

**APPENDIX 'I'**  
**Evaluation of Options**

**TOWNSHIP OF SPRINGWATER  
CLASS ENVIRONMENTAL ASSESSMENT FOR THE  
MIDHURST WATER, WASTEWATER AND TRANSPORTATION  
MASTER PLAN**

**WATER SUPPLY – EVALUATION OF OPTIONS**

<b>CRITERIA / WEIGHTING</b>	<b>OPTION A – DO NOTHING</b>	<b>OPTION B - CITY OF BARRIE – ONE OVERALL SYSTEM</b>	<b>OPTION C - ONE OVERALL SYSTEM - EXPAND EXISTING WELLS</b>	<b>OPTION D - ONE OVERALL SYSTEM – NEW WELLS</b>	<b>OPTION E - FOUR SEPARATE SYSTEMS</b>	<b>OPTION F - THREE SEPARATE WATER SYSTEMS</b>
Response to Secondary Plan Growth  Weighting - 15%	Does not allow for growth – This is considered to be a fatal flaw and therefore, this Option has been eliminated from any further evaluation	Would provide adequate service for anticipated growth  Weighting - 1/15	Based on past hydrogeological explorations, it is considered that this Option is not feasible. This is considered to be a fatal flaw and therefore, this Option has been eliminated from any further evaluation	Based on currently available hydrogeological assessments, it is considered that this Option would provide adequate service for growth  Weighting - 1/15	Based on currently available hydrogeological assessments, it is considered that this Option would provide adequate service for growth  Weighting - 1/15	Based on currently available hydrogeological assessments, it is considered that this Option would provide adequate service for growth  Weighting - 1/15
Fisheries  Weighting - 2%		No anticipated impact based on supply from Barrie. There may be some watercourse crossings as a result of distribution system extensions and potential trunk watermain on St. Vincent St. (crossing of Willow Creek)  Weighting - 1/2		No anticipated impact due to well development. There may be some watercourse crossings as a result of distribution system extensions.  Weighting - 1/2	No anticipated impact due to well development. There may be some watercourse crossings as a result of distribution system extensions.  Weighting - 1/2	No anticipated impact due to well development. There may be some watercourse crossings as a result of distribution system extensions.  Weighting - 1/2
Wetlands, Floodplains & Shorelines  Weighting - 2%		No anticipated impact based on supply from Barrie. Barrie’s water supply may affect Lake Simcoe. There may be some watercourse crossings as a result of distribution system extensions and potential trunk watermain on St. Vincent St. (crossing of Willow Creek)  Weighting - 2/2		No anticipated impact due to well development. There may be some watercourse crossings as a result of distribution system extensions.  Weighting - 1/2	No anticipated impact due to well development. There may be some watercourse crossings as a result of distribution system extensions.  Weighting - 1/2	No anticipated impact due to well development. There may be some watercourse crossings as a result of distribution system extensions.  Weighting - 1/2
Woodlands  Weighting - 10%		No impact  Weighting - 1/10		Potential loss of forest at new well sites in Anten Mills and sites along Russell Rd.  Weighting - 3/10	Potential loss of forest at new well sites in Anten Mills and sites along Russell Rd.  Weighting - 3/10	Potential loss of forest at new well sites along Russell Rd.  Weighting - 2/10

CRITERIA / WEIGHTING	OPTION A – DO NOTHING	OPTION B - CITY OF BARRIE – ONE OVERALL SYSTEM	OPTION C - ONE OVERALL SYSTEM - EXPAND EXISTING WELLS	OPTION D - ONE OVERALL SYSTEM – NEW WELLS	OPTION E - FOUR SEPARATE SYSTEMS	OPTION F - THREE SEPARATE WATER SYSTEMS
Groundwater Weighting - 10%		No impact – existing municipal wells could be abandoned which would benefit groundwater conditions  Weighting - 1/10		Preliminary Hydrogeological Reports indicate that acceptable groundwater supplies can be found within Development Area # 1, at the Russell/Storrie site and north of Anten Mills.  Preliminary Hydrogeological investigations have identified potential impacts to private wells at the Anten Mills site. The quantity of groundwater taken will therefore have to be limited at that site. No impacts to the groundwater have been identified at the other sites. This Option would require at least two pressure zones.  Weighting - 2/10	Preliminary Hydrogeological Reports indicate that acceptable groundwater supplies can be found within Development Area # 1, at the Russell/Storrie site and north of Anten Mills.  Preliminary Hydrogeological investigations have identified potential impacts to private wells at the Anten Mills site. The quantity of groundwater taken will therefore have to be limited at that site, which may impact the supply to the Carson Rd. neighbourhood. No impacts to the groundwater have been identified at the other sites.  Weighting - 4/10	Preliminary Hydrogeological Reports indicate that acceptable groundwater supplies can be found at the Russell/Storrie site and along Russell Rd. to Pooles Rd. However, no impacts to the groundwater have been identified to sites along Russell Rd.  Weighting - 1/10
Air Quality, Noise & Vibration Weighting - 10%		Air quality, noise and vibration would be reduced upon abandonment of the existing wells and pumphouses – minor improvement only  Weighting - 1/10		Minor impacts at new well sites with respect to diesel generator sets  Weighting - 5/10	Minor impacts at new well sites with respect to diesel generator sets  Weighting - 5/10	Minor impacts at new well sites with respect to diesel generator sets  Weighting - 5/10
Sensitive Species & ANSI/PSW Weighting - 2%		Trunk watermain extension on Highway 26/27 and/or Anne St will not result in any impacts. Trunk watermain extension on St. Vincent St. could impact sensitive species.  Weighting - 1/2		Impacts at wells sites to be determined but are considered to be negligible  Weighting - 1/2	Impacts at wells sites to be determined but are considered to be negligible  Weighting - 1/2	Impacts at wells sites to be determined but are considered to be negligible  Weighting - 1/2
Social Impacts on Residents Weighting - 15%		Cost to existing serviced residents to abandon existing wells and contribute to new trunk watermain from Barrie. Potentially more costly user charge based on City rates.  Weighting - 10/15		No financial impact with respect to capital costs to existing serviced residents  Weighting - 1/15	No financial impact with respect to capital costs to existing serviced residents  Weighting - 1/15	No financial impact with respect to capital costs to existing serviced residents  Weighting - 1/15
Social Impacts on Social Features Weighting - 5%		Potential for impact to be assessed based on locations of new booster pump stations (no impact re: reservoirs)  Weighting - 3/5		Potential for impact to be assessed based on locations of new wells and booster pump stations (no impact re: reservoirs)  Weighting - 3/5	Potential for impact to be assessed based on locations of new wells (no impact re: reservoirs)  Weighting - 1/5	Potential for impact to be assessed based on locations of new wells (no impact re: reservoirs)  Weighting - 1/5

