



S. LLEWELLYN & ASSOCIATES LIMITED
CONSULTING ENGINEERS

July 9, 2020
File 19034

Region of Halton
1151 Bronte Road
Oakville, Ontario
L6M 3L1

Attention: Mr. A. Huycke, MCIP, RPP, CPT
Senior Planner, Community Planning

Dear Mr. Huycke:

**RE: GARDEN TRAILS PHASE 2 SUBDIVISION
FILE 24T-99005/B
IN THE CITY OF BURLINGTON**

Further to your letter dated March 24, 2020 and our June 29, 2020 meeting in connection with the above noted project, we wish to confirm that we have reviewed the Functional Design Report dated November 1999, as prepared by Philips Planning & Engineering Limited for the Garden Trails Subdivision.

We confirm that the conclusions of the Functional Design Report still apply to the proposed Garden Trails Phase 2 Subdivision, with respect to storm and wastewater sewer servicing, stormwater management, and water servicing. The as-constructed volume of the existing stormwater management facility will have to be verified by our office prior to registration of the plan of subdivision.

If you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

S. LLEWELLYN & ASSOCIATES LIMITED

S. Llewellyn, P.Eng.



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Wednesday July 15, 2020

Via E-Mail

Conservation Halton
2596 Britannia Road W.
Burlington ON L7P 0G3

Attention: Emma DeFields, MES, MCIP, RPP

RE: Request for Extension of Draft Approval
File: 24T-99005/B
Garden Trail Phase 2 Subdivision
Block 154, Registered Plan 20M-795

Dear Ms. DeFields,

Thank you for meeting with Emshih Developments Inc., and our consulting team on June 29 and July 15, 2020 to discuss matters related to our draft approval request for extension for the above noted site. Concerns were raised with regard to the existing stormwater facility and outfall, as well as work related to the stable top of slope.

Stormwater Management & Outfall

Please accept this letter as confirmation that the existing “as-constructed” stormwater management facility, associated outfall and compensation works were approved and completed as part of the overall subdivision plan during the development of Phase 1. All works have been monitored, inspected and received final sign-off.

Attached, you find copies of permit approvals by Conservation Halton and the Ministry of Environment for the works in question, as well as a letter from our previous consultant verifying these approvals. Nonetheless, as noted by S. Llewellyn & Associates Ltd., the “as-constructed” storm facility will be reviewed to confirm it will continue to satisfy the stormwater management requirements for Phase 2 of the subject development.

Stable Top of Slope

In preparation for our upcoming meeting on July 27, 2020 to discuss technical matters related to the stable top of slope, please note that the following reports and analysis have been completed and provided to CH for review to date:

- Grading Plans – October 2007, prepared by Philips Engineering
- Updated Phase 2 lot grading plans and revise slope evaluation – November 2008, prepared by Phillips Engineering

- Preliminary Geotechnical Investigations – December 2010 & December 2011, prepared by Soil-Mat
- Soil-Mat Letter to CH - Southern Limit of property (developable area) and stable slope established, June 21, 2013
- CH site visit with Soil-Mat re: slope and stabilization - November 27, 2013
- Geomorphic Assessment and Design – Sept 2014, prepared by Parish
- Geotechnical Investigation and Slope Stability Report - October 10, 2014, prepared by Soil-Mat
- Final Preliminary Design – Channel Rehabilitation at SWM Outfall and Hydraulic Model – October 30, 2015, prepared by Amec Foster-Wheeler
- Final Engineering Plans, Lot Grading, Slope Stabilization and CH Package – November 2, 2015, prepared by Amec Foster-Wheeler
- Geotechnical Investigation and Slope Stability Report (October 2014), prepared by Soil-Mat and recirculated to CH, September 2017
- Soil-Mat Supplemental Slope Stability Comments, August 2019
- Soil-Mat Updated Slope Stability Considerations, December 2019
- Propex Geosolutions report – December 2019
- Soil-Mat Supplemental Slope Stability Comments, February 2020
- TIPP & EMP – March 2020, prepared by Kuntz Forestry Consultants
- Fluvial Geomorphic Assessment – April 2020, prepared by Water's Edge Environmental
- Grading, Sediment & Erosion Control Plans, Creek Rehabilitation drawings – April 2020, prepared by S. Llewellyn & Associates Ltd

We trust that the information provided satisfies any outstanding concerns regarding stormwater management on the site and determination of stable top of slope as it relates to the Phase 2 subdivision. Should any additional information be required, please do not hesitate to contact the undersigned.

