Appendix A

Background Documents

Terms of Reference for:

Fruitland-Winona
Block Servicing Strategy

November 4, 2013 - FINAL

Introduction

The Fruitland-Winona Secondary Plan area is characterized by a relatively flat topography which requires specific grading and detailed servicing provisions to adequately service the future development area so development proceeds in a coordinated and comprehensive manner. The purpose of this study is to develop a Block Servicing Strategy (BSS) for areas identified in the Fruitland-Winona Secondary Plan – Block Servicing Strategy Area Delineation is shown in **Appendix A**.

The Fruitland-Winona Block Servicing Strategy shall be carried out in accordance with the Fruitland-Winona Secondary Plan policies in Section 13.2.19. Review Section 13.2.19 of the Fruitland-Winona Secondary Plan when developing work plan. This Terms of Reference provides an overview of the requirements of the Block Servicing Strategy.

There are three (3) blocks included in the Fruitland-Winona Secondary Plan which require a Block Servicing Strategy:

Block 1: Generally located by Barton Street to the north, Highway 8 to the south, Fruitland Road to the west and east of Jones Road to Stoney Creek numbered watercourse 6.

Block 2: Generally located by Barton Street to the north, Highway 8 to the south, watercourse 6 at the west, and Glover Road to the east.

Block 3: Generally located north of Barton Street, Highway 8 to the south, McNeilly Road at the west and east of Lewis Road.

The Fruitland-Winona Subwatershed Studies shall form the basis of all Block Servicing Strategies. It shall conform to the vision, objectives and policies of the approved Fruitland-Winona Secondary Plan and shall identify the land use designations, densities and natural heritage features, including Vegetation Protection Zones and Restoration Areas, in accordance with the Secondary Plan. Where it can be achieved, the Block Servicing Strategy shall comply with the Fruitland-Winona Secondary Plan Urban Design Guidelines.

The Block Servicing Strategy shall have regard for existing development in accordance with the Fruitland-Winona Secondary Plan by reflecting the general scale and character of the established development pattern in the surrounding area by taking into

consideration lot frontages and areas, building height, coverage, mass, setbacks, privacy and overview. All development within the lands identified as the "Servicing Strategies Area" as identified in the Fruitland-Winona Secondary Plan – Block Servicing Strategy Area Delineation shall conform to the Block Servicing Strategies.

The Block Servicing Strategy will be used in assessing priorities among proposals for development. The preliminary grading plan, layout of local roads, sanitary sewers, storm sewers and stormwater management facilities, watermains shall be defined, together with the phasing of servicing proposed to ensure development is achieved in an efficient and systematic manner within each block area.

The Block Servicing Strategy shall follow the Municipal Class Environmental Assessment Planning process for Phases 1 and 2. A public consultation plan shall be developed including the number of meetings to be held with the public and stakeholders.

Key Tasks & Deliverables

This study is intended to outline the concepts for the servicing of the Fruitland-Winona lands located south of Barton Street, east of Fruitland Road, west of Fifty Road, and north of Highway No. 8.

The Block Servicing Strategy shall include an integration of a Functional Stormwater Management and Environmental Management Plan, and a Functional Servicing Plan forming one comprehensive document. The Environmental Management Plan shall build on the findings of the final sub-watershed study for SCUBE watercourses.

The Block Servicing Strategy shall include the following tasks:

1. Functional Stormwater Management and Environmental Management Plan; and a
2. Functional Servicing Plan

1. Functional Stormwater Management and Environmental Management Plan

The Functional Stormwater Management and Environmental Management Plan is intended to build upon the baseline information contained in the subwatershed study and shall be implemented in

support of the secondary plan. This study shall address any gaps identified in the subwatershed plan related to servicing, stormwater management and natural heritage features (meander belt assessment). The level of study would focus on integrating servicing and stormwater management to a greater level of detail than is normally achieved through the subwatershed study.

Stormwater management facilities shall comply with the City's Criteria and Guidelines for Stormwater Infrastructure Design and Policies, the Fruitland-Winona Sub-watershed Studies and the Block Servicing Strategy. In addition, stormwater management facilities:

- shall be located and designed to maintain ecological functions of the Natural Heritage features;
- shall be located adjacent to the Barton Street Pedestrian Promenade and other Open Space Designations where possible;
- shall be designed along the Barton Street Pedestrian Promenade; and,
- shall be designed to provide visual attraction and passive recreation where possible.

The principle objectives and tasks required for a Functional Stormwater Management and Environmental Management Plan include but not limited to:

a. Review final sub-watershed study for SCUBE watercourses. Re-running of the models from the sub-watershed study using the proposed level of impervious coverage and stormwater controls to confirm the existing targets are sufficiently robust to control the increased impervious arrears without causing an increase in downstream flooding and erosion and water quality compliance in accordance with MOE guidelines.
b. Establish basic sub-watershed conditions (peak flows, runoff volumes, and erosion threshold assessment)
c. Determine the preliminary design of the stormwater management systems including the outlet design at each location. This shall include:
    i. Volumetric sizing
    ii. Stage/storage/discharge relationship
    iii. Volume calculations at various facility stages
    iv. Outlet control calculations – drawdown time
    v. Forebay dispersion length
    vi. Minimum forebay deep zone bottom width
    vii. Length/width ratios
    viii. Decanting area

ix. Maintenance access route to inlet & outlet structures and forebay
x. Overland flow route to main pond
xi. Detailed gradients for trunk major and minor system (vertical control)
xii. Hydraulic grade line (HGL) assessment for storm sewer system.

d. Functional grading and drawings (plan and profile) for each stormwater management facility.
e. Capacity assessment of the receiving system for the proposed storm outlet
f. Identify drainage constraints relating to existing and post-development flows
g. Screen various stormwater management strategies and techniques and evaluate a reasonable range of alternatives.
h. Recommend stormwater management solutions based on sound evaluations of the natural, social and economic environments of various feasible alternatives.
i. Prepare general drainage plans, outlining both the major and minor systems along with detailed flow limits at critical points.
j. Identify opportunities to integrate passive recreation opportunities with stormwater management strategy.
k. Identify opportunities for Phasing of construction of stormwater facilities.
l. Functional design of proposed realignment of watercourses.

The Functional Stormwater Management and Environmental Management Plan shall have regard to ecological, hydrological, air drainage and road geometry assessments.

Ecological Assessment

The components of the ecological studies shall include:

a. Meander Belt Width Assessments for all watercourses;
b. The identification and consideration of all areas regulated by the Conservation Authority's Development, Interference with Wetlands; Alterations to Shorelines and Watercourses Regulation or its successor; and,
c. Scoped EIS including evaluation of natural areas (Core Areas).
d. Topographic survey of the lands including the staked limit of wetlands and top of bank of watercourses.
e. Determination of top of stable slope of watercourses
f. Determine limits of buffers to watercourses and wetlands based on HCA/City criteria

g. Hydraulic study of watercourses and determination/verification of flood plain limits.
h. Geotechnical assessment to determine stable slope of the watercourse.

Hydrological Assessment

The stormwater management finding/recommendations from the SCUBE sub-watershed study shall be reviewed and incorporated in the Block Servicing Strategy. In addition, the hydrological investigation shall include:

a. Water balance study.
b. Groundwater levels and flow path.
c. Significant recharge and discharge zones.
d. An assessment of the impacts of development on the functions of b & c above.
e. The foundation drain flow rate based on groundwater and severe wet weather conditions.
f. Recommendation for an appropriate sump pump design.
g. A contingency plan to ensure that an appropriate mitigation strategy can be implemented where:
   - An aquifer is breached during construction;
   - Groundwater is encountered during construction;
   - Continuous running of sump pump occurs; and,
   - Negative impacts occur on the water supply and sewage disposal system or any surface and groundwater related infrastructure.

Air Drainage Analysis

The Air Drainage Analysis Brief shall include:

a. A review of the existing conditions, including air photos, topography, thermal conditions, climate and air movement down the Niagara Escarpment and towards Lake Ontario, to evaluate the effects of the proposed Secondary Plan land use on the existing microclimate and airflow; and,
b. Where appropriate, propose a road layout and development patterns that maximize air drainage in a north/south alignment to minimize potential negative impacts on the tender fruit area to the south.

Road Geometry

The Block Servicing Strategy shall include the development of a transportation network for local roads in consideration of the existing and proposed collector roadways identified in the Secondary Plan.

The following shall apply to new road crossings:

- Where possible, road crossings shall avoid significant and/or sensitive natural features;
- Where it is not possible for road crossings to avoid significant and/or sensitive natural features, road crossings may be located in previously disturbed watercourse reaches or in locations where the disturbance or removal of riparian vegetation can be minimized. All watercourses will need to recognize inputs from meander belt analyses, flood plain analyses and fisheries at a minimum;
- New roadway culverts and bridges shall have sufficient conveyance capacity to pass 100 year event to avoid adverse backwater effects. In addition, under Hurricane Hazel event the maximum flooding depth on road shall be in accordance with MNR's technical guidelines;
- Where new roadway culverts and bridges cannot meet the requirements set out above, Regulatory flooding depths on roadways shall be based on the standards within the Ontario Ministry of Natural Resources Natural Hazards Technical Guides, latest version or its successor guideline; and,
- If a minor realignment of the stream channel is necessary to achieve the desired crossing configuration, the new channel should be established using natural channel design principles.

2. Functional Servicing Plan

The Functional Servicing Plan is intended to identify the manner in which water, sanitary and storm servicing is to be provided for. The plan generally includes, but is not limited to

a. Defining the sanitary and storm drainage area boundaries and confirming capacity of the outlets
b. Finalizing the land-use plan through the establishment of local and collector road locations
c. Functional design of all existing collector roadways within the Block
d. Location and preliminary sizing of sanitary sewers
e. Location and preliminary sizing of storm sewers
f. Location and preliminary sizing of watermains
g. Preliminary grading plan based on the proposed road pattern
h. Location and functional design of stormwater management facilities

i. Location and preliminary sizing of hydraulic structures (i.e. Bridges and culverts)
j. Preliminary channel grading plans and supporting analyses
k. Watermain Analysis of Block Plan using City-wide WaterCad Model.
l. Proposed phasing scheme

Notes:
The findings and solutions identified in the individual drainage and flooding assessments shall be integrated into the Block Servicing Strategies and subsequent Draft Plan of Subdivision.

Block 1

- Include functional design for Jones Road
- Determine the floodplains for:
    - Along Watercourse 5.0, immediately downstream of Fruitland Road (between sections 2221 and 2150); and
    - Along Watercourse 5.0, halfway between Highway No. 8 and Barton Street (between sections 1693.967 and 1537.457)
- Through the Schedule C Class Environmental Assessment process, determine the alignment for the north/south (new Fruitland Road) road between highway No. 8 and Barton Street.
- Local flooding issue remediation required:
    - Local flooding at 688 Barton Street (private property drainage issue).
    - Local flooding at 728 Barton Street (private property drainage).
- Specific natural heritage requirements for the Block Servicing Strategy:
    - Ecological Land Classification and Vegetation Surveys
        - Update SCUBE West Subwatershed Study Phase 1 & 2.
    - Fisheries and Watercourse Assessments on Watercourses 5, 6 & 7
        - Re-alignment of watercourse 5 may require additional studies.
    - Re-alignment and re-construction of Watercourse 5.0 upstream of Barton Street would identify design measures to avoid/mitigate the potential negative effects of the proposed stream relocation on existing natural heritage features and functions;

avoid/mitigate the potential negative impacts to wetlands 1 and 4.
    - Define limits of natural heritage feature boundaries.
    - Review the widths of the preliminary vegetation protection zone (VPZ) that have been established within the Subwatershed Study.
    - Drainage and infrastructure improvement works:
        - Identification of design measures to avoid/mitigate the potential negative effects of the proposed channel improvements on existing natural heritage features and functions.

Block 2

- Include functional design for Glover Road
- Determine the floodplains along Watercourse 6.0, downstream of Highway No. 8 (between sections 2232.182 and 1785.033).
- Local flooding issue remediation required:
    - Local flooding at 808 Barton Street.
- Specific natural heritage requirements for the Block Servicing Strategy:
    - Ecological Land Classification and Vegetation Surveys
        - Update SCUBE West Subwatershed Study Phase 1 & 2.
    - Define limits of natural heritage feature boundaries.
    - Review the widths of the preliminary vegetation protection zone (VPZ) that have been established within the Subwatershed Study.
    - Drainage and infrastructure improvement works:
        - Identification of design measures to avoid/mitigate the potential negative effects of the proposed channel improvements on existing natural heritage features and functions.

Block 3

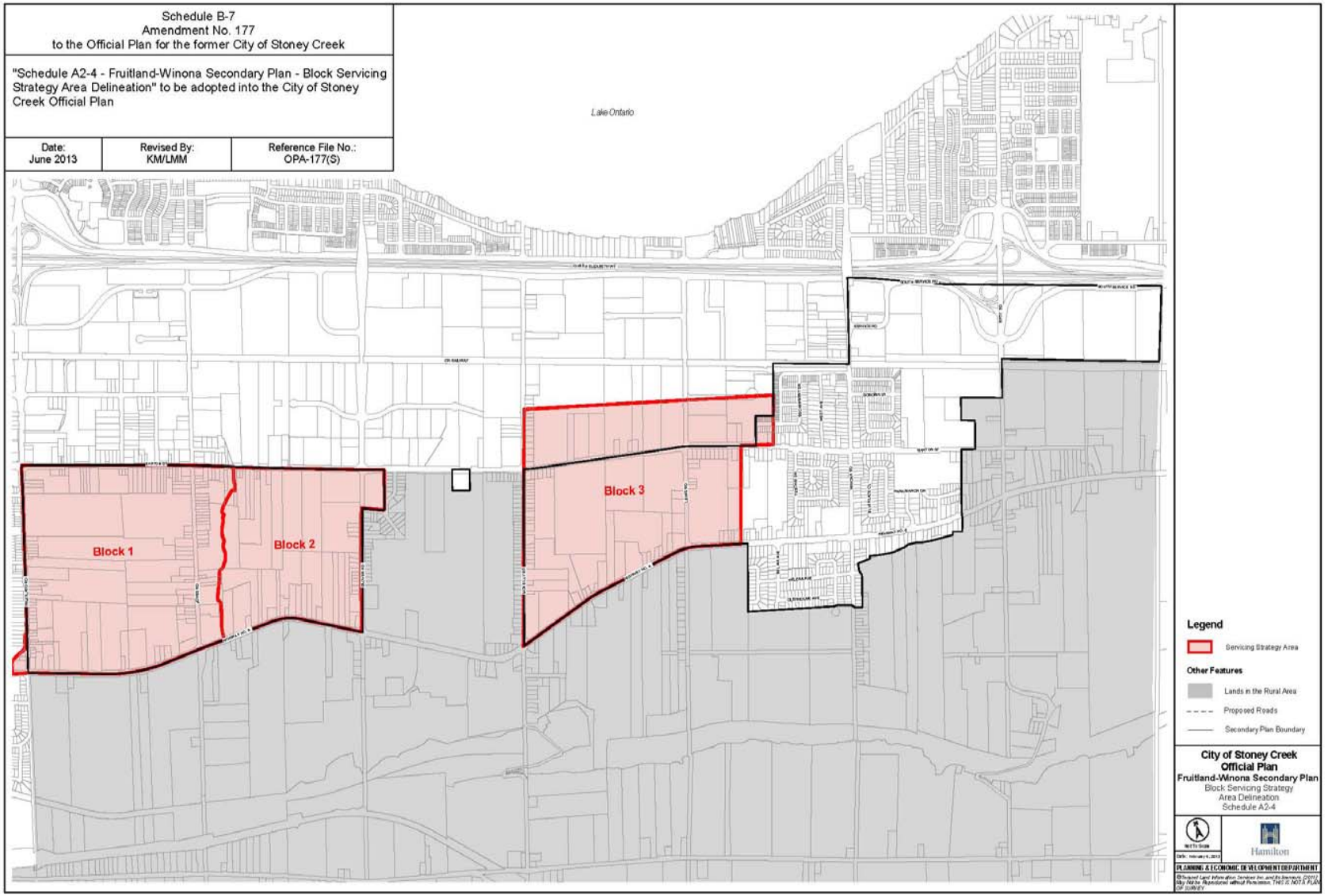
- Include functional design of McNeilly Road and Lewis Road
- Local flooding issue remediation required:
    - Local flooding at 1028 Barton Street (groundwater issue).
- Specific natural heritage requirements for the Block Servicing Strategy:
    - Ecological Land Classification and Vegetation Surveys
        - Update SCUBE East Subwatershed Study Phase 1 & 2.

- Define limits of natural heritage feature boundaries.
- Review the widths of the preliminary vegetation protection zone (VPZ) that have been established within the Subwatershed Study.
- Drainage and infrastructure improvement works:
    - Identification of design measures to avoid/mitigate the potential negative effects of the proposed channel improvements on existing natural heritage features and functions.

Appendices

Appendix 'A'	Fruitland-Winona Secondary Plan – Block Servicing Strategy Area Delineation

Appendix 'A' Fruitland-Winona Secondary Plan – Block Servicing Strategy Area Delineation



Appendix N
Amendment No. 17
to the Urban Hamilton Official Plan

"Map B.7.4-4 - Fruitland-Winona Secondary Plan - Block Servicing Strategy Area Delineation" to be adopted into the Urban Hamilton Official Plan

Date:	Revised By:	Reference File No.:
April 2014	AM/NB	OPA-U-17(S)

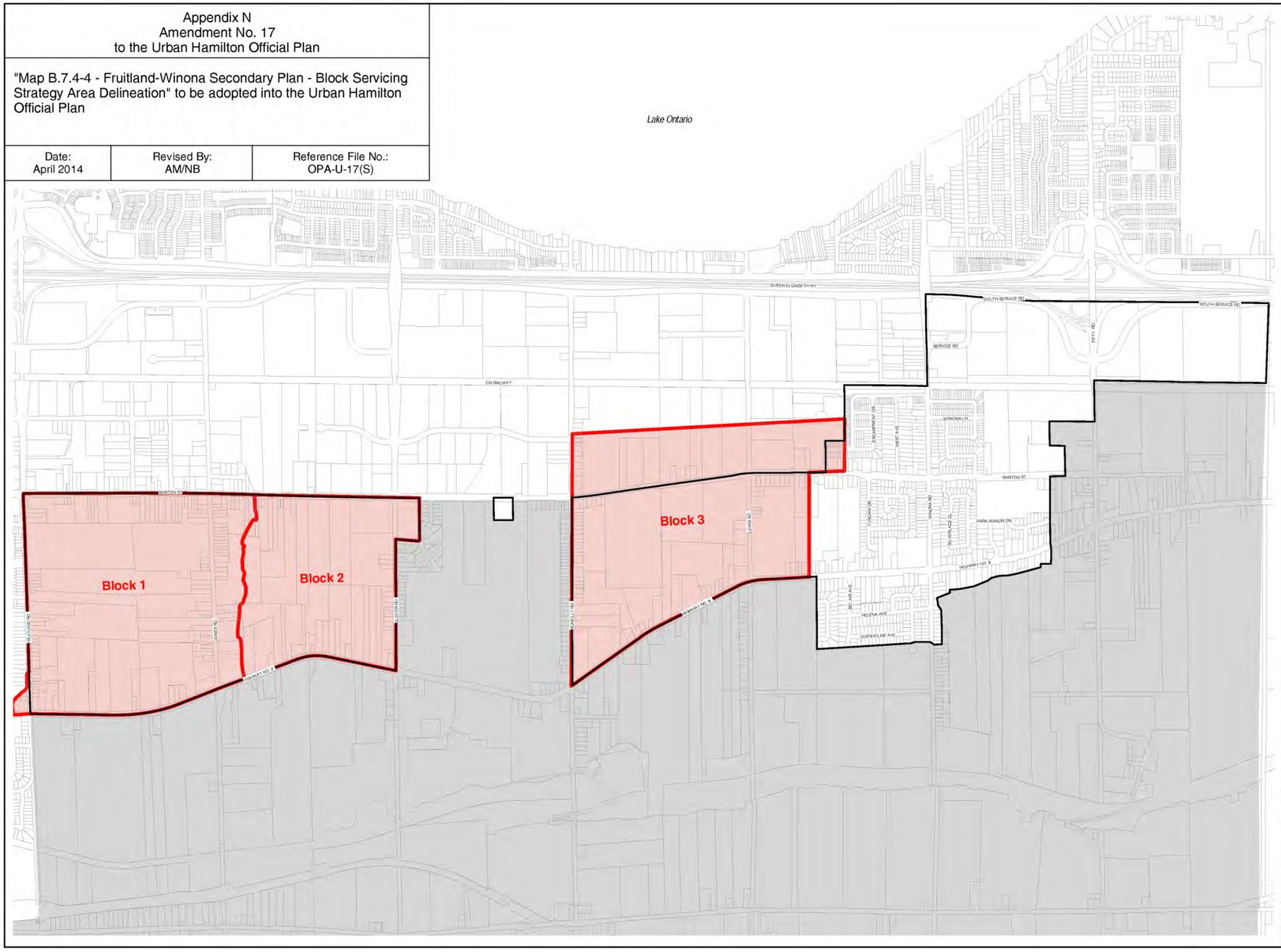


Figure 2.1 – Fruitland–Winona Secondary Plan – Block Servicing Plan Areas

Figure 2-1 –Fruitland-Winona Secondary Plan – Block Servicing Plan Areas

Residental POPULATION SUMMARY-Block 1 Per Section E 1.4 Comprehensive Development Guidelines						
Area ID	Area Classification	Area (ha)	City Max Density		Population	
			Units/ha	Total Units	(ppl/ha)	Total Population
Barton Street East						
B1	Arterial Commercial	2.08	n/a		0	0
B2	Medium Density Residential 2	1.01	**75**	**76**	250	253
B3	Medium Density Residential 2	4.46	**75**	**335**	250	1115
Subtotal		***7.55***		***411***		***1368***
Fruitland Road						
F1	Low Density Residential 3	0.65	**60**	**39**	110	72
F2	Low Density Residential 3	1.31	**60**	**79**	110	144
F3	Low Density Residential 3	1.75	**60**	**105**	110	193
F4	Institutional	0.21	n/a		0	0
Subtotal		***3.92***		***223***		***409***
Jones Road						
J1	Medium Density Residential 2	0.89	**75**	**67**	250	223
J2	Park	0.05	n/a		0	0
J3	Medium Density Residential 2	1.43	**75**	**107**	250	358
J4	Medium Density Residential 2	1.59	**75**	**119**	250	398
J5	Commercial	2.19	n/a		0	0
Subtotal		***6.15***		***294***		***979***
North West Quadrant						
NW1	Low Density Residential 2	4.91	**40**	**196**	75	368
NW2	Low Density Residential 3	0.69	**60**	**41**	110	76
NW3	Low Density Residential 3	1.70	**60**	**102**	110	187
NW4	Medium Density Residential 2	3.37	**75**	**253**	250	843
Subtotal		***10.67***		***593***		***1474***
North East Quadrant						
NE1	Park	7.18	n/a		0	0
NE2	Medium Density Residential 2	2.04	**75**	**153**	250	510
NE3	Institutional	2.16	n/a		0	0
Subtotal		***11.38***		***153***		***510***
South West Quadrant						
SW1	Low Density Residential 3	0.98	**60**	**59**	110	108
SW2	Medium Density Residential 2	4.81	**40**	**192**	250	1203
SW3	Low Density Residential 2	2.32	**40**	**93**	75	174
SW4	Park	2.47	n/a		0	0
SW5	Low Density Residential 3	3.84	**60**	**230**	110	422
SW6	Low Density Residential 2	2.44	**40**	**98**	75	183
SW7	Medium Density Residential 2	3.53	**75**	**265**	250	883
SW8	Commercial	0.76	n/a		0	0
SW9	Commercial	0.35	n/a		0	0
SW10	Low Density Residential 3	0.46	**60**	**28**	110	51
Subtotal		***21.96***		***965***		***3024***
South East Quadrant						
SE1	Medium Density Residential 2	2.50	**75**	**188**	250	625
SE2	Low Density Residential 3	2.08	**60**	**125**	110	229
SE3	Low Density Residential 2	2.89	**40**	**116**	75	217
SE4	Park (Cemetery)	5.09	n/a		0	0
SE5	Commercial	2.14	n/a		0	0
SE6	Institutional	1.80	n/a		0	0
SE7	Low Density Residential 3	0.63	**60**	**38**	110	69
Subtotal		***17.13***		***466***		***1140***
Total		**78.76**		**3105**		**8904**

Notes:

1. Non-residential populations have been omitted from this population summary.
2. **60** Denotes City max density per Appendix B-Secondary Plan Residential Density Chart.
3. **3.0** Denotes Urbantech ppu assumed. This is a conservative figure and representative of all built forms.
4. In Comparison to 6-14-21 Population Summary this analysis adds 927 to the Resi population.
5. Latest Update 11-19-21

Sensitivity Analysis

Min Density-Planning	6481
Max Density Planning	9304
Engineering Density	8904

NATURAL HERITAGE CHARACTERIZATION ASSESSMENT
BLOCK 1 LANDS - CITY OF HAMILTON

Prepared for:

Sidney W Woods Engineering (2011) Inc.