<b>CRITERIA / WEIGHTING</b>	<b>OPTION A – DO NOTHING</b>	<b>OPTION B - CITY OF BARRIE – ONE OVERALL SYSTEM</b>	<b>OPTION C - ONE OVERALL SYSTEM - EXPAND EXISTING WELLS</b>	<b>OPTION D - ONE OVERALL SYSTEM – NEW WELLS</b>	<b>OPTION E - FOUR SEPARATE SYSTEMS</b>	<b>OPTION F - THREE SEPARATE WATER SYSTEMS</b>
Archaeological Weighting - 5%		No impact within proposed development lands. Potential for impact to be assessed based on locations of new booster pump stations (no impact re: reservoirs)  Weighting - 3/5		No impact within proposed development lands. Potential for impact to be assessed based on locations of new wells and booster pump stations (no impact re: reservoirs)  Weighting - 3/5	No impact within proposed development lands. Potential for impact to be assessed based on locations of new wells (no impact re: reservoirs)  Weighting - 1/5	No impact within proposed development lands. Potential for impact to be assessed based on locations of new wells (no impact re: reservoirs and booster pump stations)  Weighting - 1/5
Construction Design, Land Ownership & Policies Weighting - 10%		Agreement with City of Barrie. Land may need to be obtained for booster pump stations. No specific Policies.  Weighting - 10/10		No Design or construction issues. Land may need to be obtained for booster pump stations and new wells. No specific Policies.  Weighting - 5/10	No Design or construction issues. Land may need to be obtained for new wells. No specific Policies.  Weighting - 3/10	No Design or construction issues. Land may need to be obtained for new wells. No specific Policies.  Weighting - 3/10
Utilities Weighting - 5%		No major Impact in Midhurst. Barrie utilities could be impacted.  Weighting - 3/5		No major impact anticipated  Weighting - 1/5	No major impact anticipated  Weighting - 1/5	No major impact anticipated  Weighting - 1/5
Operational Considerations Weighting - 4%		Township would not have any wells to operate and maintain which would be a benefit. New booster stations would need to be operated and maintained. Pressure regulating valves would be needed.  Weighting - 1/4		Township would have more wells to operate and maintain. New booster stations would need to be operated and maintained. Pressure regulating valves would be needed.  Weighting - 3/4	Township would have more wells to operate and maintain in four separate systems with four treatment facilities. System could be interconnected to provide duplicate emergency water supply.  Weighting - 3/4	Township would have more wells to operate and maintain. System could be interconnected through Pressure Regulating Valves to provide duplicate emergency water supply.  Weighting - 3/4
Capital Cost Weighting - 5%	Not Applicable	\$37 million  Weighting - 5/5	Not Feasible	\$26 million  Weighting - 1/5	\$27 million  Weighting - 2/5	\$26 million  Weighting - 1/5

**Township of Springwater**

Class Environmental Assessment

Midhurst Water, Wastewater and Transportation Master Plan

Water Treatment and Supply Options

Summary Score Analysis (Weighted Rankings)

<b>EVALUATION CRITERIA</b>	<b>Weightings - %</b>	<b>Option A</b>	<b>Option B</b>	<b>Option C</b>	<b>Option D</b>	<b>Option E</b>	<b>Option F</b>
Response to Secondary Plan Growth	15		1		1	1	1
Fisheries	2		1		1	1	1
Wetland, Floodplains and Shorelines	2		2		1	1	1
Woodlands	10		1		3	3	2
Groundwater	10		1		2	4	1
Air Quality, Noise and Vibration	10		1		5	5	5
Sensitive Species & ANSI/PSW	2		1		1	1	1
Social Impacts on Residents	15		10		1	1	1
Social Impacts on Social Features	5		3		3	1	1
Archaeological	5		3		3	1	1
Construction Design, Land Ownership and Policies	10		10		5	3	3
Utilities	5		3		1	1	1
Operational Considerations	4		1		3	4	3
Capital Cost	5		5		1	2	1
<b>Totals</b>	<b>100</b>		<b>43</b>		<b>31</b>	<b>29</b>	<b>23</b>

