# LYNDEN GARDEN BLOCK PLAN

Prepared for Welton & Innes GP Inc.

Prepared by:

Macaulay Shiomi Howson Ltd.

in association with

Williams & Stewart Associates Limited/ John G. Williams Limited, Architect

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# 1. Introduction

# 1.1 Background

The City of Brantford Official Plan Envisioning Our City:2051 (the Official Plan) was approved by the Province, with modifications, with an effective date of August 5, 2021. The Plan establishes in Section 5.1 f. General Provisions for All Land Use Designations, Role of the Block Plan Process, that:

"If a development application is located within a Block Plan Area identified on Schedule 2: DGA Density and Block Plan Boundaries, it shall be subject to the applicable Block Plan. The City shall require, prior to submission of any development application, that a Block Plan be prepared for the whole of the applicable Block Plan Area. The purpose of the Block Plan is to promote comprehensive planning....."

Schedule 2: Designated Greenfield Area Density and Block Plan Boundaries of the Official Plan designates the lands north of Lynden Road, east of the City's previous settlement area boundary and west of the Canadian National Railway (CNR), which in this location coincides with the boundary of the Designated Greenfield Area (DGA), as the Lynden Garden Block Plan Area. (See Figure 1A).

Section 5.1 g. of the Official Plan requires that

"The preparation of Block Plans shall have regard for the policies of this Plan, the Urban Design Manual and the Comprehensive Block Plan Terms of Reference (Appendix B to this Plan). The preparation of each individual Block Plan will be guided by an area specific Block Plan terms of reference to be developed at the beginning of the Block Plan process."

The +/- 77.7 hectares of land in the Lynden Garden Block Plan Area are almost entirely owned by Welton & Innes GP Inc. (Welton & Innes), with the exception of a 1.3 hectare (ha) residential lot fronting on Lynden Road with the municipal address 253 Lynden Road. In addition, there is an unopened municipal road allowance running north-south through the Block which is not required for any proposed development.

In accordance with the requirements of the Official Plan, terms of reference were developed as a basis for the preparation of the Lynden Garden Block Plan which reflect the unique attributes of the Block. The Terms of Reference, January 2024, prepared by Welton & Innes GP Inc., are found under separate cover.

# 1.2 Block Plan Organization

The Block Plan is organized as follows:

- Vision and Purpose;
- Background and Context; and
- Block Plan Design and Development Considerations.

The preparation of the Block Plan is supported by a Block Servicing Strategy prepared by Urbantech, January 2024, comprised of a number of technical studies which are found under separate cover including:

- Lynden Garden Block Plan, Urban Transportation Considerations, BA Group, December 2022 and Traffic Study Addendum -Response to Comments, BA Group, October 16, 2023;
- Scoped Environmental Impact Study, including a summary of First Nations Consultations, WSP Canada Inc., January 2024;
- Watermain Hydraulic Assessment of Lynden Gardens Development, C3 Water, October 2023;
- Hydrogeological Investigation Report, Terrapex Environmental Ltd., December 2023;
- Supplemental Geotechnical Investigation, Terrapex Environmental Ltd., October 2022;
- Lynden Garden MESP Erosion, Hazard and Mitigation Assessment, GEO Morphix, December 2023;
- Phase One Environmental Site Assessment, Terrapex Environmental Ltd., May 2022;
- Transportation Noise & Vibration Feasibility Assessment, Gradient Wind Engineering Inc., October 2023;
- Archaeological Assessment, This Land Archaeology Inc., January 2020; and,
- Lynden Garden Block Pumping Station and Forcemain Design Development Conceptual Design Report, RVA, November 2023.

In addition, the Indigenous consultation to date is summarized in "299 Lynden Road – Brantford Residential Project: Indigenous Consultation Summary and Next Steps Memorandum September 22, 2023".

# 2. Vision and Purpose

# 2.1 Vision

The Lynden Garden Block Vision, in conformity with the Official Plan, is for the creation of a new residential neighbourhood, in conjunction with neighbourhoods to the west, which will form part of "a complete community that is inclusive, accessible, compact and well connected for all modes of travel" (Official Plan Section 2.1 a).

# 2.2 Purpose

The Lynden Garden Block Plan is a non-statutory document which the City will use as a basis for approvals of Draft Plan of Subdivision and implementing Zoning By-law amendment applications, as well as, if necessary, other applications under the Planning Act.

The Block Plan consists of a Conceptual Master Plan, which graphically demonstrates the public and private elements of the Block Plan area, together with supporting text which explains the planning rationale for the various elements of the Conceptual Master Plan.

The Block Plan has been developed in a manner which should ensure high quality design and efficient land uses in the public and private realm.

In particular, the Block Plan, through the Conceptual Master Plan and the text, in accordance with Section 5.1 f. of the Official Plan, does the following:

- "i. Identify the detailed land use and density distribution, and to ensure that the required density targets will be achieved;
- ii. Confirm the boundaries of the Natural Heritage System through an Environmental Impact Study;
- iii. Identify the parkland system, community facilities and the active transportation network;
- iv. Identify the detailed road pattern, including Local Roads;
- v. Articulate the details for protection of water, sewer and storm water management system in a Block Servicing Strategy;
- vi. Identify network and system connections to properties adjacent to the Block Plan Area; and,

vii. Form the basis for a Developer's Group Agreement, where the Block Plan Area includes multiple landowners." (Note: With respect Subsection vii., given the consolidation of ownership within the Lynden Garden Block Plan Area, a Developer's Group Agreement is not warranted or required.)

# 3. Background and Context

This section outlines the location and policy and technical background development context for the Block Plan. It identifies the key development parameters for the Block.

# 3.1 Location

The Lynden Garden Block forms part of the lands annexed by the City of Brantford from the County of Brant in 2017 to accommodate new development. It is located at the eastern edge of the City. Specifically, as noted above, the Block is located north of Lynden Road, east of the City's previous settlement area boundary and west of the Canadian National Railway (CNR).

The Subject Lands generally undulate, with flatter areas to the south and west, and steeper slopes to the north and east, primarily within wooded areas. The northern portion of the Block consists of natural/semi-natural features associated with Silver Creek, a tributary of Fairchild Creek.

The southern portion of the Block is largely undeveloped and used for agricultural purposes. There is a former farmstead with related abandoned buildings at the end of Welton Road, and an existing farmstead on a separate lot which fronts on Lynden Road.

Surrounding development is as follows:

- West: An existing residential neighbourhood is located immediately to the west.
  The lands immediately abutting the Lynden Garden Block include the Lynden Hills
  Park and low density residential development. The neighbourhood also includes
  medium and high density housing adjacent to Lynden Road. In addition, a range
  of community facilities is found in the area including parks, places of worship,
  schools and the Branlyn Community Centre, as well as a range of retail facilities
  on Lynden Road (e.g. grocery store, food outlets, bank, medical facilities, gym).
- North: Natural Heritage System associated with Silver Creek which extends north
  of the Block Plan boundary.
- East: CNR line forms the City boundary. Lands beyond are in the County of Brant and include rural and natural heritage areas.
- South: Lynden Road forms the southern boundary of the Block. To the south of it is an employment area.

# 3.2 Planning Policy and Design Context

The City's Official Plan was approved by the Province on August 5, 2021. It was prepared in conformity with the most current Provincial planning framework. In particular, it is consistent with the Provincial Policy Statement, 2020 (PPS) and conforms with A Place to Grow: Growth Plan for the Greater Golden Horseshoe, Office Consolidation 2020 (Growth Plan).

Since the approval of the Official Plan, it has been further amended, with Official Plan Amendment No. 5 (OPA 5) being relevant to the natural/semi-natural features associated with Silver Creek in the northern portion of the Lynden Garden Block (See Figures 1A and 1B). OPA 5, as set out in the Purpose to that amendment:

"changes the Growth Plan Natural Heritage System and corresponding Core Natural Areas Designation and Adjacent Lands Overlay on Schedule 6 of the City of Brantford Official Plan to align with the revised Growth Plan NHS. The Amendment also changes the affected Core Natural Areas to other land uses on Schedules 1, 2, 3 and 4 of the City of Brantford Official Plan as originally proposed in the Council-adopted Official Plan (March 26, 2021) prior to the new Official Plan's approval as modified by the Province (August 4, 2021)."

These changes were not approved by the Province as it would have delayed the approval of the Plan. However, the Province has since considered and accepted the proposed changes as set out in the Basis to OPA 5, although formal approval of OPA 5 is still outstanding.

Regardless, the Official Plan as amended by OPA 5 provides the detailed policy framework with respect to the development of Lynden Garden Block Plan Area. Key directions are summarized in the following subsections.

# 3.2.1 Designations

The following designations are applicable to Lynden Garden with Schedules 2 and 4 providing specific direction regarding development density and detailed land use:

 Schedule 1 Growth Management – The lands are identified as "Designated Greenfield Area" and are located with the Settlement Area Boundary, unlike the lands immediately to the north. The majority of the Block is designated "Neighbourhoods", with the northern portion associated with the tributary to the Fairchild Creek designated "Core Natural Areas".

- Schedule 2 Designated Greenfield Area Density and Block Plan Boundaries The schedule identifies the boundary and name of the Block Plan. It establishes a density target of 60 residents and jobs combined per hectare for the Block.
- Schedule 3 Land Use Plan The majority of the lands are identified as being in the "Residential Designation" while the northern portion of the Block is designated "Core Natural Areas Designation".
- Schedule 4 Designated Greenfield Area Structure The northern portion of the Block is identified as "Core Natural Areas Designation", while the central and east portions are identified as "Residential Designation". However, a block of land fronting on Lynden Road on the west side of the Block is designated "Neighbourhood Centre", while the lands on either side of the southern portion of the proposed collector road to the east of the Neighbourhood Centre are designated "Neighbourhood Corridor" (See Figures 1A and 1B).
- Schedule 6 Natural Heritage System Additional detail is provided with respect to the Core Natural Areas Designation on this schedule, including an overlay illustrating the "Growth Plan Natural Heritage System" and the boundary of the "Adjacent Land Overlay (90 m)". The Settlement Area Boundary is also identified.
- Schedule 7-1 Floodplain The limit of the Floodplain along the tributary of Fairchild Creek is identified together with the associated Floodway Policy Area.
- Schedule 7-3 Steep Slopes and Erosion Hazard Steep and Toe Slope Areas are identified associated with the tributary of Fairchild Creek in the Block Area.
- Schedule 11 Bikeways and Trails Network Plan Proposed On-Road trails are identified along the proposed collector road system in the Block and along Lynden Road.
- Schedule 12 Road Network A proposed Major Collector Road system is identified in the Block. Lynden Road is designated as a Major Arterial Road.
- Schedule 13 Road Allowance Widenings This table identifies a proposed Right-Of-Way Width of 40 metres for Lynden Road for the area from Brantwood Park Road to Garden Avenue.

# 3.2.2 Key Policy Directions

As identified on the Official Plan schedules (See Figures 1A and 1B), the northern portion of the Block Plan Area is designated "Core Natural Areas", while the remainder is designated "Residential". This includes a "Neighbourhood Centre" designation abutting

Lynden Road, and a "Neighbourhood Corridor" designation on the east side of the southern portion of the proposed collector road to the east of the Neighbourhood Centre.

Section 5.6 Policies for the Natural Heritage System, provides detailed direction with respect to the lands in the Core Natural Areas designation. In particular, development is limited as noted in Section 5.6. b:

- "i. The Core Natural Areas Designation, which comprises the environmental features and an associated 30 metre buffer, as well as portions of the Natural Heritage System for the Growth Plan for the Greater Golden Horseshoe located within Brantford, that the City shall protect and conserve; and,
- ii. The Adjacent Lands Overlay, which is based on an approximate 90 meter setback from the boundary of the Core Natural Areas Designation and is intended to act as a trigger for the completion of an Environmental Impact Study when required by the City."

However, development, redevelopment and/or site alteration is permitted subject to an Environmental Impact Study (Section 5.6.1 h) that "demonstrates that there will be no negative impacts on any natural heritage features, or their ecological and hydrological functions". Changes to the Core Natural Areas designation may also be considered through the Block Plan process and a related Environmental Impact Study (Section 5.6.1 o). In addition, lands in the Adjacent Lands Overlay trigger a requirement for an Environmental Impact Study when necessary to support development (Section 5.6.2).

Section 5.2 Policies for Neighbourhoods, provides the key directions with respect to proposed development. In conformity with the Official Plan, the Residential Designation permits a full range of residential units in Low-Rise, Mid-Rise and High-Rise Residential buildings as well as a range of related uses including additional residential units, retirement homes and live-work units, as well as parks and stormwater management facilities.

