Appendix B

Halton Region Comments

Legislative & Planning Services
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March 21, 2019

Paul Barrette, Senior Planner
Town of Oakville, Planning Services Department
PO Box 310, 1225 Trafalgar Road, 2nd Floor
Oakville ON L6J 5A6

Dear Mr. Barrette:

RE: Oakville Green Development Inc.
24T-18006 & Z.1325.07
Dundas Street West & Third Line

Regional Staff have now completed a review of Oakville Green Development Inc.'s March 2019 second submission related to the Zoning By-law Amendment (**ZBA**) and Draft Plan of Subdivision (**DPS**) applications to permit the following:

- A DPS application to create a plan of subdivision for future employment, commercial and institutional uses including a medical office building, a hotel and conference centre, innovation centre and an institutional care facility; and,
- A ZBA application to rezone the lands from an Existing Development 'ED' zone to a new proposed zone Health Sciences and Technology Core (HSTC) to permit the development of the above noted uses.

The applications have been reviewed within the context of Provincial planning documents and the Regional Official Plan (ROP). Based upon a review of the recently submitted comments on behalf of Whiteoaks Communications Group Limited (CHWO Lands), Regional Staff are **NOT** is a position to provide a recommendation on the submitted ZBA and DPS as a land use compatibility/adverse impacts issue between the proposed use and the nearby CHWO radio towers requires further analysis as outlined herein.

Planning Comments:
Regional Staff have considered the development proposal in the context of the Provincial Policy Statement 2014 (**PPS**), the Growth Plan for the Greater Golden Horseshoe 2017 (**P2G**), and the Region's Official Plan 2009 (**ROP**). The ROP provides goals, objectives and policies to direct physical development and change in Halton. To this end, the ROP designates the subject property as "Urban Area" and being subject to the "Employment Area" overlay. Since these lands fall within the Employment Area, the Employment policies within the PPS and P2G documents apply to this application.

The PPS, P2G and ROP provide policy direction that protects and preserves employment lands for their planned function. Regional Staff have considered the development proposal, and the supporting studies and supplementary materials as it relates to this policy direction. As previously noted there remains an outstanding land use compatibility/adverse impacts issue that required further analysis to ensure that PPS, P2G and ROP policy direction has been addressed.

The subject lands are designated Urban Area in the Region's Official Plan and identified as being within an Employment Overlay. The lands are outside of the built boundary and within a greenfield area. The Urban Area designation under Section 76 permits uses in accordance with the Local Official Plan and Zoning By-law and all development shall be subject to the policies of this Plan.

Potential Conversion:
One of the major themes in the applicable planning documents is to direct planning authorities to promote economic development and competitiveness by planning for and protecting *employment areas* for employment purposes. The intent of a portion of the development proposal is to permit a new sensitive land use within an employment area. Based upon the understanding that Town Planning Staff are of the opinion that the North Oakville West Secondary Plan permits a **seniors care facility** on these lands, Regional Staff, are satisfied that an **institutional care facility** use is a recognized use in the context of the ROP (Policy 77.4(1)(a)).

The applicants current proposal indicates a "senior's living facility" on the subject lands which are identified as Employment Area in the Region's Official Plan. Institutional uses are permitted within the Region's Employment Area as noted above, however, residential uses are not and are considered a conversion of employment lands. For the Region to be satisfied that the proposal does not amount to a conversion of employment lands, the proposed zoning bylaw for the lands should specify that the proposed "seniors living facility" is an institutional use as opposed to a residential use. To address this policy direction, the Region will require, among other things a prohibition of residential dwelling units within nursing and retirement homes in the zoning by law.

Servicing Allocation:
Section 77(15) of the ROP requires the development industry to absorb its share of the cost of the provision for infrastructure and that any financial impact of new development or redevelopment on existing residents be based on a financing plan communicated to the taxpayers and subsequently approved by Council. To this end, Halton Region has implemented an Allocation Program. The Allocation Program requires proponents of development applications to purchase servicing allocation from Halton Region through an Allocation Agreement.

Regional Staff confirm that subject lands do not require allocation through the 2012 Allocation Program given the employment lands in question are not part of the program *per se*. Regional Staff further note that the proposed development **MAY** be subject to a future Allocation Program and the reservation to servicing allocation may be required in order to support future development applications such as a Site Plan application.

Land Use Compatibility:
The applicant has submitted a land use compatibility and D6 Guidelines assessment for the subject lands and the proposed institutional use. Regional Staff have reviewed the report which concludes that there are two potential facilities of concern, being the existing hospital and stormwater management pond and indicated that the potential for odour concerns is negligible. Similarly from a stationary noise perspective the report concludes that mitigation with respect to design of the facility can reduce the concern from the hospital to negligible. The report recommends that there may be a requirement to do additional noise studies at the site plan stage.

Regional Staff are also in receipt of correspondence submitted by CHWO as it relates to the proposed development, and the compatibility/impacts of this development on their AM station facility to the east of the subject lands. This correspondence raises a number of compatibility and adverse impact concerns that will require further analysis to ensure that PPS, P2G and ROP policy direction has been addressed. In the absence of this further analysis, Regional Staff are unable to confirm that the proposed development has addressed the relevant policy direction.

Natural Heritage:
The subject lands are not located within Halton's Regional Natural Heritage System (RNHS) as per Map 1 and Map 1G of the 2009 Regional Official Plan. However, the subject lands are located within 120m of the RNHS and are within the North Oakville Subwatershed Study. Any conclusions and/or requirements that were determined through subwatershed study should be reviewed as part of the EIR/FSS for this application.

Based on the features (wetlands, floodplain) identified in the RNHS on the adjacent lands, Regional staff defer the review of the EIR/FSS report from a natural heritage perspective to Conservation Halton (CH) as they provide

environmental advisory and technical review services to Halton Region in relation to the protection of certain natural heritage features and hazards.

Regional staff does recommend that the environmental review of these lands in their entirety is completed during this phase of the development as the EIR/FSS will need to be completed for the entirety of the Oakville Green Development as outlined in the subwatershed study.

Regional staff supports the inclusion of any recommendations or zoning items identified by Conservation Halton.

Contaminated Sites Comments:
Section 147(17) of the ROP requires that prior to the Region considering any development application proposals, the proponent must identify whether there is any potential for soils on the site to be contaminated. The applicant submitted both a Phase I and Phase II Environmental Site Assessment for the subject property. There were five Phase II ESA reports corresponding to different parts of the site, plus one appendix containing laboratory certificates related to all of the mentioned ESA reports. While the current application is for the north west portion of the site, it is staff's understanding that ultimately the development of the other sections of the property will occur in the future. Based on the information provided in the reports, the main source of contamination has been imported fill, which impacted different areas across the entire site. Contaminated soil removal was done in areas spanning multiple sections.

Regional Staff note a number of items which are required to be addressed for these reports. The Region requires reports to be current within 18 months and the reports provided are dated, October 2015 and are required to be updated. The subject lands border on the Natural Heritage System to the east and north-east and the reports have not reflected this or used appropriate standards in this regard and should be updated accordingly. Further, staff note that there are important deficiencies in the text of the ESA reports and some confusion as a result of breaking the site into five different reports. Updated Phase I and II reports compliant with Ontario Regulation 153/04 for the entire site are required. The reports in addition to addressing the Natural Heritage System need to present a full CSM, meaningful cross section and contamination delineation across the entire site. If there is a desire to move forward with approval on the NW portion of the lands only, new updated Phase I and II reports for that portion of the site must be submitted. These reports must be stand-alone documents and not rely on information contained in reports from different portions of the property. In this scenario, development of the remainder of the site would require new updated reports to support future applications. These concerns could be addressed by way of a holding provision and as condition of draft plan approval.

