



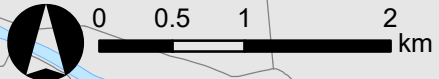
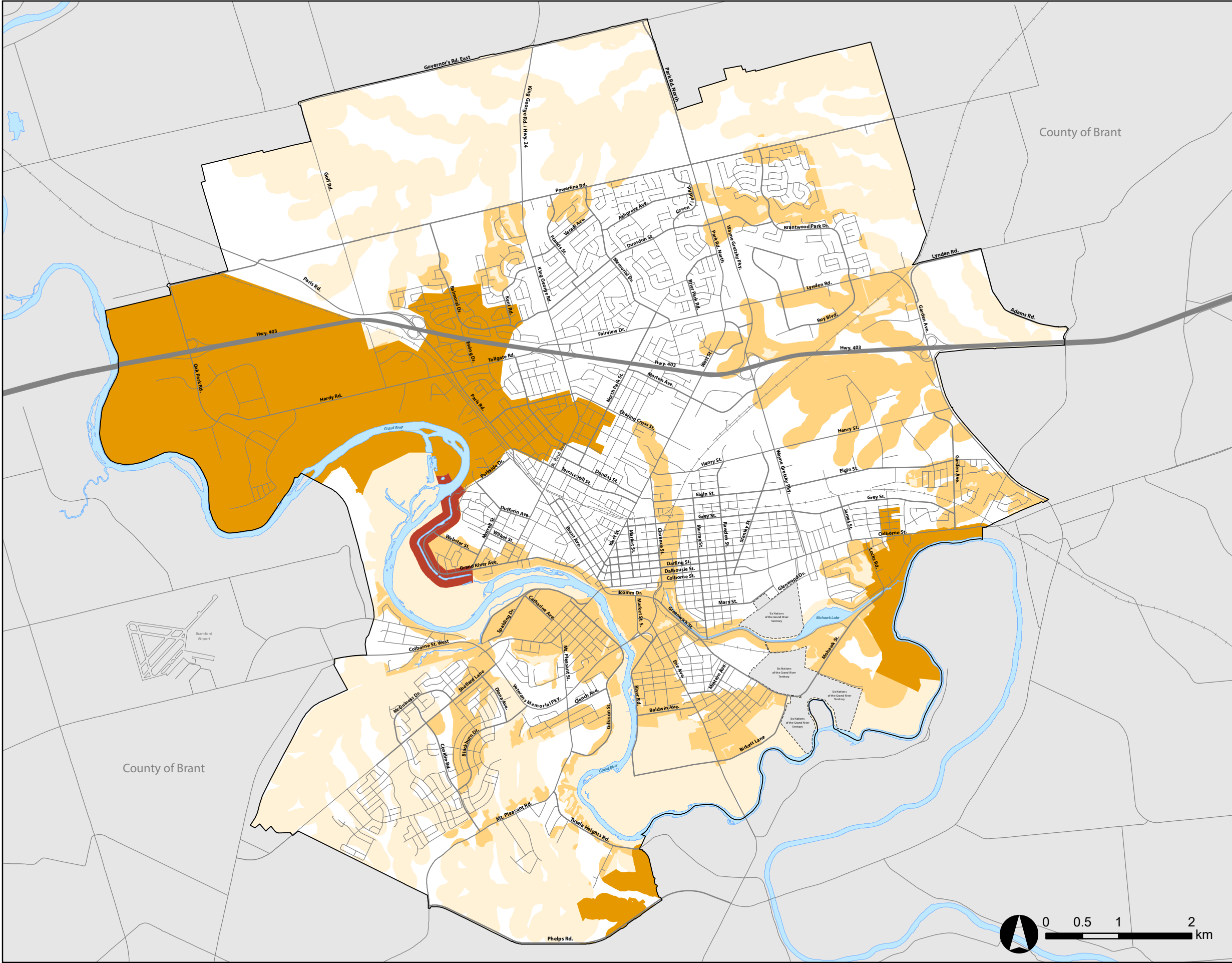


