

Comparative Evaluation of Net Effects and Ranking – Section S3

| Evaluation Factors and Sub-Factors           | Alternative S3-1   | Alternative S3-2  | Alternative S3-3  | Alternative S3-4 - Preferred   | Alternative S3-5   |
|--|--|---|---|--|--|
| Summary of Potential Net Effects and Ranking |  |   |   |  |  |
| 1.0 Natural Environment                      |  |   |   |  |  |
| 1.1 Fish and Fish Habitat                    |  |   |   |  |  |
| 1.1.1 Fish Habitat                           | <p>Standard net effects to watercourses as outlined in the accompanying memo at the following:</p> <p><b>11 watercourses:</b></p> <ul style="list-style-type: none"><li>1 main stem river crossing (Credit River, 0.3 km), baitfish and migratory trout</li><li>1 permanent tributary (assumed coldwater), trout specialized habitat</li><li>2 intermittent watercourses with unconfirmed fish communities</li><li>7 ephemeral headwater features identified as not fish habitat</li></ul> <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, offsetting / enhancement measures; until confirmed, net effects remain the same as potential effects:</p> <ul style="list-style-type: none"><li>Crossing the main stem Credit River containing migratory trout and Atlantic Salmon habitat, effects can be managed following standard design/construction mitigation.</li><li>Majority of tributary identified as trout specialized habitat (i.e. spawning and/or rearing) would be enclosed under alignment unless tributary can be realigned depending on the design of the interchange and associated ramps.</li></ul> | <p>Standard net effects to watercourses as outlined in the accompanying memo at the following:</p> <p><b>7 watercourses:</b></p> <ul style="list-style-type: none"><li>1 main stem river crossing (Credit River, 0.3 km), baitfish and trout migration</li><li>1 permanent tributary (assumed coldwater), trout spawning and/or rearing</li><li>1 intermittent watercourse (Huttonville Creek 0.6 km; contributing habitat to Redside Dace) unconfirmed fish community</li><li>Network of ephemeral features (4) of Huttonville Creek, not fish habitat</li></ul> <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, offsetting / enhancement measures; until confirmed, net effects remain the same as potential effects:</p> <ul style="list-style-type: none"><li>Crossing the main stem Credit River containing migratory trout including American Eel and Atlantic Salmon, effects can be managed following standard design/construction mitigation.</li><li>Majority of tributary identified as trout specialized habitat (i.e. spawning and/or rearing) would be enclosed under alignment unless tributary can be realigned depending on the design of the interchange and associated ramps.</li><li>Gravel pit at north end of alternative, potential coldwater input to ephemeral channel</li><li>Potential realignment of upstream reach of Huttonville Creek, following MNRF guidance document and consultation with MECP and DFO for mitigation.</li></ul> | <p>Standard net effects to watercourses as outlined in the accompanying memo at the following:</p> <p><b>8 watercourses:</b></p> <ul style="list-style-type: none"><li>1 permanent tributary of Credit River, unconfirmed fish habitat</li><li>1 intermittent roadside/agricultural ditch watercourse of Credit River, no fish habitat</li><li>2 intermittent watercourses of Credit River, unconfirmed fish community</li><li>Network of ephemeral features (4) north end of the alternative, not fish habitat</li></ul> <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, offsetting / enhancement measures; until confirmed, net effects remain the same as potential effects:</p> <ul style="list-style-type: none"><li>The ephemeral watercourses at the north end are all skewed to the alignment or parallel to the alignment requiring some degree of realignment, unless the highway can be shifted to the east.</li><li>Realignment potential at south end of alignment for an intermittent watercourse, unless the highway can be shifted to the west.</li></ul> | <p>Standard net effects to watercourses as outlined in the accompanying memo at the following:</p> <p><b>6 watercourses:</b></p> <ul style="list-style-type: none"><li>1 intermittent tributary of Credit River, not fish habitat</li><li>4 ephemeral headwater features of Credit River, not fish habitat</li><li>1 ephemeral feature of Huttonville Creek, contributing habitat for Redside Dace</li></ul> <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, offsetting / enhancement measures; until confirmed, net effects remain the same as potential effects:</p> <ul style="list-style-type: none"><li>Impacting 1 ephemeral headwater feature that contribute to occupied habitat for Redside Dace Downstream</li><li>Impacting long reach (~750 m) of parallel intermittent feature potentially requiring realignment or altering drainage patterns.</li></ul> | <p>Standard net effects to watercourses as outlined in the accompanying memo at the following:</p> <p><b>7 watercourses:</b></p> <ul style="list-style-type: none"><li>2 intermittent watercourses (Huttonville Creek), unconfirmed fish community (contributing habitat to Redside Dace)</li><li>1 intermittent watercourse, unconfirmed fish community (Tributary to Credit River, 0.7 km)</li><li>Network of ephemeral features (4) of Huttonville Creek, not fish habitat</li></ul> <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, offsetting / enhancement measures; until confirmed, net effects remain the same as potential effects:</p> <ul style="list-style-type: none"><li>Realignment of ~750 m of upstream reach of main stem Huttonville Creek may be required, following MNRF guidance document for mitigation and consultation with MECP and DFO</li><li>Potential realignment of an intermittent tributary to Credit River (~130 m)</li></ul> |

| Evaluation Factors and Sub-Factors  | Alternative S3-1  | Alternative S3-2   | Alternative S3-3  | Alternative S3-4 - Preferred  | Alternative S3-5  |
|-------------------------------------|---|--|---|---|---|
|                                     | Summary of Potential Net Effects and Ranking  |  |   |   |   |
|                                     | HIGH NET EFFECT<br><b>RANKING: 4th</b>  | HIGH NET EFFECT<br><b>RANKING: 5<sup>th</sup></b>  | LOW NET EFFECT<br><b>RANKING: 1<sup>st</sup></b>  | MODERATE NET EFFECT<br><b>RANKING: 2<sup>nd</sup></b>   | MODERATE NET EFFECT<br><b>RANKING: 3<sup>rd</sup></b>   |
|                                     | Alternative intersection crosses the main stem Credit River and a permanent tributary that supports trout spawning with a potential realignment or enclosure of this feature due to the location of the interchange.  | Alternative intersection crosses the main stem Credit River and a permanent tributary that supports trout spawning with a potential realignment or enclosure of this feature due to the location of the interchange. Alternative crosses portion of Huttonville Creek that contributes to Redside Dace habitat at meander and parallel sections potentially requiring significant realignment. Alternative also crosses an intermittent tributary to the Credit River at a significant skew.   | Alternative has 4 intermittent crossings, but no impacts to identified SAR habitat.   | Alternative crosses no known sensitive fish habitat; however, an ephemeral headwater feature contributes to Redside Dace habitat ~700 m downstream of alignment.  | Alternative crosses portion of Huttonville Creek that contributes to occupied habitat for Redside Dace downstream at meander and parallel sections potentially requiring significant realignment. Alternative also crosses an intermittent tributary to the Credit River at a significant skew.   |
| 1.1.2 Fish Community                | Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, offsetting / enhancement measures; until confirmed, net effects remain the same as potential effects: <ul style="list-style-type: none"><li>Crossing parallel tributary identified as trout spawning and/or rearing, realignment likely prohibitive, potential for full enclosure.</li></ul> | Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, offsetting / enhancement measures; until confirmed, net effects remain the same as potential effects: <ul style="list-style-type: none"><li>Crossing of meandering, and portions of parallel watercourse contributing to Occupied Redside Dace habitat downstream.</li><li>A crossing of an intermittent tributary identified as contributing habitat to Redside Dace</li><li>Crossing parallel tributary identified as trout spawning and/or rearing, realignment likely prohibitive, potential for full enclosure</li></ul> | Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, offsetting / enhancement measures; until confirmed, net effects remain the same as potential effects: <ul style="list-style-type: none"><li>No known impacts to sensitive fish communities</li></ul> | Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, offsetting / enhancement measures; until confirmed, net effects remain the same as potential effects: <ul style="list-style-type: none"><li>Crossing 1 ephemeral tributary identified as contributing habitat for Redside Dace</li></ul> | Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, offsetting / enhancement measures; until confirmed, net effects remain the same as potential effects: <ul style="list-style-type: none"><li>Crossing 2 watercourses contributing to occupied habitat for Redside Dace downstream, 1 of which is meandering and could require some realignment dependent on highway alignment</li></ul> |
|                                     | HIGH NET EFFECT   | HIGH NET EFFECT  | LOW NET EFFECT  | MODERATE NET EFFECT   | MODERATE NET EFFECT   |
|                                     | <b>RANKING: 4th</b><br><br>This alternative impacts trout species in spawning / rearing habitat. Ranking based on habitat.  | <b>RANKING: 5th</b><br><br>This alternative impacts trout species in spawning / rearing habitat, and potentially impacts Redside Dace by contributing to habitat downstream. Alternative also crosses portion of Huttonville Creek that contributes to Redside Dace habitat at meander and parallel sections potentially requiring significant realignment.  | <b>RANKING: 1<sup>st</sup></b><br><br>Alternative does not impact any significant fish communities. Ranking based on habitat.   | <b>RANKING: 2<sup>nd</sup></b><br><br>Alternative does not impact any known sensitive fish communities but does impact an ephemeral tributary that contributes habitat to Redside Dace downstream. Ranking based on habitat.  | <b>RANKING: 3<sup>rd</sup></b><br><br>Alternative crosses portion of upstream main stem Huttonville Creek that contributes to Redside Dace habitat; crossing at meander and parallel sections potentially requiring significant realignment.  |
| 1.2 Terrestrial Ecosystems          |   |  |   |   |   |
| 1.2.1 Wildlife and Wildlife Habitat | Net effects associated with the alternative are dependent on the ability  | Net effects associated with the alternative are dependent on the ability   | Net effects associated with the alternative are dependent on the ability  | Net effects associated with the alternative are dependent on the ability to implement   | Net effects associated with the alternative are dependent on the ability to implement   |

| Evaluation Factors and Sub-Factors | Alternative S3-1   | Alternative S3-2   | Alternative S3-3   | Alternative S3-4 - Preferred  | Alternative S3-5   |
|------------------------------------|--|--|--|---|--|
|                                    | Summary of Potential Net Effects and Ranking   |  |  |   |  |
|                                    | <p>to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of small existing habitats will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>Permanent loss of wildlife habitat including habitat for potential Species at Risk (SAR) and Species of Conservation Concern (SCC), candidate Significant Wildlife Habitat (SWH) and other areas for breeding and rearing of young (e.g. amphibian breeding habitat)</li> <li>Removals through this alternative would represent ~6.7 ha losses, or complete removal for many habitat patches.</li> <li>Reduction of wildlife habitat quality through indirect effects that cannot be fully mitigated including edge effects (e.g. increased light and noise and the introduction of pathways for invasive species) and increased potential for animal-vehicle collisions</li> </ul> | <p>to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of existing habitats will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>Permanent loss of wildlife habitat including potential habitat for Species at Risk (SAR) and confirmed Species of Conservation Concern (SCC), large tracts of candidate Significant Wildlife Habitat (SWH) and other areas for breeding and rearing of young (e.g. amphibian breeding habitat)</li> <li>Removals through this alternative would represent ~20.6 ha losses, or complete removal for many habitat patches.</li> <li>Reduction of wildlife habitat quality through indirect effects that cannot be fully mitigated including edge effects (e.g. increased light and noise and the introduction of pathways for invasive species) and increased potential for animal-vehicle collisions.</li> <li>Loss of habitat would impact critical life stages by removing habitat requirements (e.g. wetlands for amphibian breeding or upload forest habitat for foraging and nesting, etc.).</li> </ul> | <p>to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of existing habitats will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>Permanent loss of wildlife habitat including habitat for potential Species at Risk (SAR) and Species of Conservation Concern (SCC), candidate Significant Wildlife Habitat (SWH) and other areas for breeding and rearing of young (e.g. amphibian breeding habitat)</li> <li>Removals through this alternative would represent ~15.3 ha losses, or complete removal for many habitat patches.</li> <li>Reduction of wildlife habitat quality through indirect effects that cannot be fully mitigated including edge effects (e.g. increased light and noise and the introduction of pathways for invasive species) and increased potential for animal-vehicle collisions.</li> </ul> | <p>avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>Permanent loss of wildlife habitat including habitat for potential Species at Risk (SAR) and Species of Conservation Concern (SCC), candidate Significant Wildlife Habitat (SWH) and other areas for breeding and rearing of young (e.g. amphibian breeding habitat)</li> <li>Wildlife habitat features in this alternative are fragmented and/or small and isolated with low to moderate habitat diversity, but are representative features within this section. These features are common within the surrounding landscape.</li> <li>There are no landscape movement opportunities within the landscape.</li> <li>Removals through this alternative would represent ~5.1 ha losses, or complete removal for many habitat patches.</li> <li>Reduction of wildlife habitat quality through indirect effects that cannot be fully mitigated including edge effects (e.g. increased light and noise and the introduction of pathways for invasive species) and increased potential for animal-vehicle collisions.</li> </ul> | <p>avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of existing communities will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>Permanent loss of wildlife habitat including habitat for potential Species at Risk (SAR) and Species of Conservation Concern (SCC), candidate Significant Wildlife Habitat (SWH) and other areas for breeding and rearing of young (e.g. amphibian breeding habitat)</li> <li>Wildlife habitat features in this alternative are fragmented and/or moderate and isolated with low to moderate habitat diversity, but are representative features within this section. These features are common within the surrounding landscape</li> <li>There are no movement corridors present within this alternative. The landscape surrounding these features is predominately agricultural and generally permeable to wildlife movement.</li> <li>Removals through this alternative would represent ~20.1 ha losses, or complete removal for many habitat patches.</li> <li>Reduction of wildlife habitat quality through indirect effects that cannot be fully mitigated including edge effects (e.g. increased light and noise and the introduction of pathways for invasive species) and increased potential for animal-vehicle collisions</li> <li>Loss of habitat would impact critical life stages by removing habitat requirements (e.g. wetlands for amphibian breeding or upload forest habitat for foraging and nesting, etc.)</li> </ul> |
|                                    | MODERATE NET EFFECT  | HIGH NET EFFECT  | MODERATE NET EFFECT  | LOW NET EFFECT  | HIGH NET EFFECT  |
|                                    | <b>RANKING: 2<sup>nd</sup></b>   | <b>RANKING: 4<sup>th</sup></b>   | <b>RANKING: 3<sup>rd</sup></b>   | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 4<sup>th</sup></b>   |
|                                    | This alternative results in a larger amount of unevaluated contiguous wetland habitat compared with alternative S3-4.  | This alternative requires a substantial amount of unevaluated wetland and associate woodland habitat removal.  | This alternative is similar to alternative S3-1 but requires a higher removal of woodland vegetation and unevaluated wetland associated with the Credit River System.  | This alternative results in the least amount of wildlife habitat removal.   | This alternative requires a substantial amount of wildlife habitat removal including unevaluated wetland and associate woodland habitats.  |

