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VIA EMAIL

October 30, 2020

Regional Municipality of Halton Planning Services Department Attn: Mr. Curt Benson, RPP, MCIP, Director and Chief Planning Official 1151 Bronte Road Oakville, Ontario L6M 3L1

Dear Mr. Benson,

Re: Regional Official Plan Review (ROPR) Discussion Papers Comments on Behalf of Mattamy Homes Our File No. 13668

We are counsel to Mattamy Homes and associated companies ("Mattamy"). Mattamy has extensive land holdings in the Region of Halton and a demonstrated track record of delivering high quality communities over many years.

We are writing at this time to provide Mattamy's submissions on the five Discussion Papers released for public comment as part of the Regional Official Plan Review ("ROPR").

In an effort to provide the most thoughtful and useful input at this stage in the ROPR, Mattamy engaged highly experienced experts to provide input which addresses both broad policy issues and technical matters. To that end, we are attaching the following:

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- 1. A submission of Ruth Victor & Associates dated October 30, 2020. Ms. Victor is not only a member of the Canadian Institute of Planners but is also a member of the Royal Town Planning Institute in England. She has some thirty (30) years of professional planning experience. Ms. Victor is the former Manager of Development at the Region of Halton who, in that capacity, conducted the Region's first major growth management exercise in the late 1980s. She does extensive work for both the private and public sectors.
- 2. A *Technical Response Paper* authored by Tom Hilditch, dated October 28, 2020, which addresses natural heritage issues. Mr. Hilditch is a renowned ecologist with some forty (40) years of experience in a broad array of ecological issues. This has included several appointments to provincial committees, including his work as the Chair of the Species at Risk Program Advisory Committee for many years.
- 3. A submission of urbanMetrics Inc. dated October 22, 2020 which addresses integrated growth management strategy issues. The author, Rowan Faludi, has over twenty-five (25) years' experience in urban economic analysis consulting to both the public and private sectors.
- 4. A submission of Savanta Inc. dated October 29, 2020 which addresses natural heritage issues specific to Mattamy lands in south Georgetown, in the Town of Halton Hills.
- 5. A submission from Turkstra Mazza Associates dated January 2, 2020 which was provided as earlier input into the Regions IGMS growth scenarios.

Each of these detailed submissions provide important insights and input into the matters addressed in the Discussion Papers. While Mattamy is pleased to provide these submissions, we are of the view that they should be treated as an invitation for further, direct engagement with Mattamy and Mattamy's team of experts. Certainly, the Region's ongoing ROPR should not be limited to simply receiving and considering the submissions.

The ROPR introduces an opportunity for the Region to provide constructive direction to facilitate vibrant, mixed use communities. This direction must reflect and implement provincial policy, including recent amendments to the Growth Plan. This opportunity will only be realized if the Region engages constructively with stakeholders. Mattamy would welcome the opportunity to discuss these issues in detail with staff as the ROPR continues.

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Regional Municipality of Halton Attn: Mr. C. Benson October 30, 2020

We respectfully request notice of all future meetings, reports and consultation activities related to the ROPR. Please provide notice directly to this firm and to Mattamy c/o Karen Ford (Karen.Ford@mattamycorp.com).

Thank you.

ours tru

Scott Snider

cc: Ruth Victor Karen Ford

Ssmd Att'd 13668/1

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TAB 1



191 Main Street South Waterdown ON, LOR 2HO rvassoclates.ca P 905-257-3590 E admin@rvassoclates.ca

October 30, 2020

Regional Municipality of Halton Planning Services 1151 Bronte Road Oakville, Ontario L6M 3L1 Attention: Mr. Curt Benson, RPP, MCIP, Chief Planning Official

Dear Sir:

Re: Regional Official Plan Review Discussion Papers – Mattamy Homes Limited

The following submission has been prepared on behalf of Mattamy Homes Limited and associated companies (Mattamy). The following is their response to the Discussion Papers issued for the Region of Halton IGMS process.

Comments were previously provided by Mattamy on January 2, 2020 and a copy of those comments are attached to this submission. In addition, Mattamy has been extensively involved in other landowner group submissions on the Regional Official Plan review provided under separate cover and reserve our rights to rely on these submissions as part of the IGMS public consultation process.

Regional Urban Structure Discussion Paper

In the previous submission of January 2, 2020, Mattamy raised the concerns that there is a need for the IGMS study process to be robust and fluid enough to address the policy changes occurring at the Provincial level. Since that submission, there is a new Provincial Policy Statement and an amendment to the Provincial Places to Grow Plan. As stated previously, the new and in force Provincial policies must now be the basis for the IGMS process and the Growth Scenarios for Halton.

The following points are the foundation for moving forward:

- Any preferred growth scenario must be based upon the current and in effect Places to Grow Plan horizon to 2051 and the new Land Needs Methodology.
- The PPS specifically refers to the provision of a market-based range and mix of housing. Market based range and mix of housing along with all other policies of the PPS is required to be considered as part of the IGMS process.
- A realistic, defensible, implementable plan for growth is needed for Halton.

The Urban Structure set out within the Discussion paper does not reflect the reality of a market-based range and mix of housing and proposes significant changes to built form and densities beyond that

which the market currently or is anticipated to support. The IGMS process must ensure complete communities that fulfill all forms and tenures of housing while be consistent with and in conformity to approved planning policy. The significant emphasis on apartment built form for larger households will not result in more affordable housing for families.

Attached to this letter is the analysis of the Urban Structure Discussion Paper by urbanMetrics Inc dated October 22, 2020. This analysis sets out detailed responses to a number of questions posed within the Urban Structure Report.

- The broad identification of corridors as strategic growth areas is not supported. The
 identification of growth areas must be done strategically. While additional density along
 corridors is appropriate, the Region must ensure that there is sufficient market demand for
 higher density housing along these corridors without compromising the designated growth
 areas within the Growth Plan and that the context of the approved and emerging secondary
 plans can integrate this additional density.
- The broad identification of additional multi-purpose and minor arterial roads to support a higher order Regional transit network is not supported. Any additional corridors within the Regional Transit Network should be assessed and identified through a technical study such as a Transportation Master Plan. The primary way to support higher order transit along these roads is to allocate additional density. This raises the questions as to whether there is the market to accommodate further additional density without detracting from higher priority intensification areas, whether these roads can physically accommodate this increased density and whether the impacts to existing and planned low density neighbourhoods can be appropriately managed. This type of intensification, where appropriate, is best assessed and implemented through local planning processes.
- Regarding factors to be considered when evaluating the appropriate location for potential settlement expansions, it is noted that the criteria set out within the report omit any aspect of market consideration as required by the Places to Grow Plan and the PPS. The criteria set out by the Region are focused only on desired policy outcomes and not whether the growth strategy could be supported by market trends. Nor do they include consideration of potential adverse impacts on the regional economy, consumer housing decisions (e.g., choice) and housing affordability. There is very little discussion within the Paper regarding the economic impact of market manipulation and the need to plan for complete communities that appropriately balance all housing types and avoid the over designation of lands for apartment development. Apartment built form intrinsically may be a more affordable option for singles and couples but is a less affordable option for families and multigenerational households which require more living space. Other key questions are raised by the potential over designation of lands for apartment development such as the viability of the Region of Halton allocation program, and the impact to communities if the markets for apartments does not materialize. The long term implications of COVID -19 on changing living arrangements as work from home, avoidance of common touch points or crowded confined spaces such as elevators and the desire for larger homes with outdoor amenity spaces are becoming the new reality for many and need to be considered as part of a long range planning process.

- Regarding the minimum density in the designated greenfield area, it is noted that the Region as a
 whole will likely already exceed the density of 50 residents and jobs per hectare set out within
 the Places to Grow Plan and will likely exceed 60 residents and jobs per hectare when completed.
 Any considerations to exceed the Provincial requirements would be for local reasons and not to
 achieve Provincial targets. The Places to Grow Plan requires that the Region take a market based
 approach to housing and utilize this lens in determining the ultimate decision on minimum
 density. A market analysis as required by Provincial Policy must be undertaken by the Region.
- In establishing a minimum Designated Greenfield Area (DGA) density target, the Region needs to be cognizant of the Provincial planning directive to accommodate a market-based mix of housing. The DGA should include a mix of housing types in order to provide a housing mix that meets market needs and focus higher density housing in intensification and planned strategic growth areas such as the strategic corridors and/or nodes.
- With the new Growth Plan, the Region must start over and reconsider all of the Scenarios. It is our view that none of the current Scenarios originally proposed in the options report conform with the new policy context and revised population and employment forecasts. As part of the next step in the process, the Region must use the Land Needs Assessment Methodology to determine its land needs and allocating future development to its area municipalities. Focusing solely on high density residential as a means of shifting housing choice and addressing other issues such as climate change is not a solution. Planning for high density in the right locations is good planning but it needs to be balanced with the reality of the market place, consumer choice and be financially viable for the Region. The Growth Plan requires that market must be recognized in planning for Growth.

Additional issues identified within the Urban Structure Discussion Paper include:

Whether the Region should consider the use of inclusionary zoning in MTSA to facilitate the provision of affordable housing, there is agreement that affordable housing is a need within communities. This should not be a blanket requirement that market housing provide affordable housing accommodation. Further the Region of Halton Allocation Program specifically makes affordable housing a significant challenge as early payment or additional payments are a cost that becomes embedded in the price of a home. This is the reality of the "growth pays for growth" policy of the Region and must be a variable that makes its way into a discussion about affordable housing. Affordable housing strategies must be augmented with various government programs to build needed housing within communities, income support programs, rent support programs as well as incentives and a review of fees and charges to reduce the cost of providing housing to the rental and ownership markets.

Regarding the identification of additional nodes from a growth or mobility perspective, this should only occur through a detailed urban structure study which has not occurred as part of this process and this work may be more appropriately completed at the local level.

For the boundaries of the MTSA, these should be driven by the local level official plan and secondary plans processes. The development of these secondary plan policies is an extensive process which is focused on

maximizing the potential for residents and jobs in these areas. Density targets should be reflective of local planning for these areas and it should be acknowledged in the growth projections that most of these areas will not build out by 2051.

How the Regional Official Plan supports employment growth and economic activity, the Official Plan needs to recognize the significant changes that are occurring in the commercial sector stemming from the rapid rise in e-commerce and impacts of changing behaviours due to Covid-19, resulting in fundamental changes to the commercial hierarchy and the interrelationship between employment and commercial functions. The Regional Official Plan should provide flexibility with the Official Plan to allow businesses to respond in this changing environment.

Natural Heritage Discussion Paper

Attached to this submission is a Technical Response Paper prepared by Tom Hilditch. This paper undertakes an extensive review the Natural Heritage Discussion Paper and provides a fulsome assessment of the Region of Halton's Natural Heritage strategy and the directions and questions posed by the Region in that discussion paper. This paper sets out detailed discussion and responses to the Natural Heritage Discussion Paper. As set out within the conclusions section of the Paper:

"There are many recommendations included in this Technical Response Paper, grouped according to key thematic areas, some of which correspond with the Region's standard questions in their Discussion Papers. A few of the more important recommendations follow:

- Given that the substantial nature of the comments and questions raised in this Technical Response Paper, we recommend that we meet and invest the time required to review and discuss all elements presented in this document
- The reliance upon a simplistic interpretation of the Precautionary Principle needs to be revised;
- Areas where the Region's approach does not seem to be in alignment with current thinking, it needs
 discussion and adjustment (e.g., the need for different NHS approached in settlement versus
 rural/agricultural lands and the need to define offsetting rules to support efficient and sustainable
 community design); and
- The Region's position that there is no "hard science" to defend specific mitigation measures (like buffer widths) requires discussion and modification.
- Minutes of Settlement between the Regional Municipality of Halton and the Mattamy Development Corporation (2015) have not been completely considered in the Region's Discussion Paper. We request a meeting take place with the Region to carefully review the Natural Heritage Discussion Paper, and mapping layers to ensure that the Minutes of Settlement have been adhered to."

In summary, the Technical Response paper stresses that it is necessary for the Region, prior to proceeding to the next stage in the IGMS process, to review the contemporary practices and literature regarding Natural Heritage Planning, identify options for moving forward that provide a degree of flexibility and innovation particularly within Urban Areas to achieve a more focused and practical approach.

The primary issue is one of balance amongst a wide range of factors including sustainable, complete communities and preservation of natural features. As set out in Section 25 of the Regional Official Plan, "Planning decisions in Halton will be made based on a proper balance amount the following factors, protecting the natural environment, preserving Prime Agricultural Areas, enhancing its economic competitiveness and fostering a health equitable society. Towards this end, Regional Council subscribes to the following principles of sustainability: that natural resources are not being over-used; that waste generated does not accumulate over time; that the *natural environment* is not being degraded; and that this and future generations' capacity to meet their physical, social and economic needs is not being compromised. The overall *goal* is to enhance the quality of life for all people of *Halton*, today and into the future." As further set out within the ROP, the fundamental value in land use planning is the principle of landscape permanence and the ROP identifies three components to its future landscape: settlement areas, a rural countryside and a natural heritage system. This fundamental value is not about preserving and expanding the Natural Heritage System at the expense of considerations and priorities but about finding the right balance between urban, rural and natural heritage.

To preserve the natural heritage system for the future, it requires an approach that has flexibility and innovation

Also attached to this submission is a letter by Savanta dated October 29, 2020. Within this letter, concerns are set out regarding the errors in the proposed mapping of the Natural Heritage System for 14256 No 10 Sideroad in the Town of Halton Hills. It is Mattamy's request that the mapping be corrected as set out within that submission.

Climate Change Discussion Paper

Regarding the Climate Change Discussion Paper, there is not a one size fits all solution to the challenges of climate change. Building more apartment buildings is not the solution. Focus on innovative building practices to reduce emissions over the long term and reduce waste in the building process should be priorities. The creation of walkable communities, that are transit supportive, is an important factor in reducing greenhouse gas emissions and should equally be a focus. This is best achieved at the local level through secondary planning processes. Discussion with landowners and the local municipality is essential to create realistic and implementable targets, programs and initiatives.

Mattamy looks forward to working with the Region throughout this study process. Should you have any questions or wish to discuss this submission further, please do not hesitate to contact me.

Regards, Ruth Victor MCIP, RPP, MRTPI

URBAN & REGIONAL PLANNING

TAB 2

TECHNICAL RESPONSE PAPER

Based on a Review of the Regional Municipality of Halton Phase Two Natural Heritage Discussion Paper





Prepared For: Mattamy Homes Canada (Greater Toronto West Division)

Prepared By:

Tom Hilditch Independent Environmental Expert Based on a Review of the Regional Municipality of Halton Phase Two Natural Heritage Discussion Paper

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ATTACHMENT A

Minutes of Settlement Between the Regional Municipality of Halton and Mattamy Development Corporation

EXECUTIVE SUMMARY

General Observations

The Region of Halton's Natural Heritage Discussion Paper is based upon traditional approaches and it presents positions and approaches that are inconsistent with some elements of the Provincial Policy Statement (PPS 2020). It is also out of step with some amended provincial legislation and emerging provincial, national and global trends. It has missed an opportunity to think differently about people and nature, especially in settlement areas.

The Region's Paper and some aspects of other related Regional Discussion Papers require revisions and modifications to recognize important advances in natural heritage system planning and landscape ecology. We collectively have an opportunity to think differently about how we conserve the most important natural heritage systems in different parts of Halton Region (e.g., in settlement versus rural and agricultural areas). Settlement areas present opportunities to think more progressively about how we as individuals and communities interact with and benefit from nature.

This Technical Response Paper has been developed to look for areas where improvements in natural heritage system planning design and implementation can be made in Halton. It looks at key interrelated topics including climate change. These materials have been developed based upon a detailed review of information and interpretations developed by Halton Region, by other Ontario municipalities and by the Province. It has also been informed by independent research that Mattamy Homes Canada has been engaged in since 2017, to better understand how to conserve and manage natural heritage systems in settlement areas.

Recommendations

There are many recommendations included in this Technical Response Paper, grouped according to key thematic areas, some of which correspond with the Region's standard questions in their Discussion Papers. A few of the more important recommendations follow:

Based on a Review of the Regional Municipality of Halton Phase Two Natural Heritage Discussion Paper

- Given that the substantial nature of the comments and questions raised in this Technical Response Paper, we recommend that we meet and invest the time required to review and discuss all elements presented in this document;
- The reliance upon a simplistic interpretation of the Precautionary Principle needs to be revised;
- Areas where the Region's approach does not seem to be in alignment with current thinking, it needs discussion and adjustment (e.g., the need for different NHS approached in settlement versus rural/agricultural lands and the need to define offsetting rules to support efficient and sustainable community design); and
- The Region's position that there is no "hard science" to defend specific mitigation measures (like buffer widths) requires discussion and modification.
- Minutes of Settlement between the Regional Municipality of Halton and the Mattamy Development Corporation (2015) have not been completely considered in the Region's Discussion Paper. We request a meeting take place with the Region to carefully review the Natural Heritage Discussion Paper, and mapping layers to ensure that the Minutes of Settlement have been adhered to.

1.0 INTRODUCTION

This Technical Response Paper has been prepared on behalf of Mattamy Homes Canada (Greater Toronto West Division). It directly addresses the Region of Halton's Natural Heritage Discussion Paper (Regional Municipality of Halton 2020) and it also identifies some additional preliminary comments regarding interrelated Discussion Papers (i.e., Rural and Agricultural, Integrated Growth Management Study, Climate Change and North Aldershot).

While we recognize that "... *The Region is requesting that the reader respond to these questions in their comment on the Discussion Paper*...", given the substantial nature of the comments in this Technical Response Paper, we have chosen to develop these response materials independent of, but with consideration of the Region's questions. Some of the Region's questions are based upon traditional approaches and in some cases upon questionable underlying assumptions. Further, some questions lead reviewers to select from limited options, restricting the opportunity for more thoughtful and independent responses.

While obviously the result of detailed work, the Region's Natural Heritage Discussion Paper is overly complex, (in part given the multiple and overlapping mapping and designation layers). It is not clearly connected to an understanding of landscape features and processes, and it continues to refer to dated terminology and dated technical guidelines, that are in need of provincial and municipal modernization and reform. The Region's consultants acknowledge, for example that Natural Heritage Reference Manual (2010) is diminished in its usefulness and relevance because it was written specifically for the 2005 PPS (Gladki Planning Associates et al 2020).

Given that the substantial nature of the comments and questions raised in this Technical Response Paper, we would be pleased to meet and invest the time required to review and discuss any or all elements presented in this document.

