

NORTH BRANTFORD AND TUTELA HEIGHTS SUBWATERSHED STUDY UPDATE

ADDENDUM

Prepared by:
**Aquafor Beech
Limited**

28 Bett Court, Unit 300
Guelph, ON N1C 1B9

Reference #: 66955
May 2026
Addendum



CONTENTS

1	Introduction	1
2	Project Context and Timeline	1
3	Overview of Relevant Policy and Planning Changes	2
3.1	Fall 2023 - Tutela Heights West Block Plan	2
3.2	March 2024 - City of Brantford Official Plan and OPA 5	4
3.3	April 2024 - Grand River Conservation Authority O. Reg. 41/24	5
3.4	October 2024 - Ontario Provincial Planning Statement	5
3.5	August 2025 – GRCA Regulatory Floodplain Mapping Update	6
3.6	March 2026 - Ontario Species Conservation Act	7
4	Mapping Updates and Overlays.....	7
4.1	Floodplain Mapping	7
4.2	Core Natural Areas Overlays	8
4.2.1	North Brantford and Tutela Heights SWS.....	9
4.2.2	Tutela Heights West Block Plan Area.....	9
4.2.3	NHS Mapping Summary / Overlay	10
5	Summary and Conclusions.....	10

LIST OF FIGURES

Figure 1: Tutela Heights West Block Plan	3
Figure 2: City of Brantford Schedule 6 Natural Heritage System updated as a part of OPA 5	5
Figure 3: Floodplain Overlays.....	11
Figure 4: Core Natural Areas Overlays.....	12
Figure 5: North Brantford and Tutela Heights SWS Overlays.....	13
Figure 6: Tutela Heights West Block Plan Area Overlays.....	14
Figure 7: Consolidated Core Natural Areas.....	15

1 Introduction

The North Brantford and Tutela Heights Subwatershed Study (SWS) Update was initiated in 2021 in response to the expansion of the City of Brantford's settlement area, as the start of a multi-staged approach to fully characterize, evaluate, and implement recommendations for these subwatersheds. Phase 1 of this study, which was prepared by Aquafor Beech Limited (Aquafor) and submitted to the City in draft in late 2022, addressed the characterization of the subwatersheds and the analysis of constraints and opportunities. The components of the study included (but were not limited to): evaluation of natural heritage features through both analysis of existing data and the completion of a field survey program; and hydraulic modeling and associated floodplain mapping to define flood hazard lands along the major stream reaches. Following the draft report submission in late 2022, there was a review and comment period for the City, relevant agencies, stakeholders, and the public, with accompanying revisions to the draft report. The final SWS Phase 1 Report was submitted in December of 2024.

The North Brantford and Tutela Heights SWS Update - Phase 2 and 3 Report was subsequently written and submitted in draft by Aquafor in August of 2023. This report built upon Phase 1 and primarily addressed stormwater management recommendations, assessment of impacts, and plans for the implementation of recommendations. Following that submission was a similar review and comment period followed by accompanying revisions to the draft report. The final Phase 2 and 3 Report was approved by the Grand River Conservation Authority (GRCA) and the City in August of 2025.

During the course of the SWS's completion, there were various planning and policy changes, both in Ontario and on the local level, that came into effect. Given the advanced stage of completion on the SWS at that time, the draft reports were not edited to reflect the full scope of those changes. This SWS Addendum has therefore been prepared to summarize the applicable changes and to acknowledge that future studies and plans will appropriately be prepared to address the current status of planning and policy for their study area rather than what may be reflected in the SWS Reports.

2 Project Context and Timeline

The overall timeline that was followed for the completion of the SWS, plus related studies completed by others and relevant planning/policy changes that occurred concurrently, has been summarized as follows:

- **Fall 2021** – Aquafor was retained to complete the North Brantford and Tutela Heights SWS.
- **2021-2022** – Aquafor completed data collection and analysis for SWS Phase 1, including field investigations.
- **December 2022 - January 2023** – Draft Phase 1 SWS report was submitted to City and GRCA.

- **June 2023** – revised draft Phase 1 SWS report was submitted, addressing City and GRCA comments.
- **August 2023** – Draft Phase 2/3 SWS report was submitted to City.
- **Fall 2023** - Tutela Heights West Block Plan and associated Master Servicing Plan were completed by others.
- **November 2023** – Revised draft Phase 2/3 report submitted to City, addressing comments.
- **March 2024** – Ministerial approval was received for City of Brantford OPA 5.
- **April 2024** – Office Consolidation date for City of Brantford OP, incorporating OPA 5.
- **April 2024** – O. Reg. 41/24 replaced previous Conservation Authorities regulation.
- **October 2024** – New Provincial Planning Statement came into force.
- **December 2024** – Final Phase 1 SWS report was submitted to City.
- **August 2025** – GRCA integrated North Brantford and Tutela Heights SWS floodplain assessment results into their regulatory floodplain.
- **August 2025** – Final Phase 2/3 SWS report was approved by GRCA and City.
- **August 2025** – Current Office Consolidation date for City of Brantford OP.
- **March 2026** – Provincial *Endangered Species Act* was repealed and *Species Conservation Act* came into force.
- **April 2026** – Most recent version of GRCA’s Regulatory Floodplain posted on GRCA’s GIS Data Catalogue.

The municipal planning process is a complex, multi-stage undertaking where numerous studies are conducted simultaneously over several years. While the North Brantford and Tutela Heights SWS was developed during a period of shifting provincial and local policy, its technical foundations remain relevant. The discussed policy updates occurred primarily after the study area characterization was complete and the Phase 1 Report was submitted. At that stage, revising and resubmitting the foundational documents would have triggered additional comment periods and stalled the project's momentum. Consequently, it was determined that these documents would stand as is, with the explicit understanding that all subsequent planning and implementation phases (e.g., development applications, site plan preparation, completion of Environmental Impact Study, etc.) will integrate the most current policies and regulatory frameworks available at that time.

3 Overview of Relevant Policy and Planning Changes

3.1 Fall 2023 - Tutela Heights West Block Plan

The Tutela Heights West Block Plan (approved in fall 2023) and associated Master Servicing Plan (revised in fall 2023) were completed by Arcadis Professional Services (Canada) Inc. for the Mt. Pleasant Landowner Group Inc. The Block Plan area is bounded by Mount Pleasant Rd, Conklin Rd, and Lake Erie and Northern Electric Railway (L.E. &N. Rail Trail). As a part of the Block Plan, an EIS was completed by Beacon Environmental in 2023. As a part of the EIS, site-specific studies were completed to refine the Core Natural Areas within and adjacent to the Block Plan area.

[illegible]

The Block Plan site-specific investigations were completed concurrent with the North Brantford and Tutela Heights SWS. The Block Plan studies addressing natural heritage were completed at a finer scale with greater site access than the SWS, and therefore they provide more detail concerning the existing conditions and natural heritage/hazard features present. The Block Plan concept and land use were approved by the City, and therefore take precedence over the findings of the SWS for that specific study area.

3.2 March 2024 - City of Brantford Official Plan and OPA 5

The City of Brantford's Official Plan Amendment (OPA) 5 (By-law 97-2023) was approved by City Council on May 23, 2023, and given Ministerial approval in March of 2024. The lands affected by this OPA were identified as Natural Heritage System (NHS) in the Growth Plan for the Greater Golden Horseshoe (2020), and were therefore included in the City's 2021 OP as NHS as well. However, the Province later removed the affected lands from the Growth Plan NHS, and OPA 5 was the means by which the City complied with that change. The OPA amended the relevant schedules in the OP to achieve conformity with the revised provincial NHS, and adjusted the land uses for the affected locations, some of which fall within the study area of the North Brantford and Tutela Heights SWS. The changes made under OPA 5 were incorporated into the 2024 Office Consolidation of the City's OP and are also incorporated into the current 2025 Office Consolidation.

Regardless of the changes described above, it must be acknowledged that the North Brantford and Tutela Heights SWS utilized Aquafor's evaluation and analysis of existing natural heritage conditions within the study area, based on existing background information, aerial photograph analysis, and the results of field investigations. These data were used to prepare the SWS mapping which identified confirmed or potential components of the Natural Heritage System based on the City's criteria for natural heritage features provided in the OP. The OP NHS mapping that was available at that time (i.e., from the 2021 version of the OP) was used only as a reference and not as the basis for the mapping provided with the SWS. The revision of the OP mapping undertaken as part of OPA 5 would therefore not have significantly influenced the North Brantford and Tutela Heights SWS report or mapping.

Any development plans or applications that were submitted and/or approved in the interim using the OP information may differ from what is presented in the North Brantford and Tutela Heights SWS (see also Section 4 of this addendum). Applications and plans that were approved using the NHS mapping provided by the OP would take precedence over the North Brantford and Tutela Heights SWS mapping or recommendations for the affected properties with relation to the approved site alteration or development.

Moving forward, applications for development or site alteration within the study area should consider both the OP and the North Brantford and Tutela Heights SWS as sources of natural heritage information and mapping, towards the preparation of site-specific studies such as Environmental Impact Studies where such are required.

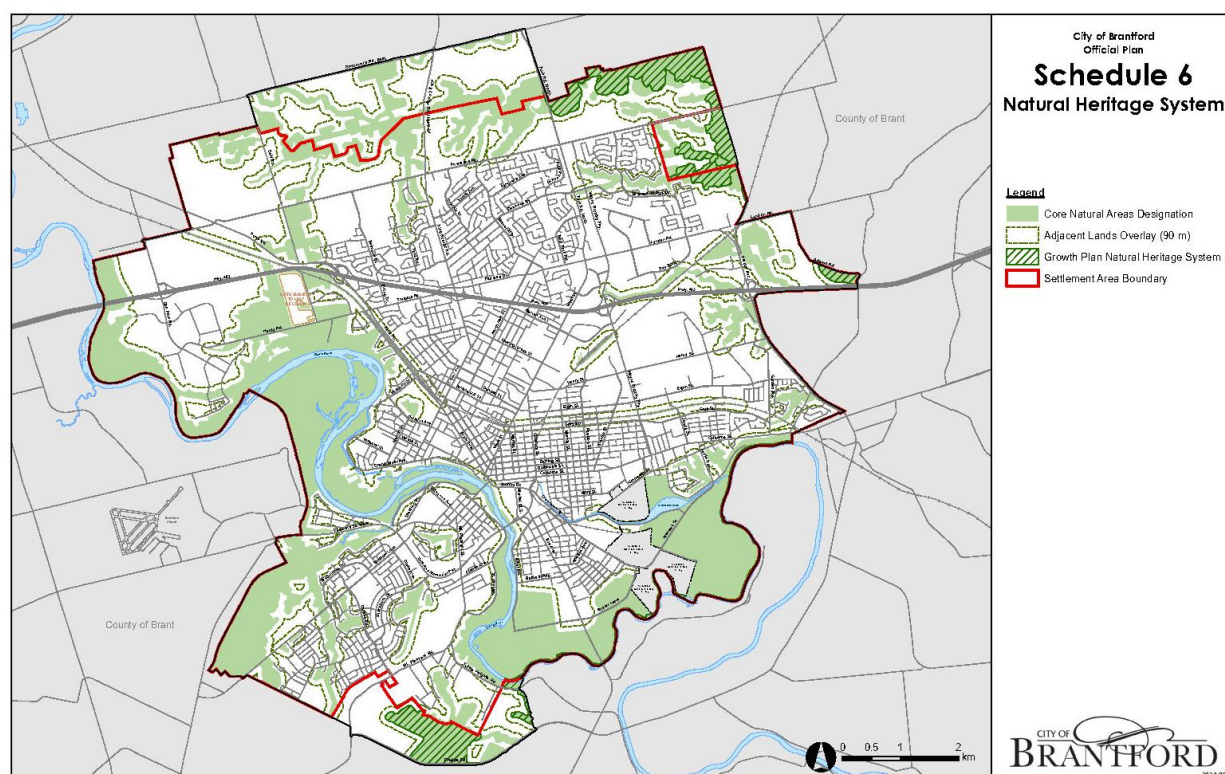


Figure 2: City of Brantford Schedule 6 Natural Heritage System updated as a part of OPA 5

3.3 April 2024 - Grand River Conservation Authority O. Reg. 41/24

In April 2024, Ontario replaced the 36 Conservation Authorities' individual regulations with a single province-wide regulation, O. Reg. 41/24. This transition standardized the regulation of "Prohibited Activities, Exemptions and Permits" across Ontario, shifting the focus of Conservation Authorities primarily toward the management of natural hazards such as flooding, erosion, and unstable soil rather than broader environmental conservation.