| Evaluation Factors and Sub-Factors           | Alternative S3-1   | Alternative S3-2  | Alternative S3-3  | Alternative S3-4 - Preferred  | Alternative S3-5  |
|--|--|---|---|---|---|
| Summary of Potential Net Effects and Ranking |  |   |   |   |   |
| 1.2.2 Wetlands                               | <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of unevaluated existing wetlands / swamps will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>1 Non-PSW identified by LIO is affected by this alternative <ul style="list-style-type: none"> <li>Based on aerial photo interpretation this feature is no longer present.</li> </ul> </li> <li>3 unevaluated wetlands are affected by this alternative <ul style="list-style-type: none"> <li>The unevaluated wetlands consist of deciduous swamp, swamp thicket and marsh.</li> </ul> </li> <li>Removal of ~2.5 ha of wetland, of which ~1.8 ha is deciduous swamp.</li> <li>Reduction in wetland quality through Indirect effects that cannot be fully mitigated including edge effects (e.g. increased light, wind, road contaminants and the introduction of pathways for invasive species) and impacts to hydrologic and groundwater inputs that support these features.</li> </ul> <p>Wetland features through this alternative have some natural buffers which would be removed as a result of the proposed alternative. Changes to adjacent land use have the potential to impact hydrological inputs to portions of features remaining.</p> | <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of existing unevaluated wetland communities will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>1 LSW is affected by this alternative (Etobicoke Creek Headwaters II Wetland Complex)</li> <li>1 Non-PSW identified by LIO is affected by this alternative <ul style="list-style-type: none"> <li>Based on aerial photo interpretation this feature is no longer present.</li> </ul> </li> <li>5 unevaluated wetlands are affected by this alternative <ul style="list-style-type: none"> <li>The unevaluated wetlands consist of deciduous swamp and marsh.</li> </ul> </li> <li>Impacts to several wetlands including ~5.6 ha of wetland and ~4.5 ha deciduous swamp.</li> <li>Significant removals to several large wetlands communities throughout the section.</li> <li>Reduction in wetland quality through Indirect effects that cannot be fully mitigated including edge effects (e.g. increased light, wind, road contaminants and the introduction of pathways for invasive species) and impacts to hydrologic and groundwater inputs that support these features.</li> </ul> <p>Wetland features through this alternative have limited natural buffers which would be removed as a result of this alternative. Changes to adjacent land use have the potential to impact hydrological inputs to portions of features remaining.</p> | <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of existing wetland communities including the Norval wetland will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>1 Non-PSW identified by LIO is removed by this alternative <ul style="list-style-type: none"> <li>Based on aerial photo interpretation this feature is no longer present.</li> </ul> </li> <li>4 unevaluated wetlands are affected by this alternative <ul style="list-style-type: none"> <li>The unevaluated wetlands consist of deciduous swamp, swamp thicket and marsh.</li> </ul> </li> <li>Removal of ~4.0 ha of wetland, of which ~3.3 ha is deciduous swamp</li> <li>Reduction in wetland quality through Indirect effects that cannot be fully mitigated including edge effects (e.g. increased light, wind, road contaminants and the introduction of pathways for invasive species) and impacts to hydrologic and groundwater inputs that support these features.</li> </ul> <p>Wetland features through this alternative have some natural buffers which would be removed as a result of this alternative. Changes to adjacent land use have the potential to impact hydrological inputs to portions of features remaining.</p> | <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>2 LSW is affected by this alternative (Etobicoke Creek Headwaters II Wetland Complex and Norval Wetland)</li> <li>4 unevaluated wetlands are affected by this alternative <ul style="list-style-type: none"> <li>The unevaluated wetlands consist of deciduous swamp and marsh.</li> </ul> </li> <li>Removal of ~2.4 ha of wetland, of which ~0.3 ha is deciduous swamp</li> <li>Reduction in wetland quality through Indirect effects that cannot be fully mitigated including edge effects (e.g. increased light, wind, road contaminants and the introduction of pathways for invasive species) and impacts to hydrologic and groundwater inputs that support these features.</li> </ul> <p>Wetland features through this alternative have limited natural buffers which would be removed as a result of this alternative. Changes to adjacent land use have the potential to impact hydrological inputs to portions of features remaining.</p> | <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of unevaluated wetlands will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>1 PSW is affected by this alternative (Huttonville Creek &amp; Area Wetland Complex)</li> <li>1 LSW is affected by this alternative (Etobicoke Creek Headwater II Wetland Complex)</li> <li>6 unevaluated wetlands are affected by this alternative</li> <li>The unevaluated wetland consists of deciduous swamp, swamp thicket and marsh.</li> <li>Removal of ~7.6 ha of wetland, of which ~6.2 ha is deciduous swamp</li> </ul> <p>Impacts to features are significant with substantial removal of most features within this alternative.</p> <ul style="list-style-type: none"> <li>The largest wetland in this section (Patch CR-HC-82, and CR-HC-72) will be significantly affected by this alternative, removing ~4.0 ha of CR-HC-82, and ~1.7 ha of CR-HC-72.</li> <li>Reduction in wetland quality through Indirect effects that cannot be fully mitigated including edge effects (e.g. increased light, wind, road contaminants and the introduction of pathways for invasive species) and impacts to hydrologic and groundwater inputs that support these features</li> </ul> <p>Wetland features through this alternative have limited natural buffers which would be removed as a result of this alternative. Changes to adjacent land use have the potential to impact hydrological inputs to portions of features remaining.</p> |
|  | LOW NET EFFECT   | HIGH NET EFFECT   | MODERATE NET EFFECT   | LOW NET EFFECT  | HIGH NET EFFECT   |
|  | <b>RANKING: 2<sup>nd</sup></b>   | <b>RANKING: 4<sup>th</sup></b>  | <b>RANKING: 3<sup>rd</sup></b>  | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 4<sup>th</sup></b>  |

| Evaluation Factors and Sub-Factors           | Alternative S3-1   | Alternative S3-2   | Alternative S3-3  | Alternative S3-4 - Preferred   | Alternative S3-5   |
|--|--|--|---|--|--|
| Summary of Potential Net Effects and Ranking |  |  |   |  |  |
|  | This alternative results in a larger amount of unevaluated contiguous wetland compared with alternative S3-4.  | This alternative requires a substantial amount of isolated unevaluated wetland removal.  | This alternative is similar to alternative S3-1 but requires a higher removal of unevaluated wetland associated with the Credit River System.   | This alternative results in the least amount of wetland community removal.   | This alternative requires a substantial amount of isolated unevaluated wetland removal.  |
| 1.2.3 Woodlands and Vegetation               | <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of existing woodlands/swamps will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>Removal of ~6.0 ha of vegetation communities including forest, meadow and swamp</li> <li>No significant woodlands are impacted by this alternative.</li> <li>No interior woodland habitat is impacted by this alternative.</li> <li>No significant valley lands are impacted by this alternative</li> <li>Reduction in vegetation community quality through indirect effects that cannot be fully mitigated including effects from road contaminants (e.g. salt, heavy metals, sediment / debris), introduction of pathways for invasive species, edge / exposure impacts (e.g. canopy blow down)</li> </ul> <p>Large portions of CR-NP-64 and CR-NP-81 will be removed as a result of this alternative. These features represent the majority of natural habitat within the landscape.</p> <p>MODERATE NET EFFECT</p> <p><b>RANKING: 2<sup>nd</sup></b></p> <p>This alternative results in a larger amount of unevaluated contiguous woodland compared with alternative S3-4.</p> | <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of existing woodlands will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>Removal of ~19.5 ha of vegetation communities including forest, meadow and swamp.</li> <li>One potentially significant woodland (~0.1 ha removal) is affected by this alternative. No interior woodland habitat is impacted by this alternative.</li> <li>No significant valley lands are impacted by this alternative.</li> <li>Reduction in vegetation community quality through Indirect effects that cannot be fully mitigated including effects from road contaminants (e.g. salt, heavy metals, sediment / debris), introduction of pathways for invasive species, edge / exposure impacts (e.g. canopy blow down)</li> </ul> <p>CR-HC-84 (2) and CR-NP-73 will be completely removed as a result of this alternative. Large portions of CR-NP-82, CR-NP-70, CR-HC-84 (1) and CR-HC-80 will be removed as a result of this alternative. These features represent the majority of natural habitat within the landscape.</p> <p>HIGH NET EFFECT</p> <p><b>RANKING: 4<sup>th</sup></b></p> <p>This alternative requires a substantial amount of woodland and other vegetation removal.</p> | <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of small existing woodlands will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>Removal of ~14.7 ha of vegetation communities including forest, meadow and treed swamp</li> <li>One potentially significant woodland (~4.9 ha removal) is affected by this alternative.</li> <li>No interior woodland habitat is affected by this alternative.</li> <li>No significant valley lands are affected by this alternative.</li> <li>Reduction in vegetation community quality through Indirect effects that cannot be fully mitigated including effects from road contaminants (e.g. salt, heavy metals, sediment / debris), introduction of pathways for invasive species, edge / exposure impacts (e.g. canopy blow down)</li> </ul> <p>Large portions of CR-NP-64, CR-NP-81 and CR-NP-63 will be removed as a result of this alternative. These features represent the majority of natural habitat within the landscape.</p> <p>MODERATE NET EFFECT</p> <p><b>RANKING: 3<sup>rd</sup></b></p> <p>This alternative is similar to alternative S3-1 but requires a higher removal of woodland and other vegetation associated with the Credit River System.</p> | <p>Net effects associated with the alternative are reduced through the implementation of mitigation measures such as shifting alignment and constraining the ROW. Net effects are dependent on the ability to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>Removal of ~3.1 ha of vegetation communities including forest, meadow, swamp, and cultural plantation.</li> <li>No significant woodlands are affected by this alternative.</li> <li>No interior woodland habitat is affected by this alternative.</li> <li>No significant valley lands are affected by this alternative.</li> <li>Reduction in vegetation community quality through indirect effects that cannot be fully mitigated including effects from road contaminants (e.g. salt, heavy metals, sediment / debris), introduction of pathways for invasive species, edge / exposure impacts (e.g. canopy blow down).</li> </ul> <p>Large portion of Patch CR-HC-96 will be removed as a result of this alternative. Small portions of other communities will be removed due to the alternative.</p> <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>This alternative results in the least amount of woodland and other community removal.</p> | <p>Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, compensation / enhancement measures; until confirmed, net effects remain the same as potential effects. Large portions of existing communities will be removed.</p> <p>Net effects include:</p> <ul style="list-style-type: none"> <li>Removal of ~19.1 ha of vegetation communities including forest and swamp.</li> <li>One potentially significant woodland (~0.1 ha removal) is affected by this alternative. No interior woodland habitat is affected by this alternative.</li> <li>No significant valley lands are affected by this alternative.</li> <li>Reduction in vegetation community quality through Indirect effects that cannot be fully mitigated including effects from road contaminants (e.g. salt, heavy metals, sediment / debris), introduction of pathways for invasive species, edge / exposure impacts (e.g. canopy blow down)</li> </ul> <p>CR-HC-84 (2) will be completely removed as a result of this alternative. Large portions of CR-NP-72, CR-NP-79 CR-HC-82, CR-HC-80 and CR-HC-84 (1) will be removed as a result of this alternative. These features represent the majority of natural habitat within the landscape.</p> <p>HIGH NET EFFECT</p> <p><b>RANKING: 4<sup>th</sup></b></p> <p>This alternative requires a substantial amount of woodland and other vegetation removal.</p> |
| 1.2.4 Designated/Special/ Natural Areas      | Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation,   | Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation,   | Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation,  | There are no net affects associated with this alternative as there are no  | Net effects associated with the alternative are dependent on the ability to implement avoidance, mitigation, compensation /  |

| Evaluation Factors and Sub-Factors                  | Alternative S3-1   | Alternative S3-2   | Alternative S3-3   | Alternative S3-4 - Preferred  | Alternative S3-5   |
|---|--|--|--|---|--|
| <b>Summary of Potential Net Effects and Ranking</b> |  |  |  |   |  |
|   | compensation / enhancement measures; until confirmed, net effects remain the same as potential effects.<br><br>Net effects include: <ul style="list-style-type: none"> <li>Removal of ~114m (~7 ha) within the Greenbelt Plan Area – Natural Heritage System</li> <li>There are no national or provincial parks within this alternative.</li> <li>There are no Conservation Authority lands within this alternative.</li> <li>Region of Peel Official Plan Designations - Intersects with 'Core Areas of Greenlands System' at two locations: minor removal in riparian zones</li> </ul> | compensation / enhancement measures; until confirmed, net effects remain the same as potential effects.<br><br>Net effects include: <ul style="list-style-type: none"> <li>Removal of ~113 m (~7 ha) within the Greenbelt Plan Area – Natural Heritage System</li> <li>There are no national or provincial parks within this alternative.</li> <li>There are no Conservation Authority lands within this alternative.</li> <li>Region of Peel Official Plan Designations - Intersects with 'Core Areas of Greenlands System' at six locations: significant removal of two woodlots, partial removal of two woodlots and edge removal of two woodlots.</li> </ul> | compensation / enhancement measures; until confirmed, net effects remain the same as potential effects.<br><br>Net effects include: <ul style="list-style-type: none"> <li>Removal of ~580 m (~10 ha) within the Greenbelt Plan Area – Natural Heritage System</li> <li>There are no national or provincial parks within this rote alternative.</li> <li>There are no Conservation Authority lands within this alternative.</li> <li>Region of Peel Official Plan Designations - Intersects with 'Core Areas of Greenlands System' at four location: minor to moderate removal in riparian zones.</li> </ul> | designated, special or natural features present.<br><br>Net effects include: <ul style="list-style-type: none"> <li>There are no ESA, ESPAs, ANSI or other designated areas within this alternative.</li> <li>There are no national or provincial parks within this alternative.</li> <li>There are no Conservation Authority lands within this alternative.</li> <li>This alternative does not intersect with the Greenbelt Plan Area – Natural Heritage System.</li> <li>This alternative does not interfere with any Regional Natural Heritage Systems.</li> </ul> | enhancement measures; until confirmed, net effects remain the same as potential effects.<br><br>Net effects include: <ul style="list-style-type: none"> <li>There are no ESA, ESPAs, ANSI or other designated areas within this alternative.</li> <li>There are no national or provincial parks within this alternative.</li> <li>There are no Conservation Authority lands within this alternative.</li> <li>This alternative does not intersect with the Greenbelt Plan Area – Natural Heritage System.</li> <li>Region of Peel Official Plan Designations - Intersects with 'Core Areas of Greenlands System' at six locations: significant removal of five woodlots and edge removal for one woodlot.</li> </ul> |
|   | LOW NET EFFECT   | LOW NET EFFECT   | MODERATE NET EFFECT  | NO NET EFFECT   | LOW NET EFFECT   |
|   | <b>RANKING: 3<sup>rd</sup></b>   | <b>RANKING: 3<sup>rd</sup></b>   | <b>RANKING: 5<sup>th</sup></b>   | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 2<sup>nd</sup></b>   |
|   | This alternative, along with alternative S3-2, intersects the same areas of Greenbelt Natural Heritage System which is less than that of alternative S3-3.   | This alternative, along with alternative S3-1, intersects the same areas of Greenbelt Natural Heritage System which is less than that of alternative S3-3.   | This alternative intersects the greatest area of Greenbelt Natural Heritage System   | This alternative does not affect the Greenbelt Natural Heritage System.   | This alternative minimally affects the Greenbelt Natural Heritage System.  |
| <b>1.3 Ecosystem Services</b>                       |  |  |  |   |  |
|   | <b>Relative ES Value</b> <ul style="list-style-type: none"> <li>Agriculture: Moderate</li> <li>Natural Cover: Low</li> <li>Cumulative: Low</li> </ul> <b>ES Value Representation</b> <ul style="list-style-type: none"> <li>Agriculture: 66%</li> <li>Natural Cover: 34%</li> </ul>  | <b>Relative ES Value</b> <ul style="list-style-type: none"> <li>Agriculture: Low</li> <li>Natural Cover: Moderate</li> <li>Cumulative: Low</li> </ul> <b>ES Value Representation</b> <ul style="list-style-type: none"> <li>Agriculture: 33%</li> <li>Natural Cover: 67%</li> </ul>  | <b>Relative ES Value</b> <ul style="list-style-type: none"> <li>Agriculture: Moderate</li> <li>Natural Cover: Low</li> <li>Cumulative: Low</li> </ul> <b>ES Value Representation</b> <ul style="list-style-type: none"> <li>Agriculture: 59%</li> <li>Natural Cover: 41%</li> </ul>  | <b>Relative ES Value</b> <ul style="list-style-type: none"> <li>Agriculture: Moderate</li> <li>Natural Cover: Low</li> <li>Cumulative: Low</li> </ul> <b>ES Value Representation</b> <ul style="list-style-type: none"> <li>Agriculture: 72%</li> <li>Natural Cover: 28%</li> </ul>   | <b>Relative ES Value</b> <ul style="list-style-type: none"> <li>Agriculture: Moderate</li> <li>Natural Cover: Moderate</li> <li>Cumulative: Moderate</li> </ul> <b>ES Value Representation</b> <ul style="list-style-type: none"> <li>Agriculture: 36%</li> <li>Natural Cover: 64%</li> </ul>  |
|   | LOW NET EFFECT   | LOW NET EFFECT   | LOW NET EFFECT   | LOW NET EFFECT  | MODERATE NET EFFECT  |
|   | <b>RANKING: 2<sup>nd</sup></b>   | <b>RANKING: 4<sup>th</sup></b>   | <b>RANKING: 3<sup>rd</sup></b>   | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 5<sup>th</sup></b>   |
|   | Alternatives S3-1, S3-2, S3-3, and S3-4 all have low net effects using the Ecosystem Service (ES) Net Effects weighting. Differentiation between alternatives is generated by examining the proportion of Natural Cover and relative contribution of Natural Cover ES value to total value.  | Alternatives S3-1, S3-2, S3-3, and S3-4 all have low net effects using the Ecosystem Service (ES) Net Effects weighting. Differentiation between alternatives is generated by examining the proportion of Natural Cover and relative contribution of Natural Cover ES value to total value.  | Alternatives S3-1, S3-2, S3-3, and S3-4 all have low net effects using the Ecosystem Service (ES) Net Effects weighting. Differentiation between alternatives is generated by examining the proportion of Natural Cover and relative contribution of Natural Cover ES value to total value.  | Alternatives S3-1, S3-2, S3-3, and S3-4 all have low net effects using the Ecosystem Service (ES) Net Effects weighting. Differentiation between alternatives is generated by examining the proportion of Natural Cover and relative contribution of Natural Cover ES value to total value.   | Alternative S3-5 has a moderate net effect using the Ecosystem Service (ES) Net Effects weighting, higher than all other alternatives in this Section - S3-1, S3-2, S3-3, and S3-4, and resulting in this alternative being identified as the least preferred.   |