Archaeological Resources:
It should be noted that the property is identified as having archaeological potential. In accordance with ROP policy direction, a Stage 1, Stage 2 and Stage 3 Archaeological Assessment were completed for the subject lands. These assessments conclude that all archaeological potential and resources onsite have been investigated in accordance with Ministry of Tourism, Culture and Sport (MTCS) requirements. Further, a letter of acknowledgement from the MTCS remains outstanding and is required prior to final approval or site alteration being approved.

Municipal Infrastructure/Regional Servicing:
Policy 58 (1.1) of 2009 ROP permits development provided that "adequate supply of water and treatment of wastewater for the proposed use has been secured to the satisfaction of the Region". Further, and as noted above, Policy 89(3) of the 2009 ROP requires that all new development within the Urban Area be on the basis of connection to Halton's municipal water and wastewater system. An EIR/FSS was submitted with the applications which note that the proposed development is to be serviced via municipal services. The following comments are provided as it relates to municipal water, wastewater and Regional stormwater services as they apply to the subject lands and the development proposal.

The application is for a proposed subdivision that is located on the east boundary of Third Line on the north boundary of Dundas Street West. This subdivision is a portion of the Developer's overall lands and as such has been identified as Phase 1. Future Phases are proposed which will speak to the remainder of the lands. These remaining lands and associated Phases will be dealt with under separate future applications and are not addressed through this review. The proposed subdivision is an irregular shaped property. It is located west of and adjacent to a tributary of the Sixteen Mile Creek and the proposed Graydon Banning Limited subdivision, which is located to the east of the tributary.

The existing services in the area of the site include:

- A 1200mm dia. watermain is located on Dundas Street West adjacent to the property.
- A 400mm dia. watermain is located on Third Line adjacent to the property.
- A 400mm dia. watermain stub is located on William Halton Parkway at the intersection of Third Line adjacent to the property.
- A 1200mm dia. sanitary sewer is located on Dundas Street West adjacent to the property.
- A 2400mm dia. sanitary sewer is located on Third Line adjacent to the property.
- A 300mm dia. sanitary sewer is located on Third Line adjacent to the property.

The applicant is required to undertake their own fire flow testing in the area in order to confirm the design requirements for domestic water supply and fire protection.

The property abuts two Regional Roads, Dundas Street West (Regional Road 5) on the south boundary and William Halton Parkway (Regional Road 40) on the north boundary. Note that William Halton Parkway's (WHP) easterly extent is at the Third Line intersection. The Region is currently finalizing the detailed design for the next section of this roadway with an anticipated construction start in Q3 2019.

Proposed Zero Lot Line Setbacks:
The possible utilization of a 0m setback from property line for the proposed buildings which are to be located adjacent to municipal and/or Regional right of ways and their proximity to the existing and proposed municipal infrastructure located within those right of ways was not addressed through the FSS. The construction methodology that may be necessitated due to adjacent infrastructure, as well as possible relocation of infrastructure/appurtenances, may require further investigation at the site plan stage of the development.

The servicing of the North Oakville West Secondary Plan is addressed in the Area Servicing Plans (ASP) for this area (the Sixteen Hollow Employment Area Servicing Plan and the North Oakville East Secondary Plan ASP). These ASPs provides the overall servicing plan for the ultimate servicing and infrastructure requirements for the NOWSP and NOESP lands. A Functional Servicing Study (FSS) was submitted as part of the Environmental Implementation Report (EIR) prepared by multiple consultants (primary consultant WSP) in support of the application and is dated November 2018.

Wastewater Servicing:
The FSS notes that the wastewater servicing of this subdivision (Phase 1) will be by connections to the existing 300mm dia. sanitary sewer located on Third Line. This existing gravity sewer outlets to the 2400mm dia. trunk sanitary sewer on Third Line at the north boundary of Dundas Street West. The sewage flow from the Dundas Street West trunk sewer and subsequently the Third Line trunk sewer is conveyed by gravity in the Region's trunk sewer system to the Mid Halton Wastewater Treatment Plant. The FSS indicated that additional sanitary sewers will be constructed in future Phases.

A proposed internal gravity sewer system, that will in a future Phase convey flows to the existing trunk sewer on Dundas Street West, is proposed to be constructed in Phase 1 within Street 'B'. It is intended that this sewer will not receive any flow nor be connected to the Dundas Street West existing sanitary sewer until a future Phase is

undertaken. The Region feels that the proposed internal gravity sewer works that are identified as commencing as part of the Phase 1 works should be undertaken in a later Phase, due to possible connection and assumption issues that may result if undertaken through Phase 1. The FSS should be revised to reflect this direction.

Analysis was included in the FSS that demonstrates that the existing sanitary sewer system on Third Line can accommodate the proposed flows from this development. The FSS assumes that the existing downstream sanitary trunk sewers on Third Line and Dundas Street West have sufficient capacity and states that this has been confirmed by the Region. Therefore these trunk sewer systems have not been analysed through this FSS, however previous analysis was completed and approved as part of the Oakville Hospital Development.

Water Servicing:
Water modeling analysis was undertaken for both the Phase 1 and the Ultimate Development scenarios, the results of which are included in the FSS. This modelling analysis was used to determine the watermain sizing for the subdivision. The FSS notes that the subdivision (Phase 1) will be serviced for water by connecting a proposed internal 300mm dia. watermain to the existing 400mm dia. watermain on Third Line. Additionally, external to the site, a 400mm dia. watermain is to be constructed on William Halton Parkway from the existing stub at Third Line, easterly, across the frontage of the site facing WHP. The aforementioned proposed internal 300mm dia. watermain will connect to the 400mm dia. watermain on WHP to provide looping and a redundant supply to the Phase 1 lands. Please see the William Halton Parkway section below for further discourse regarding the proposed 400mm dia. watermain that is to be constructed on WHP. The FSS indicated that additional watermains will be constructed in future Phases.

Existing Private Water Well & Septic System Decommissioning:
The FSS does not speak to existing wells and septic systems. The presence of such infrastructure, or lack of, should be verified and indicated in the FSS. If present within the proposed subdivision, they are to be decommissioned and removed from the site according to the proper MOE guidelines.

Storm Water Drainage on Regional Roads:
Dundas Street West that is adjacent to this subdivision was just recently reconstructed and urbanized. As noted previously, construction of WHP, which will run along the north boundary of the subdivision, is tentatively scheduled to commence Q3 2019. The FSS notes that the site drains to the existing stormwater detention pond (Glen Oaks Pond) located on the proposed subdivision lands as well as on the future Phase lands. The FSS indicates that the pond will be reconfigured as part of the Phase 1 works and expected to be further modified in the future Phases.

The FSS notes that the stormwater drainage from the pond will continue to be directed to a storm sewer culvert crossing Dundas Street West and to the Sixteen Mile Creek tributary per the existing drainage scheme and indicated that the culvert from the pond crossing Dundas Street can accommodate the Regional storm event without overtopping of Dundas Street West occurring.

Please note that the Glen Oaks Pond and associated culvert outlet crossing Dundas Street West were both designed to accommodate the storm water drainage from Dundas Street West. Any changes/reconfiguration to the Glen Oak Pond and associated infrastructure are not to negatively impact storm water drainage for Dundas Street West.

William Halton Parkway:
The proposed William Halton Parkway parallels the site from east to west adjacent to the north boundary of the subdivision. The timing of the construction of this roadway in relation to the rest of the subdivision is a concern from a servicing perspective.

The FSS notes that a 400mm diameter watermain is required to be constructed on William Halton Parkway. Please note that this infrastructure is currently an unfunded Development Charge (DC) watermain, which was identified through the NOESP ASP. This watermain could be constructed as part of the Region's WHP road project with funding provided for the watermain by the developer. Alternately, both construction and funding could be undertaken by the Developer as part of these subdivision works, depending on the timing of both the Region's WHP project and this development.

If future Consents or Severances of the Blocks depicted on the Draft Plan of Subdivision are pursued, care must be taken to ensure that services to buildings crossing more than one property line does not result. Further, care must be taken to ensure that the reconfiguration and re-grading of the existing retention pond does not negatively impact regional road grading or drainage.