The SWS Phase 1 Report cited O. Reg. 150/06 as the means by which the GRCA could regulate development, interference with wetlands, and alterations to shorelines and watercourses within regulated portions of their watershed. Proposed works involving prohibited activities in areas regulated by GRCA will be subject to O. Reg. 41/24 moving forward. Features and areas which are to be regulated by GRCA (e.g., watercourses, wetlands, hazard lands) remain generally consistent between the previous and current regulation. One notable change is that the regulated limit around wetlands has reduced from 120 m to 30 m.

3.4 October 2024 - Ontario Provincial Planning Statement

Section 1.2 of the North Brantford and Tutela Heights SWS Phase 1 Report discussed the existing policy framework for the study area and identified the 2020 Provincial Policy Statement as the means by which the province could direct municipal land use planning activities related to matters of provincial interest. The report then further discussed the 2020 document "A Place to

Grow: Growth Plan for the Greater Golden Horseshoe” as a further guide for growth and development in municipalities found along the shoreline of Lake Ontario from Peterborough to Niagara.

In 2024, the Ontario government released a new consolidated planning document that replaced both the 2020 Provincial Policy Statement and the Growth Plan. The new Provincial Planning Statement (PPS) came into effect in October of 2024. The changes within the PPS related to natural heritage and natural hazards were relatively minor and did not include changes to the minimum standards for features that are required to be incorporated into municipal Official Plans. The changes resulting from the PPS would therefore not have significantly changed the results or recommendations of the SWS. Nevertheless, future studies or plans citing the SWS must ensure they utilize the most up-to-date information including the 2024 PPS as the basis for planning activities related to matters of provincial interest.

Other key changes noted from the institution of the 2024 PPS include:

- “Large and fast-growing municipalities”, as listed in Schedule 1 of the 2024 PPS and which include the City of Brantford, are required to undertake watershed planning to inform infrastructure and land use. Municipalities not listed are encouraged to also complete watershed studies.
- Municipal boundary expansions can occur at any time.
- The terminology of “Key Hydrological Features” and “Key Natural Heritage Features” as defined in the Growth Plan were not carried forward into the 2024 PPS.
- The 2024 PPS aligns with Bill 23 by shifting primary responsibility for natural heritage evaluations from Conservation Authorities to municipalities. Conservation Authorities are still responsible for natural hazards.

3.5 August 2025 – GRCA Regulatory Floodplain Mapping Update

The Regulatory Floodplain is a critical planning tool used by the GRCA to identify areas at risk of flooding and to guide safe land use decisions. This boundary is determined by a "greater-of" approach, comparing a standard 1-in-100-year flood event against the Regional Storm scenario. The Regional Storm is based on the historical rainfall of Hurricane Hazel, which remains the benchmark for extreme weather in Ontario. By using the more severe of these two scenarios, the GRCA ensures that development is kept out of areas that would be submerged during the worst-case flooding events. To keep this mapping accurate, the GRCA periodically incorporates data from technical reports, such as subwatershed studies and master drainage plans. These studies provide a high level of detail by accounting for changes in local topography, new infrastructure, and updated rainfall statistics. GRCA incorporated the results of the north Brantford and Tutela Heights SWS in August 2025. The most recent version of this data, dated April 27, 2026, represents the culmination of these technical updates and is publicly available through the Grand River Information Network (GRIN). GRCA’s most recent Regulatory Floodplain mapping is dated April 27, 2026.

3.6 March 2026 - Ontario Species Conservation Act

The Ontario *Endangered Species Act* (ESA) was cited in the SWS as the means by which habitat of endangered and threatened species (which is a component of the Natural Heritage System) is to be identified and protected. In late March of 2026, the ESA was repealed and the *Species Conservation Act* (SCA) came in to force to replace it. This transition fundamentally changed the province's approach to protecting at-risk species by shifting from a "prohibition-based" model to a more streamlined, industry-focused "registration first" framework. Under the SCA, development activities that are likely to impact a species listed on the Protected Species in Ontario List (O. Reg. 60/26) no longer require a ministerial permit and can now be registered through the online Species Conservation Registry. Other changes resulting from the implementation of the SCA include:

- Narrowed Habitat Protection: Protected habitat is now more strictly defined as specific "dwelling places" (like a nest or den) essential for breeding, rearing, or hibernating. Areas used for migration or foraging are generally excluded from automatic protection.
- Revised Protected List: Protection is limited to species on the Protected Species in Ontario List. The provincial government now has the discretion to choose which species classified by the Committee on the Status of Species at Risk in Ontario (COSSARO) receive legal protection.
- Federal Reliance: Responsibility for protecting over 100 species—including all migratory birds and aquatic species—has been deferred to the federal *Species at Risk Act* (SARA), and those species are no longer listed as Protected Species for the purposes of the SCA.

Future development applications and studies affecting protected species in the study shall be guided by the *Species Conservation Act*, along with any additional laws or regulations which are relevant (e.g., under the federal *Species at Risk Act*).

4 Mapping Updates and Overlays

By reconciling the data between the Subwatershed Study (SWS), the City's Official Plan, and the GRCA requirements, this section establishes the definitive baseline for future development limits and restoration opportunities. To illustrate the progression of events and the resulting changes that were discussed in the previous sections, Aquafor has prepared a series of comparative mapping overlays and associated discussion, which have been presented in the following sections.

4.1 Floodplain Mapping

As a part of the SWS study, hydraulic modeling and associated floodplain mapping were undertaken to define flood hazard lands along the major stream reaches within the North Brantford and Tutela Heights Study Area. Hydraulic analysis for the Study Area was undertaken using the GeoHEC-RAS hydraulic model. Model results for the 100-year and Regional storms were

then plotted on topographic mapping generated from the DEM over the study area. The resulting floodplain hazard lands are illustrated in Figure 3. There is no spill of floodwaters in this model.

An updated PCSWMM model was developed to assess the existing and proposed conditions. As of September 26, 2024, GRCA approved this model as calibrated and validated, and suitable for use to develop regulatory floodlines. When modeling the future proposed conditions as part of the Phase 2 and 3 report, including existing conditions, future uncontrolled, traditional SWM, and traditional SWM + LID scenarios.

The storm events included in the model included the 2-year through 100-year storms, as well as the regional storm. Modeled areas included Jones Creek, Karek Creek, Silver Creek, Fairchild Creek, and the Alexander Ave. Drain for the North Brantford Study area, as well as Phelps Creek for the Tutela Heights study area.

GRCA's most recent Regulatory Floodplain mapping dated April 27, 2026 depicts the regulatory flood which is the greater of the 100-year flood or regional storm (based on Hurricane Hazel rainfall).

There are some discrepancies between the 100-year and regional storms floodplains and the most recent GRCA's Regulatory Floodplain. GRCA's Regulatory Floodplain includes all of the 100 year floodlines, but there are locations where the regional storm floodlines extend outside of the GRCA's Regulatory Floodplain. Additionally, there are a few areas where GRCA's Regulatory Floodplain extends outside of both the 100-year and the regional storm floodlines. All of the locations identified as approximate indicate that they are "areas with some level of site-specific engineering analysis, however not meeting complete mapping standards (i.e. flood elevation determined through engineered analysis, however depiction of floodplain is limited by available mapping)" as defined in the Regulatory Floodplain metadata.

4.2 Core Natural Areas Overlays

The changes between the 2021 and the 2025 version of the OP mapping of Core Natural Areas (i.e., changes brought about through the implementation of OPA 5) directly relate to the boundary of the Natural Heritage System for the Growth Plan for the Greater Golden Horseshoe. The bulk of these changes were technical in nature, including:

- Floodplain Updates: Adjusting boundaries to reflect the most current mapping of the Grand River floodplain.
- NHS Refinements: Incorporating provincial refinements to the regional NHS overlay, which the city is required to implement.
- Correction of Errors: Removing areas previously designated as "Core" in error, such as residential reserve blocks like those on Turnbull Drive.
- Land Redesignation: Lands removed from the Core Natural Areas designation were typically redesignated for Residential, General Employment, Intensification Corridor, or Agricultural uses to match council-adopted intentions from March 2021.

The 2021 Core Natural Areas covered an area of 2,813.48 ha and the 2025 updated Core Natural Areas covers 2,769.39 ha for a difference of 44.09 ha removed across Brantford. As a part of the update, a total of 11.79 ha was added to this designation and 55.88 ha was removed. The bulk of the boundary changes appears to be related to the floodplain boundary updates along with minor boundary refinements. Locations where Core Natural Area boundaries were modified through the adoption of changes included in OPA 5 are shown on Figure 4.

4.2.1 North Brantford and Tutela Heights SWS

The North Brantford and Tutela Heights SWS used the City of Brantford's OP as a reference while completing the study, but utilized the available data and the results of field investigations to independently prepare mapping of the NHS using the City's criteria for identifying and evaluating natural heritage features. The mapping provided with the SWS therefore differs somewhat from the NHS that was approved as part of OPA 5 and which is currently included in the 2025 Consolidation of the City's OP.

Figure 5 highlights the key differences between the NHS mapping that was prepared for the North Brantford and Tutela Heights SWS and that of the City's 2025 Office Consolidation OP. Key differences between the two NHS mapping sources are primarily associated with features that Aquafor concluded met the criteria for "other natural heritage features" (i.e. woodlands less than 4 ha, locally significant wetlands, treed slopes, and cultural habitat features) and which were included in the Core Natural Areas mapped as part of the SWS, but which were excluded from the City's mapping. The City's Official Plan, section 5.6.1 (a), indicates that the City's Core Natural Areas designation includes "other natural heritage features" per the criteria noted above, which was the basis for Aquafor's decision to include them in the NHS mapping prepared for the SWS.

