



August 26, 2019

Mr. Scott Taylor, Senior Planner
The Corporation of Grey County
595 9th Avenue East
Owen Sound Ontario, N4K 3E3

Dear Mr. Taylor:

Subject: Peer Review - Hydrogeological Report and Site Servicing Study – Proposed Residential Subdivision - North Part of Lot 9, Concession 7, Geographic Township of Derby, Settlement of Kilsyth, Township of Georgian Bluffs, County of Grey

WSP Canada Inc. (WSP) has been contracted on behalf of The Corporation of Grey County (Grey County) to conduct a peer review of the technical documents submitted in support of a proposed residential subdivision on the North Part of Lot 9, Concession 7, Geographic Township of Derby, Settlement of Kilsyth, Township of Georgian Bluffs, in the County of Grey on behalf of Barry's Construction and Insulation Ltd.

This letter provides a summary of the findings of our review of the Hydrogeological Report and Site Servicing Study prepared by GM BluePlan Engineering in July 2019. This report includes information to address draft comments on previous submissions as provided by WSP in January and May 2019.

The proposed development is to comprise a subdivision of 33 single family residential lots, serviced by a new roadway with access to Grey Road 5 and Concession 7. The subdivision is generally located southwest of the intersection of Grey Road 5 and Concession 7. The development property is 17.09 ha. Each lot is proposed to be serviced by individual private well and individual on-site systems for sewage disposal. Two blocks of the proposed draft plan of subdivision have been set aside for construction of stormwater management (SWM) facilities

The GM BluePlan reports were reviewed in detail by qualified professionals to confirm that the work documented in the submitted and reviewed report complies with the Provincial requirements of Guideline D-5-4 and D-5-5 and local guidelines for residential developments. The findings of this review is that the work submitted complies with provincial and local guidelines.

The GM BluePlan July 2019 report presents a conventional assessment of the lot carrying capacity for private sewage systems and also includes an alternate approach that reflects the dilution available within the development area. This approach and the sensitivity analysis presented indicates that the proposed development can be constructed to be protective of on-site and downgradient water supplies.

The revised servicing plan now calls for steel casings for water supply wells to be grouted in place to a depth of 12 m below ground surface. This approach will provide additional protection of groundwater quality for the residents. This requirement is recommended to be a condition of approval. The GM BluePlan July 2019 report does not specifically address plans for modifications to the existing domestic well (2502982) and to test wells (A214466, A214465) to

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comply with this requirement for extended casings. This can also be specified in the recommended Condition of Approval.

Wells that are no longer required for monitoring or domestic use are to be decommissioned in accordance with Ontario Regulation 903 (as amended). This may also be appropriate to be included as a Condition of Approval. If included, it is appropriate to request documentation of the decommissioning to be provided.

WSP notes that the GM BluePlan July 2019 report does not contain a detailed Conceptual Servicing Plan that illustrates the proposed structures, driveways, amenities, wells, and private sewage systems on each property in compliance with requirements of the Ontario Building Code and local municipalities. This is not specifically a requirement of Guideline D-5-4, but it is WSP's experience that municipalities request this type of plan as supporting documentation that the proposed development can be constructed in compliance with applicable requirements. WSP recommends that Grey County consider a Condition of Approval to require submission of a Conceptual Servicing Plan that illustrates proposed locations of structures, driveways, amenities, wells, and private sewage systems and confirms that these can be positioned on the designated lots within the requirements of the Ontario Building Code and Township Zoning By-law to the satisfaction of The Township of Georgian Bluffs.

Although the GM BluePlan July 2019 report supports that the proposed plan for private servicing will not adversely affect on-site or off-site water supplies, there is a benefit to the developers, future owners, and the municipalities if a baseline water quality survey is conducted, prior to construction, to confirm the existing water quality in private water supplies to the north and east of the proposed development. This baseline water quality sampling could also be considered as a Condition of Approval through wording in the subdivision agreement.

Similarly, WSP also recommends that it is appropriate to have a Condition of Approval in the subdivision agreement to ensure that individual private wells in the subdivision are tested and certified by a Qualified Professional to demonstrate that the wells can provide sufficient water to service each proposed residence with potable water prior to occupancy. This testing can be carried out in conjunction with work required to satisfy O.Reg. 903 Wells, but will typically require more specific and detailed hydraulic testing and water quality testing for chemical and microbiological parameters.

If you have any questions or wish to discuss any of the above, please do not hesitate to contact the undersigned.

Yours sincerely,

Lloyd Lemon, M.Sc., P.Geo.
Senior Project Geoscientist
LAL/dlw

Chris Wilson, P.Eng.
Team Lead - Infrastructure

cc: Ms. Jenn Burnett, Intermediate Planner, Township of Georgian Bluffs
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