The water modelling analysis undertaken for both the Phase 1 and Ultimate Development scenarios demonstrate that the anticipated water system pressures indicate that the utilization of booster pumping for multi-storey buildings should be investigated.

Regional Transportation:
Section 173(8) of the ROP states that the Region and the Local municipalities will work together to control access to Arterial Roads in accordance with Council adopted access management policies. On Map 3 of the ROP, Regional Road 5 (Dundas Street) is defined as major arterial road with William Halton Parkway identified as a proposed major arterial road. As previously noted, Map 3 of the ROP also identifies Regional Road 5 (Dundas Street) as being a Higher Order Transit Corridor.

The Oakville Green Health Sciences and Technology District, Phase 1 Transportation Impact Study (TIS), by WSP dated November 2018, has been peer reviewed and Halton Region provided comments and requested a resubmission of the report and additional analysis. Due to the extremely short timeframe provided for agency review, the Region is in the process of obtaining a peer review on the resubmitted study. Comments on this peer review should be available shortly and will be communicated to the Town once received.

It is further noted that should the above noted compatibility issue be resolved, the applicant will have to complete a noise assessment study prior to engineering submission and preparation of the Region's subdivision agreement to determine whether noise mitigation in relation to Regional right-of-ways is required for the proposed institutional use. Specific to this, the location of any potential noise mitigation is of particular interest to Halton Region and needs to be determined through the subdivision. The study will have to be in accordance with Halton's Noise Abatement Policy and Noise Abatement Guidelines. A Terms of Reference will be required in advance for this study and will need to be approved by Halton Region prior to advancing the study. In order to reduce the need for physical noise mitigation, it is suggested that the land use be planned such that out-door amenity areas are not constructed adjacent to Regional Roads or requiring noise mitigation (noise barrier), and are shielded by proposed buildings within the development plan.

With respect to access, intersection locations and improvements, final determination will be subject to the review and approval of the final transportation impact study. It is noted that daylight triangles, right-of-way widenings and accommodation for future road improvements as a result of the development will be required for both Dundas Street and William Halton Parkway. All lands to be dedicated to Halton Region shall be dedicated with clear title (free and clear of encumbrances) and a Certificate of title shall be provided, in a form satisfactory to the Director of Legal Services or his designate. Any required road works needed to accommodate the development will be subject to a Regional servicing agreement.

For information purposes the updated timing of Halton's Capital Implementation Plan (2018 – 2031) is as follows but is subject to change:

- Dundas Street Widening - 4 to 6 lanes from Tremaine Road to Bronte Road – Q4 2019 to Q4 2022
- Bronte Road – Widening – 4 to 6 lanes from Speers Road to Highway 407 – 2025 to 2027
- William Halton Parkway - 2 to 4 Lane Widening from Old Bronte Road to Hospital Gate – Q2 2021 to Q4 2021
- William Halton Parkway – 4 lanes from Third Line to Neyagawa Boulevard – Q3 2019 to Q3 2022
- Tremaine Road – 2 to 4 lane widening from Dundas Street to Lower Base Line – start of construction 2024

Waste Comments:
The Region will not service this development with Regional pick-up. The proposal should be proposed on private waste collection due to the complexity of the site and the various uses proposed.

Conclusion:
As noted herein, there are a number of Provincial and Regional planning policies that are triggered by the proposed development. While most of these interests can be addressed by way of Holding Symbol or conditions of Draft Plan approval, one significant matter remains outstanding and should be addressed prior to a formal recommendation being provided. Specifically, as identified in a March 14, 2019 comment letter prepared on behalf of CHWO, land use compatibility/adverse impacts concerns have been identified which may impact the proposed development, built form and permitted uses for these lands.

The issues identified in this letter on behalf of CHWO's require further analysis to ensure that Provincial and Regional planning policy has been addressed in this regard. This additional information will be required prior to a recommendation being provided. In the absence of this additional analysis, Regional Staff are not in a position to provide a positive recommendation for the submitted ZBA and DPS applications.

I trust these comments are of assistance to you, should you have any questions or require additional information please do not hesitate to contact me directly.

Sincerely,

for

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c. C. Benson, Halton Region
J. Nethery, Halton Region
T. West, Halton Region

Halton Region Transportation Impact Study Peer Review Comments

CIMA+ Original Recommendation	Revised Comment
Discrepancies between Report Lane Configuration Diagrams and Synchro Reports/Existing Road Network ***Recommendation*** Ensure intersection lane configurations reflect the conditions appropriately and are consistent between the report's figures, tables, and Synchro models.	**Addressed** This comment has been addressed in Figure 3.1 for existing conditions. Lane configuration within the figure appears to be consistent to existing lane configuration using Google Streetview.
Traffic Volume Figures ***Recommendation*** Review of the existing TMC's provided by the Town of Oakville for consistency with the existing volumes in Figure 3.2. Review of all volumes figures/Synchro results for future background and future total to ensure consistency between traffic volume figures and Synchro results.	**Partially Addressed** The existing traffic volumes provided in Figure 3.2 were compared to the original TMC's provided by the Town of Oakville in Appendix A. The volume figures illustrated in Figure 3.2 does not match the existing turning movement count volumes indicated in Appendix A. Comments on Page 6 indicate that some traffic volumes have been modified and increased to the higher number of vehicle movements to ensure continuity of traffic flow due to TMC's being conducted on different days. The suggested volume balancing was completed for existing conditions.
Lost Time Adjustment ***Recommendation*** Revise the lost time adjust of -3 seconds for left-turn movements or provide further justification as to how the -3 seconds was selected for analyses purposes.	**Partially Addressed** The report indicates aggressive behavior observed during site visits (Page 13), however no indication of how these observations were measured and how the -3 seconds was calculated (i.e. based on the site visit results or additional reference to other guidelines).
William Halton Parkway Access ***Recommendation*** Revise the TIS trip assignment in accordance with a right-in/right-out access configuration on the William Halton Parkway extension.	**Addressed** The report has been updated to include a right-in/right-out access configuration on the William Halton Parkway extension which is labelled as the 'North Site Driveway'.
Background Developments ***Recommendation*** Update the TIS to include the Bronte Green development in the future background scenarios.	**Addressed** Bronte Green has been added to Section 4.4 Traffic Increases Related to Other Developments list and future background scenarios.
Proposed Development Trip Generation ***Recommendation***	**Addressed** Trip generation rates have been revised to match the corresponding rates in the ITE Trip Generation Manual, 10th edition for the given land use codes,

CIMA+ Original Recommendation	Revised Comment
Revise the trip generation rates for consistency with the latest ITE Trip Generation Manual, 10th edition.	as indicated in Section 5 of the report.
Trip Distribution Percentages/Assignment ***Recommendation*** Update the TIS report to include a figure illustrating the location of the TTS data zones relative to the Oakville Green Development. In addition, provide a figure or table to clarify trip distribution assumptions as to how the directional distribution values provided in Table 5.8 are applied to site volumes throughout the network.	**Addressed** A figure highlighting the TTS data zones has been provided in Appendix F. Figure 5.1 is provided to indicate the distribution percentage breakdown of turning movements based on Table 5.8 in the TIS report.
Modal Split ***Recommendation*** Clarify the reasoning for the modal split percentage differences between the Terms of Reference (TOR) and the report. Justify the ridership numbers, transit access assumptions and modal splits for 2026 and 2031.	**Partially Addressed** The modal split percentages appear identical to the previous TIS report submitted. A reference has been made in Section 5 indicating that the modal split rates are consistent to the Halton Region Transportation Master Plan, however there is no mention for the varying percentages compared to the TOR. A more detailed breakdown of transit ridership and transit access assumptions has been provided in Section 5 of the report.
2031 Site Generated Traffic Volumes ***Recommendation*** Revise the site generated traffic figures presented in Section 5.5 to ensure accurate link volume balancing throughout the network and turning movement arrow illustrations.	**Partially Addressed** It appears that turning movement arrows have been provided for some but not all the Site Distribution Figures presented in Figure 5.4, specifically for the Hospital Entrance intersection/Westerly Site Driveway northbound right-turning movement. There are still inconsistencies with turning movements throughout the network such as the intersection of William Halton Parkway & Hospital Gate.