2.0 SUMMARY OF COMMENTS

The Region's Natural Heritage System (NHS) Discussion Paper does not distinguish between approaches in quite different areas, characterized predominantly by primary land uses in the Region (e.g., urban, urbanizing, rural and agricultural areas). That is inconsistent with section 2.1.3 of the 2020 PPS (i.e., "... Natural heritage systems shall be identified in Ecoregions 6E & 7E, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas. ...".

While it is important that natural heritage systems and their features and functions are maintained to the extent achievable in Settlement Areas, given the demands associated with sustainable community design and the increased human activity within the urban/urbanizing NHS, there is a strong case to be made for considering settlement area policies and approaches that allow for an increased degree of flexibility and innovative design. Outside of settlement areas, there are more opportunities to establish a higher level of natural heritage protection that will also help to limit and direct some negative and sometimes lethal interactions and disease spread between humans and wildlife (e.g., vehicular collisions and the spread of viruses, diseases, fungi, etc., including West Nile Virus and Lyme disease).

Given these unusual times (COVID-19 pandemic), it would be wise to more carefully consider the social and economic aspects of natural heritage planning. A more focused and practical approach to NHS design, implementation and management, especially in settlement areas would potentially increase opportunities for the deployment of human and financial resources in other, critical priority areas (e.g., employment, health care, green infrastructure). The more efficiently and effectively we can plan and implement natural heritage system creation and recovery, the better Ontario will be able to recover from the pandemic.

This Technical Response Paper addresses comments in the following components; general technical comments (section 2.0), and other technical comments including responses related to Mattamy specific lands that were the subject of mediation and a settlement agreement in 2013 (section 3.0). These two components are supported by supplementary technical observations and more detailed comments in section 4.0.

2.1 Bigger Picture Comments

The following points highlight key bigger picture comments that are supported by supplementary materials in section 4.0.

- The Natural Heritage Discussion Paper presents positions and approaches that are inconsistent with some elements of the PPS (2020), amended provincial legislation and emerging provincial, national and global trends;
- The Region's Discussion Paper is based upon traditional approaches it doesn't encourage innovation or new ways of thinking about people and nature;
- The Paper is also out of step with several important global advances in natural heritage system planning and landscape ecology;
- The Region's approach misses the opportunity to consider the Halton landscape beyond a traditional 2-dimensional perspective. It does not fully and appropriately integrate social, economic, earth and life science systems and their interrelationships;
- The Regional Natural Heritage Discussion Paper pushes together natural heritage and water systems without an understanding of important functions, dependencies and interrelationships (e.g., between physiographic units, soils and aquatic ecological systems);
- That push results in a superficial look at visible features and an overly conservative and predictive approach to linkages, buffers and enhancement areas;
- It also leaves some terms undefined or vaguely defined and it leaves some aspects unmapped contributing to a need for greater clarity, especially in the Waters Resource System (e.g., headwaters, discharge areas, significant surface water contribution areas);
- The Region's Discussion Paper is missing opportunities to take more accurate and practical approaches to the definition of some features (e.g., Significant Woodlands, Significant Wetlands, Significant Wildlife Habitat);

- The Region's Discussion Paper is limited to consideration of the NHS within municipal and provincial plans and boundaries which precludes the thoughtful consideration of how the terrain and landscapes in Halton are related to adjacent municipal jurisdictions and Lake Ontario;
- The Region's definition and use of the Precautionary Principle is simplistic and is out of step with accepted interpretations and approaches
- Practical and implementable visions for sustainability and climate change need to be better integrated within the Natural Heritage Discussion Paper and have regard for creating a balance with other objectives of the Region in order to build complete communities;
- Science-based supporting analyses are not provided for the somewhat aspirational Centers of Biodiversity, extensive enhancement areas, connections and linkages (e.g., across large areas in north Halton Region); and
- Practical and implementable Natural Heritage directions that lay the policy context for achievable Natural Heritage outcomes and input to the Natural Heritage Strategy are not provided.

2.2 Other Technical Comments

The following comments are more technical in nature and some make reference to the Minutes of Settlement signed by the Regional Municipality of Halton and Mattamy Development Corporation in 2013. It provides feedback to the Region regarding technical points applicable to the natural heritage of Ontario. These technical points are supported by supplementary materials in section 4.0 and by the attached figures.

• The criteria thresholds for woodland significance are too low and too easily achieved to effectively discern a true degree of ecological significance (e.g., 0.5 ha would more reasonably be replaced with 5 ha) and standards should differ between settlement areas and rural/agricultural areas;

- The only wetland information in the Region's Discussion Paper seems to be limited to a footnote at the bottom of page 68. While other agencies are involved with the oversight and regulation of wetlands, the Region should provide a discussion specific to how wetlands were addressed in the development of the NHS;
- And specifically, the Region should ensure its approach and policies related to wetlands are consistent with outcomes of the Province's ongoing review of wetland management in Ontario;
- Buffers are intended to be 30 m regardless of area and site-specific considerations; that approach has no basis in science and appears to be based upon an administrative approach to simplifying planning processes without recognizing conditions on the ground; and
- Minutes of Settlement between the Regional Municipality of Halton and the Mattamy Development Corporation (2015) have not been completely considered in the Region's Discussion Paper.

3.0 MATTAMY SPECIFIC LANDS

Mattamy completed extensive technical studies and investigations as input to their future development planning related to two blocks of land in Milton, Ontario referred to as the Renaissance/White Squadron Lands and the Kenborough Lands.

The lead author of this Technical Response Paper (Tom Hilditch) led technical investigations of the Renaissance/White Squadron lands and the Kenborough Lands, leading up to, during and for a period of time after the completion of ROPA 38, an OP review process that began in 2014. Mr. Hilditch was personally involved in all detailed technical studies, discussions, and in meetings with municipalities (Town of Milton, Regional Municipality of Halton) and with agencies, on behalf of the Mattamy Development Corporation. He also led environmental dialogue on behalf of Mattamy in mediation meetings amongst experts. Those meetings resulted in the development of the Consultants' Joint Memorandum which forms part of the Minutes of Settlement that are included with this Technical Response Paper (**Attachment A**). The Region of Halton through its technical consultants (e.g., North-South Environmental) fully participated in the detailed technical studies, discussions and meetings, all of which led up to the preparation and mutual execution of Minutes of Settlement.

The Region's Natural Heritage Discussion Paper states that the NHS mapping is updated to include all approvals up to 2018. That is clearly not the case as the mapping misses addressing important aspects of the Minutes of Settlement (e.g., the agreed removal of Area B on the Kenborough lands and Areas D & E on the Renaissance/White Squadron lands).

The Minutes of Settlement identify the location of the White Squadron/Renaissance Lands (Exhibit A) and the Kenborough Lands (Exhibit B) in **Attachment A**.

Confirmation is requested to be provided, and specific attention should be paid to the following:

 Additional studies such as Subwatershed Studies (SWSs), Master Environmental Servicing Plans (MESPs), SIS's Subwatershed Impact Studies (SIS), Subwatershed Update Studies

Based on a Review of the Regional Municipality of Halton Phase Two Natural Heritage Discussion Paper

(SUS) and Subwatershed Management Studies (SMS) illustrate substantial changes to the floodplain areas identified by the Region;

- Additional studies could add or delete ephemeral watercourses identified by the Region;
- In some specific cases, science-based buffers would be established that could be eliminated or reduced in size and the 30 m standard would not necessarily be required; and
- Certain ecological features would be identified and assessed and would not meet significance levels that would require protection in whole or in part.

In reviewing the Region's Natural Heritage Discussion Paper, the approach, analyses and outcomes of the Minutes of Settlement are not fully reflected the deliberations during mediation and the outcome of the Minutes of Settlement. The mapping in the Discussion Paper is not presented at a scale that allow us to confirm that all Elements of the Minutes of Settlement have been addressed/met.

The Minutes do appear to be properly reflected in ongoing Secondary Planning and subwatershed work being completed by the Town of Milton. **Figure 5**, for example, reflects the incorporation of the Renaissance/White Squadron Minutes of Settlement.

We recommend that a meeting take place with the Region to carefully review the Natural Heritage Discussion Paper, and mapping layers to ensure that the Minutes of Settlement have been adhered to.

Based on a Review of the Regional Municipality of Halton Phase Two Natural Heritage Discussion Paper

4.0 TECHNICAL RESPONSE PAPER SUPPLEMENTARY MATERIALS

4.1 Responses to Halton Region's Questions/Options

The questions posed in the Region's Discussion Paper are based upon traditional approaches and in some cases upon questionable underlying assumptions. In some cases, the Region's questions guide reviewers to select from restricted options. In our experience, the majority of laypeople would generally be inclined to favour options that increase the likelihood of preservation, especially in the absence an understanding of the larger context and the impacts of those options.

As discussed earlier, rather than attempting to fit the ideas and comments in this Technical Review Paper into the Region's questions, we have chosen to provide our thoughts under general thematic, technical and policy headings.

4.1.1 Being at the Forefront of Natural Heritage Planning

Halton Region states that they have "...been at the forefront of natural areas planning since the 1980s, well before the Province made it mandatory for municipalities to do so." It notes in the Discussion Paper that the Region's "... strong commitment to the natural heritage preservation has been strengthened in each successive Halton ROP..." (Regional Official Plan).

The Region of Halton, like most municipalities and the Province more generally, remain supporters and implementers of more traditional, two-dimensional natural heritage planning that is disconnected from nearby lands and physiographic features and functions (and from community/nature relationships). From an ecological perspective, Halton Region's approach is out of step with some current processes and language. It promotes, for example, the ongoing use of and reliance on dated, traditional and in some cases, redundant classifications (e.g., ESAs and ANSIs) and it is not in alignment with the Province's current thinking regarding the importance of minor and disturbance origin wetland features.

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To really understand where the forefront in environmental conservation is, we need to consider a brief history of natural heritage planning.

Environmental Conservation generally has its roots more recently in the 1800s and early 1900s. Famous thinkers and authors including Leopold (1949), and Teal (1969) began to publish works that emphasized our human connection with nature. In the 1960s, Rachel Carson raised concerns and alarm around the widespread insecticide spraying occurring around the farming and forestry industries in her book, (Silent Spring 1962).

In North America, very thorough technical work was developed around soils, forestry and agriculture emerged in the 1950s and 1960s. Colman (1953) developed insightful work related to vegetation and watershed management. Authors like Flawn (1970) developed more complete understanding of the geological and geographical terrain characteristics (e.g., environmental geology).

Approaches including landscape ecology, biodiversity conservation and even NHS planning, have been present in the Ontario planning context for at least 25 years (i.e., since the early 1990s). The origins of this type of planning began in the mid to late 1970s in Ontario, with a focus on the determination of environmentally sensitive and significant natural areas (ESAs).

Those earlier efforts were driven by the recognition that some areas of special importance deserved recognition and protection. Evaluation systems were created for application at the provincial and municipal scales (e.g., Eagles and Adindu 1978; Sargent and Brande 1976; Barrett and Riley 1980). Those early frameworks led to the production of Environmentally Sensitive and Significant Areas studies throughout southern Ontario (Brough 1983).

In most cases, those earlier studies were completed by ecologists, without an understanding of the earth sciences or the relationships amongst people, communities and nature. Other important technical disciplines were not generally considered in those early initiatives (e.g., Economists, Landscape Architects and Cultural Heritage professionals).

The feature-based approach persisted through the 1980s with a shift towards the identification and conservation of Natural Heritage Systems (NHS) beginning to emerge in the early 1990s.

NHS planning in Ontario was described in Riley and Mohr (1994) and was presented in the 1999 provincial Natural Heritage Reference Manual (NHRM). It was expanded upon in the 2010 NHRM and the most current Provincial Policy Statement (2020) continues to support that approach. The PPS (2020) refers to a recommended approach for identifying *natural heritage systems*, but also notes that municipal approaches that achieve or exceed the same objective may also be used. The Halton Region Natural Heritage Discussion Paper has not demonstrated how and where it is consistent with the recommended approach and where Halton has deviated beyond the Provincial objective related to defining Natural Heritage Systems.

The science of Landscape Ecology is still the subject of some debate (several decades after it was first introduced). The science of the related theme of ecological restoration or rewilding focuses on understanding the dynamics of spatial heterogeneity and the relationship among pattern process and scale. The art and science of landscape ecology emphasize the necessary use of humanistic and holistic perspectives for integrating biophysical with socio-economic and cultural components in general, in design, planning and management in particular (Wu and Hobbs 2007). Some countries and municipalities are beginning to make advances in this more holistic planning, principally through the formal adoption and implementation of UN Sustainable Development Goals (SDGs) (e.g., New York City 2018).

4.1.2 Precautionary Approach

Despite having considered the topic in some detail (Regional Municipality of Halton, 2020c), the Region of Halton appears to have taken a limited and simplistic approach to the definition and application of the Precautionary Principle. The Region has chosen to enshrine the principle in the ROP (enshrine: to preserve or cherish as sacred, Merriam-Webster). They note that "... the precautionary principle can be explained by when faced with uncertainty, err on the side of being conservative to ensure the protection of natural heritage components." The Region's Discussion Paper also notes that, "There may also be uncertainty about a universally accepted definition of the precautionary principle."

The Region notes that "... it is important to grasp that there is no "hard science" to defend specific mitigation measures (like buffer widths) and that it relies on professional judgement. The Region

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also notes that "... there is general agreement that the more protection you provide, the higher the confidence that a feature will be protected. So there is little disagreement that there is greater confidence that a 50 m buffer against a woodland would protect it better than a 10 m buffer." (Regional Municipality of Halton, 2020c).

That is a significant misrepresentation of the science that does exist around the determination of buffers. A larger buffer does not necessarily equate to better woodland protection (see section 4.1.6 of this Technical Response Paper). Larger buffers without scientific support can erode the efficiency of natural heritage planning and can negatively affect the availability of resources to ensure balanced planning and land use decisions. It can result in the inefficient use of developable lands, a commodity that is increasingly under pressure in Halton Region and elsewhere in the Greater Toronto Area.

Schmitz (2007) notes that the precautionary approach requires thinking through which interdependent species will ultimately be impacted and how this will alter the character and complexion of ecosystems when our children and grandchildren inherit the planet. It also recognizes that exploitation must be undertaken with sensitivity and respect for the livelihood and dignity of all human societies (Ludwig et al 2001) and to minimize the risk of long-term consequences of the impacts.

Schmitz (2007) also notes that taking a precautionary approach means that our definitions of prosperity must include a sustainable natural economy in addition to sustaining a market economy. It also means that ecologists, as scientists, must develop methods and approaches that better support precautionary decision making in policy and management.

It is not clear that the Region has thoroughly assessed and implemented current best practices related to the Precautionary Principle and approaches. The Region's definition links the word "precautionary" with "...being conservative to ensure the protection of natural heritage component". That is vague language that speaks to natural heritage "protection" and "components". In the absence of clarifying definitions and examples, this Principle will not be consistently defined or effectively implemented.

4.1.3 Understanding the Landscape

The Region's Natural Heritage System is missing a comprehensive understanding of all dimensions of the landscape. This is perhaps best explained by first, looking more closely at the broad landscape units delineated and defined by Chapman and Putnam (1984), a reference cited by the Region in their Natural Heritage Discussion Paper. **Figure 1** shows a depiction of those broad terrain features within and connected to Halton Region. **Figure 2** complements and builds on the physiography with a depiction of soils in the Region. Together the physiography and soils information contribute to, better understanding of biophysical interrelationships and ecosystem functions and biodiversity.

The Region will benefit from that more broad consideration of the landscape moving away from a more two-dimensional understanding of the landscape towards an understanding of the interrelationships and interactions with major systems across the landscape (e.g., those related to airsheds, surface watershed, underground, geologically driven watersheds, surface ecological systems and social systems).

The terrain in Halton can be considered, to very broadly include, the:

- Niagara Escarpment and associated talus slopes and upper plateaus;
- Oak Ridges Moraine; and
- Peel Plain (a clay/silt landscape) that resulted from the glacial lake bottoms.

These larger scale units are interrupted/incised by significant river systems and associated valleys such as Bronte Creek, 14 Mile Creek and 16 Mile Creek and other local features (e.g., Trafalgar Moraine).

Landscapes function evolve and/or are shaped by human activities. Landscapes change over time as evidenced by the large-scale disruption of the Ontario landscape (before the jurisdiction was referred to as Ontario). Indigenous Peoples and their land-based systems of trade, commerce and evolving communities were cruelly displaced and oppressed by colonization on the Halton landscape. Deforestation, the expansion of agriculture and the beginning of European settlements replete with post offices, agricultural and mechanical societies began to grow aggressively in the GTA.

In the context of directing sustainable growth in existing and expanding settlement areas, landscapes will continue to be modified by the need for the creation of new infrastructure and the ongoing maintenance of existing infrastructure. We have developed more innovative solutions to help avoid, mitigate and diminish the effects associated with ongoing settlement.

An approach that encompasses adaptation and resiliency and recognizes the need for flexibility and innovation would lay the foundation for ensuring we understand, protect, manage and improve natural heritage systems in Halton. While at the same time, facilitating practical and realistic planning, designing and implementing development that will promote improved conservation, management and the wise use of natural heritage in proximity to existing and growing communities.

4.1.4 When Everything is Significant, How Do We Decide What's Important?

There's no question that all, natural areas are important for many reasons (eco-health, natural water treatment and water storage and distribution carbon sequestration, products, resources, etc.). But when southern Ontario is one of the fastest growing jurisdictions in the world, we need to approach natural heritage system in a more holistic fashion, with more balanced and practical approaches and with a more discriminating assessment of what merits the label "significant".

The Ontario context has evolved over time, moving from protecting features to protecting and restoring connected natural heritage systems. That makes sense on a theoretical level, but the realities in the Peel Plain (including Halton Region), in particular demand a more progressive and creative approach. Practical discussions about what needs to be and should be protected in existing and planned new communities are being supressed by complicated, overlapping and inconsistent approaches to the definition of what is significant on the landscape.

Currently the threshold for significance of ecological features and systems is relatively low in Halton Region (and in southern Ontario more generally). That creates artificial and false choices around how and where to create and manage development and site alteration. Those false

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choices push Ontario towards inefficiencies and misdirected investments of financial and human resources. Ontario and Halton should look more practically at the way land use and resource management decisions are being made to better balance the distribution and use of resources.

The approach for the development of natural heritage systems in Ontario will benefit from some further advancements and refinements to address climate change and other significant challenges (e.g., strain on resources to accomplish balanced and optimized outcomes involving environmental, social and economic considerations).