| Evaluation Factors and Sub-Factors                           | Alternative S3-1  | Alternative S3-2  | Alternative S3-3   | Alternative S3-4 - Preferred   | Alternative S3-5   |
|--|---|---|--|--|--|
|  | S3-1 has the second lowest relative contribution by natural cover of the Low Net Effects ranked alternatives, making it the second most preferred alternative in S3.  | 3-2 has the highest relative natural contribution by cover of the Low Net Effects ranked alternatives, making it the second least preferred alternative in S3.  | 3-3 has the second highest relative contribution by natural cover of the Low Net Effects ranked alternatives, making it more preferred than S3-2 and less preferred than S3-1.   | S3-4 has the lowest relative contribution by natural cover of the Low Net Effects ranked alternatives, making it the most preferred alternative in S3.   |  |
| <b>1.4 Groundwater</b>                                       |   |   |  |  |  |
| 1.4.1 Areas of Groundwater Recharge or Discharge             | <ul style="list-style-type: none"> <li>Small loss of recharge due to footprint and small loss of discharge due to interception.</li> </ul>  | <ul style="list-style-type: none"> <li>Small loss of recharge due to footprint and small loss of discharge due to interception.</li> </ul>  | <ul style="list-style-type: none"> <li>Small loss of recharge due to footprint and small loss of discharge due to interception.</li> </ul>   | <ul style="list-style-type: none"> <li>Small loss of recharge due to footprint and small loss of discharge due to interception.</li> </ul>   | <ul style="list-style-type: none"> <li>Small loss of recharge due to footprint and small loss of discharge due to interception.</li> </ul>   |
|  | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>Same Net Effect</p>  | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>Same Net Effect</p>  | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>Same Net Effect</p>   | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>Same Net Effect</p>   | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>Same Net Effect</p>   |
| 1.4.2 Groundwater Source Areas and Wellhead Protection Areas | <ul style="list-style-type: none"> <li>No Net Effects</li> </ul>  | <ul style="list-style-type: none"> <li>No Net Effects</li> </ul>  | <ul style="list-style-type: none"> <li>No Net Effects</li> </ul>   | <ul style="list-style-type: none"> <li>No Net Effects</li> </ul>   | <ul style="list-style-type: none"> <li>No Net Effects</li> </ul>   |
|  | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>Same Net Effect</p>   | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>Same Net Effect</p>   | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>Same Net Effect</p>  | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>Same Net Effect</p>  | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>Same Net Effect</p>  |
| 1.4.3 Large Volume Wells                                     | <ul style="list-style-type: none"> <li>No presence of large volume well</li> </ul>  | <ul style="list-style-type: none"> <li>No presence of large volume well</li> </ul>  | <ul style="list-style-type: none"> <li>One large volume well is in-use and may require decommissioning</li> </ul>  | <ul style="list-style-type: none"> <li>One large volume well within buffer zone, in close proximity of alternative</li> </ul>  | <ul style="list-style-type: none"> <li>No presence of large volume well</li> </ul>   |
|  | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No presence of large volume well. No net effects</p>  | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No presence of large volume well. No net effects</p>  | <p>LOW NET EFFECT</p> <p><b>RANKING: 5<sup>th</sup></b></p> <p>Presence of one large volume well</p>   | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>Presence of large volume well within the buffer zone, in close proximity of alternative</p>   | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No presence of large volume well. No net effects</p>   |
| 1.4.4 Private Wells  | <ul style="list-style-type: none"> <li>Potential reduction in water quality within the shallow aquifer in at least 1 well due to potential salt issue only.</li> <li>At least 10 wells are to be removed/ decommissioned by alternative.</li> </ul> | <ul style="list-style-type: none"> <li>Potential reduction in water quality within the shallow aquifer in at least 1 well due to potential salt issue only.</li> <li>At least 13 wells are to be removed/ decommissioned by alternative.</li> </ul> | <ul style="list-style-type: none"> <li>Potential reduction in water quality within the shallow aquifer in at least 3 wells due to potential salt issue only.</li> <li>At least 16 wells are to be removed/ decommissioned by alternative.</li> </ul> | <ul style="list-style-type: none"> <li>Potential reduction in water quality within the shallow aquifer in at least 2 wells due to potential salt issue only.</li> <li>At least 21 wells are to be removed/ decommissioned by alternative.</li> </ul> | <ul style="list-style-type: none"> <li>Potential reduction in water quality within the shallow aquifer in at least 2 wells due to potential salt issue only.</li> <li>At least 14 wells are to be removed/ decommissioned by alternative.</li> </ul> |
|  | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>This alternative has a few shallow wells and fewer wells to be removed.</p>  | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>This alternative has a few shallow wells and fewer wells to be removed.</p>  | <p>LOW NET EFFECT</p> <p><b>RANKING: 4<sup>st</sup></b></p> <p>This alternative has a few shallow wells and more wells to be removed.</p>  | <p>LOW NET EFFECT</p> <p><b>RANKING: 5<sup>th</sup></b></p> <p>This alternative has a few shallow wells and more wells to be removed.</p>  | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>This alternative has a few shallow wells</p>  |
| 1.4.5 Groundwater-Dependent Commercial Enterprises           | <ul style="list-style-type: none"> <li>One commercial use and wells displaced.</li> </ul>   | <ul style="list-style-type: none"> <li>No commercial use and wells displaced.</li> </ul>  | <ul style="list-style-type: none"> <li>One commercial use and wells displaced.</li> </ul>  | <ul style="list-style-type: none"> <li>One commercial use and wells displaced.</li> </ul>  | <ul style="list-style-type: none"> <li>No commercial use and wells displaced.</li> </ul>   |
|  | <p>MODERATE NET EFFECT</p> <p><b>RANKING: 3<sup>rd</sup></b></p> <p>Presence of commercial well</p>   | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No presence of commercial well</p>   | <p>MODERATE NET EFFECT</p> <p><b>RANKING: 3<sup>rd</sup></b></p> <p>Presence of commercial well</p>  | <p>MODERATE NET EFFECT</p> <p><b>RANKING: 3<sup>rd</sup></b></p> <p>Presence of commercial well</p>  | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No presence of commercial well</p>  |

| Evaluation Factors and Sub-Factors                                     | Alternative S3-1   | Alternative S3-2  | Alternative S3-3  | Alternative S3-4 - Preferred   | Alternative S3-5  |
|--|--|---|---|--|---|
| <b>Summary of Potential Net Effects and Ranking</b>                    |  |   |   |  |   |
| 1.4.6 Groundwater-Sensitive Ecosystems                                 | <ul style="list-style-type: none"> <li>Low potential to affect sensitive ecosystems with wetland areas in buffer zone and coolwater streams that are somewhat dependent on groundwater due to the presence of relatively small number of water courses and wetlands. Some loss of discharge function anticipated.</li> </ul>   | <ul style="list-style-type: none"> <li>Low potential to affect sensitive ecosystems with wetland areas in buffer zone and coolwater/coldwater streams that are somewhat dependent on groundwater due to the presence of relatively small number of water courses and wetlands. Some loss of discharge function anticipated.</li> </ul>  | <ul style="list-style-type: none"> <li>Low potential to affect sensitive ecosystems with wetland areas in buffer zone and coolwater streams that are somewhat dependent on groundwater due to the presence of relatively small number of water courses and wetlands. Some loss of discharge function anticipated.</li> </ul>  | <ul style="list-style-type: none"> <li>Low potential to affect sensitive ecosystems with wetland areas in buffer zone and coolwater/coldwater streams that are somewhat dependent on groundwater due to the presence of relatively small number of water courses and wetlands. Some loss of discharge function anticipated.</li> </ul>   | <ul style="list-style-type: none"> <li>Low potential to affect sensitive ecosystems with wetland areas in buffer zone and coolwater/coldwater streams that are somewhat dependent on groundwater due to the presence of relatively small number of water courses and wetlands. Some loss of discharge function anticipated.</li> </ul>  |
|  | LOW NET EFFECT   | LOW NET EFFECT  | LOW NET EFFECT  | LOW NET EFFECT   | LOW NET EFFECT  |
|  | <b>RANKING: 1<sup>st</sup></b>   | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 1<sup>st</sup></b>   | <b>RANKING: 1<sup>st</sup></b>  |
|  | Same Net Effect  | Same Net Effect   | Same Net Effect   | Same Net Effect  | Same Net Effect   |
| <b>1.5 Surface Water</b>   |  |   |   |  |   |
| 1.5.1 Watershed / Subwatershed Drainage Features / Patterns            | <ul style="list-style-type: none"> <li>Net effects are all minimal; the realignment would require some effort and cost but would be straightforward. The enhancement potential eliminates the net effect.</li> </ul>   | <ul style="list-style-type: none"> <li>Generally minimal impacts. Potential for overall net benefit to West Huttonville Creek through enhancing Redside Dace habitat. Complicated redesign and approvals</li> </ul>   | <ul style="list-style-type: none"> <li>Net effects are all minimal; the realignment would require some effort and cost but would be straightforward. The enhancement potential eliminates the net effect.</li> </ul>  | <ul style="list-style-type: none"> <li>Realignment potentially required for several ephemeral headwater drainage features that contribute to Redside Dace habitat downstream.</li> </ul>   | <ul style="list-style-type: none"> <li>Generally minimal impacts. Potential for overall net benefit to West Huttonville Creek through enhancing Redside Dace habitat. Complicated redesign and approvals</li> </ul>   |
|  | LOW NET EFFECT   | MODERATE NET EFFECT   | LOW NET EFFECT  | LOW NET EFFECT   | LOW NET EFFECT  |
|  | <b>RANKING: 1<sup>st</sup></b>   | <b>RANKING: 5<sup>th</sup></b>  | <b>RANKING: 2<sup>nd</sup></b>  | <b>RANKING: 3<sup>rd</sup></b>   | <b>RANKING: 4<sup>th</sup></b>  |
|  | Minimal impact   | Complicated redesign and approvals  | Realignment needed  | Overall minimal impacts  | Complicated redesign and approvals  |
| 1.5.2 Surface Water Quality and Quantity                               | <ul style="list-style-type: none"> <li>Introduces 54 ha impervious area to Main Credit river;</li> <li>Low impacts on quality through direct and indirect discharges of contaminated and sediment-laden run-off;</li> <li>Low impacts on hydrology due to changes in ground permeability;</li> <li>Low effects on modifications to surface drainage patterns and alterations of water bodies.</li> </ul> | <ul style="list-style-type: none"> <li>Introduces 43 ha impervious area, including 26 ha to Huttonville Creek watershed and 17 ha to Main Credit river;</li> <li>Medium impacts on quality through direct and indirect discharges of contaminated and sediment-laden run-off, thermal impact on the coldwater system;</li> <li>Medium impacts on hydrology due to changes in ground permeability;</li> <li>High effects on modifications to surface drainage patterns and alterations of water bodies.</li> </ul> | <ul style="list-style-type: none"> <li>Introduces 54 ha impervious area to Main Credit River;</li> <li>Medium impacts on quality through direct and indirect discharges of contaminated and sediment-laden run-off;</li> <li>Medium impacts on hydrology due to changes in ground permeability;</li> <li>Low effects on modifications to surface drainage patterns and alterations of water bodies</li> </ul> | <ul style="list-style-type: none"> <li>Introduces 54 ha impervious area, including 25 ha to Huttonville Creek watershed and 29 ha to Main Credit river;</li> <li>Medium impacts on quality through direct and indirect discharges of contaminated and sediment-laden run-off.</li> <li>Medium impacts on hydrology due to changes in ground permeability.</li> <li>Medium effects on modifications to surface drainage patterns and alterations of water bodies</li> </ul> | <ul style="list-style-type: none"> <li>Introduces 51 ha impervious area including 32 ha to Huttonville Creek watershed and 19 ha to Main Credit river;</li> <li>Medium impacts on quality through direct and indirect discharges of contaminated and sediment-laden run-off, thermal impact on the coldwater system.</li> <li>Medium impacts on hydrology due to changes in ground permeability.</li> <li>High effects on modifications to surface drainage patterns and alterations of water bodies</li> </ul> |
|  | LOW NET EFFECT   | MODERATE NET EFFECT   | LOW NET EFFECT  | MODERATE NET EFFECT  | HIGH NET EFFECT   |
|  | <b>RANKING: 1<sup>st</sup></b>   | <b>RANKING: 3<sup>rd</sup></b>  | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 3<sup>rd</sup></b>   | <b>RANKING: 5<sup>th</sup></b>  |
|  | Impervious area to larger watershed. Lowest net effect.  | Significant impervious area to sensitive creek; modification of drainage feature.   | Impervious area to larger watershed. Lowest net effect.   | Significant impervious area to sensitive creek.  | Impervious area to sensitive creek; Significant change to drainage feature.   |
| <b>1.6 Air Quality and Climate Change</b>                              |  |   |   |  |   |
| 1.6.1 Local and regional air quality impacts; greenhouse gas emissions | <ul style="list-style-type: none"> <li>A few residences on Hwy 7, Mayfield Rd., Wanless Dr. and Heritage Rd. are anticipated to</li> </ul>   | <ul style="list-style-type: none"> <li>A few residences on Hwy 7 and Heritage Rd. are anticipated to be close enough</li> </ul>   | <ul style="list-style-type: none"> <li>A few residences on Hwy 7, Mayfield Rd., Wanless Dr. and Heritage Rd. are anticipated to</li> </ul>  | <ul style="list-style-type: none"> <li>A few residences on Heritage Rd. are anticipated to be close enough to experience a change</li> </ul>   | <ul style="list-style-type: none"> <li>A few residences on Heritage Rd. are anticipated to be close enough to experience a change in air quality,</li> </ul>  |



| Evaluation Factors and Sub-Factors   | Alternative S3-1  | Alternative S3-2  | Alternative S3-3   | Alternative S3-4 - Preferred  | Alternative S3-5  |
|--|---|---|--|---|---|
| <b>Summary of Potential Net Effects and Ranking</b>                        |   |   |  |   |   |
|  | be close enough to experience a change in air quality, but pollutants will remain within acceptable levels. Residences along Winston Churchill Blvd. are anticipated to be far enough that they will experience little change in air quality.   | to experience a change in air quality, but pollutants will remain within acceptable levels. Residences on Mississauga Rd. are anticipated to be far enough that they will experience little change in air quality.  | be close enough to experience a change in air quality, but pollutants will remain within acceptable levels. Residences along Winston Churchill Blvd. are anticipated to be far enough that they will experience little change in air quality.  | in air quality, but pollutants will remain within acceptable levels. Residences elsewhere in the area are anticipated to be far enough away that they will experience little change in air quality.   | but pollutants will remain within acceptable levels. Residences elsewhere in the area are anticipated to be far enough away that they will experience little change in air quality.   |
|  | LOW NET EFFECT  | LOW NET EFFECT  | LOW NET EFFECT   | LOW NET EFFECT  | LOW NET EFFECT  |
|  | <b>RANKING: 3<sup>rd</sup></b>  | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 4<sup>th</sup></b>   | <b>RANKING: 4<sup>th</sup></b>  | <b>RANKING: 1<sup>st</sup></b>  |
|  | Slightly more affected residences than S3-2 and S3-5 (particularly on Heritage Rd., north of Mayfield Rd.)  | 2 <sup>nd</sup> fewest affected residences. This alternative also contributes to the shortest overall corridor length, thus reducing the contribution to regional emissions of GHG and air pollutants   | Along with S3-4, somewhat more affected residences than other alternatives (particularly on Heritage Rd., south of Bovaird Dr.)  | Along with S3-3, somewhat more affected residences than other alternatives.   | Fewest affected residences.   |
| <b>2.0 Land Use / Socio-Economic Environment</b>                           |   |   |  |   |   |
| <b>2.1 Land Use Planning Policies, Goals, Objectives</b>                   |   |   |  |   |   |
| 2.1.1 Indigenous Land Claims   | Treaties including Nanfan (1701), Treaty 3 (1795), Treaty 3.75 (1795), Treaty 13 (1805), Treaty 13A (1805), Treaty 18, 1818, Treaty 19 (1918), Williams Treaty (1923), as well as various Assertions and Claims. <ul style="list-style-type: none"> <li>Additional Indigenous Assertions and/or Claims may be filed and/or proven at any time.</li> </ul> | Treaties including Nanfan (1701), Treaty 3 (1795), Treaty 3.75 (1795), Treaty 13 (1805), Treaty 13A (1805), Treaty 18, 1818, Treaty 19 (1918), Williams Treaty (1923), as well as various Assertions and Claims. <ul style="list-style-type: none"> <li>Additional Indigenous Assertions and/or Claims may be filed and/or proven at any time.</li> </ul>                     | Treaties including Nanfan (1701), Treaty 3 (1795), Treaty 3.75 (1795), Treaty 13 (1805), Treaty 13A (1805), Treaty 18, 1818, Treaty 19 (1918), Williams Treaty (1923), as well as various Assertions and Claims. <ul style="list-style-type: none"> <li>Additional Indigenous Assertions and/or Claims may be filed and/or proven at any time.</li> </ul>                    | Treaties including Nanfan (1701), Treaty 3 (1795), Treaty 3.75 (1795), Treaty 13 (1805), Treaty 13A (1805), Treaty 18, 1818, Treaty 19 (1918), Williams Treaty (1923), as well as various Assertions and Claims. <ul style="list-style-type: none"> <li>Additional Indigenous Assertions and/or Claims may be filed and/or proven at any time.</li> </ul> | Treaties including Nanfan (1701), Treaty 3 (1795), Treaty 3.75 (1795), Treaty 13 (1805), Treaty 13A (1805), Treaty 18, 1818, Treaty 19 (1918), Williams Treaty (1923), as well as various Assertions and Claims. <ul style="list-style-type: none"> <li>Additional Indigenous Assertions and/or Claims may be filed and/or proven at any time.</li> </ul> |
|  | MODERATE NET EFFECT   | MODERATE NET EFFECT   | MODERATE NET EFFECT  | MODERATE NET EFFECT   | MODERATE NET EFFECT   |
|  | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 1<sup>st</sup></b>   | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 1<sup>st</sup></b>  |
|  | No difference between alternatives.   | No difference between alternatives.   | No difference between alternatives.  | No difference between alternatives.   | No difference between alternatives.   |
| 2.1.2 Provincial / Federal Land Use Planning Policies / Goals / Objectives | <ul style="list-style-type: none"> <li>Impacts 4 hectares of Greenbelt lands Protected Countryside.</li> <li>Impacts PPS Agricultural lands and public space and recreation policies.</li> <li>Impacts 39 hectares of Agricultural lands.</li> <li>Impacts 9 hectares of Environmental Policy Area.</li> <li>Impacts Agricultural System.</li> </ul>      | <ul style="list-style-type: none"> <li>Impacts 4 hectares of Greenbelt lands Protected countryside Natural Heritage System.</li> <li>Impacts PPS Agricultural lands and public space and recreation policies.</li> <li>Impacts 15 hectares of Agricultural lands.</li> <li>Impacts 21 hectares of Environmental Policy Area.</li> <li>Impacts Agricultural System.</li> </ul> | <ul style="list-style-type: none"> <li>Impacts 9 hectares of Greenbelt lands Protected Countryside-Natural Heritage System.</li> <li>Impacts PPS Agricultural lands and public space and recreation policies.</li> <li>Impacts 39 hectares of Agricultural lands.</li> <li>Impacts 28 hectares of Environmental Policy Area.</li> <li>Impacts Agricultural System</li> </ul> | <ul style="list-style-type: none"> <li>Consistent with the Greenbelt Plan policies.</li> <li>Impacts PPS Agricultural lands and public space and recreation policies.</li> <li>Impacts 29 hectares of Agricultural lands.</li> <li>Impacts 4 hectares of Environmental Policy Area.</li> <li>Impacts Agricultural System.</li> </ul>                      | <ul style="list-style-type: none"> <li>Consistent with the Greenbelt Plan policies.</li> <li>Impacts PPS Agricultural lands and public space and recreation policies.</li> <li>Impacts 15 hectares of Agricultural lands.</li> <li>Impacts 23 hectares of Environmental Policy Area.</li> <li>Impacts Agricultural System.</li> </ul>                     |
|  | MODERATE NET EFFECT   | LOW NET EFFECT  | MODERATE NET EFFECT  | LOW NET EFFECT  | LOW NET EFFECT  |
|  | <b>RANKING: 4<sup>th</sup></b>  | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 4<sup>th</sup></b>   | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 1<sup>st</sup></b>  |