Prepared by:

Colville Consulting Inc.

File: C18028
February 2019

COLVILLE CONSULTING INC.

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1.0 Introduction

Colville Consulting Inc. was retained to prepare a Natural Heritage Characterization Assessment for a number of properties located east of Fruitland Road, between Barton Street and Highway 8, in the City of Hamilton. This assessment has been prepared to describe natural heritage features located on the Subject Lands, with the intent of determining the extent of potential Core Areas, Linkages and Restoration Areas, as described in the Urban Hamilton Official Plan. A summary of our assessment is included below.

1.1 Description of the Subject Property

The Subject Lands collectively measure approximately 36.2 hectares (89.5 acres) in size and are known by the municipal addresses of 192, 212, 23, 236, 234, 242, 250-254 and 258 Fruitland Road, as well as 667 and 669 Highway 8 in the City of Hamilton. The Subject Lands are generally bound by Barton Street to the north, Highway 8 to the south and Fruitland Road to the west (see Figure 1).

The majority of lands in the central and southern portion of the Study Area consist of meadow and active agricultural lands, along with a small woodland and thicket feature. Active and abandoned residences are present on five of the properties within the Study Area, with manicured and landscaped areas associated with most of these residences.

The 258 Fruitland Road property, located at the north end of the Study Area, was formerly used as a tree and shrub nursery, which has been abandoned. Remnant plantings from this nursery operation are still present on the property. This property is current used for recreational purposes, with the active trails exhibiting signs of use by mountain bike riding and running races.

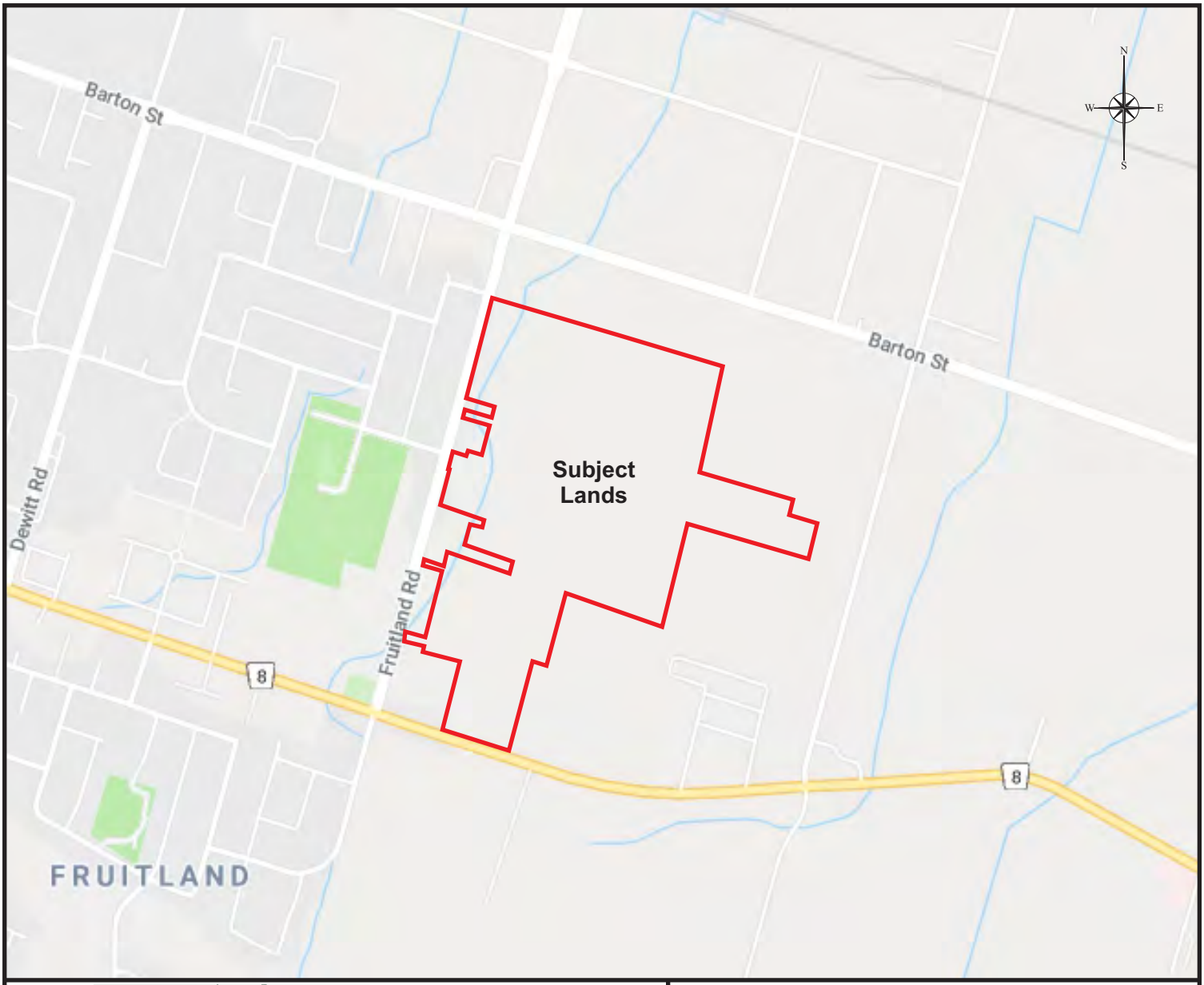
A watercourse feature also traverses many of the properties in the Study Area. This watercourse enters the Subject Lands at 200 Fruitland Road and flows north to Barton Street. The Subject Lands generally slope from south of north, however lands in the vicinity of the watercourse appear to drain towards this feature.

2.0 Study Approach

2.1 Background Review

Prior to the commencement of primary field inventories, a review of background material available for the Subject Lands and surrounding area was conducted. Some of the background information reviewed included:

- Urban Hamilton Official Plan (City of Hamilton 2014);
- Fruitland-Winona Secondary Plan (City of Hamilton 2018);
- Ontario Ministry of Natural Resources Hamilton Species at Risk List (MNR 2018);
- Background data available from the HCA (including data from the Hamilton Natural Heritage Database) and MNRF;
- Hamilton Natural Areas Inventory, 3RD Edition (Schwetz 2014);
- Stoney Creek Urban Boundary Expansion (SCUBE) West Subwatershed Study Phase 1 and Phase 2 Final Report (Aquafor Beech Limited 2013);



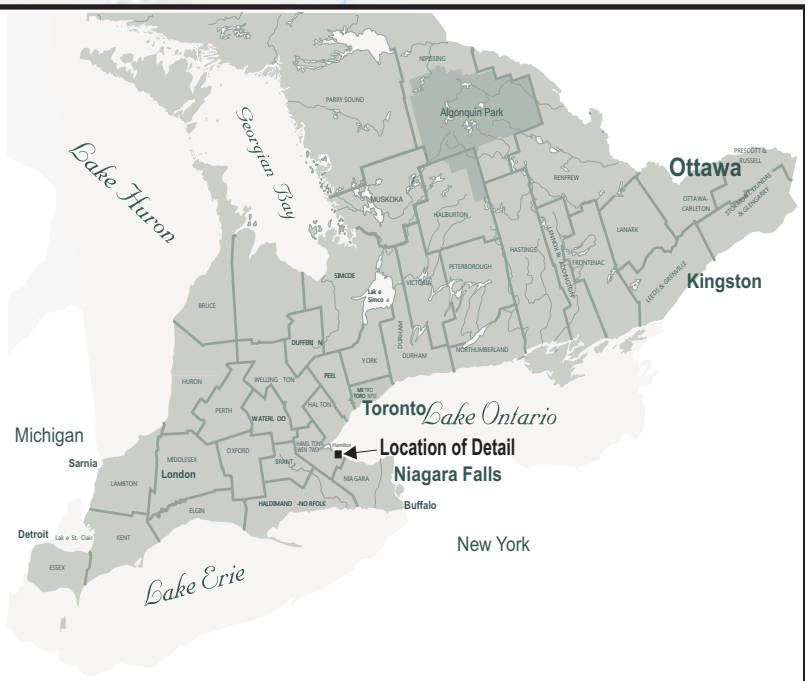


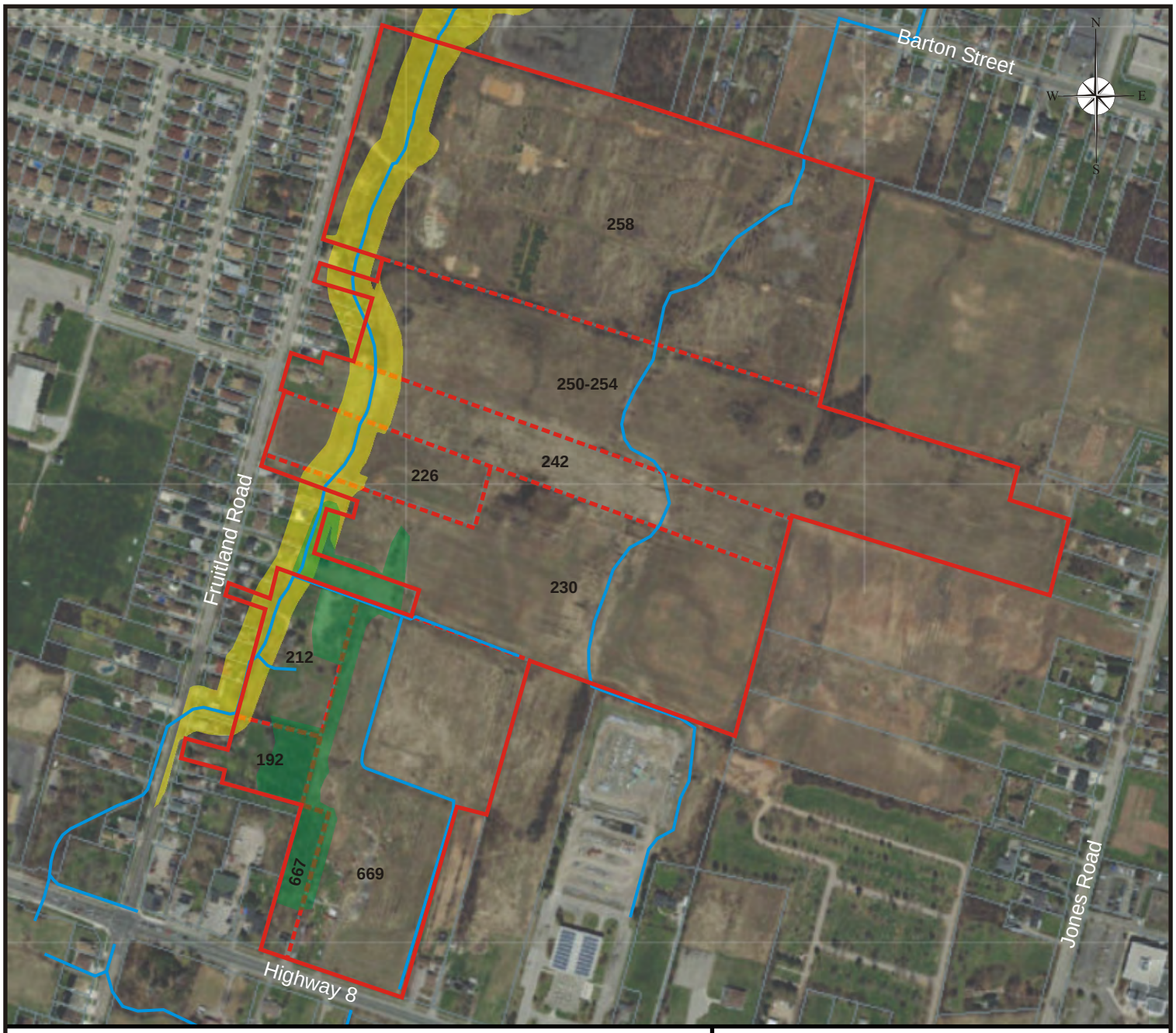
Figure 1
Location of Subject Lands

Natural Heritage Features Analysis – Block 1 Lands, City of Hamilton

Prepared for:
Sidney W Woods Engineering Inc.

Prepared by:
COLVILLE CONSULTING INC.

December 2018 | FILE: 18028



Legend

- Subject Lands
- Watercourses
- Linkage
- Core Area (wetland)

Source: Fruitland-Winona Secondary Plan, Map B.7.4-2

Figure 2
Mapped Natural Heritage Features on the Subject Lands

Natural Heritage Features Analysis
Block 1 Lands, City of Hamilton

Prepared for: **Sidney W Woods Engineering Inc.**

Prepared by: COLVILLE CONSULTING INC.

January 2019 | FILE: 18028

- Natural Heritage Assessment of Lands Bounded by Fruitland Road, Glover Road, Barton Street and Highway 8, City of Hamilton (Dillon Consulting Limited 2009); and,
- Fruitland-Winona Block 1 Servicing Strategy Environmental Assessment & Natural Heritage System Plan (Dougan and Associates 2017).

2.2 Field Inventories

In order to ensure all natural heritage features on the properties were assessed adequately, Colville Consulting conducted the following inventories and assessments on the Subject Properties:

1) Breeding bird surveys;
2) Botanical inventories;
3) Assessment and description vegetation communities on the properties using the Ecological Land Classification System for Southern Ontario;
4) Aquatic Habitat Assessment and Electrofishing Survey;
5) Search for Species at Risk habitat on and adjacent the Subject Lands; and,
6) Documentation of wildlife on the Subject Lands.

The methods employed for each of the above components are provided in the appropriate sections below.

3.0 Study Findings

3.1 Botanical Inventories and Vegetation Mapping

Botanical inventories of the Subject Lands were conducted on June 15 and October 28, 2018. Vegetation communities (ELC units – following Lee et al. 1998) were mapped and described, and a list of botanical species was compiled (see Appendix A). Species status was assessed for Ontario (Oldham and Brinker 2009) and City of Hamilton (Goodban 2014). Representative photos of the vegetation communities on these properties are presented in Appendix B. The results of our observations and assessment are provided below.

3.1.1 Botanical Inventories

One hundred and thirty-eight (138) plant species were documented during our inventories (see Appendix A). No species considered at risk in Ontario were documented on the Subject Lands. Two locally uncommon plant species (Northern Dewberry and Downy Hawthorn) were documented on the Subject Lands. The Northern Dewberry (*Rubus flagellaris)* was located on the east side of the 258 Jones Road property (see Figure 3). This species is tolerant of a variety of soil and moisture conditions, and is known to occur in 7 other locations in the City of Hamilton (Goodban 2014).

Downy Hawthorn were observed to be scattered throughout the more mature hedgerows within the Study Area. Downy Hawthorn is a pioneer species that is also tolerant of a variety of soil and moisture conditions. This species appears to have colonized in more mature hedgerows prior to the establishment of Common Buckthorn in this area. Downy Hawthorn is known to occur in at least 7 other locations in the City of Hamilton (Goodban 2014), however this species is the most common Hawthorn species in Niagara.

3.1.2 Vegetation Communities

The following is a list of vegetation communities were mapped and described on the Subject Lands:

CUM1-1	Dry-Fresh Old Field Cultural Meadow Type
CUP3	Coniferous Plantation
THDM2-6	Buckthorn Deciduous Shrub Thicket Type
THDM3	Dry - Fresh Deciduous Hedgerow Thicket Ecosite
WODM4-4	Dry - Fresh Black Walnut Deciduous Woodland Type

The central portion of the Study Area consists primarily of a Dry-Fresh Old Field Cultural Meadow Type (CUM1-1), along with areas that were recently plowed for agricultural production. Vegetation in CUM1-1 communities consisted of mix of grasses, asters, goldenrods and typical meadow species, with scattered Grey Dogwood and Dotted Hawthorn throughout.

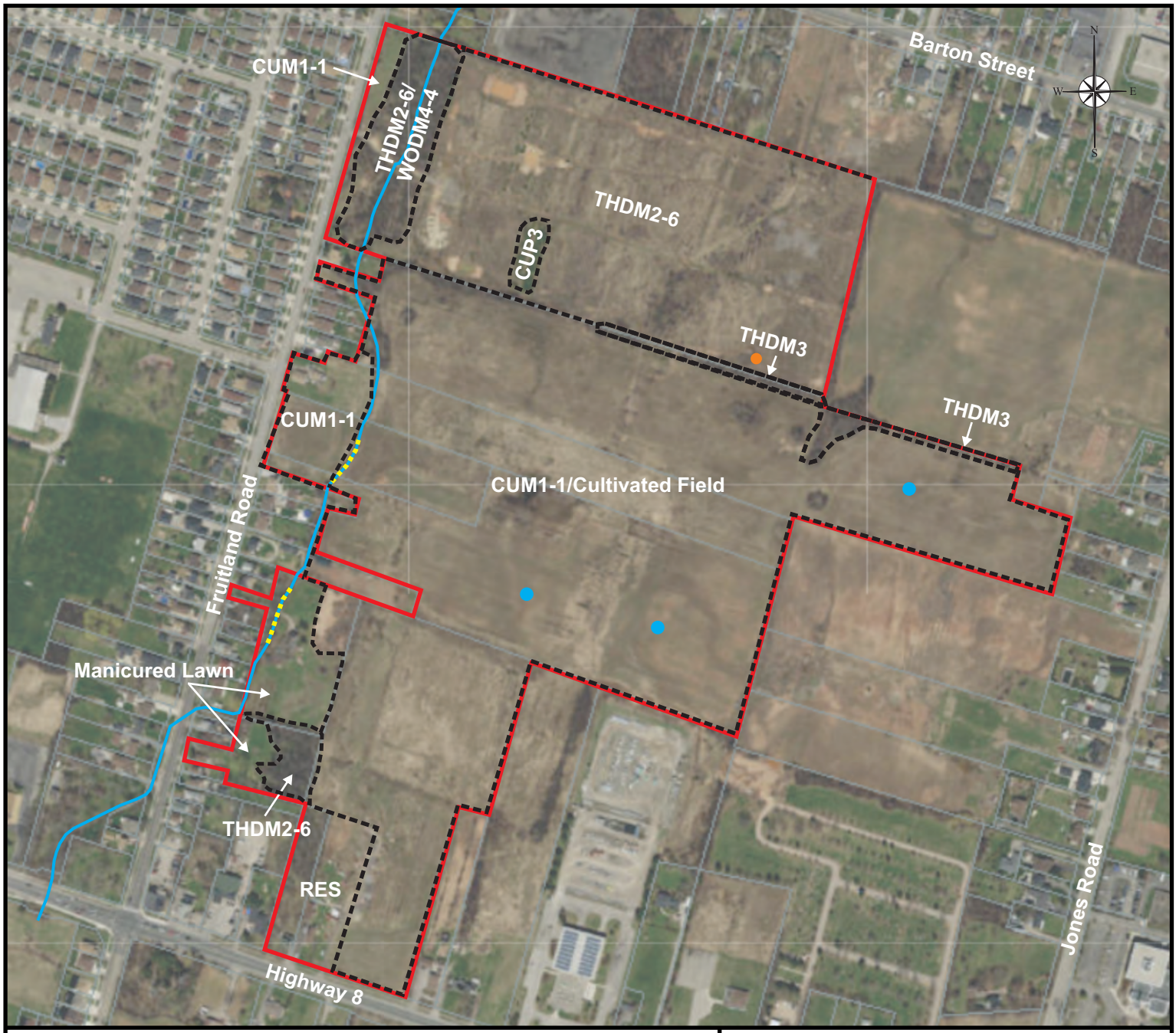
The northern portion of the Study Area consists primarily of an open Buckthorn Deciduous Shrub Thicket Type (THDM2-6), which has formed on a former agricultural orchard and nursery. Common Buckthorn dominates the shrub layer in this community, with Grey Dogwood and Rose species also occurring. In open areas, Goldenrod and Aster species dominate the ground layer with field grasses, Wild Carrot, Grass-leaved Goldenrod, Common Strawberry and Ox-eye Daisy. Up to 10% cover is also formed by young trees or saplings, which mostly consist of Green Ash, Apple and Pear trees.

Located within this open thicket is a small Coniferous Plantation (CUP3). This community is remnant from the former nursery operation on the property, with holes still present from where trees were spade from the ground. An even smaller stand of young Trembling Aspen trees occurs just to the east of this plantation, which is also remnant from the former nursery.

In the northeast corner of the Subject Lands a Deciduous Hedgerow Thicket (THDM3) occurs along and near property lines. Species within this area consist of Trembling Aspen, Eastern Cottonwood, Shagbark Hickory, Bur Oak and Basswood, along with young Green Ash, Common Buckthorn and Dotted Hawthorn.

A Buckthorn Deciduous Shrub Thicket Type (THDM2-6) with complexes of Dry - Fresh Black Walnut Deciduous Woodland Type (WODM4-4) occur in the northwest corner of the Study Area. Tree cover in the open woodland portions of the community consist of open grown Black Walnut and Green Ash trees, with the ash exhibiting significant canopy die back due to the Emerald Ash Borer infestation. Also common in the open canopy are tall Common Buckthorn. Common Buckthorn shrubs form approximately 60% cover in the sub-canopy layer, with Manitoba Maple Oaks and Staghorn Sumac also occurring. Cover in the shrub layer is greater than 60% and is dominated by Common Buckthorn. Grey Dogwood, Honeysuckle, Rose species and the occasional Common Privet also occur in the shrub layer. Grasses and herbaceous meadow species fill in the ground layer.

An additional Buckthorn Deciduous Shrub Thicket Type (THDM2-6) occurs in the southwest corner of the Study Area. Common Buckthorn dominates in the shrub layer of this community, along with scattered young Green Ash and Grey Dogwood. Forbs such as Common Strawberry, Geum, Goldenrod and Aster species along with grasses occur in the ground layers. The majority of Green Ash formerly comprising the canopy in this community have died as a result of Emerald Ash Borer infestation, resulting in a community dominated by Common Buckthorn.