More specific discussion is presented regarding Woodlands, Wetlands, and Wildlife Habitat.

<u>Woodlands</u>

The definition of woodlands and significant woodlands has evolved in Ontario over the past several years. The Province has established relevant definitions in some provincial plans (e.g., Oak Ridges Moraine, Greenbelt Plan) and has approved Significant Woodland approaches in a number of Ontario Official Plans (e.g., Regions of Peel and York, City of Hamilton). While each Significant Woodland policy determination exercise considers local considerations, the scientific principles developed in support of them are relatively common across southern Ontario's municipalities.

Those principles are discussed in some detail in the Natural Heritage Reference Manual (NHRM; OMNR 2010), a document that was developed by the Province to provide technical guidance for implementing the natural heritage policies of the Provincial Policy Statement, 2005. Unfortunately, the NHRM is now out of date in many respects. Gladki et al (2020) acknowledges that because the 2010 NHRM referenced above was written specifically for the 2005 PPS, its usefulness and relevance has diminished. The NHRM supports traditional approaches and does not allow flexibility to deal with current efforts to accelerate and improve better environmental outcomes in communities. For example, in the NHRM, for woodlands, planning authorities are to:

- establish a set of criteria as part of a focused planning process;
- apply consistent evaluations across the planning area;

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- take into account the physiography of the landscape (e.g., moraines, clay plains);
- allow for the evaluation of woodland functions at the landscape level (e.g., providing linkages in a natural heritage system); and
- reduce resources needed to confirm site-specific details at a later planning stage.

This approach is not well-suited to municipalities with varied physiographic and land use areas including the Region of Halton (e.g., urban, rural agricultural). In those situations, different criteria may be needed for different areas. If significance thresholds are too low, small and/or disturbed feature may be exaggerated in importance and that could impede the creation of efficient, sustainable communities.

The Technical Definitions and Criteria for Key Natural Heritage Features in the Natural Heritage System of the Protected Countryside Area (OMNR 2012) provide some guidance regarding delineating woodlands, using approaches that merit review and consideration in municipalities more generally (e.g., degree of woodland connection, woodland openings, indentations in woodland edges and the presence of invasive species and examples of mid to late-successional tree species).

The Region's Natural Heritage Discussion Paper (section 7.7) discusses Significant Woodlands. Woodlands need to meet only one of four criteria along with a low size threshold (i.e., 0.5 ha or larger). This discussion is based on current approved ROPA 38 policy. As noted above, relatively lower thresholds for significance can present unnecessarily restrictive conditions that may hamper the ability to meet Ontario's broad vision to plan for strong, sustainable and resilient communities for people of all ages, a clean and healthy environment, and a strong and competitive economy. It is clear that some criteria should vary, according to different areas of Halton Region (e.g., settlement areas, rural areas, agricultural areas).

- The thresholds for woodland significance are too low and too easily achieved to effectively discern a true degree of ecological significance (e.g., 0.5 ha would more reasonably be replaced with 5 ha);
- The thresholds will continue to complicate, lengthen and increase costs associated with efforts to create sustainable communities;

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- Applying such low thresholds will not encourage effective collaboration amongst various stakeholders, including the private sector;
- Relatively small natural features and created features (e.g., small plantations, hedgerows, relict recreational and theme park features) can block the flexibility required to achieve efficient and sustainable communities and associated infrastructure; and
- The lack of flexibility to discern significance more finely and accurately will contribute to the delay of opportunities to address adaptations required to mitigate climate change impacts especially in settlement areas (e.g., woodland management, firebreak establishment, landscaping for fire resistance, replacing open space structures/signage and interpretation landmarks with fire-resistant materials).

Figure 3 illustrates some examples of the challenges associated with woodlands and trees within settlement areas. Small woodlands, hedgerows and scattered individual trees (and their buffers) can create challenges for community development in areas slated for growth. In addition to the challenges that small units pose, especially in settlement areas, forest health and forest fire susceptibility are important matters that should be considered in natural heritage planning.

Some forests are being set back significantly on successional pathways (with resultant ground fuel accumulation) given the spread of insects (e.g., emerald ash borer and insect vector borne diseases and fungi (e.g., Dutch elm disease fungus). In situations where declines are substantial, these considerations should enter into decisions regarding woodland significance and natural heritage conservation and management measures (e.g., strategic ground fuel removal, replacement of susceptible tree species with species more tolerant to climate change and suitable for assisted migration (e.g., Johnston 2009).

Wildland fire mitigation is an especially important aspect of natural heritage planning, given climate change (Ontario Ministry of Natural Resources and Forestry 2017c). In that document, the MNRF states that "... if wildland fire mitigation measures such as vegetation manipulation are proposed, and they would result in negative impacts, then such mitigation measures cannot be applied." The PPS (2020) definition of hazardous lands "... means property or lands that could be unsafe for development due to naturally occurring processes...". The definition of Hazardous

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types for wildland fire, "...means forest types assessed as being associated with the risk of high to extreme wildland fire using risk assessment tools established by the Ontario Ministry of Natural Resources and Forestry, as amended from time to time." That would seem to present an internal conflict in the PPS, something that should also be addressed in the definition of significant woodlands.

Section 3.3.3 in the Wildland Fire Risk Assessment and Mitigation Reference Manual states that, "... in general, where the provincial plans and the PPS, 2014 conflict, provincial plans take precedence over the PPS as specified in policy 4.12 of the PPS, 2014. Likewise, the PPS, 2014 provides policy direction (i.e., in the case of wildland fire (new policy 3.1.8)) on topics that the provincial plans do not address."

It would be helpful for the Region and Province to clarify how wildland fire risk and the protection of people and property is integrated with natural heritage system planning, perhaps most specifically in settlement areas where people and property are concentrated. Physiographic landscape differences are not addressed in the Province's Wildland Fire Risk Assessment and Mitigation Reference Manual. Clarity is required regarding how to manage the relative risks to fire associated with landscapes where forests are more disconnected from ground and surface water sources and/or where forest soils are thin (e.g., portions of the Oak Ridges Moraine and the Niagara Escarpment).

The risk of fire is changing with increased risk of drought and extreme weather events, in areas including Halton Region. It seems that woodland significance would preclude pro-actively mitigating against wildfire risk, making it especially important for municipalities to discern between levels of significance in settlement versus rural/agricultural landscapes and to manage forests in a manner to manage that risk, which is increasing in some parts of Ontario, with climate change.

Significant Wetlands

Significant Wetlands and Other Wetlands (making important ecological contributions) also merit some specific discussion and consideration in the context of the Region's Natural Heritage system. Wetland discussions in the Region's Discussion Paper seem to be limited to a footnote at the bottom of page 68. The footnote includes the wording: *"(c) for lands within the Halton NHS outside the areas describe in (a) and (c), provincially significant wetlands and wetlands that make*

an important ecological contribution to the Halton Natural Heritage System; and (d), for all lands outside the areas described in (a), (b), and (c), provincially significant wetlands." We would expect the Regional Discussion Paper to better describe wetlands and any interrelated work by conservation authorities and/or the Province.

There is no apparent discussion of what wetlands make an *"important ecological contribution"* and how that phrase is defined. As noted in the following discussion, the definition of Provincially Significant Wetlands is based upon an outdated evaluation system and vague imprecise language around wetland areas and complexing.

Provincially Significant Wetlands are defined, based upon the application of the Ontario Wetland Evaluation System (OWES), originally developed in the early 1980s. Some of the thresholds applied in the implementation of OWES are low and/or numbers of special features (e.g., species) are not capped and can result in a wetland unit or complex of units easily meeting the scoring levels to be deemed to be significant (e.g., unlimited accumulation of points for locally regionally significant species, based upon dated status lists).

The OWES needs to better define and explain minimum size and potential complexing. Different areas of Ontario apply different complexing criteria. Wetland complexing can increase challenges to creating efficient and sustainable communities. The complexing criteria, where available for use from various MNRF district offices are imprecise and enable the definition of wetland areas as significant (regardless of size, origin and/or ecological significance). Complexing criteria, where available, do not appear to have any formal recognition/status and have not been peer reviewed externally. These informal and inconsistent approaches exaggerate the importance of very small and often created features, (e.g., farm and irrigation ponds) causing unnecessary complexity, costs and inefficiencies during the creation of strong, healthy communities.

The Social Component of OWES is inadequate and is not aligned with best current practices. Criteria related to Aboriginal Values are inadequate and disrespectful. Significant wetlands are not all the same; they can vary widely in their integrity, features and functions. by the Province, in association with municipal organizations. In 2014, the Ministry of Natural Resources and Forestry (MNRF) worked with other ministries, municipalities and partners in the review of Ontario's broad wetland conservation framework and the identification of opportunities to strengthen policies and stop the net loss of wetlands. That mandate was renewed in 2016.

The Province released its final Wetland Strategy for Ontario (July 20, 2017). That document appropriately raised questions around the potential need to improve the OWES (e.g., incorporating recent advances in science and knowledge; assessing whether some values that are not currently considered should be added; whether other values could be removed and whether some values should be re-assessed in light of new knowledge).

The Draft Strategy (2016) noted that the end product of the review of OWES may be a new edition of the Ontario Wetland Evaluation System, or it may be a new approach to mapping and evaluating the significance of wetlands in Ontario. That language was deleted from the final 2017 Strategy, leaving it unclear whether the OWES will be revised to address outdated approaches, the absence of Indigenous knowledge and other matters.

In Halton, there are many examples of wetlands included in significance designations that occur on/in abandoned oil/gas well pads, storm water management ponds, farm livestock/irrigation ponds, relict recreational and theme park features, and features on abandoned, managed and restored aggregate lands. Many of these features have resulted from the abandonment of agro-industrial activities in the Peel Plain, an area with predominantly heavy and imperfectly drained clay soils (Chapman and Putnam 1984). Those soils are well-suited to the intentional and unintentional creation of wetland areas, especially where agricultural field drainage systems were installed to improve crop yields.

It is unreasonable to assume these types of features merit significance consideration, especially where they have been intentionally or unintentionally created by humans and/or by disturbance activities. The preservation of relatively small natural features and created features can suppress adaptations required to mitigate climate change impacts (e.g., wetland creation and wetland modification to ensure a viable and sustainable hydrologic setting). These small features and their buffers can create challenges to the efficient use of land in settlement areas.

The Region should ensure its approach and policies are consistent with outcomes of the Province's ongoing review of wetland management in Ontario. We understand that the Province is examining how to better enable growth and development, while effectively safeguarding wetlands.

There are a number of factors that should be considered when deciding which wetlands merit conservation in situ, in settlement areas. Some of those factors are:

- Degree of landscape isolation (e.g., permanent hydrologic connections; note that the current MNRF 750 m rule between wetland areas in a complex is unnecessarily excessive);
- Ecological integrity related to disturbed landscape conditions;
- Relative age in terms of origin (e.g., absence of the development of deep, historic peat soils);
- Origins in terms of artificial drainage impoundments, drainage blockages, aggregate ponds, etc.); and/or
- Ability to be effectively replicated and/or enhanced, through off-setting measures.

Figure 4 illustrates some of the challenges associated with small and scattered wetlands within settlement areas. Adding 30 m buffers to such features is typically unnecessary to protect wetland features and functions, and in many cases, there features can be removed and easily replicated/improved in a newly created and/or expanded NHS. To-date, no formal processes or approaches have been adopted by the Province, Region or lower tier municipalities in Halton to facilitate the concept of wetland removal with off-setting, where appropriate.

Significant Wildlife Habitat

The Region of Halton relies upon and builds upon provincial guidance for the determination of Significant Wildlife Habitat. As with the OWES, some of the materials supporting the provincial

definition of Significant Wildlife Habitat are outdated and are often subject to inconsistent interpretations. A few examples of challenges related to criteria for significance include:

- Bat survey protocols need to be reviewed to ensure efforts used are accurately quantifying individual/colony number and areas of habitat used;
- Seeps and springs need to be better defined and considered in the Halton Discussion Paper. Not all seeps and springs should be considered Significant Wildlife Habitat. Created, artificially maintained and/or significantly degraded seeps or springs should not be considered to be Significant Wildlife Habitat. Seeps are relatively common in Ecoregions 6E and 7E landscape. Seeps that should be considered significant, should meet rigorous criteria;
- Amphibian breeding habitats need to be assessed consistently to avoid an exaggeration of population numbers (e.g., avoiding cumulative counts across multiple years); and
- Artificial/created habitats (e.g., active areas within aggregate operations, including areas transitioning towards eventual successional goals) should be excluded from consideration for significant wildlife habitat. Other created habitat exclusions should also include plantations, nurseries, farm livestock/irrigation ponds, drainage ditches, and golf course/recreational aesthetic and infrastructure ponds.

4.1.5 Linkages and Enhancement Areas

There are several references to linkages and enhancement areas in the Region's Discussion Paper. Enhancement areas including Centres of Biodiversity do not appear to be mapped, or well supported by scientific information, During ROPA 38 discussions, Centers of Biodiversity were difficult to understand and apply in the landscape.

Enhancement areas seem to be more aspirational, based in part on a sense that bigger and wider systems and corridors are better and are important throughout the Region. There does not appear to be any methodology used to consider settlement areas differently from rural and agricultural lands.

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There is an unrecognized potential for more rapid gains towards important biodiversity objectives, but a rigid policy framework discourages innovation. We are presented with an opportunity to create, sustain and enhance in a collaborative manner, harnessing the energies and resources, across all sectors and communities, including the private sector.

Allison (2012) notes that the combination of global climate change and invasive species is greatly complicating our efforts to preserve and restore ecosystems. More people live in civilized spaces with almost no connection to wild nature, biodiversity and open spaces. Natural Heritage in Settlement Areas needs to move beyond the notion of preservation and encompass the use of adaptive management.

Rudnick et al (2012) note that "... it is important to consider how changes in connectivity and fragmentation may influence the spread of diseases and invasive species...", "Intact, well-connected landscapes can serve as conduits for many invasive species if they disperse in similar ways to native species."... "... processes that fragment habitats for native species may simultaneously provide connections that can facilitate biotic invasions. "

References to broad areas of Natural Heritage System (e.g., Cootes to Escarpment EcoPark System, large areas in northern portions of the Region) do not appear to be based upon the best available science. In the case of the EcoPark, it's not clear why this concept was identified in proximity/within existing and proposed settlement areas. It would be very helpful for the Region to provide much more information regarding the methodology they implemented as they considered linkage and enhancement questions including:

- Where are the most important broad landscape linkages in and adjacent to Halton Region?
- Have linkages been assessed relying upon the quantification of the landscape in terms of physiography, hydrogeological and hydrological connections and wildlife movement?
- Have linkages and enhancement areas been considered as sources and pathways for the spread of diseases and invasive species?
- How have Indigenous, Traditional and cultural considerations been addressed as alternative EcoPark, linkage and enhancement areas were considered?

• Have the social and economic considerations of linkages been fully addressed?

Without detailed supporting information and analyses, the suggested Cootes to Escarpment EcoPark System and some other broad linkages in Halton Region seem to be aspirational and without merit.

Practically speaking (especially in aspirational areas such as linkages, enhancement areas), investments in natural heritage should be directed to situations where the long-term viability of features and functions can be expected (e.g., in rural and agricultural areas, not necessarily in urban and urbanizing areas). In some urban situations, artificial hydrologic measures may be required in perpetuity to support and hold some wetland features static, suppressing responses to succession and climate change.

4.1.6 Buffers and Vegetation Protection Zones

Buffers have been used by municipalities across southern Ontario for several decades to address a range of development impacts related to urban land use. Throughout this period, there has been extensive debate among regional and municipal planners, ecologists and community builders regarding appropriate approaches to buffer application at a site-specific scale. Although there is a substantial base of scientific literature related to appropriate ranges of buffer widths to address specific impacts related to agricultural and forestry related impacts, very little research is available to support broad application of specific buffer widths to address traditional urban land development related impacts such as long-term human use adjacent to natural features.

The Framework for Regional Natural Heritage System Buffer Width Refinements for Area-Specific Planning ("the Framework") was developed by Halton Region to provide guidance for the delineation and refinement of ecological buffer widths at the subwatershed level.

The buffer refinement approach proposed within the Framework uses a standardized base buffer width of 30 m as a starting point for outward buffer adjustments, despite a lack of evidence that a 30 m buffer is an appropriate starting point. Further, the Framework assumes that buffers are an appropriate mitigation tool to address the human-use related impacts that are considered by the Region.

The concept of buffers appears in the literature as early as the 1940s and 1950s in relation to the protection of waterfowl and their habitat, prompted by the economic value of waterfowl as a resource in North America. In addition to habitat protection, watercourses in general were also the subject of earlier literature on buffers. Trimble and Sartz (1957) presented an approach to buffer delineation for stream protection adjacent to logging operations. Impacts to watercourses related to agricultural runoff have been the subject of intensive study starting in the 1960s mainly devoted to the determination of optimal buffer areas for water quality enhancement (Hilditch 1992). Notably, none of this early documentation on buffers was done in the context of municipal land use planning.

Carolinian Canada subsequently published *Draft Guidelines for Determining Setbacks and Buffers* as a white paper related to the 2003 conference on environmental impact statements. This further supported a science-based decision-making process for buffer width determination based on the ecological functions that were being protected along with the nature of the adjacent land use.

To-date, there has been little scientific work monitoring the effectiveness or appropriateness of buffers in land use planning decision-making despite this matter being raised many times, over the past few decades in southern Ontario. Conservation authorities that purport to monitor and house relevant buffer data have been unable to or unwilling to share that information. Without this monitoring, analysis and synthesis work, the Region's Natural Heritage Discussion Paper continues to rely on the notion that, bigger and more robust buffers are better. This haphazard approach needs to be subject to more scientific rigour.

In the absence of available and comprehensive buffer effectiveness research, Mattamy Homes Canada retained Savanta Inc. to complete their own research into buffers in 2017. Field investigations were completed on representative buffers in residential, commercial and industrial developments in Halton, Peel and Durham Regions (to assess buffer effectiveness i.e., direct and indirect impact mitigation and access control). A comprehensive literature review and those field investigations contributed to a substantial body of unpublished work, held by Mattamy Homes Canada.