CIMA+ Original Recommendation	Revised Comment
Future Road Development ***Recommendation*** Revise the report to remove or justify the extension of William Halton Parkway from Bronte Road to Tremaine Road. Provide further clarification and revisions if the eastward extension of William Halton Parkway from Third Line to Neyagawa Boulevard was considered under 2021 future conditions.	**Partially Addressed** The report references the extension of William Halton Parkway westerly from Bronte Road to Tremaine Road under 2021 conditions as part of the 'Lazy Pat Lands Study' in Section 4.2. No mention is made to how this relates to Regional policy or planned improvements to the network. Traffic volume related to the 'Lazy Pat Farm Property' provided in Appendix D.5A and D.5B indicate traffic being allocated to the proposed westerly extension[1]. Section 4.2 indicates that the eastward extension of William Halton Parkway from Third Line to Neyagawa Boulevard was not considered under 2021 future conditions as the implementation date is scheduled for 2022. Section 4.4 indicates that traffic volume under the 2021 future scenarios have been redistributed throughout the network and some movements will be operating poorly (which are mitigated in later horizon years).
Discrepancies between HCM Report Summary Tables and Synchro Outputs ***Recommendation*** Revise all intersection operations summary tables to include LOS, delays and v/c ratios for all intersection critical turning movements and overall intersection operational results. Review Synchro results provided in the Appendices to ensure all intersection operations are consistent within the report.	**Partially Addressed** The report has updated the intersection operations summary tables to include LOS, delays and v/c ratios for all intersection critical turning movements and overall intersection operational results. However, there are still inconsistencies between the synchro results within the report and the synchro results in the appendices (Section 4.6, Bronte Road & William Halton Parkway, Westbound Right-turning movement).
Queuing Review ***Recommendation*** Update the report to include a SimTraffic analysis of select intersections to identify potential queue interactions between intersections. Intersections to be reviewed using SimTraffic should include each of the site accesses, and any signalized intersections near major intersections (for example, Third Line & Hospital Gate could potentially be affected by northbound queues at Third Line & William Halton Parkway).	**Partially Addressed** SimTraffic queuing analysis was conducted under 2031 Future Total conditions and summarized in Table 6.9. However, the SimTraffic results and summary presented do not indicate the extent of the queues in terms of potential spillover to downstream intersections. For example, the southbound 95th percentile queue reported at the intersection of Third Line & Hospital Entrance/Westerly Site Access is expected to extend beyond the upstream intersection of Third Line & Dundas Street (285 metre 95th percentile queue, while there is only a distance of 215 m between intersections) according to SimTraffic outputs provided in Appendix G.

[1] A previous review in 2014 of the Lazy Pat Lands study was conducted by CIMA+ and the volumes presented in Appendix D.5A, B could not be verified in comparison to volumes presented within the report. In addition, it is unknown what the development status is for the lands highlighted within the report.

Town Peer Review Comments – Transportation Impact Study

Sensitive / Proprietary

PARSONS

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March 13, 2019

Town of Oakville
1225 Trafalgar Road
Oakville, ON, Canada
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Attention: Syed Rizvi, M.Sc., P. Eng.
Transportation Engineer
Engineering & Construction

Re: Oakville Green Health Sciences & Technology District – Phase 1 Transportation Impact Study – Second Peer Review, Town of Oakville, Ontario

Dear Mr. Rizvi,

The following letter provides our findings regarding the Second Peer Review of the Oakville Green Health Sciences and Technology District Phase 1 Transportation Impact Study revised by WSP Canada dated March 2019. The study was completed for a proposed mixed-use development which includes office uses, senior living, medical centre and a hotel/conference centre. The proposed development is to be located in the northeast corner of the Dundas St. West and Third Line intersection in the Town of Oakville, Ontario.

Based on our second review of the revised Transportation Impact Study, we offer the following additional comments:

REVIEW OF EXISTING TRANSPORTATION CONDITIONS

Section 3.1 Road Network

1. Figure 3.1 found on page 6, lane configurations for the eastbound approach for the William Halton Parkway and Third Line intersection should be altered to match synchro files.
   a. Comment addressed.

Section 3.2 Traffic Data

2. Where signal timing plans were not available, dual left turn movements should be protected phases. i.e. Bronte Rd. and Upper Middle Rd. westbound dual lefts. Also, red and yellow intervals

are to be calculated/estimated using the OTM guidelines. Operation analyses are to be revised for all scenarios using the correct clearance interval timing.

a. Dual left turn phases have not been addressed.

Section 3.5 Model Calibration

3. Under the heading Saturation Flow Rates found on page 12, it was stated that a saturation flow rate of 2,000 passenger cars per hour was utilized. Can the consultant provide rationale for utilizing this value?
   a. Comment not addressed. We believe the Synchro default value should be used unless the Town of Oakville and Halton Region are in agreement with WSP's response.

4. Under the heading Lost Time Adjustment noted on page 12, can the consultant clarify the lost times assumed were representative for how many cycles within the peak hour analyzed? It appears that total clearance time (red plus yellow) of one second for left turn movements was used which is too short and it needs to representative for each location.
   a. Comment not addressed.

5. Under the Heading Lane Width found on page 13, lane width adjustments should be applicable to all intersections analyzed not for few selected intersections.
   a. Comment addressed.

6. As noted on page 14 *"Two sneakers per cycle have been assumed within the Synchro model, with results illustrating that all movements are operating within capacity."* Consideration of sneakers in addition to lost time adjustment will underestimate the intersection operational performance. This is to be corrected and operation analyses are to be revised.
   a. Comment not addressed.

Section 3.6.1 Queuing

7. Available storage lane length should be measured between stop-bar and start of solid line. Taper length and dotted line upstream of solid line is a functional component of the left turn lane. All tables showing queues are to be revised.
   a. Comment addressed.

FUTURE BACKGROUND TRAFFIC CONDITIONS

1. As mentioned in the comments regarding the TIS Terms of Reference dated Sept. 12, 2018, the following issues are noted:
   a. The widening of William Halton Pkwy to 4 lanes between Bronte Road to Third Line will not occur until after the 2021 horizon year of the study. 4 lanes within this section and associated intersections should not be implemented until the 2023 horizon.
      a. Comment not addressed.

b. The widening of Bronte Road to six lanes in the future will be made up of 4 general purpose lanes and 2 HOV lanes by 2027. ***How have the HOV lanes been utilized (lane utilization) within the analysis***?
   a. Comment addressed.

c. HOV lanes are to be assumed along Dundas St. for 2026 and 2031. ***How have the HOV lanes been utilized (lane utilization) within the analysis***?
   a. Comment addressed.

Section 4.2 Planned Transportation Network Improvements

2. Figures 4.2 (A &B) found on pages 21 and 24, lane configurations for the eastbound approach at the William Halton Parkway and Third Line intersection should be altered to match synchro files.
   a. Comment addressed.

3. The last paragraph of this section on page 19, can the consultant provide further information on the proportion of trips which were chosen for redistribution and how these proportions were determined?
   a. Comment partially addressed.

SITE GENERATED TRAFFIC

Section 5.1 Trip Generation Methodology

1. Table 5.1 found on page 44.
   a. The AM and PM trip equations for Code 710 – General Office Building are incorrect.
   b. The AM trip equation for Code 720 – Medical-Dental Office Building is incorrect.
      a. Comment addressed.