In the Residential Centre designation, single-detached, semi-detached, duplex, street townhouse and block townhouse dwellings are not permitted, and mixed use buildings are encouraged. In the Residential Corridor designation single-detached, semi-detached, and duplex dwellings are prohibited. In both designations, development is to have a minimum height of three storeys.

# 3.3 Development Context

Key development parameters identified through the Block Servicing Strategy are summarized below, together with consultation initiatives to date:

# 3.3.1 Transportation

The Block Plan Area, as set out in the transportation analysis by BA Group, is well served by a variety of existing roadway connections provided across the City, the County and to/from the Greater Toronto and Hamilton Area (GTHA), facilitated by adjacent arterial roads and Highway 403. The City of Brantford Transportation Master Plan (2020) proposes various transportation-related projects within the Block Plan Area and vicinity including:

- A minor collector road system in the Block with on-street cycling infrastructure which extends northwards from Lynden Road in the form of a loop;
- Several new off-road and on-road bikeways and trails within the vicinity of the Block to provide further connections to other areas of the City and the County; and,
- A road widening of Lynden Road to an overall right-of-way of 40 metres to accommodate cycling and active transportation infrastructure.

The Block Plan Area is already well-served by several existing bus transit routes operated by Brantford Transit. This includes four bus routes that are accessible within an 800 metre radius.

Based on the transportation analysis carried out by BA Group, the proposed development will generate in the order of 590 to 765 two-way vehicle trips in the weekday morning and afternoon peak hours respectively. A signalized access is proposed at the intersection of the Minor Collector Road and Lynden Road near the south west corner of the Block Plan Area. The signal would also provide for mid-block crossing opportunities for pedestrians and vulnerable road users. In addition, it would mitigate traffic flows along Lynden Road and control access for vehicles entering and exiting the Block Plan Area.

All intersections in the Block will operate under capacity and at acceptable levels-ofservice in the weekday peak hours. BA evaluated the feasibility of implementing roundabout, traffic signal or dual roundabout options at the intersection of Lynden Road and Garden Avenue to support the assessment.

Ultimately, BA concluded that the Block Plan development can be effectively accommodated within the existing transportation network. The proposed road plan aligns well with the City's existing plans for roads and active transportation. Additional road network improvements beyond what is proposed with the Block and the City's existing plans in the vicinity are deemed unnecessary.

# 3.3.2 Servicing

As outlined in detail in the Block Servicing Strategy (BSS) prepared by Urbantech Consulting, the Lynden Garden Block Plan can be serviced through the extension of

municipal services, construction of local water, wastewater and storm services, and the construction of stormwater management (SWM) facilities. In particular, the following should be noted:

# Water Distribution System

There are no existing watermains in close proximity to the Lynden Garden Block at this time. Development of the Block will require construction of new Capital Infrastructure. As identified in the City of Brantford's Master Servicing Plan, new water transmission mains are required within both Lynden Road and the proposed Block. These are identified as Capital Projects W-M-018 and W-M-020 respectively.

The Block is located within Pressure District (PD) 2/3. This PD is supplied by the Tollgate, Wayne Gretzky and Albion Pump Stations. Floating storage is provided by the King George Elevated Tank.

 Water servicing will be provided through a network of new local watermains connected to the proposed Capital Projects. All local watermains within the Block are proposed to be 250 mm in diameter. C3 Water conducted a hydraulic assessment of the proposed system and concluded that the proposed water servicing concept met all the required criteria and level of service. The results of this analysis are found in "Watermain Hydraulic Assessment of Lynden Gardens Development, C3 Water, October 2023".

# Sanitary Servicing

There is no existing wastewater infrastructure directly adjacent to the Lynden Garden Block. Development will require upgrades to the existing wastewater system and construction of new Capital Infrastructure. These projects will provide wastewater servicing both to the Lynden Garden Block and the employment lands (Bella Gardens) to the east.

Ultimately these lands will drain to the existing Empey Waste Water Pumping Station (WWPS) via the Coulbeck Road trunk sewer. Capacity upgrades to the Empey WWPS are required to support projected 2041 growth. This project is currently underway (Capital Projects WW-PS-007 and WW-PS-008) and was expected to be completed in 2023.

A portion of the Lynden Garden sanitary sewer will have to be removed and replaced with a larger sanitary trunk sewer to provide sufficient capacity for growth. This upgrade project is identified as WW-SS-013 in the City's Master Servicing Plan.

Further, due to the shallow depth of the Coulbeck Trunk and site grading constraints, a wastewater pumping station and forcemain are required to service

both the Lynden Garden Block and the employment lands to the east. These projects are identified as WW-PS-005 and WW-FM-005 in the City's Master Plan.

The Block Plan is proposing an alternative location for the proposed pumping station (PS). RVA has prepared a preliminary design concept for the local pumping station and forcemains required for the Lynden Garden Block. The PS is proposed to be located along Lynden Road for a range of reasons including reduced capital works to bring the station on line and related cost savings. This concept is detailed in the Lynden Garden Block Pumping Station and Forcemain Design Development Conceptual Design Report, RVA, November 2023.

# Stormwater Management

Stormwater management will be primarily based on City of Brantford and Ministry of Environment, Conservation and Parks (MECP) Stormwater Management Guidelines. Findings of the Phase 1 Subwatershed Study (SWSS) and Grand River Conservation Authority (GRCA)Guidelines will also be followed where applicable.

The proposed stormwater sewer system is designed such that flow is directed toward the proposed stormwater management (SWM) ponds/storage facilities before being discharged into downstream receiving water bodies. Two SWM Ponds and one underground box culvert superpipe storage have been proposed for the site. SWM Pond 1 is located at the south end of the Block near Lynden Road and SWM Pond 2 is located in the north east corner of the Block.

# 3.3.3 Natural Heritage

A Scoped Environmental Impact Study (EIS) prepared by WSP Canada Inc. concluded that the proposed development can be undertaken while protecting key environmental features, with the confirmation of feature limits, implementation of recommended development setbacks and other mitigation measures, subject to refinement and updates to technical studies and detailed designs that will be prepared as part of future submissions. The EIS includes recommendations to confirm or refine conclusions and recommendations through future work (e.g. preparation of detailed landscape planting plans, preparation of a Biological Monitoring Program).

In particular, with respect to the Official Plan, the Study notes in Section 5.7.3 Policy Compliance:

"No development or site alteration is proposed within the Core Natural Areas Designation; this area will be maintained in full, with development setbacks, buffer enhancements and other mitigation measures. Development that has the potential to impact the features and functions of natural areas is proposed within the Adjacent Lands Overlay. These potential impacts will be further assessed through subsequent submissions; however, it is anticipated that with implementation of recommended protection, enhancement and

mitigation measures, impacts can be avoided and an overall net benefit to retained natural areas will be realized."

# 3.3.4 Noise and Vibration Impact Assessment

The Transportation Noise & Vibration Feasibility Assessment carried out by Gradient Wind Engineering Inc. analyzed the effect of post-development transportation noise on residents' indoor and outdoor living spaces. The report was prepared in accordance with MECP's NPC-300 guidelines, and includes recommended mitigation measures for noise attenuation, where applicable.

Modelling completed as part of the analysis suggests that noise levels over the site will range from between 54 and 73 dBA during the daytime and between 51 and 71 dBA at night. The highest noise levels are anticipated to be in the southeast corner of the site. These results include the combined noise associated with the post-development roadway traffic plus the CN rail corridor. Noise calculations include sound level projections from future roadway expansions. It is noted that the major source of transportation noise in the Block is associated with the CN rail line.

The MECP guidelines recommend a noise range for indoor living spaces between 35 and 45 dBA. In order to account for potential deficiencies in building construction, the target indoor noise range is between 32 to 35 dBA. To achieve this target ranges, the following is recommended:

- Upgraded building components with higher Sound Transmission Class (STC)will be required for areas where outdoor noise levels exceed 60 dBA due to the railway source and 65 dBA due to the roadway source.
- Closed windows reduce dBA by 10, therefore lots that experience noise levels above 60 dBA will require air conditioning, or a similar mechanical system, to ensure the comfort of occupants.
- Lots that experience outdoor noise levels between 55-60 dBA will require forced air heating with provision for air conditioning.
- No outdoor noise mitigation is required for lots that fall under 55 dBA.
- Rear yards backing onto the rail line and Lynden Road may require noise control
  measures such as noise barriers to reduce to under 55 dBA.

A detailed transportation noise study will be undertaken at the time of subdivision registration to determine the specific noise control measures for the development.

With respect to vibration, a vibration study was undertaken to determine the potential impact of the CN rail line on the foundations in the vicinity of the rail corridor. This analysis was completed using the United States Federal Authority's (FTA) criteria to identify potential areas of concern.

Estimated vibration levels at foundations nearest to the rail corridor are anticipated to be 0.44 mm/s RMS (75 dBV) based on the FTS's protocol. No mitigation is required for vibration levels up to this level. As vibration levels for the Block are anticipated to be within this range, no specific mitigation measures are required.

# 3.3.5 Archaeological Assessment

This Land Archaeology Inc. (This Land) was contracted in 2019 to conduct a peer review of the archaeological work (Stage 1 and Stage 2) done on the Lynden Garden Block site in 2006 by Amick Consultants Ltd.

At the conclusion of the peer review it was determined that an updated Stage 2 Archaeological Assessment of Field 2 (a portion of the Block along the west boundary) should be carried out. No further work was deemed necessary for the remainder of the Block.

The Stage 2 assessment was conducted for Field 2 in June 2019. It resulted in the recovery of a number of indigenous artifacts. It was also found that one site known as the Innes-Welton Site D (AhHB-146) met the criteria for a Stage 3 Assessment.

The Stage 3 Assessment was carried out in July 2019. It yielded eight artifacts, none of which were of Cultural Heritage Value of Interest (CHVI). The final recommendation was that no further work was needed.

The Ministry of Heritage, Sport, Tourism, Culture Industries in their clearance letter to This Land indicates that the report documents the assessment/mitigation of the study area and concludes that the sites on the property requiring archaeological assessment have been adequately documented and that no further archeological assessment is required. The study has been entered into the Ontario Public Register of Archaeological Reports. The letter does note that 16.65 ha of land identified as Environmental Protection Area outside the study area should be subject to a test pit survey when approved by the proponent.

# 3.3.6 Indigenous Engagement

WSP Canada Inc. (WSP) has been retained to support Indigenous engagement efforts as part of the preparation of the Block Plan. The engagement to date involves the following Nations/organizations and is summarized in "299 Lynden Road – Brantford Residential Project: Indigenous Consultation Summary and Next Steps Memorandum September 22, 2023":

- Mississaugas of the Credit First Nation;
- Six Nations of the Grand River; and,

Survivor's Secretariat.

Engagement will continue as the Block Plan process proceeds, providing Project updates at key milestones to Indigenous Nations and organizations. Welton & Innes will coordinate with the City regarding any Indigenous engagement that the City will initiate related to the Block.

### 3.3.7 Other Landowners

There is only one other landowner in the Lynden Garden Block who own a small 1.3 ha parcel fronting on Lynden Road. Welton & Innes have been in contact with the owner to advise them of the process, has shared all the submission materials for this Block Plan and will continue to liaise with them.

### 3.3.8 Conclusions

The background policy, technical analysis and consultation process provides the basis for the development of the Block Plan in particular, the detailed land use and density distribution; confirmation of the boundaries of the Natural Heritage System; identification of the parkland system, and the active transportation network and detailed road pattern as well as the water, sewer and storm water management system and required noise mitigation measures. The key development parameters include:

- Minimum Density Target minimum 60 residents and jobs combined per hectare.
- Land Use Distribution- Northern portion of the Block is identified as "Core Natural Areas", while the central and east portions are "Residential". The lands along Lynden Road on the west side of the Block are designated as "Neighbourhood Centre", while the lands on the east side of the southern portion of the proposed collector road are designated "Neighbourhood Corridor".
- Protection of the Natural Heritage features, topography and vegetation in the northern portion of the Block generally in the area designated "Core Natural Areas in the Official Plan.
- Parkland is required to be identified in accordance with Section 5.2.3 of the Official Plan to serve the neighbourhood in accordance with the Planning Act requirements.
- The City's Transportation Master Plan identifies the need for a minor collector road system in the Block Plan Area with on-street cycling infrastructure which extends northward from Lynden Road in the form of a loop. A road widening of Lynden

Road to an overall right-of-way of 40 metres to accommodate cycling and active transportation infrastructure is also established in the Official Plan.

- The Block will be serviced through an extension of municipal services, construction
  of local water, wastewater and storm services and stormwater management
  facilities.
- Noise mitigation will be required, particularly in the southeast corner of the Block, at lots that are nearest and most exposed to the CN rail corridor. This will include upgraded building components with higher Sound Transmission Class (STC) rating, requirements for air conditioning and forced air hearing with provision for air conditioning.