Appendix A-1 Intake Protection Zones

Refer to the Grand River Source Protection Plan
www.sourcewater.ca

Legend

-  Intake Protection Zone 1
(Vulnerability Score 10)
-  Intake Protection Zone 2
(Vulnerability Score 9)
-  Intake Protection Zone 3
(Vulnerability Score 8)
-  Intake Protection Zone
(Vulnerability < 8)






Appendix A-2 Aquifers and Groundwater Recharge Areas

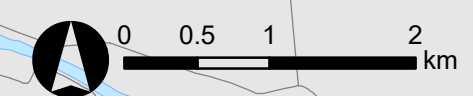
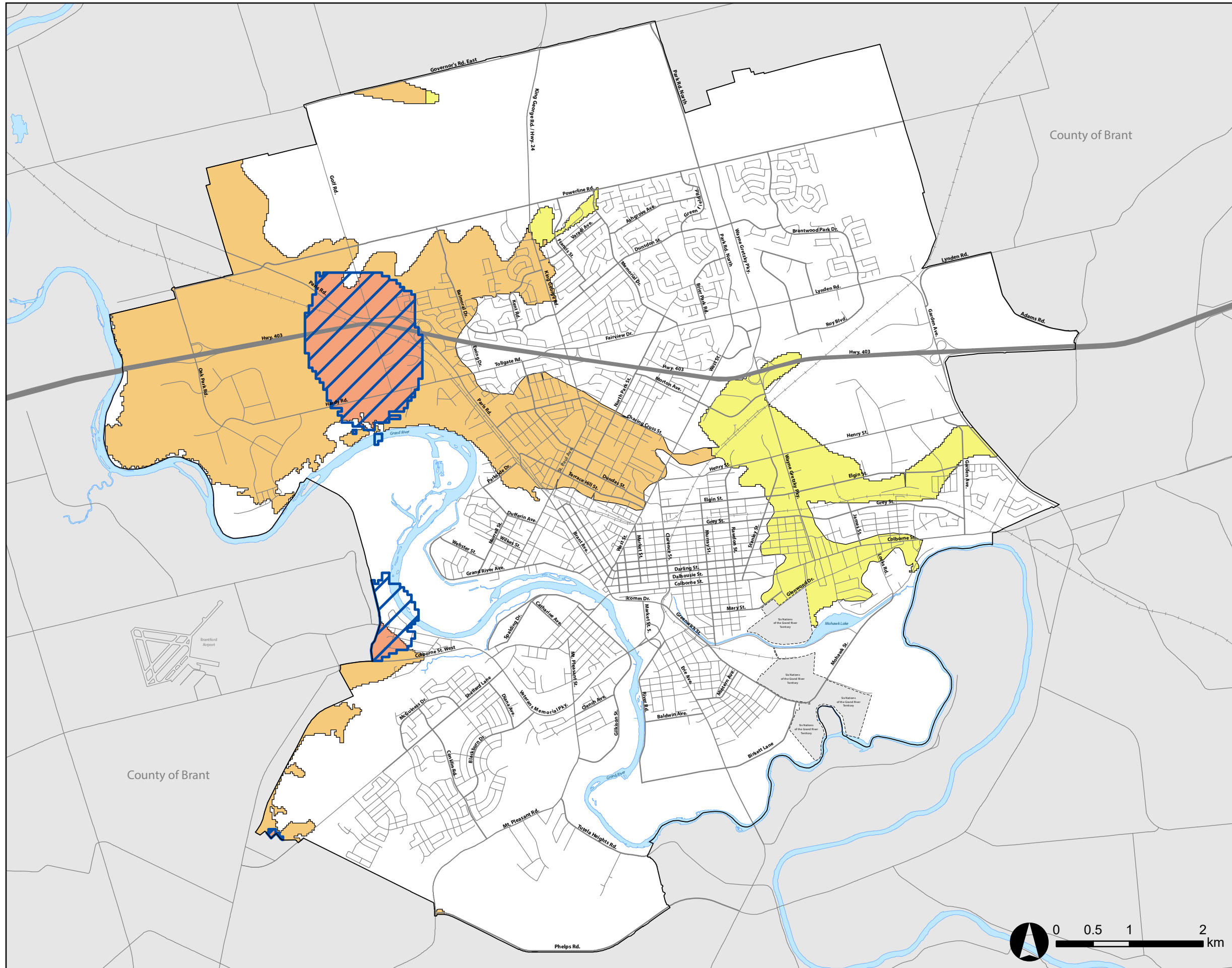
Refer to the Grand River Source Protection Plan
www.sourcewater.ca