Option A - Not Feasible

Option C - Not Feasible

**TOWNSHIP OF SPRINGWATER  
CLASS ENVIRONMENTAL ASSESSMENT FOR THE  
MIDHURST WATER, WASTEWATER AND TRANSPORTATION  
MASTER PLAN**

**WASTEWATER COLLECTION & TREATMENT – EVALUATION OF OPTIONS**

<b>CRITERIA / WEIGHTING</b>	<b>OPTION A - DO NOTHING</b>	<b>OPTION B - CONVEY WASTEWATER TO CITY OF BARRIE</b>	<b>OPTION C - CONVEY WW TO SNOW VALLEY PLANT(S) AND/OR FUT. CENTRE VESPRA PLANT</b>	<b>OPTION D - SINGLE NEW WASTEWATER TREATMENT FACILITY WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION E - THREE NEW WASTEWATER TREATMENT FACILITIES WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION F - TWO NEW WASTEWATER TREATMENT FACILITIES WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION G – SINGLE NEW WASTEWATER TREATMENT FACILITY WITH SURFACE EFFLUENT DISPOSAL</b>
Response to Secondary Plan Growth  Weighting - 15%	Does not allow for growth – This is considered to be a fatal flaw and therefore, this Option has been eliminated from any further evaluation	Would provide adequate service for anticipated growth  Weighting - 1/15	This Option is not feasible as there is limited capacity in the Snow Valley and Centre Vespra Plants. This is considered to be a fatal flaw and therefore, this Option has been eliminated from any further evaluation	Based on currently available assessments, it is considered that this Option would provide adequate service for growth. However the acceptability of subsurface disposal of effluent is in question.  Weighting - 5/15	Based on currently available assessments, it is considered that this Option would provide adequate service for growth. However the acceptability of subsurface disposal of effluent is in question.  Weighting - 5/15	Based on currently available assessments, it is considered that this Option would provide adequate service for growth. However the acceptability of subsurface disposal of effluent is in question.  Weighting - 5/15	Based on currently available assessments, it is considered that this Option would provide adequate service for growth with an acceptable effluent disposal method.  Weighting – 1/15
Fisheries  Weighting - 2%		No anticipated impact based on pumping to Barrie. There may be some watercourse crossings as a result of collection system. No watercourse crossings with potential forcemain along Carson Rd., Anne St. and Brock St.  Weighting - 1/2		No anticipated impact as subsurface effluent discharge is proposed from wastewater treatment plant. There may be some watercourse crossings as a result of collection system.  Weighting - 1/2	No anticipated impact as subsurface effluent discharge is proposed from wastewater treatment plant. There may be some watercourse crossings as a result of collection system.  Weighting - 1/2	No anticipated impact as subsurface effluent discharge is proposed from wastewater treatment plant. There may be some watercourse crossings as a result of collection system.  Weighting - 1/2	Potential for impact as surface effluent disposal is proposed. Studies will be completed in ensure minimal impact on receiving water body. Preliminary mitigation measures include high level wastewater treatment and proposed effluent discharge location with greatest assimilative capacity. There may be some watercourse crossings as a result of collection system.  Weighting – 2/2
Wetlands, Floodplains & Shorelines  Weighting - 2%		No anticipated impact based on pumping to Barrie. Barrie wastewater treatment plant may have some impact on Lake Simcoe. There may be some watercourse crossings as a result of collection system.  Weighting - 2/2		No anticipated impact due to wastewater treatment facility or pumping stations. There may be some watercourse crossings as a result of collection system.  Weighting - 1/2	No anticipated impact due to wastewater treatment facilities or pumping stations. There may be some watercourse crossings as a result of collection system.  Weighting - 1/2	No anticipated impact due to wastewater treatment facilities or pumping stations. There may be some watercourse crossings as a result of collection system.  Weighting - 1/2	No anticipated impact due to wastewater treatment facilities or pumping stations. Potential impact at location on Willow Creek for effluent disposal. There may be some watercourse crossings as a result of collection system.  Weighting - 2/2