# 4. Block Plan Design and Development Considerations

The Lynden Garden Block Plan Conceptual Master Plan (See Schedule 1) has been developed based on the Vision and Guiding Principles and policy directions in the Official Plan. These directions include matters specific to Block Plans including Section 5.1f.-j. Role of the Block Plan Process. In addition, directions in the Official Plan related to neighbourhoods, natural heritage system, transportation, servicing and design considerations are addressed.

The City's Urban Design Manual has also been taken into consideration in conformity with the Official Plan, Section 3.3 b. which states that "all new development shall be consistent with the City's Urban Design Manual."

Lynden Garden has been planned, in conformity with the Official Plan, as established in the Vision for the Block, such that this new residential neighbourhood, in conjunction with neighbourhoods to the west, will form part of "a complete community that is inclusive, accessible, compact and well connected for all modes of travel" (Section 2.1 a).

The Conceptual Master Plan and this Block Plan document and illustrate the design and development considerations for elements within the public and private realm of the Block Plan. The Block Plan reflects input from Williams & Stewart Associates Limited/ John G. Williams Limited, Architect with respect to urban design.

Appendix A identifies how each component of the design and development considerations in the Official Plan and Urban Design Manual have been addressed in detail. The Table in Appendix A summarizes the policy and guideline framework identified in the Official Plan and the Urban Design Manual for each design and development component, and then provides an assessment of how each component is addressed. The following sections provide an overview of this assessment.

### 4.1 Streets and Blocks

# 4.1.1 Configuration of blocks and future lots

The road pattern, as illustrated on the Conceptual Master Plan Schedule 1(CMP), reflects a modified grid pattern that responds to natural heritage feature or open spaces and existing street and other existing development conditions. Similarly, the configuration of the blocks generally reflects the dimensions in the City's Urban Design Manual (UDM), Section 3.1, taking into consideration the overall dimensions of the Block and the configuration of the Natural Heritage System and Neighbourhood Centre block.

# 4.1.2 Pedestrian and vehicle linkages to existing adjacent areas, including streets, multi-purpose pathways and trails

The opportunities for vehicle linkages to existing adjacent areas are limited to Lynden Road given the existing design of abutting development to the west, the location of the Natural Heritage System to the north and east, and the CNR to the east (See Schedule 1). However, an active transportation network is proposed for the Block including a fine-grained pedestrian network and on-road cycling infrastructure. A key component of this network will be the potential to provide an active transportation connection through the Lynden Hills Park to the community to the west and the rest of the City. Two opportunities are also provided for connections to the Natural Heritage System and any trails which are developed as part of that area.

# 4.1.3 Layout and design of development parcels

The configuration and size of the Neighbourhood Centre and Neighbourhood Corridor blocks will permit a development in general conformity with the direction in the UDM. Development of the remaining lands will include single detached and street townhouses.

Dwellings will face the street and can be designed in conformity with the directions in the UDM including creation of an attractive streetscape with a well-defined street edge, created through an appropriate relationship between the dwelling and the street.



Dwellings will be designed to appropriately suit their location<sup>1</sup>

No rear lotting is proposed with respect to public streets, multi-use pathways and trails, and parks. Rear lotting is proposed for the Natural Heritage System to protect the

<sup>&</sup>lt;sup>1</sup> Source: All photographs and graphics provided with permission of Sorbara Group of Companies from material originally prepared by John G. Williams Limited, Architect.

environment. Access to the Natural Heritage System is proposed at two points to ensure any impacts are minimized.

# 4.2 Public Realm – Streetscape Design

# 4.2.1 Streetscape Typologies for Neighbourhood Corridors; Neighbourhood Centres; Collector Roads; Local Roads, and Lanes

The local roads and minor collector road system will be developed with ROWs which will accommodate the City's requirements as established in the Design and Construction Manual and having regard for the UDM (See Figures 2 and 3). The streetscape typologies for the Neighbourhood Centre and Corridor blocks will be established at the site plan stage of development, but will reflect the directions in the UDM, recognizing that these areas are planned to be served by private roads and lanes.

# 4.2.2 Existing or new neighbourhood focal points and/or landmarks

With respect to the Lynden Garden Block, there are no existing focal points or landmarks. However, there are a number of potential locations for the creation of focal points and landmarks including entrances to two parks and the NHS, as well as the two road accesses to the Block (See CMP).

# 4.3 Land Use Mix & Distribution

# 4.3.1 Distribution of density and land uses that meet the required Block Plan area density target in the Official Plan

The proposed development with a density of 64 residents and jobs combined per hectare (See Appendix B) will result in achievement of the minimum density target of 60 residents and jobs combined per hectare in the City Official Plan.

# 4.3.2 Mix of housing types and densities

The proposed development will provide a mix and range of market-based housing types, styles, tenures and affordability characteristics to meet the needs of the City's growing and diverse population. Specifically, it is anticipated that the mix and range will include in the order of 235 12.2 metre detached units; 279 11.0 metre detached units; 422 6.1 metre townhouse units and 178 5.5 metre block townhouse units. In addition, the Neighbourhood Centre block (See Figure 4 Concept Plan which illustrates a potential concept for the block) has the potential for the development of mixed use and apartment buildings including the preservation of the existing heritage farm dwelling. The concept plan provides one option for development which would result in 148 apartment dwellings in addition to ground floor commercial and commercial use of the heritage farm dwelling.



A variety of harmonious architectural expression will be developed throughout the Lynden Garden Block.

# 4.3.3 Identification of mixed-use areas

The Neighbourhood Centre block in terms of its size and configuration provides the opportunity for mixed use on the lands.

# 4.3.4 Appropriate intensification within Neighbourhood Centres and Corridors

Development of the Neighbourhood Center and Corridor blocks will conform with the Official Plan resulting in development which is more intensive than that proposed for the Residential designation.

# 4.4 Built Form and Site Planning

# 4.4.1 Residential building types

The proposed residential building types conform with the permitted uses in the Official Plan and will provide a mix and range of market-based housing types, styles, tenures and affordability.







Conceptual images of proposed architectural character of single detached dwellings







Conceptual images of proposed architectural character of townhouse dwellings

# 4.4.2 Mixed Use and Non-residential building types

The Neighbourhood Centre block in terms of its size and configuration provides the opportunity for mixed use on the lands.

# 4.5 Natural Heritage System

4.5.1 The following should be included within the Conceptual Master Plan: Boundaries of the Natural Heritage System; Location of natural features including mature trees and vegetation; and strategies to enhance and protect existing Natural Heritage.

Based on the review in the Environmental Impact Study (EIS), the proposed development can be undertaken while protecting key environmental features, with the implementation of recommended development setbacks and other mitigation measures, subject to refinement and updates and future design stages, including specific recommendations identified in the EIS.



Conceptual image of Natural Heritage System

# 4.6 Parks, Open Spaces and Community Uses

# 4.6.1 Parkland dedication strategy

As identified on the CMP, the intent is to dedicate in the order of 5 % of the developable land as neighbourhood park in conformity with the requirements of the Official Plan and the Planning Act.

# 4.6.2 Location, orientation, and size of proposed parks, open spaces, and trail system

The proposed park locations can be designed to achieve the directions in the OP and UDM, in particular maximizing public access, views and safety. In addition, the western park provides a critical connection to the community to the west for active transportation, while the eastern park provides a buffer to the CNR.





# Conceptual images of parkland

# 4.6.3 Future public destinations including schools, community facilities, and institutional uses. Emergency service buildings including fire, police, and emergency medical services.

The Lynden Garden Block is immediately adjacent to existing development to the west which is well served by schools and other community facilities. No need has been identified for additional facilities in Lynden Garden. If a location is required for uses such as small-scale places of worship or other neighbourhood supporting uses the Neighbourhood Centre block provides an opportunity for such development.

# 4.6.4 Public Art and the provision of Community Benefits

The details of what Community Benefits will be required will be resolved through later review. However, Landmark/Focal Point locations have been identified on the CMP in accordance with the criteria established in the UDM – highly visible and publicly accessible locations including parks and neighbourhood centres and corridors.

# 4.7 Transportation Network and Servicing

As determined by the Block Servicing Strategy, the following should also be included within the Conceptual Master Plan:

4.7.1 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

As illustrated on the CMP, a modified grid network of local and minor collector roads has been planned in conformity with the OP and the City's Design and Construction Manual. The proposed roads are designed to accommodate active transportation as required by the City, including sidewalks on each street and on-road bike facilities on the minor collector road system. The opportunity for a trail system is provided for through the extension of Lynden Hills Park and in the NHS as illustrated conceptually on Schedule 1. The feasibility and detailed design of these facilities will be determined by the City. Similarly, transit service can be provided on the minor collector road system to Lynden Road, as determined by the City.

# 4.7.2 Details for provision of water, sanitary trunks and sub-trunks

Stormwater management facilities including location and area requirements

Infrastructure utilities including gas, electricity and telecom

The BSS prepared by Urbantech provides the required details with respect to:

- Grading design;
- Storm servicing;
- Stormwater management;
- Water balance and low impact development;
- Wastewater servicing;
- Water servicing; and,
- Erosion and sediment control.

The proposed servicing reflects the City's design requirements including the Storm Sewer, Design and Construction Manual, Linear Municipal Standards (v5- January 2022); Linear Infrastructure Municipal Infrastructure Standards; and Water Master Plan. In accordance with the City's Roads and Transportation Design and Construction Manual

road right-of-way sections, services will generally be located under the paved portion of the road, with utilities in a joint use utility trench in the boulevard of the road right-of-way.



Conceptual image of stormwater management facility

### 4.8 Other Uses/Considerations

# 4.8.1 Strategies to apply sustainable best practice

The Block Plan and supporting technical studies reflect the directions in the City's OP, Master Plans, Design and Construction Manual and UDM which are designed to support sustainable development. In particular, the Block Plan has been developed based on a modified grid road system and active transportation network which will result in the creation of a health, walkable, transit-supportive, cycling and pedestrian-friendly neighbourhood.

# 4.8.2 Cultural heritage resources and strategies to protect them

As outlined in Section 3.3.5 of this Plan, This Land Archaeology Inc. (This Land) was contracted in 2019 to conduct a peer review of the archaeological work (Stage 1 and Stage 2) done on the Lynden Garden Block site in 2006 by Amick Consultants Ltd.

At the conclusion of the peer review it was determined that an updated Stage 2 Archaeological Assessment of Field 2 (a portion of the Block along the west boundary) should be carried out. No further work was deemed necessary for the remainder of the Block.

The Stage 2 assessment was conducted for Field 2 in June 2019. It resulted in the recovery of a number of indigenous artifacts. It was also found that one site known as the Innes-Welton Site D (AhHB-146) met the criteria for a Stage 3 Assessment.

The Stage 3 Assessment was carried out in July 2019. It yielded eight artifacts, none of which were of Cultural Heritage Value of Interest (CHVI). The final recommendation was that no further work was needed.

The Ministry of Heritage, Sport, Tourism, Culture Industries in their clearance letter to This Land indicates that the report documents the assessment/mitigation of the study area and concludes that the sites on the property requiring archaeological assessment have been adequately documented and that no further archeological assessment is required. The study has been entered into the Ontario Public Register of Archaeological Reports. The letter does note that 16.65 ha of land identified as Environmental Protection Area outside the study area should be subject to a test pit survey when approved by the proponent.

With respect to cultural heritage buildings and landscapes the one other landowner in the Lynden Garden Block who owns a small 1.3 ha parcel fronting on Lynden Road (253 Lynden Road, which is listed in the City's heritage inventory, but is not designated. A full evaluation is required as part of any application for development, but provision has been made for preservation of the dwelling as illustrated in the concept plan for the Neighbourhood Centre (See Figure 4).

# 4.8.3 Potential Views and vistas to development of built form and open space

Reflecting the directions in the OP and UDM, as discussed above Landmarks/Focal Points have been identified at key areas of the Block which will provide vistas and views into parks and the NHS. In addition, a Landmark/Focal Point is proposed at the entrances to the Block at gateways created by the Neighbourhood Centre and the Neighbourhood Corridor blocks and related minor collector road accesses to the neighbourhood.

# 4.8.4 How the proposed development will influence and integrate with future development

The Block is located on the eastern boundary of the City. The CNR is located to the east, the NHS to the north and north east and Lynden Road, a major arterial, and a future employment area to the south. The development of this Block will complete the residential community to the west. The Block development will be integrated with that development through connections for active transportation through the extension of Lynden Hills Park, and vehicular/active transportation connections along Lynden Road.

# 4.8.5 Phasing of development including all relevant information required to evaluate the phasing plan

It is premature to identify phasing of the Block at this time given the limited area. If development is to be phased it will be determined through the plan of subdivision process.

# 4.9 Conclusions

The Block Plan, including the Conceptual Master Plan, together with the results of the technical background studies, has been prepared in conformity with the City's Official Plan, and is consistent with the Urban Design Manual.