Legend

	Property Boundary
	Watercourses
CUM1-1	Dry - Moist Old Field Meadow Type
CUP3	Coniferous Plantation
RES	Residential
THDM2-6	Buckthorn Deciduous Shrub Thicket Type
THDM3	Dry - Fresh Deciduous Hedgerow Thicket
WOD	Deciduous Woodland
WODM4-5	Dry - Fresh Deciduous Woodland Ecosite
	Location of Fish Collection
	Location of Observed Bobolink
	Location of *Rubus flagellaris*

Figure 3
Vegetation Communities on the Subject Properties

Natural Heritage Features Analysis
Block 1 Lands, City of Hamilton

Prepared for: **Sidney W Woods Engineering Inc.**

Prepared by: COLVILLE CONSULTING INC.

January 2019 | FILE: 18028

3.2 Wildlife and Wildlife Habitat

3.2.1 Breeding Bird Surveys

Breeding bird surveys were conducted on June 14 and July 06, 2018 to inventory breeding birds on the Subject Lands. Surveys were completed at least 15 days apart, under suitable weather conditions with little to no wind or precipitation. A thorough search of the subject properties was completed during both surveys between dawn and no later than 10:00 am. All birds seen or heard calling were recorded and the highest breeding evidence per species was determined in accordance with the criteria of the Atlas of the Breeding Birds of Ontario (Cadman et al. 2007).

A total of 37 species of birds were observed or heard on or above the subject property. According to Ontario conservation status ranks (S-rank) designations, with the exception of 3 non-native species, all other recorded species are considered to be "secure" (S5 - common, widespread and abundant) or "apparently secure" (S4 - uncommon but not rare) in the province of Ontario. The recorded species are also considered to be mostly common with 3 considered uncommon in the City Of Hamilton (Hamilton Nature Counts, 2013).

The Barn Swallows observed flying and calling over the Subject Lands on both site visits are listed as Threatened under Ontario's Endangered Species Act. 2007 (ESA) and have been designated as Threatened in Canada by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

Bobolink were observed on the 230 and 250-254 Fruitland Road properties during our breeding bird surveys. Two male Bobolink were observed flying, singing and landing on the east side of the 250-254 Fruitland Road property. One male Bobolink was observed flying, singing and landing in the central portion of the 230 Fruitland Road property and a male and female were observed flying, singing and landing on the east side of the 230 Fruitland Road property. Bobolink are designated as Threatened in the province and Canada.

3.2.3 Wildlife Observations

Incidental wildlife observations including signs were recorded during each visit to the Study Area. Observations include Eastern Cottontail, Grey Squirrel and Northern Short-tailed Shrew, along with track evidence of White-tailed Deer, coyote and raccoon. Green Frogs were also observed in the watercourse.

Observations of insects were also documented during field assessments and included

- American Dog Tick (*Dermacentor variabilus*)
- Black Swallowtail (*Papilio polyxenes*)
- Bumble Bee (*Bombus* spp)
- Cabbage White Butterfly (*Pieris rapae*)
- Cicada (Cicadidae)
- Clouded Sulphur (*Colias philodice*)
- Cricket (Gryllidae)

Active hand searches of vegetation and debris were also completed during visits to the property to assess potential use by wildlife species. No species other than those listed above were observed during these surveys.

Table 1: Results of Breeding Bird Surveys on the Subject Lands.

Species	SRank	Hamilton Status*	Subject Property Meadow/ Thicket	Adjacent Lands	Highest Breeding Evidence**	Breeding Code***
American Crow	S5B	N C	X	X	PO	H
American Goldfinch	S5B	N C	X		PO	S
American Robin	S5B	N C	X		CO	FY
Baltimore Oriole	S4B	N C	X		PO	H
Barn Swallow	S4B	N C	X		OBS	X
Black-capped Chickadee	S5	N C	X	X	PO	S
Bobolink	S4B	N C	X	X	PR	P
Brown-headed Cowbird	S4B	N C	X	X	CO	FY
Canada Goose	S5	N C	X		PO	H
Cedar Waxwing	S5B	N C	X	X	PO	H
Common Grackle	S5B	N C	X	X	CO	FY
Common Yellowthroat	S5B	N C	X		PO	S
Downy Woodpecker	S5	N C	X		PO	S
Eastern Kingbird	S4B	N C	X		PR	P
European Starling	SNA	E	X	X	CO	FY
Field Sparrow	S4B	N C	X	X	PO	S
Grasshopper Sparrow	S4B	N U	X		PO	S
Gray Catbird	S4B	N C	X	X	PO	S
House Sparrow	SNA	E	X	X	PO	S
House Wren	S5B	N C	X		PR	A
Killdeer	S5B,S5N	N C	X		PO	H
Mallard	S5	N C	X		PO	H
Mourning Dove	S5	N C	X	X	CO	FY
Northern Cardinal	S5	N C	X		PO	S
Northern Flicker	S4B	N C	X		PO	S
Northern Mockingbird	S4	N U	X		PO	S
Northern Rough-wing	S4B	N U	X		PO	S
Red-winged Blackbird	S4	N C	X	X	PR	A
Ring-billed Gull	S5B,S4N	N C	X		OBS	X
Rock Dove	SNA	E	X		OBS	X
Savannah Sparrow	S4B	N C	X	X	PR	A
Song Sparrow	S5B	N C	X		CO	FY
Swamp Sparrow	S5B	N C	X		PO	S
Tree Swallow	S4B	N C	X		PO	S
Turkey Vulture	S5B	N C	X	X	OBS	X
Willow Flycatcher	S5B	N C	X	X	PO	S
Yellow Warbler	S5B	N C	X	X	CO	FY

* Hamilton Residency Codes:
N = Native - Indigenous to Ontario E = Exotic - Not indigenous to Ontario
* Hamilton Abundance Codes:
R = Rare. Highly significant to Hamilton area. U = Uncommon. Moderately significant in Hamilton area.
C = Common. Present in many locations across the City of Hamilton. M = Migrant. Passes through Hamilton; not known to breed here. (Hamilton Nature Counts, 2013).
** OBS – observed, no evidence of breeding; PO – possible breeding; PR – probable breeding; CO - confirmed breeding

*** X – observed in its breeding season, no evidence of breeding
H – species observed in its breeding season in suitable nesting habitat
S – singing male present in its breeding season in suitable nesting habitat
P – pair observed in their breeding season in suitable nesting habitat
A – agitated behavior or anxiety calls of an adult
N – nest building or excavation of nest hole
FY – recently fledged young
CF – adult carrying food for young
NY – nest with young

3.3 Aquatic Habitat Assessment

As illustrated on Figure 2, a watercourse enters the Subject Lands on the 200 Fruitland Road property and traverses several properties in the Study Area as it continues north to Barton Street. This watercourse is an unnamed tributary to Lake Ontario, however it has been identified as Watercourse 5 in background reports. Watercourse 5 conveys surface water from the Niagara Escarpment north to Lake Ontario.

The channel of Watercourse 5 was assessed at several locations within the Subject Lands on June 4, 2018 using methods modified from the Ontario Stream Assessment Protocol. The watercourse channel ranged from approximately 3.1m to 4.8m in width, with the low-flow channel ranging from approximately 0.8m-1.5m in width. Less than 5cm of water was present in much of the watercourse at the time of assessment, however very little flow was evident. Sporadic shallow pools were present within the watercourse, with the largest of these pools located on the 226 Fruitland Road property.

Substrates in this channel are comprised primarily of gravel, cobble and debris, with silt and clay present as the parent soil material. The riparian area of the watercourse is generally vegetated by tall shrubs and scattered trees, with sections of manicured lawn also present. Very little instream vegetation was present. Potential cover in the watercourse was provided by woody debris and rubble.

Watercourse 5 was determined to be an intermittent warmwater watercourse. Two Electrofishing surveys of approximately 40m and 50m each were conducted in the watercourse on June 29, 2018, however no fish were observed or captured. It is understood that barriers to fish movement are located downstream of the property, which limits the potential for fish to enter this reach (Aquafor Beech Limited 2013). It is therefore our assessment that this reach is contributing to fish habitat downstream, but does not provide direct fish habitat.

4.0 ASSESSMENT OF SIGNIFICANT NATURAL HERITAGE FEATURES AND POTENTIAL CORE AREAS

4.1.1 Significant Habitat of Endangered and Threatened Species

No Endangered species were documented on or adjacent to the property during our inventories and surveys. Threatened species observed during our surveys were limited to Barn Swallows and Bobolink.

Barn Swallows were observed foraging above the Subject Lands during both breeding bird surveys. Outbuildings were documented on the 667 Highway 8, 669 Highway 8 and 212 Fruitland Road, however none of these structures appeared to be providing nesting habitat for Barn Swallows. It is therefore our assessment that the Subject Lands are providing opportunistic

foraging habitat for Barn Swallows, but since there were no nests documented on or adjacent to the Subject Lands, significant habitat of this species is not present in the study area.

Several Bobolink were observed flying and foraging above the 230 and 250-254 Fruitland Road properties during breeding bird surveys. From our observations, it is probable that Bobolinks were breeding on the Subject Lands, however no nests were observed and breeding was not confirmed.

As part of our assessment, we submitted an information request to the Ministry of Natural Resources and Forestry (MNRF) and completed a Species at Risk Screening (Appendix C). No response has been received to date from the MNRF, however information provided by MNRF for a project in close proximity to the Subject Lands indicated that three endangered species (Jefferson Salamander, Cucumber Tree and Butternut), as well as the Threatened Bank Swallow have been documented in this area. Typical habitat for all of these species is not present on the Subject Lands and none of these species were documented during botanical inventories and wildlife surveys.

4.1.2 Other Potential Species of Conservation Concern

No Special Concern Species were documented during our survey work. Based on information provided by MNRF, Special Concern Species known to occur in the area of the property include Wood Thrush, Peregrine Falcon, Red-headed Woodpecker Snapping Turtle. Our assessment indicates that typical habitat for these species is not present on the Subject Lands and none of these species were observed during our inventories.

In addition to the above, MNRF indicates that Shreber's Aster (S2), Eastern Milksnake (S3) and Hairy Green Sedge (S3) have been documented in the vicinity of the Subject Lands. None of these species were documented during inventories, and therefore the Subject Lands do not provide habitat for these species.

4.2 Significant Wildlife Habitat

4.2.1 Seasonal Concentration Areas of Animals

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E identifies 14 types of seasonal concentrations of animals that may be considered significant wildlife habitat. These include, but are not limited to:

- Waterfowl Stopover and Staging Areas (Aquatic and Terrestrial);
- Shorebird Migratory Stopover Area;
- Raptor Wintering Area;
- Bat Hibernacula;
- Bat Maternity Colonies;
- Turtle Wintering Areas;
- Reptile Hibernaculum;
- Colonially -Nesting Bird Breeding Habitat (Bank and Cliff);
- Colonially -Nesting Bird Breeding Habitat (Tree/Shrubs);
- Colonially -Nesting Bird Breeding Habitat (Ground);
- Migratory Butterfly Stopover Areas;
- Landbird Migratory Stopover Areas; and
- Deer Winter Congregation Areas.

Seasonal concentration areas are typically designated as significant wildlife habitat if an area supports a species at risk or a large population may be lost if the habitat is destroyed.

None of these types of seasonal concentrations of animals were observed or documented on the Subject Lands. An assessment of SWH is provided in Appendix D.

4.2.2 Rare Vegetation Communities

Rare vegetation communities often contain rare species, which depend on such habitats for their survival and cannot readily move to or find alternative habitats. Those areas that qualify as rare habitats are assigned an SRank of S1, S2 or S3 by the Natural Heritage Information Center (NHIC).

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E identifies 7 specialized habitats that may be considered significant wildlife habitat. They are:

- Cliffs and Talus Slopes;
- Sand Barren;
- Alvar;
- Old Growth Forest;
- Savannah;
- Tallgrass Prairie; and
- Other Rare Vegetation Communities.

No rare vegetation communities are present on or adjacent to the Subject Lands.

4.2.3 Specialized Habitats of Wildlife considered SWH

Some wildlife species require large areas of suitable habitat for their long-term survival and many wildlife species require substantial areas of suitable habitat for successful breeding. Their populations are at risk of decline when habitat becomes fragmented or reduced in size

Specialized habitats for wildlife include:

- Waterfowl Nesting Area;
- Bald Eagle and Osprey Nesting, Foraging and Perching Habitat;
- Woodland Raptor Nesting Habitat;
- Turtle Nesting Areas;
- Seeps and Springs;
- Amphibian Breeding Habitat (Woodland);
- Amphibian Breeding Habitat (Wetlands); and
- Woodland Area-Sensitive Bird Breeding Habitat.

The Subject Lands are not providing specialized habitat for wildlife.

4.2.4 Habitats of Species of Conservation Concern considered SWH

Habitats of Species of Conservation Concern include wildlife species that are listed as Special Concern or rare, that are declining, or are featured species. Habitats of Species of Conservation Concern do not include habitats of Endangered or Threatened species as identified by the Endangered Species Act. The following habitats are considered candidate SWH:

- Marsh Breeding Bird Habitat;
- Open Country Bird Breeding Habitat;
- Shrub/Early Successional Bird Breeding Habitat;

- Terrestrial Crayfish; and
- Special Concern and Rare Wildlife Species.

Vegetation communities on the Subject Lands do not meet the criteria to be considered habitat of Species of Conservation Concern. Habitat conditions in the CUM1-1/Cultivated Field do not meet the size or recommended age criteria to be considered Open Country Bird Breeding Habitat and bird species using the THDM2-6 community are not indicative of Shrub/Early Successional Bird Breeding Habitat.

4.2.5 Animal Movement and Migration Corridors

The SWHTG defines animal movement corridors as elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another. To qualify as significant wildlife habitat, these corridors should be a critical link between habitats that are regularly used by wildlife.

Based on our review of air photos and mapping, no portion of the Subject Lands forms part of a Migration Corridor. The watercourse on the Subject Lands may be providing some minor linkage function to allow for species such as Eastern Cottontail and Grey Squirrel to move between the Buckthorn Thicket communities at the north and south limits of the Subject Lands. Since there are no natural heritage features located north of Barton Street or west of Fruitland Road, the Subject Lands do not form part of a migration corridor.

4.3 Significant Areas of Natural and Scientific Interest (ANSI)

No Areas of Natural and Scientific Interest are located on or adjacent to the Subject Property.

4.4 Significant Woodlands

A woodland in this part of the City of Hamilton must meet two or more of the following criteria to be considered significant:

a) Size – Be greater than 2ha;
b) Interior Forest Habitat – Provide interior forest habitat that is located a minimum of 100 metres from a woodland edge;
c) Proximity/Connectivity - Be located within 50 metres of a significant natural area (defined as wetlands 0.5 hectares or greater in size, ESAs, PSWs, and Life Science ANSIs);
d) Proximity to Water – Be located within 30 metres of any hydrological feature, including all streams, headwater areas, wetlands, and lakes;
e) Woodland Age – Contain 10 or more native trees/hectare greater than 100 years old; or
f) Rare Species – Provide habitat for any threatened, endangered, special concern, provincially or locally rare species.

Based on our review of background information, no Significant Woodlands have been previously identified within the Subject Lands. Our assessment confirmed that no woodlands are located on the Subject Lands. The Buckthorn Deciduous Shrub Thicket Type (THDM2-6) located on the 192 Fruitland Road property may have formerly contained sufficient tree cover to be considered woodland, however due to decline resulting from Emerald Ash Borer infestation, there is now insufficient tree cover to be considered a woodland.

4.5 Streams

As described above, Watercourse 5 traverses several properties within the Study Area. From our assessment of the watercourse, this feature is a warmwater, intermittent watercourse, which is contributing to fish habitat downstream of the Subject Lands.

To protect the integrity and ecological functions of the watercourse and riparian area, it is recommended that a buffer of 15m be established from the edge of the low flow channel. The extent of the 15m buffer is illustrated in Figure 4. A buffer of more than 15m from Watercourse 5 does not appear to be necessary to protect the ecological functions of this watercourse.

It is understood that the flood and erosion hazards associated with Watercourse 5 have been delineated through appropriate modeling studies. Based on our assessment, it does not appear that any buffers from the flood or erosion hazards beyond what is recommended above for the protection of ecological functions of Watercourse 5 are warranted on these properties.

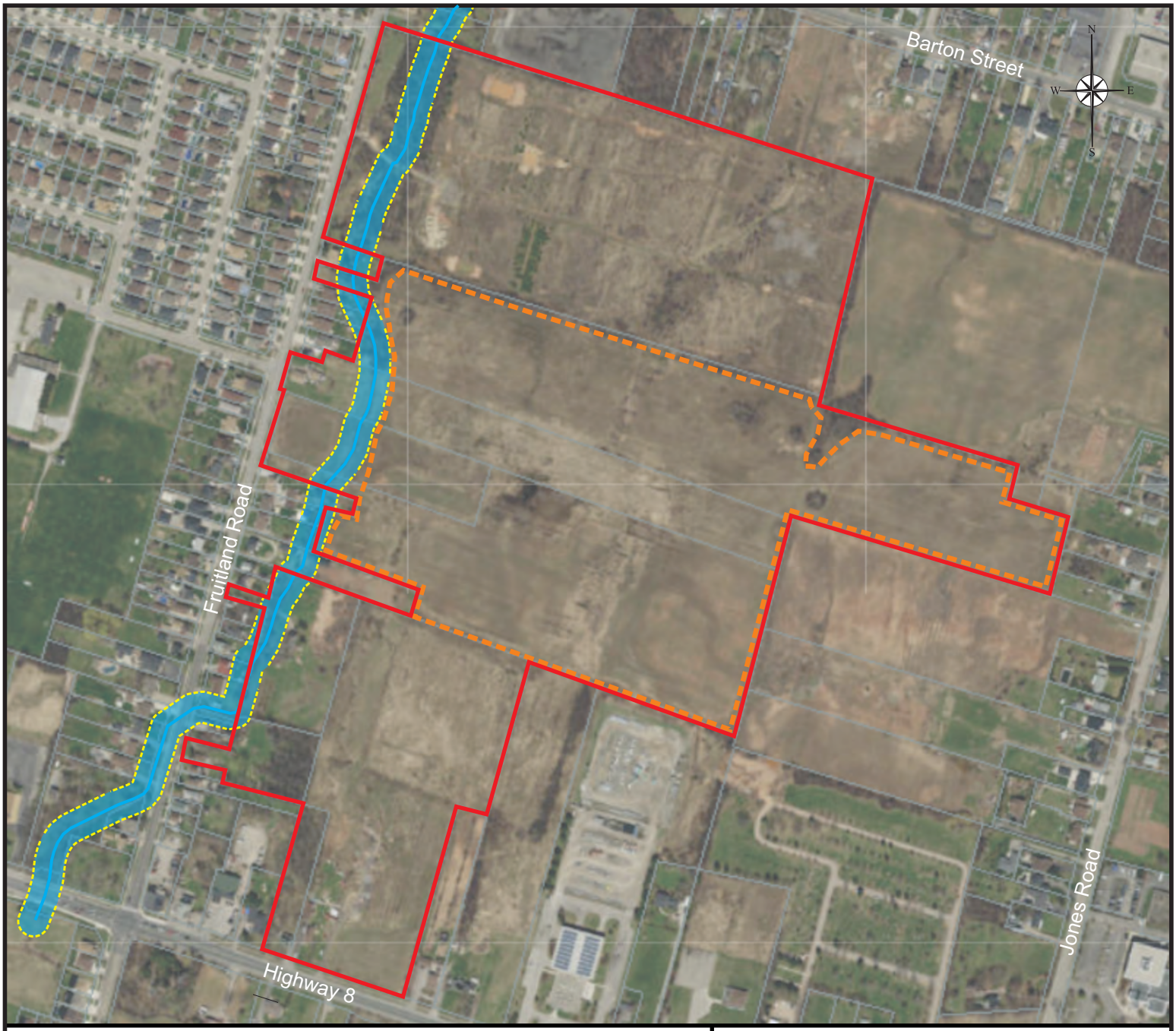
Based on our assessment of Watercourse 5 within the Study Area, this watercourse appears to be a good candidate for future relocation, should the opportunity arise. It is likely that relocation of the watercourse on these lands will provide an opportunity to increase the current buffer from Watercourse 5, as well as incorporate instream habitat features, which could potentially be utilized by fish when downstream barriers are mitigated. Riparian habitat adjacent to Watercourse 5 can be easily replicated or enhanced through the relocation process, which will provide an overall benefit to this watercourse and the Core Area.

4.6 Wetlands

Background mapping available for the Study Area indicates that several small wetland features have been previously identified on the Subject Lands. Our assessment indicates that no vegetation communities on the Subject Lands are consistent with a wetland community using the Ecological Land Classification system. The Woodland/Buckthorn Thicket community on 192 Fruitland Road was previously described as a Green Ash Swamp, however it is our assessment that vegetation and soil conditions in this area are not consistent with a wetland.

Several small depressional areas within the cultural meadow/cultivated area exhibited characteristics of meadow marsh, however these areas were too small to map as inclusions.

It is our assessment that no portion of the Subject Lands meets the definition of wetland in the UHOP.



Legend

- Subject Property
- Watercourse
- 15 Metre Watercourse Buffer
- Linkage
- Extent of Potential Bobolink Habitat

Figure 4
Refined Extent of Natural Heritage Features on the Subject Lands

Natural Heritage Features Analysis
Block 1 Lands, City of Hamilton

Prepared for: **Sidney W Woods Engineering Inc.**

Prepared by: COLVILLE CONSULTING INC.

January 2019

FILE: C18028

4.7 Linkages

Based on our review of background mapping, a Linkage has been identified in association with the watercourse. Linkages are defined in the Urban Hamilton Official Plan as natural areas within the landscape that ecologically connect Core Areas. Linkages are intended to act as avenues along which plants and animals can propagate, genetic interchange can occur, populations can move in response to environmental changes and life cycle requirements, and species can be replenished from other natural areas.

Based on our assessment and review of background information, no Core Areas are located upstream or downstream of the Subject Lands. Although Watercourse 5 and the adjacent lands do not serve to connect Core Areas, the 15m buffer recommended from the watercourse will be more than sufficient in size to maintain the movement of plant and animal species observed during our assessment.

5.0 RECOMMENDATIONS

The primary intent of this project is to characterize natural heritage features on the Subject Lands and delineate the extent of any Core Areas as defined by the UHOP. Core Areas on the Subject Lands consist of Watercourse 5. Watercourse 5 was determined to be an intermittent warmwater watercourse, which is providing contributions to fish habitat downstream of the Subject Lands. To protect the integrity of the watercourse, it is recommended that a 15m buffer be established from the edge of the low flow channel. This watercourse buffer will also serve to maintain any linkage between areas upstream and downstream of the Subject Lands.

From our assessment, a portion of the Subject Lands consists of a cultural meadow/cultivated area that was providing potential breeding habitat for Bobolink. The extent of potential Bobolink habitat is delineated in Figure 4. As this area is less than 30ha in size, it is recommended that MNRF be contacted prior to any detailed designs for the Subject Lands to discuss any obligations required by the registration process outlined in Ontario Regulation 242/08.

Please do not hesitate to contact the undersigned should you have any question regarding this project.

Respectfully submitted by:

Ian Barrett, M.Sc.
Colville Consulting Inc.