2. Table 5.2 found on page 45.
   a. The site trips generated for Employment Use Building during the PM peak hour do not reflect the current ITE trip equation found in the 10th edition manual.
      a. Comment not addressed.

Section 5.2 2021 Total Trip Generation

3. Table 5.3 found on page 46.
   b. The total number of inbound active person trips during the AM peak hour should be 44.
      a. Comment addressed.

   c. The PM Peak Hour Inbound and Outbound trips will need to be revised to reflect correct ITE trip equation for General Office Building.
      a. Comment not addressed.

PARSONS

TOTAL FUTURE TRAFFIC CONDITIONS

1. As mentioned in the comments regarding the TIS Terms of Reference dated Sept. 12, 2018, the following issues are noted:
    a. The widening of Bronte Road to six lanes in the future will be made up of 4 general purpose lanes and 2 HOV lanes by 2027. ***How have the HOV lanes been utilized (lane utilization) within the analysis***?
        a. Comment addressed.

    b. HOV lanes are to be assumed along Dundas St for 2026 and 2031. ***How have the HOV lanes been utilized (lane utilization) within the analysis***?
        a. Comment addressed.

2. Turning movements at certain intersections appear to decrease going from 2021 to 2031 total conditions. Can the consultant clarify why this has occurred? For example:
    a. The westbound left turn movement at Bronte Rd. and Dundas St. during the PM is 209 vehicles which then drops to 199 in 2026 total and 196 in 2031 total.
    b. The westbound left turn movement at Dundas St. and Third Line during the AM is 354 vehicles which then drops to 325 in 2026 and 2031 total.
        a. Comment partially addressed.

3. Overall intersection V/C ratios should be included in all Synchro analysis result tables (existing through future total).
    a. Comment addressed.

4. Can the consultant clarify why future total 2031 intersection operational performance at several locations perform better than future total 2021 or 2026 operations with the addition of background traffic growth?
    a. Comment partially addressed.

TRANSIT IMPACT ANALYSIS

1. All table headings for the last two columns should read 'P.M. Peak Hour'. Transit Mode Split volumes for the PM Peak Hour should also be updated to reflect General Office Building trip equations discrepancy highlighted under the site generated traffic section of this letter.
    a. Partially addressed.

PARKING ASSESSMENT

<u>Section 8.1 By-Law Parking Requirements</u>

1. Table 8.1 found on page 77, the minimum parking requirements calculated for office, medical and senior living home are incorrect based on the parking rates provided.
    a. Partially addressed.

PARSONS

If you would like any additional information or further clarifications on this letter, please contact the undersigned at (905)-569-4122.

Yours truly,

Altaf Hussain, P. Eng., M.A.Sc.
Principal Traffic Engineer

Engineering & Construction – Transportation Comments

Section B: Zoning Amendment Comments

- Sustainable Transportation

1. Staff has no comments at this time. [Circ. 2]

- Oakville Transit

1. Staff acknowledges up to 10 additional buses would be required by 2031 (up to four for Route 3 and up to six for Route 5/5A) based on the assumptions. While the bus requirement is consistent in the Executive Summary, Section 7 Transit Impact Analysis and Section 9.2 Recommendations, staff would like to make a note that in Section 9.1, it says "up to an additional of four transit buses may be required". This number should be up to an additional of 10, as noted in the rest of the report. The capital cost for additional buses and operating cost for additional service identified herein would require council approval. [Circ. 2]

2. ***Clarification required*** – The TIS provided a transit demand forecast for the Oakville Green development (Phase 1) in 2021, 2026 and 2031. The result is based on the assumption that all four buildings are occupied by 2021, with the transit mode split (GO and Oakville Transit altogether) of 10% for 2021, 15% for 2026 and 20% in 2031. The 2026 and 2031 transit mode splits are in line with the Region's Transportation Master Plan. [Circ. 1 - comment addressed]

   The assumption does not include future growth of new developments in the lands adjacent to Phase 1. The numbers and projections are for Phase 1 only.

   The language in different sections of the TIS is inconsistent. TIS Section 7 states that the initial transit vehicle requirement for Phase 1 in 2021 may be up to an additional of four buses (two per route for the existing Route 3 and 5/5A). The 2026 requirement may be up to an additional of six buses (three per route). The 2031 requirement may be up to eight buses (four per route). [Circ. 1 - comment addressed]

   In the Executive Summary at the beginning of the report, it states that "up to an additional four transit buses may be required to accommodate the projected transit volumes, with up to four buses being added to Oakville Transit routes 3 and 5/5A each." In Section 9, Conclusions and Recommendations, it states that "up to an additional four transit buses may be required to accommodate the projected transit volumes, with one or two buses being added to routes 3 and 5/5A respectively." [Circ. 1 - comment addressed]

   I believe it should read up to an additional eight transit buses may be required to accommodate the demand by 2031 for Phase 1 – four buses for each of route 3 and 5/5A, dependent of actual transit ridership. Would the consultant please confirm. [Circ. 1 - comment addressed]

I would also note that this assumption is also based on current traffic volume and travel time, which means additional buses may be required just to maintain headways in the future due to additional travel time as a result of congestion. In the future, local transit connections may be available to Bronte/407 GO carpool as well as the future Palermo Terminal, located at Dundas Street and Bronte Road. Future routes will potentially shift the demand to/from existing routes. [Circ. 1 - for information]

The capital cost for additional buses and operating cost for additional service identified herein would require council approval through the annual budget process, therefore notwithstanding the identified requirement for additional buses and service, we are unable to confirm that these resources would be available. [Circ. 1 - for information]

Would the consultant be able to identify the traffic impact to the roads if the projected mode splits are not achieved, or the additional transit service is not available? [Circ. 1 - comment addressed]

3. ***Advisory comment*** – New transit infrastructures (bus stops and amenities) would be required along Third Line and along Halton William Parkway adjacent to the site to accommodate future transit service. Transit infrastructures around the site should be identified on the area design layout plan, site plans and pedestrian circulation plans. These locations should be protected from utilities, landscaping and tree plantings. [Circ. 1 - comment addressed]

4. ***Advisory comment*** – Oakville Transit provides door-to-door paratransit service called care-A-van for persons with disabilities. Service is provided by low-floor, fully accessible 26ft buses supplemented in partnership with local taxi providers. care-A-van vehicles will require to access private roadways within the site. Drivers will leave the vehicle and escort the customer to the first accessible public entrance. The paratransit vehicle will occupy part of the drive aisle or loading area for the duration of loading and securing mobility devices. When designing the site plan for each building, please identify the care-A-van pick up and drop off area and ensure care-A-van buses can access the site by submitting an AutoTurn analysis. The preference for such is that the 26ft care-A-van buses should be able to maneuver through the loading area in a single forward movement. In addition, a designated care-A-van loading area should be considered for the senior living building and the medical office building. [Circ. 1 - Noted. To be addressed in site plan]

Section B: Transportation Impact Assessment (TIA) Comments

1. North Access / William Halton Parkway –Traffic and queue analysis results of the proposed intersection are not included in the TIS. Applicant should update the TIS with the result of the intersection for all future scenarios and resubmit for review and comments by transportation strategy. [Circ. 1 comment addressed]

2. Third Line / William Halton Parkway – Queue analysis results for the future scenarios are not included in the report, traffic consultant should complete the analysis of the intersection and update tables of the TIS report for review and comments by transportation strategy. [Circ. 1 comment addressed]

3. Parking assessment Table 8.1- The leasable area of the table should be updated for the correct calculations of number of parking spaces required. The parking spaces requirement doesn't match up with the parking rates for various proposed land uses at site. [Circ. 1 comment partially addressed]

4. Sensitivity Analysis - As per the Halton Regional access management guidelines, the location of proposed northerly access is close to the Third line access to operate as a full move intersection.