Kind Regards,
Garden Trail Developments Limited c/o Emshih Developments Inc.



Kristina Didiano, MES
Planner

Cc: Adam Huycke, Halton Region
Jeff McIsaac, City of Burlington
Kyle Plas, City of Burlington
Melissa Morgan, City of Burlington
Dana Anderson, MHBC
Scott Llewellyn, S. Llewellyn & Associates Ltd.
Ian Shaw, Soil-Mat Engineers
Dr. Michael Shih, Emshih Developments



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Monday August 24, 2020

Via E-Mail

City of Burlington
426 Brant Street
Burlington ON L7R 2G2

RE: Response to CH Deficiencies List regarding Supplementary information and directions regarding subdivision agreement extension for Garden Trails Subdivision (PL-48-20)

Dear Mayor Meed-Ward and members of Council,

Regarding Subdivision Application 24T-99005, please accept this letter as a response to the list of deficiencies provided to the City by Conservation Halton (CH) on March 24, 2020 and July 15, 2020. Outlined below is a summary of the key deficiencies and that status of each:

1. Slope Stability Assessment: CH has reviewed prior submissions of this document. A consolidated report that determines the erosion hazard limits for the valley feature under existing and proposed conditions, and that integrates the physical top of bank as staked by CH staff on August 4, 2020, is required. Until this information is provided, CH cannot confirm that development (including new residential lots or dwellings) is not proposed within hazardous lands or that the proposal meets Provincial Policy.
 - Soil-Mat Engineers previously prepared a comprehensive soil stability analysis report (dated October 10, 2014), which included a determination of the long-term top of stable slope. An addendum to this report was provided in 2015, and then additional addendums in 2017 in response to comments from CH staff.
 - More recent detailed response to CH comments were provided in 2019 and 2020, which were direct answers to specific questions raised. So, to be clear, the relevant detailed geotechnical slope stability assessment work has been done, and further refined since the start of our involvement in 2010. An updated consolidated report is reasonable to assist CH staff in their review, however this is not a function of lack of information or detailed study, it is a function of the evolution of the file over time and based on comments from CH staff.
 - The preparation of a consolidated geotechnical report is underway and will address matters related to the site walk undertaken on August 4, 2020.
 - Further, Soil-Mat has had recent discussions with CH staff, including during a recent site visit on August 4, 2020. These have been aimed at resolving the technical issues of the file, which are more complicated than most typical such sites. This is primarily due to the fact the property is a decommissioned former brick making quarry, and so the slope in question is not natural, but rather comprised of 'man-made' soil fill.
 - During our site visit with CH staff on August 4 we engaged in positive technical discussion with CH staff, and were advised that they would conduct further internal

discussion and advise us on their position on some of the technical points of discussion. We have not yet received specific follow up to this.