| Evaluation Factors and Sub-Factors   | Alternative S3-1   | Alternative S3-2  | Alternative S3-3  | Alternative S3-4 - Preferred   | Alternative S3-5  |
|--|--|---|---|--|---|
|  | Summary of Potential Net Effects and Ranking   |   |   |  |   |
|  | Impacts the greatest amount of Agricultural lands and System and has impacts on the Greenbelt lands.   | Impacts a small amount of Agricultural lands and System and has minimal impact on Greenbelt lands.  | Impacts the greatest amount of Agricultural lands and System and Greenbelt lands.   | Does not impact Greenbelt lands and impacts a significant amount of Agricultural lands and System.   | Does not impact Greenbelt lands and impacts a minimal amount of Agricultural lands and System.  |
| 2.1.3 Municipal (local and regional) Land Use Planning Policies / Goals / Objectives | <ul style="list-style-type: none"> <li>Impacts 39 hectares of agricultural lands.</li> <li>Impacts 9 hectares of Environmental Policy Area.</li> <li>Impacts 110 hectares of future urban area lands.</li> <li>Not in keeping with proposed Heritage Heights Secondary Plan; impacts 113.4 hectares.</li> <li>Potential to be future Norval By-pass.</li> <li>Does not align with HBATS.</li> </ul> <p>MODERATE NET EFFECT</p> | <ul style="list-style-type: none"> <li>Impacts 15 hectares of agricultural lands.</li> <li>Impacts 21 hectares of Environmental Policy Area.</li> <li>Impacts 125 hectares of future urban area lands.</li> <li>Generally in keeping with proposed Heritage Heights Secondary Plan; impacts 128 hectares.</li> </ul> <p>LOW NET EFFECT</p>  | <ul style="list-style-type: none"> <li>Impacts 39 hectares of agricultural lands.</li> <li>Impacts 28 hectares of Environmental Policy Area.</li> <li>Impacts 132 hectares of future urban area lands.</li> <li>Not in keeping with proposed Heritage Heights Secondary Plan; impacts 141.3 hectares.</li> <li>Potential to be future Norval By-pass.</li> <li>Does not align with HBATS.</li> </ul> <p>HIGH NET EFFECT</p> | <ul style="list-style-type: none"> <li>Impacts 29 hectares of Agricultural lands.</li> <li>Impacts 148 hectares of future urban area.</li> <li>Impacts 4 hectares of Environmental Policy Area.</li> <li>Generally in keeping with proposed Heritage Heights Secondary Plan; impacts 147.7 hectares.</li> </ul> <p>LOW NET EFFECT</p>                                      | <ul style="list-style-type: none"> <li>Impacts 15 hectares of Agricultural lands.</li> <li>Impacts 155 hectares of future urban area.</li> <li>Impacts 23 hectares of Environmental Policy Area.</li> <li>Generally in keeping with proposed Heritage Heights Secondary Plan; impacts 154.9 hectares.</li> </ul> <p>MODERATE NET EFFECT</p> |
|  | <p><b>RANKING: 4<sup>th</sup></b></p> <p>Impacts a low amount of future urban area and is not in keeping with the Heritage Heights Secondary Plan.</p>   | <p><b>RANKING: 1<sup>st</sup></b></p> <p>Impacts a low amount of future urban area lands and is generally in keeping with the Heritage Heights Secondary Plan.</p>  | <p><b>RANKING: 5<sup>th</sup></b></p> <p>Impacts a high amount of future urban area lands and is not in keeping with the Heritage Heights Secondary Plan.</p>   | <p><b>RANKING: 2<sup>nd</sup></b></p> <p>Impacts a high amount of future urban area lands and is generally in keeping with Heritage Heights Secondary Plan.</p>  | <p><b>RANKING: 3<sup>rd</sup></b></p> <p>Impacts the highest amount of future urban area lands and is generally in keeping with the Heritage Heights Secondary Plan.</p>  |
| 2.1.4 Development Objectives of Private Property Owners                              | <ul style="list-style-type: none"> <li>Strongly supported by one landowner group.</li> </ul> <p>LOW NET EFFECT</p>   | <ul style="list-style-type: none"> <li>Design refinements would not eliminate impacts to proposed Catholic cemetery development (8.1 hectares).</li> <li>Not supported by either (east/west) landowners group.</li> <li>Preliminary design could reduce impacts to Osmington site; would not eliminate impacts, since alternative shift to the east would impact Jehovah's Witness development.</li> </ul> <p>MODERATE NET EFFECT</p> | <ul style="list-style-type: none"> <li>Likely interest to develop lands but no applications made because of the GTA West Study Area.</li> </ul> <p>LOW NET EFFECT</p>   | <ul style="list-style-type: none"> <li>Design refinements could reduce, but not eliminate impacts to proposed Catholic cemetery development (11.8 hectares). Preliminary design could reduce impacts to Osmington site; would not eliminate impacts, since alternative shift to the east would impact Jehovah's Witness development.</li> </ul> <p>MODERATE NET EFFECT</p> | <ul style="list-style-type: none"> <li>Design refinements would not eliminate impacts to Osmington (7.3 hectares), Heathwood (3.5 hectares) and MCN (3.4 hectares) applications and proposed Catholic cemetery (8.1 hectares).</li> </ul> <p>HIGH NET EFFECT</p>  |
|  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>Impact to future potential development can be reduced by removing property from the FAA and compensating impacted landowners</p>  | <p><b>RANKING: 4<sup>th</sup></b></p> <p>Impacts proposed Catholic Cemetery.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>Impact to future potential development can be reduced by removing property from the FAA and compensating impacted landowners.</p>  | <p><b>RANKING: 3<sup>rd</sup></b></p> <p>Impacts proposed Catholic Cemetery. Given the cemetery property is on the edge of the 250 m right-of-way limit, it could be reduced during Preliminary Design.</p>  | <p><b>RANKING: 5<sup>th</sup></b></p> <p>Impacts four development applications and the proposed Catholic cemetery.</p>  |
| <b>2.2 Land Use – Community</b>  |  |   |   |  |   |
| 2.2.1 First Nation Reserves  | <ul style="list-style-type: none"> <li>No reserves in study area.</li> </ul> <p>NO NET EFFECT</p>  | <ul style="list-style-type: none"> <li>No reserves in study area.</li> </ul> <p>NO NET EFFECT</p>   | <ul style="list-style-type: none"> <li>No reserves in study area.</li> </ul> <p>NO NET EFFECT</p>   | <ul style="list-style-type: none"> <li>No reserves in study area.</li> </ul> <p>NO NET EFFECT</p>  | <ul style="list-style-type: none"> <li>No reserves in study area.</li> </ul> <p>NO NET EFFECT</p>   |
|  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No difference between alternatives.</p>   | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No difference between alternatives.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No difference between alternatives.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No difference between alternatives.</p>   | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No difference between alternatives.</p>  |

| Evaluation Factors and Sub-Factors                    | Alternative S3-1  | Alternative S3-2   | Alternative S3-3   | Alternative S3-4 - Preferred  | Alternative S3-5  |
|---|---|--|--|---|---|
|   | Summary of Potential Net Effects and Ranking  |  |  |   |   |
| 2.2.2 Indigenous Sacred Areas                         | <ul style="list-style-type: none"><li>No known or reported Indigenous Sacred Areas</li></ul>  | <ul style="list-style-type: none"><li>No known or reported Indigenous Sacred Areas</li></ul>   | <ul style="list-style-type: none"><li>No known or reported Indigenous Sacred Areas</li></ul>   | <ul style="list-style-type: none"><li>No known or reported Indigenous Sacred Areas</li></ul>  | <ul style="list-style-type: none"><li>No known or reported Indigenous Sacred Areas</li></ul>  |
|   | NO NET EFFECT   | NO NET EFFECT  | NO NET EFFECT  | NO NET EFFECT   | NO NET EFFECT   |
|   | <b>RANKING: 1<sup>st</sup></b><br><br>No difference between alternatives.   | <b>RANKING: 1<sup>st</sup></b><br><br>No difference between alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No difference between alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No difference between alternatives.   | <b>RANKING: 1<sup>st</sup></b><br><br>No difference between alternatives.   |
| 2.2.3 Urban and Rural Residential Uses and Properties | <ul style="list-style-type: none"><li>8 residential properties impacted (2.79 hectares).</li></ul>  | <ul style="list-style-type: none"><li>13 residential properties impacted (3.55 hectares).</li></ul>  | <ul style="list-style-type: none"><li>8 residential properties impacted (2.69 hectares).</li></ul>   | <ul style="list-style-type: none"><li>14 residential properties impacted (2.47 hectares).</li></ul>   | <ul style="list-style-type: none"><li>12 residential properties impacted (2.79 hectares).</li></ul>   |
|   | LOW NET EFFECT  | MODERATE NET EFFECT  | LOW NET EFFECT   | MODERATE NET EFFECT   | MODERATE NET EFFECT   |
|   | <b>RANKING: 1<sup>st</sup></b><br><br>Lowest number of residential properties impacted but a larger area of land impacted over alternative S3-3.      | <b>RANKING: 3<sup>rd</sup></b><br><br>Moderate number of residential properties impacted.  | <b>RANKING: 1<sup>st</sup></b><br><br>Lowest number of residential properties impacted.  | <b>RANKING: 3<sup>rd</sup></b><br><br>Highest number of residential properties impacted; not the highest area impacted. Located in a redevelopment area.  | <b>RANKING: 3<sup>rd</sup></b><br><br>Moderate number of residential properties impacted.   |
| 2.2.4 Commercial/ Industrial Uses and Properties      | <ul style="list-style-type: none"><li>Impacts 2 commercial use (Crawfords Village Bakery [1.6 hectares] and Sun Opta [0.2 hectares]).</li></ul>       | <ul style="list-style-type: none"><li>Impacts 3 commercial uses (Crawfords Village Bakery [1.6 hectares], Sun Opta [0.2 hectares] and Gro Bark [11 hectares]).</li></ul>   | <ul style="list-style-type: none"><li>Impacts 2 commercial uses (Carl Laidlaw Orchards [2.3 hectares] and Orchalaw Farms [14.8 hectares]).</li></ul>                 | <ul style="list-style-type: none"><li>Impacts 6 commercial uses (Doanne Supply Ltd./Rocca’s Universal Truck Repair [2.8 hectares], DKG Landscaping [18.8 hectares], Lauber Group Canada Inc. [0.4 hectares], Orchalaw Farms [4.8 hectares] Laidlaw Orchards [4.3 hectares], and Osmington [interchange impact only]).</li></ul> | <ul style="list-style-type: none"><li>Impacts 2 commercial uses (Laidlaw Orchards [3.7 hectares] and Gro Bark [11 hectares]).</li></ul>           |
|   | LOW NET EFFECT  | HIGH NET EFFECT  | HIGH NET EFFECT  | MODERATE NET EFFECT   | MODERATE NET EFFECT   |
|   | <b>RANKING: 1<sup>st</sup></b><br><br>Impacts a portion of Crawfords Village Bakery but does not impact access.                                       | <b>RANKING: 4<sup>th</sup></b><br><br>Impacts access to one of the commercial properties as the alternative intersects the middle of the property and only impacts a small portion of Crawfords Village Bakery.                  | <b>RANKING: 4<sup>th</sup></b><br><br>Intersects through the middle of both properties and impacts the use of the properties.  | <b>RANKING: 2<sup>nd</sup></b><br><br>Impacts access to the three commercial properties as the alternative intersects the middle of the properties and impacts the entire operation of another property.  | <b>RANKING: 2<sup>nd</sup></b><br><br>Impacts access to the two commercial properties as the alternative intersects the middle of the properties. |
| 2.2.5 Recreational Areas and Tourist Attractions      | <ul style="list-style-type: none"><li>Impacts Brampton Wilderness Centre (0.03 hectares) which could be avoided through design refinements.</li></ul> | <ul style="list-style-type: none"><li>Impacts Brampton Wilderness Centre (0.03 hectares) which could be avoided through design refinements</li></ul>   | <ul style="list-style-type: none"><li>Impacts Brampton Wilderness Centre (14.8 hectares) which could be avoided through design refinements.</li></ul>                | <ul style="list-style-type: none"><li>No impacts</li></ul>  | <ul style="list-style-type: none"><li>No impacts</li></ul>  |
|   | LOW NET EFFECT  | LOW NET EFFECT   | HIGH NET EFFECT  | NO NET EFFECT   | NO NET EFFECT   |
|   | <b>RANKING: 3<sup>rd</sup></b><br><br>Impacts a small portion of the Brampton Wilderness Centre lands.  | <b>RANKING: 3<sup>rd</sup></b><br><br>Impacts a small portion of the Brampton Wilderness Centre lands.   | <b>RANKING: 5<sup>th</sup></b><br><br>Impacts a large portion of the Brampton Wilderness Centre.   | <b>RANKING: 1<sup>st</sup></b><br><br>No impacts.   | <b>RANKING: 1<sup>st</sup></b><br><br>No impacts.   |
| 2.2.6 Community Facilities / Institutions             | <ul style="list-style-type: none"><li>Impacts Sant Nirankari Satsang Bhawan (3.4 hectares).</li></ul><br><br>HIGH NET EFFECT                          | <ul style="list-style-type: none"><li>Impacts Sant Nirankari Satsang Bhawan (3.4 hectares).</li><li>Impacts proposed Catholic Cemetery (8.1 hectares).</li><li>Impacts Assembly Hall Jehovah Witnesses (0.7 hectares).</li></ul> | <ul style="list-style-type: none"><li>Impacts Brampton Wilderness Centre (14.8 hectares).</li><li>Impacts Assembly Hall Jehovah Witnesses (0.01 hectares).</li></ul> | <ul style="list-style-type: none"><li>Impacts Proposed Catholic Cemetery (11.8 hectares).</li><li>Impacts St. Elias Catholic Church (0.4 hectares).</li></ul>   | <ul style="list-style-type: none"><li>Impacts proposed Catholic Cemetery (8.1 hectares).</li></ul><br><br>LOW NET EFFECT                          |

