



Conservation

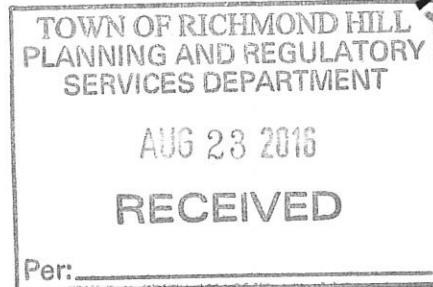
for The Living City

CFN: 55948

August 19, 2016

BY EMAIL ONLY

Ms. Phoebe Chow
Town of Richmond Hill
225 East Beaver Creek Road
Richmond Hill, ON L4B 3P4



Dear Ms. Chow:

**Re: D01-16002 (Official Plan Amendment)
D02-16012 (Zoning By-law Amendment)
D03-16006 (Draft Plan of Subdivision)
59 Brookside Road, Richmond Hill (formerly 47 & 59 Brookside Rd., 11014-11076 Yonge St., 12 & 24 Naughton Dr.)
Part of Lots 1 & 2, Plan 1642, Lots 1-4, Plan 3600 and Part of Lot 1, Plan 3799
Yonge MCD Inc.**

This letter will acknowledge receipt of the above-noted applications. The application was received May 19, 2016. Toronto and Region Conservation Authority (TRCA) staff have reviewed the submission and offer the following comments.

PURPOSE OF THE APPLICATION

It is our understanding that the purpose of these applications is to facilitate the development of a 29 storey mixed use building at the northwest corner of Naughton Drive and Yonge Street and 3 additional highrise residential buildings (16, 20 & 29 storeys), 6 single detached dwellings fronting Brookside Drive, 22 street townhouse units, 22 condominium townhouse units, 138 condo stacked townhouse units and a public park on the subject property.

BACKGROUND

TRCA staff conducted a site staking of the property on May 20, 2014 with the applicant, their consultants and Town of Richmond Hill staff. The existing top-of-slope was staked where applicable along with the limit of contiguous vegetation / feature limit associated with the stream corridor.

Development Limits

As outlined in our previous staking letter related to the subject property dated June 5, 2014, TRCA's policies identify that a minimum 10 metre buffer (which is considered to be part of the natural feature, to be conveyed into public ownership through the associated development applications) must be provided between the greater of the following potential constraints:

- Regional Storm Flood Plain;
- Long-term-stable top-of-slope;
- Limit of contiguous vegetation with a natural heritage feature.

Furthermore, our letter indicated that the following reports and policy assessments are required in order to determine the limits of development:

- Accurate depiction of the Regional Storm Flood Plain using TRCA's flood model and detailed topographical information obtained by the consultant's surveyor;
- An Erosion Hazard Limit assessment that addresses erosion issues between Stake 1 and Stake 14.
- Provincial Policies including the Oak Ridges Moraine Conservation Plan (ORMCP);
- Applicable Secondary Plan requirements;
- Endangered Species Act; and
- Requisite Municipal structural setback and buffer.

APPLICABLE TRCA REGULATIONS AND POLICIES

Ontario Regulation 166/06

The subject property is traversed by the valley and stream corridor of a tributary of the Rouge River. Furthermore, a portion of the subject property is located within the Regional Storm Flood Plain of this tributary. As such, a portion of the subject property is located within an area regulated by the TRCA under Ontario Regulation 166/06 (Development, Interference with Wetlands and Alteration to Shorelines and Watercourses), as amended.

In accordance with Ontario Regulation 166/06 (Development, Interference with Wetlands and Alteration to Shorelines and Watercourses), as amended, a permit is required from the TRCA prior to any of the following works taking place:

- a) straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland;
- b) development, if in the opinion of the Authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development.

Development is defined as:

- i. The construction, reconstruction, erection or placing of a building or structure of any kind;
- ii. Any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure;
- iii. Site grading, or;
- iv. The temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.

As a portion of the proposed works is located within the TRCA Regulation Limit, a permit under Ontario Regulation 166/06 is required for the proposed development.

