit** -- Will the option provides an opportunity to implement transit along the corridor?		The proposed Option does not offer flexibility to integrate transit facilities along corridor.	NP	The widened roadway/accessible shoulder provide some flexibility to integrate transit facilities along corridor.	P
A6	**Utilities** -- Will the option provide opportunity to include existing and new utilities along the corridor.		Under this option, there is no potential impacts to existing utilities. The grading design to improve the existing drainage along the ditches may have some impacts on existing utilities.	NP	Under this Option, there is a potential to relocate few select existing utilities due to widening to accommodate bicycle accessible shoulders. The drainage improvements may have other impacts too along the corridor.	NP
Summary			Selection based on the above categories	NP	Selection based on the above categories	P
B. Natural Environment						
B1	**Terrestrial Wildlife and Vegetation (including Species at Risk)** -- Potential to impact area wildlife and Species at Risk (SAR)		No tree removal or impacts to SAR (species at risk) are anticipated as the road will not be widened as part of this rehabilitation option.	P	Under this Option, some tree removal may be required to accommodate widening.	NP
B2	**Fisheries / Aquatic** -- Potential to impact fish habitat and aquatic features.		Watercourse crossings are present within the study area. No anticipated impacts if appropriate erosion and sediment control measures are implemented.	P	Watercourse crossing are present in the study area. Potential to impact fish and fish habitat at watercourse crossings due to culvert replacement needed to accommodate road widening for bicycle accessible shoulders. This option may provide an opportunity to improve the existing constrained watercourse areas and increase the fluvial and natural route of existing creek/s.	P
B3	**Wetlands** -- Potential to impact existing vegetation.		Etobicoke Creek Headwater Wetland Complex present. Other wetlands present at watercourse crossings. No anticipated impacts if appropriate erosion and sediment control measures are provided.	P	Under this Option, there is a potential to impact the existing wetlands and watercourse crossings. This provides an opportunity to improve the fluvial and natural environmental along creek crossings. This option also provides an opportunity for additional planting along the creek crossing area and therefore recover or add bird habitat/s.	P
B4	**Surface Water and Groundwater** -- Potential to impact surface water and groundwater resources?		No anticipated impacts if appropriate erosion and sediment control measures are implemented.	P	Potential to impact water and groundwater at watercourse crossings due to culvert replacements needed to accommodate road widening for bicycle accessible shoulders.	NP
Summary			Selection based on the above categories	P	Selection based on the above categories	NP
C. Cultural Environment						
C1	**Archaeological** -- Will the option impact area archaeological resources?		Some parts of the study area have potential for impacts. A Stage 2 archaeological investigation will be required to confirm. All options will have same impact.	P	Some parts of the study area have potential for impacts. A Stage 2 archaeological investigation will be required to confirm. All options will have same impact.	P
C2	**Built Heritage & Cultural Heritage** -- Landscapes Will the option impact area-built heritage resources?		Anticipated impacts to cultural resources present can be mitigated through various measures. All options will have same impact.	P	Anticipated impacts to cultural resources present can be mitigated through various measures. All options will have same impact.	P
Summary			Selection based on the above categories	P	Selection based on the above categories	P
D. Social Environment						
D1	**Property Impacts** -- Will the option require property acquisition?		A 36.0 m ROW property will be acquired by the Town for future widening purpose. All work under this option will be within the 36.0 m proposed future ROW.	P	A 36.0 m ROW property will be acquired by the Town for future widening purpose. All work under this option will be within the 36.0 m proposed future ROW.	P
D2	**Aesthetics** -- Will the option impact the area visually?		No impacts anticipated.	P	No impacts anticipated.	P
D3	**Access Management -** Will the option impact private property access?		No impacts anticipated.	P	No impacts anticipated.	P
D4	**Noise and Vibration** -- Will the option impact noise levels during construction and the long term?		No impacts anticipated.	P	No impacts anticipated.	P
D5	**Climate Change / Qualitative Air Quality Assessment** -- Will the option impact air quality? How does the option impact climate change and how does climate change impact the option?		No impacts to climate change or air quality or anticipated as the road width is remaining unchanged. Air quality mitigations related to construction will be implemented.	P	An increase to the impervious surface is acknowledged, but marginal in comparison to the existing roadway. No impacts to climate change are anticipated. Air quality mitigations related to construction will be implemented.	P
Summary			Selection based on the above categories	P	Selection based on the above categories	P
E. Economic Environment						
E1	**Property Acquisition Costs** -- Will the option require property acquisition?		A 36.0 m ROW property will be acquired by the Town for future widening purpose. All work under this option will be within the 36.0 m proposed future ROW.	P	A 36.0 m ROW property will be acquired by the Town for future widening purpose. All work under this option will be within the 36.0 m proposed future ROW.	P
E2	**Construction Costs** -- Will the option be expensive to construct?		This option do not require any widening and therefore will be very less expensive as compared to Option B.	P	This option will be expensive as compared to Option A due to widening and road reconstruction work.	NP
Summary			Selection based on the above categories	P	Selection based on the above categories	NP
Overall Summary			Not Preferred	14 P	Preferred typical section	15 P