| Evaluation Factors and Sub-Factors                           | Alternative S3-1  | Alternative S3-2  | Alternative S3-3  | Alternative S3-4 - Preferred  | Alternative S3-5  |
|--|---|---|---|---|---|
|  |   | HIGH NET EFFECT   | MODERATE NET EFFECT   | MODERATE NET EFFECT   |   |
|  | <b>RANKING: 4<sup>th</sup></b><br><br>Impacts the use of the Sant Nirankari Satsang Bhawan even with design refinements.  | <b>RANKING: 5<sup>th</sup></b><br><br>Impacts the use of the Sant Nirankari Satsang Bhawan and the eastern portion of the proposed Catholic cemetery lands and Assembly Hall Jehovah Witnesses.   | <b>RANKING: 2<sup>nd</sup></b><br><br>Impacts access to the Brampton Wilderness Centre from Bovaird Drive and intersects the middle of the property. Impacts could not be avoided through design refinements. Impacts to Assembly Hall Jehovah Witnesses could be eliminated through design refinements.  | <b>RANKING: 2<sup>nd</sup></b><br><br>Impacts the access and largest portion of the proposed Catholic cemetery lands. Impacts a small portion of St. Elias Catholic Church but does not impact the use of the property.   | <b>RANKING: 1<sup>st</sup></b><br><br>Impacts only one property and the smallest portion of the proposed Catholic cemetery lands.   |
| 2.2.7 Municipal Infrastructure and Public Service Facilities | <ul style="list-style-type: none"> <li>Impacts GO Transit line that intersects Heritage Road.</li> </ul><br>LOW NET EFFECT  | <ul style="list-style-type: none"> <li>Impacts GO Transit line that intersects Heritage Road and potential future layover facility.</li> </ul><br>LOW NET EFFECT  | <ul style="list-style-type: none"> <li>Impacts GO Transit line that intersects Heritage Road and potential future layover facility.</li> </ul><br>LOW NET EFFECT  | <ul style="list-style-type: none"> <li>Impacts GO Transit line that intersects Heritage Road and potential future layover facility.</li> </ul><br>LOW NET EFFECT  | <ul style="list-style-type: none"> <li>Impacts GO Transit line that intersects Heritage Road and potential future layover facility.</li> </ul><br>LOW NET EFFECT  |
|  | <b>RANKING: 1<sup>st</sup></b><br><br>All alternatives impact the GO Transit line. Impacts can be mitigated through design refinements.   | <b>RANKING: 1<sup>st</sup></b><br><br>All alternatives impact the GO Transit line. Impacts can be mitigated through design refinements.   | <b>RANKING: 1<sup>st</sup></b><br><br>All alternatives impact the GO Transit line. Impacts can be mitigated through design refinements.   | <b>RANKING: 1<sup>st</sup></b><br><br>All alternatives impact the GO Transit line. Impacts can be mitigated through design refinements.   | <b>RANKING: 1<sup>st</sup></b><br><br>All alternatives impact the GO Transit line. Impacts can be mitigated through design refinements.   |
| <b>2.3 Noise Sensitive Areas (NSA's)</b>                     |   |   |   |   |   |
| 2.3.1 Transportation Noise                                   | <ul style="list-style-type: none"> <li>A few residences on Highway 7, Mayfield Rd., Wanless Dr. and Heritage Rd. are anticipated to be close enough to experience a significant change in noise. Residences along Winston Churchill Blvd. may experience some change in noise level.</li> </ul><br>MODERATE NET EFFECT                                    | <ul style="list-style-type: none"> <li>A few residences on Highway 7 and Heritage Rd. are anticipated to be close enough to experience a significant change in noise. Residences along Mississauga Rd. may experience some change in noise level.</li> </ul><br>MODERATE NET EFFECT   | <ul style="list-style-type: none"> <li>A few residences on Highway 7, Mayfield Rd., Wanless Dr. and Heritage Rd. are anticipated to be close enough to experience a significant change in noise. Residences along Winston Churchill Blvd. may experience some change in noise level.</li> </ul><br>MODERATE NET EFFECT                                    | <ul style="list-style-type: none"> <li>Several residences on Heritage Rd. are anticipated to be close enough to experience a significant change in noise. Residences along Winston Churchill Blvd. and Mississauga Rd. may experience some change in noise level.</li> </ul><br>MODERATE NET EFFECT   | <ul style="list-style-type: none"> <li>A few residences on Heritage Rd. are anticipated to be close enough to experience a significant change in noise. Residences along Mississauga Rd. will experience some change in noise level.</li> </ul><br>MODERATE NET EFFECT  |
|  | <b>RANKING: 1<sup>st</sup></b><br><br>Well removed from residences on Mississauga Rd. and Winston Churchill. Number of other affected residences is one of the fewest of the alternatives and has the lowest score.   | <b>RANKING: 2<sup>nd</sup></b><br><br>Closer to more residences on Mississauga Rd. and approximately the same score as S3-3 to S3-5   | <b>RANKING: 2<sup>nd</sup></b><br><br>Somewhat more affected residences than S3-1 and approximately same score as S3-2, S3-4 and S3-5   | <b>RANKING: 2<sup>nd</sup></b><br><br>Well removed from both Winston Churchill Blvd. and Mississauga Rd., and has fewest affected residences, but has approximately the same score as S3-2, S3-3 and S3-5   | <b>RANKING: 2<sup>nd</sup></b><br><br>Closer to more residences on Mississauga Rd. than any other alternatives (highest number of affected residences) and approximately same score as S3-2 to S3-4.  |
| <b>2.4 Land Use – Resources</b>                              |   |   |   |   |   |
| 2.4.1 Indigenous Treaty Rights and Land Use Management       | Treaties including Nanfan (1701), Treaty 3 (1795), Treaty 3.75 (1795), Treaty 13 (1805), Treaty 13A (1805), Treaty 18, 1818, Treaty 19 (1918), Williams Treaty (1923), as well as various Assertions and Claims. <ul style="list-style-type: none"> <li>Additional Indigenous Assertions and/or Claims may be filed and/or proven at any time.</li> </ul> | Treaties including Nanfan (1701), Treaty 3 (1795), Treaty 3.75 (1795), Treaty 13 (1805), Treaty 13A (1805), Treaty 18, 1818, Treaty 19 (1918), Williams Treaty (1923), as well as various Assertions and Claims. <ul style="list-style-type: none"> <li>Additional Indigenous Assertions and/or Claims may be filed and/or proven at any time.</li> </ul> | Treaties including Nanfan (1701), Treaty 3 (1795), Treaty 3.75 (1795), Treaty 13 (1805), Treaty 13A (1805), Treaty 18, 1818, Treaty 19 (1918), Williams Treaty (1923), as well as various Assertions and Claims. <ul style="list-style-type: none"> <li>Additional Indigenous Assertions and/or Claims may be filed and/or proven at any time.</li> </ul> | Treaties including Nanfan (1701), Treaty 3 (1795), Treaty 3.75 (1795), Treaty 13 (1805), Treaty 13A (1805), Treaty 18, 1818, Treaty 19 (1918), Williams Treaty (1923), as well as various Assertions and Claims. <ul style="list-style-type: none"> <li>Additional Indigenous Assertions and/or Claims may be filed and/or proven at any time.</li> </ul> | Treaties including Nanfan (1701), Treaty 3 (1795), Treaty 3.75 (1795), Treaty 13 (1805), Treaty 13A (1805), Treaty 18, 1818, Treaty 19 (1918), Williams Treaty (1923), as well as various Assertions and Claims. <ul style="list-style-type: none"> <li>Additional Indigenous Assertions and/or Claims may be filed and/or proven at any time.</li> </ul> |

| Evaluation Factors and Sub-Factors  | Alternative S3-1   | Alternative S3-2   | Alternative S3-3   | Alternative S3-4 - Preferred   | Alternative S3-5  |
|---|--|--|--|--|---|
|   | Summary of Potential Net Effects and Ranking   |  |  |  |   |
|   | MODERATE NET EFFECT  | MODERATE NET EFFECT  | MODERATE NET EFFECT  | MODERATE NET EFFECT  | MODERATE NET EFFECT   |
|   | RANKING: 1 <sup>st</sup>   | RANKING: 1 <sup>st</sup>   | RANKING: 1 <sup>st</sup>   | RANKING: 1 <sup>st</sup>   | RANKING: 1 <sup>st</sup>  |
|   | No difference between alternatives.  | No difference between alternatives.  | No difference between alternatives.  | No difference between alternatives.  | No difference between alternatives.   |
| 2.4.2 Agriculture / Specialty Crop  |  |  |  |  |   |
| <ul style="list-style-type: none"> <li>Removal or sterilization of Class 1 – 3 agricultural lands</li> <li>Specialty Crops/Cropland affected</li> <li>Cropland affected</li> <li>Livestock operations affected</li> <li>Loss of agricultural buildings</li> <li>Agricultural buildings within 50 m</li> <li>Field crop operations affected</li> <li>Farm properties greater than 20 ha affected</li> <li>Farm properties less than 20 ha affected</li> <li>Severed parcels greater than 20 ha created</li> <li>Severed parcels less than 20 ha created</li> <li>Landlocked parcels created</li> <li>High investment operations affected</li> <li>Farm equipment transportation routes affected</li> </ul> | <ul style="list-style-type: none"> <li>Loss of 51.2 ha of Class 1 – 3 Lands</li> <li>No effect</li> <li>Loss of 24.1 ha of common field crop cropland<br/>Loss of 24.0 ha of forage cropland</li> <li>One livestock operation affected</li> <li>Loss of one retired bank barn and farm residential unit, loss of one bank barn with extension, silo, machine shed and farm residential unit</li> <li>No effect</li> <li>Four field crop operations affected</li> <li>Four farm properties greater than 20 ha affected</li> <li>No effect</li> <li>One severed parcel greater than 20 ha created</li> <li>Four severed parcels less than 20 ha created</li> <li>No effect</li> <li>One high investment operation affected (land only)</li> <li>No effect</li> </ul> | <ul style="list-style-type: none"> <li>Loss of 29.2 ha of Class 1 – 3 lands</li> <li>No effect</li> <li>Loss of 6.9 ha of small grain cropland<br/>Loss of 2.3 ha of forage/pasture cropland<br/>Loss of 0.6 ha of common field cropland</li> <li>No effect</li> <li>No effect</li> <li>No effect</li> <li>Two field crop operation affected</li> <li>One farm property greater than 20 ha affected</li> <li>No effect</li> <li>One severed parcel greater than 20 ha created</li> <li>No effect</li> <li>No effect</li> <li>No effect</li> <li>No effect</li> </ul> | <ul style="list-style-type: none"> <li>Loss of 55.7 ha of Class 1 – 3 lands</li> <li>No effect</li> <li>Loss of 24.1 ha of common field crop cropland<br/>Loss of 24.0 ha of forage cropland</li> <li>One livestock operation affected</li> <li>Loss of one retired bank barn and farm residential unit, loss of one bank barn with extension, silo, machine shed and farm residential unit</li> <li>No effect</li> <li>Four field crop operations affected</li> <li>Four farm properties greater than 20 ha affected</li> <li>No effect</li> <li>One severed parcel greater than 20 ha created</li> <li>Four severed parcels less than 20 ha created</li> <li>No effect</li> <li>One high investment operation affected (land only)</li> <li>No effect</li> </ul> | <ul style="list-style-type: none"> <li>Loss of 39.1 ha of Class 1 – 3 lands</li> <li>No effect</li> <li>Loss of 21.9 ha of forage cropland<br/>Loss of 13.6 ha of soybean cropland</li> <li>No effect</li> <li>Loss of one retired bank barn</li> <li>No effect</li> <li>Three field crop operations affected</li> <li>Three farm properties greater than 20 ha affected</li> <li>No effect</li> <li>No effect</li> <li>Four severed parcels less than 20 ha created</li> <li>One landlocked parcel created</li> <li>No effect</li> <li>No effect</li> </ul> | <ul style="list-style-type: none"> <li>Loss of 25.40 ha of Class 1 – 3 lands</li> <li>No effect</li> <li>Loss of 6.9 ha of small grain cropland<br/>Loss of 2.3 ha of pasture/forage cropland<br/>Loss of 0.6 ha of common field cropland</li> <li>No effect</li> <li>No effect</li> <li>No effect</li> <li>Two field crop operation affected</li> <li>One farm property greater than 20 ha affected</li> <li>No effect</li> <li>One severed parcel greater than 20 ha created</li> <li>No effect</li> <li>No effect</li> <li>No effect</li> <li>No effect</li> </ul> |

| Evaluation Factors and Sub-Factors   | Alternative S3-1   | Alternative S3-2  | Alternative S3-3   | Alternative S3-4 - Preferred   | Alternative S3-5  |
|--|--|---|--|--|---|
| Summary of Potential Net Effects and Ranking   |  |   |  |  |   |
| <ul style="list-style-type: none"><li>Division of agricultural community areas</li><li>Loss of tile drainage</li></ul> | <ul style="list-style-type: none"><li>No effect</li><li>Loss of 34.8 ha of tile drainage (systematic)</li></ul> <p>HIGH NET EFFECT</p>   | <ul style="list-style-type: none"><li>No effect</li><li>Loss of 6.7 ha of tile drainage (systematic)</li></ul> <p>LOW NET EFFECT</p>  | <ul style="list-style-type: none"><li>No effect</li><li>Loss of 34.8 ha of tile drainage (systematic)</li></ul> <p>HIGH NET EFFECT</p>   | <ul style="list-style-type: none"><li>No effect</li><li>Loss of 8.3 ha of tile drainage (systematic)</li></ul> <p>MODERATE NET EFFECT</p>  | <ul style="list-style-type: none"><li>No effect</li><li>Loss of 6.7 ha of tile drainage (systematic)</li></ul> <p>LOW NET EFFECT</p>  |
|  | <p><b>RANKING: 4<sup>th</sup></b></p> <ul style="list-style-type: none"><li>Loss of 51.2 ha of Class 1 – 3 lands</li><li>No specialty crop lands</li><li>One livestock operation affected</li><li>Loss of one retired bank barn and farm residential unit, loss of one bank barn with extension, silo, machine shed and farm residential unit</li><li>No additional agricultural buildings within 50 m</li><li>One high investment operation affected (land only)</li><li>Loss of 34.8 ha of tile drainage</li></ul> | <p><b>RANKING: 1<sup>st</sup></b></p> <ul style="list-style-type: none"><li>Loss of 29.2 ha of Class 1 – 3 lands</li><li>No specialty crop lands</li><li>No livestock operations</li><li>Loss of one retired bank barn</li><li>No additional agricultural buildings within 50 m</li><li>No high investment operations affected</li><li>Loss of 6.7 ha of tile drainage (systematic)</li></ul> | <p><b>RANKING: 4<sup>th</sup></b></p> <ul style="list-style-type: none"><li>Loss of 55.7 ha of Class 1 – 3 lands</li><li>No specialty crop lands</li><li>One livestock operation affected</li><li>Loss of one retired bank barn and farm residential unit, loss of one bank barn with extension, silo, machine shed and farm residential unit</li><li>No additional agricultural buildings within 50 m</li><li>One high investment operation affected (land only)</li><li>Loss of 34.8 ha of tile drainage</li></ul> | <p><b>RANKING: 3<sup>rd</sup></b></p> <ul style="list-style-type: none"><li>Loss of 39.1 ha of Class 1 – 3 lands</li><li>No specialty crop lands</li><li>No livestock operations</li><li>Loss of one retired bank barn</li><li>No additional agricultural buildings within 50 m</li><li>Four severed parcels less than 20 ha created</li><li>One landlocked parcel created</li><li>No high investment operations affected</li><li>Loss of 8.3 ha of tile drainage (systematic)</li></ul> | <p><b>RANKING: 1<sup>st</sup></b></p> <ul style="list-style-type: none"><li>Loss of 25.4 ha of Class 1 – 3 lands</li><li>No specialty crop lands</li><li>No livestock operations</li><li>Loss of one retired bank barn</li><li>No additional agricultural buildings within 50 m</li><li>No high investment operations affected</li><li>Loss of 6.7 ha of tile drainage (systematic)</li></ul> |
| 2.4.3 Recreation   | <ul style="list-style-type: none"><li>No impacts</li></ul> <p>NO NET EFFECT</p>  | <ul style="list-style-type: none"><li>No impacts</li></ul> <p>NO NET EFFECT</p>   | <ul style="list-style-type: none"><li>Affects the Brampton Wilderness Centre (14.8 hectares).</li></ul> <p>HIGH NET EFFECT</p>   | <ul style="list-style-type: none"><li>No impacts</li></ul> <p>NO NET EFFECT</p>  | <ul style="list-style-type: none"><li>No impacts</li></ul> <p>NO NET EFFECT</p>   |
|  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No impacts.</p>   | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No impacts.</p>  | <p><b>RANKING: 5<sup>th</sup></b></p> <p>Compromises access to the Brampton Wilderness Centre from Bovaird Drive and intersects the middle of the property.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No impacts.</p>   | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No impacts.</p>  |
| 2.4.4 Aggregate and Mineral Resources  | <ul style="list-style-type: none"><li>Potential impact on provincially significant shale resource subject to policies in the Peel Region and Brampton Official Plan.</li></ul> <p>LOW NET EFFECT</p>   | <ul style="list-style-type: none"><li>Potential impact on provincially significant shale resource subject to policies in the Peel Region and Brampton Official Plan.</li></ul> <p>LOW NET EFFECT</p>  | <ul style="list-style-type: none"><li>Potential impact on provincially significant shale resource subject to policies in the Peel Region and Brampton Official Plan.</li></ul> <p>LOW NET EFFECT</p>   | <ul style="list-style-type: none"><li>Potential impact on provincially significant shale resource subject to policies in the Peel Region and Brampton Official Plan.</li></ul> <p>LOW NET EFFECT</p>   | <ul style="list-style-type: none"><li>Potential impact on provincially significant shale resource subject to policies in the Peel Region and Brampton Official Plan.</li></ul> <p>LOW NET EFFECT</p>  |
|  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>Impact could be mitigated by removing the resource as part of construction.</p>   | <p><b>RANKING: 1<sup>st</sup></b></p> <p>Impact could be mitigated by removing the resource as part of construction</p>   | <p><b>RANKING: 1<sup>st</sup></b></p> <p>Impact could be mitigated by removing the resource as part of construction</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>Impact could be mitigated by removing the resource as part of construction.</p>   | <p><b>RANKING: 1<sup>st</sup></b></p> <p>Impact could be mitigated by removing the resource as part of construction</p>   |
| 2.5 Major Utility Transmission Corridors and Pipelines   |  |   |  |  |   |
| 2.5.1 Major Existing Utility Transmission Corridors and Pipelines  | <ul style="list-style-type: none"><li>No impacts</li></ul>   | <ul style="list-style-type: none"><li>No impacts</li></ul>  | <ul style="list-style-type: none"><li>Alternative has 1 pipeline crossing</li></ul>  | <ul style="list-style-type: none"><li>1 pipeline crossing</li></ul>  | <ul style="list-style-type: none"><li>1 or more pipeline crossings.</li></ul>   |