Living City Policies for Planning and Development in the Watersheds of the TRCA (LCP)

The Living City Policies for Planning and Development in the Watersheds of the Toronto and Region Conservation Authority (LCP) describes a "Natural System" made up of water resources, natural features and areas, natural hazards, potential natural cover and/or buffers. The LCP recommends that development, infrastructure and site alteration not be permitted within the Natural System and that it be conveyed into public ownership for its long term protection and enhancement.

Source Protection Plan: CTC Source Protection Region

The Source Protection Plan, established under the *Clean Water Act, 2006*, was developed for the Credit Valley, Toronto and Region and Central Lake Ontario (CTC) Source Protection Region and took effect on December 31, 2015. This application is subject to Source Water Protection policies listed in the CTC Source Protection Plan. The purpose of a Source Protection Plan is to outline how water quality and quantity for municipal drinking water systems will be protected.

This subject application is located in a Source Water Protection vulnerable area referred to as Wellhead Protection Area-Q2 (WHPA-Q2). This area was delineated to help manage activities that may reduce recharge to an aquifer (Prescribed Threat No. 20 under the *Clean Water Act, 2006*).

Under the CTC Source Protection Plan a site specific water balance assessment for review by TRCA staff (on behalf of York Region) is required and should demonstrate mitigation of development related impacts to infiltration.

Oak Ridges Moraine Conservation Plan (ORMCP)

The subject properties are designated as Settlement Area under the Oak Ridges Moraine Conservation Plan (ORMCP). Under the ORMCP, Minimum Vegetative Protection Zones (MVPZ), typically of 30 metres and Minimum Areas of Influence (120 metres) are applied to Key Natural Heritage Features and Hydrologically Sensitive Features on or in close proximity to the subject property. The valley corridor along the eastern edge of the subject lands and the watercourse located therein qualify as a Key Natural Heritage Feature and Hydrologically Sensitive Feature respectively.

Given that municipalities are the designated approval authority under the Oak Ridges Moraine Conservation Act, we recommend that the Town of Richmond Hill ensure that this application conforms with the provisions of the ORMCP. Should the Town proceed with approvals, the applicant must demonstrate that the ecological integrity of the ORCMP plan is not adversely affected.

As the works qualify as Major Development within the ORMCP, the application must conform with the watershed plan (in this case, the Rouge River Watershed Plan).

Rouge River Watershed Plan, 2007

The implementation of source controls to maintain pre-development Water Balance for new urban development is an objective identified under the *Rouge River Watershed Plan, 2007*.

APPLICATION SPECIFIC COMMENTS

Development Limits

TRCA staff are at this time not satisfied with the proposed development limits as shown on the materials submitted.

Flood Hazard

1. As indicated in our staking letter and as standard requirements under our policy document (both Valley and Stream Corridor Management program and its successor document Living City Policies), a 10 metre buffer is required from the greatest hazard / feature limit.

We note that the development limit as proposed by the applicant is derived from 10 metre setbacks from the staked natural feature limit and long-term-stable top-of-slope as well as a 6 metre setback from the "proposed" regulatory floodline. It is unclear to TRCA staff why a 6 metre setback from the "proposed" regulatory floodline has been established. Furthermore, the applicant should clarify why the floodline has been labelled as "proposed".

Oak Ridges Moraine Conservation Plan (ORMCP)

2. The subject property is designated Settlement Area under the ORMCP. Under the ORMCP, a minimum vegetation protection zone (MVPZ) of 30 meters is required to provide protection of the key natural heritage features including wetland and watercourse, both of which occur on the subject property. Although alternate MVPZ widths may be established under Section 21 (4) of the ORMCP, TRCA staff are not satisfied that the Natural Heritage Evaluation prepared by Beacon Environmental dated April 2016 has provided adequate rationale for not providing the minimum 30 metre MVPZ.

Furthermore, the rationale must provide mitigation measures that address the increase in impervious surfaces, predation, light and decrease in water quality that all affect the function and quality of Rouge River Tributary corridor. At this time, it is difficult to see how these impacts can be mitigated with a reduced buffer and the proposed high intensity uses. Please see Appendix B, comments 11 through 15 for additional information.