The City's 2025 OPA Core Natural Areas mapping also included a 30 m buffer beyond the boundary of the identified NHS feature.

Additionally, as illustrated on Figure 5, there are some features which have been identified as Core Natural Areas on the City's OP mapping which were not included in the NHS mapping prepared for the North Brantford and Tutela Heights SWS. These tend to follow some of the Category 1 hedgerows identified in the SWS as well as some of the areas that were highlighted as enhancement or restoration.

4.2.2 Tutela Heights West Block Plan Area

The land within the Tutela Heights West Block Plan Area was also included in the secondary study area for the North Brantford and Tutela Heights SWS (Figure 6). The features mapped within these two reports differed slightly. The SWS report highlighted three small features as Core Natural Areas including small forest patch, a cultural plantation, and a cultural woodland. However, due to limitations on private property access within and adjacent to the Block Plan Area, the SWS primarily used aerial photograph interpretation and roadside ground truthing to characterize natural heritage features for that location. Conversely, as a part of the Block Plan study, Beacon Environmental completed a suite of on-site field surveys to identify and refine

features comprising the Core Natural Areas. Beacon's study identified two small forest communities (Dry-Fresh Oak Deciduous Forest [FOD1] and Dry – Fresh Oak – Hickory Deciduous Forest [FOD2-2]) that they concluded met the criteria to be considered Core Natural Areas. The City's 2025 Core Natural Areas align with the features mapped through Beacon's study in the Block Plan area, which accounts for the minor additions/removals of Core Natural Areas between the City's 2021 and 2025 OP schedules for this location.

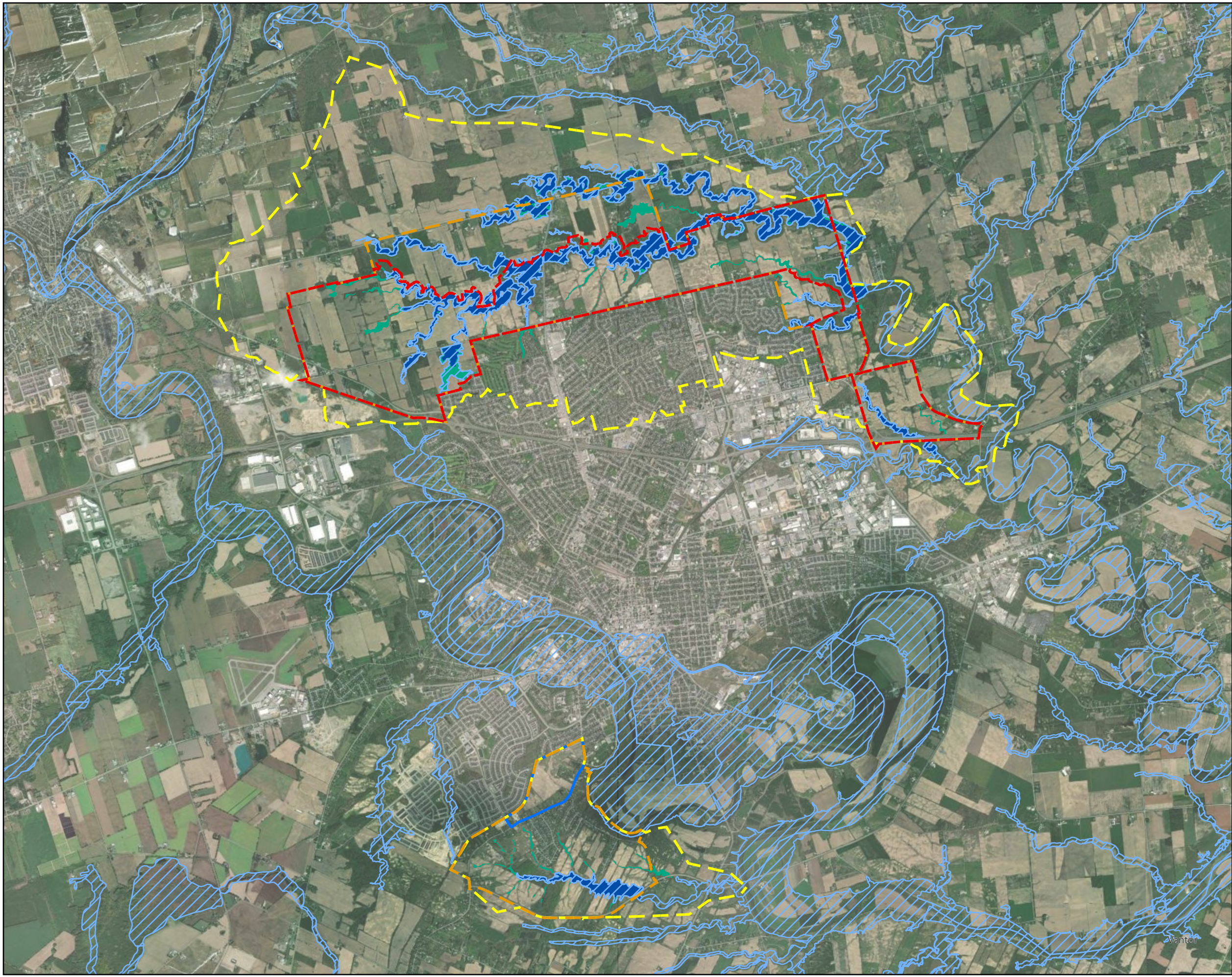
4.2.3 NHS Mapping Summary / Overlay

Figure 7 provides an overall summary of the information discussed in the preceding sections, and features: the current, approved City of Brampton NHS per the 2025 Office Consolidation of the OP; the NHS as portrayed in the North Brantford and Tutela Heights SWS, noting in particular the locations where that NHS differs from the OP (and may therefore require additional attention as part of an EIS or other applicable study as part of a development application on the affected lands); and the approved floodplain limits as determined through the SWS and approved by the GRCA on August 22 2025 and most recently updated on April 27 2026.

5 Summary and Conclusions

Although the North Brantford and Tutela Heights SWS and the Tutela Heights West Block Plan predated several recent policy shifts, their characterizations and data remain sound. However, these documents are no longer "standalone" guides; they must be applied through the lens of current provincial and municipal standards.

As is highlighted in the North Brantford and Tutela Heights SWS, and specified in the City of Brantford's Official Plan policies, an Environmental Impact Study (EIS) is to be completed for any proposed development or site alteration that has the potential to impact the NHS. The North Brantford and Tutela Heights SWS may be used as a background resource for the completion of such a study, or to assist in determining the appropriate scope of work that is to be included. The feature boundaries and characteristics that are provided in the SWS or through other background sources may be confirmed and refined on a site-specific basis through an EIS. Ultimately, the final approved EIS is considered to take precedence over the natural heritage characterization and constraints contained in the SWS and, when completed to the City's satisfaction, would define the accepted NHS that would apply to future proposed developments.

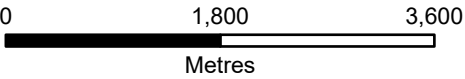


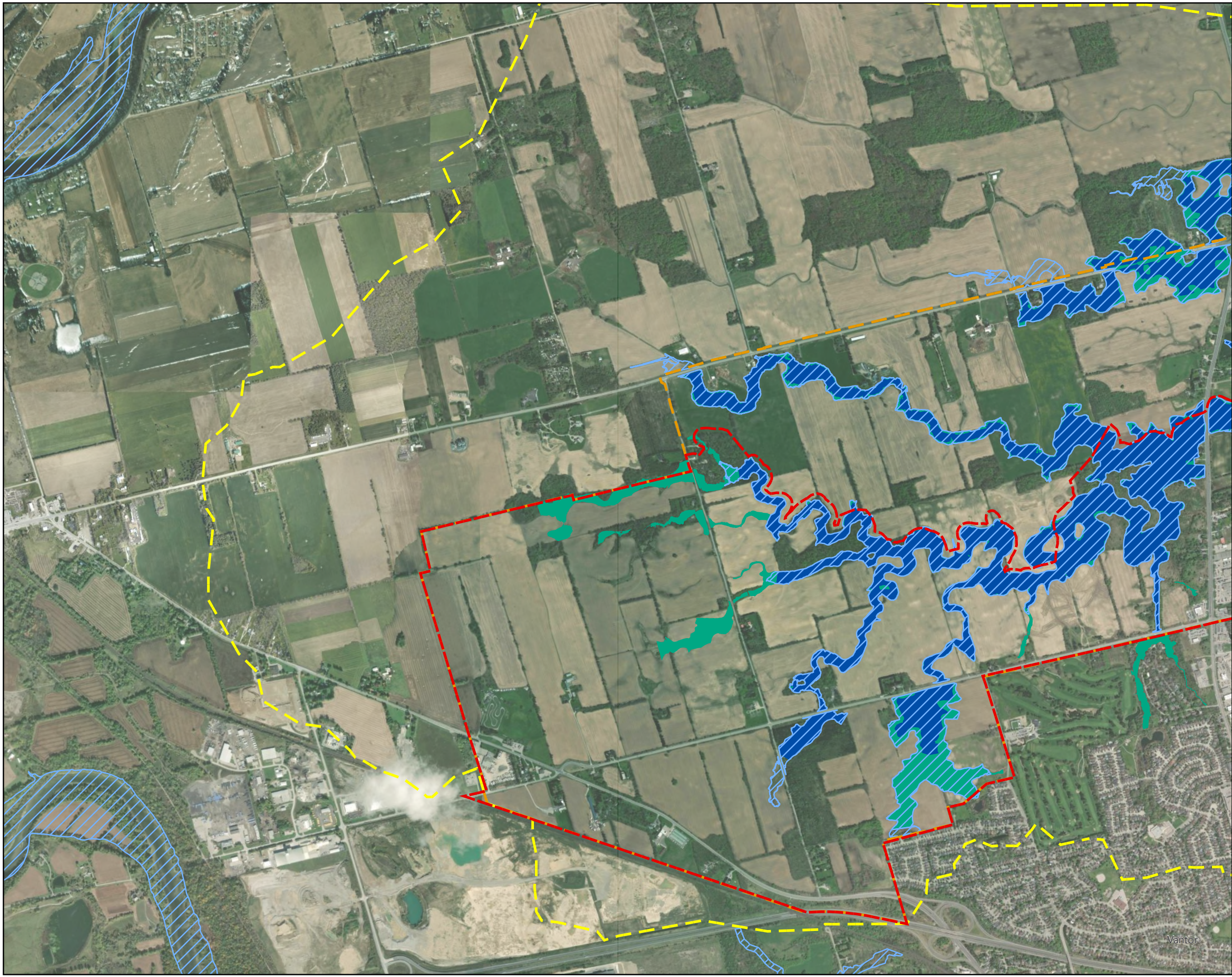
- Legend**
-  Regulatory Floodplain (GRCA)
 -  North Brantford and Tutela Heights 100 Year Floodline (Aquafor)
 -  North Brantford and Tutela Heights Regional Floodline (Aquafor)
 -  SWS Primary Study Area
 -  SWS Secondary Study Area
 -  SWS Tertiary Study Area
 -  Tutela Heights West Block Plan Area