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Appendix A

Vascular Plant Checklist

Plant list for the Block 1 Lands in Stoney Creek. Conducted by A. Garofalo on June 15 & Oct 28, 2018 including previous observations from 212 Jones Road on Aug. 22, 2014

ScientificName	CommonNames	Coeff.Cons.	Coeff.Wet.	GRank	COSEWIC	COSSARO	SRank	LRank	Notes
Abutilon theophrasti	Velvetleaf	0	4	G?			SE5		
Acer negundo	Manitoba Maple	0	-2	G5			S5		
Acer platanoides	Norway Maple	0	5	G?			SE5		
Agrostis stolonifera	Creeping Bent Grass	0	-3	G5			S5		
Alisma plantago-aquatica	Common Water-plantain	3	-5	G5			S5		
Alliaria petiolata	Garlic Mustard	0	0	G?			SE5		
Amaranthus sp	Pigweed Species								
Ambrosia artemisiifolia	Common Ragweed	0	3	G5			S5		
Anthemis arvensis	Corn Chamomile	0	5	G?			SE5		
Arctium minus ssp. minus	Common Burdock	0	5	G?			SE5		
Asparagus officinalis	Asparagus	0	3	G5?			SE5		
Aster ericoides var. ericoides	Heath Aster	4	4	G5			S5		
Aster lanceolatus ssp. lanceolatus	Panicled Aster	3	-3	G5			S5		
Aster novae-angliae	New England Aster	2	-3	G5			S5		
Aster pilosus var. pilosus	Hairy Aster	4	2	G5			S5		
Berberis vulgaris	Common Barberry	0	3	G?			SE5		
Betula sp	Birch Species								
Bidens frondosa	Devil's Beggar-ticks	3	-3	G5			S5		
Bidens sp	Beggar-ticks Species								
Calystegia sepium ssp. angulata	Hedge Bindweed	2	0	G5			S5		
Campanula rapunculoides	Creeping Bellfower						SE?		
Carex vulpinoidea	Fox Sedge	3	-5	G5			S5		
Carya ovata	Shagbark Hickory	6	3	G5			S5		
Chenopodium album var. album	Lamb's Quarters	0	1	G5			SE5		
Chrysanthemum leucanthemum	Ox-eye Daisy	0	5	G?			SE5		
Cichorium intybus	Chicory	0	5	G?			SE5		
Cirsium arvense	Canada Thistle	0	3	G?			SE5		
Cirsium vulgare	Bull Thistle	0	4	G5			SE5		
Cornus foemina ssp. racemosa	Grey Dogwood	2	-2	G5			S5		
Crataegus mollis	Downy Hawthorn	4	-2	G5			S5	U	Scattered throughout more mature hedgerows
Crataegus punctata	Dotted Hawthorn	4	5	G5			S5		
Dactylis glomerata	Orchard Grass	0	3	G?			SE5		
Daucus carota	Wild Carrot	0	5	G?			SE5		
Dianthus armeria	Deptford Pink	0	5	G?			SE5		
Dipsacus fullonum ssp. sylvestris	Common Teasel	0	5	G?			SE5		
Echinochloa sp	Barnyard Grass Species								
Elymus repens	Quack Grass	0	3	G5			SE5		
Epilobium sp	Willow-herb Species								
Erigeron annuus	Daisy Fleabane	0	1	G5			S5		
Erigeron philadelphicus ssp. phila	Philadelphia Fleabane	1	-3	G5			S5		
Euthamia graminifolia	Grass-leaved Goldenrod	2	-2	G5			S5		
Festuca rubra	Red Fescue		1	G5			S5		
Festuca sp	Fescue Species								
Fragaria virginiana ssp. virginiana	Common Strawberry	2	1	G5			S5		
Fraxinus pennsylvanica	Red Ash	3	-3	G5			S5		
Galium sp	Bedstraw Species								Likely G. aparine or asprellum
Geum canadense	White Avens	3	0	G5			S5		
Geum laciniatum	Rough Avens	4	-3	G5			S4		
Glechoma hederacea	Ground Ivy	0	3	G?			SE5		

ScientificName	CommonNames	Coeff.Cons.	Coeff.Wet.	GRank	COSEWIC	COSSARO	SRank	LRank	Notes
Glyceria striata	Fowl Manna Grass	3	-5	G5			S5		
Hemerocallis fulva	Tawny Day-lily	0	5	G?			SE5		
Hesperis matronalis	Dame's Rocket	0	5	G4G5			SE5		
Hieracium sp	Hawkweed Species								
Hypericum perforatum	Common St. John's-wort	0	5	G?			SE5		
Impatiens capensis	Spotted Touch-me-not	4	-3	G5			S5		
Juglans nigra	Black Walnut	5	3	G5			S4		
Juncus effusus ssp. solutus	Soft Rush	4	-5	G5			S5		
Juncus tenuis	Path Rush	0	0	G5			S5		
Juniperus virginiana	Eastern Red Cedar	4	3	G5			S5		
Lactuca sp	Lettuce Species								
Leontodon autumnalis ssp. autum	Fall Hawkbit	0	5	G?			SE5		
Lepidium campestre	Field Cress	0	5	G?			SE5		
Ligustrum vulgare	Common Privet	0	1	G?			SE5		
Linaria vulgaris	Butter-and-eggs	0	5	G?			SE5		
Lonicera morrowii	Morrow's Honeysuckle	0	5	G?			SE3		
Lonicera tatarica	Tartarian Honeysuckle	0	3	G?			SE5		
Lonicera X bella	Showy Fly Honeysuckle	0	5	G?			SE2		
Lotus corniculatus	Bird's-foot Trefoil	0	1	G?					
Lythrum salicaria	Purple Loosestrife	0	-5	G5			SE5		
Malus pumila	Common Apple	0	5	G5			SE5		
Malus sp	Crabapple Species								
Medicago lupulina	Black Medick	0	1	G?			SE5		
Melilotus alba	White Sweet-clover	0	3	G5			SE5		
Morus alba	White Mulberry	0	0	G?			SE5		
Oxalis sp	Wood-sorrel Species								
Parthenocissus inserta	Thicket Creeper	3	3	G5			S5		
Phalaris arundinacea	Reed Canary Grass	0	-4	G5			S5		
Phleum pratense	Timothy	0	3	G?			SE5		
Phragmites australis	Common Reed	0	-4	G5			S5		
Picea abies	Norway Spruce	0	5	G?			SE3		
Picea pungens	Blue Spruce	?	?	g?			SE?		
Pinus nigra	Austrian Pine	0	-5	G?			SE2		Planted
Pinus sylvestris	Scots Pine	0	5	G?			SE5		
Pisum sativum	Garden Pea	?	?	G?			SE?		Escaped from cultivation
Plantago lanceolata	Ribgrass	0	0	G5			SE5		
Plantago major	Common Plantain	0	-1	G5			SE5		
Plantago rugelii	Pale Plantain	1	0	G5			S5		
Poa pratensis ssp. pratensis	Kentucky Blue Grass	0	1	G?			S5		
Populus deltoides ssp. deltoides	Eastern Cottonwood	4	-1	G5			S5		
Populus tremuloides	Trembling Aspen	2	0	G5			S5		
Potentilla norvegica ssp. monspel	Rough Cinquefoil	0	0	G5			S5		
Potentilla recta	Rough-fruited Cinquefoil	0	5	G?			SE5		
Potentilla simplex	Common Cinquefoil	3	4	G5			S5		
Prunella vulgaris ssp. lanceolata	Heal-all	5	5	G5			S5		
Prunus avium	Sweet Cherry	0	5	G?			SE4		
Prunus serotina	Black Cherry	3	3	G5			S5		
Prunus virginiana ssp. virginiana	Choke Cherry	2	1	G5			S5		
Pyrus communis	Common Pear	0	5	G5			SE4		
Quercus bicolor	Swamp White Oak	8	-4	G5			S4		

ScientificName	CommonNames	Coeff.Cons.	Coeff.Wet.	GRank	COSEWIC	COSSARO	SRank	LRank	Notes
Quercus macrocarpa	Bur Oak	5	1	G5			S5		
Ranunculus acris	Tall Buttercup	0	-2	G5			SE5		
Ranunculus sceleratus var. scele	Cursed Crowfoot	2	-5	G5			S5		
Rhamnus cathartica	Common Buckthorn	0	3	G?			SE5		
Rhus radicans ssp. negundo	Climbing Poison-ivy	5	-1	G5			S5		
Rhus typhina	Staghorn Sumac	1	5	G5			S5		
Rosa canina	Dog Rose	0	5	G?			SE2		May be the similar R. eglantaria
Rosa multiflora	Multiflora Rose	0	3	G?			SE4		
Rosa sp	Rose Species								
Rubus flagellaris	Northern Dewberry	4	4	G5			S4	U	
Rubus idaeus ssp. melanolasius	Wild Red Raspberry	0	-2	G5			S5		
Rubus occidentalis	Black Raspberry	2	5	G5			S5		
Rudbeckia hirta	Black-eyed Susan	0	3	G5			S5		
Rumex crispus	Curly Dock	0	-1	G?			SE5		
Salix alba	White Willow	0	-3	G5			SE4		
Salix alba var. tristis	Weeping Willow	0	-3	G5			SE4		Planted
Setaria pumila	Yellow Foxtail	0	0	G?			SE5		
Solanum dulcamara	Bittersweet Nightshade	0	0	G?			SE5		
Solidago altissima var. altissima	Tall Goldenrod	1	3	G?			S5		
Solidago juncea	Early Goldenrod	3	5	G5			S5		
Solidago rugosa ssp. rugosa	Rough Goldenrod	4	-1	G5			S5		
Sonchus asper ssp. asper	Spiny-leaved Sow-thistle	0	0	G?			SE5		
Sonchus sp	Sow-thistle Species								
Syringa vulgaris	Common Lilac	0	5	G?			SE5		
Taraxacum officinale	Common Dandelion	0	3	G5			SE5		
Taxus sp	Yew species	7	3	G5			S5		Planted
Thuja occidentalis	Eastern White Cedar	4	-3	G5			S5		Planted
Tilia americana	Basswood	4	3	G5			S5		
Trifolium pratense	Red Clover	0	2	G?			SE5		
Trifolium repens	White Clover	0	2	G?			SE5		
Tussilago farfara	Coltsfoot	0	3	G?			SE5		
Ulmus americana	White Elm	3	-2	G5?			S5		
Ulmus pumila	Siberian Elm	0	5	G?			SE3		
Verbascum thapsus	Common Mullein	0	5	G?			SE5		
Verbena urticifolia	White Vervain	4	-1	G5			S5		
Vicia cracca	Cow Vetch	0	5	G?			SE5		
Vicia tetrasperma	Sparrow Vetch	0	5	G?			SE5		
Vitis labrusca	Fox Grape	3	3	G5			S1		Planted and persisting from former vineyards
Vitis riparia	Riverbank Grape	0	-2	G5			S5		

Legend

CoeCons. - Coefficient of Conservatism. Scores for each species range from 0 (low conservatism) to 10 (high conservatism).
A conservatism value of 0 indicates species is widespread. A value of 8, 9 or 10 indicates that a species is a habitat specialist.

CoeWet. - Coefficient of Wetness
5 - Almost always occur in upland areas
4, 3, 2 - Usually occur in upland areas
1, 0, -1 - Found equally in upland and wetland areas
-2, -3, -4 Usually occur in wetlands

-5 Almost always occur in wetlands

Grank - Global Rank G1 — Critically Imperiled, G2 — Imperiled, G3 — Vulnerable, G4 — Apparently Secure, G5 — Secure

COSEWIC - Committee on the Status of Endangered Wildlife in Canada

COSSARO - Committee on the Status of Species at Risk in Ontario

Srank - Subnational Rank
S1 — Critically Imperiled - Critically imperiled in the province because of extreme rarity, (often 5 or fewer occurrences)
S2 — Imperiled - Imperiled in the province because of rarity due to very restricted range, very few populations (often 20 or fewer)
S3 — Vulnerable - Vulnerable in the province due to a restricted range, relatively few populations (often 80 or fewer)
S4 — Apparently Secure - Uncommon but not rare
S5 — Secure - Common, widespread, and abundant in the province
SE — Exotic

Lrank - Local Rank
U - Uncommon in the City of Hamilton

Appendix B

Site Photos

Photo 1. Example of vegetation conditions in the CUM1-1/Cultivated Area on the Subject Lands.

Photo 2. Example of vegetation conditions in the CUM1-1/Cultivated Area on the Subject Lands.

Photo 3. Example of vegetation conditions in the CUM1-1 community on the Subject Lands.

Photo 4. Example of vegetation conditions in the THDM2-6 community on the 192 Fruitland Road Property.

Photo 5. Example of vegetation conditions in the THDM2-6 community on the 192 Fruitland Road Property.

Photo 6. Example of vegetation conditions within and adjacent to Watercourse 5 on the 212 Fruitland Road property.

Photo 7. Example of vegetation conditions within and adjacent to Watercourse 5 on the 236 Fruitland Road property.

Photo 8. Example of conditions within and adjacent to Watercourse 5 on the 258 Fruitland Road property.

Photo 9. Example of vegetation conditions in the THDM2-6 community on the 258 Fruitland Road property.

Photo 10. Example of vegetation conditions in the THDM2-6/WODM4-4 community on the 258 Fruitland Road property.

Photo 11. Example of vegetation conditions in the CUP3 community on the 258 Fruitland Road property.

Appendix C

Species at Risk Screening

HAMILTON

Species At Risk Designations	
ENDANGERED	
THREATENED	
SPECIAL CONCERN	
EXTIRPATED	

AMPHIBIANS		ESA Protection	Key Habitats Used By Species	Subject Lands
Jefferson Salamander (*Ambystoma jeffersonianum*)	**Known to Occur**	*Species Protection and **Habitat Regulation***	inhabit deciduous and mixed deciduous forests with suitable breeding areas which generally consist of ephemeral (temporary) bodies of water that are fed by spring runoff, groundwater, or springs.	Potential breeding and overwintering habitat not present on Subject Lands.
Unisexual Ambystoma - Jefferson dominated (*Ambystoma laterale - jeffersonianum*)	**Known to Occur**	*Species Protection and **Habitat Regulation***	inhabit deciduous and mixed deciduous forests with suitable breeding areas which generally consist of ephemeral (temporary) bodies of water that are fed by spring runoff, groundwater, or springs.	Potential breeding and overwintering habitat not present on Subject Lands.

BIRDS		ESA Protection	Key Habitats Used By Species	Subject Lands
Acadian Flycatcher (*Empidonax virescens*)	**Known to Occur**	*Species and General Habitat Protection*	generally requires large areas of mature, undisturbed forest; avoids the forest edge; often found in well wooded swamps and ravines	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Bald Eagle (*Haliaeetus leucocephalus*)	**Known to Occur**	*N/A*	prefers deciduous and mixed-deciduous forest; and habitat close to water bodies such as lakes and rivers; They roost in super canopy trees such as Pine	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Bank Swallow (*Riparia riparia*)	**Known to Occur**	*Species and General Habitat Protection June 27, 2014*	It nests in a wide variety of naturally and anthropogenically created vertical banks, which often erode and change over time including aggregate pits and the shores of large lakes and rivers	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Barn Owl (*Tyto alba*)	**Known to Occur**	*Species Protection and **Habitat Regulation***	generally prefer low-elevation, open country; often associated with agricultural lands, especially pasture. Nests are located in buildings, hollow trees and cavities in cliffs.	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Barn Swallow (*Hirundo rustica*)	**Known to Occur**	*Species and General Habitat Protection*	prefers farmland; lake/river shorelines; wooded clearings; urban populated areas; rocky cliffs; and wetlands. They nest inside or outside buildings; under bridges and in road culverts; on rock faces and in caves etc.	Barn Swallows observed foraging during breeding bird surveys. No nests or nesting behaviour observed near structures on Subject Lands.
Black Tern (*Childonias niger*)	**Known to Occur**	*N/A*	generally prefer freshwater marshes and wetlands; nest either on floating material in a marsh or on the ground very close to water	Potential breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Bobolink (*Dolichonyx oryzivorus*)	**Known to Occur**	*Species and General Habitat Protection*	generally prefers open grasslands and hay fields. In migration and in winter uses freshwater marshes and grasslands	Bobolink observed foraging within Subject Lands during breeding bird surveys. Current habitat not suitable for breeding.
Canada Warbler (*Cardellina canadensis*; formerly *Wilsonia canadensis*)	**Known to Occur**	*N/A*	Generally prefers wet coniferous, decediuous and mixed forest types, with a dense shrub layer. Nests on the ground, on logs or hummocks, and uses dense shrub layer to conceal the nest.	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Cerulean Warbler (*Setophaga cerulea;* formerly *Dendoica cerulea*)	**Known to Occur**	*Species and General Habitat Protection*	generally found in mature deciduous forests with an open understorey; also nests in older, second-growth deciduous forests.	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Chimney Swift (*Chaetura pelagica*)	**Known to Occur**	*Species and General Habitat Protection*	historically found in deciduous and coniferous, usually wet forest types, all with a welldeveloped, dense shrub layer; now most are found in urban areas in large uncapped chimneys	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Common Nighthawk (*Chordeiles minor*)	**Known to Occur**	*N/A*	generally prefer open, vegetation-free habitats, including dunes, beaches, recently harvested forests, burnt-over areas, logged areas, rocky outcrops, rocky barrens, grasslands, pastures, peat bogs, marshes, lakeshores, and river banks. This species also inhabits mixed and coniferous forests. Can also be found in urban areas (nest on flat roof-tops)	Typical breeding habitat not present on Subject Lands.
Eastern Meadowlark (*Sturnella Magna*)	**Known to Occur**	*Species and General Habitat Protection*	generally prefers grassy pastures, meadows and hay fields. Nests are always on the ground and usually hidden in or under grass clumps.	Potential breeding habitat present on Subject Lands. Not observed during breeding bird surveys.
Eastern Whip-poor-will (*Caprimlugus vociferus*)	**Known to Occur**	*Species and General Habitat Protection*	generally prefer semi-open deciduous forests or patchy forests with clearings; areas with little ground cover are also preferred; In winter they occupy primarily mixed woods near open areas.	Typical breeding habitat not present on Subject Lands.

Eastern Wood-Pewee (*Contopus virens*)	**Known to Occur**	*N/A*	asscoiated with deciduous and mixed forests. Witin mature and intermediate age stands it prefers areas with little understory vegetation as well as forest clearings and edges.	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Golden-winged Warbler (Vermivora chrysoptera)	**Known to Occur**	*N/A*	generally prefer areas of early successional vegetation, found primarily on field edges, hydro or utility right-of-ways, or recently logged areas.	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Henslow's Sparrow *(Ammodramus henslowii)*	**Historically Known to Occur**	*Species and General Habitat Protection*	generally found in old fields, pastures and wet meadows. They prefer areas with dense, tall grasses, and thatch, or decaying plant material	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
King Rail *(Rallus elegans)*	**Known to Occur**	*Species and General Habitat Protection*	generally this species requires large marshes with open shallow water that merges with shrubby areas	Potential breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Least Bittern *(Ixobrychus exilis)*	**Known to Occur**	*Species and General Habitat Protection*	generally located near pools of open water in relatively large marshes and swamps that are dominated by cattail and other robust emergent plants	Potential breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Louisiana Waterthrush *(Seiurus motacilla)*	**Known to Occur**	*N/A*	generally inhabits mature forests along steeply sloped ravines adjacent to running water. It prefers clear, cold streams and densely wooded swamps	Potential breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Peregrine Falcon *(Falco peregrinus)*	**Known to Occur**	*N/A*	generally nest on tall, steep cliff ledges adjacent to large waterbodies; some birds adapt to urban environments and nest on ledges of tall buildings, even in densely populated downtown areas.	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Prothonotary Warbler *(Protonotaria citrea)*	**Known to Occur**	*Species and General Habitat Protection*	generally found in the dead trees of flooded woodlands or deciduous swamp forests; Carolinian zone	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Red-Headed Woodpecker *(Melanerpes erythrocephalus)*	**Known to Occur**	*N/A*	generally prefer open oak and beech forests, grasslands, forest edges, orchards, pastures, riparian forests, roadsides, urban parks, golf courses, cemeteries, as well as along beaver ponds and brooks	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Short-eared Owl *(Asio flammeus)*	**Suspected to Occur**	*N/A*	generally prefers a wide variety of open habitats, including grasslands, peat bogs, marshes, sand-sage concentrations, old pastures and agricultural fields	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Wood Thrush (Hylocichla mustelina)	**Known to Occur**	*N/A*	Nests mainly in second-growth and mature deciduous and mixed forests, with saplings and well-developed understory layers. Prefers large forest mosaics, but may also nest in small forest fragments.	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.
Yellow-breasted Chat *(Icteria virens)*	**Known to Occur**	*Species and General Habitat Protection*	generally prefer dense thickets around wood edges, riparian areas, and in overgrown clearings	Typical breeding habitat not present on Subject Lands. Not observed during breeding bird surveys.

FISH			**Key Habitats Used By Species**	**Subject Lands**
American Eel *(Anguilla rostrata)*	**Known to Occur**	*Species and General Habitat Protection*	all fresh water, estuaries and coastal marine waters that are accessible to the Atlantic Ocean; 12-mile creek watershed and Lake Ontario	Potential habitat not present on Subject Lands. Not observed during electrofishing surveys.
Grass Pickerel *(Esox americanus vermiculatus)*	**Known to Occur**	*N/A*	generally occur in wetlands with warm, shallow water and an abundance of aquatic plants; occur in the St. Lawrence River, Lake Ontario, Lake Erie, and Lake Huron	Potential habitat not present on Subject Lands. Not observed during electrofishing surveys.
Northern Sunfish (*Lepomis peltastes*)	**Known to Occur**	*N/A*	Shallow vegetated areas of quiet, slow flowing rivers and streams, as well as warm lakes and ponds, with sandy banks or rocky bottoms.	Potential habitat not present on Subject Lands. Not observed during electrofishing surveys.
Redside Dace *(Clinostomus elongatus)*	**Known to Occur**	*Species Protection and **Habitat Regulation***	generally found in pools and slow-moving areas of small headwater streams with a moderate to high gradien	Potential habitat not present on Subject Lands. Not observed during electrofishing surveys.
Silver Shiner *(Notropis photogenis)*	**Known to Occur**	*Species and General Habitat Protection*	generally prefer moderate to large, deep, relatively clear streams with swift currents, and moderate to high gradients	Potential habitat not present on Subject Lands. Not observed during electrofishing surveys.

INSECTS		ESA Protection	**Key Habitats Used By Species**	**How to Conduct a Proper Survey**
Monarch Butterfly *(Danaus plexippus)*	**Known to Occur**	*N/A*	exist primarily wherever milkweed and wildflowers exist; abandoned farmland, along roadsides, and other open spaces	No milkweed noted on Subject Lands. Monarchs not observed during field inventories.
Mottled Duskywing (Erynnis martialis)	**Known to Occur**	*Species and General Habitat Protection June 27, 2014*	generally inhabits a range of grassland, shrubland, and savanna habitats that contain well drained soils and the presence of its host plants Prairie Redroot (Ceanothus herbaceus) or New Jersey Tea (Ceanothus americanus).	Typical habitat not present on Subject Lands.

West Virginia White (Pieris virginiensis)	**Known to Occur**	*N/A*	generally prefer moist, deciduous woodlands. The larvae feed only on the leaves of the two-leaved toothwort (Cardamine diphylla), which is a small, spring-blooming plant of the forest floor.	Typical habitat not present on Subject Lands.