Stormwater Management (SWM) and Water Balance

3. The SWM design must provide confirmation that all criteria can be met. TRCA requires a level of feasibility that the proponent has considered all spatial requirements and the proposed techniques will achieve the required targets. Please resubmit and provide confirmation that the water quality and erosion control targets can be met including volumetric sizing and placement of any required mitigation footprints required.
4. Please note that as this site is located in a Source Water Protection vulnerable area referred to as Wellhead Protection Area-Q2 (WHPA-Q2) and is considered as Major Development under the ORMCP, water balance is required such that post-development conditions are mitigated to pre-development conditions. Please note that this criterion supersedes the 5mm retention criteria.

Detailed Technical Comments

Detailed technical comments can be found under Appendix B. However, we request that the development limits of the property be established to ours and the Town's satisfaction prior to the applicant addressing all of the detailed comments.

FEES

By copy of this letter, the applicant is advised that the TRCA has implemented a fee schedule for our planning application review services. In accordance with our 2016 TRCA Planning Services Fee Schedule, this application is subject to a **\$35,000** combined Draft Plan of Subdivision (Major), Official Plan Amendment (Major) and Zoning By-law Amendment (Major) review fee payable to the TRCA (which at this time remains outstanding). We request that the applicant submit this fee to our office at their earliest convenience.

RECOMMENDATION

In light of the above, TRCA staff cannot support Official Plan Amendment Application D01-16002, Zoning By-law Amendment Application D02-16012 and Draft Plan of Subdivision Application D03-16006 at this time.

TRCA staff request that the development limits be established to ours and the Town's satisfaction and confirm that requisite SWM criteria including post- to pre- Water Balance can be achieved. TRCA staff request that the applicant address comments 1 to 4 above prior to addressing all of our detailed comments found in Appendix B.

As part of the resubmission, a detailed response letter should be prepared by the applicant outlining how each of our comments have been addressed. Please note that upon receipt and review of revised materials, additional comments may be provided.

We trust this is of assistance. Should you have any further questions or comments, do not hesitate to contact the undersigned.

Yours truly,



Anthony Sun, B.E.S.
Planner II
Planning and Development
Tel: (416) 661-6600, Ext. 5724

APPENDIX A: MATERIALS REVIEWED

- Proposed Zoning By-law Schedule "B"
- Site Plan, drawing A-00, prepared by AJ Tregebov Architect, revised April 6, 2016;
- Functional Servicing and Stormwater Management Report, prepared by SCS Consulting, dated March 2016;
- Geotechnical Assessment, prepared by Shad & Associates Inc., revised April 25, 2016;
- Hydrogeological Assessment, prepared by GEMS, dated January 18, 2016;
- Natural Heritage Evaluation, prepared by Beacon Environmental, dated April 2016.

APPENDIX B: DETAILED TECHNICAL COMMENTS

Water Resources Engineering

1. A 10m setback from Regional Storm Floodline is required. Please revise all drawings and figures accordingly.
2. It is unclear what is represented by the "Proposed Regulatory Floodline". Please respect the existing floodline and revise on all drawings and figures as "Existing Regulatory Floodline" or provide a flood study for the proposed revised line.
3. Please provide additional details ensuring that the water quantity targets can be met for all five phases of design. Additionally, please ensure all SWM controls (tanks/super pipes) will be installed prior to discharge to the watercourse. Furthermore, please ensure there is adequate space within the site for the proposed tanks/pipes.
4. Please note that while detailed specifications are not required at the Official Plan and Zoning By-law Amendment stage, the SWM design must provide confirmation that all criteria can be met. TRCA requires a level of feasibility that the proponent has considered all spatial requirements and the proposed techniques will achieve the required targets. Please resubmit and provide confirmation that the water quality and erosion control targets can be met including volumetric sizing and placement of any required mitigation footprints required.
5. Please note that as this site is located in a Source Water Protection vulnerable area referred to as Wellhead Protection Area-Q2 (WHPA-Q2) and is considered as Major Development under the ORMCP, water balance is required such that post-development conditions are mitigated to pre-development conditions. Please note that this criterion supersedes the 5mm retention criteria.
6. It would appear that Drainage Area 205 on Figure 2.2 in the Functional Servicing and Stormwater Management Report will remain undeveloped due to the existing tributary and associated setbacks; however, a brief discussion should be included within the report.
7. Please provide a comprehensive plan illustrating all proposed SWM measures.