Figure 3 (Overview)

Floodplain Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford, GRCA



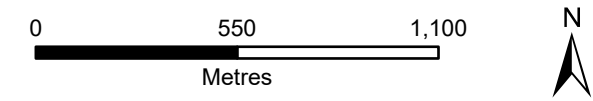


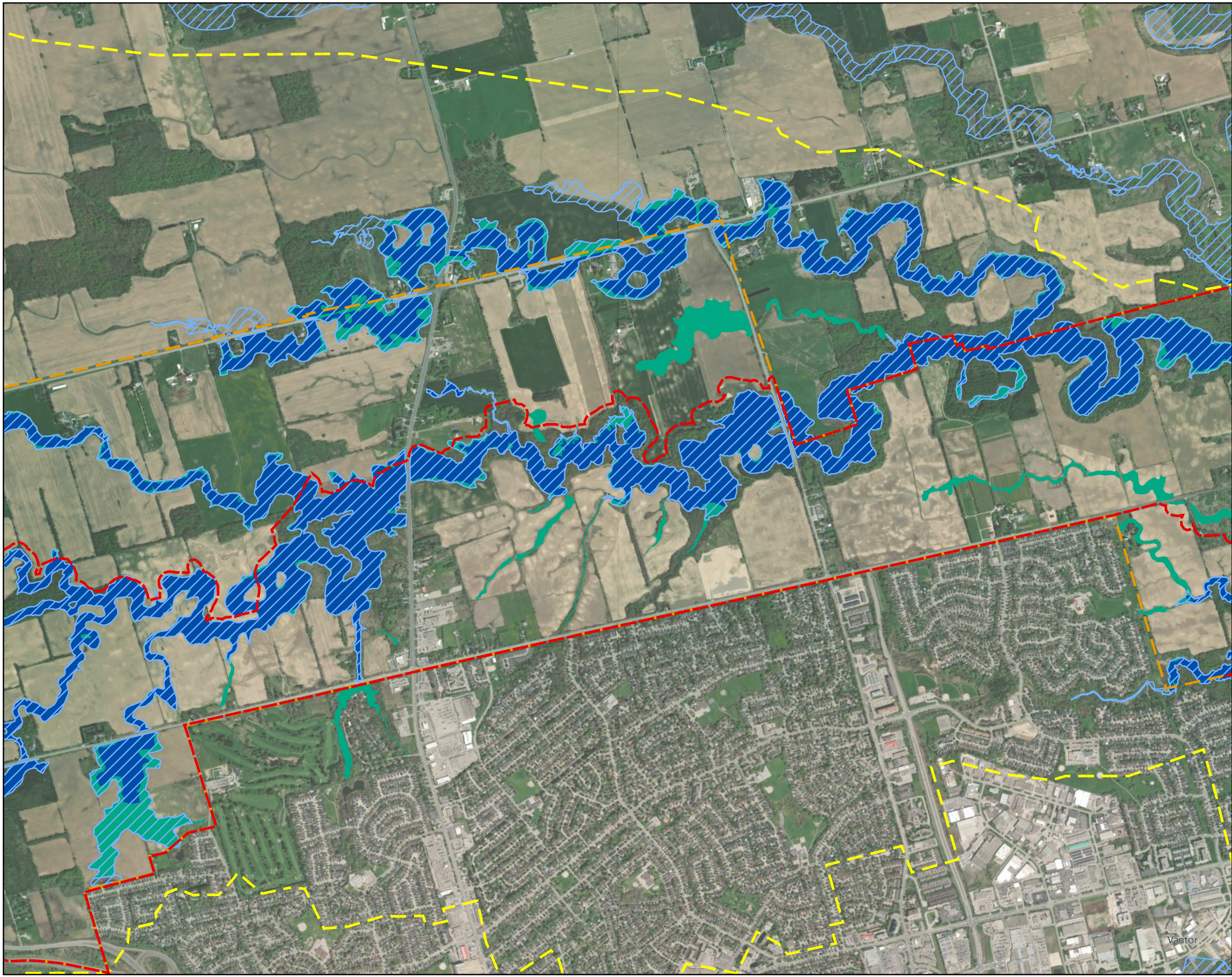
- Legend**
- Regulatory Floodplain (GRCA)
 - North Brantford and Tutela Heights 100 Year Floodline (Aquafor)
 - North Brantford and Tutela Heights Regional Floodline (Aquafor)
 - SWS Primary Study Area
 - SWS Secondary Study Area
 - SWS Tertiary Study Area
 - Tutela Heights West Block Plan Area

Figure 3 (Northeast)

Floodplain Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford, GRCA



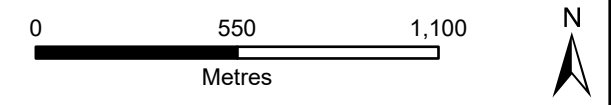


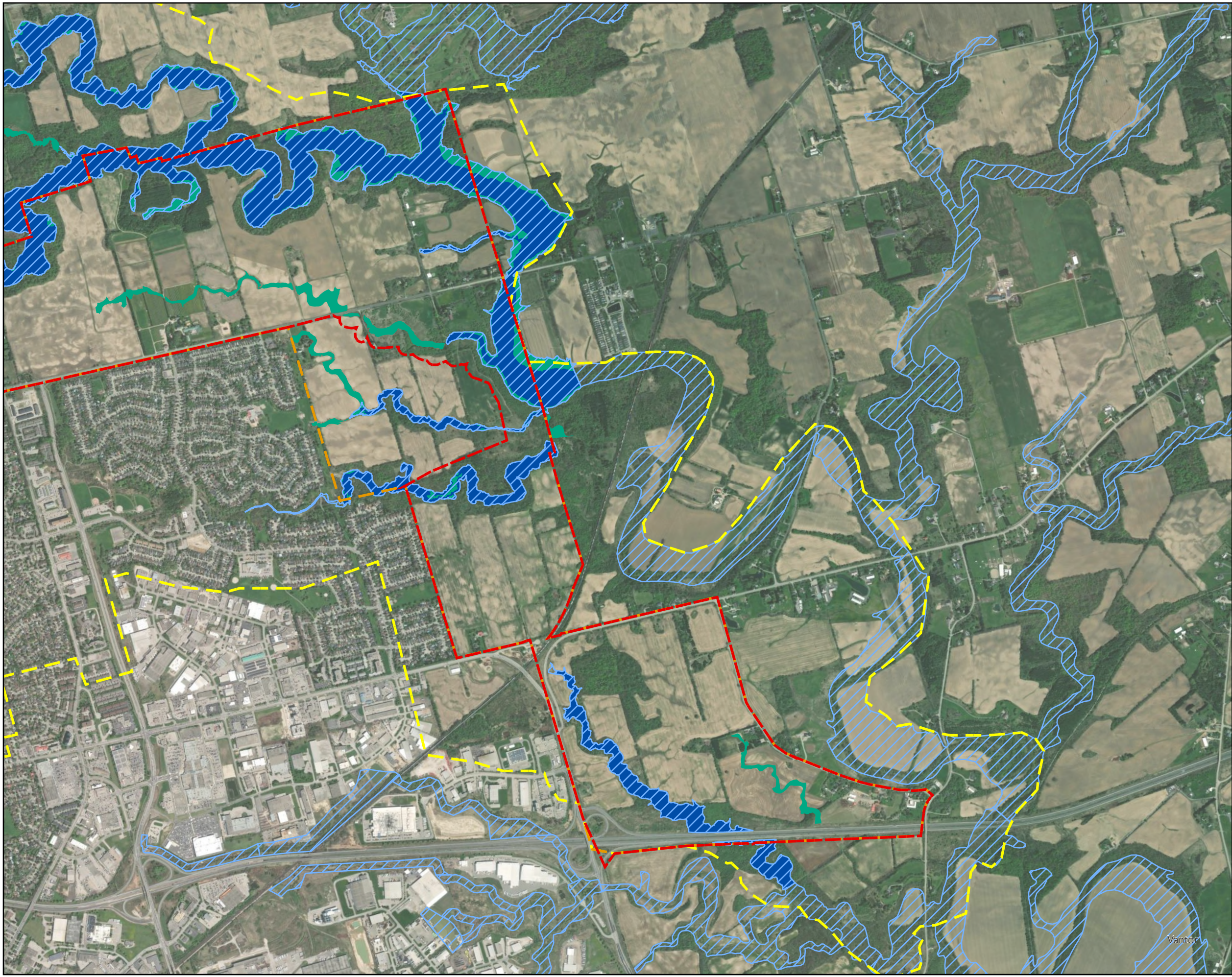
- Legend**
- Regulatory Floodplain (GRCA)
 - North Brantford and Tutela Heights 100 Year Floodline (Aquafor)
 - North Brantford and Tutela Heights Regional Floodline (Aquafor)
 - SWS Primary Study Area
 - SWS Secondary Study Area
 - SWS Tertiary Study Area
 - Tutela Heights West Block Plan Area

Figure 3 (North)

Floodplain Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford, GRCA





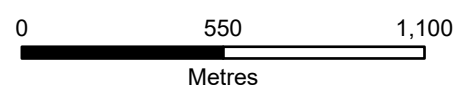
Legend

-  Regulatory Floodplain (GRCA)
-  North Brantford and Tutela Heights 100 Year Floodline (Aquafor)
-  North Brantford and Tutela Heights Regional Floodline (Aquafor)
-  SWS Primary Study Area
-  SWS Secondary Study Area
-  SWS Tertiary Study Area
-  Tutela Heights West Block Plan Area

Figure 3 (Northwest)

Floodplain Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford, GRCA



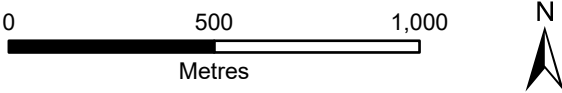


- Legend**
- Regulatory Floodplain (GRCA)
 - North Brantford and Tutela Heights 100 Year Floodline (Aquafor)
 - North Brantford and Tutela Heights Regional Floodline (Aquafor)
 - SWS Primary Study Area
 - SWS Secondary Study Area
 - SWS Tertiary Study Area
 - Tutela Heights West Block Plan Area

Figure 3 (South)

Floodplain Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford, GRCA



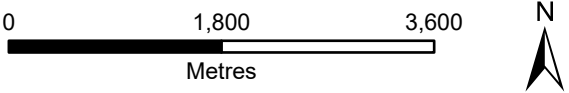


- Legend**
- Core Natural Areas (OPA 5 - 2025)
 - Area Added to Core Natural Areas in 2025
 - Area Removed From Core Natural Areas in 2025
 - SWS Primary Study Area
 - SWS Secondary Study Area
 - SWS Tertiary Study Area
 - Tutela Heights West Block Plan Area

Figure 4 (Overview)

City of Brantford's
Core Natural Areas Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford



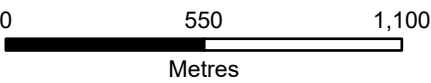


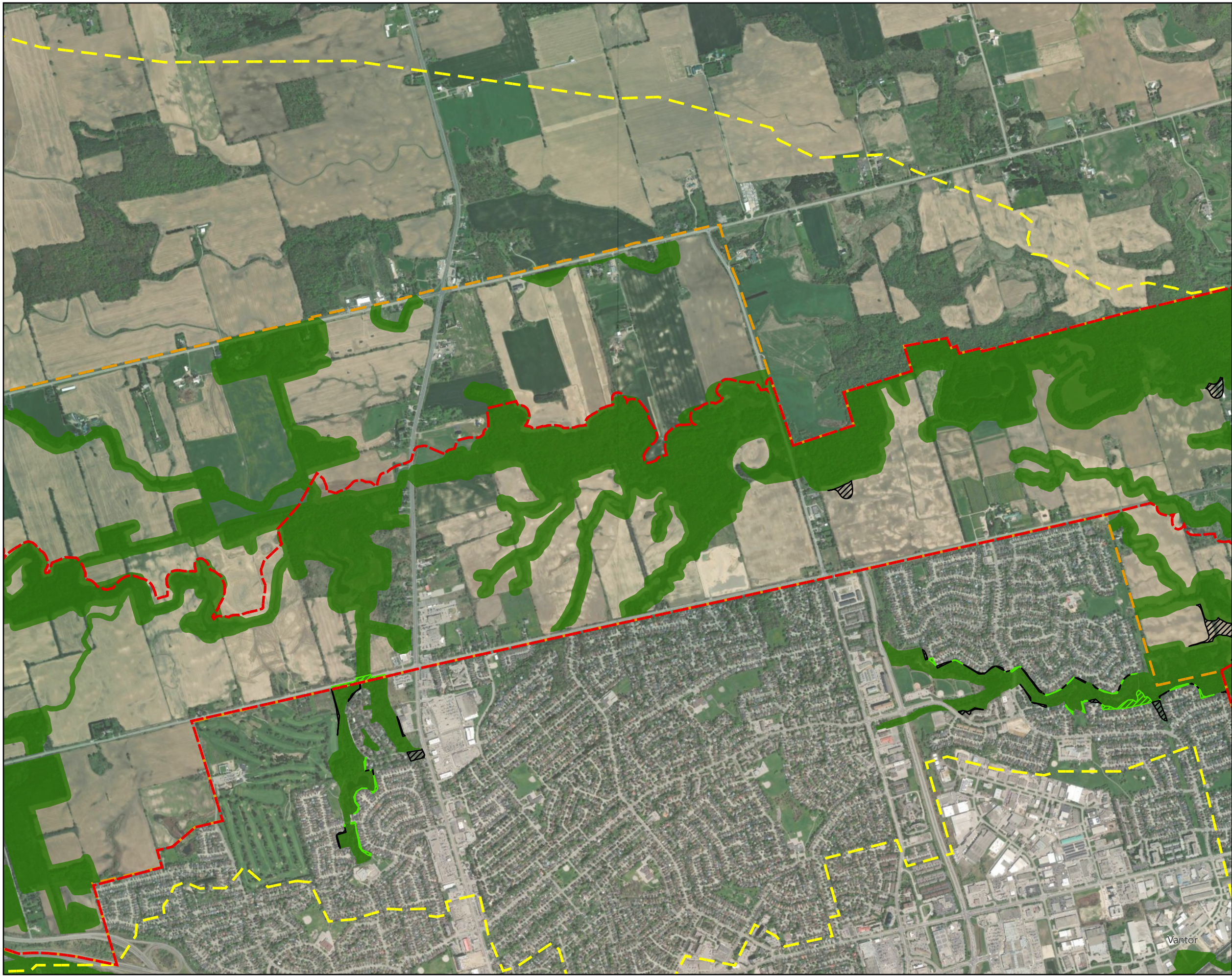
- Legend**
- Core Natural Areas (OPA 5 - 2025)
 - Area Added to Core Natural Areas in 2025
 - Area Removed From Core Natural Areas in 2025
 - SWS Primary Study Area
 - SWS Secondary Study Area
 - SWS Tertiary Study Area
 - Tutela Heights West Block Plan Area

Figure 4 (Northeast)

City of Brantford's
Core Natural Areas Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford



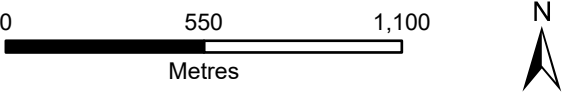


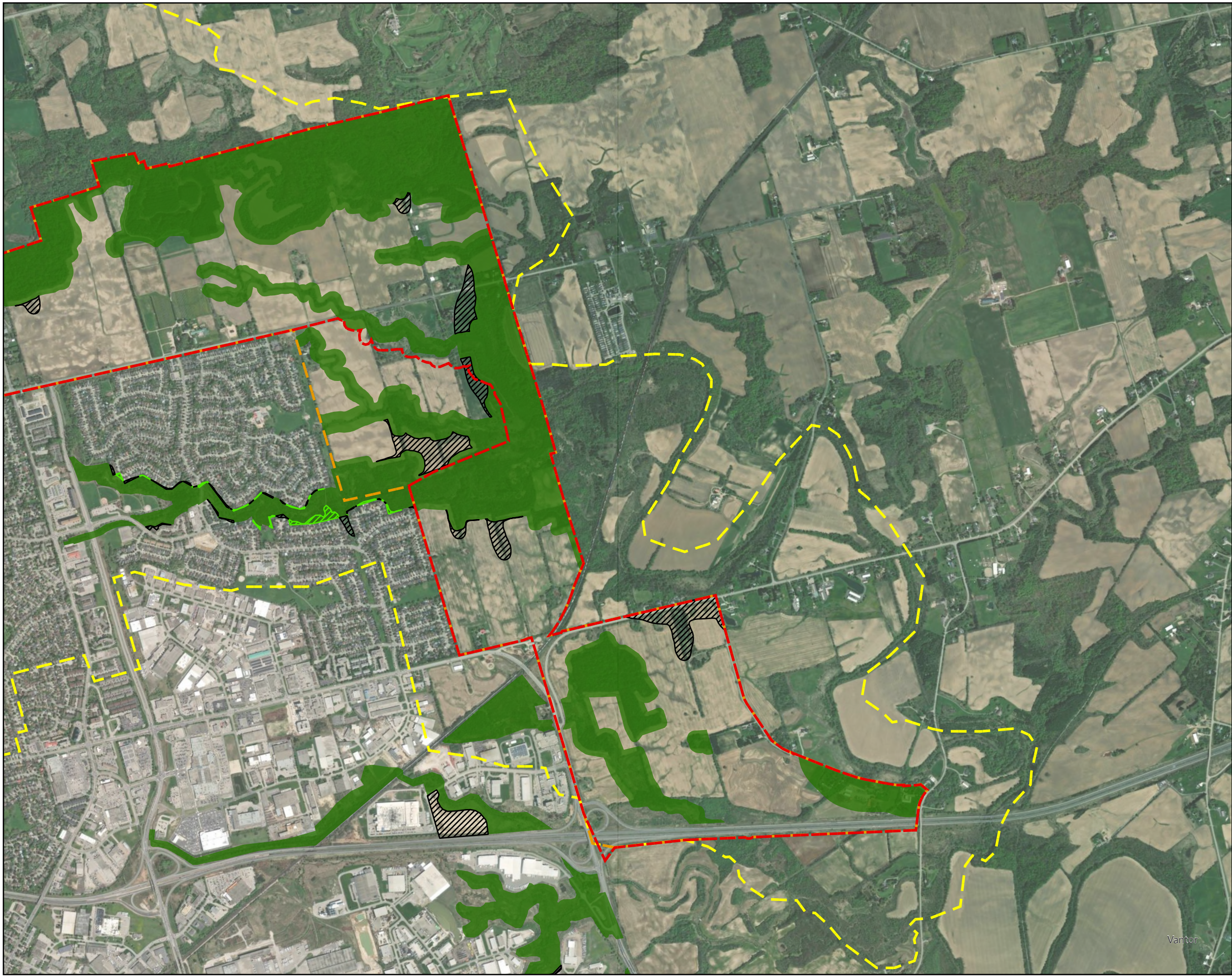
- Legend**
- Core Natural Areas (OPA 5 - 2025)
 - Area Added to Core Natural Areas in 2025
 - Area Removed From Core Natural Areas in 2025
 - SWS Primary Study Area
 - SWS Secondary Study Area
 - SWS Tertiary Study Area
 - Tutela Heights West Block Plan Area

Figure 4 (North)

City of Brantford's
Core Natural Areas Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford



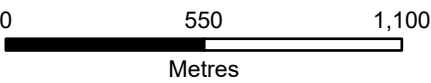


- Legend**
- Core Natural Areas (OPA 5 - 2025)
 - Area Added to Core Natural Areas in 2025
 - Area Removed From Core Natural Areas in 2025
 - SWS Primary Study Area
 - SWS Secondary Study Area
 - SWS Tertiary Study Area
 - Tutela Heights West Block Plan Area

Figure 4 (Northwest)

City of Brantford's
Core Natural Areas Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford



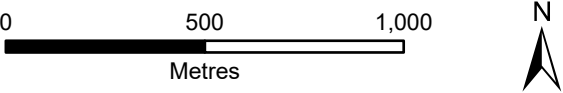


- Legend**
- Core Natural Areas (OPA 5 - 2025)
 - Area Added to Core Natural Areas in 2025
 - Area Removed From Core Natural Areas in 2025
 - SWS Primary Study Area
 - SWS Secondary Study Area
 - SWS Tertiary Study Area
 - Tutela Heights West Block Plan Area

Figure 4 (South)

City of Brantford's
Core Natural Areas Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford





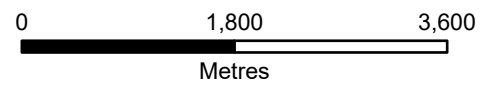
Legend

-  City of Brantford's Core Natural Areas (2025)
-  Core Natural Areas Included in the SWS (Aquafor)
-  Vegetation Protection Zone (VPZ) around Core Natural Areas from SWS
-  Enhancement / Restoration Area Included in the SWS
-  Primary Study Area
-  Secondary Study Area
-  Tertiary Study Area
-  Tutela Heights West Block Plan Area
-  Watercourse (Ontario Hydro Network)

Figure 5 (Overview)