PROPOSED LAND USE	Area	% of Area				
1) Neighbourhood Residential	28.8ha	37.1%				
2) Neighbourhood Corridor	3.6ha	4.6%				
3) Neighbourhood Centre	1.7ha	2.2%				
4) Neighbourhood Park	2.7ha	3.5%				
5) Natural Heritage System	22.1ha	28.4%				
6) Stormwater Management Facility	5.8ha	7.5%				
and Access Block						
7) Pumping Station	0.2ha	0.3%				
8) Lynden Road Widening (10m)	0.1ha	0.1%				
9) Road Right-of-Ways	12.7ha	16.3%				
TOTAL	77.7ha					
Notes: 1. The proposed Neighbourhood Park land use represents 5% of total developable lands.						
2. The total proposed area for Neighbourhood Centre includes a 1.2ha parcel owned by a						

non-participating landowner.

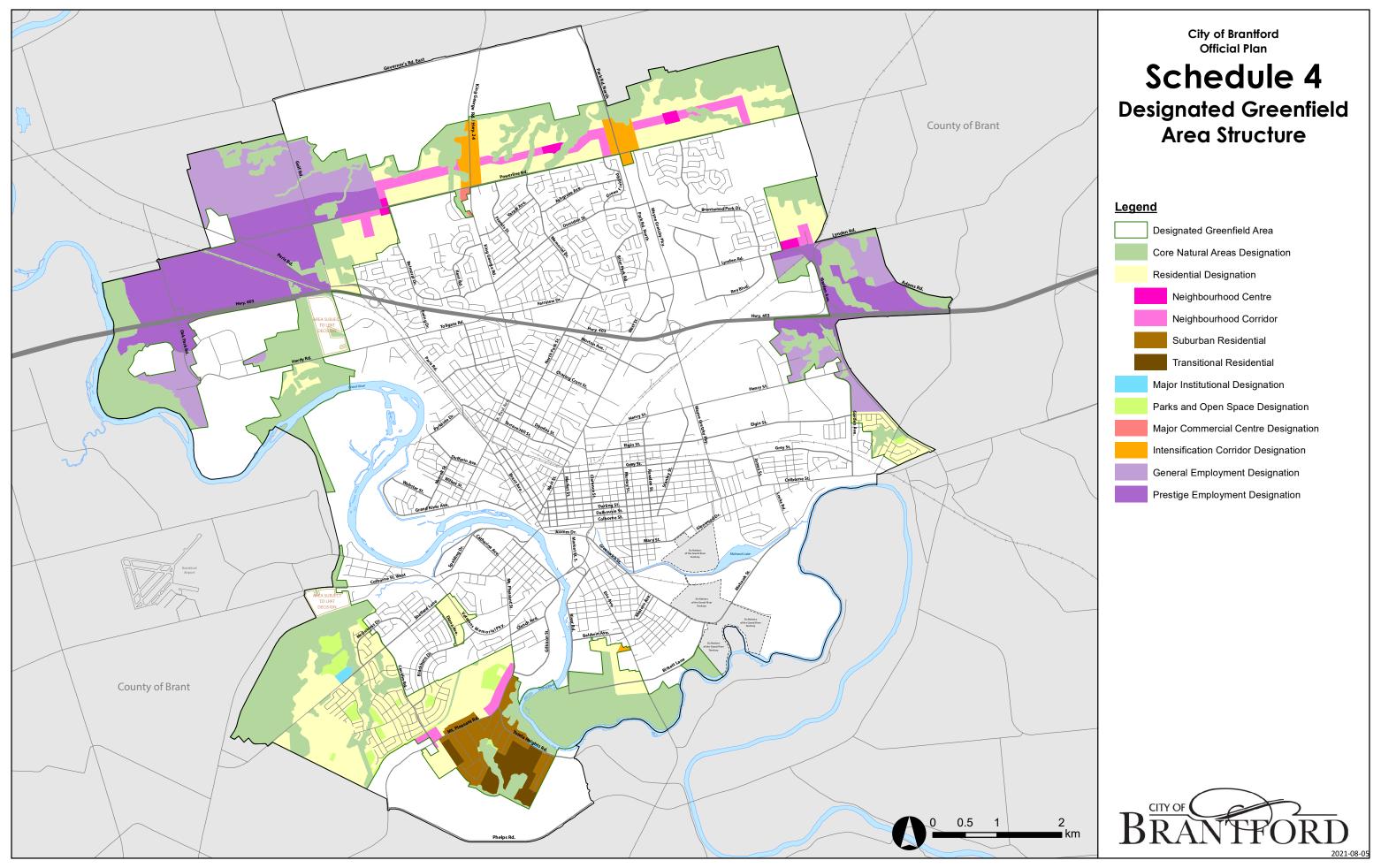
# City-Owned Right-of-Way PREPARED FOR: WELTON & INNES GP INC SCALE 1: 4,000 PROJECT No. L19-1708 DATE January 26, 2024

SCHEDULE 1 LYNDEN GARDEN BLOCK PLAN conceptual master plan

Landmark / Focal Point

Block Plan Boundary

Trail







Changes to Official Plan Schedule 2 - Designated Greenfield Area and Block Plan Boundaries:

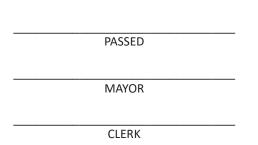
Land affected by this amendment changed from CORE NATURAL AREAS to DENSITY TARGET OF 60 RESIDENTS AND JOBS COMBINED PER HECTARE



Land affected by this amendment changed from CORE NATURAL AREAS to DENSITY TARGET OF 25 JOBS PER HECTARE

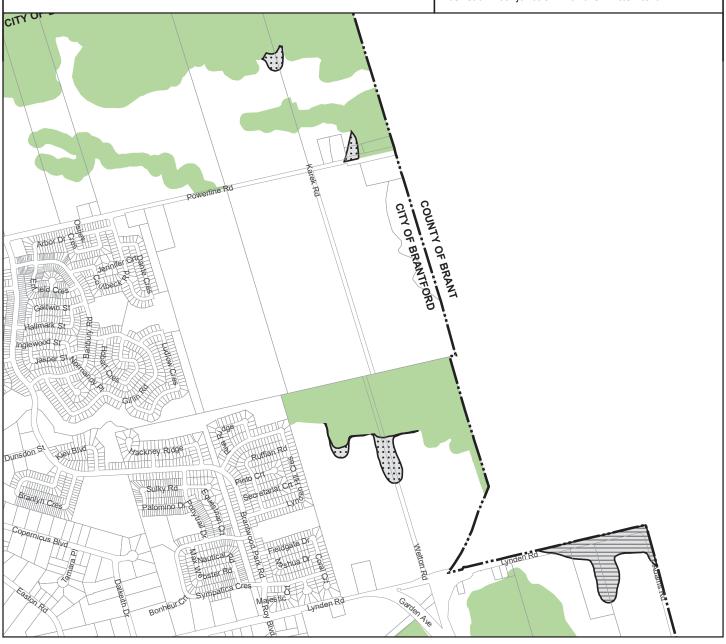


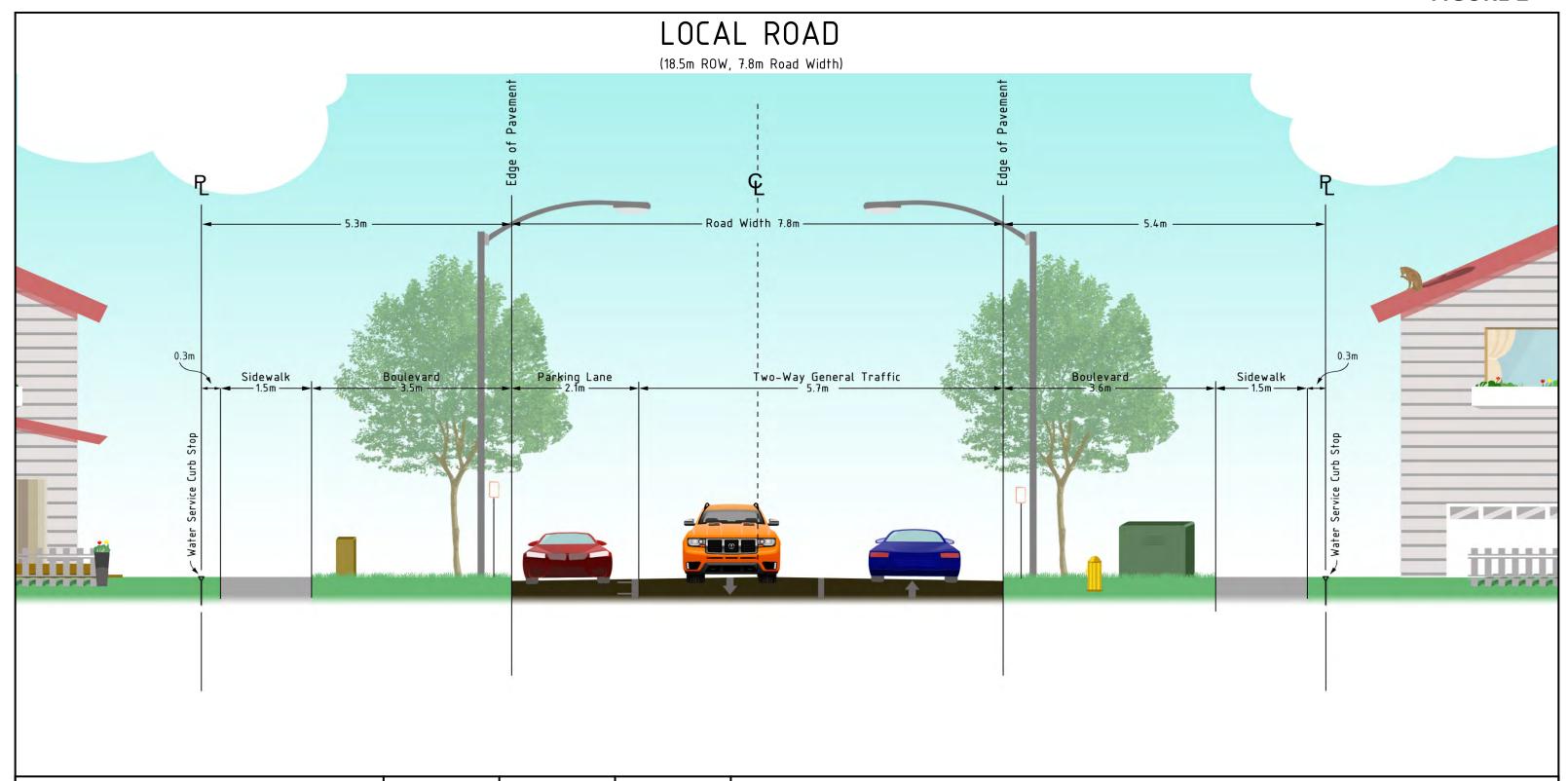
Existing Core Natural Areas to remain



Scale: N.T.S.

Note: This schedule forms part of Amendment No. 5 to the Official Plan for the City of Brantford and must be read in conjunction with the written text.