A few observations from that extensive literature review follow:

- There are numerous references that study the effects of human use stressors on both natural and urban environments (Deng and Guo, 2005; Manolis et. al., 2002; Taylor and Knight, 2003; Fernàndez-Juricic et. al., 2004; Hamburg et. al., 2008; Malmivaara et. al., 2008; McWilliam et. al., 2011; etc.), but none of those studies indicate that prescribed base buffers are appropriate mitigation for those stressors;
- The literature review reveals that there is limited scientific research that supports buffers as effective mitigation for human related impacts in an urban environment. The literature review also reveals that buffers much smaller than 30 m are effective in many situations;
- A variety of site-specific conditions must be considered to delineate effective buffer widths including, but not limited to, the size of the natural feature, the nature of the adjacent land use, the desired buffer function, feature sensitivity and the local biophysical conditions;
- The Rouge North Management Plan was an early and formative effort to drive buffer width determination according to mitigating against tree fall and fire risk to adjacent structures. That approach blurs an ecological and human risk factors for the determination of buffers;
- The basis for 30 m buffers in several Ontario jurisdictions seems to be that risk avoidance measure to allow trees to fall at the edge of the NHS without impacting people and structures. (i.e., allowing a 30 me tall tree to fall, assuming a tree reaches maturity and that it will fall fully away from the forest edge). Rather than relying upon a treefall risk to determine buffer widths, it would be more appropriate to manage woodlands in settlement areas on an ongoing basis to optimize the health and diversity of a woodland (and its edges) and to mitigate potential risks;
- It's also notable that jurisdictions that require the reforestation of buffers are simply pushing the tree fall risk outwards in space and time into communities;
- The Ontario Ministry of Agriculture and Rural Affairs recommended riparian buffers along watercourses of ranging from 15 m to 30 m depending on the stream classification;

- Mandated or fixed-width buffers such as those proposed by Halton Region are often ineffective at mitigating impacts to natural features when applied as a generalized administrative measure, and they are often inefficient; and
- Castelle *et al.* (1994) concluded that narrower buffers (15 m) better maintain the physical and chemical characteristics of aquatic resources while larger buffers (30 m) function to sustain biological components.

A few observations and conclusions related to the detailed buffer research supported by Mattamy were:

- Existing buffers ranging between 5 m and 15 m were routinely observed during field investigations;
- The effectiveness of buffers was strongly linked to the ability to control human access to the buffer and adjacent protected areas;
- Properly implemented buffers can provide some mitigation to human use impacts in certain circumstances, but to effectively address these impacts over time, a more holistic approach to impact mitigation is required;
- Development itself (e.g., buildings, streets) can present an access barrier to the conserved features and associated functions;
- Access control and management are preferred strategies to supplement buffers in some cases larger buffers served to increase random access and increase impacts to conserved natural areas; and
- Buffers should not be used to address impacts that they cannot be reasonably expected to address. Buffers are one means of impact mitigation that can be supplemented with other complementary and supplementary measures (e.g., barrier design and implementation, effective trail design, pedestrian guidance/direction and domestic pet control).

Without literature or defensible studies to support a base 30 m buffer, a more appropriate approach would be to use the detailed scientific data generated through the refinement of the RNHS (e.g. Subwatershed Study, EIA) to inform appropriate buffer widths. Buffer widths should be based on the impacts that they are intended to address, and other mitigation should be considered if buffers are not the most appropriate form of mitigation to address the impact.

With no apparent rationale for a 30 m base buffer, the Region's Framework represents an unnecessary regulatory process that distracts from sound planning decisions that utilize the best available science related to potential impacts and appropriate mitigation. A buffer should be determined based on science rather than upon an arbitrary base buffer and unqualified risk ranking (as proposed by the Region). The Region's Buffer Framework offers no value to the planning process aside from being an administratively simple approach for the Region to implement that eliminates debate around the ecological value of a given buffer width.

4.1.7 What Can Occur Within the Region's NHS?

The potential acceptable uses in the Natural Heritage System lands and associated buffer needs more consideration and clarification. The Region, for example, reported that the Official Plan could provide explicit guidance on stormwater facilities in buffers (Regional Municipality of Halton, 2020c). The following uses should be permitted in the Natural Heritage System because they contribute to and supplement the natural features and functions in that system:

- Important infrastructure (e.g., stormwater management ponds and overland outlets);
- Recreational trails, boardwalks, viewing platforms, nature and interpretive centers; and
- Limited and localized parking and associated small scale infrastructure).

These and other potential uses should demonstrate that negative impacts will be minimized and/or where overall benefits can be achieved (including ecological, social, economic benefits).

Natural heritage areas and systems within and abutting Settlement Areas need to fully explore the context for and policy approaches to reconnect people and communities with nature. The World Health Organization reported in 2008, that there were already more people living in cities than in rural areas. In Halton Region, opportunities exist in natural heritage systems to improve the connectedness of people to nature through more progressive and innovative uses and activities, including:

- Forest Therapy Areas;
- Traditional and/or ceremonial uses in natural areas;
- Areas for mindful engagement with nature;
- Green recreation and sports;
- Nature Guardian programs;
- Research and monitoring;
- Care farms supporting mental health and nurturing resilience;
- Community horticulture and farming; and
- Community outdoor education and spiritual use.

It is also important to also address the interactions between people and nature that are not positive (e.g., Lyme disease, West Nile, and others that are moving north with climate change). Pfeiffer (2018) speaks clearly about Lyme disease, she calls it the first epidemic of climate change. Her book speaks to the developing understanding of the distribution of ticks, carrying the disease and the role played by migrating birds that depend upon many natural heritage systems as migratory flyways.

The occurrence of Lyme disease is spreading in Halton and in Ontario (Ontario Agency for Health Protection and Promotion 2019). The note on the Ontario Lyme Disease Map (2019) indicates that, "... while low there is a possibility of blacklegged ticks almost anywhere in the province, provided that the habitat is suitable for blacklegged ticks (e.g., woody or brushy areas)."

West Nile Virus is also present in Halton and in Ontario. Routine surveillance reporting identified 18 "positive mosquito pools in Halton during the week October 4 – October 10, 2020 (Public Health Ontario, 2020).

The Region's Natural Heritage Discussion Paper should introduce Natural Heritage System design principles and approaches, necessary to ensure human/nature interactions in Settlement Areas, are as safe as possible, including the consideration of practical measures including:

- Landscape design including natural and artificial barriers that will slow tick movements;
- Management of animal hosts for ticks (especially in settlement areas);
- Design review of stormwater management systems to minimize the opportunities for mosquito development and virus spread; and
- Active management of invasive plants.

4.1.8 Offsetting

The Province has lagged behind other jurisdictions that accept the removal of less important natural features in exchange for off-sets, compensation and/or mitigation banking. The inability to use off-sets, based upon Provincial standards and criteria has resulted in minor natural features and functions being studied extensively and retained, negatively impacting the ability to efficiently establish sustainable communities. Examples of those features could include disturbed, human-created features and younger features that are relatively easily replicated (e.g., immature woodlands and wetlands created from the abandonment of agricultural drainage systems and features).

The Regional Natural Heritage Paper needs to include appropriate considerations for exceptions to significance (for wetlands and other features) that can be addressed through alternative methods (e.g., off-setting, overall benefit and landscape agreements).

While not formally in place yet provincially, informal offsetting (to achieve a net ecological gain) has been used in North West Brampton. In that case, collaborative dialogue, supported by technical studies, allowed for practical discussions amongst the MNRF, the City of Brampton, Credit Valley Conservation Authority and private sector developers. Several small, disturbance origin and created wetland features were deemed not to be feasible to retain in the urbanizing landscape. Those features were determined to be better suited to removal and offsetting within a new NHS. Only after those decisions were made, did the MNRF then apply the OWES manual and approaches to the landscape.

That forward-thinking approach ensured no not net loss of wetland area, improved wetland functions, and allowed for more efficient and sustainable community development. Even in that

Based on a Review of the Regional Municipality of Halton Phase Two Natural Heritage Discussion Paper

case, the extensive resources and finances required to plan, design, create and monitor the enlarged Natural Heritage System, were consumed without the originally planned success. Parts of the new NHS were flooded by Beaver which decided to settle in. Much of the planted NHS was submerged and began on a new successional path. The province, in that case, choose to protect the re-established Beaver habitat instead of protecting the endangered Redside Dace habitat that the new NHS was to enlarge and enhance.

In other words, even with our best efforts to plan, design, implement and manage a new and/or expanded NHS, a few of Canada's largest rodents (and the second largest rodent globally) can disrupt the planned successional trajectory. Flexibility and adaptation need to be a key part of any NHS design.

Municipalities (and conservation authorities) tend to demand that all, natural areas be transferred at no cost to their jurisdictions, during the development process (without consideration for emerging economic credits for these lands e.g., carbon and biodiversity); this is an area that merits discussion in the Region's Natural Heritage Discussion Paper, in association with an assessment of the concept of offsetting to improve community sustainability.

Economic credits are well explained by Kumar (2010) in the importance of identifying the beneficiaries of ecosystem services and institutions and the different stakeholders. Kumar notes that those who are providing the services, those involved in or affected by the use, and those involved at different levels of decision-making, should be clearly identified in economic credit discussions.

The Region, Province and others should consider alternative approaches to the valuation and transfer of lands in the development process.

4.1.9 EIA Guidelines

On June 17, 2020 the Region of Halton Council endorsed the Environmental Impact Assessment Guidelines. These Guidelines are posted on the Region's website as a draft. Rather than providing detailed comments on the Draft Guidelines at this point, the following more general

Based on a Review of the Regional Municipality of Halton Phase Two Natural Heritage Discussion Paper

observations are provided for the Region's consideration. We expect that we may have additional comments depending upon discussions amongst the Region, Mattamy and Mattamy's professional consulting team.

The Draft EIA Guidelines generally follow the Province's approach, outlined in the now dated Natural Heritage Reference Manual (2010). It would seem reasonable that the Province should be taking the lead in the development of updated Provincial EIA/EIS guidelines that can be used by municipalities, with minor modifications to address local concerns and interests.

The NHRM (2010) notes: The second edition of the Natural Heritage Reference Manual (the manual) provides technical guidance for implementing the natural heritage policies of the Provincial Policy Statement. It also is recognized that some planning authorities may have limited planning resources. Nevertheless, the manual is intended to provide guidance that is adaptable to all communities in Ontario regardless of location. Planning authorities may adopt other approaches relevant to the local situation provided that they can be demonstrated to achieve or exceed the same objectives as those in the PPS.

It seems inefficient for individual municipalities to develop their own stand-alone guidance documents rather than building on the guidance provided in the NHRM. It's also evident that some conservation authorities have developed their own stand-alone guidance related to ecological studies (e.g., Conservation Halton, Guideline for Ecological Studies, August 2017).

Has the Region had dialogue with the Province to determine whether the Region's approach meets the Province's intent with the NHRM? It is not clear whether the NHRM is currently being updated, although it should be, as it now includes dated directions and approaches. The following specific points merit discussion amongst the Region, Province and other interested parties:

- Submission requirements should be clearly adjusted to accommodate on-line submissions in response to changes sparked by COVID-19;
- Regional Guidelines should not include the potential for the Region to verify the qualifications of persons who are involved in carrying out an EIA;

Based on a Review of the Regional Municipality of Halton Phase Two Natural Heritage Discussion Paper

- The proponent has the right to retain the team they deem suited to an assignment; it would be inappropriate for proponents to suggest that they be provided with confirmation of qualifications of government and agency review staff;
- In the absence of a provincial Impact Assessment (IA) certification program, the Region may choose to provide guidance to proponents about how to select a consulting team;
- If not already in place, the Region may choose to have representatives become members in select professional associations: e.g., International Association for Impact Assessment (IAIA) and the Ontario Association for Impact Assessment (OAIA); International Association for Landscape Ecology;
- Section 3.4 of the Region's Guidelines should be clarified in terms of understanding the landscape and the definition of a systems approach, in light of the comments provided earlier in this Technical Response Paper;
- Section 3.4.3 may require adjustments in response to the comments provided in this Technical Response Paper;
- Section 3.5 a) may include proprietary information and the Region should receive a final version of a proposal informed by the NHRM and any Regional guidelines that might be developed; private proponents may not feel comfortable engaging in a collaborative private/public design process, where proprietary approaches/information may be involved;
- Section 3.7, Enhancement Opportunities should provide clarity regarding the degree of enhancement required and how resources and costs for those enhancements will be attributed;
- Further, the following statement in section 3.7 should be explained: "...The Region may consider a "net environmental gain" approach to the preservation and enhancement of the RNHS...";

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- The following statement requires discussion and clarification: "... The conclusions should include a final recommendation to approve/not approve the development proposal based on the results of the study and identify conditions of approval required to achieve 'no negative impact' in accordance with the ROP. ...";
- More specifically, an EIA/EIS is typically not a planning report that provides planning opinions; Professional Planners have an obligation to ensure that a proposed development meets with all aspects of the PPS (2020), not just the natural heritage aspects addressed in an EIA/EIS;
- The Proponents and their teams are not the planning authority; the planning authority is responsible for approval or disapproval of a development proposal; and
- The development of conditions for a development approval may be a joint activity, depending upon the development application.

5.0 CONCLUDING REMARKS

We have appreciated the opportunity to review and comment on the Region of Halton's Natural Heritage Discussion Paper, and the related Draft Environmental Impact Assessment Guidelines.

The Natural Heritage Discussion Paper is detailed and builds upon earlier efforts, but it misses the opportunity to think differently and in a more advanced way about improving on traditional natural heritage system planning. In these troubled times of COVID-19 and associated social, political and economic distress, we collectively have an opportunity to think differently about how we conserve the most important natural heritage systems and how we effectively and efficiently incorporate natural heritage principles and practices within settlement areas.

We look forward to having productive and positive discussions regarding the Region's Natural Heritage Discussion Paper and how, to better link natural heritage matters into the other four Discussion Papers.

Report Prepared by:

Tom Hilditch Independent Environmental Expert

Based on a Review of the Regional Municipality of Halton Phase Two Natural Heritage Discussion Paper

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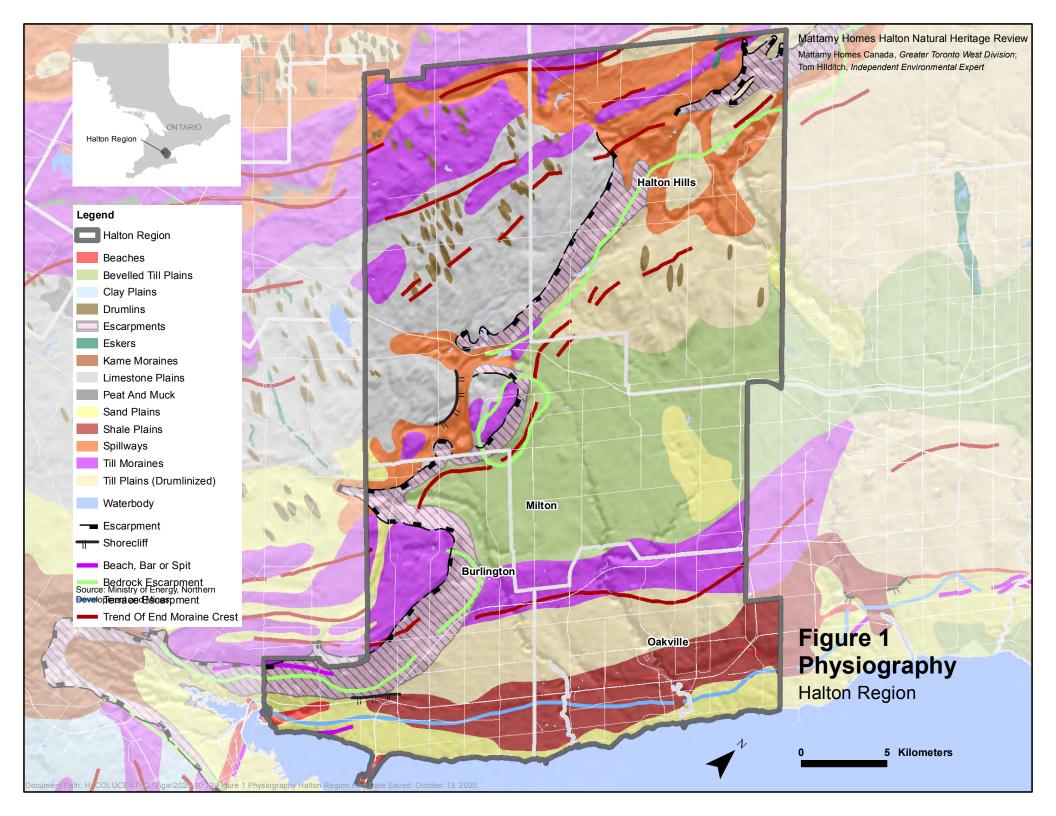
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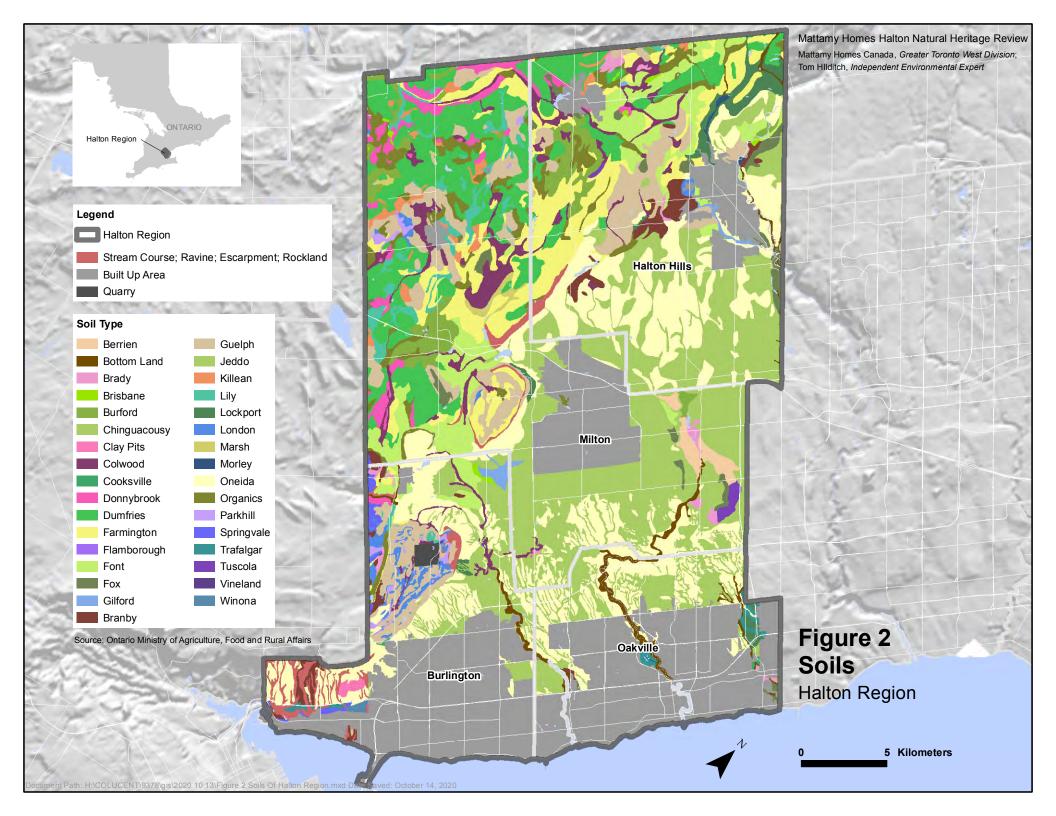
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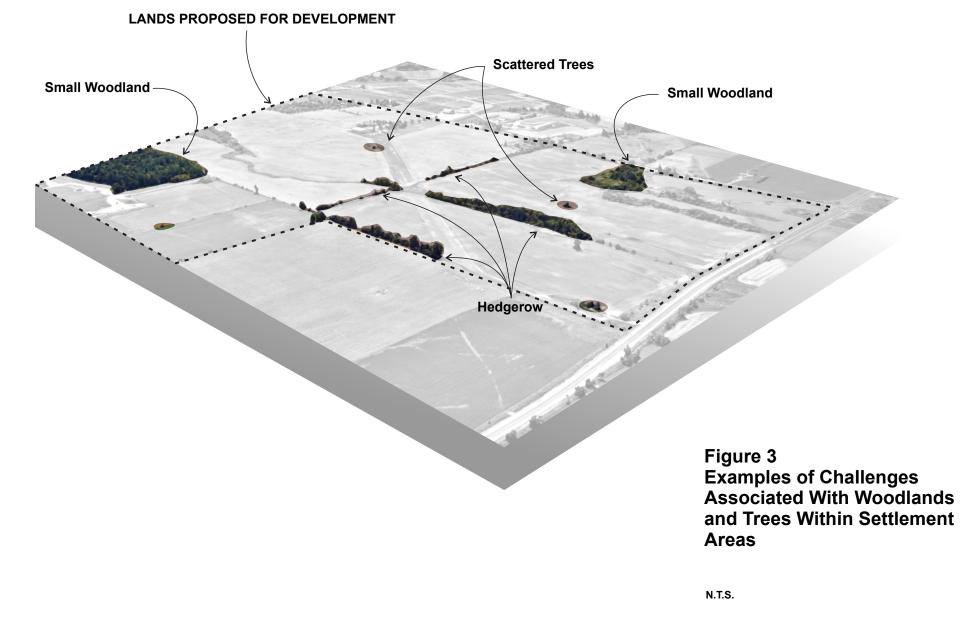
APPENDICES