Legend

Significant Groundwater Recharge Area

-  Higher vulnerability to water quantity stresses
-  Vulnerability to water quantity stresses
-  Lower vulnerability to water quantity stresses

Highly Vulnerable Aquifer



Appendix B

Comprehensive Block Plan Terms of Reference



CITY OF BRANTFORD
OFFICIAL PLAN
ENVISIONING OUR CITY: 2051

Envisioning Brantford - Municipal Comprehensive Review

Comprehensive Block Plan Terms of Reference

January 2021

Comprehensive Block Plan

Terms of Reference

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1. Purpose

The City will require a Comprehensive Block Plan (Block Plan) to be prepared by landowners at their expense and submitted to the City to the satisfaction of the Director of Planning prior to the approval of a development application for any lands located within the City's Block Plan areas, as identified on Schedule 2 of the Official Plan. A Block Plan is a non-statutory document which will be used to form the basis of the approvals related to Draft Plans of Subdivision or implementing Zoning By-law applications, and if necessary, Official Plan amendment applications.

Submission of a Block Plan to the City will include a Conceptual Master Plan, graphically illustrating the public and private design elements of the Block Plan area, accompanied by a Block Plan Document which should explain in writing the design rationale for the various elements of the Conceptual Master Plan. These components are further described in Section 3.

A Block Plan is intended to communicate the vision for the community and promote comprehensive planning within specific sections of the City's Designated Greenfield Areas. A Block Plan should demonstrate how the physical form of a proposed development fits within the planned context for each area. It should illustrate the vision and analyze the proposed development, demonstrating regard for: a mix of land uses; the layout and design of public streets and blocks; existing and planned adjacent land uses and Block Plan areas; pedestrian and cycling connections; parks and open spaces; public realm and streetscape elements; parking and access; landscaping; natural heritage features; and built form considerations such as type, location, organization, massing and density distribution. Block Plans should also demonstrate how the policies and guidance of the Official Plan, the Urban Design Manual, Master Servicing Plan, Transportation Master Plan, and any other relevant supporting City design documents are met and will be implemented. Block Plans should be supported by technical studies needed to inform future development applications, to the satisfaction of the City.

The Comprehensive Block Plan Terms of Reference has been prepared to standardize the City's expectation for Block Plan submissions to allow for efficient preparation and review. The scope and level of detail expected in each plan will be determined through an approved Terms of Reference and will depend on the scale, location, nature, and complexity of the development block. Planning and Public Works Staff will use Block Plans to help assess the proposed design, uses, and opportunities of a Block Plan area and to ensure that high quality design and efficient land uses are achieved in the public and private realm of the City's Designated Greenfield Areas.

2. Preparation and Approval Process

This Terms of Reference sets out a process based on the minimum requirements to complete a Block Plan. The first step in the process for preparing a Block Plan is a pre-consultation meeting followed by the formal submission of a Terms of Reference for the Block Plan study. Preparation of the Block Plan may commence once the Terms of Reference is satisfactory to City Staff.

It is the intent that Block Plans be undertaken by the proponents of development applications, in consultation with neighbouring landowners. The proponent of a Block Plan is required to advise neighbouring landowners of the initiation of a Block Plan. Where a Block Plan area includes multiple landowners, the development of a Block Plan should form the basis for a Developer's Cost Share Agreement. All landowners within a Block Plan area are subject to the Block Plan process, and are encouraged to work together to complete the plan.

2.1. Consultation

The proponent should consult with Planning and Public Works Staff as the Block Plan is developed. As part of the City's review of a submission, staff will circulate the Draft Block Plan to the Ward Councillors, City Departments and outside agencies. The preparation and review of Block Plans should be conducted in consultation with external stakeholders, including but not limited to: the Grand River Conservation Authority; the Ministry of the Environment, Conservation and Parks; and any other relevant stakeholders.