- A further technical note, with respect to the reference of the staked top of bank that was recently done by CH staff during August 4 site visit. With due respect to CH staff, this is a relatively arbitrary staking of a physical top of slope location done by eye while on site. It is a useful reference, however, with respect, from a geotechnical engineering point of view it would not be considered as the governing or controlling reference. That would be the established top of stable slope based on detailed geotechnical assessment, which again was initially presented in our report of October 2014.
 - We anticipate that a formal report will be issued in the next few weeks.
2. Grading and Stabilization plans are needed to address erosion and slope stability issues along the valley and stormwater (SWM) pond.
- Grading and Stabilization plans were prepared by S. Llewellyn & Associates Ltd. And Soil-Mat Engineers, submitted to CH as part of the complete permit application circulated on April 24, 2020.
 - Comments from CH were received on June 24, 2020, and subsequent meetings held on July 15, 2020, July 27, 2020 and August 4, 2020.
 - Technical comments and recommendations to address these items have been presented to CH staff, including appropriate slope stabilization measures where warranted. Soil-Mat been engaged in discussion with CH staff to establish the most appropriate approach that would be acceptable to CH staff, and have provided additional technical comment and material to CH staff during this process. Detail of the grading plans has been revised, however is tied to the technical discussion regarding the slope stability, so there is somewhat of a 'chicken and egg' scenario in this case.
 - A resubmission addressing comments received will be undertaken.
3. Fluvial Geomorphic Assessment is needed to inform erosion allowances, restoration measures and management of SWM facility's outfall.
- A fluvial geomorphic assessment was prepared by Water's Edge Environmental Solution, dated April 17, 2020, and submitted to CH as part of the permit application.
 - Comments from CH were received on June 24, 2020 and will be addressed in the resubmissions to be undertaken.
4. Functional Servicing and Stormwater Management (SWM) Report should be updated in accordance with current standards and guidelines considering the proposed development form. It must be demonstrated that the SWM pond will not impact slope stability or exacerbate existing erosion concerns.
- A Functional Servicing Report (FSR) was prepared for the original subdivision, addressing both Phase 1 and Phase 2 of the plan.
 - In the attached letter prepared by S. Llewellyn & Associates Ltd., dated July 9, 2020, confirms that the existing FSR still applies to the proposed Phase 2 subdivision.
 - As such, volumes of the as-constructed storm facility will be verified prior to registration.
5. Environmental Impact Assessment (EIA) is needed to demonstrate no negative impacts on the natural heritage system (NHS) and to confirm development setbacks. Agencies are currently reviewing a Terms of Reference for this study.

- A scoped Terms of Reference (TOR) was circulated to agencies on August 5, 2020 and is currently under review.
 - If the TOR is accepted, Emshih expects that an updated EIA can be prepared in approximately 6 months.
 - If the scope of work for the EIA requires additional seasonal studies, the completion of the formal report could take upwards of a year.
6. Updated or new Tree Inventory and Preservation Plan; Landscape and Restoration Plans; Engineering Drawing Set (Grading, Servicing, ESC, etc.); and Topographic Survey.
- A Tree Inventory Preservation Plan and Edge Management Plan, dated March 20, 2020, was prepared by Kuntz Forestry Consultants Inc. and circulated to CH as part of the permit application.
 - Grading and Sediment & Erosion Control plans were prepared by S. Llewellyn & Associates Ltd. And circulated to CH as part of the permit application.
 - Comments from CH were received on June 24, 2020 and will be addressed in the resubmission to be undertaken.
 - Updated Topographic Survey prepared by MMP Surveyors during Fall and Winter 2019, Long-term Stable Top of Slope was staked and surveyed for the permit application.
7. Planning (Subdivision) Fees: CH has no record of receiving fees for prior review of this subdivision. Additional review fees are required and would be similar to that of a new application.
- Emshih Developments Inc. recently paid to CH fees in the amount of \$21,285.00 for the ongoing technical review of the permit application submitted on April 24, 2020.
 - Additional planning fees have only recently been made know through the extension request process.
 - As noted in earlier presentations, Emshih will pay the appropriate fees to reflect staff time and resources for the review of resubmission materials if an extension is granted.
 - CH has the discretion to charge Peer Review fees and Additional fees (at an hourly rate) in addition to Plan Review fees.

Emshih Developments Inc. is committed to completing the Garden Trail Phase 2 subdivision through the draft approval extension request. As outlined above, most of the deficiencies noted by CH have been completed and reviewed by CH technical staff and will be circulated to CH planning staff upon approval of the extension request. We anticipate that the outstanding matters with CH will be resolved prior to the end of the year. As such, we trust that the summary we have provided shall serve as additional information for Council's review and consideration regarding our extension request.

Regards,

Kristina Didiano, Emshih Developments Inc.

Attachments:

- A – Information Package to CH re: Stormwater Management & Stable Top of Slope
- B – Letter from S. Llewellyn & Associates Ltd re: Functional Servicing Report