Figures

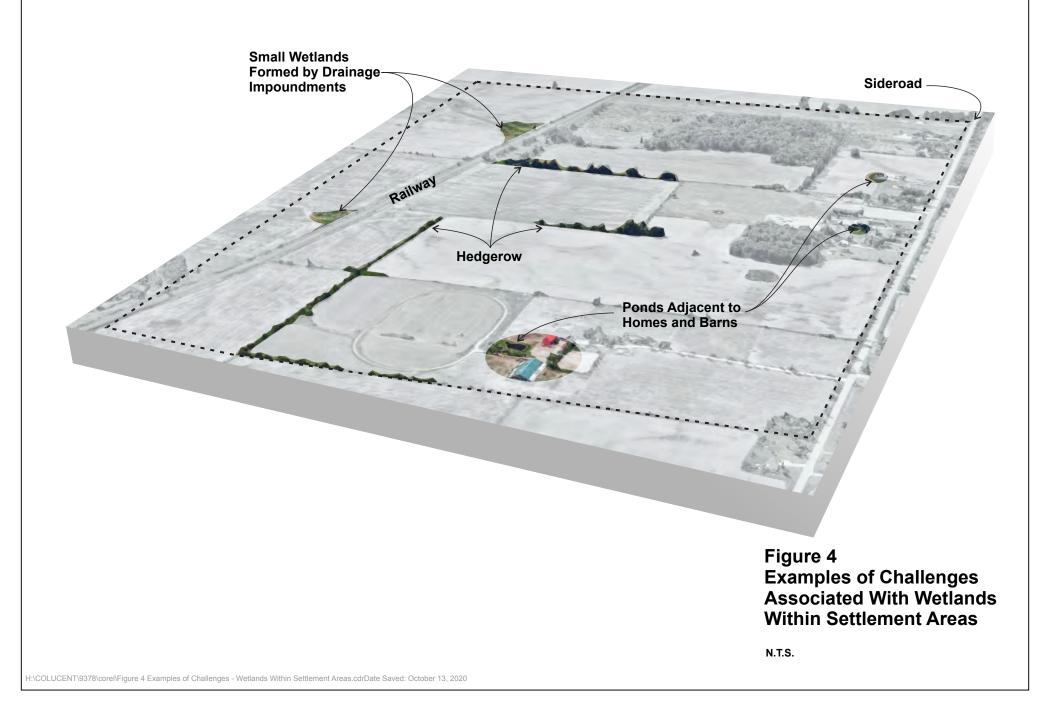


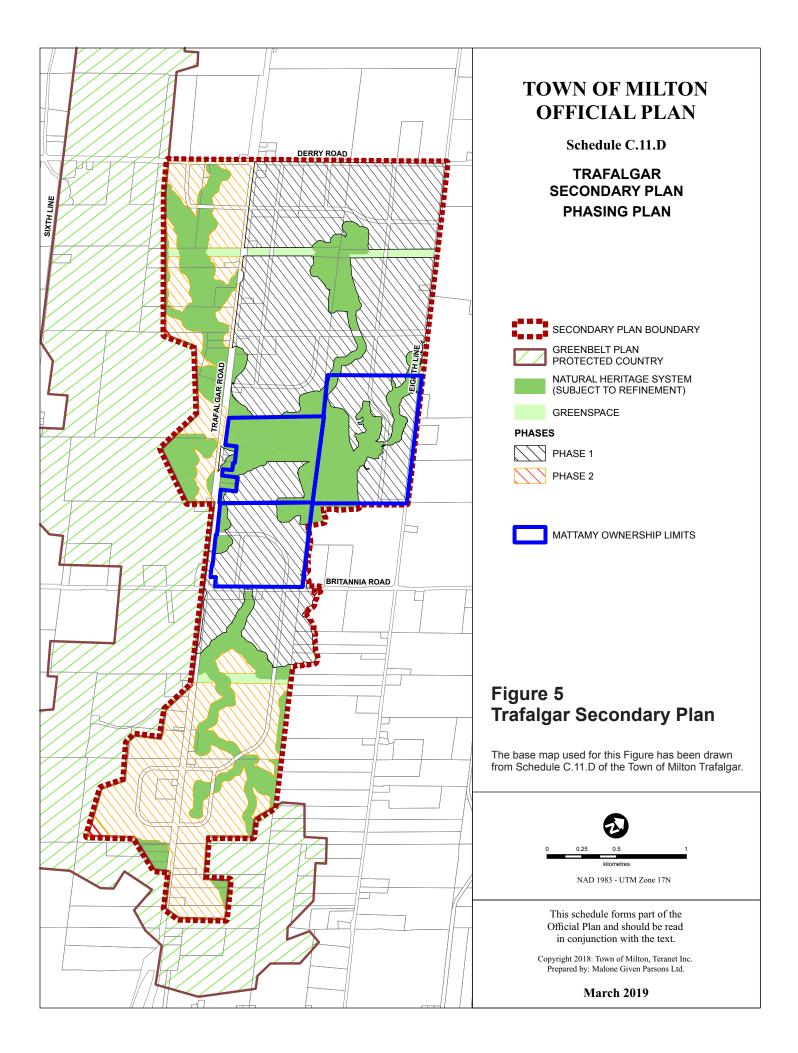


Mattamy Homes Halton Natural Heritage Review Mattamy Homes Canada, *Greater Toronto West Division* Tom Hllditch, *Independent Environmental Expert*



H:\COLUCENT\9378\core\\Figure 3 Examples of Challenges - Woodland and Trees Within Settlement Areas.cdr Date Saved: October 14, 2020





Attachment A – Minutes of Settlement

FX. 73

PL091166 PL111358 PL110857

ONTARIO MUNICIPAL BOARD Commission des affaires municipals de l'Ontario

IN THE MATTER OF Subsection 17(36) of the Planning Act, R.S.O. 1990, c. P. 13, as amended

Appellants:	See Attachment "1"
Subject:	Proposed Official Plan Amendment No. 37
Municipality	Regional Municipality of Halton
O.M.B. Case No .:	PL091166
O.M.B. File No .:	PL091166

IN THE MATTER OF Subsection 17(36) of the Planning Act, R.S.O. 1990, c. P. 13, as amended

Appellants:	See Attachment "1"
Subject:	Proposed Official Plan Amendment No. 38
Municipality	Regional Municipality of Halton
O.M.B. Case No .:	PL111358
O.M.B. File No.:	PL111358

IN THE MATTER OF Subsection 17(36) of the Planning Act, R.S.O. 1990, c. P. 13, as amended

Appellants: Subject: Municipality O.M.B. Case No .: O.M.B. File No .:

See Attachment "1" Proposed Official Plan Amendment No. 39 Regional Municipality of Halton PL110857 PL110857

MINUTES OF SETTLEMENT

BETWEEN:

THE REGIONAL MUNICIPALITY OF HALTON (hereinafter referred to as "Halton Region")

-and-

MATTAMY DEVELOPMENT CORPORATION (hereinafter referred to as the "Appellant")

WHEREAS in 2006 Council for Halton Region commenced a multi-year work plan called Sustainable Halton to bring the Regional Official Plan into conformity with the Province's Growth Plan and other provincial plans and to conduct a five-year review of the Regional Official Plan;

WHEREAS on June 3, 2009 Halton Region adopted Regional Official Plan Amendment No. 37 ("ROPA 37");

WHEREAS on November 27, 2009, the Minister of Municipal Affairs and Housing (the "MMAH") approved ROPA 37;

WHEREAS on December 16, 2009 Halton Region adopted Regional Official Plan Amendment No. 38 ("ROPA 38");

WHEREAS on November 29, 2010, the Ontario Municipal Board (the "Board") issued a decision on ROPA 37 that brought ROPA 37 into force and effect subject to appeals to certain subsections;

WHEREAS on July 13, 2011 Halton Region adopted Regional Official Plan Amendment No. 39 ("ROPA 39");

WHEREAS on July 22, 2011, Halton Region issued a Notice of Adoption for ROPA 39;

WHEREAS on November 24, 2011, the Minister of Municipal Affairs and Housing (the "MMAH") approved with modifications ROPA 38;

WHEREAS the Appellant filed appeals of ROPA 37, ROPA 38 and ROPA 39, identified by the Ontario Municipal Board (the "Board") as appeals No. PL091166 – 2, PL111358 – 16 and PL110857-6, respectively (the "Appeals") appealing certain subsections of ROPA 37 and appealing ROPA 38 and ROPA 39 in their entirety;

WHEREAS the Appellant is the owner of certain lands in Halton Region including lands in the Town of Milton within the area bounded by Derry Road to the north, Brittania Road to the south, 5th Line to the west and 6th Line to the east as shown on Exhibit "A" attached hereto (the "Kenborough Lands") and the owner of certain lands in the Town of Milton within the area bounded by Derry Road to the north, Brittania Road to the south, Trafalgar Road to the west and 8th Line to the east as shown on Exhibit "B" attached hereto (the "White Squadron/Renaissance Lands", collectively with the Kenborough Lands, the "Subject Lands");

WHEREAS the Appellant has completed a number of detailed scientific studies and is in the process of conducting further scientific studies on the Subject Lands to assess the natural heritage system ("NHS") features and their ecological functions on the Subject Lands;

WHEREAS Halton Region in the Sustainable Halton process identified certain lands within the area bounded by Derry Road to the north, Brittannia Road to the south, 5th Line to the west and 8h Line to the east including the Subject Lands as lands that, due to the unique location of NHS features and the scientific work done to date will result in future refinements to the final NHS designation in ROPA 38. Additionally, further scientific work on the Subject Lands in the form of Subwatershed Studies, Functional Stormwater and Environmental Management Studies, Environmental Impact Assessments and Subwatershed Impact Studies and/or similar studies based on terms of reference accepted by Halton Region, (collectively, "Additional Studies") may result in further refinements to the final NHS boundaries;

WHEREAS Halton Region and the MMAH negotiated additional modifications to ROPA 38 and such modifications are reflected in a revised and consolidated Regional Official Plan (the "Consolidated ROP") to be used for case management purposes only and filed as Exhibit 15 to these proceedings;

WHEREAS Halton Region and the other ROPA 38 parties through Board-assisted mediations negotiated additional modifications to the Consolidated ROP;

WHEREAS as a result of negotiations between the parties, the parties have agreed to resolve the Appeals on the terms and conditions contained herein;

NOW THEREFORE the parties in consideration of the mutual covenants set out below and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, agree as follows:

- The Subject Lands are to be designated as part of the Urban Area and Regional Natural Heritage System ("Regional NHS") as shown on Map 1 in ROPA 38 as adopted by Council.
- 2. The parties acknowledge that the Appellant has done detailed work toward achieving refinements to the Regional NHS boundaries as designated by ROPA 38 on the Subject Lands, in accordance with the proposed Section 116.1 of the Regional Official Plan. Attached hereto as Exhibit D. The lands and rationale for the refinements are described in the memorandum and as shown on the mapping attached to the memorandum prepared by Tom Hilditch of Savanta Inc., the Appellant's expert and Brent Tegler of North-South Environmental Inc. the Region's expert and attached hereto as Exhibit "C" (the "Consultants' Joint Memorandum").

- 3. The parties acknowledge that the Appellant has completed a series of detailed scientific studies that support the refinement of certain portions of the Subject Lands from the Regional NHS and the designation of those lands as Urban Area. The parties further acknowledge that there are opportunities to further refine the Regional NHS boundaries.
- 4. The Consultants' Joint Memorandum is based in part on the following six principles which are adopted by the parties for the purpose of these Minutes:
 - a. With the completion of detailed scientific investigation and study to date, it is clear that the principles and objectives that underlie the Regional Natural Heritage System can be achieved with the refinement of certain lands from the Natural Heritage System through the process outlined in Section 116.1.
 - b. The Regional NHS includes all floodplain areas. At this stage in the planning process it is not possible to make definitive statements regarding the size and location of floodplains in regard to the amount land that may be required for protection. It is recognized however that Additional Studies will determine the size and location of floodplains and the Regional NHS will be refined to reflect the outcome of the Additional Studies.
 - c. The Regional NHS includes enhancement areas. For the Subject Lands, enhancement areas as agreed to in the Consultant's Joint Memorandum are depicted on the mapping attached to the said Consultant's Joint Memorandum.
 - d. The Regional NHS includes a 30 m buffer from woodlands, wetlands and watercourses. Additional Studies may refine the final buffer width (ie increase or decrease) based on more information such as the type of adjacent development proposed and/or the sensitivity/significance of the feature(s).
 - e. The Regional NHS includes all watercourses within Conservation Authority Regulation Limits and some additional watercourses that provide important ecological connection corridors to isolated woodlands and/or wetlands but does not typically protect ephemeral streams in the urban context. It is recognized that Additional Studies will determine appropriate management strategies for watercourses and the Regional NHS will be refined to reflect these changes.
- 5. The parties jointly acknowledge that the Consultants' Joint Memorandum recognizes that as a result of the particular attributes of the Subject Lands and the scientific work done to date that portions of the Subject Lands can be refined from the Regional NHS

designation. These include, on Figure 1, the southern portion of Area A (identified with cross hatching) and the whole of Area B, and on Figure 2, the whole of Areas D and E as well as the area identified by cross hatching as "wetland without ecological function" on the eastern portion of these lands. The precise boundary between A and D and C and D will be ultimately defined through Additional Studies. Additionally, the Consultant's Joint Memorandum demonstrates that through Additional Studies in the development approval process including at the secondary plan level refinement to the Regional NHS boundaries on the Subject Lands may result as a consequence of appropriate application of the policies of ROPA 38. For the purpose of clarity the parties confirm that notwithstanding the significance of the size of these adjustments they qualify as 'refinements' within the meaning of that term in Section 116.1 as amended through the mediation process and set out in Exhibit "D" for ease of reference.

- 6. The parties acknowledge that as a result of the particular attributes of the Subject Lands and the scientific work done to date, there will be the refinement of portions of the Subject Lands from the Regional NHS and that future refinements to the Regional NHS boundaries on the Subject Lands following the completion of Additional Studies, will result in a net gain of land to the Urban Area when considering these lands alone, and that planning should proceed on that basis.
- 7. The Region advises that the land budget exercise as determined through the Sustainable Halton process was completed and accepted by the MMAH on the understanding that the refinements to Regional NHS boundaries in Halton Region through Additional Studies would produce a 'zero-sum gain' where the amount of land to be re-designated as Urban Area from Regional NHS would be balanced with the amount of land to be removed from the Urban Area.
- 8. it is acknowledged by the parties that the portions of the Subject Lands which have been identified through scientific study for removal in the Consultants' Joint Memorandum are appropriate to be redesignated from Regional NHS to Urban Area at the next Five Year Review of the Regional Official Plan (the "Next Five-Year Review").
- The Appellant undertakes to update Halton Region on the progress of the Additional Studies on the Subject Lands and the parties will continue assessing the impact of Additional Studies on the Urban Area.
- 10. Further, when Additional Studies are completed to the satisfaction of Halton Region, if they result in a net gain of land to the Urban Area which are not balanced by net loss

adjustments on other lands, the parties agree that Halton Region may, at its own discretion, withhold any approval of a Local Official Plan affecting these properties. However the Region acknowledges that these lands will be considered as part of the Next Five-Year Review through the Regional municipal comprehensive review process and in accordance with the applicable Regional Official Plan policies and provincial plans. For the purpose of clarity, nothing in these Minutes shall be taken as an agreement or acknowledgement on the part of Halton Region t at it is appropriate for those portions of the Subject Lands which are subject to Additional Studies, to be brought into the Urban Area in advance of the completion of those Additional Studies.