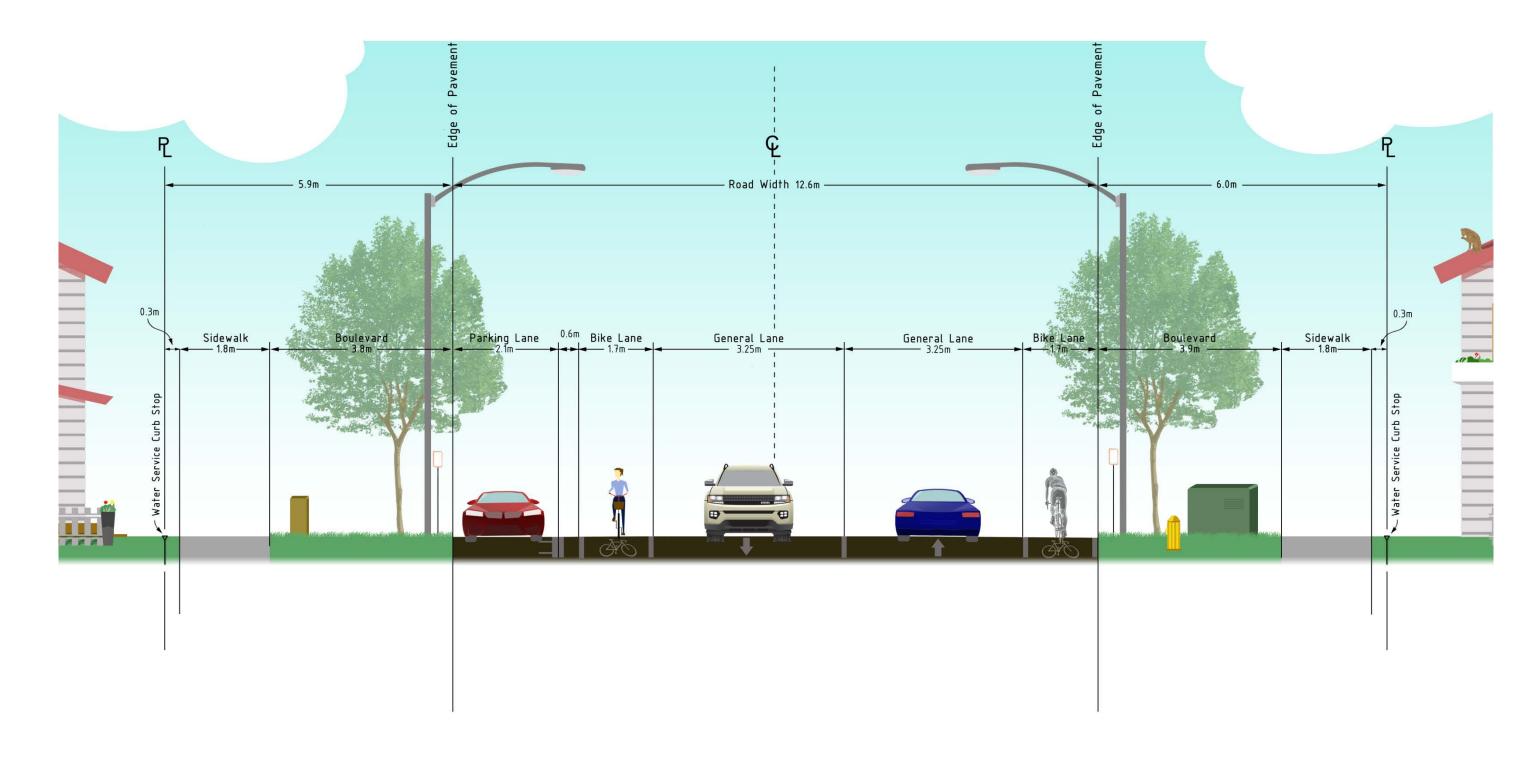


CITY OF BRANTFORD Public Works Commission	Date:	Revised:	Scale:
	October 2017	February 2020	N.T.S.
LOCAL ROAD 18.5 M ROW, 7.8 M ROAD WIDTH	Drawn by:	Checked by:	Approved by:
Drawing Number: G-101	A.L.	L.V.	L.V.

### NOTES

- 1. Curbs not shown. See Roads Manual and Detailed Cross-sections for curb, gutter and subdrain standards.
- 2. Pavement design details not shown. See Roads manual for pavement design standards.
- 3. Lane markings are shown for information only and do not represent marking requirements. See Roads Manual for pavement marking standards.
- 4. Road grade and crossfall shall be in accordance with the Roads and Transportation Manual.
- 5. Sidewalk Grade: minimum of 0.5% and maximum of 5%; Sidewalk Crossfall: minimum of 2% and maximum of 4%.
- 6. Water service curb stops shall be on the property line. Installation on hard surfaced area, such as driveways and walkways shall be avoided.
- 7. A minimum clearance of 0.3 m must be maintained between the gas line and the property line.

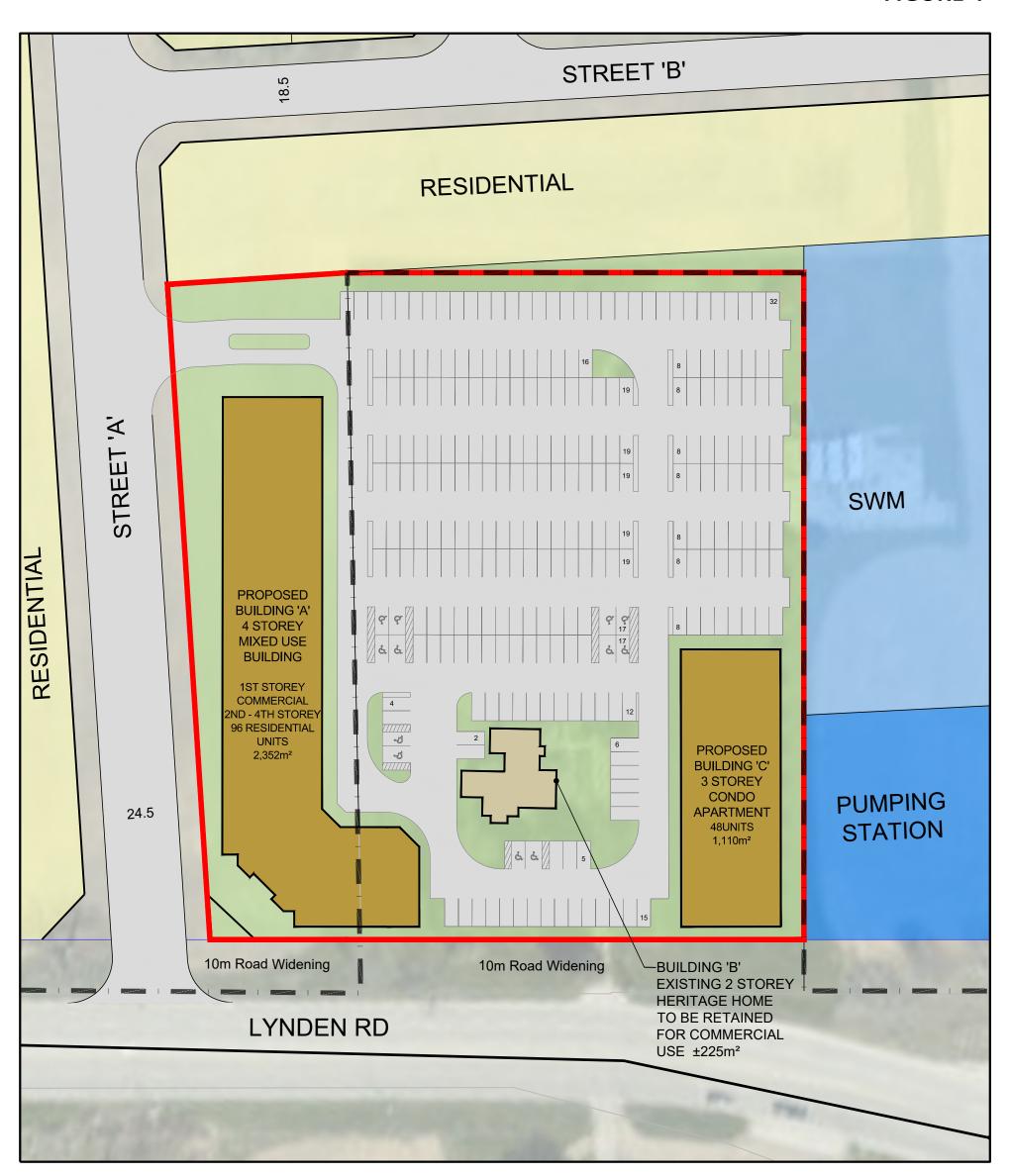
# Figure 3

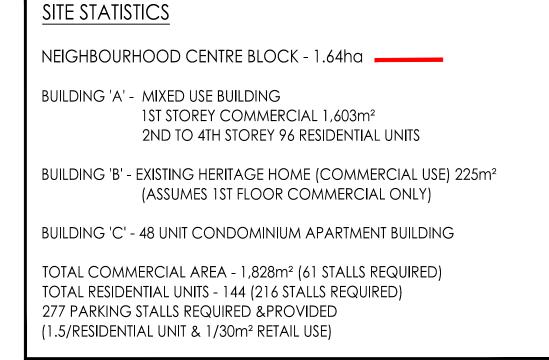


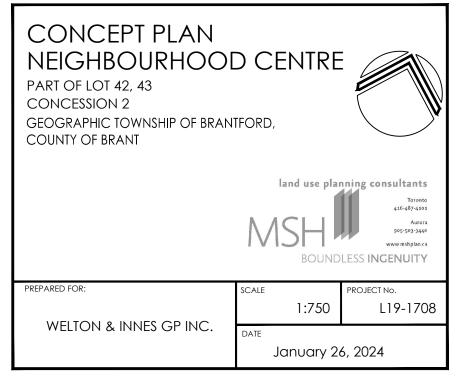
CITY OF BRANTFORD Public Works Commission	Date:	Revised:	Scale:
	October 2017	December 2022	N.T.S.
MINOR COLLECTOR 24.5 M ROW, 12.6 M ROAD WIDTH	Drawn by:	Checked by:	Approved by:
Drawing Number: G-103	A.L.	L.V.	L.V.

### NOTES

- 1. Curbs not shown. See Roads Manual for curb, gutter and subdrain standards.
- 2. Pavement design details not shown. See Roads manual for pavement design standards.
- 3. Lane markings are shown for information only and do not represent marking requirements. See Roads Manual for pavement marking standards.
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# APPENDIX A LYNDEN GARDEN BLOCK PLAN DESIGN AND DEVELOPMENT CONSIDERATIONS

- **#** Component Review and Assessment
- 1. Streets and Blocks
- 1.1 Configuration of blocks and future lots

### **Policy and Guideline Framework**

**The Official Plan (OP)** provides in Section 7.2 e. that "The City supports a grid pattern road network and connectivity to facilitate transit use and to increase opportunities for walking and cycling trips. Cul-de-sacs, or other disruptions to the grid network are generally discouraged."

The City's **Urban Design Manual (UDM)** builds on this direction and encourages in Section 3.1 Streets and Blocks, a "well connected network of streets and blocks" (Guideline 1). Further, Guideline 2 indicates that "new streets should be based on a continuous grid/modified grid pattern that responds to natural heritage feature or open spaces, built heritage and existing street conditions." Section 3.1 includes specific Block Guidelines including:

- "1.Block lengths should generally not exceed 200 metres along ....Neighbourhood Corridors. Where a block extends beyond 150 metres, a mid-block pedestrian connections should be provided in the form of a 6 to 10 metre walkway, parkette, or Privately-Owned Publicly Accessible Spaces (POPS)."
- "3. For designated greenfield areas, low-rise development blocks should generally be a minimum of 70 metres deep.
- 4. Mid-rise development blocks that accommodate a mid-rise building and transitional built form to the rear of the block should generally be 80-90 metres deep."

### **Policy and Guideline Assessment**

#### Review

As illustrated on Schedule 1, the road pattern reflects a modified grid pattern. Unfortunately, road connections to the west, other than via Lynden Road, cannot be achieved given the design of the existing development. In addition, access to the north and north-east is prohibited by the Natural Heritage System, while the CNR blocks access to the east other than via Lynden Road.

With respect to the configuration of the blocks, the Neighbourhood Corridor block is generally in the order of 200 metres long from south to north. However, the east/west dimensions of the Block and the requirement to locate the major north/south road in the existing City right-of-way means that the majority of the east/west residential blocks all exceed 150 meters in length. These blocks range from +/- 160 metres to +/- 195 metres. Further, the north/south dimensions of the Block and the configuration of the Natural Heritage System and Neighbourhood Centre, also mean that it is not feasible to create blocks which are 150 metres in length in a north/south direction. The north/south blocks range from =/- 179 metres

to 205 metres. Regardless, the block length has been minimized as much as feasible and only two blocks exceed 200 metres.

Similarly, the dimensions of the Block and the objective of providing more affordable housing, means that the blocks all are less than 70 metres deep. The blocks range in depth from +/- 56 to +/- 61 metres. The Neighbourhood Centre block, which would provide the potential for mid-rise development, has a depth of between +/- 127 metres at the north end and +/- 119 metres at the south end.

#### Conclusion

The road pattern reflects a modified grid pattern that responds to natural heritage features, open spaces and existing street and other existing development conditions. Similarly, the configuration of the blocks generally reflects the dimensions in the Guidelines taking into consideration the context particularly the overall dimensions of the Block and the configuration of the Natural Heritage System and Neighbourhood Centre block.

# 1.2 Pedestrian and vehicle linkages to existing adjacent areas, including streets, multi-purpose pathways and trails

### **Policy and Guideline Framework**

The **OP** provides policies for active transportation in Section 7.1 d.-h. inclusive. In particular, Subsection f. states that "New public roads shall accommodate pedestrian and cycling activity through the inclusion of dedicated cycle lanes, sidewalks, multi-use pathways, or a combination thereof, on both sides of the road, unless otherwise exempted by this Plan." OP Schedule 11, Bikeways and Trails Network Plan, identifies a Proposed On-Road bikeway and trails network within the right-of-way (ROW) of the minor collector road network in the Block which is identified on OP Schedule 12, Road Network. In addition, an On-Road bikeway/trails network is also identified within the Lynden Road ROW (a Major Arterial on OP Schedule 12) on the south boundary of the Block.