**North Brantford and Tutela Heights
SWS Overlays**

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford, GRCA



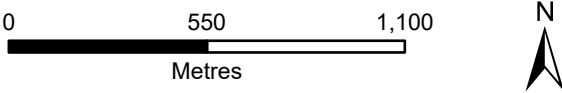


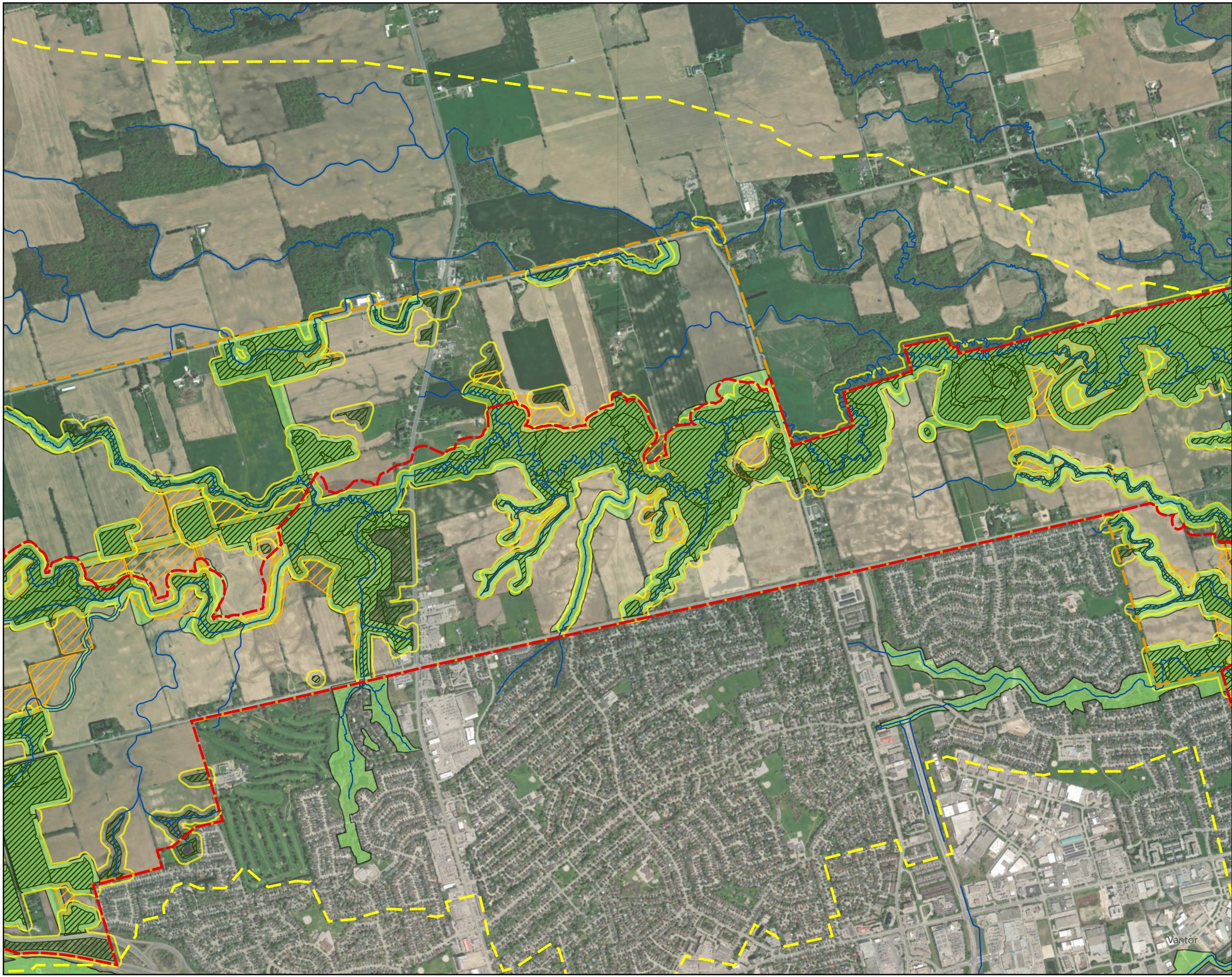
- Legend**
- City of Brantford's Core Natural Areas (2025)
 - Core Natural Areas Included in the SWS (Aquafor)
 - Vegetation Protection Zone (VPZ) around Core Natural Areas from SWS
 - Enhancement / Restoration Area Included in the SWS
 - Primary Study Area
 - Secondary Study Area
 - Tertiary Study Area
 - Tutela Heights West Block Plan Area
 - Watercourse (Ontario Hydro Network)

Figure 5 (Northeast)

North Brantford and Tutela Heights
SWS Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford, GRCA



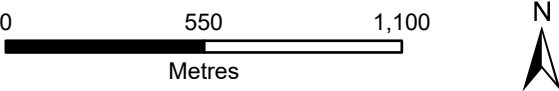


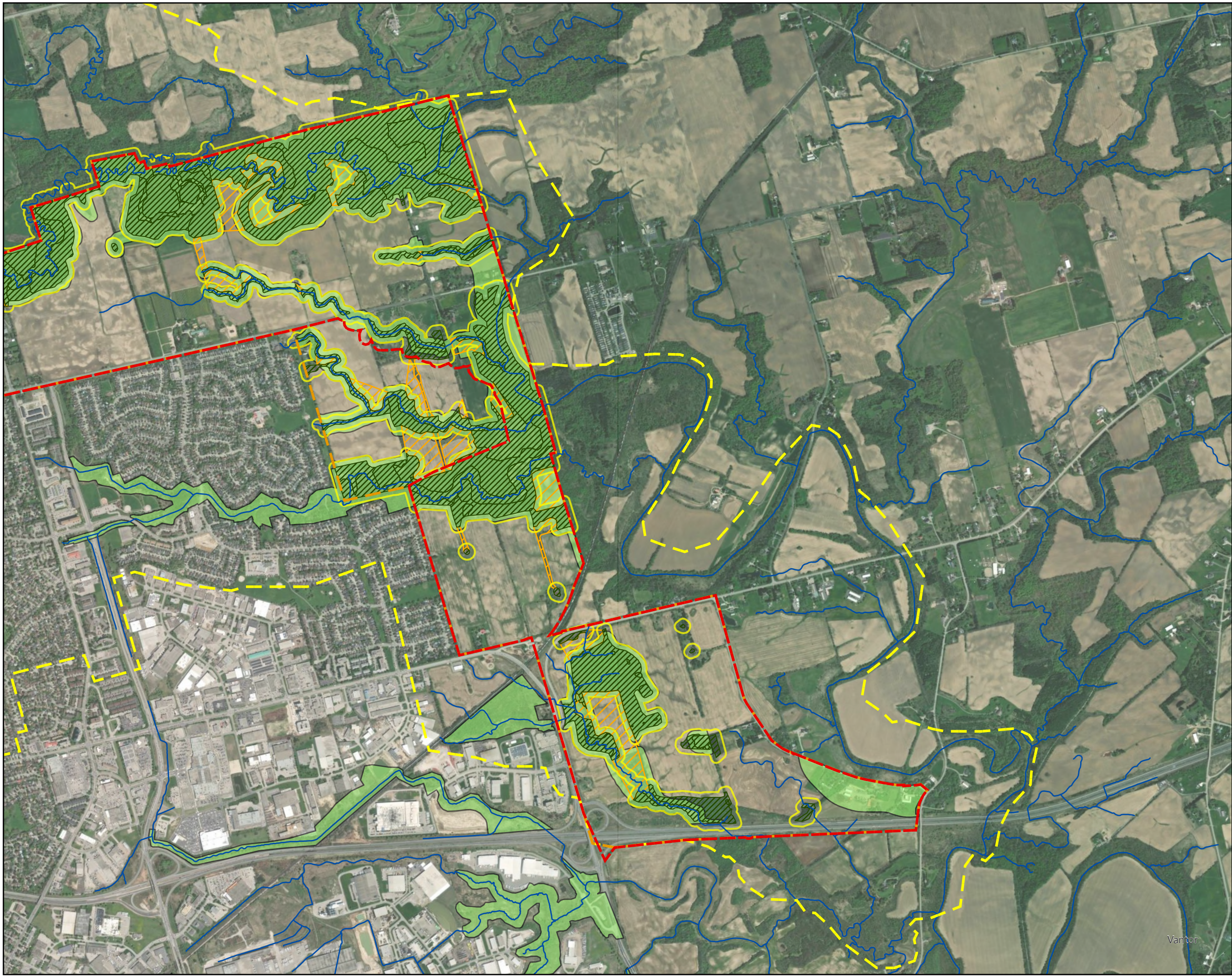
- Legend**
- City of Brantford's Core Natural Areas (2025)
 - Core Natural Areas Included in the SWS (Aquafor)
 - Vegetation Protection Zone (VPZ) around Core Natural Areas from SWS
 - Enhancement / Restoration Area Included in the SWS
 - Primary Study Area
 - Secondary Study Area
 - Tertiary Study Area
 - Tutela Heights West Block Plan Area
 - Watercourse (Ontario Hydro Network)

Figure 5 (North)

North Brantford and Tutela Heights
SWS Overlays

Date: May 2026
Author: KB
Projection: UTM, Zone 17N
Source: City of Brantford, GRCA



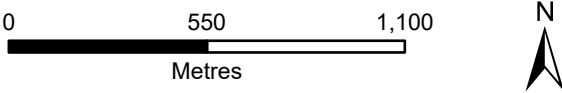


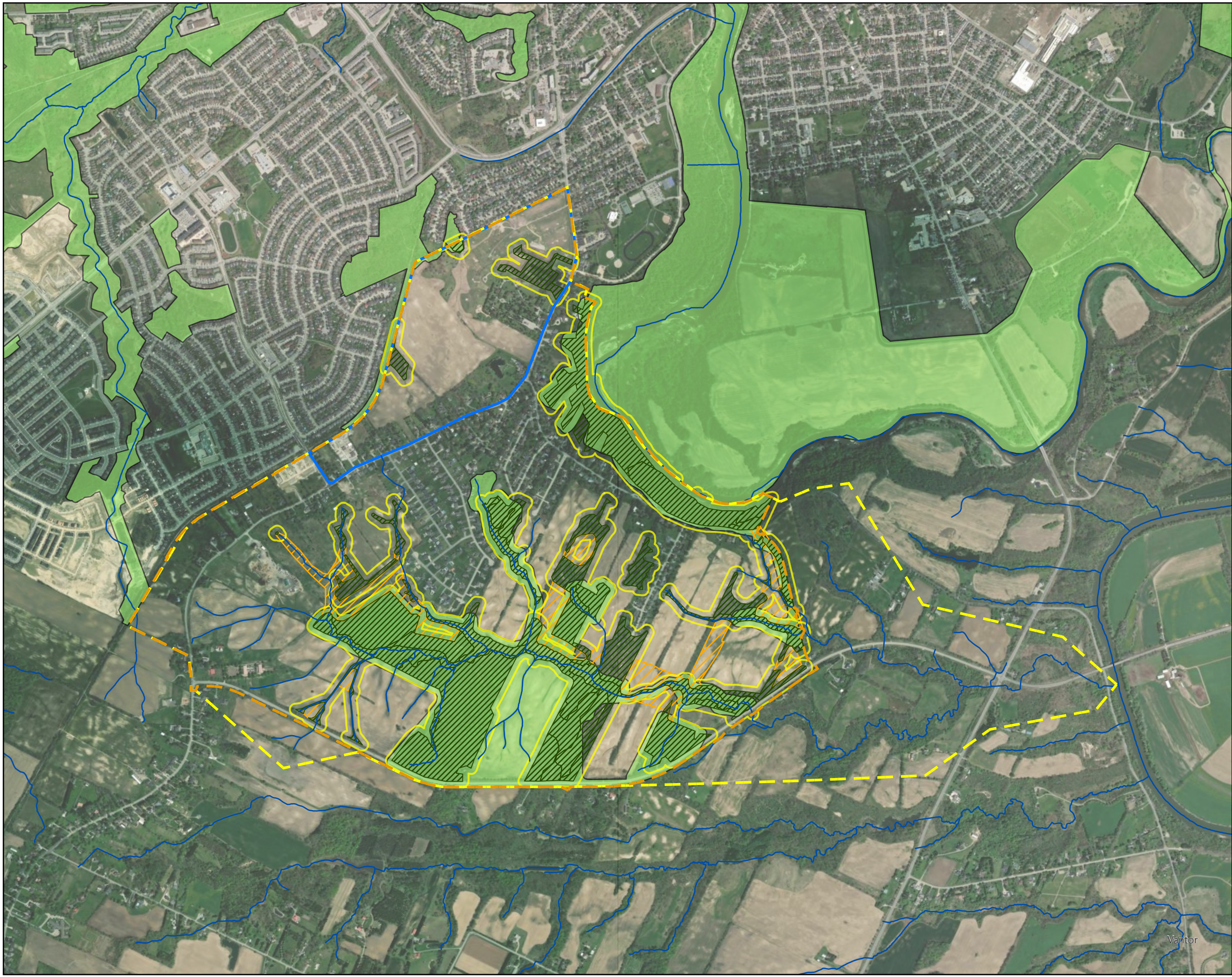
- Legend**
- City of Brantford's Core Natural Areas (2025)
 - Core Natural Areas Included in the SWS (Aquafor)
 - Vegetation Protection Zone (VPZ) around Core Natural Areas from SWS
 - Enhancement / Restoration Area Included in the SWS
 - Primary Study Area
 - Secondary Study Area
 - Tertiary Study Area
 - Tutela Heights West Block Plan Area
 - Watercourse (Ontario Hydro Network)

