

File #:

100 Date: June 19, 2017

Mr. John Antoszek, P. Eng. Pollution Control Engineer Advisor Water Standards Section, Standards Development Branch Ministry of the Environment and Climate Change 40 St. Clair Ave. W., 9th Floor Toronto, ON, M4V1M2

Dear Mr. Antoszek:

MOECC Draft LID Stormwater Management Guidance Manual Draft Version 1.0 - April 20, 2017

We are writing on behalf of the Building Industry and Land Development Association (BILD) and the Ontario Home Builders' Association (OHBA) with a combined response from our membership to the MOECC's draft LID Manual released for review.

We appreciate the opportunity to continue to be included in the Stakeholder Review Group and we look forward to continued cooperation with MOECC and the Stakeholder Group to facilitate the successful completion of the LID SWM Guidance Document. We recognize and appreciate the modifications that have been made to the Draft document to date based on our previous comments.

Please consider the following comments in the next iteration of the LID Guidance Manual:

- Section 1.5.1.1 The Better Site Design section should include efficient landuse criteria such as incorporating LIDs into parks, schools, buffers, SWM facilities, parking lots and private lots, to minimize the need for additional land to achieve the runoff volume control targets
- Section 3.0 This section conflicts with the statements in Section 2.2 (second last paragraph on page 38). Section 2.2 acknowledges that SWM targets previously established as part of a SWS or EMP will supersede the targets in the new LID manual. The last sentence of Section 3.0 states "In all cases, the area specific requirements and/or most stringent policy and/or requirement shall apply". This sentence should simply be removed from the document to be consistent with Section 2.2 and with the opening statements in Section 3.0. It is extremely important that the current stormwater management objectives as recommended through the current planning process continue to be recognized as the over-riding criteria since there have been significant planning and economic decision made based on these recommendations. Any other similar discussions in the document should be reviewed for consistency and clarity with section 2.2.

- Section 3.2, first bullet—Pre-Development for New Development Definition It is inappropriate and unreasonable to consider the "pre-development" condition as "undisturbed forest" if the site is actually agricultural or some other form of developed condition. The pre-development condition should always reflect the "current" condition of the site at the time of the development application. Utilization of an undisturbed forest condition would result in significant upfront and long term infrastructure cost implications for the municipalities or private landowners. Use of an "overcontrol" situation should be limited to areas with downstream constraints only, not as a general guideline.
- Section 3.2, second bullet Pre-Development for Re-Development, Re-urbanization and Intensification Definition same comment as above existing conditions should be recognized, as opposed a maximum runoff coefficient of 0.3. Use of an "overcontrol" situation should be limited to areas with downstream constraints only, not as a general guideline.
- Section 3.3.3.2 Similar to the definition of "pre-development" and "re-development" it is inappropriate to request an entire site to meet the current run-off volume control targets as opposed to being limited to the expansion area. The associated cost and implications to an existing site could be prohibitive to the owner who is improving or expanding their property.
- Section 3.3.1 A volume control exemption consideration should be given to sites that directly abut a lake since the rationale behind the volume control requirements would not equally apply in this situation. This would not exempt the site from quality control requirements. This exemption would be consistent with the lack or requirement for quantity control for sites adjacent to a lake.
- Section 3.3.3.6 We acknowledge that this clause was modified to remove the "500 m" distance criteria and now only applies to sites that outlet "directly to a watercourse or wetland". While we appreciate the modification, the same principles apply as previously discussed related to this clause. If a specific site meets the options included in the "Flexibility" clause 3.3.3.5, then it is irrelevant if the site is outletting directly to a watercourse the flexibility criteria must be applied to all sites equally or there can be significant implications. There is no other municipal or Provincial policy or criteria that treats sites outletting directly to a watercourse any differently than those that do not all sites eventually outlet to a water body. The level of treatment for every site should be consistent, regardless of the proximity to a watercourse. The Flexible Treatment Options have been incorporated for valid reasons, which should apply equally to all sites.
- Section 4.2, Page 65, Last Sentence What is meant by "careful consideration must be given to salts and chlorides when infiltration stormwater"? Almost all road based stormwater run-off in Ontario will contain chlorides. Would this eliminate or modify any of the suggested LID options? Item 3 in Section 4.2.6 suggests that runoff from areas that include road salt NOT be conveyed to an infiltration based LID. This would include all parking lots, sidewalks, driveways and roads in Ontario. This would essentially rule out any infiltration based LID that isn't accepting water from a rooftop or landscaped area. Item 3 also suggests a by-pass could be incorporated during winter months this solution would typically not be acceptable by the operating authority based on the significant maintenance requirements, especially for an operating authority with hundreds of LIDs to maintain. If the LID is being relied up on for water quality, erosion and water balance control, then a

second SWM facility would be required, which would then result in a significant lack of efficiency and added cost. This clause, if implemented, will eliminate all infiltration based LID's for use in treating stormwater runoff from all paved areas in Ontario, aside from a very few areas where no salt is applied. This would also conflict with Clause 3.3.3.6 which does not allow anything but infiltration or re-use for sites outletting directly to a watercourse.