The **UDM** provides directions in Section 3.2 B Boulevard Design with respect to sidewalks. In particular, Guideline B 1 states that "accessible sidewalks and/or multi-use paths should be provided on both sides of all streets....and should be continuous, including where they cross driveways. Sidewalks should be located such that there is a boulevard separation, adequate for the roadway classifications, between the sidewalk and the roadway."

Section 3.4.3 Bicycle Circulation and Parking also provides in Guideline 4 "Active transportation facilities such as bike lanes, multi-use paths, transit stopes with shelter etc. should be considered for all developments. In addition, Guideline 5 provides that "Connections should be made to the larger trail or bikeway network where one exists surrounding a proposed development." While Guideline 6

provides "Trails or multi-use pathways should be provided along significant natural areas where they abut a built-up area or street (either public or private)."

### Policy and Guideline Assessment

### Review

As outlined in the Urban Transportation Considerations Report and the Lynden Garden Block Plan Traffic Study Addendum – Response to Comments prepared by BA Group for the Block Plan, a fine-grained pedestrian network will be established within the Block. In addition, on-road cycling infrastructure will be established on the proposed minor collector road system which will connect to the on-road cycling infrastructure on Lynden Road. A key component of this network will be the potential to provide an active transportation connection through the Lynden Hills Park to the community to the west. In particular to the sidewalk and bike infrastructure on Brantwood Park Drive. The facilities on Brantwood Park Drive will, in turn, allow active transportation connections to other areas of the City.

Two opportunities are also provided for connections to the Natural Heritage System and any trails which are developed as part of that area.

#### Conclusion

The opportunities for vehicle linkages to existing adjacent areas are limited as discussed above. However, an active transportation network is proposed for the Block including a fine-grained pedestrian network and on-road cycling infrastructure. A key component of this network will be the potential to provide an active transportation connection through Lynden Hills Park to the community to the west and the rest of the City. Two opportunities are also provided for connections to the Natural Heritage System and if any trails which are developed as part of that area.

### 1.3 Layout and design of development parcels

### **Policy and Guideline Framework**

The **OP** provides no direction with respect to the layout and design of development parcels in the Designated Greenfield Area.

The **UDM** provides detailed direction although more applicable at the subdivision design and site plan stages of development. However, the following are applicable to the Block Plan:

Section 2.4 Neighbourhood Centre: D Lynden Rd. and Garden Ave. "This neighbourhood centre is envisioned to provide additional retail, service and office development to serve existing and future neighbourhoods surrounding the

centre and compliment future employment uses within the Prestige Employment area of the City located south of Lynden Road."

Section 2.5 Neighbourhood Corridors: B Lynden Rd. and Garden Ave. Corridor "....located adjacent to a neighbourhood centre and should be developed to act as a gateway to future neighbourhood and low-rise residential to the north. This includes the provision of denser residential uses such as townhouses and midrise buildings, along with small commercial and retail uses to serve future residents."

Section 5.1 Low-Rise Residential Buildings Guideline 2 "Contribute to an attractive and active, pedestrian-supportive streetscape with a well-defined street edge, created through an appropriate relationship between the dwelling and the street."

Guideline 3. Dwellings should be designed and site to maximize views of streets, parks and open spaces and natural heritage features."

Guideline 4. "Backlotting of residential dwellings onto public streets, multi-use pathways and trails, parks, natural heritage features and the Grand River should be avoided.....Where backlotting is unavoidable the façade facing the feature....should be designed to be the same or higher level quality as the front façade."

Guideline 6. "Dwellings located interior to a block or not on an arterial or major collector should front onto streets, and where possible, driveways should be paired."

Section 5.1.2 New Low Rise Guideline 5. "Dwellings should be sited to define the street edge."

# **Policy and Guideline Assessment**

#### Review

The ownership of the Neighbourhood Centre block is split and the majority of the lands are owned by a small private landowner. The block is configured and is of a size (+/-1.6 ha) which will permit a development in general conformity with the direction in the UDM with mixed use and/or mid rise residential buildings and a design appropriate for a gateway (See Figure 4 Concept Plan which illustrates a potential development concept). Preservation of the existing heritage dwelling and its integration with the mixed use development is also feasible. However, any development would have to recognize that the relative isolation of the block, and uncertainty in the market, may limit the non-residential component or limit any development in the short to mid-term.

With respect to the lands in the Neighbourhood Corridor block, the block is configured, and is of a size, to allow design appropriate for a gateway to the community.

Development of the remaining lands will include single detached and street townhouses. Dwellings will face the street and will be designed to create to an attractive and active, pedestrian-supportive streetscape with a well-defined street edge, created through an appropriate relationship between the dwelling and the street. No rear lotting is proposed with respect to public streets, multi-use pathways and trails, and parks (See conceptual images of proposed architectural character of single detached and townhouse dwellings in Block Plan).

Access to the Natural Heritage System however will be limited to better protect the Natural Heritage System. Backlotting is proposed along much of the Natural Heritage System (NHS)with access at two points to ensure any impacts are minimized. Backlotting with fenced rear/side yards and specific possible trail access points:

- Eliminates unauthorized access points and ad hoc trails;
- Minimizes impacts to natural drainage;
- Minimizes road mortality;
- Provides, in rear yards particularly where planted with native species, additional habitat contiguous with the NHS;
- Provides "eyes" on the NHS and related trail system to better address instances of vandalism, unwanted behaviour and similar undesirable activities to increase the safety of the trail network and protection the NSH;
- Eliminates impacts from road salt;
- Minimizes noise, garbage and light impacts from roads adjacent to natural areas; and,
- Reduces heat impacts from pavement directly adjacent to the NHS

#### Conclusion

The configuration and size of the Neighbourhood Centre and Neighbourhood Corridor blocks will permit a development in general conformity with the direction in the UDM. Development of the remaining lands will include single detached and street townhouses. Dwellings will face the street and can be designed in conformity with the directions in the UDM including creation of an attractive streetscape with a well-defined street edge, created through an appropriate relationship between the dwelling and the street. No rear lotting is proposed with respect to public streets, multi-use pathways and trails, and parks. Rear lotting is proposed for the Natural Heritage System to protect the environment. Access to the Natural Heritage System is proposed at two points to ensure any impacts are minimized.

- **#** Component Review and Assessment
- 2. Public Realm Streetscape Design
- 2.1 Streetscape Typologies for Neighbourhood Corridors; Neighbourhood Centres; Collector Roads; Local Roads, and Lanes

### **Policy and Guideline Framework**

The **OP** provides minimal direction with respect to streetscape typologies. Section 7.2 simply stating in Subsection j. that "minor collector roads are designed to carry low to moderate volumes of traffic in residential neighbourhoods....connecting to the broader Major Collector and Minor Arterial Roads." Section 7.2 k. with respect to Local Roads indicates they "carry low volumes of traffic".

The **UDM** provides general direction in Section 3 Public Realm Guidelines, not specific to different streetscape typologies, with respect to:

- 3.1 Streets and Blocks;
- 3.2 Boulevard Design A Street Furniture and Landscape Area, B Sidewalks and C Transition Area:
- 3.3 Signage;
- 3.4 Active Transportation;
- 3.5 Transit;
- 3.6 On-Street Parking; and,
- 3.7 Lighting.

The City's **Design and Construction Manual Linear Municipal Infrastructure Standards**, however, provides detailed direction with respect to public road classifications (Section 6.0 Road Classifications) including typical road cross section diagrams. Local roads are to have a ROW up to 18.5 m, while minor collectors are to have a ROW up to 24.5 m. Lanes are also provided for but Table 10 provides no specific dimension.

### Policy and Guideline Assessment

### Review

The Block Plan is based on local roads with a ROW of 18.5 m and a minor collector road system as required by the Official Plan which has a ROW of 22 m. (See Figures 2 and 3) The local road design generally reflects the design in the cross section plan found in the City's Design and Construction Manual. Similarly, the minor collector road, while narrower than illustrated in the City's cross section drawing, provides for all the required facilities. The Neighbourhood Centre and Corridor blocks will be served by private roads and lanes. The streetscape typologies for these blocks will be established at the plan of subdivision/plan of condominium stage of development, but will reflect the directions in the UDM.

### Conclusion

The local roads and minor collector road system will be developed with ROWs which will accommodate the City's requirements as established in the Design and Construction Manual and having regard for the UDM. The streetscape typologies for the Neighbourhood Centre and Corridor blocks will be established at the plan

of subdivision/plan of condominium stage of development, but will reflect the directions in the UDM, recognizing that these areas will be served by private roads and lanes.

### 2.2 Existing or new neighbourhood focal points and/or landmarks.

# **Policy and Guideline Framework**

The **OP** provides no specific direction with respect to new neighbourhood focal points and/or landmarks other than general directions such as is found in Principle 6 in Section 2.2 Guiding Principles. Principle 6 states "new greenfield development will demonstrate high quality urban design that contributes to the recognition of Brantford as a beautiful City."

The **UDM** also provides limited direction regarding creation of new neighbourhood focal points and/or landmarks. However, Section 2.5 B Lynden Rd. and Garden Ave. Corridor indicates that the area "should be developed as a gateway for future neighbourhood and low-rise residential development to the north." Section 3.8 Public Art provides that "Public Art is encouraged in highly visible and publicly accessible locations including parks and open spaces, along trails, and throughout Downtown, intensification corridors, and neighbourhood centres, particularly on prominent streets." Section 3.9 Natural Heritage Features Guidelines 6 states "maximize views and awareness of natural heritage features...." while Guideline 9 directs "Parks and open spaces are focal points for neighbourhoods."

### **Policy and Guideline Assessment**

#### Review

With respect to the Lynden Garden Block, there are no existing focal points or landmarks. However, there are a number of potential locations for the creation of focal points and landmarks. These include:

- two proposed parks, particularly the extension of Lynden Hills Park which will form a major connection to the neighbourhoods to the west;
- two proposed access points to the NHS; and,
- two road accesses to the Block, particularly the westerly connection to Lynden Road which will be a signalized intersection with the Neighbourhood Centre in the north/east quadrant.

The design of each of these areas will require careful consideration. With respect to the parks both have significant public road frontage and the City through its design can contribute to the creation a focal point/landmark at the primary entrances to both facilities using landscaping, signage, lighting and other features. The access points to the NHS will also involve landscaping, signage and other features. Finally, through the development process, design of the Neighbourhood Centre and Corridor blocks can integrate features such as public art to ensure the entrances are clearly established as gateways to Lynden Garden.

### Conclusion

With respect to the Lynden Garden Block, there are no existing focal points or landmarks. However, there are a number of potential locations for the creation of focal points and landmarks including entrances to two parks and the NHS, as well as the two road accesses to the Block.

### 3. Land Use Mix & Distribution

# 3.1 Distribution of density and land uses that meet the required Block Plan area density target in the Official Plan.

### **Policy and Guideline Framework**

The **OP** Schedule 2 Designated Greenfield Area Density and Block Plan Boundaries identifies a density target for the Lynden Garden Block of minimum 60 residents and jobs combined per hectare in accordance with the detailed policies with respect to Density within the Designated Greenfield Area in Section 4.3 d. of the OP.

### Policy and Guideline Assessment

#### Review

The Official Plan does not establish how density should be calculated. However, Section 2.2.7 Designated Greenfield Areas of the Growth Plan requires that the minimum density target for such areas should be measured over the entire designated greenfield area excluding natural heritage features, natural heritage systems, and floodplains provided development is prohibited in such areas. Based on the direction in the Growth Plan the area over which the density would be calculated for Lynden Garden is 55.6 hectares and the proposed density is 64 residents and jobs combined per hectare (See Appendix B).

### Conclusion

The proposed development will result in proposed density of 64 residents and jobs combined per hectare which is in line with the Official Plan target.

### 3.2 Mix of housing types and densities

# Policy and Guideline Framework

The **OP** Section 3.1 b. "The City shall encourage a mix and range of market-based housing types, styles, tenures and affordability characteristics to meet the needs of a growing and diverse population."

### **Policy and Guideline Assessment**

### Review

A mix of low and medium density market-based housing types with a variety of styles and a range of affordability is proposed in the order of 1,291 units as follows:

• 235 12.2 m detached units

279 11 m detached units



- 422 6.1 m townhouse units
- 178 5.5 m block townhouse units



In addition, the Neighbourhood Centre block has the potential for the development of 144 apartments in mixed use and/or residential buildings.

### Conclusion

The proposed development will provide a mix and range of market-based housing types, styles, tenures and affordability characteristics to meet the needs of the City's growing and diverse population.

### 3.3 Identification of mixed-use areas

### **Policy and Guideline Framework**

Section 5.2.1 y. i. of the **OP** encourages mixed use buildings with ground floor neighbourhood supporting uses and residential units above in the Neighbourhood Centre block.