<b>CRITERIA / WEIGHTING</b>	<b>OPTION A - DO NOTHING</b>	<b>OPTION B - CONVEY WASTEWATER TO CITY OF BARRIE</b>	<b>OPTION C - CONVEY WW TO SNOW VALLEY PLANT(S) AND/OR FUT. CENTRE VESPRA PLANT</b>	<b>OPTION D - SINGLE NEW WASTEWATER TREATMENT FACILITY WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION E - THREE NEW WASTEWATER TREATMENT FACILITIES WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION F - TWO NEW WASTEWATER TREATMENT FACILITIES WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION G – SINGLE NEW WASTEWATER TREATMENT FACILITY WITH SURFACE EFFLUENT DISPOSAL</b>
Woodlands Weighting - 10%		May be some impact on wooded area depending on pumping station location at Carson Rd. & Bayfield St. as well as other pumping station sites.  Weighting – 5/10		Minimal impact – initial works will be constructed within proposed development area which is currently mainly farmland. Potential for pumping station outside of proposed development area (especially if existing Midhurst community is serviced in the future), which may have minor impacts on wooded areas depending on locations selected.  Weighting – 3/10	Minimal impact – initial works will be constructed within proposed development area which is currently mainly farmland. If existing Midhurst is serviced in the future, additional pumping stations will be required which may have minor impacts on wooded areas depending on locations selected.  Weighting – 3/10	Minimal impact – initial works will be constructed within proposed development area which is currently mainly farmland. If existing Midhurst is serviced in the future, additional pumping stations will be required which may have minor impacts on wooded areas depending on locations selected.  Weighting – 3/10	Minimal impact – initial works will be constructed within proposed development area which is currently mainly farmland. Potential for pumping station outside of proposed development area (especially if existing Midhurst community is serviced in the future), which may have minor impacts on wooded areas depending on locations selected.  Weighting – 3/10
Groundwater Weighting - 10%		No impact  Weighting – 1/10		Potential impact to groundwater if subsurface effluent disposal is used. Studies will be completed to ensure minimal impact on groundwater. Preliminary mitigation measures include tertiary treatment of wastewater to minimize nitrogen levels and strategic placement of effluent disposal wells. May have construction impacts due to dewatering. These will be mitigated if required.  Weighting – 5/10	Potential impact to groundwater if subsurface effluent disposal is used. Studies will be completed to ensure minimal impact on groundwater. Preliminary mitigation measures include tertiary treatment of wastewater to minimize nitrogen levels and strategic placement of effluent disposal wells. May have construction impacts due to dewatering. These will be mitigated if required.  Weighting – 5/10	Potential impact to groundwater if subsurface effluent disposal is used. Studies will be completed to ensure minimal impact on groundwater. Preliminary mitigation measures include tertiary treatment of wastewater to minimize nitrogen levels and strategic placement of effluent disposal wells. May have construction impacts due to dewatering. These will be mitigated if required.  Weighting – 5/10	Minimal impact to groundwater as surface water effluent disposal is proposed. May have construction impacts due to dewatering. These will be mitigated if required.  Weighting – 1/10
Air Quality, Noise & Vibration Weighting - 10%		Minor impact at new sanitary pumping stations with respect to diesel generator set  Weighting – 3/10		Potential for impact at new wastewater treatment plant and pumping station sites with respect to diesel generator sets. Potential for odour issues related to wastewater treatment that will be addressed during design.  Weighting – 8/10	Potential for impact at new wastewater treatment plant and pumping station sites with respect to diesel generator sets. Potential for odour issues related to wastewater treatment that will be addressed during design.  Weighting – 8/10	Potential for impact at new wastewater treatment plant and pumping station sites with respect to diesel generator sets. Potential for odour issues related to wastewater treatment that will be addressed during design.  Weighting – 8/10	Potential for impact at new wastewater treatment plant and pumping station sites with respect to diesel generator sets. Potential for odour issues related to wastewater treatment that will be addressed during design.  Weighting – 8/10

<b>CRITERIA / WEIGHTING</b>	<b>OPTION A - DO NOTHING</b>	<b>OPTION B - CONVEY WASTEWATER TO CITY OF BARRIE</b>	<b>OPTION C - CONVEY WW TO SNOW VALLEY PLANT(S) AND/OR FUT. CENTRE VESPRA PLANT</b>	<b>OPTION D - SINGLE NEW WASTEWATER TREATMENT FACILITY WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION E - THREE NEW WASTEWATER TREATMENT FACILITIES WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION F - TWO NEW WASTEWATER TREATMENT FACILITIES WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION G – SINGLE NEW WASTEWATER TREATMENT FACILITY WITH SURFACE EFFLUENT DISPOSAL</b>
Sensitive Species & ANSI/PSW  Weighting - 2%		Proposed forcemain on Carson Rd and Anne St will not result in any impacts.  Weighting – 1/2		Location of WWTP within the proposed development area as well as locations of pumping stations will be selected to avoid impacts on Sensitive Species & ANSI/PSW.  Weighting – 1/2	Locations of WWTPs within the proposed development area as well as locations of pumping stations will be selected to avoid impacts on Sensitive Species & ANSI/PSW.  Weighting – 1/2	Locations of WWTPs within the proposed development area as well as locations of pumping stations will be selected to avoid impacts on Sensitive Species & ANSI/PSW.  Weighting – 1/2	Location of WWTPs within the proposed development area as well as locations of pumping stations will be selected to avoid impacts on Sensitive Species & ANSI/PSW.  Weighting – 1/2
Social Impacts on Residents  Weighting - 15%		No financial impact with respect to capital costs to existing residents. Construction impact to the City of Barrie including forcemain crossing of Hwy 400.  Weighting – 10/15		No financial impact to existing residents with respect to capital costs for initial works. However, if sanitary servicing is extended to existing community of Midhurst in the future, residents will be impacted.  Weighting – 1/15	No financial impact to existing residents with respect to capital costs for initial works. However, if sanitary servicing is extended to existing community of Midhurst in the future, residents will be impacted.  Weighting – 1/15	No financial impact to existing residents with respect to capital costs for initial works. However, if sanitary servicing is extended to existing community of Midhurst in the future, residents will be impacted.  Weighting – 1/15	No financial impact to existing residents with respect to capital costs for initial works. However, if sanitary servicing is extended to existing community of Midhurst in the future, residents will be impacted.  Weighting – 1/15
Social Impacts on Social Features  Weighting - 5%		Potential for impact to be assessed based on locations of new wastewater pumping stations  Weighting – 3/5		Minimal impact to existing residents with respect to initial works. Initially, a forcemain will be constructed through Midhurst.  If sanitary servicing is extended to existing community of Midhurst in the future, social features may be impacted. Potential impact to be assessed based on locations of pumping stations. Preliminary locations include parkland. Mitigation measures will be required to minimize impact.  Weighting – 3/5	Minimal impact to existing residents with respect to initial works. If sanitary servicing is extended to existing community of Midhurst in the future, social features may be impacted. Potential impact to be assessed based on locations of pumping stations. Preliminary locations include parkland. Mitigation measures will be required to minimize impact.  Weighting – 1/5	Minimal impact to existing residents with respect to initial works. If sanitary servicing is extended to existing community of Midhurst in the future, social features may be impacted. Potential impact to be assessed based on locations of pumping stations. Preliminary locations include parkland. Mitigation measures will be required to minimize impact.  Weighting – 1/5	Minimal impact to existing residents with respect to initial works. Initially, a forcemain will be constructed through Midhurst.  If sanitary servicing is extended to existing community of Midhurst in the future, social features may be impacted. Potential impact to be assessed based on locations of pumping stations. Preliminary locations include parkland. Mitigation measures will be required to minimize impact.  Weighting – 3/5