   Traffic consultant should complete a sensitivity analysis to determine the benefits of providing a full or a partial move access control to justify the location and type of control at William Halton Parkway (WHP). Note that WHP being a Regional roadway final approval of the location and type of access control is subject to approval of the Region transportation. [Circ. 1 comment addressed]

5. For the internal road connections and building frontages, a right-of-way of 23 metres is proposed on site plans. The applicant should follow the "North Oakville Urban Design and Open Space Guidelines" to suggest suitable ROW section for the internal roadways connections. [Circ. 1comment]

   Applicant proposes to reserve the right-of-way of 23 metres for internal roadways as part of zoning application process, and the ultimate roadway cross-section to be finalized at the site plan stage of development approval process. [Circ. 2 comment agreed]

6. Queuing Analysis: Reference section 6.2.1, It is noted that the available storage lengths reported at the following intersections in the second submission of the TIS are different from the previous report:

Dundas St & Hospital Gate Movement - SBL	November TIS Report (available storage length - 91 m)	March TIS Report (available Storage length – 460 m)
Neyagawa & Dundas St W Movement - SBT	November TIS Report (available storage length - 222 m)	March TIS Report (available Storage length – 1220 m)
Third line & Dundas St W Movement - NBT	November TIS Report (available storage length - 127 m)	March TIS Report (available Storage length – 1985 m)
Third line & Upper Middle Rd	November TIS Report	March TIS Report

Movement - SBT	(available storage length - 310 m)	(available Storage length – 1985 m)

7. Reference Table 6.8, at Third Line and Dundas Street West, for the NBL and NBR movement, reported queue lengths for 50th and 90th percentile exceed available storage lengths.

   Traffic consultant should recommend suitable mitigation measures for extended queue lengths beyond storage available lengths, and update the storage length table accordingly.

   The applicant should address transportation strategy comments and resubmitted the updated TIS report for review and comments by transportation strategy.

8. Parking Assessment
   In response to the concerns raised regarding parking supply for the development, a Parking Justification Report is necessary to justify the minimum number of parking spaces required. It is recommended to include a Parking Justification Report, to the satisfaction to the town, in a holding zone of the zoning by law.

These comments are in addition to Peer review comments and based on the information provided to date.

Urban Design

Urban Design Brief

Please note that the Urban Design Brief will be part of the approved documentation and therefore should be revised along with all the submitted plans and other studies to address the following comments:

1. Parking

The proposed form of parking is not clear. It is stated throughout the document that the majority of parking is to be provided within the underground parking structures with total of 3,014 parking spaces between the 3 levels of underground. However, the language regarding above-grade facilities which was of a concern within the previous submission is still indicated in the Design Principles:

2.2.6.2: “Proposed above-ground parking facilities shall be screened to conceal parking structures”;

2.2.6.3: “Above-ground facilities that are not wrapped by uses at grade shall be screened with an architectural veneer….”

Above-ground parking facilities which are not wrapped by different uses are not acceptable from an urban design point of view. If a design of any above-ground parking structures is contemplated, there must be a clear direction in regard to other uses wrapping such a structure and concealing it appropriately from public views. The desirable density cannot be achieved by compromising the ability

of achieving a good urban design environment. Development of multiple storey parking podiums adjacent to public streets might create a very negative impact on the streetscape. Active, vibrant uses must be achieved in order to create a pedestrian-friendly environment.

If above-grade parking structures remain part of this development, they should be completely wrapped with other uses on all floors on facades which are facing public streets.

The final Urban Design Brief should be revised to provide clear direction.

March 5, 2019: Comment addressed. The applicant removed the references related to the above-ground parking structures from the UD Brief.

2. Built Form

There is a strong concern about the future treatment of the 15-storey office buildings. These buildings should be designed to avoid creation of large slabs. The language provided should be more elaborate and strengthen to provide enough direction on designing office buildings which will demonstrate a high-quality architectural design that reflects their context and function. More directions should be provided to ensure an interesting building fabric and a diverse image.
Following are also few comments/guidelines in regard to the Built Form which are of a concern and should be revised:

- Page 72: "Windows will be promoted along all sides of building podiums where feasible to open the building facades to public realm".

The above language does not fully support the objective of the North Oakville Urban Design and Open Space Guidelines (NOUDOSG) Section 3.3.1.1 g. Eliminate the words "where feasible" and design the uses which benefit from window openings along facades facing and/or visible public realm.
Also, revise the references to "podiums" – all building facades facing streets should feature openings. The same applies for page 75, Building facades a) – as per the NOUDOSG, the articulation must be provided for building facades, not just podiums.

- Page 108, 2.2.3.2: Eliminate "at strategic locations".

Façades facing public streets shall be articulated along the whole length of the façade.

- Page 109, 2.2.4.2: "Buildings shall use a colour palette that follows an earth tone at the podium level".

The above guideline could create built form which is likely conservative in expression at the podium level and following the next guidelines 2.2.4.3 providing a transition to a very varied built form above that level. It is suggested to eliminate any specific colour palette suggestion at this time to provide enough opportunity for the future architect's expression.

March 5, 2019: Comment mostly addressed. There is still not enough direction on designing large office buildings which will demonstrate a high-quality architectural design. As there is no design proposed at this time, there is a concern that without a clear direction, the future development might appear monolithic and out of context. More advice to ensure an interesting and varied built form would be desirable. Please note that through the Site Plan process, a high-quality architectural design that reflects the Oakville context and that creates an interesting building fabric and a diverse image will be required.

3. Site Layout

- Page 113, 2.2.6.13: Eliminate “wherever possible”. Access to servicing and loading areas shall be always provided from a rear lane or side street.
- Page 104, 2.2.1.3: Replace “or” with “and”.
- Page 104, 2.22.1.4: Delete “public or private”.
- Page 94, 2.1.2.7: This direction is not clear. The maximum block length suggested in North Oakville is 250m (NOUDOSG 3.2.2. c). 500m is not considered promoting walkability. Revise or delete this section.

March 5, 2019: Comment addressed.

Zoning By-law

There is a strong concern with the proposed section 7.18.7 Additional Zone regulations. Both separation distance between towers as well as the floorplate dimension should be revised to better address the context of Oakville. As proposed, the separation distance is less than a half of what is supported by Oakville’s urban design directions (12 m as opposed to 30 m). Also, the proposed floorplate would create extremely large slab buildings. For comparison, the industry standard for residential towers of this height in GTA is between 750 – 900 square meters and even the larger office buildings recently designed are of a smaller floorplate than proposed. These are major concerns which should be revisited and addressed prior to next circulation.

March 5, 2019: This issue has been discussed at the latest technical review meeting on February 13th, 2019 and it was stated by the architect that the proposed floorplate is not exceeding 2,500 square metres. The Zoning should reflect this number as a maximum.

In regard to the tower separation, 12 m is proposed only for specific points from which the towers flare out and soon reach much larger separation distance. The Zoning should reflect such situation and also permit a min. of 25 m separation for all other instances.

Peer Review

The submission does not feature any proposed architectural design. As this development progresses toward the Site Plan stage, the Town of Oakville might require a peer review process to be in place for the review of the architectural design. In such case, the applicant will be responsible for the costs associated with such a peer review.

March 5, 2019: Comment acknowledged, remains applicable. No further action is required.

Shadow Study

The submitted Shadow Study has not been prepared according to the Town’s Terms of Reference. The Shadow Study indicates that there will not be any negative impacts from the proposed development on the adjacent lands. As no detailed design is being proposed at this time, it is only conceptual in nature. Detailed Shadow Study as per the Town’s Terms of Reference will be required at the Site Plan stage.

March 5, 2019: Comment acknowledged, remains applicable. No further action is required.

Finance

Development Charge (DC) requirements shall be determined in accordance with the rates in effect at building permit issuance. Cash in lieu of parkland requirements will be determined in accordance with the Planning Act and Town By-law.