### **Policy and Guideline Assessment**

Review

The location of the Neighbourhood Centre at the entrance to the neighbourhood, in conformity with the OP provides the potential for mixed use development. However, given the proximity to existing commercial uses to the west; the limited market in the immediate area; the difficult access for vehicles, as well as the split ownership of the lands, that potential is limited. Nevertheless, the proposed block in terms of its size and configuration provides the opportunity for mixed use on the lands.

#### Conclusion

The Neighbourhood Centre block in terms of its size and configuration provides the opportunity for mixed use on the lands.

# 3.4 Appropriate intensification within Neighbourhood Centres and Corridors Policy and Guideline Framework

**OP** Section 5.2.1 y. establishes policies which limit low density uses (e.g. single and semi-detached dwellings) in Neighbourhood Centre and Corridors areas.

### Policy and Guideline Assessment

### **Review**

The OP policies ensure that development in the Neighbourhood Centre and Corridor designations is more intensive than the development in the Residential designation. The lands in the Neighbourhood Corridor block are proposed for 178 5.5 m block townhouse units, the most intense development for which specific plans have been prepared on the Subject Lands. The ultimate development of the Neighbourhood Centre block is required to exceed that density and may include potentially 144 apartments in mixed use and/or residential buildings.

#### Conclusion

Development of the Neighourhood Center and Corridor blocks will conform with the Official Plan resulting in development which is more intensive than that proposed for the Residential designation.

### 4. Built Form and Site Planning

# 4.1 Residential building types

# 4.2 Mixed Use and Non-residential building types

### **Policy and Guideline Framework**

The OP in Section 5.2.1 Residential designation provides in subsection a. that "a full range of residential dwelling types, as well as supporting land uses intended to serve local residents" are permitted. Subsection c. however limits Low-Rise Residential buildings to single detached, semi-detached, duplex, triplex and townhouse dwellings with a maximum height of three storeys. Additional housing units are also permitted. Subsection c. indicates that Low-Rise Residential Buildings shall generally be located on Local Roads, or Minor Collector Roads.

With respect to lands in the Neighbourhood Corridor designation single detached, semi detached and duplex dwellings are prohibited (Section 5.2.1 y. ii.). In the Neighbourhood Centre designation such dwellings are also prohibited but in addition street and block townhouse dwellings are also prohibited and mixed use buildings encouraged (Section 5.2.1 y.i.).

### Policy and Guideline Assessment

#### Review

In conformity with the OP, development in the Residential designation includes a variety of single detached and street townhouse dwellings. The lots will be developed in general conformity with the directions in the UDM.

As noted above, the lands in the Neighbourhood Corridor block are proposed for 178 5.5 m block townhouse units. The ultimate development of the Neighbourhood Centre block is required to exceed that density and may include potentially 144 apartments in mixed use and/or residential buildings.

The location of the Neighbourhood Centre at the entrance to the neighbourhood, in conformity with the OP provides the potential for mixed use development. However, given the proximity to existing commercial uses to the west; the limited market in the immediate area; the difficult access for vehicles, as well as the split ownership of the lands, that potential is limited. Nevertheless, the proposed block in terms of its size and configuration provides the opportunity for mixed use on the lands.

#### Conclusion

The proposed residential building types conform with the permitted uses in the Official Plan and will provide a mix and range of market-based housing types, styles, tenures and affordability. The Neighbourhood Centre block in terms of its size and configuration provides the opportunity for mixed use on the lands.

### 5. Natural Heritage System

5.1 The following should be included within the Conceptual Master Plan:
Boundaries of the Natural Heritage System; Location of natural features including mature trees and vegetation; and strategies to enhance and protect existing Natural Heritage.

### **Policy and Guideline Framework**

The OP establishes policies for the NHS in Section 5.6, including 5.6.1 Core Natural Areas Designation; 5.6.2 Adjacent Lands Overlay and 5.6.3 Growth Plan Policies for Natural Heritage System, Key Hydrologic Features and Key Natural Heritage Features. It should also be noted that related policies are found in Section 6.1 Floodplain Areas and Section 6.2 Steep Slopes and Erosion Hazards. As outlined in the Scoped Environmental Impact Study (EIS) prepared by WSP: "The City of Brantford Official Plan (August 2021) includes a Natural Heritage

System consisting of Core Natural Areas Designation and Adjacent Lands Overlay.

- The woodland and valleyland along the Tributary of Fairchild Creek (Vegetation Units 1 to 7 as well as 8 and 12) on and adjacent to the Subject Property has been identified as part of the Core Natural Areas Designation on Schedule 6 of the Official Plan. Underlying Provincial designations (i.e., Growth Plan Natural Heritage System) are also shown.
- Lands within 90 m and abutting the Core Natural Areas Designation are shown on Schedule 6 as the Adjacent Lands Overlay. Areas within the proposed development envelope, adjacent to the Core Natural Areas Designation are located within the Adjacent Lands Overlay.

Per Section 5.6 of the Official Plan, policies for the natural heritage system are as follows:

- The Natural Heritage System is intended to:
  - Protect the health and water quality of the Grand River Watershed;
  - Protect surface and underground water resources;
  - Conserve biodiversity; and
  - Protect all significant natural heritage features and their associated ecological and hydrological functions."

C

The UDM provides some additional direction in Section 3.9 Natural Heritage Features, Parks, Open Spaces, Multi-Use Trails and The Waterfront. In particular: Guideline 1 indicates that "development should be appropriately set back from...existing natural heritage features to preserve and protect them, and shall adhere to any setbacks defined by an Environmental Impact Study (EIS)."

Guideline 2 "Natural heritage features should be adequately buffered through the appropriate placement of roads, infrastructure and buildings, indigenous and ecologically complementary plantings, and fencing. Lighting should not be directed towards natural heritage features."

Guideline 3 "Landscaping that protects, supports, enhances or extends natural heritage features into a site is encouraged. Where feasible, new development should incorporate linkages between natural heritage features .....to protect, enhance, and restore the natural heritage system and its ecological functions."

Guideline 4 "Development adjacent to natural heritage features should maintain natural drainage networks to retain functional surface drainage and watercourses and to support stormwater management infrastructure such as stormwater management ponds."

Guidelines 5. "Where appropriate, development adjacent to natural heritage features should limit impermeable surfaces and integrate low impact development measures....In determining whether these measures are appropriate,

consideration should be had for the potential impacts of chloride from road salting on groundwater and natural heritage."

6. Guideline 6 "Maximize views and awareness of natural heritage features ... through the appropriate placement of roads and the location, height and orientation of buildings and the arrangement of windows, balconies, and porches. Single loaded roads defining the edge of natural heritage features ..... are encouraged."

### Policy and Guideline Assessment

### Review

The EIS was prepared to satisfy the Natural Heritage System requirements of the City's OP. It includes (EIS Section 1.1) "documentation of existing natural features and functions on and adjacent to the Subject Property, which have the potential to be impacted by proposed development. The report also includes recommended measures for impact mitigation, stewardship and restoration, and future work."

In addition to the OP, the report considers as part of the policy assessment, the Fisheries Act (1985), Migratory Birds Convention Act (1994), Endangered Species Act (2002), Provincial Policy Statement (2020), and the Grand River Conservation Authority responsibilities to regulate activities in natural and hazardous areas under Ontario Regulation 150/06.

With respect to conformity with the OP, the EIS concludes in Section 5.7.3:

"No development or site alteration is proposed within the *Core Natural Areas Designation*; this area will be maintained in full, with development setbacks, buffer enhancements and other mitigation measures. Development that has the potential to impact the features and functions of natural areas is proposed within the *Adjacent Lands Overlay*. These potential impacts will be further assessed through subsequent submissions; however, it is anticipated that with implementation of recommended protection, enhancement and mitigation measures, impacts can be avoided and an overall net benefit to retained natural areas will be realized."

In addition, the following general conclusions and recommendations are made in Section 7.0 of the EIS:

"Based on the review discussed herein, the proposed development can be undertaken while protecting key environmental features, with the confirmation of feature limits, implementation of recommended development setbacks and other mitigation measures, subject to refinement and updates to technical studies and detailed designs that will be prepared as part of future submissions. This conclusion reflects the following considerations:

• Natural Area Protection and Enhancement – There will be no intrusion into

natural heritage features that make up the Core Natural Areas Designation in the City of Brantford Official Plan....

- The conceptual development design measures, as well as the recommended mitigation measures conform to relevant natural heritage system policies outlined in the City of Brantford Official Plan;
- Future studies will demonstrate water balance to receiving areas/retained natural heritage features and mitigate downstream impacts to receiving watercourses....

The following work is recommended in order to confirm or refine conclusions and recommendations herein. Note that these items are recommended to be completed as part of a future Draft Plan application submission/through detailed design of the proposed development:

- Confirmation that a water balance to retained natural features can be achieved post-development with the implementation of appropriate mitigation measures. Demonstration of water balance should be documented through technical studies, prepared as part of future submissions.
- Finalize the ESC plan and SWM strategy, including details regarding outlet locations and design, as well as low-impact development measures as needed to demonstrate water balance.
- Complete site walks with relevant agencies to refine and confirm recommended feature limits presented herein, with the limits to be surveyed and incorporated in future submissions.
- Complete additional fieldwork in 2024 to assess the presence of potential Monarch and White-tailed Deer habitats across the Subject Property based on discussion with SNGR representatives.....
- For the shed structure (adjacent to Vegetation Unit 11): In the bat active season immediately prior to the planned demolition of this structure, it is recommended to complete two rounds of bat exit surveys according to MECP protocols. This will assess potential use of the structure by SAR bats. Appropriate ESA compliance activities are to be completed pending the results of targeted bat surveys.
- Preparation of detailed landscape planting plans, including naturalized buffers to environmental features.
- Undertake registration and appropriate compensation measures related to the removal / harm of Butternut trees.
- An appropriate Biological Monitoring program is recommended to be prepared and included in future submissions in order to assess the potential impacts and efficacy of the recommended mitigation and enhancement measures."

With respect to the UDM guidelines, much of the NHS is proposed to be backlotted, consistent with Guidelines 1-5, in order to ensure development is appropriately set back from existing natural features; natural heritage features are adequately buffered through appropriate placement of roads, infrastructure, buildings,

### **#** Component Review and Assessment

plantings, fencing and lighting; landscaping is established which protects, supports, enhances and extends the NHS; the natural drainage networks are maintained adjacent to the NHS; impermeable surfaces are limited; and to reduce impacts from road salt.

#### Conclusion

Based on the review in the EIS, the proposed development can be undertaken while protecting key environmental features, with the implementation of recommended development setbacks and other mitigation measures, subject to refinement and updates and future design stages, including specific recommendations identified in the EIS.

### 6. Parks, Open Spaces and Community Uses

# 6.1 Parkland dedication strategy

### **Policy and Guideline Framework**

The **OP** in Section 5.2.3 Parks and Open Space Designation establishes that "parkland dedication will occur in accordance with the provisions of Section 42 of the Planning Act. The City shall prepare a Parkland Dedication By-law that requires that land be dedicated to the City in an amount not exceeding:

- 2 percent of land proposed for development or redevelopment for commercial or industrial purposes; and,
- ii. 5 percent of land proposed for development or redevelopment in all other cases."

# Policy and Guideline Assessment

#### **Review and Conclusion**

As identified on the Conceptual Master Plan, the intent is to dedicate +/- 5 % of the developable land as neighbourhood park in conformity with the requirements of the OP and the Planning Act.

# 6.2 Location, orientation, and size of proposed parks, open spaces, and the trail system

### **Policy and Guideline Framework**

The **OP** provides limited guidance with respect to this matter other than indicating in Section 3.3 d. that "All newly constructed and/or renovated City owned, leased, funded or operated facilities, parks and open spaces, municipal infrastructure systems, and any other space that is accessible to the public, shall comply with the City's Facility Accessibility Design Standards .....

The **UDM** provides some direction in Section 3.9 Natural Heritage Features, Parks, Open Spaces, Multi-Use Trails and the Waterfront in the following:

Guideline 9 Parks and open spaces are focal points for neighbourhoods. To maximize public access, views and safety, the majority of the perimeter of parks and open spaces should be bounded by streets and buildings. Entrances should be oriented to address and frame parks and open spaces and encourage

### # Component Review and Assessment

pedestrian safety by enhancing visibility between drivers, cyclists, and pedestrians."

### **Policy and Guideline Assessment**

#### Review

Two parks are proposed. The park at the west edge of the Block is an extension of existing Lynden Hills Park. This extension will not only allow access for residents to the park facilities, but will have the potential to provide an active transportation connection through the Lynden Hills Park to the community to the west. In particular to the sidewalk and bike infrastructure on Brantwood Park Drive. The facilities on Brantwood Park Drive will, in turn, allow active transportation connections to other areas of the City.