Landowner consultation shall occur prior to the Block Plan's formal submission to the City and all landowners within the Block Plan area shall be notified and consulted as part of this process. Written proof will be required to demonstrate all landowners have been notified.

2.2. Block Plan Preparation Steps

The preparation of a Block Plan in consultation with the City will generally follow the steps below:

1. Pre-consultation with City Staff
2. Proponent required to notify all Block Plan landowners and invite them to participate in preparation of the Block Plan
3. Submission of Block Plan Terms of Reference to the City
4. Amend Terms of Reference and re-submit (if needed)
5. Approval of Block Plan Terms of Reference by City Staff

6. Completion of Block Plan by proponent and submission to City
7. Circulation of Block Plan by City Planning Staff to City Departments and agencies
8. Amend Block Plan and re-submit (if needed)
9. Acceptance of Block Plan by the Director of Planning

2.3. Block Servicing Strategy - Required Supporting Studies

The preparation of a Block Plan will be supported by a Block Servicing Strategy that is informed by a number of required studies. These studies will be confirmed as part of the pre-consultation process and may include, but are not limited to:

2.3.1. Environmental Impact Study (EIS)

An Environmental Impact Study (EIS) will be prepared in accordance with the approved Block Plan Terms of Reference. The EIS is to be approved by the City as part of the Block Plan process and will satisfy the Natural Heritage System requirements of the City's Official Plan to the satisfaction of the City in consultation with the Grand River Conservation Authority.

The EIS will include:

- Field studies to address gaps or updates in subwatershed level information for the applicable catchment or subcatchment areas of the Block Plan;
- Integration of the existing management goals and recommendations of applicable subwatershed studies;
- Completion of an impact assessment and development recommendations for mitigation, restoration and enhancement following the City's Natural Heritage System policies based on the Block Plan concept and including all related infrastructure, parks, trails, etc.;
- Provide a water balance that is inclusive of natural heritage features and areas based on the Block Plan concept;
- Refine stormwater management plans and recommendations including infiltration targets to support and achieve the overall water balance for the Block Plan area and support maintaining or improving the hydrologic functions of natural heritage features and areas, surface water features and ground water features (refer to engineering requirements in Section 2.3.2);
- Provide recommendations for the enhancement and restoration of existing surface water features and their riparian areas, and the management of contaminants (i.e. salt) and runoff, in order to support fish habitat and the improvement of water quality and quantity;
- Assess impacts and develop recommendations to mitigate proposed refinements for the trail network and associated alignments including looking at opportunities to collocate trails with other existing or proposed infrastructure. Where trails are proposed within the Natural Heritage System, provide recommendations to ensure compatibility between natural heritage

features and areas and the proposed trail network, including the provision of sufficient space for trails, in accordance with the Official Plan Natural Heritage System policies;

- Develop management objectives for stewardship and restoration of natural heritage features and areas, including the provision of recommendations regarding the protection and enhancement of the City's forest resources, including the identification of plantable spaces, while also providing opportunities for meadow communities and pollinator habitats;
- Identify and develop monitoring and adaptive management recommendations to ensure long-term sustainability of the Natural Heritage System within the Block Plan area and natural heritage features and areas, surface water features and ground water features.

The need for subsequent site specific environmental studies, their scope and timing will be determined through the pre-consultation process prior to the submission of development applications and will build from and satisfy the recommendations of the applicable Block Plan EIS.

2.3.2. Master Environmental Servicing Plan (MESP)

A Master Servicing Plan (MSP) will be required to determine the appropriate servicing needs for the Blocks and shall follow the Municipal Class Environmental Assessment planning process. All projects that are identified through the MSP shall satisfy Phases 1 and 2 of the Class EA process, at a minimum.

The submission will include studies and plans that inform the design of the road network, active transportation network, servicing, and stormwater management facilities. As indicated in Section 2, this guidance document is intended to establish the minimum level of detail required of a Block Plan Terms of Reference and a Block Plan, and to support a more inclusive submission with a higher level of detail if a proponent wishes to scope subsequent development applications.