- Table 5.4.2 Our previous requested modifications to this table were not incorporated. We request your reconsideration of the following items:
 - "Large" sites should reflect a major urban expansion, which is typically larger than a "concession block" which is in the order of 2 km x 2 km. Therefore, it would be more appropriate to use 450 ha as a guideline. We note that the "Seaton" example of a "large" site is a 3000 ha development, which is suitable to the associated modelling approach. A 250 ha area would not meet the same considerations for a "large" site and would be too onerous an approach.
 - Fully naturalized sites are recommended as only a "D" type modelling. Based on the size of the naturalized area and the size of the site itself, the appropriate model type could range from an "A" to "D" type model. For example, a 1ha naturalized site would not be appropriate to utilize a "D" type model.
 - Many smaller sites are adjacent to wetlands, cold-water streams, streams with measured baseflow contribution (BFI>0.5), or ecologically significant groundwater recharge areas. This should not result in an automatic default to a "C" or "D" type modelling scenario subject to a full review of the overall potential implications. A "B" type modelling options should be
 - Many sites in Ontario have groundwater depths <4 m. These situations are typically addressed through various measures including filling, use of filtration vs. infiltration LIDs. etc. The modelling scenarios for the average development would be adequately served with a "B" type modelling scenario. We request that the recommended class of modelling category be updated to include type "B" for this scenario.

We recognize and appreciate the pre-amble to Table 5.4.2 suggests a practical approach to the model selection, however without reflecting the potential scenarios noted above, we remain concerned that the model selection process will default to the most onerous modelling approach as defined by the table.

Section 7.4.1- Frequently Asked Question #3 – the need for an ECA for private lot infiltration trenches should be reconsidered. Private lots already include several LIDs such as disconnected roof drains, extra depth topsoil, shallow grassed swales etc. which do not require ECAs, but are part of overall treatment train stormwater solutions. Infiltration trenches would be just another form of private LID. The administrative process alone to have an ECA issued by the Ministry for every private lot with an infiltration LID would be extremely onerous. The likelihood that the ECA would be transferred to future ownerships is also extremely slim. We recommend that private lot LIDs should be added to the exemptions in O.Reg. 525/98.

- Section 7.6 The definition of "Compliance Monitoring" should be reconsidered. A typical development site could include numerous LIDs spread throughout the plan. Monitoring of each LID to confirm infiltration rates, volume reductions, water quality treatment and groundwater recharge is not practical or feasible. The LIDs will be designed based on detailed background analysis including proven design techniques with proven quality control capabilities and detailed hydrogeotechnical analysis with proven infiltration rates. As such, if the LID is designed and built properly, it will function adequately. On this basis, we suggest that the definition of Compliance Monitoring be modified to confirmation that appropriate erosion and sediment controls are in place until the LID is operational, that infiltration facilities aren't operational until all contributing areas are stabilized and restored, and that all volume and material specifications are adequately constructed prior to turning the facility over to the operating authority.
- Table 9.6.1 An annual O&M Report for LIDs on private residential lots will be extremely onerous for the lot owners and for whichever agency is anticipated to receive and review these reports. Similar to our comment on Section 7.4.1, LIDs on private residential lots should be excluded from this process. Likewise, the LC approach should not apply to LIDs on private residential lots, other than what is secured through the existing Subdivision Agreement process.
- Section 10 The proposed multi-step certification process is extremely onerous and unnecessary if the proper background analysis, design and construction monitoring/inspection is completed.
- Section 10.1 the suggested level of "Conventional SWM Monitoring Programs" is not consistent
 with current ECA conditions. SWM facilities designed in accordance with MOECC SWM Design
 Guidelines are assumed to meet water quality and quantity control requirements and do NOT require
 additional monitoring, provided they are built in accordance with the design specifications.

On behalf of BILD and OHBA, we appreciate the continued opportunity be part of the Stakeholder Review Group to provide constructive feedback on the proposed guidance documents based on the experience of our members.

Please call the undersigned if you have any questions regarding the above comments.

Sincerely,

SCS Consulting Group Ltd.

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