- 12. Notwithstanding the above Halton Region agrees that the Appellant may undertake Additional Studies that includes the Subject Lands and do all other things necessary to advance the application for development approval. Halton Region will review and comment on such work in the ordinary course notwithstanding the reservation respecting the land budget to be addressed as set out herein.
- 13. Halton Region acknowledges that the Next Five-Year Review will commence in 2014, subject to ROPA 37, ROPA 38 and ROPA 39 coming into force and effect in advance of the commencement of the Next Five-Year Review and subject to the provisions of Paragraph 14 below.
- 14. The parties recognize that Halton Region has no authority over additional requirements of provincial and federal jurisdictions, resulting from changes to environmental legislation or regulations or Board decisions that may affect the implementation of these Minutes.
- 15. The parties hereto shall jointly request, that the Board approve the modifications and additions to the Regional Official Plan, as set out in Exhibit E hereto.
- 16. Upon approval of the Board of these Minutes of Settlement, the Appellant agrees to withdraw its appeal of ROPAs 37, 38 and 39. The Appellant further agrees to advise, the Board that these Minutes are acceptable to them.
- 17. Nothing in these Minutes shall prejudice, limit or preclude Halton Region from adopting a new Official Plan pursuant to the five-year review or other comprehensive process or prevent the Appellant from appealing any such amendment subject to applicable rights of appeal.
- 18. The parties agree that these Minutes address all of the terms and conditions of their agreement and that there are no other written or oral terms which amend or modify or

otherwise affect the provisions of this agreement.

- 19. The Appellant agrees that these Minutes shall bind its successors and assigns.
- 20. The parties acknowledge and agree that these Minutes may be executed by their solicitors, respectively, in counterpart, and if so executed, these Minutes shall be of force and effect as if executed by the parties themselves.
- 21. The Parties agree and acknowledge that they shall each bear their own costs of the Appeals and of all matters contemplated by these Minutes of Settlement.
- 22. If any provision of these Minutes of Settlement or the application thereof to any circumstance is held to be invalid, illegal or unenforceable, then such invalidity, illegality or unenforceability shall attach only to such provisions and shall not affect any other provision of these Minutes of Settlement and where necessary shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein and the remaining provisions of these Minutes of Settlement or the application thereof to other circumstances shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.
- 23. These Minutes of Settlement are made pursuant to, shall be governed by and shall be construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable in Ontario.
- 24. These Minutes of Settlement may be signed in counterparts and the signatures delivered by facsimile or email transmission, each of which shall be deemed to be an original with the same effect as if the signatures thereto were upon the same instrument and delivered in person.

IN WITNESS WHEREOF the parties have executed this agreement by the hands of their duly authorized signing officers in that regard.

DATED this 27 day of September . 2013.

THE REGIONAL MUNICIPALITY OF HALTON, by its solicitors

MATTAMY DEVELOPMENT CORPORATION, by its - solicitors GARY GREGORIS PER:

TOR01: 5328302: v3

ATTACHMENT "1"

ListofAppellants

ROPA 37-OMB Case No. PL091166

- 1. Georgetown Shopping Centres Ltd.
- 2. Mattamy Development Corporation
- 3. Southwest Georgetown Landowners Group

ROPA 38 - OMB Case No. PL111358

- 1. 2220243 Ontario Inc.
- 2. Catholic Cemeteries of the Diocese of Hamilton
- City of Brampton (withdrawn)
- City of Burlington
- 5. Clay Brick Association of Canada
- 6. Conservation Halton
- 7. Crosswinds Golf & Country Club (1652152 Ontario Inc.)
- B. Don Johnson
- 9. Georgetown Shopping Centres Limited
- 10. Halton Region
- 11. Halton Region Federation of Agriculture
- 12. Holcim (Canada) Inc.
- 13. Joseph H. Richardson
- 14. Ken Woodruff (Stop Escarpment Highway Coalition)
- 15. Local 707 CAW (withdrawn)
- 16. Mattamy Development Corporation
- 17. Melrose Properties Inc. and Ironrose Investments Limited
- 18. Memorial Gardens Canada Limited
- 19. Milton Business Park II Landowners Group
- 20. Milton Phase 3 Landowners Group Inc.
- 21. Monte Carlo Inn (1071253 Ontario Limited) (withdrawn)
- 22. Munn's United Church
- 23. Nelson Aggregate Co.
- 24. Newmark Developments Limited and Rosko Investment and Development Limited
- 25. North Oakville Community Builders Inc.
- 26. Oak-Land Ford Lincoln
- 27. Ontario Stone, Sand & Gravel Association
- 28. Orlando Corporation
- 29. Paletta International Corporation and P&L Livestock Limited
- 30. Region of Peel (withdrawn)
- 31. Shipp Corporation Limited
- 32. South Georgetown Landowners Group
- 33. Southwest Georgetown Landowners Group
- 34. Sundial Homes (3rd Line) Limited and Sundial Homes (4¹h Line) Limited
- 35. Swiss Chalet (1137528 Ontario Limited) (withdrawn)
- 36. Town of Halton Hills
- 37. Town of Milton
- 38. Trafalgar Golf and Country Club
- 39. Trebbiano Trail Development, Orianna Glen Homes Corp., Sempronia Estate Inc. and Albanella Development Ltd., Mil Con Four Britannia Developments Limited & Mil Con Four

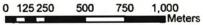
Thomson Developments Limited, Trinison Management Corp. and Fieldgate Developments

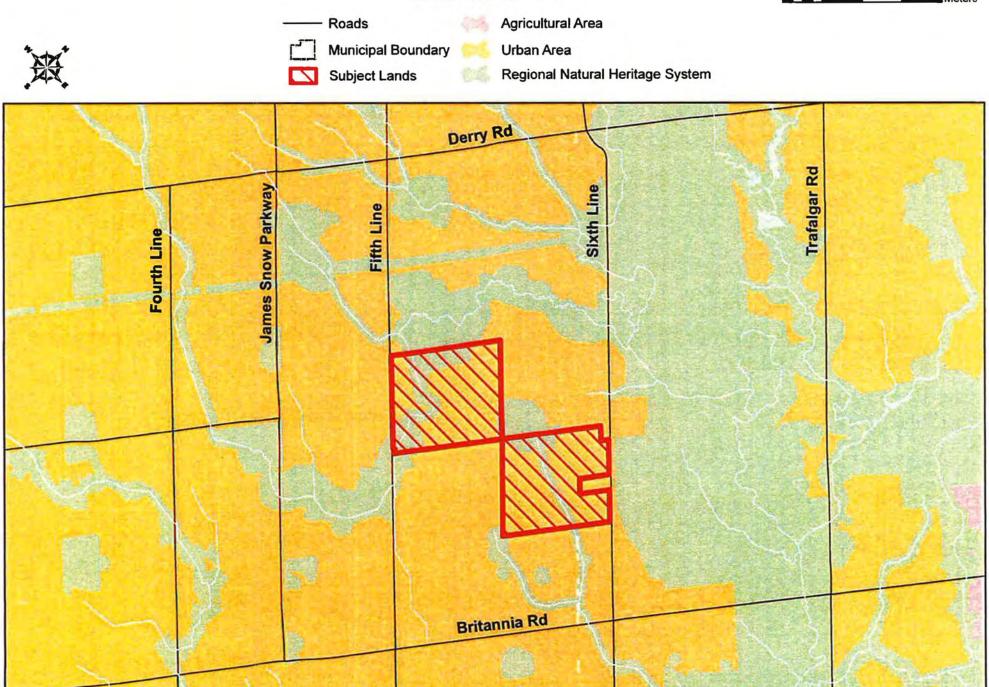
- · 40. TSIInternational Canada Inc.
- 41. United Parcel Services of Canada

ROPA 39 - OMB Case No. PL110857

- 1. 2220243 Ontario Inc.
- 2. Trinison Development Corporation and Fieldgate Developments Limited
- 3. Georgetown Country Properties Ltd. (withdrawn)
- 4. Georgetown Shopping Centres Limited
- 5. Lormel Developments (Georgetown) Ltd.
- 6. Mattamy Development Corporation
- 7. Milton Main Street Homes Ltd.
- 8. Orlando Corporation
- 9. Shelson Properties Ltd. and Caryville Construction Ltd.
- 10. Shipp Corporation Limited
- 11. South Georgetown Landowners Group
- 12. Southwest Georgetown Landowners Group
- 13. United Parcel Services of Canada

Exhibit "A"

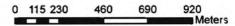


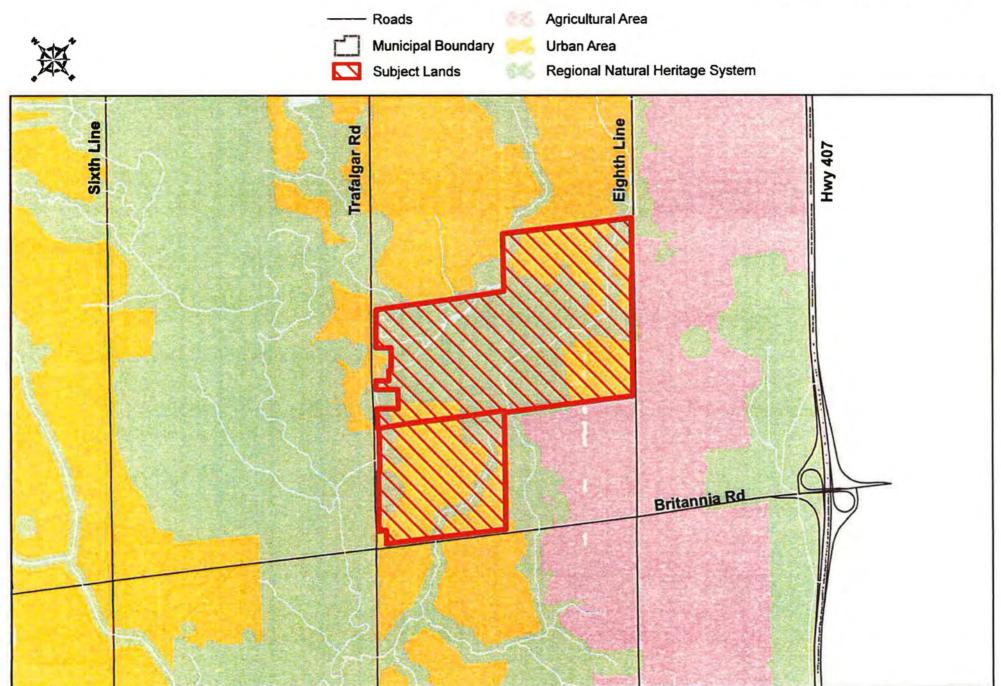


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Exhibit "C"

Consultants Joint Memorandum

This professional opinion letter has been prepared by B. Tegler (North-South Environmental Inc.), on behalf of the Region of Halton (the "Region") and T. Hilditch (Savanta Inc.) on behalf of Mattamy Development Corporation ("Mattamy"). It represents a summary of discussions regarding two blocks of land owned by Mattamy (hereafter referred to as the Kenborough and Renaissance/White Squadron Lands) and is provided in support of Minutes of Settlement between Mattamy and the Region.

Preamble

The following are key aspects of the Regional Natural Heritage System (RNHS) that were specific to the discussion between the consultants:

- As noted in the text below, some of the recommendations and assessments provided here will be informed and refined by future studies carried out in the normal course of land use planning, through additional studies such as Subwatershed Studies (SWS), Functional Stormwater and Environmental Management Studies (FSEMS), Environmental Impact Assessments (EIA) and Subwatershed Impact Studies (SIS) (the "Additional Studies").
- 2. The RNHS includes all floodplain areas. At this stage in the planning process it is not possible to make definitive statements regarding the size and location of floodplain in regard to the amount of land that may be required for protection. It is recognized however that Additional Studies will determine the size and location of floodplains and the RNHS will be modified to reflect these changes.
- The RNHS includes a 30 m buffer from woodlands, wetlands and watercourses. Additional Studies may refine the final buffer width based on more information such as the type of adjacent development proposed and/or the sensitivity/significance of the feature(s).
- 4. The RNHS includes all watercourses within Conservation Authority Regulation Limits and some additional watercourses that provide important ecological connection corridors to isolated woodlands and/or wetlands. It is recognized that Additional Studies will determine appropriate management strategies for watercourses and the RNHS will be modified to reflect these changes.

Kenborough Lands- Figure 1

The following opinions are provided regarding the northwestern and southeastern blocks of the Kenborough lands. Area specific comments are related to symbols for Areas A, B and C on Figure 1 (attached).

Northwestern Block

- B. Tegler and T. Hilditch agreed that an enhancement area at the northernmost portion of this block, which would serve to expand the existing wooded feature, would achieve useful ecological gains (Area A);
- Both agreed that in this particular location (Area A) the enhancement area does
 not require a buffer along its southern boundary, thus any buffers depicted south
 of this boundary can be removed;
- B. Tegler advocates a 30m buffer adjacent to woodlands, significant woodlands and wetlands as per his background report;
- T. Hilditch did not support the automatic 30m buffer application to all areas given the presence of detailed data available to input to these considerations; and
- B. Tegler and T. Hilditch acknowledged 30m buffers are subject to refinement through Additional Studies.

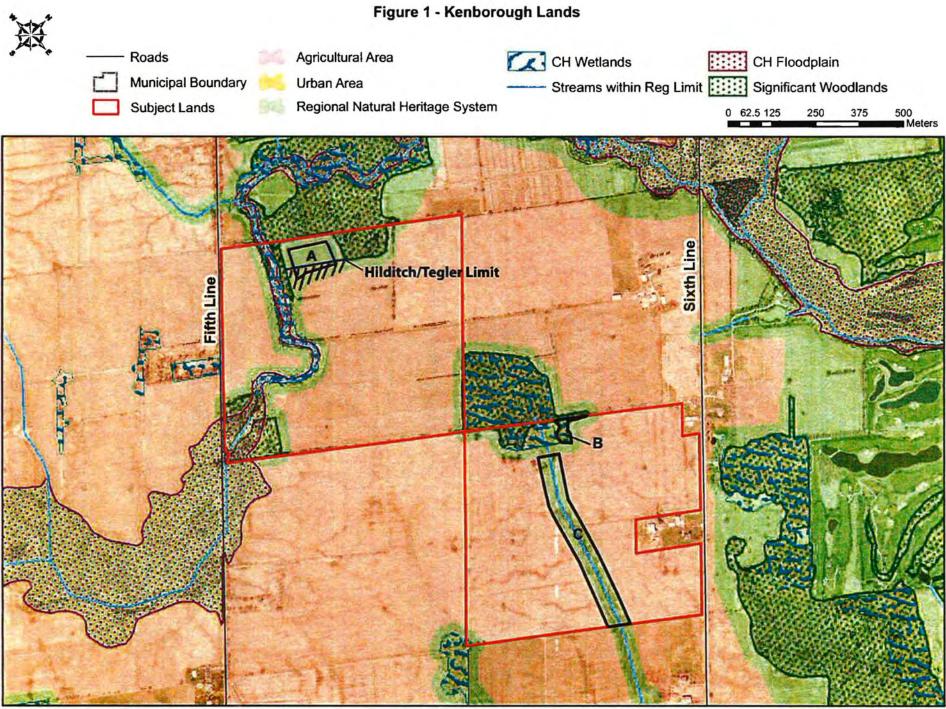
Southeastern Block

- B. Tegler agreed to an adjustment to a regionally significant woodland to exclude a hedgerow extension immediately east of the existing woodland/wetland, at the northern end of this block (and continuing outside Mattamy lands to the north) (Area B);
- B. Tegler and T. Hilditch acknowledged 30m buffers are subject to refinement through Additional Studies;
- Both gentlemen agreed that the watercourse across the southeastern block of the Mattamy lands appears to have limited functions (Area C);
- Savanta has determined through detailed assessments that this reach (Area C) meets the definition of ephemeral;
- Both agreed that if this feature (Area C) continues to be determined to be ephemeral through Additional Studies, that the feature will likely be flexible in terms of how it is treated on the landscape, including the potential for its complete removal;
- B. Tegler noted that this reach was identified within the RNHS for its apparent connectivity with the woodland and wetland at the upstream end of the feature;
- Both agreed that the ephemeral drainage feature (Area C) could be removed from the RNHS through Additional Studies so long as the woodland/wetland feature remains connected by an ecological linkage to the larger RNHS; and
- This connection may be along the riparian corridor to the south or it may be to the east or west of the feature, as determined through Additional Studies.

Renaissance/White Squadron Lands- Figure 2

Area specific comments are related to symbols for Areas A to F on Figure 2 (attached). B. Tegler presented a potential RNHS limit that would satisfy two key principles used to identify the core area enhancements within this portion of the RNHS:

- 1) Provision of enough mass to reach a minimum core area of 20 ha; and
- Provision of a block with a minimum width of 300 metres that would provide some potential interior habitat for area sensitive species;
- Both agreed that the proposed enhancement areas (Area A) would meet RNHS core principles of minimum core area and interior habitat (as noted above);
- Both agreed that the mapped floodplains would remain mapped as part of the RNHS (e.g., Area C) but that substantial changes could result through Additional Studies;
- Both agreed that as a result of changes to Area C that the proposed adjacent enhancement area (Area B) could also be eliminated as a result of Additional Studies;
- Both agreed that proposed enhancement area (Area D) could be removed from the RNHS based on proposed enhancement areas (Area A) meeting important core principles of minimum core area and interior habitat;
- Both agreed the small woodland patch (Area E) does not satisfy significant woodland criteria and could be removed from the RNHS;
- Savanta delineated the southern drainage feature (Area F) as ephemeral; North-South mapped this feature as a redundant ecological linkage and deemed it to be less important than the tributary to the immediate east;
- Both agreed that if this feature (Area F) continues to be determined to be ephemeral through Additional Studies that the feature will likely be flexible in terms of how it is treated on the landscape, including the potential for its complete removal;
- B. Tegler indicated that until Additional Studies are completed, a 30m general buffer is to be used for woodland, wetland and watercourse features with the exception of the larger, presently open enhancement area (Area A) which is already inclusive of buffers; and
- Both agreed that the lands on Figure 2 identified by cross-hatching can be removed from the RNHS (the cross-hatched area provides no linkage to the east and wetland features are not provincially significant or ecologically important).