| Evaluation Factors and Sub-Factors                                | Alternative S3-1  | Alternative S3-2   | Alternative S3-3  | Alternative S3-4 - Preferred  | Alternative S3-5  |
|---|---|--|---|---|---|
| Summary of Potential Net Effects and Ranking                      |   |  |   |   |   |
|   | NO NET EFFECT<br><b>RANKING: 1<sup>st</sup></b><br><br>No impacts.  | NO NET EFFECT<br><b>RANKING: 1<sup>st</sup></b><br><br>No impacts.   | LOW NET EFFECT<br><b>RANKING: 3<sup>rd</sup></b><br><br>1 pipeline crossing, like alternative S3-4. Impact can be mitigated through design refinements. Cost of mitigation in constructability and costs criteria.  | LOW NET EFFECT<br><b>RANKING: 3<sup>rd</sup></b><br><br>1 pipeline crossing, like alternative S3-3. Impact can be mitigated through design refinements. Cost of mitigation in constructability and costs criteria.  | MODERATE NET EFFECT<br><b>RANKING: 5<sup>th</sup></b><br><br>This alternative has the most pipeline crossings. Impact can be mitigated through design refinements. Cost of mitigation in constructability and costs criteria.   |
| 2.5.2 Major Proposed Utility Transmission Corridors and Pipelines | • No impacts<br><br>NO NET EFFECT<br><b>RANKING: 1<sup>st</sup></b><br><br>No impacts.  | • No impacts<br><br>NO NET EFFECT<br><b>RANKING: 1<sup>st</sup></b><br><br>No impacts.   | • No impacts<br><br>NO NET EFFECT<br><b>RANKING: 1<sup>st</sup></b><br><br>No impacts.  | • No impacts<br><br>NO NET EFFECT<br><b>RANKING: 1<sup>st</sup></b><br><br>No impacts.  | • No impacts<br><br>NO NET EFFECT<br><b>RANKING: 1<sup>st</sup></b><br><br>No impacts.  |
|   |   |  |   |   |   |
| 2.6 Contaminated Property and Waste Management                    | <b>Properties within alternative:</b> <ul style="list-style-type: none"> <li>Three (3) commercial/ light industrial properties;</li> <li>One (1) institutional property (religious centre);</li> <li>One (1) CPR rail line.</li> </ul> <b>Properties within 250 m of alternative:</b> <ul style="list-style-type: none"> <li>One (1) institutional property (religious centre).</li> </ul><br>HIGH NET EFFECT<br><b>RANKING: 4<sup>th</sup></b> | <b>Properties within alternative:</b> <ul style="list-style-type: none"> <li>Six (6) commercial/ light industrial properties;</li> <li>Two (2) institutional properties (religious centres);</li> <li>One (1) CPR rail line.</li> </ul> <b>Properties within 250 m of alternative:</b> <ul style="list-style-type: none"> <li>One (1) commercial/ light Industrial property.</li> </ul><br>HIGH NET EFFECT<br><b>RANKING: 5<sup>th</sup></b> | <b>Properties within alternative:</b> <ul style="list-style-type: none"> <li>Three (3) commercial/ light industrial / agricultural business properties;</li> <li>One (1) institutional property (religious centre);</li> <li>One (1) CPR rail line.</li> </ul> <b>Properties within 250 m of alternative:</b> <ul style="list-style-type: none"> <li>One (1) Institutional property (religious centre).</li> </ul><br>MODERATE NET EFFECT<br><b>RANKING: 2<sup>nd</sup></b> | <b>Properties within alternative:</b> <ul style="list-style-type: none"> <li>One (1) vehicle repair facility;</li> <li>Three (3) commercial/ light industrial/ agricultural business properties;</li> <li>One (1) CPR rail line;</li> <li>One (1) institutional property (religious centre).</li> </ul> <b>Properties within 250 m of alternative:</b> <ul style="list-style-type: none"> <li>Two (2) commercial/ light industrial/ agricultural business properties.</li> </ul><br>MODERATE NET EFFECT<br><b>RANKING: 1<sup>st</sup></b> | <b>Properties within alternative:</b> <ul style="list-style-type: none"> <li>Six (6) commercial/ light industrial/ agricultural business properties;</li> <li>One (1) commercial/ industrial properties which also contains a gas station; however, the gas station is approximately 1 km from alternative;</li> <li>One (1) CPR rail line.</li> </ul> <b>Properties within 250 m of alternative:</b> <ul style="list-style-type: none"> <li>Two (2) commercial/ light industrial/ agricultural business properties.</li> <li>One (1) institutional property (school)</li> </ul><br>MODERATE NET EFFECT<br><b>RANKING: 2<sup>nd</sup></b> |
|   | Three (3) properties of high concern to be directly impacted; Two (2) properties of medium concern to be directly impacted; One (1) property of medium concern to be indirectly impacted.   | Three (3) properties of high concern to be directly impacted; Six (6) properties of medium concern to be directly impacted; One (1) property of high concern to be indirectly impacted.  | Two (2) properties of high concern to be directly impacted; Three (3) properties of medium concern to be directly impacted; One (1) property of medium concern to be indirectly impacted.   | One (1) property of high concern to be directly impacted; Five (5) properties of medium concern to be directly impacted; One (1) property of high concern to be indirectly impacted; and One (1) property of medium concern to be indirectly impacted.  | Two (2) properties of high concern to be directly impacted; Six (6) properties of medium concern to be directly impacted; One (1) property of high concern to be indirectly impacted; and Two (2) properties of medium concern to be indirectly impacted.   |
|   |   |  |   |   |   |
| 2.7 Landscape Composition   |   |  |   |   |   |
| 2.7.1 Terrain   | <ul style="list-style-type: none"> <li>Topography is primarily level, currently agricultural land (most of section designated as future urban area; north portion of alternative designated agricultural area)</li> <li>Total of 9 watercourse crossings and associated floodplains are impacted by this alternative</li> <li>3 Unevaluated Wetlands are impacted by this alternative (totalling approx. 3.0 ha)</li> </ul>                     | <ul style="list-style-type: none"> <li>Topography is primarily level, currently agricultural land (most of section designated as future urban area; north portion of alternative designated agricultural area)</li> <li>Impacts total of 5 watercourse crossings and associated floodplains</li> <li>1 LSW will be impacted by this alternative</li> </ul>   | <ul style="list-style-type: none"> <li>Topography is primarily level, currently agricultural land (most of section designated as future urban area; north portion of alternative designated agricultural area)</li> <li>Impacts 14 watercourse crossings in total and associated floodplains</li> </ul>   | <ul style="list-style-type: none"> <li>Topography is primarily level, currently agricultural land (most of section designated as future urban area; north portion of alternative designated agricultural area)</li> <li>Alternative impacts total of 10 watercourse crossings and associated floodplains</li> <li>1 LSW will be impacted by this alternative</li> </ul>   | <ul style="list-style-type: none"> <li>Topography is primarily level, currently agricultural land (most of section designated as future urban area; north portion of alternative designated agricultural area)</li> <li>Alternative impacts total of 5 watercourse crossings and associated floodplains</li> <li>1 PSW will be impacted by this alternative</li> <li>1 LSW will be impacted by this alternative</li> </ul>  |

| Evaluation Factors and Sub-Factors | Alternative S3-1   | Alternative S3-2   | Alternative S3-3  | Alternative S3-4 - Preferred  | Alternative S3-5  |
|------------------------------------|--|--|---|---|---|
|                                    | Summary of Potential Net Effects and Ranking   |  |   |   |   |
|                                    | MODERATE NET EFFECT<br><b>RANKING: 1<sup>st</sup></b><br><br>Alternative has least number of effects on existing topography and land use patterns. Least amount of wetland being impacted without impacting PSW or LSW's   | MODERATE NET EFFECT<br><b>RANKING: 2<sup>nd</sup></b><br><br>Similar in topographical effects to S3-1 however this alternative has a slightly greater impact land use patterns. More wetlands area being removed with 1 LSW being impacted.  | MODERATE NET EFFECT<br><b>RANKING: 5<sup>th</sup></b><br><br>Alternative has greatest overall effect on existing land use patterns. Larger area of wetland being removed.   | MODERATE NET EFFECT<br><b>RANKING: 4<sup>th</sup></b><br><br>Alternative has a significant effect on existing land use patterns as compared to other alternatives. Least amount of wetland being removed however 1 LSW will be impacted   | MODERATE NET EFFECT<br><b>RANKING: 3<sup>rd</sup></b><br><br>Alternative has moderate effects on existing land use patterns as compared with other alternatives. Largest area of wetland being removed with 1 PSW and 1 LSW impacted.   |
| 2.7.2 Vegetation                   | <ul style="list-style-type: none"> <li>Alternative affects edge of 1 Wooded Area just south of Wanless Dr., and 50% of another Wooded area just north of Wanless Dr. These are isolated vegetation communities.</li> <li>Interrupts connectivity of 1 vegetation corridor associated with watercourse (between Bovaird Dr. and rail line); partially wooded corridor with open / meadow vegetation</li> <li>Minor effects to several existing hedgerows</li> </ul> | <ul style="list-style-type: none"> <li>Alternative affects large wooded area just east of Heritage Rd.</li> <li>Affects series of 3 separate wooded areas connected by hedgerow and watercourse vegetation (in section N of railway line and south of Wanless Dr.)</li> <li>Affects 2 additional adjacent wooded areas connected by hedgerow in section between Wanless Dr. and Regional Road 14</li> </ul>  | <ul style="list-style-type: none"> <li>Alternative affects 1 Significant Urban Wooded Area at south end of alternative</li> <li>Alternative affects / interrupts 1 potentially significant woodland area (approximately 4.74 ha in total)</li> <li>Alternative affects edge of 1 Wooded Area just south of Wanless Dr., and 50% of another wooded area just north of Wanless Dr. These are isolated vegetation communities.</li> <li>Affects connectivity of vegetated corridor associated with watercourse between Bovaird Dr. and rail line (partially wooded as well as open meadow vegetation)</li> </ul> | <ul style="list-style-type: none"> <li>Alternative interrupts a few established hedgerows but no significant wooded areas are impacted</li> <li>A few small, isolated vegetation communities are also affected by proposed alternative.</li> </ul>  | <ul style="list-style-type: none"> <li>Alternative affects 75% of woodlot north of Bovaird Dr. adjacent to easement</li> <li>Affects series of 3 separate wooded areas connected by hedgerow and watercourse vegetation (in section N of railway line and south of Wanless Dr.)</li> <li>Affects 2 additional adjacent wooded areas connected by hedgerow in section between Wanless and Regional Road 14</li> </ul>  |
|                                    | LOW NET EFFECT   | HIGH NET EFFECT  | MODERATE NET EFFECT   | LOW NET EFFECT  | HIGH NET EFFECT   |
|                                    | <b>RANKING: 1<sup>st</sup></b><br><br>Alternative has fewest effects on existing vegetation and endangered species habitats as compared to other alternatives.   | <b>RANKING: 4<sup>th</sup></b><br><br>Similar to S3-5; however, shorter alternative necessitates fewer vegetation removals.  | <b>RANKING: 3<sup>rd</sup></b><br><br>Overall alternative avoids most of existing vegetation with the exception of a Significant Woodland area at south end of section; realignment in this area would improve ranking.   | <b>RANKING: 2<sup>nd</sup></b><br><br>Low effects on wooded areas and endangered species habitats as compared to other alternatives.  | <b>RANKING: 5<sup>th</sup></b><br><br>Alternative has greatest overall effect on existing vegetation as compared to other alternatives.   |
| 2.7.3 Visual Impacts               | <ul style="list-style-type: none"> <li>Diminished aesthetic quality of scenic views, reduced visual impact through mitigation/compensation measures</li> <li>1 sensitive viewer (large church facility) at south end of alternative</li> <li>Cluster of sensitive viewers (4 residential properties) just west of alternative on Wanless Dr.</li> <li>2 residential / farm properties are sensitive viewers on Mayfield Rd. near north interchange</li> </ul>      | <ul style="list-style-type: none"> <li>Diminished aesthetic quality of scenic views, reduced visual impact through mitigation / compensation measures</li> <li>2 sensitive viewers (large church facilities) at south end of alternative</li> <li>Sensitive viewers to expanding subdivision area between Mississauga Road and Creditview, Sandalwood Parkway and Mayfield Road</li> <li>Sensitive viewers (5 residential properties) clustered on Heritage Rd</li> <li>1 farm property is sensitive viewer on Heritage Rd.</li> </ul> | <ul style="list-style-type: none"> <li>Diminished aesthetic quality of scenic views, reduced visual impact through mitigation/compensation measures</li> <li>1 sensitive viewer (large church facility) at south end of alternative</li> <li>Cluster of sensitive viewers (4 residential properties) just west of alternative on Wanless Dr.</li> <li>2 residential / farm properties are sensitive viewers on Mayfield Rd. near north interchange</li> <li>Cluster of 6 residential properties and 1 farm property</li> </ul>  | <ul style="list-style-type: none"> <li>Diminished aesthetic quality of scenic views, reduced visual impact through mitigation/compensation measures</li> <li>3 residential/ farm properties are sensitive viewers at south end of section on Heritage Rd.</li> <li>2 residential properties would be sensitive viewer on Heritage Rd. (1 just south of Bovaird, 1 just north)</li> <li>Cluster of 3 residential properties and 1 commercial property (garden center) on Bovaird Dr. would be sensitive viewers</li> </ul> | <ul style="list-style-type: none"> <li>Sensitive viewers to expanding subdivision area between Mississauga Road and Creditview Road and Sandalwood Parkway and Mayfield Road</li> <li>Diminished aesthetic quality of scenic views, reduced visual impact through mitigation/compensation measures</li> <li>3 residential/ farm properties are sensitive viewers at south end of section on Heritage Rd.</li> <li>Cluster of sensitive viewers (5 commercial properties) at Bovaird Dr./ Mississauga Rd. intersection adjacent to proposed south interchange</li> </ul> |