Geotechnical Engineering

8. The slope stability assessment by Shad and Associates Inc. uses a toe erosion allowance provided by GeoProcess. Please provide the results of the toe erosion allowance by GeoProcess and specify for each cross-section what toe erosion allowance (in meters) was applied to determine the position of the Long-Term-Stable Top-of-Slope.
9. The site plan presented in the geotechnical report by Shad and Associates Inc. (Figure 4) should be submitted in a larger scale. The position of the Long-Term-Stable Top-of-Slope, existing Top-

of-Bank and also Toe-of-Slope should be shown on the site plan in a visible and legible format. Please provide a revised site plan for TRCA review.

Hydrogeology

10. TRCA Hydrogeology staff have reviewed the Hydrogeological Assessment prepared by GEMS and note that the foundations for the proposed towers will extend into the Oak Ridges Aquifer. Generally, TRCA does not support foundations within this aquifer due to direct adverse effects on the groundwater system and potential indirect adverse effects on adjacent natural features.

Although TRCA staff are supportive of the report's recommendation to use of a continuous caisson wall for the parking garages to minimize groundwater intrusion into the parking structure, there remain some outstanding issues that have not been addressed in the report, including potential uplift / upward hydraulic pressure.

Given that the aquifer was encountered between 8 and 16 m below grade but not instrumented (instrumentation was installed at depths above and below the aquifer but not within the aquifer itself), additional hydrogeologic data is required to assess the need for both construction and permanent dewatering. Please note that TRCA does not support permanent dewatering.

Due to the constrained nature of the site hydrogeologically, further consideration / discussion should be conducted regarding the absolute need for three levels of underground parking and what alternatives may exist.

Ecology

Please address the following comments regarding the Natural Heritage Evaluation (NHE) as they may affect the development limit.

11. Please clearly show ELC communities on Figure 2. Please edit Figure 2 to address the following:
 - a. Please clearly define Unit 5 willow mineral thicket swamp (SWT2-2), it is difficult to discern the various lines on the current figure;
 - b. Please label ELC community for staked dripline area to the north;
 - c. Please identify the ELC community south of Unit 4;
 - d. Please label the vegetation community south of the driveway (Unit 7) and residence (Unit 1) on Yonge Street.
12. All ELC communities that require minimum vegetation protection zones should be placed on Figure 3. Please show the Cattail shallow mineral marsh (MAS2-1) and Willow mineral thicket swamp (SWT2-2) on Figure 3 with a 30 MVPZ.
13. Under the ORMCP, Key Natural Heritage Features (KNHF) located within Settlement Areas require a Minimum Vegetation Protection Zone (MVPZ) of 30 meters to provide protection of the features (including wetlands and watercourses). The NHE should recommend the size of buffer required to protect the feature based upon the potential development impacts and on the existing policies. A reduction in the buffer would have to show a significant net ecological gain. TRCA staff are unable to find clear reasoning for the reduction of the MVPZ in the NHE. As such, TRCA does not support the reduction of the prescribed buffers at this time.
14. The NHE should address the increase in impervious surfaces, predation, light and decrease in water quality that all affect the function and quality of Rouge River Tributary corridor. It is difficult to see how these impacts can be mitigated with a reduced buffer with the high intensity uses proposed.
15. As stated in the NHE, this reach of the Rouge River Tributary is identified as a coldwater system with brook trout indicated as a target species for management. Please provide comment on the development proposal in terms of Low Impact Development measures and thermal mitigation that are feasible for this property as this may also affect the buffer size.