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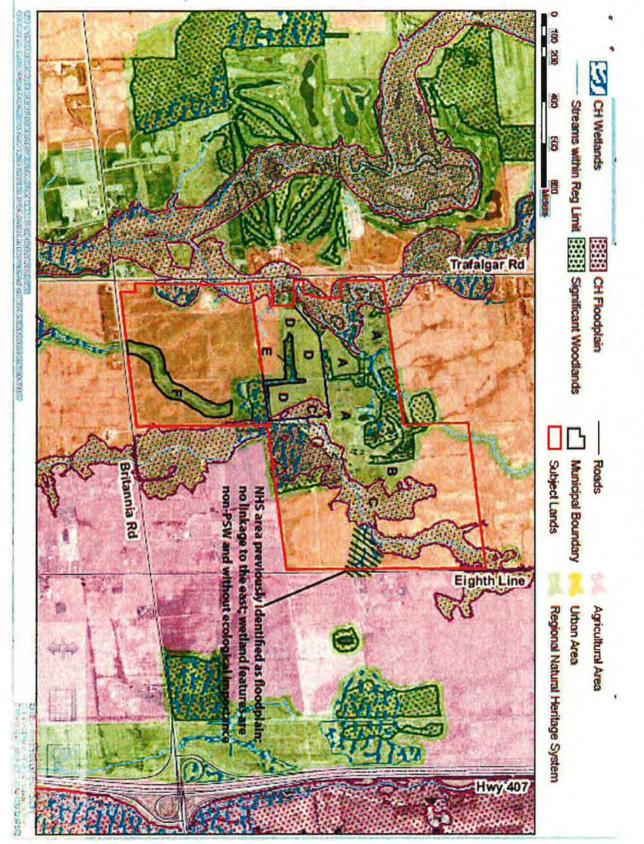


Figure 2 – White Squadron / Renaissance Lands

Exhibit "D"

The following Sections are from the Consolidated ROP as negotiated between Halton Region and the Province dated November 9, 2012 and filed as Exhibit 15 to these proceedings.

Halton Region's proposed modifications to a "clean" version of the Consolidated ROP include the deletion of certain wording shown in <u>blue strikethrough</u> and the inclusion of new wording shown in <u>blue underline</u>.

- 116.1 The mapping of certain components <u>boundaries</u> of the Regional Natural Heritage System may be updated <u>refined</u>, with additions, deletions and/or boundary adjustments, through:
 - a Sub-watershed study accepted by the Region and undertaken in the context of an Area Specific Plan;
 - b) an individual Environmental Impact Assessment accepted by the Region, as required by this Plan; or
 - c) similar studies based on terms of reference accepted by the Region. Once

approved through an approval process under the Planning Act, these refinements are in effect on the date of such approval programs of the Ministry of Natural Resources, *Conservation Authorities* and/or the *Region*. As well, the boundaries of the Regional Natural Heritage System and/or its Key Features may be refined through the preparation of Area Specific Plans, Sub-watershed studies or individual Environmental Impact Assessments, provided such refinements are based on established criteria recognized by the Province and Region. The *Region* will maintain mapping showing such <u>refinements</u> and incorporate them as part of the *Region*'s statutory review of its Official Plan, changes, provide notification to affected landowners, and incorporate them expeditiously by amendment to this Plan.

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 - a Sub-watershed study accepted by the Region and undertaken in the context of an Area Specific Plan;
 - b) an individual Environmental Impact Assessment accepted by the Region, as required by this Plan; or
 - c) similar studies based on terms of reference accepted by the Region. Once

approved through an approval process under the Planning Act, these refinements are in effect on the date of such approval programs of the Ministry of Natural Resources, *Conservation Authorities* and/or the *Region*. As well, the boundaries of the Regional Natural Heritage System and/or its Key Features may be refined through the preparation of Area-Specific Plans, Sub-watershed studies or individual Environmental Impact Assessments, provided such refinements are based on established criteria recognized by the Province and Region. The *Region* will maintain mapping showing such <u>refinements</u> and incorporate them as part of the *Region*'s statutory review of its Official Plan, changes, provide notification to affected landowners, and incorporate them expeditiously by amendment to this Plan.

Exhibit "E"

Minutes of Settlement between Mattamy Development Corporation and the Region of Halton dated September 27, 2013

The chart below shows additional modifications to the version of the Consolidated Regional Official Plan attached as Exhibit "F" to the Affidavit of Ho-Kwan Wong sworn August 8, 2013 in the Region's Supplementary Reply Motion Record dated August 8, 2013 that are agreed to between Mattamy Development Corporation and the Region of Halton.

Policy	Modifications
115.4(2)	"Regulated Flood Plains as determined, and mapped and refined from time to time by the appropriate Conservation Authority."
118(7)	"Obtain, or encourage the Local Municipalities, <i>Conservation Authorities</i> and other <i>public agencies</i> to obtain, through the <i>development</i> approval process and as permitted by legislation, parts of the Regional Natural Heritage System-and adjacent areas, the latter for the purpose of protecting the System from incompatible uses."
220.5	"CENTRE FOR BIODIVERISTY means an area that encompasses existing <i>natural heritage features</i> and associated enhancement areas <u>enhancements to the Key Features</u> and is of sufficient size, quality and diversity that it can support a wide range of native species and <i>ecological</i> <i>functions</i> , accommodate periodic local extinctions, natural patterns of disturbance and renewal and those species that are area sensitive, and provide sufficient habitat to support populations of native plants and animals in perpetuity."
233	"ESSENTIAL means that which is deemed necessary to the public interest after all alternatives have been considered and with respect to transportation and utility facilities, where applicable, as determined through the Environmental Assessment process."
256.2	"MAJOR CREEK OR CERTAIN HEADWATER CREEK means, as it applies to Section 277(4) of this Plan, all <i>watercourses</i> within a <i>Conservation Authority</i> Regulation Limit as of the date of the adoption of this Plan and those portions of a <i>watercourse</i> that extend beyond the limit of the <i>Conservation Authority</i> Regulation Limit to connect a <i>woodland</i> considered <i>significant</i> based on criteria under Section 277(1), 277(2) or 277(3) and/or <i>wetland</i> feature within the Regional Natural Heritage System. The extent and location of <i>major creeks or certain headwater</i> <i>creeks</i> will be updated from time to time by the appropriate <i>Conservation</i>

	Authority and as a result may lead to refinements to the boundaries of significant woodlands."
	Significant wooddanas.
141(8)	(New) " <u>141(8)</u> Encourage opportunities for the consideration and use of alternative engineering standards to promote sustainability and more efficient use of resources."
184(3)	"If a plan of subdivision or part thereof has been registered for 8 years or more and does not conform to the Growth Plan principles and objectives, the Region may request the Local Municipality to use its authority under section 50(4) of the Planning Act to deem it not to be a registered plan of subdivision, where construction or installation of Regional water, waste water and roads or Local services has not commenced."
77(2.3)	Through amendment to this Plan, implement, without impacting the Region's commitments related to the financial and implementation plan under Section 77(17), a strategy to redress any significant deficits under Section 77(2.2)c) that may include one or more of the following measures a) updating the assignment of housing units to the Built-Up Area under Section 77(1)e) for the period between the current year and 2031 while maintaining the intensification targets of Table 2;
	 b) limiting the annual number of new housing units occurring in the <i>Designated Greenfield Area</i> based on forecasts under Section 77(1)e); c) requiring, once the limit under Section 77(2.3)b) is reached in any year, Local Municipalities to consider only approval of joint
	applications for <i>development</i> from both the <i>Built-Up Area</i> and the <i>Designated Greenfield Area</i> that deliver a minimum of 40 per cent of new units in the <i>Built-Up Area</i> ; and/or
	d) in consultation with the Local Municipalities and the <i>development</i> industry, investigating incentives to promote <i>intensification</i> and seek Provincial assistance, financial or otherwise, to support such incentives.
77(16)	Require the Local Municipalities to phase <i>development</i> to the year 2031 in accordance with Map 5, Regional Phasing Map, Table 2a Regional Phasing, and the <i>policies</i> of this Plan. The progression from one phase to the subsequent phase within a municipality is independent for each municipality and is also independent for employment and residential lands The preparation, processing and approval of large scale plans such as <i>Area</i> <i>Specific Plans</i> , and the preparation and processing of Zoning By-laws and the processing of planning applications for <u>site-specific development</u> , such

	as applications for draft plan of subdivision approval on lands in the 2021- 2031 phase on Map 5 can proceed prior to 2021 but must be in accordance with Section 77(17).
Map 4	Amend the legend to add a reference to Proposed Minor Arterial

TAB 3

October 22, 2020

Gary Gregoris Senior Vice-President, Land Operations Mattamy Homes Limited 433 Steeles Avenue East, Suite 110 Milton, Ontario L9T 8Z4

Dear Mr. Gregoris:

RE: Response to Halton Region Urban Structure Discussion Paper

You have asked urbanMetrics to provide commentary with regards to the Urban Structure Discussion paper released in June, 2020 as part of the Halton Region Integrated Growth Management Strategy (IGMS). In addition, we have also provided commentary on how the recent amendment to the Growth Plan finalized in August will impact the IGMS and the direction of the Urban Structure Discussion Paper.

urbanMetrics

Recent Amendments to the Growth Plan means components of the Region's IGMS must be re-visited

After proposing a number of changes to the Provincial Growth Plan in June and subsequently receiving public feedback, the Province announced the finalized version of the Amendment on August 28, 2020. Among the changes that will go into effect, several have direct implications on Halton's IGMS, including:

- Extending the Planning Horizon to 2051. The work to date including the Region's Growth Scenarios report was based on projections only to 2041 as per the 2019 Growth Plan in effect at the time. The added time frame means that the Region will have to plan to accommodate more population and employment than it had previously considered.
- Flexibility to Increase the Growth Plan Population and Employment Targets. The IGMS Scenarios Report prepared growth scenarios based on a fixed population. The amended

Growth Plan now considers the population and employment forecasts as "minimums" rather than "targets", which can be increased by the Region through a municipal comprehensive review.

- **Updated Population and Employment Projections.** Schedule 3 of the Growth Plan now only includes population and employment forecasts to 2051. The IGMS work was based on the previous projections for 2031 and 2041 from the 2019 Growth Plan.
- Updated Market Based Land Needs Methodology The methodology used in the IGMS work tended to reflect desired policy outcomes with minimal emphasis on market demand and supply parameters, which is a required component of the updated methodology.

It should be noted that there are no transition provisions provided in the Province's Amendments to the Growth Plan and as such, the Halton Region MCR (like all other Regions MCR's) is required to consider and conform to these changes. As such the Region is likely faced with having to reconsider and redo some of its previous IGMS work.

Questions Posed by the IGMS Structure Report

The IGMS Structure Report poses some 15 questions to be addressed during the IGMS process. Some of the most relevant to Mattamy Homes given its various land holdings in the Region, include:

Discussion Question 6: Building on the 2041 Preliminary Recommended Network from the Define Major Transit Requirements, should corridors be identified as Strategic Growth Areas in the Regional Official Plan? If so, should a specific minimum density target be assigned to them?

It is important to consider that the Growth Plan identifies Urban Growth Centres, Priority Transit Corridors and Major Transit Station Areas as the highest areas of intensification with the highest priority. The vast majority of corridors identified in the Halton Official Plan are not included in the Growth Plan. While this does not mean that Halton cannot plan for higher densities along its corridors, it does mean that if doing so, the Region must ensure that sufficient market for higher density housing exists so as not to impede the development of these higher priority areas.

Many growing parts of the Region, such as North Oakville, do not contain any Urban Growth Centres, Higher Order Transit Corridors or Major Transit Station Areas, which are the highest priority intensification nodes with the highest density targets as per the Growth Plan. Considering corridors in these and other areas as Strategic Growth Areas, should be done with a full comprehension of the market for higher density uses in the Region and its various communities.



Strategic Growth Areas along corridors should only be established after an understanding of (a) how they would impact the ability of higher order intensification areas to achieve their targeted densities; (b) whether there is sufficient market to support additional density along the corridors; (c) how additional density can physically be accommodated within the context of approved and emerging Secondary Plan Areas.

Discussion Question 7: Should the Regional Official Plan identify additional multi-purpose and minor arterial roads in the Regional Urban Structure, not for the purposes of directing growth, but to support a higher order Regional transit network

According to the Structure report, multi-purpose and Minor Arterial roads in the Region have the potential to be considered as part of the Regional Urban Structure as a focus for growth and intensification (depending on the urban context) or for long term protection to support a high-frequency transit function.

Whether multi-purpose and/or Minor Arterial Roads should be so considered for additional growth is a question that would depend, in part, on the densities required to support higher order Regional transit in a particular area, as well as, the impact of this additional growth on the existing policies by the local municipalities. Furthermore, the permission or planning of additional density along Minor Arterial Roads which are typically situated within or in proximity to planned or established low rise stable neighbourhoods must be properly assessed. This juxtaposition of density and built form creates both real and perceived land use impacts. Finally, the implementation of additional development along Minor Arterial Roads often conflicts with other equally important planning objectives, such as: restrictions on direct access; over-sizing of lots; the requirement for rear lane or rear loaded housing forms; the need to accommodate on-street parking; transit stops and bus movements; traffic calming strategies; turning circles and road design; conflicts with sidewalks; multi-purpose pedestrian corridors and bike lanes.

As an example of the impact of such a move on local policies, we would also note that in OPA 321, the Town of Oakville removed singles, semi-detached and duplex units from its definition of "Medium Density" development. Incorporating additional Medium Density development along Minor Arterial and multi-purpose roads would further constrain opportunities for these housing types, which are important in terms of accommodating housing choice and diversity.

In summary, the question cannot be answered as posed. The only way to support transit along these corridors is through the direction of planning for growth. This approach to land planning has implications (some which are extremely negative) to place making and good community building principles.



Discussion Question 14: Are there other factors, besides those required by the Growth Plan, Regional Official Plan or the Integrated Growth Management Strategy Evaluation Framework that Halton Region should consider when evaluating the appropriate location for potential Settlement Area expansions?

As discussed above, the Growth Plan and the recent changes to it require a number of new considerations that were not anticipated or mandated: such as the change in the planning horizon; the new population and employment forecasts; the definition of the forecasts as being minimum thresholds not targets; and, that the housing market be examined as part of the growth management exercise and land budget methodology. To a large extent, the proposed scenarios and the Region's Assessment Criteria shown on Figure 25 of the Structure Report to be used to evaluate the need for a Settlement Boundary expansion and where it should occur omits any aspect of market consideration. The criteria are focused entirely on desired policy outcomes and not on whether a growth strategy could be supported by market trends or what the potential adverse impacts would be on the regional economy, consumer residential housing decisions and housing affordability of adjusting the housing mix and supply in the Region.

The current version of the Growth Plan requires that the "The GGH will have sufficient housing supply that reflects market demand and what is needed in local communities" and also indicates that "It is important to optimize the use of the existing urban land supply as well as the existing building and housing stock to avoid over-designating land for future urban development while also providing flexibility for local decision-makers to respond to housing need and market demand".

The Amendment to the Growth Plan also requires that municipalities use a revised methodology to determine their land needs:

Recognizing that local needs are diverse, the proposed new Methodology aims to provide the key factors to be considered as municipalities plan to ensure that a sufficient and appropriate mix of land is available to: accommodate all housing market segments; avoid housing shortages; consider market demand; accommodate all employment types, including those that are evolving; and plan for all infrastructure services that are needed to meet complete communities objectives to the horizon of the Plan...

The proposed Methodology will provide more flexibility to municipalities. It will also be forward-looking and account for demographics, employment trends, market demand, and concerns related to housing affordability in the Greater Golden Horseshoe².



² Environmental Registry of Ontario (ERO) Number – 019-1679.

In our opinion, the proposed changes to the Growth Plan reinforce the need of municipalities to consider market demand in their application of the population and employment forecasts and in the preparation of municipal comprehensive reviews. While the Halton Growth Scenario's work does contain a number of paragraphs addressing market conditions, the Assessment criteria shown in Figure 25 of the Structure Report used to determine where expansion should occur contains no mention of market as a factor.

The Scenarios report also acknowledges that the IGMS work is seeking to manipulate historic market trends rather than planning to accommodate them within the broader policy context:

Planning for the GGH, including Halton, seeks to profoundly change these historical patterns, by introducing far more apartments into the broader housing market as well as within local market areas, including Halton. This planned shift in the range and mix of housing underlies much of the IGMS work and long-term growth planning in Halton³.

Very little discussion is contained in the IGMS work with regards to the economic impact of this market manipulation and the need to plan for complete communities that reflect the appropriate balance of housing types. Planning for a mix and range of housing forms in a variety of location to satisfy all facets of consumer choice and preference is a tenant of good public policy making and a requirement of all relevant and applicable legislation and planning policy. This has been reinforced in the August Growth Plan amendment which requires consideration of market demand. Essentially, in the statement above the Region through aspirational policy statement is ignoring the need to plan in the short and long term for housing and neighbourhoods that are both resilient and complete. Arguably, the Region's proposition is that traditional housing forms for families are less of a priority than other housing forms that cater to other segments of the community and marketplace.

Of particular concern, is the potential to over-designate lands for apartment development, which is inherent in policies related to infill development, Urban Growth Centres, Major Transit Station Areas, Intensification Corridors, as well as, propositions in the Structure Report for minimum density targets along Corridors and to direct growth to multi-purpose and minor arterial roads. While the Growth Plan does contain specific density and intensification targets which must be met, the 2020 Growth Plan policies also require a balanced approach to the housing mix with a consideration of market needs to avoid overbuilding a particular housing type.

It is important to recognize that there seems to be a common misconception that apartment units are universally more affordable than ground related housing. This, however, is only true



³ IGMS Scenarios report p. 27.

when apartments are constructed at sizes much smaller than ground related units. This is because the cost to construct an apartment unit with surface parking is about 60% to 70% more on a square foot basis than a townhome or single detached house and the construction cost of an apartment with underground parking is approximately double the cost per square foot of a ground related unit. These cost differentials are directly reflected in the purchase prices of apartments and ground related units. Based on research conducted by urbanMetrics in November 2019, a new three-bedroom apartment in Oakville's Uptown Core of approximately 1,000 square feet was selling for an average of approximately \$940,000, compared to about \$800,000 for a much larger 1,800 square foot new townhome in a greenfield site in Milton.

While apartment units may be a more affordable option for singles and couples for whom smaller housing space is manageable, apartments become decidedly less affordable for families with greater space needs.

Key questions that need to be addressed in the IGMS work are:

- To what extent does excessive apartment approvals limit the options available to home buyers, further reducing the affordability of ground related units and causing increased movement to the fringes of the urban area?
- Are large amounts of high-rise apartment development a feasible alternative for ground related housing
- What is the most appropriate balance between apartment development and ground related housing, recognizing both the policy goals of intensification and the economic impacts of constraining the supply of ground related housing?
- How can market analysis best be accommodated within the IGMS framework going forward?
- And finally, how is the Region's Allocation Program going to be considered. Will housing
 policies skewed towards apartments be economically viable? How will local
 municipalities and the Region afford to pay for infrastructure if the market for
 apartments does not materialise or take up is much slower due to oversupply? Finally,
 how is the basic land economics of high-rise developments (which are extremely capital
 intensive) being considered in a system that requires substantial front-end finance to
 meet the Region's principle that growth must pay for growth? If priority is given to
 high-rise developments over grade-related housing how will parkland and school sites
 be obtained?