Accordingly, the minimum level of Engineering plans and studies will include the following:

- Description of Proposed Development and Required Infrastructure;
- Sanitary, Stormwater and Water Servicing, including Servicing Connectivity to adjacent Blocks and hydraulic grade line assessments;
- Establish sanitary and storm drainage area boundaries, confirm capacity of outlets and conveyance systems;
- Location and preliminary sizing of sanitary sewers, storm sewers and watermains;
- Phasing/Sequencing of Infrastructure;
- Stormwater management strategy including hydrogeological assessment and preliminary design of stormwater management facilities including volumetric sizing, stage/storage/discharge relationship, outlet control

calculations, forebay design, length/width ratios, decanting area, access routes, overland flow route;

- Preliminary Grading Plan to a level of detail that ensures that the future subdivision lotting will meet Engineering grading standards;
- Full transportation network to the local road level including active transportation connections (plan and profile drawings including all road geometrics);
- Noise impact analysis to ensure noise sensitive land uses are located away from noise sources;
- A Phase I/One Environmental Site Assessment and subsequent study reports;
- High level cost estimates for engineering works.

If a proponent chooses, additional details could be provided at the Block Plan stage to help streamline the subsequent development applications. Additional details to consider at the Block Plan level include, but are not limited to:

- Road cross-sections that accommodate transportation, servicing needs, and streetscaping requirements, while aiming to avoid locating utilities beneath trees or hardscaped areas;
- Road plan and profile drawings including all road geometrics;
- Municipal services with detailed design sheets and plan and profiles;
- Stormwater management strategy/plan including hydrogeological assessment and associated field work to confirm water balance requirements;
- Erosion and sediment control plans;
- Geotechnical report to support the proposed road and pipe design;
- Plans for all other utilities;
- On-street parking plan.

The most recent versions of the following documents should be utilized when preparing the aforementioned plans and studies. If deviation from the City's Engineering standards is required to achieve the vision, innovative engineering solutions may also be considered, to the satisfaction of the City Engineer.

- City of Brantford Master Servicing Plan
- City of Brantford Transportation Master Plan with Complete Street Framework
- City of Brantford North Brantford and Tutela Heights Sub Watershed Study
- City of Brantford Linear Design and Construction Manuals

2.3.3. Traffic Impact Study

A Traffic Impact Study (TIS) will be prepared in accordance with a Terms of Reference (TOR) for the TIS as part of the overall Block Plan TOR. The TIS is to be approved by the City as part of the Block Plan process.

The Block Plan will include a road schedule that builds upon Schedule 12: Road Network of the City's Official Plan. Roads shall generally be designed and built in accordance with the Complete Streets Framework of the Transportation Master

Plan, standards outlined in the policies of the Linear Design and Construction Manuals, and the Official Plan.

The active transportation network shall be designed in accordance with the approved Transportation Master Plan and Schedule 11: Bikeways and Trails Network Plan of the Official Plan. The City's approved Bikeway and Trail Network Plan passes through parks and open spaces wherever possible, and aligns within the road right-of-way only where necessary to connect the network, and where fully-separated facilities in the boulevard are possible. The cycling network is within the road right-of-way. Active Transportation network connections must follow the design guidelines stated in the City's Complete Street Framework in the Transportation Master Plan.

Consultation with Engineering staff with respect to minimum facility design standards is required and the final design will be subject to staff's approval as part of the recommended Block Plan.

3. Comprehensive Block Plan Components

The submission of a Comprehensive Block Plan will be informed by supporting studies required as part of the Block Servicing Strategy and will include both a Conceptual Master Plan and Block Plan Document. The Conceptual Master Plan should detail public and private design elements including, but not limited to:

- Proposed residential, commercial and employment areas;
- Neighbourhood Centres and Corridors;
- The creation of Neighbourhoods within the Block;
- Conceptual building siting;
- Integration of the Natural Heritage System;
- Sustainability;
- Proposed parks and open space network;
- New community facilities and institutional uses;
- Roads and active transportation network; and
- Preliminary servicing considerations.