The major park (+/- 2.38 ha) intended to serve the Block is proposed in the south-east quadrant. It has frontage on a local road of +/- 120 m. It also provides a buffer to the CNR.

In both cases, the location and configuration of the parks will allow the City to develop a design to maximize public access, views and safety. In addition, entrances can be oriented to address and frame the parks and encourage pedestrian safety.

#### Conclusion

The proposed park locations can be designed to achieve the directions in the OP and UDM, in particular maximizing public access, views and safety. In addition, the western park provides a critical connection to the community to the west for active transportation, while the eastern park provides a buffer to the CNR.

6.3 Future public destinations including schools, community facilities, and institutional uses. Emergency service buildings including fire, police, and emergency medical services.

### **Policy and Guideline Framework**

The **OP** permits in Section 5.1 k, Uses Permitted in All Land Use Designations, other than the Core Natural Areas designation and Adjacent Lands Overlay, public service facilities. In addition, the Residential designation permits in Section 5.2.1 b. small-scale places of worship and neighbourhood supporting uses which includes facilities such as recreational and/or cultural facilities and healthcare office and clinics. In addition, Section 5.2.1 w. permits elementary schools in the Residential Designation, but not secondary schools.

### **Policy and Guideline Assessment**

#### **Review and Conclusion**

The Lynden Garden Block is immediately adjacent to existing development to the west which is well served by schools and other community facilities. No need has been identified for additional facilities in Lynden Garden. If a location is required for uses such as small-scale places of worship or other neighbourhood supporting

# **Appendix A Lynden Garden Block Plan Design and Development Considerations Component Review and Assessment** uses the Neighbourhood Centre block provides an opportunity for such development. Public Art and the provision of other Community Benefits 6.4 **Policy and Guideline Framework** The **OP** indicates in Section 3.3 f. that "The City shall maintain and enhance its existing inventory of public art, and shall pursue installation of new pieces of public art in public locations, in accordance with the City's Public Arts Policy." Further, Section 3.3 g. indicates that "In accordance with the Community Benefits By-law, and the applicable policies of this Plan, the City may require public art as a defined community benefit." Section 9.7 indicates that the City may uses a Community Benefits Charges By-law – in accordance with Section 37 of the Planning Act to implement the **OP**. The **UDM** outlines directions with respect to Public Art in Section 3.8. The Guidelines provide specific direction with respect to matters such as durability and landscaping. However, Guideline 1 indicates that: "Public Art is encouraged in highly visible and publicly accessible locations including parks and open spaces, along trails, and throughout the Downtown, intensification corridors and neighbourhood centres and corridors, particularly on prominent streets." **Policy and Guideline Assessment Review and Conclusion** The details of what Community Benefits will be required will be resolved through later review. However, Landmark/Focal Point locations have been identified on the Conceptual Master Plan in accordance with the criteria established in the UDM – highly visible and publicly accessible locations including parks and neighbourhood centres and corridors. 7. **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 7.1 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 **Policy and Guideline Framework** The OP provides in Section 7.2 e. that "The City supports a grid pattern road

network and connectivity to facilitate transit use and to increase opportunities for

walking and cycling trips. Cul-de-sacs, or other disruptions to the grid network are generally discouraged."

The **OP** provides policies for active transportation in Section 7.1 d.-h. inclusive. In particular, Subsection f. states that "New public roads shall accommodate pedestrian and cycling activity through the inclusion of dedicated cycle lanes, sidewalks, multi-use pathways, or a combination thereof, on both sides of the road, unless otherwise exempted by this Plan." OP Schedule 11, Bikeways and Trails Network Plan, identifies a Proposed On-Road bikeway and trails network within the right-of-way (ROW) of the minor collector road network in the Block which is identified on OP Schedule 12, Road Network. In addition, an On-Road bikeway/trails network is also identified within the Lynden Road ROW (a Major Arterial on OP Schedule 12) on the south boundary of the Block.

The **UDM** provides directions in Section 3.2 B Boulevard Design with respect to sidewalks. In particular, Guideline B 1 states that "accessible sidewalks and/or multi-use paths should be provided on both sides of all streets....and should be continuous, including where they cross driveways. Sidewalks should be located such that there is a boulevard separation, adequate for the roadway classifications, between the sidewalk and the roadway."

Section 3.4.3 Bicycle Circulation and Parking also provides in Guideline 4 "Active transportation facilities such as bike lanes, multi-use paths, transit stopes with shelter etc. should be considered for all developments. In addition, Guideline 5 provides that "Connections should be made to the larger trail or bikeway network where one exists surrounding a proposed development." While Guideline 6 provides "Trails or multi-use pathways should be provided along significant natural areas where they abut a built-up area or street (either public or private)."

# Policy and Guideline Assessment

### **Review and Conclusion**

As illustrated on the Conceptual Master Plan, a modified grid network of local and minor collector roads has been planned in conformity with the OP and the City's Design and Construction Manual (See discussion under Component 1 above). The proposed roads are designed to accommodate active transportation as required by the City, including sidewalks on each street and on-road bike facilities on the minor collector road system. A trail system may be provided within the NHS and through the extension of Lynden Hills Park as illustrated conceptually on Schedule 1. The detailed design of these facilities will be determined by the City. Similarly, transit service can be provided on the minor collector road system to Lynden Road, as determined by the City.

# 7.2 Details for provision of water, sanitary trunks and sub-trunks

Stormwater management facilities including location and area requirements

### # Component Review and Assessment

# Infrastructure utilities including gas, electricity and telecom

### **Policy and Guideline Framework**

Section 8.0 Servicing and Infrastructure of the OP, provides overarching policies intended to complement the City's Master Servicing Plan and subwatershed studies related to wastewater servicing infrastructure, water servicing infrastructure and stormwater servicing infrastructure. In particular, such infrastructure is permitted in any land use designation; co-location of infrastructure is encouraged and adequate capacity must be available before the approval oany application for development. The policies also provide direction specific to wastewater, water and stormwater management. In addition, Section 8.2 Utilities provides general direction related to such facilities including co-location of linear utilities and telecommunication facilities; and a location underground into a single utility conduit where feasible in a road allowance or easement.

### **Policy and Guideline Assessment**

#### **Review and Conclusion**

The BSS prepared by Urbantech provides the required details with respect to:

- · Grading design;
- Storm servicing;
- Stormwater management;
- Water balance and low impact development;
- Wastewater servicing;
- · Water servicing; and,
- Erosion and sediment control.

The proposed servicing reflects the City's design requirements including the Storm Sewer, Design and Construction Manual, Linear Municipal Standards (v5-January 2022); Linear Infrastructure Municipal Infrastructure Standards; and Water Master Plan.

In accordance with the City's Roads and Transportation Design and Construction Manual road right-of-way sections, services will generally be located under the paved portion of the road, with utilities in a joint use utility trench in the boulevard of the road right-of-way.

### 8. Other Uses/Considerations

### 8.1 Strategies to apply sustainable best practice

# **Policy and Guideline Framework**

The **OP** provides direction in Section 3.5 Promoting Sustainable Development and Adapting to Climate Change with respect to sustainable development. However, this section focuses on actions by the City. Section 3.5 a. indicates that "the City will explore a broad range of practices often associated with sustainable development". This includes "developing communities and buildings that are energy and water efficient", "promoting the use of environmentally friendly building materials and green infrastructure", and "creating complete, healthy, walkable,

transit-supportive, cycling and pedestrian-friendly communities". Section 3.5 b. further states that "the City will use its array of master plans and the Urban Design Manual to help guide development and redevelopment to be more sustainable and resilient to climate change." More specific direction is also provided with respect to source protection, energy conservation, air quality and carbon mitigation, forest resources and urban agriculture.

The UDM includes Section 4.2 Sustainable Design. This section is primarily concerned with detailed design direction such as "Impermeable surfaces should be limited" and "Green roofs are encouraged."

### **Policy and Guideline Assessment**

#### **Review and Conclusion**

The Block Plan and supporting technical studies reflect the directions in the City's OP, Master Plans, Design and Construction Manual and UDM which are designed to support sustainable development. In particular, the Block Plan has been developed based on a modified grid road system and active transportation network which will result in the creation of a health, walkable, transit-supportive, cycling and pedestrian-friendly neighbourhood.

# 8.2 Cultural heritage resources and strategies to protect them

# **Policy and Guideline Framework**

Section 3.4 Protecting Cultural Heritage Resources provides direction on the protection of built heritage resources, cultural heritage landscapes and archeological resources.

### **Policy and Guideline Assessment**

#### **Review and Conclusion**

As outlined in Section 3.3.5 of this Plan, This Land Archaeology Inc. (This Land) was contracted in 2019 to conduct a peer review of the archaeological work (Stage 1 and Stage 2) done on the Lynden Garden Block site in 2006 by Amick Consultants Ltd.

At the conclusion of the peer review it was determined that an updated Stage 2 Archaeological Assessment of Field 2 (a portion of the Block along the west boundary) should be carried out. No further work was deemed necessary for the remainder of the Block.

The Stage 2 assessment was conducted for Field 2 in June 2019. It resulted in the recovery of a number of indigenous artifacts. It was also found that one site known as the Innes-Welton Site D (AhHB-146) met the criteria for a Stage 3 Assessment.

The Stage 3 Assessment was carried out in July 2019. It yielded eight artifacts, none of which were of Cultural Heritage Value of Interest (CHVI). The final recommendation was that no further work was needed.

The Ministry of Heritage, Sport, Tourism, Culture Industries in their clearance letter to This Land indicates that the report documents the assessment/mitigation of the study area and concludes that the sites on the property requiring archaeological assessment have been adequately documented and that no further archeological assessment is required. The study has been entered into the Ontario Public Register of Archaeological Reports. The letter does note that 16.65 ha of land identified as Environmental Protection Area outside the study area should be subject to a test pit survey when approved by the proponent.

With respect to cultural heritage buildings and landscapes the one other landowner in the Lynden Garden Block who owns a small 1.3 ha parcel fronting on Lynden Road (253 Lynden Road, which is listed in the City's heritage inventory, but is not designated. A full evaluation is required as part of any application for development, but provision has been made for preservation of the dwelling as illustrated in the concept plan for the Neighbourhood Centre (See Figure 4).

# 8.3 Potential views and vistas to development of built form and open space.

### **Policy and Guideline Framework**

The **OP** and the UDM do not give any specific direction with respect to views and vistas for new development. However, both documents do provide some general directions. In particular, the Lynden Rd. Garden Ave. Corridor guideline in the UDM references its potential to act as a gateway for future neighbourhood and low-rise residential development to the north. In addition, both the OP and UDM discourage backlotting.

### **Policy and Guideline Assessment**

### **Review and Conclusion**

Reflecting the directions in the OP and UDM, as discussed above Landmarks/Focal Points have been identified at key areas of the Block which will provide vistas and views into parks and the NHS. In addition, Landmark/Focal Point is proposed at the entrances to the Block at gateways created by the Neighbourhood Centre and the Neighbourhood Corridor blocks and related minor collector road accesses to the neighbourhood.

# 8.4 How the proposed development will influence and integrate with future development

### **Review and Conclusion**

The Block is located on the eastern boundary of the City. The CNR is located to the east, the NHS to the north and north east and Lynden Road, a major arterial, and a future employment area to the south. The development of this Block will

Appendix A Lynden Garden Block Plan Design and Development Considerations				
#	Component Review and Assessment			
	complete the residential community to the west. The Block development will be integrated with that development through connections for active transportation through the extension of Lynden Hills Park, and vehicular/active transportation connections along Lynden Road.			
8.5	Phasing of development including all relevant information required to evaluate the phasing plan			
	Review and Conclusion It is premature to identify phasing of the Block at this time given the limited area. If development is to be phased it will be determined through the plan of subdivision process.			

# APPENDIX B LYNDEN GARDEN BLOCK PLAN DENSITY CALCULATION

Population Projections						
Land Use	Units	Unit %	PPU	Рор		
Single Detached - 12.2m	235	16%	3.17	745		
Single Detached - 11	279	29%	3.17	884		
Townhouse - 6.1	422	29%	2.55	1,076		
Neighbourhood Corridor	178	11%	2.55	454		
Neighbourhood Centre	144	15%	1.71	246		
Subtotal	1,258			3,405		
Secondary Suites	33	3.0% <sup>2</sup>	1.71	56		
Undercount (3%)				105		
Total	1,291			3,566		

Developable Area				
Land Use	Area (ha)			
Total Area	77.7			
Natural Heritage System	22.1			
Net Developable Area	55.6			

Population and Jobs per Hectare				
Population Projection	3,566			
Developable Area	55.6			
Pop + Jobs / Ha	64.0			

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<sup>&</sup>lt;sup>2</sup> Secondary Suites are 3% of proposed singles, semis and townhouses.