Figure 5 (Northwest)

North Brantford and Tutela Heights
SWS Overlays

Date: May 2026
Author: KB
Projection: UTM, Zone 17N
Source: City of Brantford, GRCA



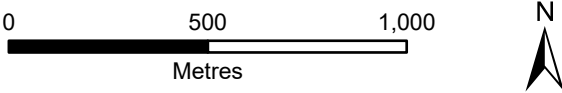


- Legend**
- City of Brantford's Core Natural Areas (2025)
 - Core Natural Areas Included in the SWS (Aquafor)
 - Vegetation Protection Zone (VPZ) around Core Natural Areas from SWS
 - Enhancement / Restoration Area Included in the SWS
 - Primary Study Area
 - Secondary Study Area
 - Tertiary Study Area
 - Tutela Heights West Block Plan Area
 - Watercourse (Ontario Hydro Network)

Figure 5 (South)

North Brantford and Tutela Heights
SWS Overlays

Date: May 2026
Author: KB
Projection: UTM, Zone 17N
Source: City of Brantford, GRCA

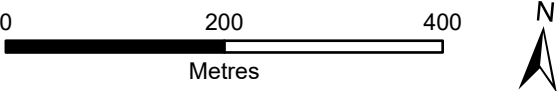


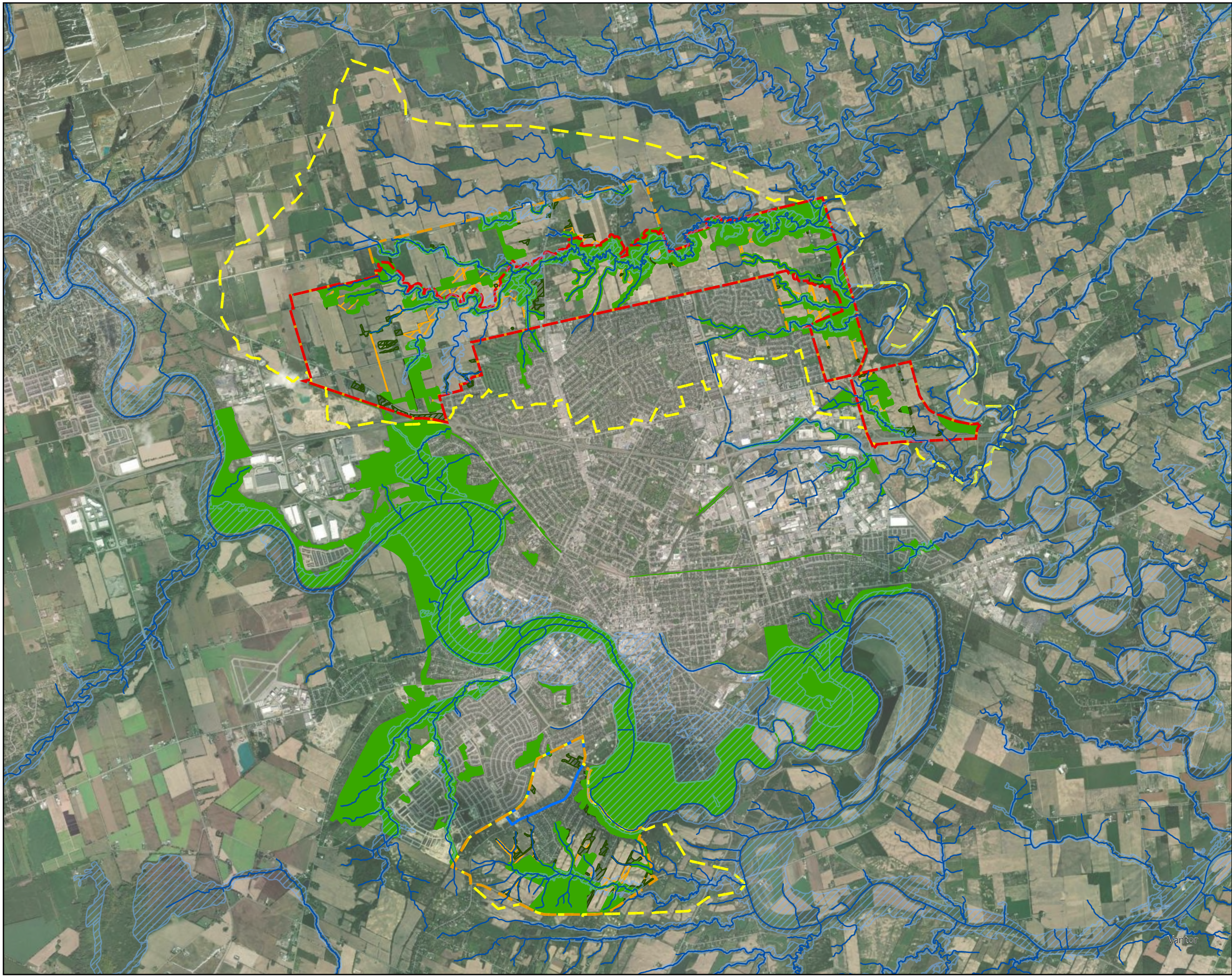


- Legend**
- Watercourse (OHN)
 - Core Natural Areas Included in the SWS (Aquafor)
 - SWS Primary Study Area
 - SWS Secondary Study Area
 - SWS Tertiary Study Area
 - Tutela Heights West Block Plan Area
 - Vegetation Protection Zone (VPZ) around Core Natural Areas from SWS
 - City of Brantford's Core Natural Areas 2025

Figure 6-4
Tutela Heights West Block Plan Area Overlays

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford, GRCA





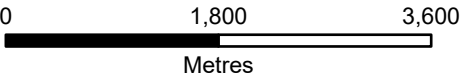
Legend

-  City of Brantford's Core Natural Areas (2025)
-  Core Natural Areas Included in the SWS (Aquafor) that Require Further Investigations
-  Enhancement / Restoration Area Included in the SWS
-  SWS Primary Study Area
-  SWS Secondary Study Area
-  SWS Tertiary Study Area
-  Tutela Heights West Block Plan Area
-  Regulatory Floodplain (GRCA)
-  Watercourse (OHN)

Figure 7 (Overview)

Consolidated Core Natural Areas

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford, GRCA





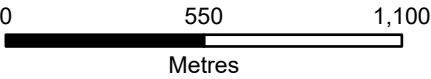
Legend

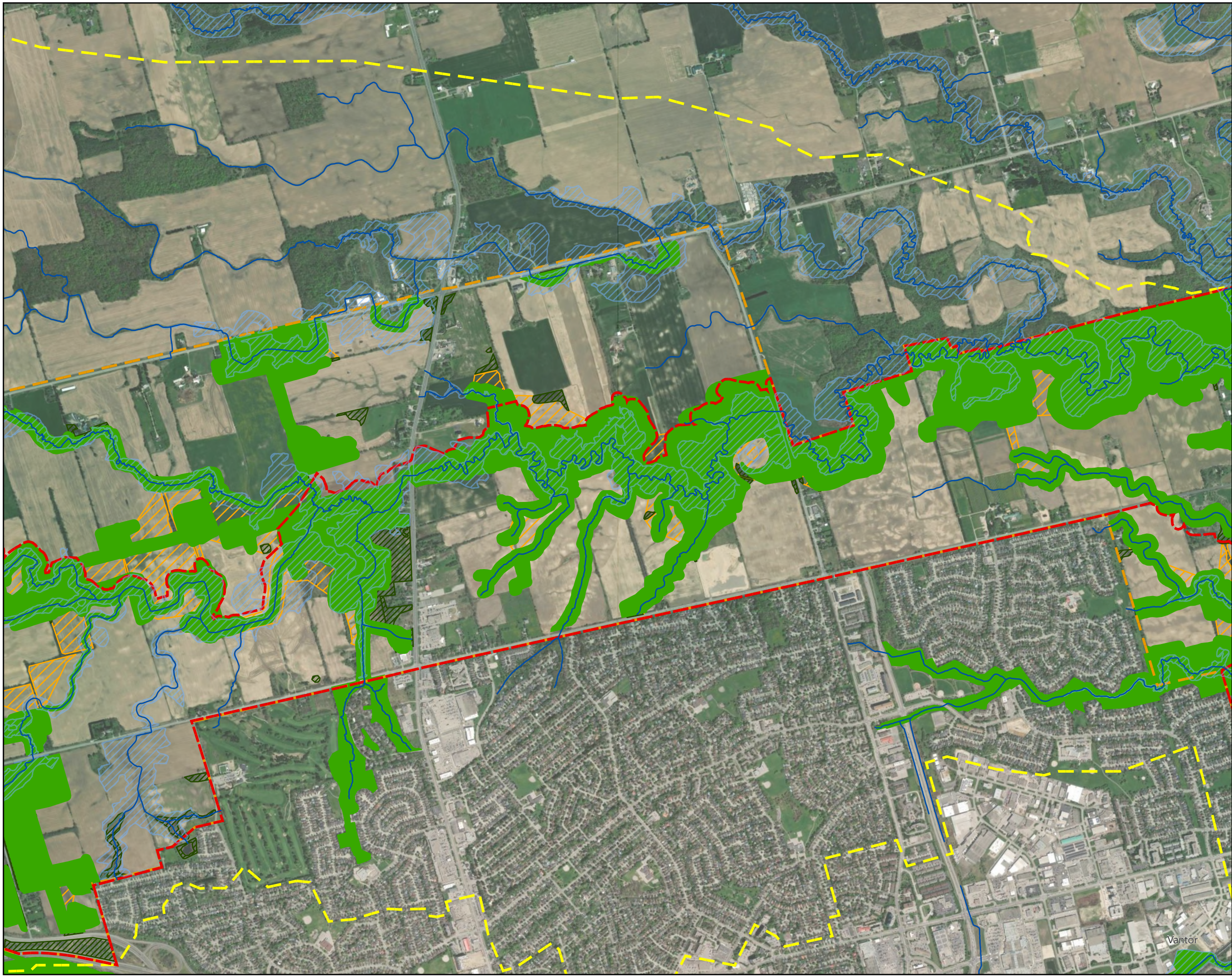
-  City of Brantford's Core Natural Areas (2025)
-  Core Natural Areas Included in the SWS (Aquafor) that Require Further Investigations
-  Enhancement / Restoration Area Included in the SWS
-  SWS Primary Study Area
-  SWS Secondary Study Area
-  SWS Tertiary Study Area
-  Tutela Heights West Block Plan Area
-  Regulatory Floodplain (GRCA)
-  Watercourse (OHN)