<b>CRITERIA / WEIGHTING</b>	<b>OPTION A - DO NOTHING</b>	<b>OPTION B - CONVEY WASTEWATER TO CITY OF BARRIE</b>	<b>OPTION C - CONVEY WW TO SNOW VALLEY PLANT(S) AND/OR FUT. CENTRE VESPRA PLANT</b>	<b>OPTION D - SINGLE NEW WASTEWATER TREATMENT FACILITY WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION E - THREE NEW WASTEWATER TREATMENT FACILITIES WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION F - TWO NEW WASTEWATER TREATMENT FACILITIES WITH SUBSURFACE EFFLUENT DISPOSAL</b>	<b>OPTION G – SINGLE NEW WASTEWATER TREATMENT FACILITY WITH SURFACE EFFLUENT DISPOSAL</b>
Archaeological Weighting - 5%		No impact within proposed development lands. Potential for impact to be assessed based on locations of new wastewater pumping station  Weighting – 2/5		No impact at proposed wastewater treatment plant/wastewater pumping station sites for initial works. If sanitary servicing is extended to existing community of Midhurst in the future, potential pumping station sites will need to be investigated for archaeological potential.  Weighting – 1/5	No impact at proposed wastewater treatment plant/wastewater pumping station sites for initial works. If sanitary servicing is extended to existing community of Midhurst in the future, potential pumping station sites will need to be investigated for archaeological potential.  Weighting – 1/5	No impact at proposed wastewater treatment plant/wastewater pumping station sites for initial works. If sanitary servicing is extended to existing community of Midhurst in the future, potential pumping station sites will need to be investigated for archaeological potential.  Weighting – 1/5	No impact at proposed wastewater treatment plant/wastewater pumping station sites for initial works. If sanitary servicing is extended to existing community of Midhurst in the future, potential pumping station sites will need to be investigated for archaeological potential.  Weighting – 1/5
Construction Design, Land Ownership & Policies Weighting - 10%		Agreement with City of Barrie. Land may need to be obtained for wastewater pumping stations. No specific Policies.  Weighting – 10/10		Design and construction issues with respect to effluent discharge. Investigating possibility of subsurface discharge. MOE approvals may be onerous. No Land issues as all works to be built within proposed development lands. If existing community of Midhurst is serviced in the future, may require land acquisition for some pumping station sites. No specific Policies.  Weighting – 5/10	Design and construction issues with respect to effluent discharge. Investigating possibility of subsurface discharge. MOE approvals may be onerous. No Land issues as all works to be built within proposed development lands. If existing community of Midhurst is serviced in the future, may require land acquisition for some pumping station sites. No specific Policies.  Weighting – 5/10	Design and construction issues with respect to effluent discharge. Investigating possibility of subsurface discharge. MOE approvals may be onerous. No Land issues as all works to be built within proposed development lands. If existing community of Midhurst is serviced in the future, may require land acquisition for some pumping station sites. No specific Policies.  Weighting – 5/10	Proposed method of surface effluent discharge will be more straightforward to get MOE approval. No Land issues as all works to be built within proposed development lands. If existing community of Midhurst is serviced in the future, may require land acquisition for some pumping station sites. No specific Policies.  Weighting – 1/10
Utilities Weighting - 5%		No major Impact in Midhurst. Barrie utilities could be impacted.  Weighting – 3/5		No major impact anticipated. Forcemain will be required through the existing community of Midhurst.  Weighting – 2/5	No major impact anticipated  Weighting – 1/5	No major impact anticipated  Weighting – 1/5	No major impact anticipated. Forcemain will be required through the existing community of Midhurst.  Weighting – 2/5
Operational Considerations Weighting - 4%		Township would not have a wastewater treatment plant to operate and maintain which would be a benefit. New pumping stations would need to be operated and maintained.  Weighting – 1/4		Township would have a single new wastewater treatment plant (including potential effluent discharge wells) to operate and maintain. New pumping stations would need to be operated and maintained.  Weighting – 2/4	Township would have three new wastewater treatment plants (including potential effluent discharge wells) to operate and maintain in three separate systems.  Weighting – 4/4	Township would have two new wastewater treatment plants (including potential effluent discharge wells) to operate and maintain in two separate systems. New pumping stations would need to be operated and maintained.  Weighting – 3/4	Township would have a single new wastewater treatment plant to operate and maintain with surface water effluent discharge. New pumping stations would need to be operated and maintained.  Weighting – 1/4
Capital Cost Weighting - 5%	Not Applicable	\$82 million  Weighting – 5/5	Not Feasible	\$72 million  Weighting – 2/5	\$81 million  Weighting – 4/5	\$79 million  Weighting – 3/5	\$68 million  Weighting – 1/4