MAMMALS		ESA Protection	**Key Habitats Used By Species**	**Subject Lands**
American Badger *(Taxidea taxus jacksoni)*	**Known to Occur**	*Species Protection and **Habitat Regulation***	generally prefer open habitats, whether natural (grasslands) or man-made (agricultural fields, road right-of-ways, golf courses)	Typical habitat not present on Subject Lands. Not observed during breeding bird surveys.
Eastern small-footed Myotis (*Myotis leibii*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: primarily under loose rocks on exposed rock outcrops, crevices and cliffs, and occasionally in buildings, under bridges and highway overpasses and under tree bark.	Potential roosting or maternal habitat present under loose bark of dead Green Ash trees on the Subject Lands. No significant habiat of this species documented on the Subject Lands.
Little Brown Myotis (*Myotis lucifugus*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 Maternal Roosts: Often associated with buildings (attics, barns etc.). Occasionally found in trees (25-44 cm dbh).	Potential habitat present in outbuildings and residences on Subject Lands. No evidence of use noted on outside of structures. Structures not likely providing significant habitat for this species.
Northern Myotis (*Myotis septentrionalis*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Often asssociated with cavities of large diameter trees (25-44 cm dbh). Occasionally found in structures (attics, barns etc.)	Potential habitat present in outbuildings and residences on Subject Lands. No evidence of use noted on outside of structures. Structures not likely providing significant habitat for this species.
Tri-colored Bat (*Perimyotis subflavus*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Can be in trees or dead clusters of leaves or arboreal lichens on trees. May also use barns or similar structures.	No live oak trees with dead foliage observed on Subject Lands. The Subject Lands are not likely providing significant habitat for this species.
Woodland Vole *(Microtus pinetorum)*	**Known to Occur**	*N/A*	generally associated with deciduous forests in areas of soft, friable, often sandy soil beneath deep humus, where it can burrow easily.	Typical habitat not present on Subject Lands. Not observed during site visits.

MOLLUSCS		ESA Protection	**Key Habitats Used By Species**	**Subject Lands**
Eastern Pondmussel *(Ligumia nasuta)*	**Known to Occur**	*Species and General Habitat Protection*	generally inhabit sheltered areas of lakes or slow streams in substrates of fine sand and mud	Potential habitat not present on Subject Lands.
Lilliput (*Taxolasma parvum*)	**Known to Occur**	*Species and General Habitat Protection June 27, 2014*	Found in a variety of habitats including small to large rivers, wetlands, shallows of lakes, ponds and reservoirs. They are common in soft substrates with over 50% of the substrate type comprised of sand and a mud/muck/silt combination. Typically occur with or near Green Sunfish, Bluegill, White Crappie, and Johnny Darter	Potential habitat not present on Subject Lands.
Rainbow Mussel *(Villosa iris)*	**Known to Occur**	*Species and General Habitat Protection*	most abundant in shallow, well- oxygenated reaches of small- to medium-sized rivers and sometimes lakes, on substrates of cobble, gravel, sand and occasionally mud	Potential habitat not present on Subject Lands.

MOSSES		ESA Protection	**Key Habitats Used By Species**	**Subject Lands**
Spoon-leaved Moss (*Bryoandersonia illecebra*)	**Known to Occur**	*Species and General Habitat Protection*	generally found in deciduous forests; found on soil that is in or near flat, low-lying, seasonally wet areas.	Typical habitat not present on Subject Lands. Not observed during botanical inventories.

PLANTS		ESA Protection	**Key Habitats Used By Species**	**Subject Lands**
American Chestnut *(Castanea dentata)*	**Known to Occur**	*Species and General Habitat Protection*	found in deciduous forest communities; this tree prefers arid forests with acid and sandy soils.	Potential habitat present on Subject Lands. Not observed during botanical inventories.
American Columbo *(Frasera caroliniensis)*	**Known to Occur**	*Species and General Habitat Protection*	most commonly associated with open deciduous forested slopes, thickets and clearings; grows in a variety of relatively stable habitats as well as on a wide variety of soils	Typical habitat not present on Subject Lands. Not observed during botanical inventories.
American Ginseng *(Panax quinquefolius)*	**Known to Occur**	*Species and General Habitat Protection*	grows in rich, moist, undisturbed and relatively mature deciduous woods in areas of neutral soil (such as over limestone or marble bedrock).	Typical habitat not present on Subject Lands. Not observed during botanical inventories.
Broad Beech Fern *(Phegopteris hexagonoptera)*	**Known to Occur**	*N/A*	generally inhabits shady areas of beech and maple forests where the soil is moist or wet	Typical habitat not present on Subject Lands. Not observed during botanical inventories.

Butternut *(Juglans cinerea)*	**Known to Occur**	*Species and General Habitat Protection*	generally grows in rich, moist, and well-drained soils often found along streams. It may also be found on well-drained gravel sites, especially those made up of limestone. It is also found, though seldomly, on dry, rocky and sterile soils. In Ontario, the Butternut generally grows alone or in small groups in deciduous forests as well as in hedgerows	Potential habitat present on Subject Lands. Not observed during botanical inventories.
Cherry Birch (*Betula lenta*)	**Known to Occur**	*Species and General Habitat Protection*	Generally grows in moist, well drained soils, but it is also found on coarse-textured or rocky shallow soils.	Typical habitat not present on Subject Lands. Not observed during botanical inventories.
Eastern Flowering Dogwood *(Cornus florida)*	**Known to Occur**	*Species Protection and **Habitat Regulation***	generally grows in deciduous and mixed forests, in the drier areas of its habitat, although it is occasionally found in slightly moist environments; Also grows around edges and hedgerows	Typical habitat not present on Subject Lands. Not observed during botanical inventories.
Few-flowered Club-rush *(Trichophorum planifolium)*	**Known to Occur**	*Species Protection and **Habitat Regulation***	generally found in Dry Fresh Oak deciduous forests and Dry Fresh Oak-Maple-Hickory deciduous forests (only found on RBG property)	Typical habitat not present on Subject Lands. Not observed during botanical inventories.
Green Dragon *(Arisaema dracontium)*	**Known to Occur**	*N/A*	generally grows in damp deciduous forests and along streams.	Typical habitat not present on Subject Lands. Not observed during botanical inventories.
Hoary Mountain Mint (*Pycnanthemum incanum*)	**Known to Occur**	*Species and General Habitat Protection*	Oak savannas and prairies	Typical habitat not present on Subject Lands. Not observed during botanical inventories.
Red Mulberry *(Morus rubra)*	**Known to Occur**	*Species and General Habitat Protection*	generally grows in moist forest habitats. In Ontario, these include slopes and ravines of the Niagara Escarpment, and sand spits and bottom lands; Can grow in open areas such as hydro corridors	Typical habitat not present on Subject Lands. Not observed during botanical inventories.
White Wood Aster *(Eurybia divaricata)*	**Known to Occur**	*Species and General Habitat Protection*	generally grows in open, dry, deciduous forests. It has been suggested that it may benefit from some disturbance, as it often grows along trails.	Typical habitat not present on Subject Lands. Not observed during botanical inventories.

REPTILES		ESA Protection	**Key Habitats Used By Species**	**Subject Lands**
Blanding's Turtle *(Emydonidea blandingii)*	**Known to Occur**	*Species and General Habitat Protection*	generally occur in freshwater lakes, permanent or temporary pools, slow-flowing streams, marshes and swamps. They prefer shallow water that is rich in nutrients, organic soil and dense vegetation. Adults are generally found in open or partially vegetated sites, and juveniles prefer areas that contain thick aquatic vegetation including sphagnum, water lilies and algae. They dig their nest in a variety of loose substrates, including sand, organic soil, gravel and cobblestone. Overwintering occurs in permanent pools that average about one metre in depth, or in slow-flowing streams.	Typical habitat not present on Subject Lands. Not observed during field surveys.
Eastern Hog-nosed Snake *(Heterodon platirhinos)*	**Historically Known to Occur and May Still Occur**	*Species and General Habitat Protection*	generally prefer habitats with sandy, well-drained soil and open vegetative cover, such as open woods, brushland, fields, forest edges and disturbed sites. The species is often found near water.	Typical habitat not present on Subject Lands. Not observed during field surveys.
Eastern Musk Turtle (*Sternotherus odoratus)*	**Known to Occur**	*Species and General Habitat Protection*	Generally prefers shallow, slowmoving water where it typically walks along the bottom rather than swimming	Typical habitat not present on Subject Lands. Not observed during field surveys.
Eastern Ribbonsnake *(Thamnophis sauritus)*	**Known to Occur**	*N/A*	generally occur along the edges of shallow ponds, streams, marshes, swamps, or bogs bordered by dense vegetation that provides cover. Abundant exposure to sunlight is also required, and adjacent upland areas may be used for nesting.	Typical habitat not present on Subject Lands. Not observed during field surveys.
Northern Map Turtle *(Graptemys geographica)*	**Known to Occur**	*N/A*	generally inhabits both lakes and rivers, showing a preference for slow moving currents, muddy bottoms, and abundant aquatic vegetation. These turtles need suitable basking sites (such as rocks and logs) and exposure to the sun for at least part of the day.	Typical habitat not present on Subject Lands. Not observed during field surveys.
Snapping Turtle *(Chelydra serpentina)*	**Known to Occur**	*N/A*	generally inhabit shallow waters where they can hide under the soft mud and leaf litter. Nesting sites usually occur on gravely or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits.	Typical habitat not present on Subject Lands. Not observed during field surveys.
Spiny Softshell *(Apalone spinifera)*	**Known to Occur**	*Species and General Habitat Protection*	generally prefer marshy creeks, swift-flowing rivers, lakes, impoundments, bays, marshy lagoons, ditches and ponds near rivers	Typical habitat not present on Subject Lands. Not observed during field surveys.

Appendix D

Significant Wildlife Habitat Assessment Summary Table

Appendix D. Significant Wildlife Habitat Assessment Summary Table for Block 1 Lands.

Significant Wildlife Habitat (SWH) Type	Known or Candidate SWH present/absent	Rationale
SEASONAL CONCENTRATION AREAS OF ANIMALS		
Waterfowl Stopover and Staging Areas	Absent	Suitable habitat not present on Subject Lands
Shorebird Migratory Stopover Area	Absent	Suitable habitat not present on Subject Lands
Raptor Wintering Area	Absent	Suitable habitat not present on Subject Lands
Bat Hibernacula	Absent	Suitable overwintering habitat not present on Subject Lands
Bat Maternity Colonies	Absent	Suitable habitat not present on Subject Lands
Turtle Wintering Areas	Absent	Suitable overwintering habitat not present on Subject Lands
Reptile Hibernaculum	Absent	Suitable overwintering habitat not observed on Subject Lands
Colonially -Nesting Bird Breeding Habitat (Bank and Cliff)	Absent	Suitable habitat not present on Subject Lands
Colonially -Nesting Bird Breeding Habitat (Tree/Shrubs)	Absent	Suitable habitat not present on Subject Lands
Colonially -Nesting Bird Breeding Habitat (Ground)	Absent	Suitable habitat not present on Subject Lands
Migratory Butterfly Stopover Areas	Absent	Suitable habitat not observed on Subject Lands
Landbird Migratory Stopover Areas	Absent	Suitable habitat not observed on Subject Lands
Deer Winter Congregation Areas	Absent	Suitable winter concentration habitat not present on Subject Lands
RARE VEGETATION COMMUNITIES		
Cliffs and Talus Slopes	Absent	Habitat type not present on Subject Lands
Sand Barren	Absent	Habitat type not present on Subject Lands
Alvar	Absent	Habitat type not present on Subject Lands
Old Growth Forest	Absent	Habitat type not present on Subject Lands
Savannah	Absent	Habitat type not present on Subject Lands

Tallgrass Prairie	Absent	Habitat type not present on Subject Lands
Other Rare Vegetation Communities	Absent	No rare vegetation communities present on Subject Lands
SPECIALIZED HABITATS OF WILDLIFE CONSIDERED SWH		
Waterfowl Nesting Area	Absent	Suitable habitat not present on Subject Lands
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Absent	Suitable habitat not present on Subject Lands
Woodland Raptor Nesting Habitat	Absent	Suitable habitat not present on Subject Lands
Turtle Nesting Areas	Absent	Suitable habitat not present on Subject Lands
Seeps and Springs	Absent	Suitable habitat not present on Subject Lands
Amphibian Breeding Habitat (Woodland)	Absent	Suitable habitat not present on Subject Lands
Amphibian Breeding Habitat (Wetlands)	Absent	Suitable habitat not present on Subject Lands
Woodland Area-Sensitive Bird Breeding Habitat	Absent	Suitable habitat not present on Subject Lands
HABITATS OF SPECIES OF CONSERVATION CONCERN CONSIDERED SWH		
Marsh Breeding Bird Habitat	Absent	Suitable habitat not present on Subject Lands
Open Country Bird Breeding Habitat	Absent	Confirmed habitat not present on Subject Lands. Habitat in CUM1-1/Cultivated Field does not meet criteria.
Shrub/Early Successional Bird Breeding Habitat	Absent	Confirmed habitat not present on Subject Lands. No indicator species present.
Terrestrial Crayfish	Absent	Suitable habitat not present on Subject Lands
Special Concern and Rare Wildlife Species	Absent	Suitable habitat not present on Subject Lands
ANIMAL MOVEMENT CORRIDORS		
Amphibian Movement Corridors	Absent	Suitable habitat not present on Subject Lands
Bat Migratory Stopover Area	Absent	Suitable habitat not present on Subject Lands

Please note the above SWH criteria are based on guidance provided by the Significant Wildlife Habitat Criteria Schedules For Ecoregion 7E and modified to be specific for the Subject Property.

MINUTES OF SETTLEMENT

THIS AGREEMENT made this 11th day of August, 2021.

B E T W E E N :

2261305 ONTARIO INC.

NICK & ANNA DEFILIPPIS

of the first part

(together, the "**Appellants**")

- and -

CITY OF HAMILTON

of the second part

(the "**City**")

WHEREAS Nick and Anna DeFilippis ("**DeFilippis**") are the owners of lands municipally known as 667 Highway No. 8 ("**DeFilippis Lands**") which are legally described on **Appendix "A"** to these Minutes of Settlement;

AND WHEREAS, 2261305 Ontario Inc. ("**2261305**") is the owner of lands municipally known as 212 Fruitland Road ("**2261305 Lands**") which are legally described on **Appendix "A"** to these Minutes of Settlement attached hereto;

AND WHEREAS the Appellants appealed Urban Hamilton Official Plan Amendment No. 17 ("**OPA 17**"), which implements the Fruitland Winona Secondary Plan ("**FWSP**") within the Urban Hamilton Official Plan (the "**Appeals**");

AND WHEREAS the issues identified by DeFilippis that are the subject of their Appeal are limited to (a) whether the natural heritage characteristics of the DeFilippis lands support the designation in the FWSP of Natural Open Space on a portion of their property; (b) the identification in the FWSP of a Core Area on a portion of the DeFilippis Lands; and (c) if not what would the appropriate designation of the DeFilippis Lands and should there be site specific servicing policies for the DeFilippis Lands;

AND WHEREAS the issues identified by 2261305 that are the subject of its Appeal are limited to: (a) whether the physical features present on their property and adjacent lands support the identification in the FWSP of core area, linkages, Key Natural Heritage and Key Hydrologic Features Wetlands on the 2261305 Lands and adjacent lands; (b) the designation in the FWSP of Natural Open Space and Core Areas, Linkages, Restoration Areas and Vegetation Protection Zone; and (c) if the FWSP is amended to remove the identification of some or all of the Natural Heritage Features on the 2261305 Lands or adjacent lands is the appropriate designation in the FWSP Residential and if so what is the appropriate Residential designation;

AND WHEREAS the Local Planning Appeal Tribunal ("**LPAT**"), in its Decision/Order dated June 22, 2018 (the "**Decision**"), pursuant to motion brought by the City, granted the City's motion and approved the FWSP in its entirety except as it applies to the DeFillippis Lands, 2261305 Lands and other appellants' lands;

AND WHEREAS pursuant to section 35 of the *Local Planning Appeal Tribunal Act, 2017*, S.O. 2017, c. 23, Sched. 1, 2261305and DeFillippis, requested that the LPAT review the Decision and the LPAT denied their request and provided the Decision remains in force and effect;

AND WHEREAS the City and the Appellants (collectively, the "**Parties**") wish to settle the Appeals on the terms set out in these Minutes of Settlement;

NOW THEREFORE in consideration of the foregoing and in consideration of the mutual covenants hereinafter expressed and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties hereto agree with one another as follows:

1.0 Recitals Binding

1.1 The Parties acknowledge and agree that the recitals to these Minutes of Settlement are true and accurate and form a binding part of the Minutes of Settlement.

2.0 Disposition of the Appeals

2.1 Forthwith upon the execution of these Minutes of Settlement, the Parties shall advise the LPAT that a settlement of the Appeals has been reached and request a date to present the settlement to the LPAT for approval. The Appellants shall be responsible for providing expert opinion evidence in support of the settlement to the LPAT. The Appellants shall provide a detailed summary of said opinion evidence to the City's legal counsel responsible for the FWSP appeals 17 business days prior to the LPAT's consideration of the settlement. If there is a dispute regarding the content of the evidence it shall be resolved prior to the presentation of the settlement to the LPAT failing which the settlement will not be presented to the LPAT and the Parties will instead schedule and prepare for a contested hearing on the Appeals.

2.2 The Parties shall jointly request that the LPAT partially approve OPA 17 in accordance with the modified policies and schedules contained in **Appendix "B"** to these Minutes of Settlement ("**Modifications**").

3.0 Future Planning Processes and Approvals

3.1 A maximum Vegetation Protection Zone ("**VPZ**") of 15 metres will be applied to the Natural Heritage Features and Core Areas located on the DeFillippis Lands and the 2261305 Lands that are not removed by the Modifications. Furthermore, a reduction in the 15 metre VPZ will be considered by the City in accordance with policies C.2.5.10 and C.2.5.11 in Volume 1 of the Urban Hamilton Official Plan ("**UHOP**") including the submission of an Environmental Impact Statement prepared in accordance with applicable UHOP and FWSP policies and City guidelines governing the preparation and content of Environmental Impact Statements as part of future draft plan of subdivision and zoning by-law amendment applications for the DeFillippis Lands and 2261305 Lands or any portion of them under the Planning Act, R.S.O. 1990, c. P.13 ("**Future Applications**"). In respect of Watercourse

No. 5, a maximum 15 metre VPZ on each side of the watercourse shall be measured from the Bankfull Channel, as that term is defined in the UHOP.

3.2 Pursuant to policy C.2.5.13 in Volume 1 of the UHOP and policies 7.4.11.3 a) and b) of the FWSP, restoration plans, including compensation for the removal of vegetation, will be required to be submitted as part of Future Applications for the 2261305 Lands containing Watercourse No. 5. The restoration plans submitted with the Future Application shall include an Environmental Impact Statement and/or Linkage Assessment prepared in accordance with applicable UHOP and FWSP policies and City guidelines governing the preparation and content of Environmental Impact Statements and Linkage Assessments.

3.3 Mitigation of any impacts to significant habitat of endangered and threatened species will be addressed through an Environmental Impact Statement submitted to the City in support of Future Applications.

4.0 General Provisions

4.1 No Party shall request that the LPAT make an order for costs as against any other Party to these Minutes of Settlement in respect of the proceedings having LPAT Case Number PL140601.

4.2 These Minutes of Settlement shall be enforceable by and against the Parties hereto, their heirs, executors, administrators, successors and assigns.

4.3 These Minutes of Settlement shall be the entire agreement among the Parties and their respective heirs, executors, personal legal representatives, successors, assigns and successors in title.

4.4 Subject to the provisions of these Minutes of Settlement, these Minutes of Settlement shall not be amended except by way of written agreement executed by the Parties to the Minutes of Settlement at the time of such amendment.

4.5 The Parties agree that the Modifications represent good planning, are consistent with the Provincial Policy Statement 2014 and the Provincial Policy Statement 2020 and conform to the Growth Plan for the Greater Golden Horseshoe, 2019.

4.6 These Minutes of Settlement are made pursuant to, shall be governed by and shall be construed in accordance with the laws of the Province of Ontario.

4.7 A reference to a UHOP or FWSP policy shall be deemed to be a reference to such policy as amended, supplemented, substituted, replaced or re-enacted from time to time.

4.8 Nothing in these Minutes of Settlement shall fetter Council's discretion in its consideration of any Future Applications.

4.9 These Minutes of Settlement may be signed in counterparts and the signatures delivered by facsimile or email transmission, each of which shall be deemed to be an original with the same effect as if the signatures thereto were upon the same instrument and delivered in person.

4.10 The Parties further agree that these Minutes of Settlement shall not be confidential and shall be a public document and shall be provided to the LPAT.

IN WITNESS WHEREOF the Parties have executed this agreement by the hands of their duly authorized signing officers in that regard or have hereunto affixed their signature duly attested to, to be effective as of the date first written above.

2261305 ONTARIO INC.

Per: _____

Name: JOHN CONCIATORI
Title: PRESIDENT

I have the authority to bind the Corporation.

NICK DEFILIPPIS

_____
Nick DeFilippis

ANNA DEFILIPPIS

Anna DeFilippis
_____
Anna DeFilippis

CITY OF HAMILTON

Per: _____

Name: Stephen Spracklin, City Solicitor

I have the authority to bind the Municipal Corporation.

APPENDIX "A"

LEGAL DESCRIPTIONS OF APPELLANTS' LANDS

DeFilippis Lands

Part Lot 14, Con 2 Saltfleet; As In AB207175, Stoney Creek, City of Hamilton

2261305 Lands

Part Lot 14, Con 2 Saltfleet, As In SA58147 Except AB60435, Stoney Creek, City of Hamilton

APPENDIX "B"

MODIFIED POLICIES AND SCHEDULES

See Attached

APPENDIX 'B'

Modifications

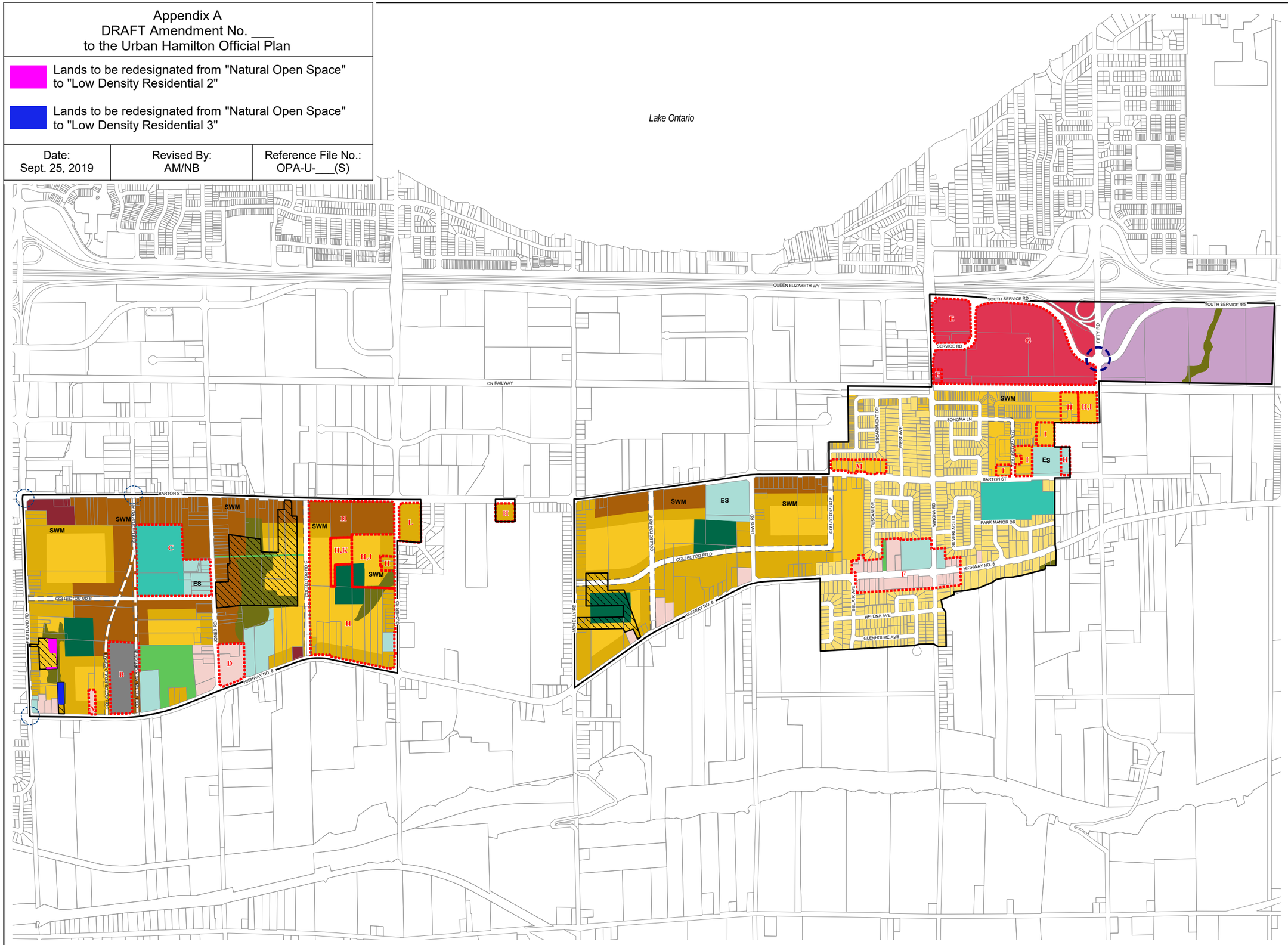
7.4.11.4 The portions of Watercourse No. 5, located on the lands north of Sherwood Park Road or on the lands municipally known as 212 Fruitland Road may be considered for relocation and natural channel design reconstruction to the satisfaction of the City in consultation with the Hamilton Conservation Authority.