Figure 7 (Northeast)

Consolidated Core Natural Areas

Date: May 2026
Author: KB
Projection: UTM_Zone_17N
Source: City of Brantford, GRCA





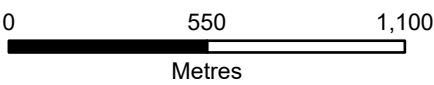
Legend

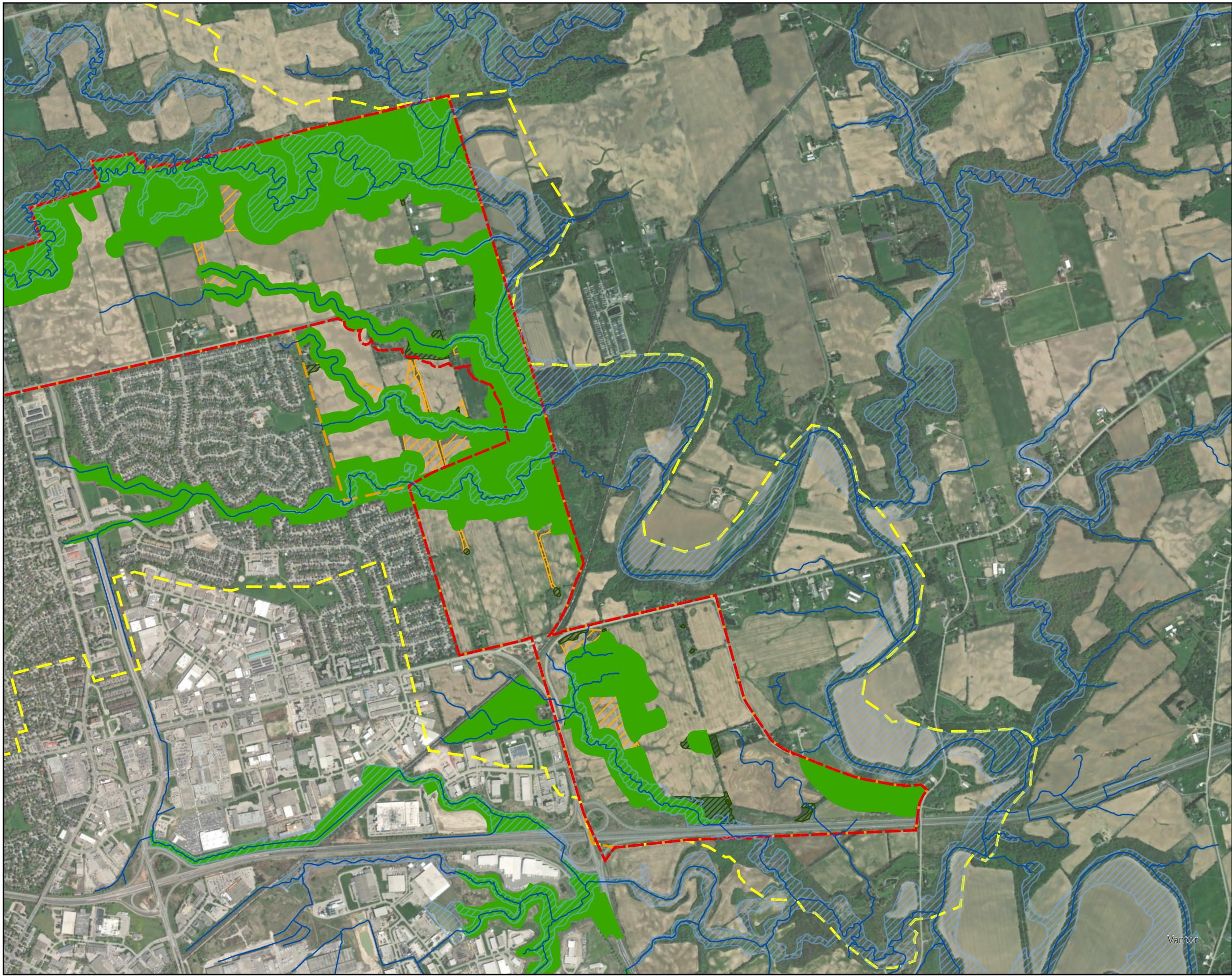
- City of Brantford's Core Natural Areas (2025)
- Core Natural Areas Included in the SWS (Aquafor) that Require Further Investigations
- Enhancement / Restoration Area Included in the SWS
- SWS Primary Study Area
- SWS Secondary Study Area
- SWS Tertiary Study Area
- Tutela Heights West Block Plan Area
- Regulatory Floodplain (GRCA)
- Watercourse (OHN)

Figure 7 (North)

Consolidated Core Natural Areas

Date: May 2026
Author: KB
Projection: UTM, Zone 17N
Source: City of Brantford, GRCA



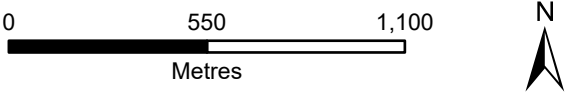


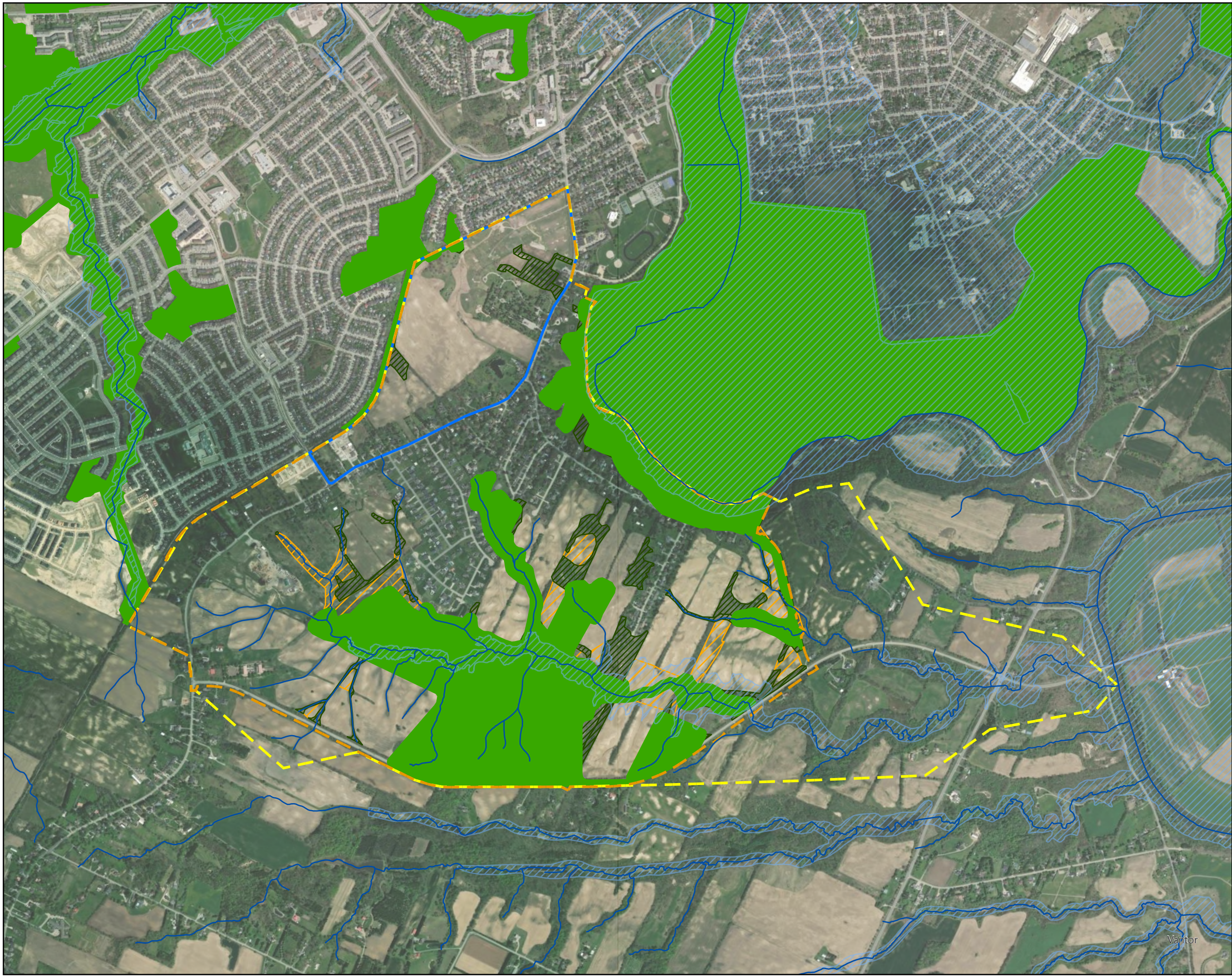
- Legend**
- City of Brantford's Core Natural Areas (2025)
 - Core Natural Areas Included in the SWS (Aquafor) that Require Further Investigations
 - Enhancement / Restoration Area Included in the SWS
 - SWS Primary Study Area
 - SWS Secondary Study Area
 - SWS Tertiary Study Area
 - Tutela Heights West Block Plan Area
 - Regulatory Floodplain (GRCA)
 - Watercourse (OHN)

Figure 7 (Northwest)

Consolidated Core Natural Areas

Date: May 2026
Author: KB
Projection: UTM, Zone 17N
Source: City of Brantford, GRCA





- Legend**
- City of Brantford's Core Natural Areas (2025)
 - Core Natural Areas Included in the SWS (Aquafor) that Require Further Investigations
 - Enhancement / Restoration Area Included in the SWS
 - SWS Primary Study Area
 - SWS Secondary Study Area
 - SWS Tertiary Study Area
 - Tutela Heights West Block Plan Area
 - Regulatory Floodplain (GRCA)
 - Watercourse (OHN)

Figure 7 (South)

Consolidated Core Natural Areas

Date: May 2026
Author: KB
Projection: UTM, Zone 17N
Source: City of Brantford, GRCA