**Township of Springwater**

Class Environmental Assessment

Midhurst Water, Wastewater and Transportation Master Plan

Wastewater Collection and Treatment Options

Summary Score Analysis (Weighted Rankings)

<b>EVALUATION CRITERIA</b>	<b>Weightings - %</b>	<b>Option A</b>	<b>Option B</b>	<b>Option C</b>	<b>Option D</b>	<b>Option E</b>	<b>Option F</b>	<b>Option G</b>
Response to Secondary Plan Growth	15		1		5	5	5	1
Fisheries	2		1		1	1	1	2
Wetland, Floodplains and Shorelines	2		2		1	1	1	2
Woodlands	10		5		3	3	3	3
Groundwater	10		1		5	5	5	1
Air Quality, Noise and Vibration	10		3		8	8	8	8
Sensitive Species & ANSI/PSW	2		1		1	1	1	1
Social Impacts on Residents	15		10		1	1	1	1
Social Impacts on Social Features	5		3		3	1	1	3
Archaeological	5		2		1	1	1	1
Construction Design, Land Ownership and Policies	10		10		5	5	5	1
Utilities	5		3		2	1	1	2
Operational Considerations	4		1		2	4	3	1
Capital Cost	5		5		2	4	3	1
<b>Totals</b>	<b>100</b>		<b>48</b>		<b>40</b>	<b>41</b>	<b>39</b>	<b>28</b>

Option A - Not Feasible

Option C - Not Feasible

**TOWNSHIP OF SPRINGWATER  
CLASS ENVIRONMENTAL ASSESSMENT FOR THE  
MIDHURST WATER, WASTEWATER AND TRANSPORTATION  
MASTER PLAN**

**TRANSPORTATION – EVALUATION OF OPTIONS**

<b>CRITERIA / WEIGHTING (Future Full Build Out)</b>	<b>ALTERNATIVE 1 - DO NOTHING</b>	<b>ALTERNATIVE - 2 PROPOSED SIMCOE AREA NETWORK IMPROVEMENTS</b>	<b>ALTERNATIVE 3 - PROPOSED BY DEVELOPERS</b>	<b>ALTERNATIVE 4 – NO HWY 400 INTERCHANGE WITH LINK CONNECTION FROM ST. VINCENT RD. TO GILL RD.</b>	<b>ALTERNATIVE 5 – PARTIAL HWY 400 INTERCHANGE WITH NO LINK CONNECTION FROM ST. VINCENT RD. TO GILL RD.</b>	<b>ALTERNATIVE 6 – PARTIAL HWY 400 INTERCHANGE WITH LINK CONNECTION FROM ST. VINCENT RD. TO GILL RD.</b>
<p>Response to Secondary Plan Growth</p> <p>Weighting - 15%</p>	<p>Assumes the existing infrastructure condition of the Midhurst</p> <p>Area without any road network improvements for the future full build out</p> <p>Does not allow for growth – This is considered to be a fatal flaw and therefore, this Option has been eliminated from any further evaluation</p>	<p>This option is less feasible as the Barrie Bypass is a long-term conceptual plan outlined in the TMP and widening of County Road 27 and Wilson Drive is a short-term improvements until the Barrie Bypass is constructed. MTO has no mandate to provide this improvement.</p> <p>Weighting - 13/15</p>	<p>This alternative is based on the proposed road network improvements by the developer’s consultants. It does not reflect coordinated approach for the Midhurst development, and would cost more, though this option adequately accommodate future growth</p> <p>Weighting-12/15</p>	<p>This option sufficiently accommodates the future full build out and also addresses the traffic deficiencies.</p> <p>This alternative includes reconstruction/upgrade of existing two-lane roads to provide auxiliary turn lanes and/or improve general platform integrity at Russell Road, Walt Road, Old Second Road (between Walt Road and Pooles Road), Pooles Road, Doran Road, Finlay Mill Road, Carson Road and Anne Street. Notable improvements include:</p> <ul style="list-style-type: none"> <li>-Widening of St. Vincent Street (south of Pooles Road) to a four-lane road with auxiliary turn lanes, as required;</li> <li>-A new extension of Gill Rd to St. Vincent St;</li> <li>-A new extension of Craig Rd to County Road 27 as a two-lane road with auxiliary turn lanes, as required;</li> <li>-Widening of County Road 27 (from north of Highway 26 to Horseshoe Valley Rd) to a four-lane road (as identified by Simcoe County); and</li> <li>-Widening of Wilson Drive (from Snow Valley Rd to Sunnidale Rd) to a four-lane road (as identified by Simcoe County).</li> </ul> <p>Weighting - 6/15</p>	<p>This option sufficiently accommodates the future full build out but no link connection from St. Vincent Road to Gill Road.</p> <p>This alternative includes reconstruction /upgrade of existing two-lane roads to provide auxiliary turn lanes and/or improve general platform integrity at Russell Road, Walt Road, Old Second Road (between Walt Road and Pooles Road), Pooles Road, Doran Road, Finlay Mill Road, Carson Road, St. Vincent Street and Anne Street. Notable improvements includes:</p> <ul style="list-style-type: none"> <li>-A new partial interchange at Pooles Road on Highway 400 providing movements to and from south;</li> <li>-A new extension of Craig Road to County Road 27 as a two-lane road with auxiliary turn lanes, as required;</li> <li>-Widening of County Road 27 (from north of Highway 26 to Horseshoe Valley Road) to a four- lane road (as identified by Simcoe County); and</li> <li>-Widening of Wilson Drive (from Snow Valley Road to Sunnidale Road) to a four-lane road (as identified by Simcoe County).</li> </ul> <p>Weighting - 6/15</p>	<p>This option sufficiently accommodates the future full build out with link connection from St. Vincent Road to Gill Road.</p> <p>This alternative includes reconstruction /upgrade of existing two-lane roads to provide auxiliary turn lanes and/or improve general platform integrity at Russell Road, Walt Road, Old Second Road (between Walt Road and Pooles Road), Pooles Road, Doran Road, Finlay Mill Road, Carson Road, St. Vincent Street and Anne Street. Notable improvements includes:</p> <ul style="list-style-type: none"> <li>-A new partial interchange at Pooles Road on Highway 400 providing movements to and from south;</li> <li>-A new extension of Craig Road to County Road 27 as a two-lane road with auxiliary turn lanes, as required;</li> <li>-Widening of County Road 27 (from north of Highway 26 to Craig Road) to a four-lane road (as identified by Simcoe County); and</li> <li>-Widening of Wilson Drive (from Snow Valley Road to Sunnidale Road) to a four-lane road (as identified by Simcoe County).</li> </ul> <p>Weighting - 6/15</p>