The town's DC Study, which supports current DC rates sets out an employment and gross floor area forecast (2017 to 2031) based on the Region of Halton's best planning estimates. Square foot per employee assumptions determined by these studies are:

Employment Category	Gross Floor area in Square Feet
Industrial	1,200
Commercial	400
Institutional	413

The subject proposal reflects denser space requirement rates, particularly for office, retail and research facilities. Utilizing the DC study employment forecast rates results in a yield of 1,527 employees versus 2,636 employees reflected in the proposal. Sampled density requirement assumptions should be reviewed further to rationalize differences in employment uses generated and potential impacts.

The proposal presents all internal services e.g. roads, green space etc. as the responsibility of the owner and therefore the conclusion presented is they do present a financial impact on the town. The proposed land exchange to accommodate the relocation of the SWMP and road alignment is also not expected to financially impact the town. However, supporting documents suggest significant reliance on transit. How this will ultimately be addressed in the town's capital forecast and future operating budgets will be subject to Council approval. Therefore, it is recommended that the applicant undertake a scoped financial impact analysis, to address transit capital and operating needs as well as employment density concerns which would identify the financial impact on the town together with mitigation measures.

Development Engineering

OAKVILLE

Development Services Department
Memorandum – 2st Submission Comments

To: Paul Barrette, Planning Services Department

Cc: Development Engineering: Eric Vonk, Philip Kelly
Conservation Halton: Jessica Bester
Region of Halton: Laurielle Natywary

From: Rita Juliao P. Eng., Water Resources Engineer

Date: March 28, 2019

Re: **Health Sciences & Technology District – Phase 1, Oakville Green Development Inc. Environmental Implementation Report and Functional Servicing Study (EIR/FSS) 24T-18006/1325 & Z.1325.07**

The following documents were reviewed in support of the Phase 1 development and Development Engineering comments dated January 25, 2019:

- *Draft Plan of Subdivision, Heath Sciences and Technology District Developments Incorporated, Oakville Ontario, prepared by MHBC Planning, Urban Design & Landscape Architecture, dated February 28, 2019*
- *Phase 1 Glen Oak and 16 Mile Creek Stormwater Management Plan, Oakville Green Development Inc., Health Sciences & Technology District, prepared by WalterFedy dated March 1, 2019*
- *Oakville Green Comments & Response Matrix V.1 dated March 2019*
- *WalterFedy Existing Conditions, Dwg. C-100 dated March 1, 2019*
- *WalterFedy Proposed Grading and Servicing, Dwg. C-200 dated March 1, 2019*
- *WalterFedy Details Dwgs. C-400 and C-401, dated March 1, 2019*
- *WSP Conceptual Grading Plan, Dwg. SG1 dated March 1, 2019*
- *WSP Conceptual Servicing Plan, Dwg. SS1 dated March 1, 2019*

PART A: All comments previously identified in our January 25, 2019 letter as needing to be addressed prior to Draft Plan Approval of Phase 1 have been addressed to our satisfaction. The following lists only the key Draft Plan comments and how each comment has been addressed. All other comments can be addressed as a condition of Draft Plan Approval or in a future EIR/FSS Addendum. Comments have been numbered in accordance with the Oakville Green Comment & Response Matrix with the specific Town comment in brackets. Please see Part B for additional comments to be addressed through conditions of Draft Plan Approval.

Comment 5.3 (TO-4a) We are satisfied that the proposed changes to the Glen Oak Stormwater Management Pond can accommodate the development of Block 3 as demonstrated by Scenario 2 in the WalterFedy submission. It is our preference that the pond modifications include the Scenario 2 outlet configuration in order to reduce the number of changes to the outlet structure. Comment addressed.

Comment 5.7 (TO-7c) Proposed Development Stages, Section 2.2, Figures 2 - 5 and Table 2 – we are satisfied that the development scenarios evaluated support the proposed development of the Phase 1 subject lands and changes to the Glen Oak Stormwater Management Pond without putting any undue grading, servicing and development constraints on the contributing drainage area to the Glen Oak SWM Pond, including spare capacity currently available in the pond. We are also satisfied that the proposed pond provides equal or greater total volume than the currently constructed pond. The SWM pond design has been sufficiently advanced to support the Phase 1 development. The SWM Pond design drawings, details and/or SWM Report should be finalized as a condition of Draft Plan Approval.

Comment 5.8 (TO-8g) - We appreciate that another modeling scenario (Scenario 2) and pond design which includes the development of Draft Plan Block 3 was included in the recent submission. We note the changes to the impervious conditions of Block 3 are minor and therefore at detailed design, the applicant should move forward on the basis of the Scenario 2 pond design. Comment addressed.

Comment 5.12 (TO-12f) – We are satisfied that the total drainage area to the Glen Oak SWM Pond has been corrected to 49.369ha in accordance with Figure 5, Proposed Phase 1 Drainage Area Plan. However, Tables 4 (Scenario 1 and 2) as well as Tables 5 and Table 6 still reflect the incorrect drainage area of 48.59ha and should be addressed in the final SWM report. Since it has been demonstrated that the total proposed pond storage volume is greater than the as-constructed conditions, we are willing to defer the comment to a condition of Draft Plan Approval. The update to the SWM report to address all comments will be required prior to preservicing and/or modification to the SWM Pond.

Comment 5.12 (TO-12h) – the modelling files could not be located in Appendix B and must be provided in the final SWM report.

Comment 5.13 (TO-13) District Energy Pond Summary and Discussion, Section 3.1.2 – comments 14a and 14b are deferred to future applications and EIR/FSS Addendum.

Comment 5.14 (TO-14 b) Continuous Hydrologic Analysis, Section 3.1.3 – we could not locate the modeling files in Appendix B however the comment regarding the update to the title block was minor in nature and can be addressed in the final SWM report. Please ensure that the continuous hydrologic modelling is provided and utilizes the revised drainage area of 49.369ha in the final SWM report. Furthermore, we appreciate the clarification of "pulse hours" and update to "hours of exceedance" which is consistent with the terminology used in the Town's subwatershed study objectives.

Comment 5.18 Conceptual Grading Plan- SG1 – The ROW cross section is generally acceptable. More detailed review and discussions will take place at detailed design stage. The ponding limits within the ROW have been addressed to our satisfaction.

Comment 5.19 Conceptual Servicing Plan – SS1 - The limit of review has been scoped to Phase 1 development only. All future grading and servicing plans beyond the review of the development of Phase 1 will need to be resubmitted with an EIR/FSS Addendum. Please note that Third Line is mislabeled on the drawing.

PART B: The following documents were also reviewed however comments can be deferred to detailed design and/or conditions of Draft Plan Approval since they were not identified in our previous comments as required prior to the approval of the Phase 1 Lands.

- *WSP Hydrogeology Addendum – Oakville Green, dated March 1, 2019*
- *WSP Existing Natural Features and Constraints Figure 4, dated March 2019*
- *WSP Wastewater Drainage Plan Figure 3.2, Water Distribution Plan Figure 2.2 and Stormwater Drainage Plan Figure 4.1, all dated March 2019*

1. WSP Hydrogeology Addendum –
    a. The location and timing of the proposed infiltration trench to the PSW requires further review and discussion with Conservation Halton staff. Following further discussion, additional comments will be provided to the applicant and must be addressed prior to finalizing the EIR/FSS Addendum with respect to hydrogeology.
    b. Further discussion with Conservation Halton staff and the applicant are required before finalizing the hydrogeology mitigation strategy with respect to the 2nd infiltration facility. We understand that this facility is meant to infiltrate intercepted groundwater collected from building foundations however, we have concerns regarding the long-term operation and maintenance of the infiltration trench and associated infrastructure. By virtue of locating the storm sewer within the municipal ROW, it would be publically owned and operated unless other suitable agreements were in place to ensure that the private landowner would provide operation and maintenance in perpetuity. Since the proposed storm infrastructure continues across the Phase 2/3 lands, a municipal servicing block or easement may be required over the alignment of the pipe and infiltration trench for access, operation and maintenance. The width of the easement would have to be determined prior to registration. In order to support this aspect of the hydrogeology addendum, the following will be required:
        i. Preliminary design of the storm sewer and confirmation that there will be no conflicts within the municipal ROW
        ii. Preliminary design of the infiltration trench including confirmation of soil conditions and updated water balance for Glenayr Creek to validate the design.
        iii. The Owner agrees to convey all necessary easements and/or servicing blocks necessary to access, operate and maintain the proposed infiltration trench and associated infrastructure as a condition of Draft Plan Approval.