The Conceptual Master Plan will be accompanied by a Block Plan Document, which should demonstrate in writing how the development proposal and Conceptual Master Plan conform with Official Plan policy and guidance from the City's Urban Design Manual. The document should also demonstrate how the Block Plan is designed to appropriately anticipate community needs and contribute to good planning and urban design. The following should be addressed and identified when developing a Block Plan:

3.1. Introduction

3.1.1. Vision and Purpose

The Block Plan Document should provide an overview of the Conceptual Master Plan and an explanation of the vision and purpose of the Block Plan.

3.1.2. Background and Existing Conditions

A brief description and analysis of the existing Block Plan area and surrounding context should be provided in the Block Plan Document. This should include an inventory of existing conditions and physical features of the site and surrounding lands, including but not limited to:

- Natural heritage features, topography and vegetation;
- Any existing buildings and structures within the area;
- Views and vistas to and from the area;
- Existing or planned landmarks or gateways;
- Existing or planned transportation networks, including vehicular, cycling, pedestrian and transit;
- Existing infrastructure utilities including telecom, electrical, natural gas;
- Existing open space linkages; and
- Any connections or interfaces with adjacent areas.

3.2. City Policy and Design Context

A Block Plan should be designed in accordance with the City's Official Plan and Urban Design Manual. These documents should be read in their entirety, with specific policies and guidance applied to the development of a Block Plan area where applicable. The Block Plan Document should provide a description of the overall character of the proposed development and identify conformity with the planning context for the area.

The Block Plan should be designed to foster a distinct community identity and purpose for each Block Plan area which is to be developed in accordance with specific direction for Brantford's Designated Greenfield Areas. This direction is provided within:

- *Section 5.2: Neighbourhoods* of the City's Official Plan, which includes policy direction for Residential Areas, Neighbourhood Centres, Neighbourhood Corridors, Transitional Residential Areas, and Suburban Residential Areas;
- *Section 5.3: Strategic Growth Areas* of the City's Official Plan, which includes policy direction for the Intensification Corridor Designation; and

- *Section 2: Urban Structure* of the City's Urban Design Manual, which outlines the planned vision and key directions for Residential Areas, Neighbourhood Centres, Neighbourhood Corridors and Intensification Corridors.

3.3. Block Plan Design and Development Considerations

Both the Conceptual Master Plan and Block Plan Document should illustrate urban design and development considerations for elements within the private and public realm of each Block Plan area. Written descriptions along with images and graphics within the Block Plan Document should provide a basis for the vision of the community and detailed rationale for the design of the proposed development. The following should be included and graphically shown within a Conceptual Master Plan, and the Block Plan Document should explain how each component has been addressed:

Streets and Blocks

- Configuration of blocks
- Pedestrian and vehicle linkages to adjacent areas, including streets, multi-purpose pathways and trails
- Layout and design of development parcels

Public Realm – Streetscape Design

- Streetscape Typologies for:
 - Neighbourhood Corridors
 - Neighbourhood Centres
 - Collector Roads
 - Local Roads
 - Lanes
 - Special Streetscapes
- Existing or new neighbourhood focal points and/or landmarks

Land Use Mix & Distribution

- Distribution of density and land uses that meet the required Block Plan area density target as outlined within the Official Plan
- Mix of housing types and densities
- Distribution and range of employment uses
- Distribution and range of commercial and retail areas
- Identification of mixed use areas
- Appropriate intensification within Neighbourhood Centres and Corridors

Built Form Design and Site Planning

- Site analysis and building types
- Residential building types
- Mixed use and non-residential areas
- Public buildings and institutions

Natural Heritage System

- As determined by the Block Servicing Strategy, the following should also be included within the Conceptual Master Plan:
 - Boundaries of the Natural Heritage System
 - Location of natural features including mature trees and vegetation
 - Strategies to enhance and protect existing Natural Heritage

Parks, Open Spaces, and Community Uses

- Parkland dedication strategy
- Location, orientation, and size of proposed parks, open spaces, and the trail system
- Future public destinations including schools, community facilities, and institutional uses
- Emergency service buildings including fire, police, and emergency medical services
- Public Art and the provision of other Community Benefits