Furthermore, the long-term implications of COVID-19 on daily working and living patterns needs to be more fully assessed as part of the IGMS work. For example, COVID-19 has demonstrated that working from home is a viable option for a large portion of the office-based work force. To what extent will this workforce return to the previous 9-5, five-day a week pre-



COVID model? And to what extent will families be willing to trade commuting time for larger home spaces from which to work, raise their children and undertake other household activities. There is already evidence that housing consumers are moving away from small apartments and gravitating to ground related units in suburban and exurban locations. While there is still a lot that is unknown with regards to the post-COVID world, it is not sufficient to simply assume that patterns of urbanisation will return to normal.

Discussion Question 15: What factors are important for the Region to consider in setting a minimum Designated Greenfield Area (DGA) density target for Halton Region as whole, and for each of the Local Municipalities? Should the Region use a higher minimum Designated Greenfield Area density target than the 50 residents and jobs per hectare target in the Growth Plan?

Halton Region as a whole, and many of its new communities, will likely already exceed the Greenfield Area density of 50 residents and jobs per hectare as mandated in the Growth Plan and will also likely exceed 60 persons and jobs per hectare. If the Region chooses to plan to exceed the provincially mandated target or apply distinct density targets to individual municipalities, it will be for local reasons and not to achieve the Provincial targets.

In our opinion, the criteria outlined on Figure 25 of the Structure report provide a good policy lens from which to assess where and how the Region should grow. However, the Growth Plan still requires that a market lens be applied to arrive at an ultimate decision. For example, the four scenarios under consideration in the Scenarios report provide for very different housing options which would appeal to different markets. The principal trade-offs between the four options relate to how many units to develop in new Greenfield Areas (mostly ground related); to be added to the existing Greenfield Areas (exclusively apartments); and to be developed within the Built Boundary (mostly apartments). A family that may be seeking a ground related unit in a new Greenfield Area in Milton, for example, would have a completely different set of housing needs than a person or family that may choose to live in an apartment along the Trafalgar Road Corridor or the Oakville Midtown Core. Without an understanding of the housing market, it would not be possible to arrive at a realistic allocation between very different areas and unit types.

For this reason, we would strongly recommend that in assessing density targets and unit allocations, that the Region undertake a market analysis to inform its decisions.

Conclusions

In summary, the changes to the Growth Plan should require the Region to reconsider the Scenarios it originally proposed in its Scenarios report, as they no longer reflect the changes to the Growth Plan and the revised population and employment forecasts. It is also essential that the Region adopt a



market focused methodology in determining its land needs and allocating future development to its area municipalities.

The apparent aspirational policy statement noted above that the Region "seeks to profoundly change these historical patterns, by introducing far more apartments into the broader housing market as well as within local market areas,...." is troubling. This does not conform to the Growth Plan, which requires that the market must be recognized in planning for growth. High density residential being a panacea of community building needs to be re-evaluated. Planning for high density in the right location is good planning but formulating public policy that provides no balance within the realistic setting of the market place, consumer choice and the basic tenant of the Region's financial foundations for growth is not .

It was a pleasure to conduct this review on your behalf. If you have any questions, please do not hesitate to contact us.

Yours truly, urbanMetrics inc.

Rowan Faludi, MCIP, RPP, CMC, PLE Partner rfaludi@urbanMetrics.ca



TAB 4



October 29, 2020

Karen Ford, Vice President, Land Development Mattamy Homes Canada Greater Toronto West Division Office 433 Steeles Ave. East Suite 110 Milton, ON L9T 8Z4

Attention: Karen Ford

Re: Regional Official Plan Review Natural Heritage Discussion Paper Georgetown South Ltd. 14256 Sideroad 10 Town of Halton Hills

Savanta has been retained by Mattamy Homes to review the Regional Official Plan Review (ROPR) Draft 2019 Natural Heritage System (NHS) Mapping, specifically for the property located at 14256 Sideroad 10, Town of Halton Hills (herein referred to as the Subject Lands, **Figure 1**). The ROPA 38 Regional Natural Heritage System (RNHS) overlaps with this property. The Draft 2019 NHS also overlaps with this property; however, the Draft 2019 NHS has been refined through additions and removals.

This letter discusses both the existing RNHS and the Draft 2019 NHS, as well as recommendations on further refinements specific to the Subject Lands, while considering the system within the local landscape.

1. ROPA 38 REGIONAL NATURAL HERITAGE SYSTEM

The ROPA 38 RNHS mapped on the Subject Lands currently includes Key Features and Buffer/ Linkage/Enhancements in Prime Agriculture areas. Based on our understanding of the methods applied to create the RNHS, it is assumed that the Key Features consist of Wetlands/Significant Woodlands and a watercourse and associated floodplain. The Buffer/Linkage/Enhancements within Prime Agriculture areas include a 30 m buffer surrounding the Key Features, and the assumed linkage appears to follow a hydrologic feature.

2. DRAFT 2019 NATURAL HERITAGE SYSTEM

The Draft 2019 NHS mapping does not appear to have changed the Key Feature areas (though the draft mapping no longer calls the floodplain a Key Feature). Removals are shown along the edges of existing Buffer/Linkage/Enhancement components. Two Buffer/Linkage/Enhancement additions have also been included in the Draft 2019 NHS. These additions are discussed below.



One addition is a pie-shaped area (Polygon 1, **Figure 1**). This area is an assumed Buffer/ Linkage/Enhancement area to the RNHS, with a likely intent to connect the two Key Features.

The second addition is a linear area (Polygon 2, **Figure 1**) that is an assumed Linkage providing a second connection from the same Key Feature (assumed wetland/Significant Woodland) to an existing Buffer/Linkage/Enhancement area, south of the woodland.

3. NATURAL HERITAGE DISCUSSION PAPER – TECHNICAL REFINEMENT OF THE RNHS

The Natural Heritage Discussion Paper (NHDP; ROPR June 2020) provides a description of the technical process the Region applied when refining the RNHS. More specifically, Section 4.5 states:

The draft 2019 RNHS also utilized updated base data information available from the Province and conservation authorities to assemble the RNHS.... In addition to the base layers updates, a review of the NHS mapping was undertaken to recognize planning decisions and updated information since ROPA 38 and this includes OMB decisions, approved planning applications, special Council Permits and staff refinements based on in-field observations.

Based on this information, it is assumed that any additions to, or removals from, the RNHS would be based on current, approved and/or field verified data. However, upon review of the two additions to the RNHS, it appears that neither addition is supported by the refinement criteria identified in Section 4.5.

The addition of the pie-shaped area cannot be explained by any of the refinement justifications, given that the Subject Lands have not been a part of any planning application, nor are we aware of any in-field observations being conducted by the Region.

The other addition, the linear area, may be explained by the current Conservation Halton (CH) Hydrologic Connection data base layer. It is understood that the CH Hydrologic Connection data is created through a topographic mapping exercise; it is not verified through field data or aerial photographic interpretation. Therefore, it identifies and maps low areas. Even though it appears that this layer was used to identify Linkage areas, it is our understanding that no field verification of the Connections has occurred, and therefore the refinement criteria have not been met.

4. **RECOMMENDATIONS**

We recommend that both the pie-shaped addition and the linear linkage area should be removed from the Draft 2019 NHS due to not meeting any of the refinement criteria listed in the NHDP.

We trust this is of assistance. Please feel free to contact the undersigned should there be any need to discuss further.



Yours truly, SAVANTA INC. A GEI Company

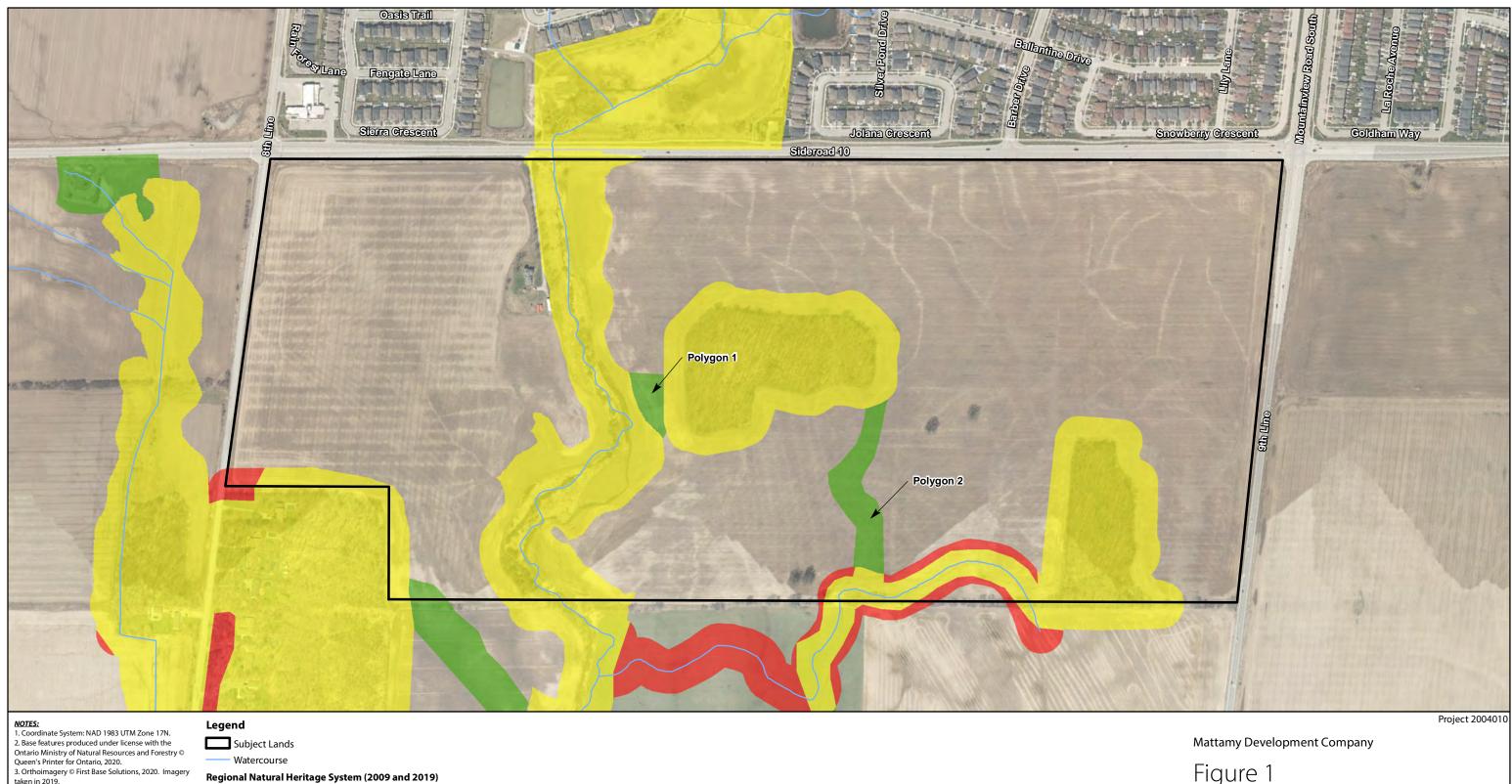
Shannon Catton Project Manager 226.971.0622 scatton@savanta.ca

Attachments (1)

- Figure 1

MBander

Noel Boucher Project Director 289.929.6951 nboucher@savanta.ca



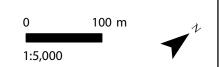
Base reatures produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2020.
 Orthoimagery © First Base Solutions, 2020. Imager taken in 2019.

- No Changes Added
- Removed

SAVANTA

Figure 1 Halton Region Natural Heritage System Review





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TAB 5



Scott Snider Professional Corporation 15 Bold Street Hamilton Ontario Canada L8P 1T3 Receptionist 905 529 3476 (905 LAW-FIRM) Facsimile 905 529 3663 ssnider@tmalaw.ca

January 2, 2020

Sent Via Email:

Region of Halton Attn: Curt Benson, Director of Planning 1151 Bronte Road, Oakville Ontario L6M 3L1

Dear Mr. Benson:

RE: Response to Integrated Growth Management Strategy Growth Scenarios Halton Region to 2041 Attachment #4 to LPS 41-19 Our File No. 13260

1.0 Introduction: Need for Engagement

I am writing to you on behalf of Mattamy Homes and associated companies.

Our clients have had the opportunity to review in detail the report on Integrated Growth Management Strategy Growth Scenarios: Halton Region to 2041 (IGMS). We have noted that there has been no formal consultation process with the development industry on the IGMS by the Region to date. On behalf of Mattamy, we wish to state that we are interested in meeting with Regional staff to discuss the report and the feedback set out below. It is our opinion that meaningful engagement throughout the process will assist in all voices being heard and a more successful outcome for the IGMS process. There are a number of questions and concerns with the approach and recommendations within the report which are set out below.

2.0 Growth Scenarios must be based on Approved Provincial Policy

It is acknowledged that over the past months that there is a changing Provincial Policy context that will continue to evolve over the period of the IGMS process. One of the challenges will be to ensure that the IGMS study process is robust and fluid enough to address these policies changes. One of the changes that has occurred and is now in effect is the amended Growth Plan.

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TURKSTRA MAZZA ASSOCIATES, LAWYERS

Attn: Mr. C. Benson January 2, 2020

Our clientssupport a growth scenario which is based on the current and in effect Growth Plan. Although we respect that the Region has been undertaking this study process over many months and the process started under the prior Growth Plan, new and in force policy must now be the basis for the Growth Scenarios. The previous Growth Plan which no longer has legal status as the basis for assessing Growth Scenarios is not appropriate.

3.0 Growth Scenarios must encourage complete communities including all forms and types of housing

The IGMS process envisions a significant change in built form and densities beyond that which the market currently or is anticipated to support. The report acknowledges the significant challenges and realistic possibility that desired housing form may not be aligned with market choices. It is essential that the IGMS plan and allow "complete" communities that fulfill all forms and tenures of households.

We also note that the new draft PPS refers to the provision of a market-based range and mix of housing. It is likely this new PPS will be in force and effect prior to the amendment implementing the IGMS comes forward and should be considered as part of the next step of the study process and the scenarios revised and amended accordingly. We suggest that the Region should further assess the Growth Scenarios as the provision of market-based housing will result in the need for more grade related housing.

The analysis is premised on the assumption that there will be a significant increase in apartmentbuilt form and that two thirds of all apartment units in the 2030's will accommodate larger family households. The report notes that this will be achieved by empty nesters moving from their homes to apartments and young families will choose to move to apartments instead of ground related housing. This does not reflect a market-based range and mix of housing nor does it provide complete communities providing a full range and mix of housing forms. Although the trend to apartment housing as a higher mix of housing stock will likely grow, it is not prudent planning policy to base the long term growth strategy on a mix of housing that does not reasonably account for a market-based range and mix of housing. We would recommend that as part of the next step of the IGMS process that a market-based growth scenario be developed for part of the evaluation process.

The IGMS report does indicate some of the challenges with the proposed growth strategies including the achievement of significant amounts of intensification. These include road, water and wastewater infrastructure deficiencies as well as parks, schools and other community uses. There needs to be a realistic assessment of the intensification areas as to their ability to accommodate growth proposed in the time frames anticipated and those assumptions factored into the IGMS process.

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5.0 Growth Number/Forecasts must be transparent

Our clients have undertaken a detailed review of the background information provided by the local municipalities regarding the capacity of the existing Designated Greenfield Area (DGA) to accommodate the projected growth. The vast majority of the numbers used within the IGMS report were verified through other reports completed at the local level. Unfortunately, we were not able to find any background documents that set out the Town of Oakville numbers. We therefore request that the Region provide the information provided by the Town of Oakville to support these and other numbers used in this report.

6.0 Re-evaluation of Growth Forecast to account for NHS adjustment

We noted that the report states that for all scenarios, the Natural Heritage System and Greenbelt boundaries were maintained as currently mapped. It is noted that any proposed changes to the NHS resulting from the ongoing NHS review as part this process would result in the need to reevaluate land supply and the potential land needs for urban expansions.

7.0 Growth must pay for Growth

Regarding the financial impact of the various scenarios we note that the report contains conflicting positions on this matter. Firstly, the report states that there are minimal differences in the financial impacts of the scenarios. The report then states that one of the challenges is the sequencing of development and the infrastructure requirements and investments. Financing of infrastructure is included in the criteria for evaluating the scenarios. We anticipate that each of the scenarios will have a differing order of magnitude regarding costing of the required infrastructure and would encourage the Region to assess and discuss this with the development community prior to proceeding with a preferred option.

8.0 Evaluation Criteria need to be re-evaluated to be less biased

Appendix C to the Report sets out the Evaluation Framework for the scenarios. The objectives are sound. The Evaluation questions set out a framework for considering the impacts of the scenarios. Improvements could be made to these questions to broaden the matters for consideration.

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The measures proposed for each of the objectives appear to be prejudicial and structured to predetermine the selection of one specific scenario by the Region. The use of the terminology "ranks the highest" in the measures does not allow for relative ranking of competing priorities as it only identifies what will be ranked the highest. One example is within Theme 1 "The concept that locates new residential development close to existing or potential priority corridors and provide opportunities for multimodal access will be ranked the highest" The measure is not clear in its language as to whether it is all new residential or only a portion of new residential to be evaluated under this measure. The measure does not consider the range and mix of housing and community design found within emerging areas and other priorities for urban structure. When one goes to the measures for complete communities, the only two measures related to protection of the NHS and Agriculture and contiguous development patterns. Building complete communities is a much broader concept then just these two measures. The language of the measures proposed is insufficient for a growth management evaluation process and need significant reconsideration prior to proceeding.

9.0 Summary

A growth management strategy must take into account planning policy directives and community and stakeholders' interests/views. Although the Region's work to date has considered some of this input, the lack of engagement with community builders is concerning along with apparent disregard of market conditions and trends. All involved desire safe and complete communities servicing the needs of existing and future residents. More weight must be given to these considerations to ensure an appropriate outcome.

We look forward to working with Region throughout this study process and further discussing the above points.

Yours truly,

Scott Snider

CC: Mark Simeoni, Director of Planning, Town of Oakville

SS:nd 13260/16

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