| Evaluation Factors and Sub-Factors                                   | Alternative S3-1  | Alternative S3-2   | Alternative S3-3  | Alternative S3-4 - Preferred   | Alternative S3-5   |
|--|---|--|---|--|--|
| Summary of Potential Net Effects and Ranking                         |   |  |   |  |  |
|  | <ul style="list-style-type: none"> <li>Cluster of 6 residential properties and 1 farm property are sensitive viewers on Heritage Rd. at north end of alternative</li> <li>Generally low landscape absorptivity across alternative due to level topography and open agricultural land use</li> </ul> | <ul style="list-style-type: none"> <li>1 residential / old farm property is sensitive view from Mississauga Rd. near north end of section</li> <li>Generally low landscape absorptivity across alternative due to level topography and open agricultural land use</li> </ul> | <ul style="list-style-type: none"> <li>are sensitive viewers on Heritage Rd. at north end of alternative; 7 residential properties and 2 residential / farm properties at south end (Heritage Rd.)</li> <li>Generally low landscape absorptivity across alternative due to level topography and open agricultural land use</li> </ul> | <ul style="list-style-type: none"> <li>2 sensitive viewers (large church facilities) at south end of alternative</li> <li>Sensitive viewers (5 residential properties) clustered on Heritage Rd</li> <li>1 farm property is sensitive viewer on Heritage Rd.</li> <li>1 residential property on Heritage Rd. north of Wanless Dr.</li> <li>2 separate clusters of residential properties (total of 11) on Heritage Rd. at north end of section would be sensitive viewers</li> <li>Generally low landscape absorptivity across alternative due to level topography and open agricultural land use</li> </ul> | <ul style="list-style-type: none"> <li>Sporadic residential / farm properties along Mississauga Rd. (total 6) would have more distant views impacted by proposed alternative</li> <li>6 residential / farm properties along Heritage Rd. (between Wanless Rd. and Bovaird Dr.) would have more distant views impacted by proposed alternative</li> <li>1 residential / farm property on Wanless Rd. would be sensitive viewer</li> <li>Generally low landscape absorptivity across alternative due to level topography and open agricultural land use</li> </ul> |
|  | MODERATE NET EFFECT   | LOW NET EFFECT   | MODERATE NET EFFECT   | MODERATE NET EFFECT  | MODERATE NET EFFECT  |
|  | <b>RANKING: 2<sup>nd</sup></b><br><br>Alternative has only slightly more sensitive viewers than S3-2.   | <b>RANKING: 1<sup>st</sup></b><br><br>Alternative has fewest impacts on existing sensitive viewers; similar landscape absorptivity to other alternatives.  | <b>RANKING: 3<sup>rd</sup></b><br><br>Alternative has moderate impacts on sensitive viewers as compared to other alternatives.  | <b>RANKING: 5<sup>th</sup></b><br><br>Alternative has greatest impact on sensitive viewers.  | <b>RANKING: 4<sup>th</sup></b><br><br>Alternative has moderate impacts on sensitive viewers as compared to other alternatives.   |
| 2.7.4 Aesthetics   | <ul style="list-style-type: none"> <li>Generally open, expansive views over primarily level topography/ farmland characterize this alternative</li> <li>Some scenic views at south portion of alternative towards southwest/ Credit River valley</li> </ul>   | <ul style="list-style-type: none"> <li>Some scenic views at south portion of alternative towards southwest/ Credit River valley</li> <li>Majority of alternative is characterized by open, expansive views over primarily level topography/ farmland</li> </ul>              | <ul style="list-style-type: none"> <li>Generally open, expansive views over primarily level topography/ farmland characterize this alternative</li> <li>Some scenic views at south portion of alternative towards southwest/ Credit River valley</li> </ul>   | <ul style="list-style-type: none"> <li>Majority of alternative is characterized by open, expansive views over primarily level topography/ farmland</li> <li>South portion of alternative offers greater scenic interest with views to south including varied/ rolling topography, and wooded valley lands</li> </ul>   | <ul style="list-style-type: none"> <li>Majority of alternative is characterized by open, expansive views over primarily level topography/ farmland</li> <li>South portion of alternative offers greater scenic interest with views to south including varied/ rolling topography, and wooded valley lands</li> </ul>   |
|  | MODERATE NET EFFECT   | MODERATE NET EFFECT  | LOW NET EFFECT  | LOW NET EFFECT   | MODERATE NET EFFECT  |
|  | <b>RANKING: 3<sup>rd</sup></b><br><br>Alternative has moderate effects on aesthetic quality as compared to other alternatives.  | <b>RANKING: 4<sup>th</sup></b><br><br>Alternative has moderate effects on aesthetic quality as compared to other alternatives.   | <b>RANKING: 1<sup>st</sup></b><br><br>Alternative has fewest overall effects on aesthetic quality of existing landscapes.   | <b>RANKING: 2<sup>nd</sup></b><br><br>Similar to S3-3 however affects more overall areas of existing vegetation which in turn impacts aesthetic quality.   | <b>RANKING: 5<sup>th</sup></b><br><br>Alternative has greatest overall effect on aesthetic quality of existing landscapes, in particular existing vegetation components of scenic composition.   |
| <b>3.0 Cultural Environment</b>                                      |   |  |   |  |  |
| <b>3.1 Built Heritage Resources and Cultural Heritage Landscapes</b> |   |  |   |  |  |
| 3.1.1 Built Heritage Resources                                       | <ul style="list-style-type: none"> <li>There are two (2) listed (BHR 077 and BHR 074), one (1) designated (BHR 073) and four (4) potential (BHR 067, BHR 079, BHR 081 and BHR</li> </ul>  | <ul style="list-style-type: none"> <li>There are two (2) listed (BHR 077 and BHR 074), one (1) designated (BHR 073) and one (1) potential (BHR 080) BHRs affected by this alternative</li> </ul>   | <ul style="list-style-type: none"> <li>There are one (1) designated (BHR 073), two (2) listed (BHR 077 and BHR 074) and four (4) potential (BHR 067, BHR 079, BHR 081 and BHR 082) BHRs affected by this alternative</li> </ul>   | <ul style="list-style-type: none"> <li>There are five (5) listed (BHR 071, BHR 072, BHR 080, BHR 081 and BHR 075) and one (1) potential (BHR 082) BHRs affected by this alternative.</li> </ul>  | <ul style="list-style-type: none"> <li>There is one (1) listed (BHR 071 and one (1) (BHR 080) potential BHRs affected by this alternative</li> </ul>   |

| Evaluation Factors and Sub-Factors                            | Alternative S3-1  | Alternative S3-2   | Alternative S3-3  | Alternative S3-4 - Preferred   | Alternative S3-5  |
|---|---|--|---|--|---|
|   | Summary of Potential Net Effects and Ranking  |  |   |  |   |
|   | 082) BHRs affected by this alternative.<br><br>HIGH NET EFFECT<br><br><b>RANKING: 2<sup>nd</sup></b><br><br>There are 2 listed and, 1 designated and 4 potential BHRs affected by this alternative which will require further evaluation in order to determine their Cultural Heritage Value and Interest. Once Cultural Heritage Value and Interest has been determined, avoidance, protection and mitigation measures must be completed | HIGH NET EFFECT<br><br><b>RANKING: 2<sup>nd</sup></b><br><br>There are 2 listed, 1 designated and 1 potential BHRs affected by this alternative which will require further evaluation in order to determine their Cultural Heritage Value and Interest. Once Cultural Heritage Value and Interest has been determined, avoidance, protection and mitigation measures must be completed | HIGH NET EFFECT<br><br><b>RANKING: 2<sup>nd</sup></b><br><br>There are 1 designated, 2 listed and 4 potential BHRs affected by this alternative which will require further evaluation in order to determine their Cultural Heritage Value and Interest. Once Cultural Heritage Value and Interest has been determined, avoidance, protection and mitigation measures must be completed  | HIGH NET EFFECT<br><br><b>RANKING: 2<sup>nd</sup></b><br><br>There are 5 listed and 1 potential BHRs affected by this alternative which will require further evaluation in order to determine their Cultural Heritage Value and Interest. Once Cultural Heritage Value and Interest has been determined, avoidance, protection and mitigation measures must be completed | MODERATE NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>There is 1 listed and 1 potential BHRs affected by this alternative which will require further evaluation in order to determine their Cultural Heritage Value and Interest. Once Cultural Heritage Value and Interest has been determined, avoidance, protection and mitigation measures must be completed |
| 3.1.2 Heritage Bridges  | • There are no Heritage Bridges affected by this alternative<br><br>NO NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>There are no Heritage Bridges affected by this alternative   | • There are no Heritage Bridges affected by this alternative<br><br>NO NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>There are no Heritage Bridges affected by this alternative  | • There are no Heritage Bridges affected by this alternative<br><br>NO NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>There are no Heritage Bridges affected by this alternative   | • There are no Heritage Bridges affected by this alternative<br><br>NO NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>There are no Heritage Bridges affected by this alternative  | • There are no Heritage Bridges affected by this alternative<br><br>NO NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>There are no Heritage Bridges affected by this alternative   |
|   | • There are no CHLs affected by this alternative<br><br>NO NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>There are no CHLs affected by this alternative   | • There are no CHLs affected by this alternative<br><br>NO NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>There are no CHLs affected by this alternative.   | • There is one (1) designated cemetery (CHL 078) CHL affected by this alternative<br><br>HIGH NET EFFECT<br><br><b>RANKING: 5<sup>th</sup></b><br><br>There is one (1) designated cemetery CHL affected by this alternative which will require further evaluation in order to determine their Cultural Heritage Value and Interest. Once Cultural Heritage Value and Interest has been determined, avoidance, protection and mitigation measures must be completed. | • There is one (1) designated CHL (cemetery) affected by this alternative<br><br>MODERATE NET EFFECT<br><br><b>RANKING: 4<sup>th</sup></b><br><br>There is one (1) designated cemetery (CHL) affected by this alternative. Given the cemetery property is on the edge of the 250 m right-of-way limit, it can be avoided during Preliminary Design.                      | • There are no listed CHLs affected by this alternative<br><br>NO NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>There are no CHLs affected by this alternative.   |
| <b>3.2 Archaeology</b>  |   |  |   |  |   |
| 3.2.1 Pre-Contact and Contact Indigenous Archaeological Sites | • No registered archaeological sites, however archaeological potential is present within much of this alternative<br><br>LOW NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>No registered pre-contact and contact Indigenous sites are present within this alternative. This alternative contains 187 hectares of undisturbed land containing archaeological potential.  | • No registered archaeological sites, however archaeological potential is present within much of this alternative<br><br>LOW NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>No registered pre-contact and contact Indigenous sites are present within this alternative. This alternative contains 165 hectares of undisturbed land containing archaeological potential.       | • No registered archaeological sites, however archaeological potential is present within much of this alternative<br><br>LOW NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>No registered pre-contact and contact Indigenous sites are present within this alternative. This alternative contains 210 hectares of undisturbed land containing archaeological potential.  | • No registered sites, however archaeological potential is present within much of this alternative<br><br>LOW NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>No registered pre-contact and contact Indigenous sites are present within this alternative. This alternative contains 211 hectares of undisturbed land containing archaeological potential.        | • No registered sites, however archaeological potential is present within much of this alternative<br><br>LOW NET EFFECT<br><br><b>RANKING: 1<sup>st</sup></b><br><br>No registered pre-contact and contact Indigenous sites are present within this alternative. This alternative contains 191 hectares of undisturbed land containing archaeological potential.           |
|   |   |  |   |  |   |

| Evaluation Factors and Sub-Factors                  | Alternative S3-1   | Alternative S3-2  | Alternative S3-3   | Alternative S3-4 - Preferred   | Alternative S3-5   |
|---|--|---|--|--|--|
| <b>Summary of Potential Net Effects and Ranking</b> |  |   |  |  |  |
| 3.2.2 Historic Euro-Canadian Archaeological Sites   | <ul style="list-style-type: none"> <li>Three (3) registered sites and archaeological potential is found within much of this alternative</li> </ul>   | <ul style="list-style-type: none"> <li>One (1) registered site and archaeological potential is found within much of this alternative</li> </ul>   | <ul style="list-style-type: none"> <li>Three (3) registered sites and archaeological potential is found within much of this alternative</li> </ul>   | <ul style="list-style-type: none"> <li>Three (3) registered sites, all of which require further assessment. Archaeological potential is present within much of this alternative</li> </ul>   | <ul style="list-style-type: none"> <li>No registered sites, however archaeological potential is present within much of this alternative</li> </ul>   |
|   | <p>MODERATE NET EFFECT</p> <p><b>RANKING: 2<sup>nd</sup></b></p> <p>One (1) registered archaeological site within this alternative requiring further assessment, and two (2) registered sites with status unknown. This alternative contains 187 hectares of undisturbed land containing archaeological potential.</p> | <p>MODERATE NET EFFECT</p> <p><b>RANKING: 2<sup>nd</sup></b></p> <p>One (1) registered archaeological site within this alternative with status unknown. This alternative contains 165 hectares of undisturbed land containing archaeological potential.</p> | <p>MODERATE NET EFFECT</p> <p><b>RANKING: 2<sup>nd</sup></b></p> <p>One (1) registered archaeological site requiring further assessment within this alternative, and 2 registered sites with status unknown. This alternative contains 210 hectares of undisturbed land containing archaeological potential.</p> | <p>MODERATE NET EFFECT</p> <p><b>RANKING: 2<sup>nd</sup></b></p> <p>Three (3) registered archaeological sites requiring further assessment within this alternative. This alternative contains 211 hectares of undisturbed land containing archaeological potential.</p>  | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No registered archaeological site requiring further assessment within this alternative. This alternative contains 191 hectares of undisturbed land containing archaeological potential.</p> |
| 3.2.3 Indigenous Burial Sites                       | <ul style="list-style-type: none"> <li>No known or reported Indigenous Burial Sites</li> </ul>   | <ul style="list-style-type: none"> <li>No known or reported Indigenous Burial Sites</li> </ul>  | <ul style="list-style-type: none"> <li>No known or reported Indigenous Burial Sites</li> </ul>   | <ul style="list-style-type: none"> <li>No known or reported Indigenous Burial Sites</li> </ul>   | <ul style="list-style-type: none"> <li>No known or reported Indigenous Burial Sites</li> </ul>   |
|   | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No difference between alternatives.</p>  | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No difference between alternatives.</p>   | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No difference between alternatives.</p>  | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No difference between alternatives.</p>  | <p>NO NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No difference between alternatives.</p>  |
| 3.2.4 Cemeteries                                    | <ul style="list-style-type: none"> <li>No registered cemeteries present within this alternative</li> </ul>   | <ul style="list-style-type: none"> <li>No registered cemeteries present within this alternative</li> </ul>  | <ul style="list-style-type: none"> <li>No registered cemeteries present within this alternative</li> </ul>   | <ul style="list-style-type: none"> <li>One registered cemetery directly adjacent to this alternative</li> </ul>  | <ul style="list-style-type: none"> <li>No registered cemeteries present within this alternative</li> </ul>   |
|   | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No registered cemeteries are present within this alternative. This alternative contains 187 hectares of undisturbed land containing archaeological potential.</p>   | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No registered cemeteries are present within this alternative. This alternative contains 165 hectares of undisturbed land containing archaeological potential.</p>                            | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No registered cemeteries are present within this alternative. This alternative contains 210 hectares of undisturbed land containing archaeological potential.</p>   | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>There is one (1) registered cemetery directly adjacent to this alternative. However, given the cemetery property is on the edge of the 250 m right-of-way limit, it can be avoided during Preliminary Design. This alternative contains 211 hectares of undisturbed land containing archaeological potential.</p> | <p>LOW NET EFFECT</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No registered cemeteries are present within this alternative. This alternative contains 191 hectares of undisturbed land containing archaeological potential.</p>                           |
| <b>4.0 Transportation</b>                           |  |   |  |  |  |
| <b>4.1 System Capacity &amp; Efficiency</b>         |  |   |  |  |  |
| 4.1.1 Movement of People                            | <ul style="list-style-type: none"> <li>Provides high capacity freeway and transitway operations with good connection to Georgetown and moderate connection to Brampton.</li> </ul>   | <ul style="list-style-type: none"> <li>Provides high capacity freeway and transitway operations with good connection to Georgetown and moderate connection to Brampton.</li> </ul>  | <ul style="list-style-type: none"> <li>Provides high capacity freeway and transitway operations with good connection to Georgetown and moderate connection to Brampton.</li> </ul>   | <ul style="list-style-type: none"> <li>Provides high capacity freeway and transitway operations with good connections to Georgetown and Brampton.</li> </ul>   | <ul style="list-style-type: none"> <li>Provides high capacity freeway and transitway operations with good connections to Georgetown and Brampton.</li> </ul>   |
|   | <p>HIGH CAPACITY &amp; EFFICIENCY</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>   | <p>HIGH CAPACITY &amp; EFFICIENCY</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>  | <p>HIGH CAPACITY &amp; EFFICIENCY</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>   | <p>HIGH CAPACITY &amp; EFFICIENCY</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>   | <p>HIGH CAPACITY &amp; EFFICIENCY</p> <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>   |