Appendix A
DRAFT Amendment No. ___
to the Urban Hamilton Official Plan

Lands to be redesignated from "Natural Open Space" to "Low Density Residential 2"

Lands to be redesignated from "Natural Open Space" to "Low Density Residential 3"

Date:	Revised By:	Reference File No.:
Sept. 25, 2019	AM/NB	OPA-U-___(S)



APPEALS

Lands Under Appeal

- 238, 252 Jones Road
- 820, 822 Barton Street East
- 212 Fruitland Road
- 228, 244 McNeilly Road
- 667, 1069 Highway No. 8

Legend

Residential Designations

- Low Density Residential 1
- Low Density Residential 2
- Low Density Residential 3
- Medium Density Residential 2

Commercial and Mixed Use Designations

- Local Commercial
- District Commercial
- Arterial Commercial

Parks and Open Space Designations

- Neighbourhood Park
- Community Park
- General Open Space
- Natural Open Space

Other Designations

- Employment Area - Business Park
- Institutional
- ES — Elementary School
- Utility
- SWM — Storm Water Management

Other Features

- Area or Site Specific Policy
- Major Gateway
- Minor Gateway
- Proposed Roads
- Secondary Plan Boundary

Urban Hamilton Official Plan
Fruitland-Winona Secondary Plan
Land Use Plan
Map B.7.4-1

Not To Scale

Date: Nov. 26, 2018

Hamilton

PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

Appendix B
DRAFT Amendment No. ___
to the Urban Hamilton Official Plan

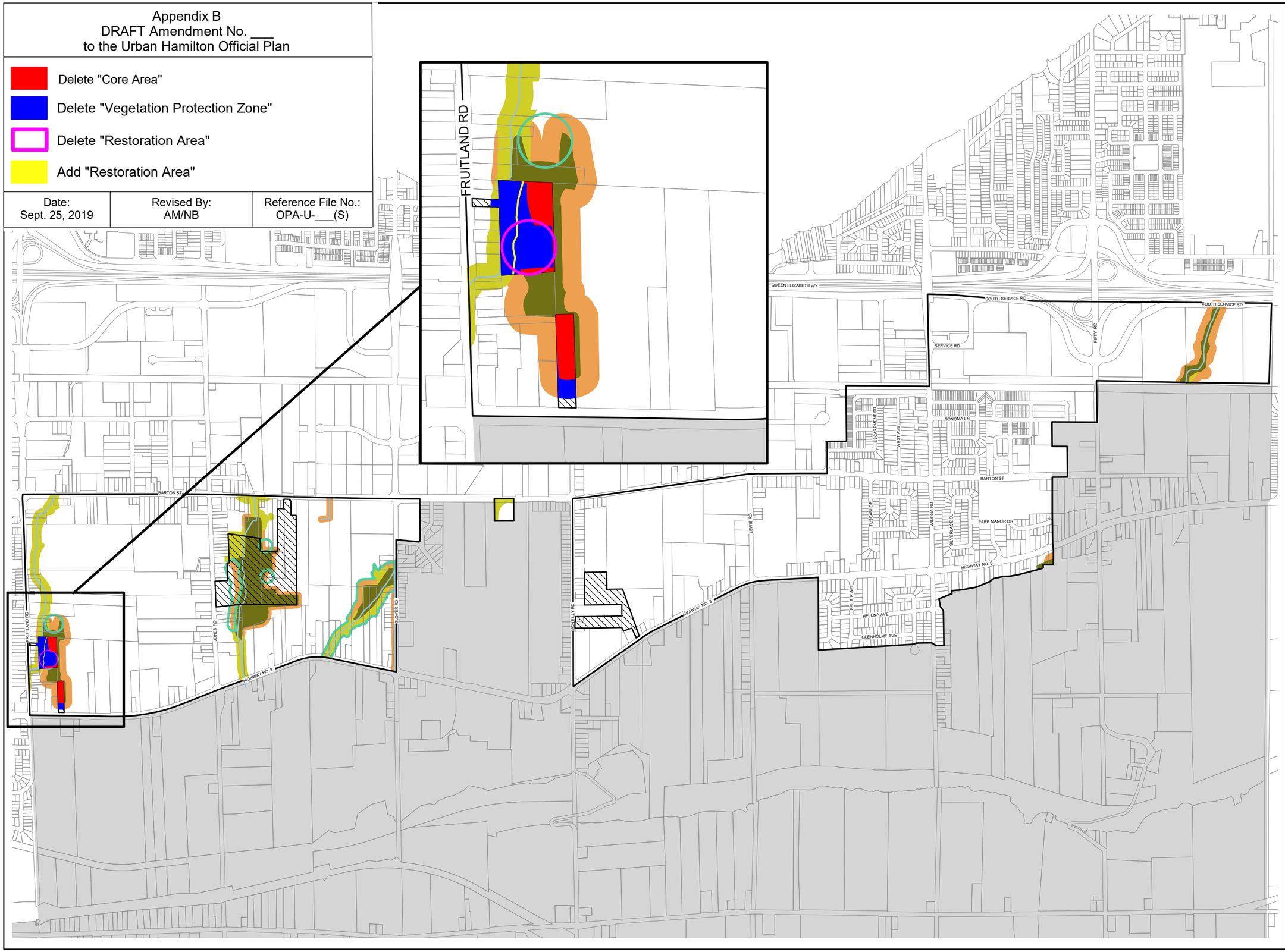
Delete "Core Area"

Delete "Vegetation Protection Zone"

Delete "Restoration Area"

Add "Restoration Area"

Date:	Revised By:	Reference File No.:
Sept. 25, 2019	AM/NB	OPA-U-___(S)



APPEALS

Lands Under Appeal

- 238, 252 Jones Road
- 820, 822 Barton Street East
- 212 Fruitland Road
- 228, 244 McNeilly Road
- 667, 1069 Highway No. 8

Legend

- Core Areas
- Linkages
- Restoration Areas
- Vegetation Protection Zone
- Streams

Other Features

- Lands in the Rural Area
- Secondary Plan Boundary

Urban Hamilton Official Plan
Fruitland-Winona Secondary Plan
Natural Heritage System
Map B.7.4-2

Not To Scale

Date: July 22, 2018

Hamilton

PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

DRAFT Urban Hamilton Official Plan Amendment No. X

The following text, together with:

Volume 1	
Appendix "A"	Chapter E – Urban Designations
Appendix "B"	Chapter F – Implementation
Appendix "C"	Chapter G – Glossary
Volume 2	
Appendix "D"	Map B.6.1-1 – Downtown Hamilton Secondary Plan – Land Use Plan
Appendix "E"	Map B.7.3-1 – Urban Lakeshore Secondary Plan – Land Use Plan
Appendix "F"	Map B.7.4-1 – Fruitland Winona Secondary Plan – Land Use Plan
Appendix "G"	Map B.7.4-2 – Fruitland Winona Secondary Plan – Natural Heritage System
Volume 3	
Appendix "H"	Chapter C – Urban Site Specific Policies
Appendix "I"	Map 2 – Site Specific Policies Key Map

attached hereto, constitutes Official Plan Amendment No. X to the Urban Hamilton Official Plan.

1.0 Purpose and Effect:

The purpose and effect of this Amendment is to:

- Clarify policies by correcting administrative errors (i.e. formatting, numbering, typographical and grammar);
- Add new policies and remove duplicate and/or redundant wording; and,
- Correct policy and mapping errors.

2.0 Location:

The lands affected by this Amendment are located within the Urban Area of the City of Hamilton.

3.0 Basis:

The basis for permitting this Amendment is:

- The Amendment reflects existing land uses and approvals and will more accurately guide future development; and,

- The Amendment is consistent with the Provincial Policy Statement, 2020 and conforms to the Growth Plan for the Greater Golden Horseshoe, 2019, as amended.

4.0 Actual Changes:

4.1 Volume 1 – Parent Plan

Text

4.1.1 Chapter E – Urban Designations

a. That the following policy of Volume 1: Chapter E – Urban Designations be amended, as outlined in Appendix "A", attached to this Amendment:
   - E.4.3.4 d)

4.1.2 Chapter F – Implementation

a. That the following policies of Volume 1: Chapter F – Implementation be amended, as outlined in Appendix "B", attached to this Amendment:
   - F.1.12.11
   - F.1.14.3.9
   - F.1.17.1
   - F.1.17.2
   - F.1.20.1

4.1.3 Chapter G – Glossary

a. That Volume 1: Chapter G – Glossary be amended by revising one definition and adding one definition as outlined in Appendix "C", attached to this Amendment.

4.2 Volume 2 – Secondary Plans

Maps

4.2.1 Maps

a. That Volume 2: Map B.6.1-1 – Downtown Hamilton Secondary Plan – Land Use Plan be amended, as shown on Appendix "D", attached to this Amendment.

b. That Volume 2: Map B.7.3-1 – Urban Lakeshore Secondary Plan – Land Use Plan be amended, as shown on Appendix "E", attached to this Amendment.

c. That Volume 2: Map B.7.4-1 – Fruitland Winona Secondary Plan – Land Use Plan be amended, as shown on Appendix "F", attached to this Amendment.

d. That Volume 2: Map B.7.4-2 – Fruitland Winona Secondary Plan – Natural Heritage System be amended, as shown on Appendix "G", attached to this Amendment.

4.3 Volume 3 – Special Policy Areas, Area Specific Policies, and Site Specific Policies

Text

4.3.1 Chapter C – Urban Site Specific Policies

a. That Volume 3: Chapter C – Urban Site Specific Polices be amended to add two new policies, as outlined in Appendix "H", attached to this Amendment.

Maps and Appendices

4.3.2 Maps

a. That Volume 2: Map 2 – Site Specific Policies Key Map be amended, as shown on Appendix "I", attached to this Amendment.

5.0 Implementation:

An implementing Zoning By-Law Amendment will give effect to the intended uses on the subject lands.

This Official Plan Amendment is Schedule “1” to By-law No. _____ passed on the ___th day of ___, 2021.

The
City of Hamilton

F. Eisenberger
MAYOR

A. Holland
CITY CLERK

Appendix “A” – Volume 1, Chapter E – Urban Designations

Proposed Change	**Proposed New / Revised Policy**
~~Grey highlighted strikethrough text~~ = text to be deleted	**Bolded text** = text to be added
E.4.3.4 d) Notwithstanding Policy E.4.6.9 Mixed Use – Medium Density Designation, **only** commercial uses shall ~~only~~ be permitted on the ground floor, and a place of worship and day nursery shall only be permitted above the ground floor of a building facing a Pedestrian Focus Street.	E.4.3.4 d) Notwithstanding Policy E.4.6.9 Mixed Use – Medium Density Designation, only commercial uses shall be permitted on the ground floor, and a place of worship and day nursery shall only be permitted above the ground floor of a building facing a Pedestrian Focus Street.

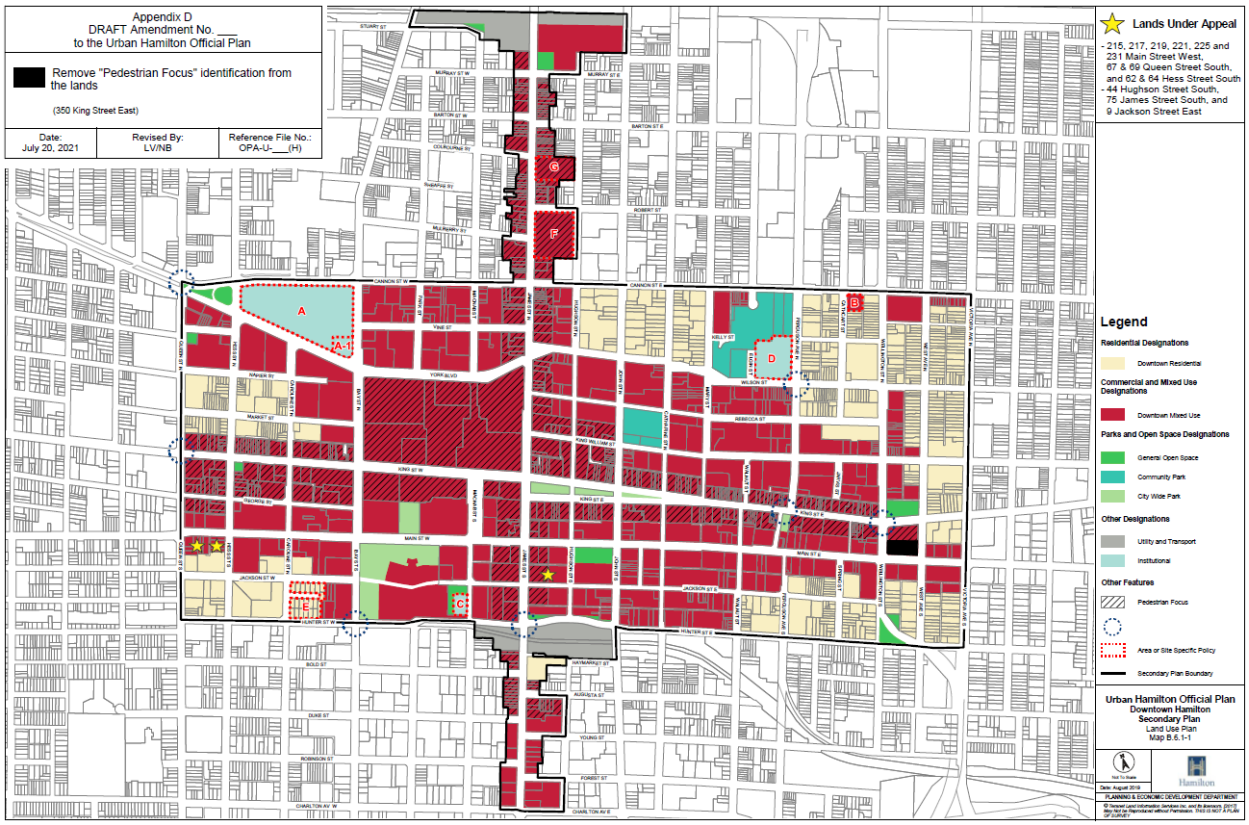
Appendix "B" – Volume 1, Chapter F – Implementation

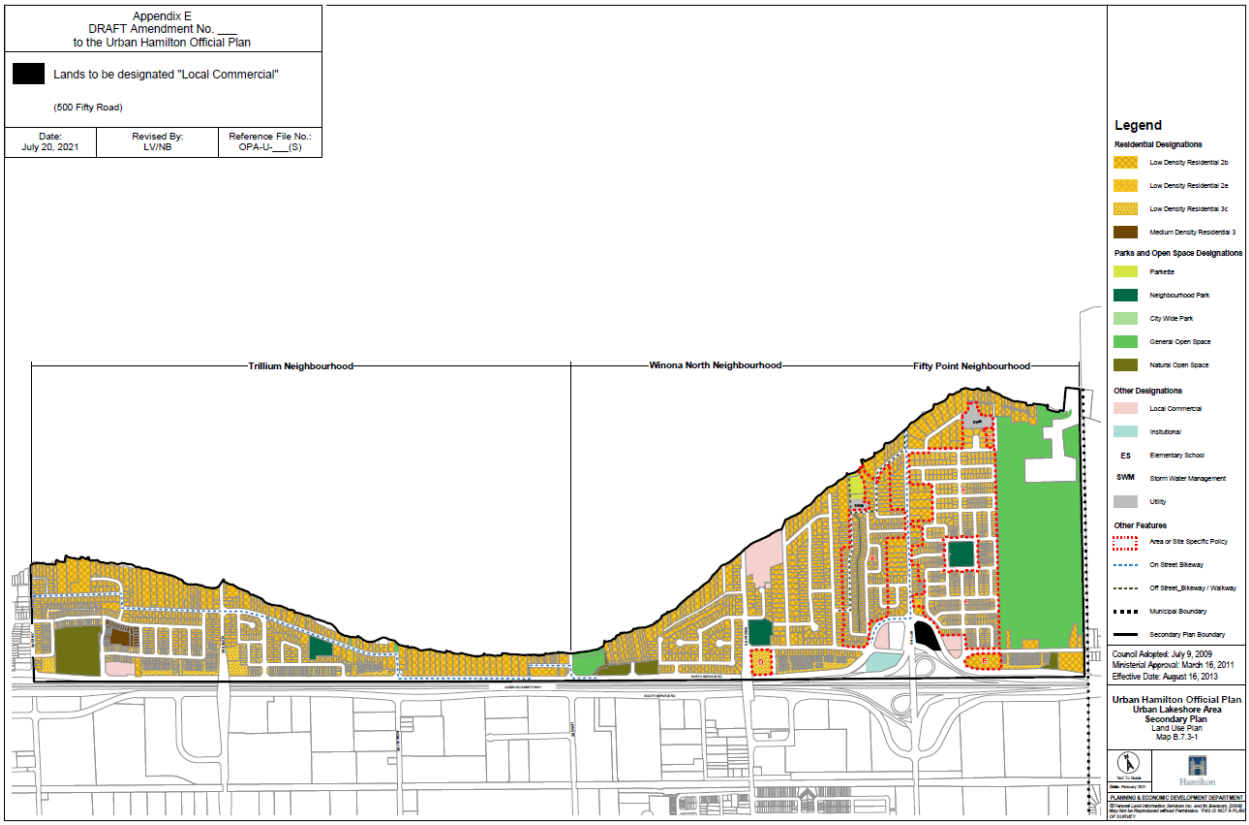
Proposed Change	Proposed New / Revised Policy
~~Grey highlighted strikethrough text~~ = text to be deleted	**Bolded text** = text to be added
Add new policy F.1.12.11: **F.1.12.11 Where the Province has passed a Minister's Zoning Order under the Planning Act, R.S.O., 1990 c. P.13, the use of the property shall be deemed to comply with the policies and land use designations of this Plan.**	F.1.12.11 Where the Province has passed a Minister's Zoning Order under the Planning Act, R.S.O., 1990 c. P.13, the use of the property shall be deemed to comply with the policies and land use designations of this Plan.
Add new policy F.1.14.3.9: **F.1.14.3.9 Severances shall not be granted for dwellings created as *Secondary Dwelling Units – Detached*.**	F.1.14.3.9 Severances shall not be granted for dwellings created as *Secondary Dwelling Units – Detached*.
F.1.17.1 The City may use a variety of communication methods to seek input on planning matters or to provide information to the general public. Depending on the issues and in accordance with the Planning Act, R.S.O., 1990 c. P.13, the City shall choose the most appropriate method of communication. Communication may be in the form of: a) Direct mail outs; b) Public notice signs; c) Surveys, electronic or mail out; d) Public information open houses **held virtually or in person**; e) Public meetings **held virtually or in person**; f) City web site; or g) Workshops.	F.1.17.1 The City may use a variety of communication methods to seek input on planning matters or to provide information to the general public. Depending on the issues and in accordance with the Planning Act, R.S.O., 1990 c. P.13, the City shall choose the most appropriate method of communication. Communication may be in the form of: a) Direct mail outs; b) Public notice signs; c) Surveys, electronic or mail out; d) Public information open houses held virtually or in person; e) Public meetings held virtually or in person; f) City web site; or g) Workshops.
F.1.17.2 Notification of public meeting(s) for the adoption of the Official Plan and amendments, changes to the Zoning By-law, plans of subdivision, **draft plan of condominium as required by the Planning Act**, and Community Improvement Plans shall be given to the public at least 17 days prior to the date of the meeting(s) and the notice shall be given in accordance with the applicable requirements of the Planning Act, R.S.O., 1990 c. P.13 regulations.	F.1.17.2 Notification of public meeting(s) for the adoption of the Official Plan and amendments, changes to the Zoning By-law, plans of subdivision, draft plan of condominium as required by the Planning Act, and Community Improvement Plans shall be given to the public at least 17 days prior to the date of the meeting(s) and the notice shall be given in accordance with the applicable requirements of the Planning Act, R.S.O., 1990 c. P.13 regulations.