<b>CRITERIA / WEIGHTING (Future Full Build Out)</b>	<b>ALTERNATIVE 1 - DO NOTHING</b>	<b>ALTERNATIVE - 2 PROPOSED SIMCOE AREA NETWORK IMPROVEMENTS</b>	<b>ALTERNATIVE 3 - PROPOSED BY DEVELOPERS</b>	<b>ALTERNATIVE 4 – NO HWY 400 INTERCHANGE WITH LINK CONNECTION FROM ST. VINCENT RD. TO GILL RD.</b>	<b>ALTERNATIVE 5 – PARTIAL HWY 400 INTERCHANGE WITH NO LINK CONNECTION FROM ST. VINCENT RD. TO GILL RD.</b>	<b>ALTERNATIVE 6 – PARTIAL HWY 400 INTERCHANGE WITH LINK CONNECTION FROM ST. VINCENT RD. TO GILL RD.</b>
Fisheries Weighting - 10%		Maximum Impact because of road widening and the Barrie Bypass would cross over the settlement areas and several Creeks.  Weighting - 8/10	Moderate Impact Several roads crossing creeks and wetlands  Weighting -6/10	Minimal anticipated impact as sufficient opening would be considered  Weighting – 3/10	Minimal anticipated impact, as sufficient opening would be considered.  Weighting - 3/10	Minimal anticipated impact as sufficient opening is considered  Weighting - 3/10
Wetlands, Floodplains & Shorelines Weighting - 2%		Moderate Impact as the Barrie Bypass would cross some watercourse / wetlands  Weighting - 2/2	Minimal anticipated impact due to development as most of the existing road would be upgraded. There may be some watercourse/wetlands crossings as a result of new roads and upgrades  Weighting-1/2	Minimal anticipated impact due to development as most of the existing road would be upgraded/extension. There may be some watercourse/ wetlands crossings as a result of new roads and upgrades  Weighting-1/2	Minimal anticipated impact due to development as most of the existing road would be upgraded/extension. There may be some watercourse crossings as a result of new roads and upgrades  Weighting-1/2	Minimal anticipated impact due to development as most of the existing road would be upgraded/extension. There may be some watercourse/wetlands crossings as a result of new roads and upgrades  Weighting-1/2
Woodlands Weighting - 10%		May significant impact on wooded area depending on the actual alignment location of the Barrie Bypass.  Weighting – 5/10	Moderate Impact due to upgrade of County Road 27 and extension of Carson Road and Russell Road  Weighting – 4/10	Minimal Impact as to upgrade /extension of the existing Road.  Weighting – 3/10	Minimal Impact as to upgrade /extension of the existing Road.  Weighting – 3/10	Minimal Impact as to upgrade /extension of the existing Road. Considered one interchange at Pooles Road.  Weighting – 3/10
Groundwater Weighting - 2%		No anticipated impact  Weighting – 1/10	No anticipated impact  Weighting – 1/10	No anticipated impact  Weighting –1/10	No anticipated impact  Weighting –1/10	No anticipated impact  Weighting –1/10
Air Quality, Noise & Vibration Weighting - 10%		Minor impact at the settlement area around County road 27  Weighting – 3/10	Minimal Impact in three development areas of Midhurst  Weighting –8/10	Minimal impact in three development areas of Midhurst. Mitigation measures include daytime construction instead of nighttime and dust control.  Weighting – 8/10	Minimal impact in three development areas of Midhurst. Mitigation measures include daytime construction instead of nighttime and dust control.  Weighting – 8/10	Minimal impact in three development areas of Midhurst. Mitigation measures include daytime construction instead of nighttime and dust control.  Weighting – 7/10
Sensitive Species & ANSI/PSW Weighting - 2%		Proposed Barrie Bypass may have some impact  Weighting – 2/2	Minimal impact based on existing road upgrades and extensions  Weighting – 1/2	Minimal impact based on existing road upgrades and extensions  Weighting – 1/2	Minimal impact based on existing road upgrades and extensions  Weighting – 1/2	Minimal impact based on existing road upgrades and extensions  Weighting – 1/2
Social Impacts on Residents Weighting - 15%		Financial impact because of Barrie Bypass. Minimal financial impact with respect to capital costs to existing residents. Construction impact to the City of Barrie  Weighting – 10/15	Minimal financial impact with respect to capital costs to existing residents due to road widenings. Majority of cost to be borne by Developers. Construction impacts, to be mitigated.  Weighting – 6/15	Minimal financial impact with respect to capital costs to existing residents due to road widenings. Majority of cost to be borne by Developers. Construction impacts, to be mitigated.  Weighting – 4/15	Minimal financial impact with respect to capital costs to existing residents due to road widenings. Majority of cost to be borne by Developers. Construction impacts, to be mitigated.  Weighting – 4/15	Minimal financial impact with respect to capital costs to existing residents due to road widenings. Majority of cost to be borne by Developers. Construction impacts, to be mitigated.  Weighting – 3/15