| Evaluation Factors and Sub-Factors           | Alternative S3-1  | Alternative S3-2  | Alternative S3-3  | Alternative S3-4 - Preferred   | Alternative S3-5   |
|--|---|---|---|--|--|
| Summary of Potential Net Effects and Ranking |   |   |   |  |  |
| 4.1.2 Movement of Goods                      | <ul style="list-style-type: none"><li>Provides high capacity freeway operations with good connection to Georgetown and moderate connection to Brampton</li></ul> <p>HIGH CAPACITY &amp; EFFICIENCY</p>  | <ul style="list-style-type: none"><li>Provides high capacity freeway operations with good connection to Georgetown and moderate connection to Brampton</li></ul> <p>HIGH CAPACITY &amp; EFFICIENCY</p>  | <ul style="list-style-type: none"><li>Provides high capacity freeway operations with good connection to Georgetown and moderate connection to Brampton</li></ul> <p>HIGH CAPACITY &amp; EFFICIENCY</p>  | <ul style="list-style-type: none"><li>Provides high capacity freeway and transitway operations with good connections to Georgetown and Brampton.</li></ul> <p>HIGH CAPACITY &amp; EFFICIENCY</p> | <ul style="list-style-type: none"><li>Provides high capacity freeway and transitway operations with good connections to Georgetown and Brampton.</li></ul> <p>HIGH CAPACITY &amp; EFFICIENCY</p> |
|  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>   | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>   |
| 4.1.3 System performance during peak periods | <ul style="list-style-type: none"><li>Overall Volume / Capacity (V/C) ratios indicate high utilization without exceeding capacity, but there is a high potential that a non-standard interchange may be considered at Bovaird Drive which would result in reduced capacity.</li></ul> <p>MODERATE PERFORMANCE</p> | <ul style="list-style-type: none"><li>Overall V/C ratios indicate high utilization without exceeding capacity, but there is a high potential that a non-standard interchange may be considered at Bovaird Drive which would result in reduced capacity.</li></ul> <p>MODERATE PERFORMANCE</p> | <ul style="list-style-type: none"><li>Overall V/C ratios indicate high utilization without exceeding capacity, but there is a high potential that a non-standard interchange may be considered at Bovaird Drive which would result in reduced capacity.</li></ul> <p>MODERATE PERFORMANCE</p> | <ul style="list-style-type: none"><li>Overall V/C ratios indicate high utilization without exceeding capacity.</li></ul> <p>HIGH PERFORMANCE</p>   | <ul style="list-style-type: none"><li>Overall V/C ratios indicate high utilization without exceeding capacity.</li></ul> <p>HIGH PERFORMANCE</p>   |
|  | <p><b>RANKING: 3<sup>rd</sup></b></p> <p>High potential for non-standard features which may reduce capacity.</p>  | <p><b>RANKING: 3<sup>rd</sup></b></p> <p>High potential for non-standard features which may reduce capacity.</p>  | <p><b>RANKING: 3<sup>rd</sup></b></p> <p>High potential for non-standard features which may reduce capacity.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>Analysis indicates overall good performance.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>Analysis indicates overall good performance.</p>  |
| 4.2 System reliability / redundancy          | <ul style="list-style-type: none"><li>Good opportunities for redundancy on the local road network.</li></ul> <p>MODERATE REDUNDANCY</p>   | <ul style="list-style-type: none"><li>Good opportunities for redundancy on the local road network.</li></ul> <p>MODERATE REDUNDANCY</p>   | <ul style="list-style-type: none"><li>Good opportunities for redundancy on the local road network.</li></ul> <p>MODERATE REDUNDANCY</p>   | <ul style="list-style-type: none"><li>Good opportunities for redundancy on the local road network.</li></ul> <p>MODERATE REDUNDANCY</p>  | <ul style="list-style-type: none"><li>Good opportunities for redundancy on the local road network.</li></ul> <p>MODERATE REDUNDANCY</p>  |
|  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>   | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No discernable difference between the alternatives.</p>   |
| 4.3 Safety                                   |   |   |   |  |  |
| 4.3.1 Traffic Safety                         | <ul style="list-style-type: none"><li>Potential for reduced sightlines at Bovaird Drive interchange.</li></ul> <p>LOW NET EFFECT</p>  | <ul style="list-style-type: none"><li>Potential for reduced sightlines at Bovaird Drive interchange.</li></ul> <p>LOW NET EFFECT</p>  | <ul style="list-style-type: none"><li>Potential for reduced sightlines at Bovaird Drive interchange.</li></ul> <p>LOW NET EFFECT</p>  | <ul style="list-style-type: none"><li>No net effect.</li></ul> <p>NO NET EFFECT</p>  | <ul style="list-style-type: none"><li>No net effect.</li></ul> <p>NO NET EFFECT</p>  |
|  | <p><b>RANKING: 3<sup>rd</sup></b></p> <p>Potential for reduced sightlines which may affect safety.</p>  | <p><b>RANKING: 3<sup>rd</sup></b></p> <p>Potential for reduced sightlines which may affect safety.</p>  | <p><b>RANKING: 3<sup>rd</sup></b></p> <p>Potential for reduced sightlines which may affect safety.</p>  | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No anticipated safety concerns.</p>   | <p><b>RANKING: 1<sup>st</sup></b></p> <p>No anticipated safety concerns.</p>   |
| 4.3.2 Emergency Access                       | <ul style="list-style-type: none"><li>High potential to improve access without reductions to existing access</li></ul> <p>HIGH ACCESS</p>   | <ul style="list-style-type: none"><li>High potential to improve access without reductions to existing access</li></ul> <p>HIGH ACCESS</p>   | <ul style="list-style-type: none"><li>High potential to improve access without reductions to existing access</li></ul> <p>HIGH ACCESS</p>   | <ul style="list-style-type: none"><li>High potential to improve access without reductions to existing access</li></ul> <p>HIGH ACCESS</p>  | <ul style="list-style-type: none"><li>High potential to improve access without reductions to existing access</li></ul> <p>HIGH ACCESS</p>  |
|  | <p><b>RANKING: 1<sup>st</sup></b></p>   | <p><b>RANKING: 1<sup>st</sup></b></p>   | <p><b>RANKING: 1<sup>st</sup></b></p>   | <p><b>RANKING: 1<sup>st</sup></b></p>  | <p><b>RANKING: 1<sup>st</sup></b></p>  |

| Evaluation Factors and Sub-Factors   | Alternative S3-1   | Alternative S3-2   | Alternative S3-3   | Alternative S3-4 - Preferred   | Alternative S3-5   |
|--|--|--|--|--|--|
| Summary of Potential Net Effects and Ranking   |  |  |  |  |  |
|  | No discernable difference between the alternatives.  | No discernable difference between the alternatives.  | No discernable difference between the alternatives.  | No discernable difference between the alternatives.  | No discernable difference between the alternatives.  |
| 4.4 Mobility & Accessibility   |  |  |  |  |  |
| 4.4.1 Modal integration and balance  | <ul style="list-style-type: none"><li>Opportunities for intermodal connections at transitway station and carpool lots.</li></ul><br>MODERATE POTENTIAL FOR IMPROVEMENT | <ul style="list-style-type: none"><li>Opportunities for intermodal connections at transitway station and carpool lots.</li></ul><br>MODERATE POTENTIAL FOR IMPROVEMENT | <ul style="list-style-type: none"><li>Opportunities for intermodal connections at transitway station and carpool lots.</li></ul><br>MODERATE POTENTIAL FOR IMPROVEMENT | <ul style="list-style-type: none"><li>Opportunities for intermodal connections at transitway station and carpool lots.</li></ul><br>MODERATE POTENTIAL FOR IMPROVEMENT   | <ul style="list-style-type: none"><li>Opportunities for intermodal connections at transitway station and carpool lots.</li></ul><br>MODERATE POTENTIAL FOR IMPROVEMENT |
|  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  |
| 4.4.2 Linkages to Population and Employment Centres                                  | <ul style="list-style-type: none"><li>Improved access to Georgetown and future development lands.</li></ul><br>MODERATE ACCESSIBILITY                                  | <ul style="list-style-type: none"><li>Improved access to Georgetown and future development lands.</li></ul><br>MODERATE ACCESSIBILITY                                  | <ul style="list-style-type: none"><li>Improved access to Georgetown and future development lands.</li></ul><br>MODERATE ACCESSIBILITY                                  | <ul style="list-style-type: none"><li>Improved access to Georgetown and future development lands.</li></ul><br>MODERATE ACCESSIBILITY  | <ul style="list-style-type: none"><li>Improved access to Georgetown and future development lands.</li></ul><br>MODERATE ACCESSIBILITY                                  |
|  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  |
| 4.4.3 Recreation and Tourism Travel  | <ul style="list-style-type: none"><li>Provides inter-regional connections from Brampton and Georgetown.</li></ul><br>LOW SUPPORT                                       | <ul style="list-style-type: none"><li>Provides inter-regional connections from Brampton and Georgetown.</li></ul><br>LOW SUPPORT                                       | <ul style="list-style-type: none"><li>Provides inter-regional connections from Brampton and Georgetown.</li></ul><br>LOW SUPPORT                                       | <ul style="list-style-type: none"><li>Provides inter-regional connections from Brampton and Georgetown.</li></ul><br>LOW SUPPORT   | <ul style="list-style-type: none"><li>Provides inter-regional connections from Brampton and Georgetown.</li></ul><br>LOW SUPPORT                                       |
|  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  |
| 4.4.4 Accommodation for pedestrians, cyclists, snowmobiles, and specialized vehicles | <ul style="list-style-type: none"><li>Opportunities to maintain existing routes across the corridor.</li></ul><br>LOW ACCOMODATION                                     | <ul style="list-style-type: none"><li>Opportunities to maintain existing routes across the corridor.</li></ul><br>LOW ACCOMODATION                                     | <ul style="list-style-type: none"><li>Opportunities to maintain existing routes across the corridor.</li></ul><br>LOW ACCOMODATION                                     | <ul style="list-style-type: none"><li>Opportunities to maintain existing routes across the corridor.</li></ul><br>LOW ACCOMODATION   | <ul style="list-style-type: none"><li>Opportunities to maintain existing routes across the corridor.</li></ul><br>LOW ACCOMODATION                                     |
|  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  |
| 4.5 Network Compatibility  |  |  |  |  |  |
| 4.5.1 Network connectivity   | <ul style="list-style-type: none"><li>Provides connections to Brampton and Georgetown.</li></ul>   | <ul style="list-style-type: none"><li>Provides connections to Brampton and Georgetown.</li></ul>   | <ul style="list-style-type: none"><li>Provides connections to Brampton and Georgetown.</li></ul>   | <ul style="list-style-type: none"><li>Provides connections to Brampton and Georgetown.</li><li>Will require realignment of Heritage Road (Maximum length 2.5 km).</li><li>Additional realignment of Heritage Road may be</li></ul> | <ul style="list-style-type: none"><li>Provides connections to Brampton and Georgetown.</li></ul>   |

| Evaluation Factors and Sub-Factors           | Alternative S3-1   | Alternative S3-2  | Alternative S3-3  | Alternative S3-4 - Preferred   | Alternative S3-5   |
|--|--|---|---|--|--|
| Summary of Potential Net Effects and Ranking |  |   |   |  |  |
|  | HIGH CONNECTIVITY  | HIGH CONNECTIVITY   | HIGH CONNECTIVITY   | considered to mitigate impacts to the planned CCFS cemetery.<br><br>MODERATE CONNECTIVITY  | HIGH CONNECTIVITY  |
|  | <b>RANKING: 1<sup>st</sup></b><br><br>Provides high connectivity to Brampton and Georgetown.   | <b>RANKING: 1<sup>st</sup></b><br><br>Provides high connectivity to Brampton and Georgetown   | <b>RANKING: 1<sup>st</sup></b><br><br>Provides high connectivity to Brampton and Georgetown.  | <b>RANKING: 5<sup>th</sup></b><br><br>Provides good connectivity, but requires local road realignment.   | <b>RANKING: 1<sup>st</sup></b><br><br>Provides high connectivity to Brampton and Georgetown.   |
| 4.5.2 Flexibility for future expansion       | <ul style="list-style-type: none"> <li>Opportunities to expand the freeway and transitway within the proposed right-of-way.</li> </ul><br>MODERATE FLEXIBILITY   | <ul style="list-style-type: none"> <li>Opportunities to expand the freeway and transitway within the proposed right-of-way.</li> </ul><br>MODERATE FLEXIBILITY                  | <ul style="list-style-type: none"> <li>Opportunities to expand the freeway and transitway within the proposed right-of-way.</li> </ul><br>MODERATE FLEXIBILITY                  | <ul style="list-style-type: none"> <li>Opportunities to expand the freeway and transitway within the proposed right-of-way.</li> </ul><br>MODERATE FLEXIBILITY | <ul style="list-style-type: none"> <li>Opportunities to expand the freeway and transitway within the proposed right-of-way.</li> </ul><br>MODERATE FLEXIBILITY                         |
|  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.   | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.   | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  | <b>RANKING: 1<sup>st</sup></b><br><br>No discernable difference between the alternatives.  |
| 4.6 Engineering                              |  |   |   |  |  |
| 4.6.1 Constructability                       | <ul style="list-style-type: none"> <li>More complex design and construction of the Bovaird Drive interchange.</li> <li>More Complex design and possibly construction of the Mayfield Road interchange to accommodate the future potential Sandalwood Parkway connection to Mayfield Road.</li> </ul><br>MODERATE POTENTIAL FOR CONSTRUCTABILITY ISSUES | <ul style="list-style-type: none"> <li>More complex design and construction of the Bovaird Drive interchange.</li> </ul><br>MODERATE POTENTIAL FOR CONSTRUCTABILITY ISSUES      | <ul style="list-style-type: none"> <li>More complex design and construction of the Bovaird Drive interchange.</li> </ul><br>MODERATE POTENTIAL FOR CONSTRUCTABILITY ISSUES      | <ul style="list-style-type: none"> <li>No significant potential constructability issues identified.</li> </ul><br>LOW POTENTIAL FOR CONSTRUCTABILITY ISSUES    | <ul style="list-style-type: none"> <li>Proposed interchange at Bovaird conflicts with an existing TransCanada Pipeline crossing.</li> </ul><br>MODERATE POTENTIAL FOR CONSTRUCTABILITY |
|  | <b>RANKING: 5<sup>th</sup></b><br><br>Design and construction of Bovaird Drive and Mayfield Road interchanges may be more complex  | <b>RANKING: 2<sup>nd</sup></b><br><br>Design and construction of Bovaird Drive may be more complex  | <b>RANKING: 2<sup>nd</sup></b><br><br>Design and construction of Bovaird Drive may be more complex.   | <b>RANKING: 1<sup>st</sup></b><br><br>No significant constructability issues identified.   | <b>RANKING: 2<sup>nd</sup></b><br><br>Conflicts with TransCanada pipeline.   |
| 4.6.2 Compliance with design criteria        | <ul style="list-style-type: none"> <li>Conforms to design criteria, but exceptions may be considered to reduce impacts to sensitive features.</li> </ul><br>MODERATE CONFORMITY  | <ul style="list-style-type: none"> <li>Conforms to design criteria, but exceptions may be considered to reduce impacts to sensitive features.</li> </ul><br>MODERATE CONFORMITY | <ul style="list-style-type: none"> <li>Conforms to design criteria, but exceptions may be considered to reduce impacts to sensitive features.</li> </ul><br>MODERATE CONFORMITY | <ul style="list-style-type: none"> <li>Conforms to design criteria.</li> </ul><br>HIGH CONFORMITY  | <ul style="list-style-type: none"> <li>Conforms to design criteria.</li> </ul><br>HIGH CONFORMITY  |
|  | <b>RANKING: 3<sup>rd</sup></b><br><br>Exceptions to design criteria may be required.   | <b>RANKING: 3<sup>rd</sup></b><br><br>Exceptions to design criteria may be required.  | <b>RANKING: 3<sup>rd</sup></b><br><br>Exceptions to design criteria may be required.  | <b>RANKING: 1<sup>st</sup></b><br><br>Conforms to design criteria.   | <b>RANKING: 1<sup>st</sup></b><br><br>Conforms to design criteria.   |
| 4.7 Construction Cost                        | <ul style="list-style-type: none"> <li>Estimated cost: \$161 million</li> </ul><br>MODERATE RELATIVE COST  | <ul style="list-style-type: none"> <li>Estimated cost: \$160 million</li> </ul><br>MODERATE RELATIVE COST   | <ul style="list-style-type: none"> <li>Estimated cost: \$169 million</li> </ul><br>MODERATE RELATIVE COST   | <ul style="list-style-type: none"> <li>Estimated cost: \$176 million</li> </ul><br>HIGH RELATIVE COST  | <ul style="list-style-type: none"> <li>Estimated cost: \$177 million</li> </ul><br>HIGH RELATIVE COST  |
|  | <b>RANKING: 1<sup>st</sup></b>   | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 1<sup>st</sup></b>  | <b>RANKING: 4<sup>th</sup></b>   | <b>RANKING: 4<sup>th</sup></b>   |

| Evaluation Factors and Sub-Factors | Alternative S3-1  | Alternative S3-2  | Alternative S3-3  | Alternative S3-4 - Preferred   | Alternative S3-5   |
|------------------------------------|---|---|---|--|--|
| 4.8 Traffic Operations             | Summary of Potential Net Effects and Ranking  |   |   |  |  |
|                                    | <ul style="list-style-type: none"><li>Potential for a non-standard interchange at Bovaird Drive with reduced capacity and potential for reduced traffic operations.</li></ul> | <ul style="list-style-type: none"><li>Potential for a non-standard interchange at Bovaird Drive with reduced capacity and potential for reduced traffic operations.</li></ul> | <ul style="list-style-type: none"><li>Potential for a non-standard interchange at Bovaird Drive with reduced capacity and potential for reduced traffic operations.</li></ul> | <ul style="list-style-type: none"><li>Volumes do not exceed capacity and no non-standard highway geometry.</li></ul> | <ul style="list-style-type: none"><li>Volumes do not exceed capacity and no non-standard highway geometry.</li></ul> |
|                                    | MODERATE POTENTIAL FOR NEGATIVE EFFECT  | MODERATE POTENTIAL FOR NEGATIVE EFFECT  | MODERATE POTENTIAL FOR NEGATIVE EFFECT  | LOW POTENTIAL FOR NEGATIVE EFFECT  | LOW POTENTIAL FOR NEGATIVE EFFECT  |
|                                    | <b>RANKING: 3<sup>rd</sup></b>  | <b>RANKING: 3<sup>rd</sup></b>  | <b>RANKING: 3<sup>rd</sup></b>  | <b>RANKING: 1<sup>st</sup></b>   | <b>RANKING: 1<sup>st</sup></b>   |
|                                    | Potential for reduced operations at Bovaird Drive interchange.  | Potential for reduced operations at Bovaird Drive interchange.  | Potential for reduced operations at Bovaird Drive interchange.  | No potential issues related to volumes or geometry.  | No potential issues related to volumes or geometry.  |