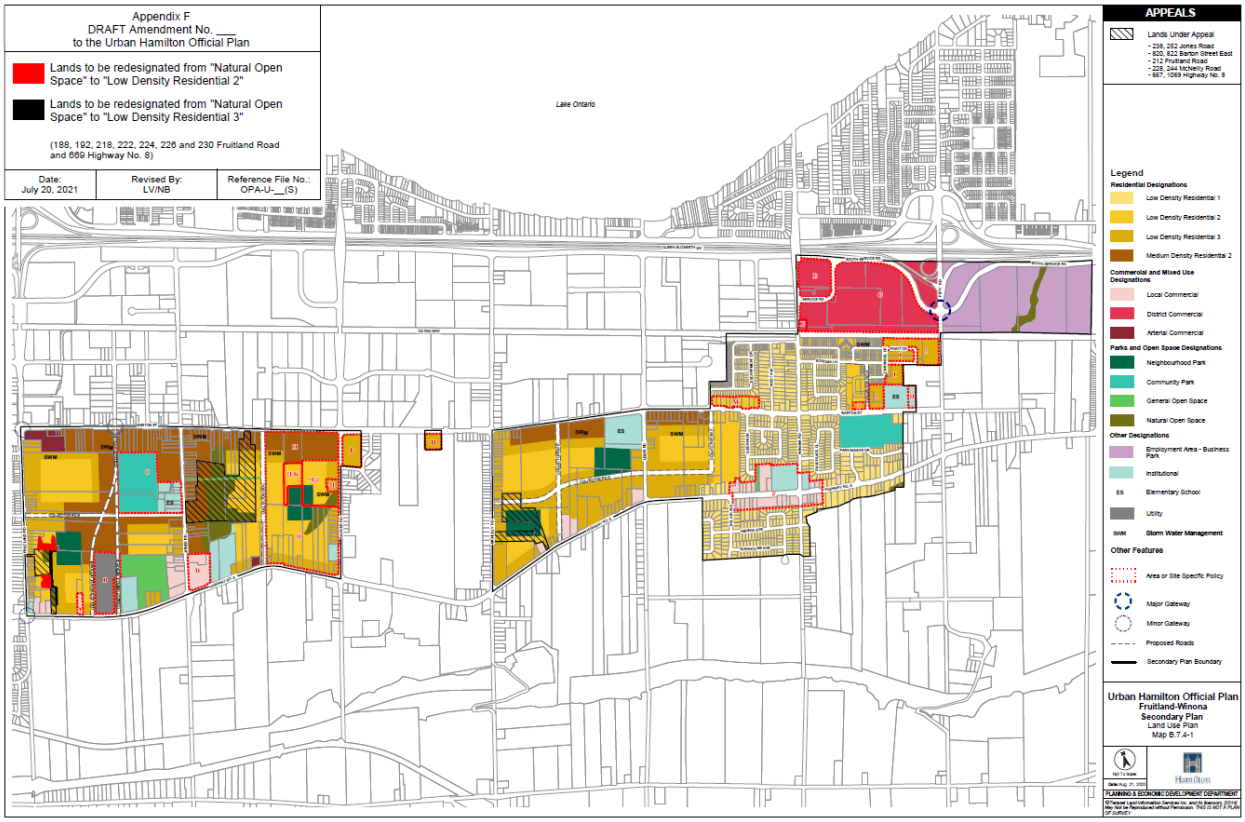
Proposed Change	Proposed New / Revised Policy
~~Grey highlighted strikethrough text~~ = text to be deleted	**Bolded text** = text to be added
F.1.20.1 Where a proponent is required, under the Zoning By-law, to provide and/or maintain parking facilities, the City may require a cash payment in lieu of all or part of the parking requirements**, in accordance with the City's Cash-in-Lieu of Parking Policy**. Such funds shall be used for the **following purposes,** ~~acquisition of lands and/or the provision of off-street parking~~ as deemed appropriate by the City~~.~~**:** **a) The acquisition of lands and/or the provision of off-street parking;** **b) Support for measures that reduce or shift the demand for parking through outreach, education and targeted programs; and,** **c) Provision of infrastructure and services that support micro-mobility including bicycles, shared bicycles, E-scooters and electric bicycles.**	Where a proponent is required, under the Zoning By-law, to provide and/or maintain parking facilities, the City may require a cash payment in lieu of all or part of the parking requirements**,** in accordance with the City's Cash-in-Lieu of Parking Policy. Such funds shall be used for the following purposes, as deemed appropriate by the City: a) The acquisition of lands and/or the provision of off-street parking; b) Support for measures that reduce or shift the demand for parking through outreach, education and targeted programs; and, c) Provision of infrastructure and services that support micro-mobility including bicycles, shared bicycles, E-scooters and electric bicycles.

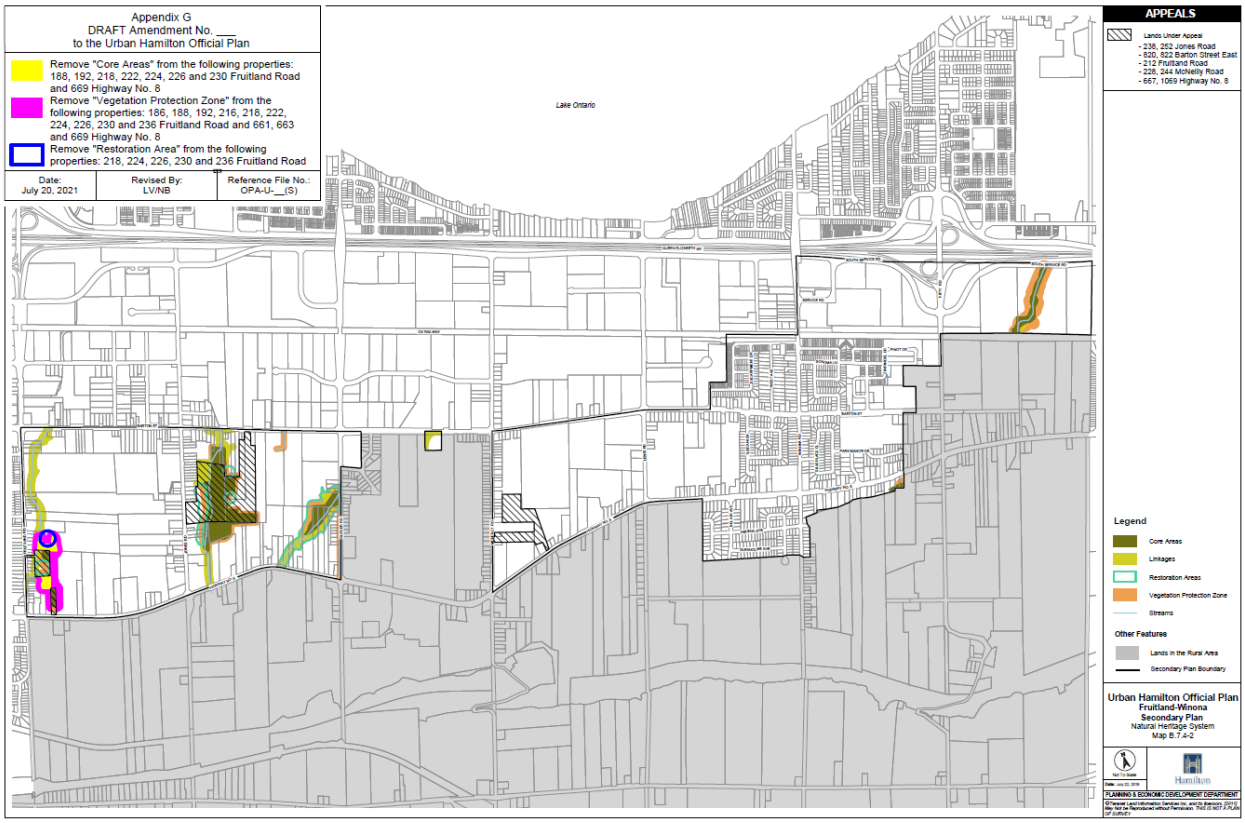
Appendix “C” – Volume 1, Chapter G – Glossary

Proposed Change	**Proposed New Policy**
~~Grey highlighted strikethrough text~~ = text to be deleted	**Bolded text** = text to be added
Secondary Dwelling Unit: means a **separate and self-contained** dwelling unit that is accessory to and located ~~on the same lot as~~ **within** the principal dwelling ~~and shall be physically located within the principal dwelling, or located within an accessory building to the principal dwelling~~.	Secondary Dwelling Unit: means a separate and self-contained dwelling unit that is accessory to and located within the principal dwelling.
Add definition of Secondary Dwelling Unit - Detached to Chapter G – Glossary.	Secondary Dwelling Unit - Detached: means a separate and self-contained detached dwelling unit that is accessory to and located on the same lot as the principal dwelling.


Appendix D
DRAFT Amendment No. ___
to the Urban Hamilton Official Plan
Remove "Pedestrian Focus" identification from the lands
(350 King Street East)
Date: July 20, 2021
Revised By: LV/NB
Reference File No.: OPA-U-___(H)
Lands Under Appeal
- 215, 217, 219, 221, 225 and 231 Main Street West, 67 & 69 Queen Street South, and 62 & 64 Hess Street South
- 44 Hughson Street South, 75 James Street South, and 9 Jackson Street East
Legend
Residential Designations
Downtown Residential
Commercial and Mixed Use Designations
Downtown Mixed Use
Parks and Open Space Designations
General Open Space
Community Park
City Wide Park
Other Designations
Utility and Transport
Institutional
Other Features
Pedestrian Focus
Area or Site Specific Policy
Secondary Plan Boundary
Urban Hamilton Official Plan
Downtown Hamilton
Secondary Plan
Land Use Plan
Map B.6.1-1
Date: August 2019
PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

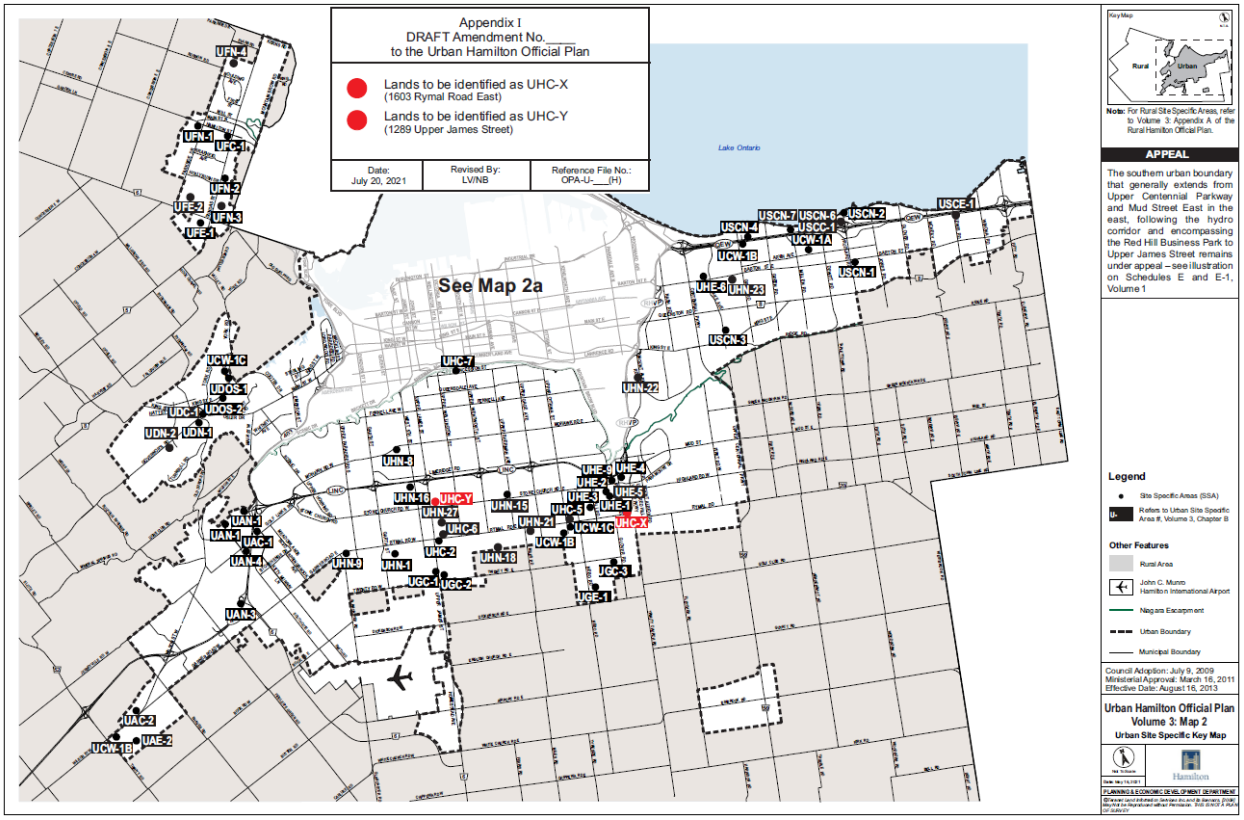

Appendix E
DRAFT Amendment No. ___
to the Urban Hamilton Official Plan
Lands to be designated "Local Commercial"
(500 Fifty Road)
Date: July 20, 2021
Revised By: LV/NB
Reference File No.: OPA-U-___(S)
Trillium Neighbourhood
Winona North Neighbourhood
Fifty Point Neighbourhood
Legend
Residential Designations
Low Density Residential 2b
Low Density Residential 2e
Low Density Residential 3c
Medium Density Residential 3
Parks and Open Space Designations
Parkette
Neighbourhood Park
City Wide Park
General Open Space
Natural Open Space
Other Designations
Local Commercial
Institutional
ES Elementary School
SWM Storm Water Management
Utility
Other Features
Area or Site Specific Policy
On Street Bikeway
Off Street_Bikeway / Walkway
Municipal Boundary
Secondary Plan Boundary
Council Adopted: July 9, 2009
Ministerial Approval: March 16, 2011
Effective Date: August 16, 2013
Urban Hamilton Official Plan
Urban Lakeshore Area
Seconday Plan
Land Use Plan
Map B.7.3-1
Hamilton
PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT


Appendix F
DRAFT Amendment No. ___
to the Urban Hamilton Official Plan
Lands to be redesignated from "Natural Open Space" to "Low Density Residential 2"
Lands to be redesignated from "Natural Open Space" to "Low Density Residential 3"
(188, 192, 218, 222, 224, 226 and 230 Fruitland Road and 669 Highway No. 8)
Date: July 20, 2021
Revised By: LV/NB
Reference File No.: OPA-U-__(S)
Lake Ontario
APPEALS
Lands Under Appeal
Legend
Residential Designations
Low Density Residential 1
Low Density Residential 2
Low Density Residential 3
Medium Density Residential 2
Commercial and Mixed Use Designations
Local Commercial
District Commercial
Arterial Commercial
Parks and Open Space Designations
Neighbourhood Park
Community Park
General Open Space
Natural Open Space
Other Designations
Employment Area - Business Park
Institutional
Elementary School
Utility
Storm Water Management
Other Features
Area or Site Specific Policy
Major Gateway
Minor Gateway
Proposed Roads
Secondary Plan Boundary
Urban Hamilton Official Plan
Fruitland-Winona
Secondary Plan
Land Use Plan
Map B.7.4-1
Hamilton
PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT


Appendix G
DRAFT Amendment No. ___
to the Urban Hamilton Official Plan
Remove "Core Areas" from the following properties: 188, 192, 218, 222, 224, 226 and 230 Fruitland Road and 669 Highway No. 8
Remove "Vegetation Protection Zone" from the following properties: 186, 188, 192, 216, 218, 222, 224, 226, 230 and 236 Fruitland Road and 661, 663 and 669 Highway No. 8
Remove "Restoration Area" from the following properties: 218, 224, 226, 230 and 236 Fruitland Road
Date: July 20, 2021
Revised By: LV/NB
Reference File No.: OPA-U-__(S)
Lake Ontario
APPEALS
Lands Under Appeal
- 238, 252 Jones Road
- 820, 822 Barton Street East
- 212 Fruitland Road
- 228, 244 McNeilly Road
- 667, 1069 Highway No. 8
Legend
Core Areas
Linkages
Restoration Areas
Vegetation Protection Zone
Streams
Other Features
Lands in the Rural Area
Secondary Plan Boundary
Urban Hamilton Official Plan
Fruitland-Winona
Secondary Plan
Natural Heritage System
Map B.7.4-2
Hamilton
PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

Appendix "H" – Volume 3, Chapter C – Site Specific Policies

Proposed Change	**Proposed New / Revised Policy**
~~Grey highlighted strikethrough text~~ = text to be deleted	**Bolded text** = text to be added
Add Site Specific Policy UHC-X	UHC-X Lands located at 1603 Rymal Road East, former City of Hamilton 1. In addition to the permitted uses of Policy E.4.8.2 of Volume 1, and notwithstanding Policy E.4.8.3 a), b), and d) of Volume 1, for the lands located at 1603 Rymal Road East, designated Arterial Commercial, the following uses are permitted: a) retail uses b) personal service uses c) office uses d) financial establishments e) medical clinics f) day nursery 2. The scale of the permitted uses shall be regulated by the Zoning By-law.
Add Site Specific Policy UHC-Y	UHC-Y 1289 Upper James Street, former City of Hamilton In addition to the permitted uses of Policy E.4.8.2 of Volume 1, and notwithstanding Policy E.4.8.3 b) and d) of Volume 1, for the lands located at 1289 Upper James Street, designated Arterial Commercial, the following uses shall be permitted within the existing building: a) Office uses; b) Retail stores; and, c) Food stores, including a food store with restaurant.


Appendix I
DRAFT Amendment No.____
to the Urban Hamilton Official Plan
Lands to be identified as UHC-X
(1603 Rymal Road East)
Lands to be identified as UHC-Y
(1289 Upper James Street)
Date: July 20, 2021
Revised By: LV/NB
Reference File No.: OPA-U-___(H)
See Map 2a
Lake Ontario
Key Map
Rural
Urban
Note: For Rural Site Specific Areas, refer to Volume 3: Appendix A of the Rural Hamilton Official Plan.
APPEAL
The southern urban boundary that generally extends from Upper Centennial Parkway and Mud Street East in the east, following the hydro corridor and encompassing the Red Hill Business Park to Upper James Street remains under appeal – see illustration on Schedules E and E-1, Volume 1
Legend
Site Specific Areas (SSA)
Refers to Urban Site Specific Area #, Volume 3, Chapter B
Other Features
Rural Area
John C. Munro Hamilton International Airport
Niagara Escarpment
Urban Boundary
Municipal Boundary
Council Adoption: July 9, 2009
Ministerial Approval: March 16, 2011
Effective Date: August 16, 2013
Urban Hamilton Official Plan
Volume 3: Map 2
Urban Site Specific Key Map
Hamilton
PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

Ontario Land Tribunal
Tribunal ontarien de l'aménagement du territoire

ISSUE DATE: November 24, 2021 **CASE NO(S).:** PL140601

PROCEEDING COMMENCED UNDER subsection 17(24) of the *Planning Act*, R.S.O. 1990, c. P.13, as amended

Appellant:	2261305 Ontario Inc.
Appellant:	549367 Ontario Ltd.
Appellant:	783878 Ontario Ltd.
Appellant:	Nick and Anna DeFilippis; and others
Subject:	Proposed Official Plan Amendment No. 17UHOP
Municipality:	City of Hamilton
OLT Case No.:	PL140601
OLT File No.:	PL140601
OLT Case Name:	DeFilippis v. Hamilton (City)

Heard: November 10, 2021 by video hearing

APPEARANCES:

Parties	**Counsel*/Representative**
Nick and Anna DeFilippis 2261305 Ontario Inc.	Nancy Smith
City of Hamilton	Michael Kovacevic
Petar Djeneralovic	No one appeared
Ray Bucci 783878 Ontario Ltd. (Bucci Homes)	No one appeared

MEMORANDUM OF ORAL DECISION DELIVERED BY T.F. NG ON NOVEMBER 10, 2021 AND ORDER OF THE TRIBUNAL

[1] This matter relates to the Urban Hamilton Official Plan Amendment No. 17 ("OPA

17") and the Fruitland-Winona Secondary Plan ("FWSP").

[2] In the past, various appeals associated with OPA 17 were withdrawn, dismissed, settled or scoped and decisions arising from those hearing events have been issued.

[3] This particular matter involves one of the three remaining groups being Block 1 Appellants, Nick and Anna DeFilippis ("DeFilippis") and 2261305 Ontario Inc. (2261305) (collectively the "Appellants"). The other appellants, Petar Djeneralovic (Block 2); and collectively "Bucci Homes" (Block 3) did not appear, though served with notice, as this hearing matter did not concern those appellants' lands.

[4] The Block 1 lands are generally located east of Fruitland Road, north of Highway No. 8 in the former City of Stoney Creek which now forms part of the amalgamated City of Hamilton ("City"). The Block 1 lands consist of a large contiguous area of approximately 36.2 hectares proposed for development under the FWSP.

[5] The DeFilippis and 2261305 lands ("Subject Lands") are shown as Exhibit "C" in Glenn Wellings Affidavit (Exhibit 1). The DeFilippis lands are located at 667 Highway No. 8. The 2261305 property is located at 212 Fruitland Road. The Subject Lands are situated within Block 1.

[6] The Subject Lands are presently used for residential purposes and contain existing single-detached dwellings. The basis for the appeals concerned the identification of natural heritage and hydrologic features and linkages on the Subject Lands. The appeals related to the proposed designation of the Subject Lands on Maps B.7.4-1 and B.7.4-2 of the FWSP.

[7] The Appellants and the City have settled the matter through Minutes of Settlement ("MOS") dated August 11, 2021 ("Settlement Proposal"). The Settlement proposes specific modifications to the policies and land use designations in the FWSP. These modifications are contained in Appendix 'B' of the MOS. The proposed modifications are based on and supported by the environmental work conducted by

Colville Consulting Inc. (“Colville”).

[8] The Appellants’ Planner, Glenn Wellings, testified in support of the settlement and the Tribunal qualified him to provide opinion evidence in the area of land use planning matters. His Affidavit dated November 5, 2021 was marked as Exhibit 1. Ian Barrett, an Ecologist with Colville, engaged by the Appellants, was qualified by the Tribunal to give opinion evidence in his specialization. His Affidavit was marked as Exhibit 2.

[9] The Tribunal, having considered the uncontroverted testimony of Mr. Wellings and Mr. Barrett, the Settlement Proposal, the proposed modifications and having reviewed the materials filed with the Tribunal, allows the appeal in part for the reasons set out below.

EVIDENCE

[10] Mr. Barrett testified with respect to his report of 2019, “Natural Heritage Characterization Assessment Block 1 Lands – City of Hamilton”, prepared by Colville (“Colville Report”) dated February 2019.

[11] The purpose of the Colville Report was to assess and describe natural heritage features located on the Block 1 lands including the Subject Lands, and to determine the extent of potential Core Areas, Linkages and Restoration Areas.

[12] A summary of the findings of the Colville Report is as follows:

- No endangered species were documented.
- Threatened Species (i.e. Barn Swallows and Bobolink) were observed but not on the Subject Lands. None of the structures present appeared to be providing nesting habitat for Barn Swallows.

- No Special Concern Species were documented.
- No rare vegetation communities or specialized habitat for wildlife are present.
- Vegetation communities on the Subject Lands do not meet the criteria to be considered habitat for Species of Conservation Concern and the Subject Lands do not form part of a migration corridor.
- No Significant Woodlands are located on the Subject Lands. Emerald Ash Borer has impacted much of the tree cover.
- No portion of the Subject Lands qualifies as wetland.
- No Core Areas, with the exception of the watercourse (i.e. Watercourse 5) are located upstream or downstream of the Subject Lands.

[13] Mr. Barrett testified that the Colville Report recommended that a 15 metre ("m") Vegetation Protection Zone ("VPZ") be established from Watercourse 5 to maintain the movement of plant and animal species observed. Based on the findings of the Colville Report, there is no evidence to support the "Natural Open Space" designation on the Subject Lands in the FWSP.

[14] Mr. Wellings, relied on the Colville Report, took the Tribunal through the policy framework and concluded that the Settlement Proposal represents good planning.

FINDINGS

[15] The Tribunal agrees with the uncontradicted evidence of Mr. Barrett that there are no endangered species identified; no significant woodlands and that there is no heritage features related core area except for watercourse 5, which he recommended a

15 m VPZ to be established to maintain the movement of plant and animal species observed. The Tribunal finds agreement with the recommended modification to Policy 7.4.11.4, included as Exhibit “F” of Exhibit 1; and with the recommended modifications as set out in the MOS and illustrated on Map B.7.4-2 of the FWSP, included as Exhibit “D”, and agrees with the recommended changes in land use illustrated on Map B.7.4-1 of the FWSP, included as Exhibit “E”.

[16] The Tribunal accepts the uncontradicted planning opinion of Mr. Wellings that the proposed Settlement Proposal has proper regard for matters of Provincial Interest pursuant to s. 2 of the *Planning Act*; is consistent with the Provincial Policy Statement 2020 (“PPS”) and conforms with the Growth Plan for the Greater Golden Horseshoe 2020 (Growth Plan). Mr. Wellings stated that the Colville Report appropriately assessed the ecological systems, including natural areas, features and functions for the Subject Lands. Based on this assessment, Colville concluded that the “Natural Open Space” designation within the FWSP is not supported.