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Social Impacts on Social Features Weighting - 5%		Potential for impact due to Barrie Bypass (conceptual)  Weighting – 3/5	Minimal impact due to Development  Weighting – 3/5	Minimal impact due to Development  Weighting – 2/5	Minimal impact due to Development  Weighting – 3/5	Minimal impact due to Development  Weighting – 2/5
Archaeological Weighting - 5%		No anticipated impact within proposed development lands or existing road allowances.  Weighting – 3/5	Minimal anticipated impact within the proposed development area or on existing road allowances.  Weighting – 3/5	Minimal anticipated impact within the proposed development area or on existing road allowances. No new roads proposed except connection of St. Vincent road to Gill Road in existing road allowance.  Weighting – 3/5	Minimal anticipated impact within the proposed development area or on existing road allowances. No new road proposed.  Weighting – 2/5	Minimal anticipated impact within the proposed development area or on existing road allowances. No new roads proposed except connection of St. Vincent road to Gill Road in existing road allowance.  Weighting – 3/5
Construction Design, Land Ownership & Policies Weighting - 10%		Agreement with City of Barrie. Land may need to be obtained for Barrie Bypass. No specific Policies.  Weighting – 10/10	Design and construction issues with respect to widening and extension of existing roads may need easements.  Weighting – 5/10	Design and construction issues with respect to widening and extension of existing roads may need easements. No Land issues as all works to be built within proposed development lands. No specific Policies.  Weighting – 5/10	Design and construction issues with respect to widening and extension of existing roads may need easements. No Land issues as all works to be built within proposed development lands. No specific Policies.  Weighting – 4/10	Design and construction issues with respect to widening and extension of existing roads may need easements. No Land issues as all works to be built within proposed development lands. No specific Policies.  Weighting – 3/10
Utilities Weighting - 5%		No anticipated impact  Weighting – 1/5	No major impact anticipated  Weighting – 2/5	No major impact anticipated  Weighting – 2/5	No major impact anticipated  Weighting – 1/5	No major impact anticipated  Weighting – 1/5
Operational Considerations Weighting - 4%		Township would not have more roads to operate and maintain.  Weighting – 1/4	Township would have more roads to operate and maintain.  Weighting – 2/4	Township would have more roads to operate and maintain.  Weighting – 3/4	Township would have more roads to operate and maintain.  Weighting – 3/4	Township would have more roads to operate and maintain.  Weighting – 2/4
Capital Cost Weighting - 5%		Estimated more than \$100 million  Weighting – 5/5	Estimated more than \$100 million  Weighting – 5/5	\$69 Million  Weighting – 1/5	\$72 million  Weighting – 2/5	\$79 million  Weighting – 3 /5

**Township of Springwater**

Class Environmental Assessment

Midhurst Water, Wastewater and Transportation Master Plan

Transportation Options

Summary Score Analysis (Weighted Rankings)

<b>EVALUATION CRITERIA</b>	<b>Weightings - %</b>	<b>Option 1</b>	<b>Option 2</b>	<b>Option 3</b>	<b>Option 4</b>	<b>Option 5</b>	<b>Option 6</b>
Response to Secondary Plan Growth	15		13	12	6	6	6
Fisheries	10		8	6	3	3	3
Wetland, Floodplains and Shorelines	2		2	1	1	1	1
Woodlands	10		5	4	3	3	3
Groundwater	2		1	1	1	1	1
Air Quality, Noise and Vibration	10		3	8	8	8	7
Sensitive Species & ANSI/PSW	2		2	1	1	1	1
Social Impacts on Residents	15		10	6	4	4	3
Social Impacts on Social Features	5		3	3	2	3	2
Archaeological	5		3	3	3	2	3
Construction Design, Land Ownership and Policies	10		10	5	5	3	3
Utilities	5		1	2	2	1	1
Operational Considerations	4		1	2	3	3	2
Capital Cost	5		5	5	1	2	3
<b>Totals</b>	<b>100</b>		<b>67</b>	<b>59</b>	<b>43</b>	<b>41</b>	<b>39</b>

Option 1- Not Feasible