2. WSP Figure 4, Existing Natural Features and Constraints - In addition to the natural features and constraints, this figure also shows the proposed and future road patterns, Phase 1 development, SWM Pond, and single infiltration trench. We note that:
    a. The future road pattern beyond the Phase 1 draft plan limits have not been reviewed or accepted by Development Engineering staff.
    b. The location of the proposed infiltration trench may be problematic for future development. The impacts of the Phase 1 development on the PSW are currently under review. Additional comments will be provided following further discussion with Conservation Halton.
    c. If it is determined that an infiltration trench along Glenayr Creek is required, Figure 4 should be revised to include the trench and associated storm infrastructure.

3. WSP Figure 4.1, Stormwater Drainage Plan - The figure shows future development conditions and infrastructure not currently under review as part of the Phase 1 application. The figure will need to be resubmitted with any future phase of development.

4. WSP Figure 3.2 Wastewater Drainage Plan - The figure also shows future development conditions not currently under review for Phase 1 development. We understand that the applicant is currently in discussions with the Region of Halton over the possibility of constructing a 300mm sanitary sewer section as part of Phase 1. We note that the outcome of these discussions should allow for flexibility of the ultimate servicing strategy. Future development and the ultimate servicing strategy would require a comprehensive review of an EIR/FSS Addendum.

5. Environmental Monitoring – We have no concerns with the proposed environmental monitoring commitments. We would like to be circulated on the annual monitoring reports for information purposes.

6. Glen Oak (GO) Stormwater Management Pond and Infiltration Galleries Monitoring –
    a. The applicant will be required to certify that the pond and associated infrastructure are constructed, stabilized and operational in accordance with the town-approved design drawings and Ministry of Environment, Conservation and Parks (MECP) Environmental Compliance Approval (ECA) prior to registration of the plan.
    b. The applicant is required to prepare a monitoring program for the GO SWMP and the infiltration galleries to the satisfaction of the Town and Conservation Halton prior to earthworks/pre-servicing clearance.
    c. The applicant will be required to monitor the infiltration galleries following competition and certification of these facilities. The monitoring program should specify targets for performance monitoring as well as details of monitoring methodology, duration of monitoring and data analysis.
    d. The applicant will be required to complete all stormwater works, including the infiltration trenches to the satisfaction of the Town and Conservation Halton.

The owner shall ensure that these facilities are constructed, stabilized and operational in accordance with their MECP ECA prior to registration of the plan.

We trust that the above is helpful. If you have any questions or concerns, please contact the undersigned at extension 3025 at your convenience.

Rita Juliao, P. Eng.
Water Resources Engineer
Development Engineering

Conservation Halton

Conservation Halton

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2596 Britannia Road West
Burlington, Ontario L7P 0G3
conservationhalton.ca

Protecting the Natural Environment from Lake to Escarpment

March 27, 2019

BY MAIL AND E-MAIL

Mr. Paul Barrette
Senior Planner, Current Planning - West District
Town of Oakville, Planning Services Department
1225 Trafalgar Road
Oakville, ON L6H 0H3

Dear Mr. Barrette:

Re: Conservation Halton Comments – Second Submission
Comments to be Addressed Prior to Draft Plan Approval
Oakville Green Health Sciences and Technology District – Phase 1
Northeast Corner of Dundas Street West and Third Line – North Oakville
24T-18006/1325 & Z.1325.07

Conservation Halton (CH) staff has now reviewed the submission listed in Appendix A for the purpose of confirming whether our previous comments that were to be addressed prior to draft plan approval as per our January 18, 2019 letter have now been satisfied.

Recommendation:

Conservation Halton (CH) staff are satisfied that our previous comments to be addressed prior to draft plan approval have been addressed. As such, we are satisfied with recommending approval of the Draft Plan of Subdivision and Zoning By-law Amendment application subject to conditions which will be provided shortly. We note that additional revisions to the draft plan will also be made to include the balance of the Phase 1 development lands currently within the limits of the existing SWM pond. CH staff have no objections to this modification to the plan.

Staff will also continue to review this submission to confirm whether our comments in *"Appendix B: Comments to be Addressed as Draft Plan Conditions and Advisory Comments"* of our January 18, 2019 letter have also been addressed to our satisfaction. A separate letter will be provided once staff has had additional time to review the submission.

We trust this is of assistance. If you require additional information, please contact me at extension 2317.

Sincerely,

Jessica Bester, BES, MCIP, RPP
Environmental Planner

Copy: Ms. Rita Juliao & Mr. Philip Kelly, Town of Oakville Engineering (via e-mail)
Ms. Laurielle Natywary, Halton Region Planning (via e-mail)
Mr. Eldon Theodore, MHBC Planning (via e-mail)
Mr. Joseph Dableh, Oakville Green Development Inc. (via e-mail)

Appendix A: Documents Reviewed (received March 7, 2019):

- *Oakville Green – Comments and Response Matrix V.1, Town of Oakville File No. 24T-18006, Z1325.07, prepared by WSP, dated March 2019;*
- *Site Plan, prepared by Gensler Architecture and Design, dated March 1, 2018;*
- *Architectural Package, Oakville Green, prepared by Gensler, dated March 1, 2018;*
- *Draft Plan of Subdivision, Health Sciences and Technology District Developments Incorporated, Oakville Ontario, prepared by MHBC Planning, Urban Design & Landscape Architecture, dated February 28, 2019;*
- *Memo, Re: Hydrogeology Addendum – Oakville Green, prepared by Andrew Kulin, WSP, dated March 1, 2019;*
- *Figure 6.1, Conceptual Road Grading Plan, prepared by WSP, dated March 2019;*
- *Figure 6.2, Overland Flow Grading Detail, prepared by WSP, dated March 2019;*
- *Figure 6.3, Overland Flow Road Sections, prepared by WSP, dated March 2019;*
- *Drawing No. SG-1, Conceptual Grading Plan, prepared by WSP, Revision No. 1 dated March 1, 2019;*
- *Drawing No. SS1, Conceptual Servicing Plan, prepared by WSP, Revision No. 1 dated March 1, 2019;*
- *Phase 1 Glen Oak and 16 Mile Creek, Stormwater Management Plan, prepared by Walter Fedy, dated March 1, 2019;*
- *Drawing No. C-100, Existing Conditions, prepared by Walter Fedy, dated March 1, 2019;*
- *Drawing No. C-200, Proposed Grading and Servicing, prepared by Walter Fedy, dated March 1, 2019;*
- *Drawing No. C-400, Details Sheet 1 of 2, prepared by Walter Fedy, dated March 1, 2019;*
- *Drawing No. C-401, Details Sheet 2 of 2, prepared by Walter Fedy, dated March 1, 2019;*
- *Figure 2.2, Water Distribution Plan, prepared by WSP, dated March 2019;*
- *Figure 3.2, Wastewater Drainage Plan, prepared by WSP, dated March 2019;*
- *Figure 4.1, Stormwater Drainage Plan, prepared by WSP, dated March 2019;*
- *Figure 2, Existing Natural Features, prepared by WSP, dated March 2019;*
- *Figure 3, Existing Constraints and Opportunities, prepared by WSP, dated March 2019;*
- *Figure 4, Existing Natural Features and Constraints, prepared by WSP, dated March 2019; and*
- *Figure 9, Proposed Development Plan and Infiltration Measures, prepared by WSP, dated March 2019.*