Transportation Network and Servicing

- As determined by the Block Servicing Strategy, the following should also be included within the Conceptual Master Plan:
 - Proposed active transportation network, including public sidewalks, bike lanes and trails, walkways through planned parks, and accessible open spaces including midblock connections
 - Proposed transportation and transit network, including new road pattern and key transit areas
 - Interconnectivity of the transit network and the off-road trails system
 - Details for the provision of water, sanitary trunks and sub-trunks
 - Stormwater management facilities including location and area requirements
 - Infrastructure utilities including gas, electricity and telecom

Other Uses/Considerations

- Strategies to apply sustainable best practices
- Cultural heritage resources and strategies to protect them
- Potential views and vistas in the development of built form and open spaces
- How the proposed development will influence and integrate with future development
- Phasing of development including all relevant information required to evaluate the phasing plan

4. Deliverables

4.1. Block Plan Terms of Reference

A Block Plan Terms of Reference will be officially received and processed once Planning Staff are satisfied that it is complete. A complete submission will consist of the following:

1. A signed letter of authorization from the landowner(s) of the Block Plan area for applications submitted by an agent;
2. A cover letter that includes: a contact name, address, email and phone number, site addresses (street and number) and legal addresses within the Block Plan area, and date of submission;
3. A completed Block Plan application form and fee provided in accordance with the Development Planning Fee Schedule;
4. Two (2) hard copies and one digital PDF copy of the Terms of Reference.

4.2. Comprehensive Block Plan

A Block Plan will be officially received and processed once the City is satisfied that it is complete, and conforms to the approved Terms of Reference and Official Plan. The submission of a Comprehensive Block Plan accompanied by a Block Servicing Strategy will include a Conceptual Master Plan accompanied by a Block Plan Document. A complete submission consists of the following:

1. A signed letter of authorization from the landowner(s) of the property for those applications submitted by an agent;
2. A title page that includes: Block Plan identifier, site addresses (street and number) within the Block Plan area, lists the principal author(s) of the Block Plan, the consulting firm(s) and date of completion;
3. Contact information for the principal author of the report: address, email and phone number;
4. Two (2) hard copies and one digital PDF copy of the Block Plan;

5. Each of the mapping schedules included in the Block Plan is to be scaled in metric and also provided in an AutoCAD, ESRI shapefile, or ESRI geodatabase format;
6. Two (2) hard copies and one digital PDF copy of all supporting technical and background reports as required. The City may request a higher number of supporting technical and background reports to accommodate requirements for Environmental Impact Statements, etc.

5. Implementation

Applications for a Draft Plan of Subdivision or implementing Zoning By-law may not be submitted until the Block Plan and Block Servicing Strategy have been accepted by the Director of Planning. All proponents are required to request a pre-consultation meeting with Planning Staff prior to the submission of any development application, in order to identify the studies and/or reports required to carry out the application. The pre-consultation process may commence prior to acceptance from by the Director of Planning, provided that the Block Plan and Block Servicing Strategy process has reached a point where requirements for a complete application can be determined. If the Block Plan or any supporting documents do not align with the policy direction of the Official Plan or are not to the satisfaction of the Director of Planning, the applicant may be required to revise and resubmit or apply for an Official Plan Amendment. Approved Block Plans may be included as an Appendix to the City's Official Plan for transparency and ease of use, however they will not form part of the Official Plan.




Planning Staff and Public Works Staff will work with Block Plan and Block Servicing Strategy proponents throughout the process, in order to provide the opportunity to streamline subsequent submission requirements for future development applications. Any development application for properties subject to Block Plan areas within the City shall demonstrate to the City's satisfaction that the proposal is generally consistent with the applicable Block Plan, and will contribute to meeting the vision, key directions, and any additional requirements for specific areas as outlined within the Official Plan, Urban Design Manual, and Block Servicing Strategy. Block Plans may be amended through the development approval process, provided the relevant City requirements continue to be met.

**Appendix C –
Mohawk Lake District Plan Areas**

Appendix C

Mohawk Lake District Plan Areas

Legend

-  Gateway Area
-  Culture and Community Destination Area
-  Mohawk Lake and Park Recreation Area