PPS and Growth Plan

[17] The Tribunal finds that the Settlement Proposal is consistent with the PPS and conforms to the Growth Plan.

[18] Section 2.1.1 of the PPS provides policies with respect to the protection of natural features and areas for the long term (2.1.1); the protection of fish habitat (2.1.6); and the protection and improvement of water quality and quantity (2.2.1).

[19] Section 4.2 (Policies for Protecting What is Valuable) of the Growth Plan contains policies addressing the Natural Heritage System. The Natural Heritage System for the Growth Plan excludes lands within settlement areas that were approved and in effect as of July 1, 2017 (Section 4.2.2.1). The FWSP lands were included within the City’s settlement area in 2005 well before July 1, 2017.

[20] The Tribunal acknowledges that the proposed refinement of the land use

designations on the Subject Lands through the Settlement Proposal supports many of the guiding principles and policy objectives of the Growth Plan including the efficient use of land and infrastructure and the optimization of land for development.

[21] The Tribunal notes that s. 7.4.11 of the FWSP contains policies addressing the Natural Heritage System. The Natural Heritage System consists of Core Areas, Linkages, Vegetation Protection Zones and Restoration Areas. These overlays are shown on Map B.7.4-2 (Natural Heritage System) of the FWSP.

[22] Map B.7.4-1 (Land Use) shows portions of the Subject Lands as “Natural Open Space”. Map B.7.4-2 (Natural Heritage System) shows “Core Area”, “Vegetation Protection Zone”, “Linkages” and “Restoration Area” designations on the Subject Lands.

[23] The Tribunal agrees with Mr. Wellings that based on the environmental review undertaken by Colville, the characteristics and features presently on the property do not justify nor support all of these natural heritage designations. The recommended mapping changes are illustrated in Appendix “B” of the MOS and which the Tribunal takes cognizance of.

[24] Also, based on the findings of the Colville Report, a “Restoration Area” has been added to Map B.7.4-2 of the FWSP (see Appendix “B” of MOS) in support of the recommendation by Colville to establish a 15 m VPZ to Watercourse 5.

Section 2 of the Planning Act

[25] Section 2 of the *Planning Act* sets out matters of Provincial Interest for which planning authorities shall have regard to. The Tribunal finds that the Settlement Proposal has regard for the applicable matters of Provincial Interest set out in s. 2 of the *Planning Act*, including subsections (a) the protection of ecological systems, including natural areas, features and functions; (h) the orderly development of safe and healthy communities; (n) the resolution of planning conflicts involving public and private interests; and (p) the appropriate location of growth and development.

[26] In summary, the Tribunal is satisfied that the Settlement Proposal has regard for relevant matters of Provincial interest, as set out in the *Planning Act*, is consistent with the PPS, conforms to the Growth Plan, maintains the general intent of the City Official Plan and represents good planning.

[27] Pursuant to s. 17(50) of the *Planning Act*, the Tribunal may, on an appeal make modifications to all or part of the plan and approve all or part of the plan as modified as an Official Plan. The modifications/amendments as presented and consented to by the parties will be attached to the Decision.

ORDER

[28] **The Tribunal Orders** that the Appeals are allowed in part and Amendment No. 17 to the Official Plan for the City of Hamilton is modified as set out in Attachment 1 to this Order and as modified is approved.

"T.F. Ng"

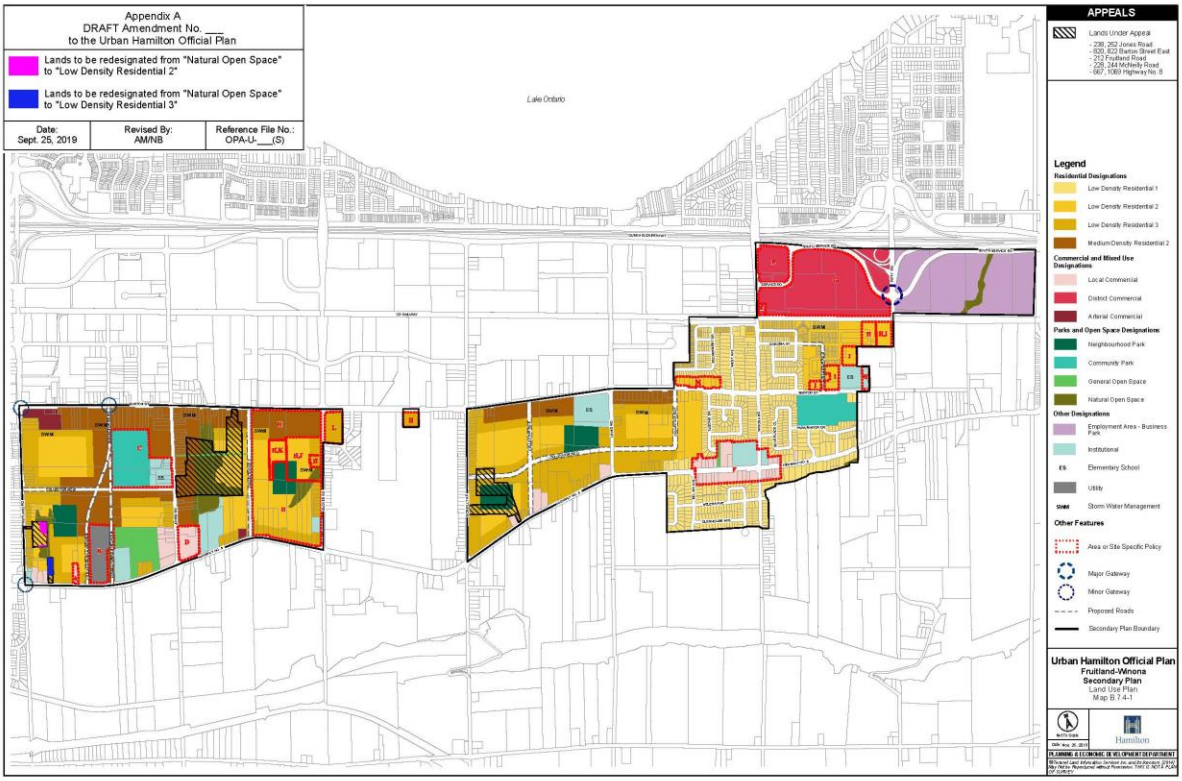
T.F. NG
MEMBER

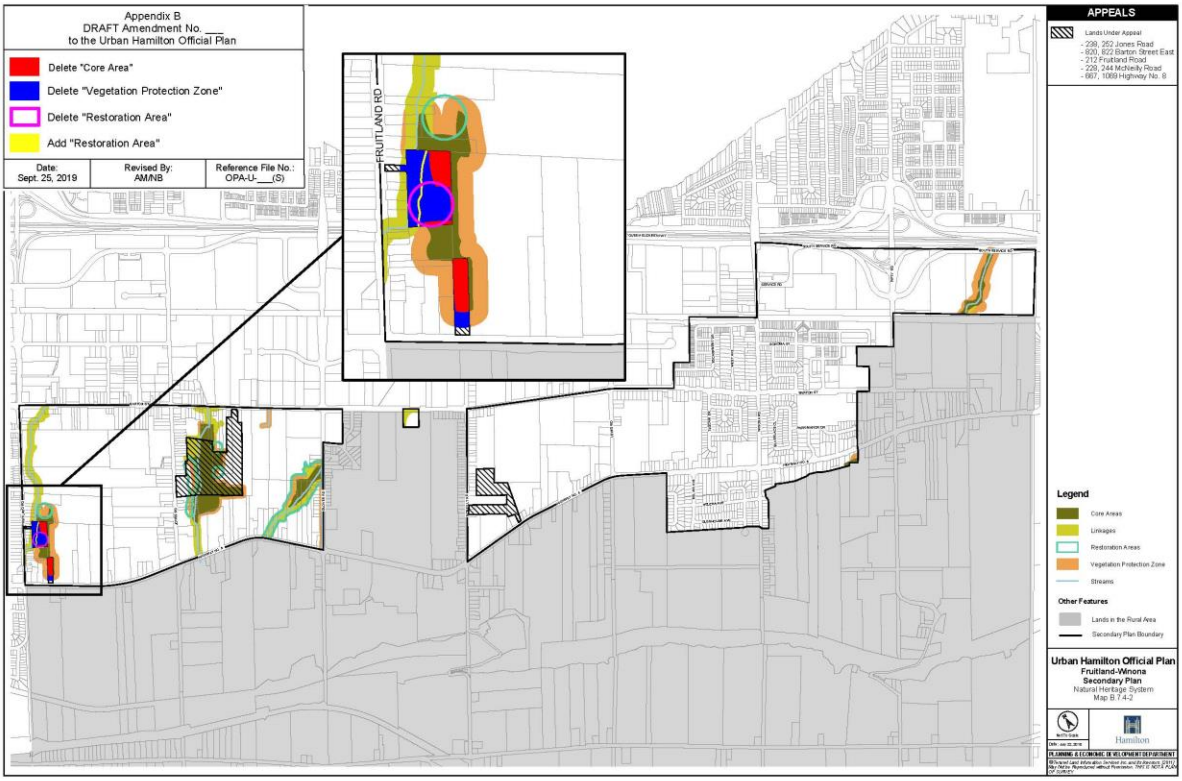
ATTACHMENT 1

APPENDIX 'B'

Modifications

7.4.11.4	The portions of Watercourse No. 5, located on the lands north of Sherwood Park Road or on the lands municipally known as 212 Fruitland Road may be considered for relocation and natural channel design reconstruction to the satisfaction of the City in consultation with the Hamilton Conservation Authority.

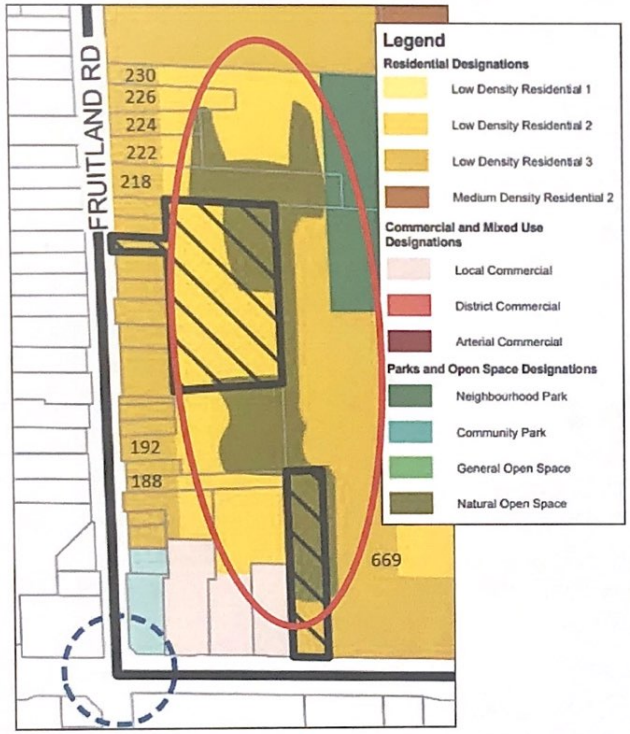

Appendix A
DRAFT Amendment No. ___
to the Urban Hamilton Official Plan
Lands to be redesignated from "Natural Open Space" to "Low Density Residential 2"
Lands to be redesignated from "Natural Open Space" to "Low Density Residential 3"
Date: Sept. 25, 2019
Revised By: AM/NB
Reference File No.: OPA-U-___(S)
Lake Ontario
APPEALS
Lands Under Appeal
- 236, 252 Jones Road
- 820, 822 Barton Street East
- 212 Fruitland Road
- 228, 244 McNeilly Road
- 667, 1069 Highway No. 8
Legend
Residential Designations
Low Density Residential 1
Low Density Residential 2
Low Density Residential 3
Medium Density Residential 2
Commercial and Mixed Use Designations
Local Commercial
District Commercial
Arterial Commercial
Parks and Open Space Designations
Neighbourhood Park
Community Park
General Open Space
Natural Open Space
Other Designations
Employment Area - Business Park
Institutional
ES Elementary School
Utility
SWM Storm Water Management
Other Features
Area or Site Specific Policy
Major Gateway
Minor Gateway
Proposed Roads
Secondary Plan Boundary
Urban Hamilton Official Plan
Fruitland-Winona
Secondary Plan
Land Use Plan
Map B.7.4-1
North
Hamilton
PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT


Appendix B
DRAFT Amendment No. ___
to the Urban Hamilton Official Plan
Delete "Core Area"
Delete "Vegetation Protection Zone"
Delete "Restoration Area"
Add "Restoration Area"
Date: Sept. 25, 2019
Revised By: AM/NB
Reference File No.: OPA-U-___(S)
FRUITLAND RD
APPEALS
Lands Under Appeal
- 298, 262 Jones Road
- 820, 822 Barton Street East
- 212 Fruitland Road
- 226, 244 McNeilly Road
- 667, 1069 Highway No. 8
Legend
Core Areas
Linkages
Restoration Areas
Vegetation Protection Zone
Streams
Other Features
Lands in the Rural Area
Secondary Plan Boundary
Urban Hamilton Official Plan
Fruitland-Wnona
Secondary Plan
Natural Heritage System
Map B.7.4-2
Hamilton

Proposed Schedule, Map, and Appendix Amendments – UHOP All Volumes

B.7.4-1 – Fruitland Winona Secondary Plan – Land Use Plan B.7.4-2 Fruitland Winona Secondary Plan – Natural Heritage System	Fruitland Winona Secondary Plan – Lands in Block 1 Servicing Area Not Under Appeal – • 186, 188, 192, 216, 218, 222, 224, 226, 230, 236 Fruitland Road • 661, 663, and 669 Highway 8 Map B.7.4-1 – FWSP Land Use Plan • Remove designation of "Natural Open Space" and apply designation of "Low Density Residential 2" on the following properties: 188, 192, 218, 222, 224, 226, and 230 Fruitland Road • Remove designation of "Natural Open Space" and apply designation of "Low Density Residential 3" for the lands at 669 Highway 8.	Settlement between City and landowners to redesignate portions of land from Natural Open Space designation to Low Density Residential 2, and Low Density Residential 3. Natural Heritage Planning staff have identified that that the Core Area originally mapped is no longer present. Watercourse and "Linkage" depicted on Map B.7.4-2 to be retained.

Proposed Schedule, Map, and Appendix Amendments – UHOP All Volumes



Map B.7.4-2 –

- Remove "Core Area" from the following properties: 188, 192, 218, 222, 224, 226 and 230 Fruitland Road and 669 Highway 8
- Remove "Vegetation Protection Zone" from the following properties: 186, 188, 216, 192, 218, 222, 224, 226, 230 and 236 Fruitland Road and 661, 663, and 669 Highway 8
- Remove "Restoration Area" from the following properties 218, 224, 226, 230 and 236 Fruitland Road

Drainage and Infrastructure Improvement

- Stream Relocation/Reconstruction (Using Natural Channel Design)
- Channel Conveyance Improvements
- Potential Culvert Replacement
- Possible Watercourse 7.2 Diversion Channel

Stormwater Management

- Proposed Wet Pond*

*Note: Size and location subject to detailed grading, servicing, environmental constraints, (species at risk) top-of-bank surveys and development phasing.

*Note: Traditional source controls acceptable for small (infill) sites (<5ha)

- LID Source Controls for groundwater recharge/baseflow:

- residential lands over silt/clay = 1mm
- residential lands over sand/gravel = 2.5mm
- employment lands over silt/clay = 2.5mm

Lake Ontario

NORTH SERVICE RD
QUEEN ELIZABETH WY
SOUTH SERVICE RD
FRUITLAND RD
GLOVER RD
MCNEILLY RD
LEWIS RD
CN Rail Line
BARTON ST
JONES RD
SHERWOOD PARK RD
HIGHWAY NO. 8
FIFTH RD E
EIGHTH RD E
RIDGE RD

WC 5.0
WC 5.2
WC 6.0
WC 6.1
WC 6.2
WC 6.3
WC 6.4
WC 7.0
WC 7.1
WC 7.2
WC 7.10
WC 9.0

Pond-1
Pond-2
Pond-3
Pond-4
Pond-5

KEY MAP

LEGEND:

- Study Area Boundary-SCUBE West Subwatershed Study
- Lands Under Consideration for Urban Development
- Urban – Not Subject to Policies of Greenbelt Plan
- Floodplain Area

NOTES:

0 100 200 400 600 800 1,000
Meters

Hamilton

Aquafor Beech limited

Recommended Subwatershed Strategy:
Stormwater Management Controls/Drainage and Infrastructure Improvement Works

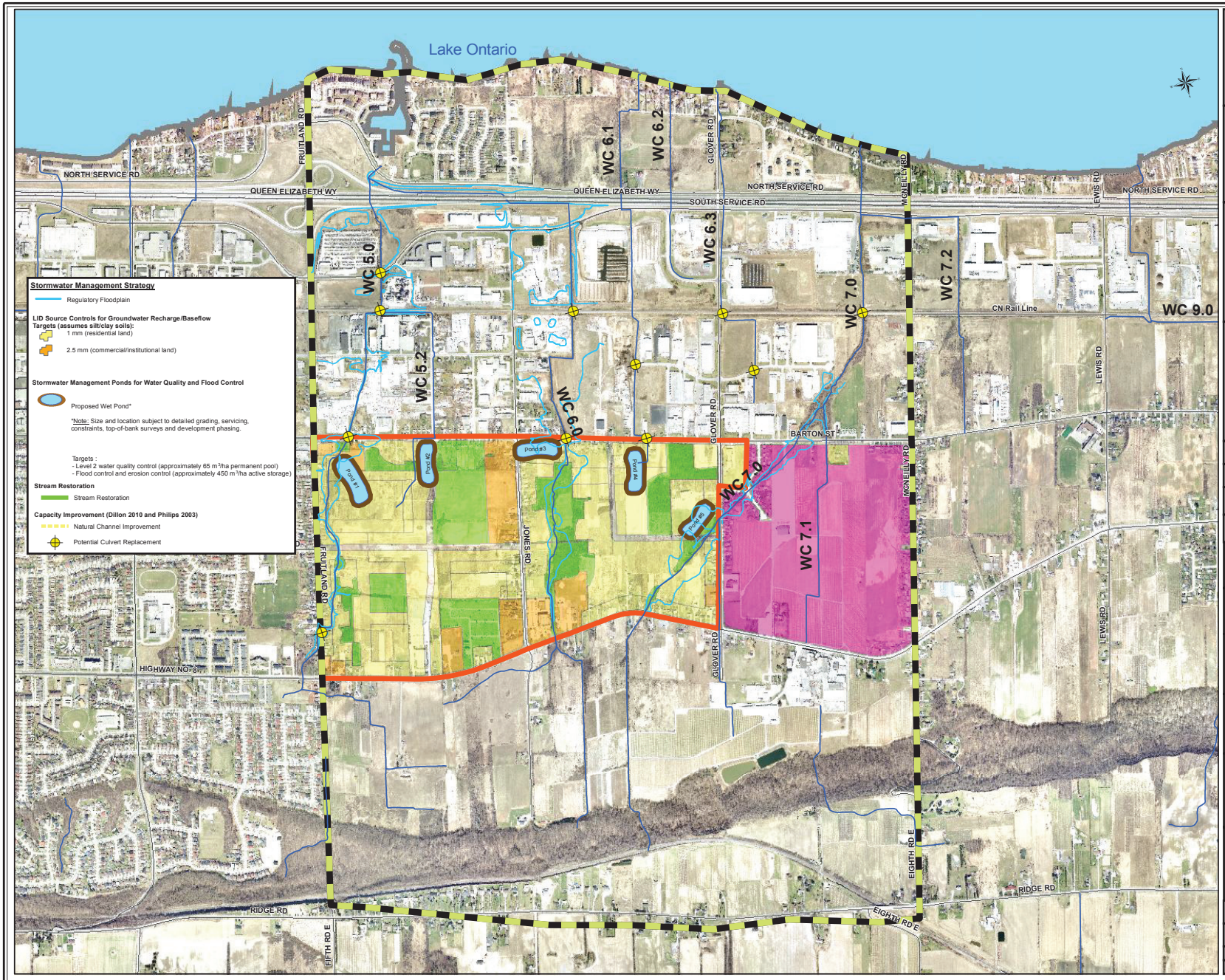
SCUBE WEST

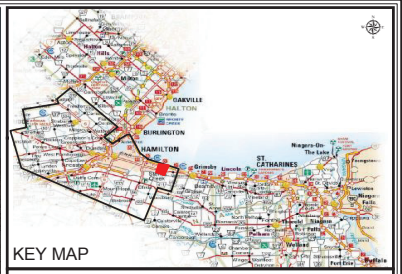
FIGURE No. 2.1

DATE: May 2013

Table 7.1: Summary of Stormwater Management Strategy Components for the SCUBE West Lands

Components:	Groundwater Resources	Water Quality	Erosion/Flood Control	Aquatic/Terrestrial Resources
Low Impact Development (LID) Source Controls:				
Targets:	- for areas of sand/gravel: 2.5 mm over catchment area - for areas of silt/clay soils: 1 mm (residential landuses, and 2.5 mm (commercial/institutional landuses)			
Benefits:	- maintain groundwater recharge rates;	- improved water quality through removal of suspended contaminants	- moderate reductions in stormwater runoff	- protect stream baseflows and improved water quality
Wet Ponds (catchment area > 5ha) and Traditional Source Controls (catchment area <5ha)				
Targets:		- Level 2 (normal) water quality control - residential landuses (50%impervious): 65 m^3/ha permanent pool, 40 m^3/ha active storage	- overcontrol of events up to 2-year storm for erosion control: approximately 150 m^3/ha active storage; - post-to-pre runoff control for flooding: approximately 450 m^3/ha active storage	
Benefits:		- improved water quality through settling and capture of suspended contaminants	- prevent increases in runoff rates which could otherwise worsen existing downstream erosion and flooding	- improved water quality
Stream Restoration				
Targets:				- re-planting streamside vegetation - removal of fish barriers
Benefits:		- potential reduction in erosion and sediment loadings with additional streamside vegetation	- potential reduction in erosion and sediment loadings with additional streamside vegetation	- improvements to fish and terrestrial habitat - reduced erosion and improved water quality; - moderates stream temperatures
Capacity Improvements Recommended through Other Studies (Dillon, 2010. Philips, 2003)				
Target / Works:			- culvert replacements (refer to Figure 6.1) - capacity improvements on Watercourse 7 through natural channel construction.	
Benefits:		- potential reduction in erosion and sediment loadings	- reduced flooding and erosion	- improvements to fish and terrestrial habitat through natural channel design (Watercourse 7) - reduced erosion and improved water quality;





LEGEND:

Study Area Boundary

SCUBE West Boundary

Proposed Land Use

- Residential
- Commercial/Institutional
- Parks/Open Space
- Rural

NOTES:

0 100 200 400 600 800 1,000

Meters

Hamilton

Aquafor Beech Limited

SCUBE WEST SUBWATERSHED STUDY

Sormwater Management Strategy

FIGURE No. 7.1

DATE: May, 2013

TABLE 5.2:
Conceptual Stormwater Management Pond Characteristics
SCUBE Subwatershed - East and West

Pond # or Catchment	Estimated Drainage Area (ha)	Landuse	Assumed % Impervious	Water Quality Control (Level 2)				Extended Detention for Flood (Quantity) Ctonrol												Total Storage Volume * (m^3)	Conceptual Pond Footprint Area ** (ha)	Pond # or Catchment
								Extended Detention for Erosion Control														
				Perament Pool Storage for Water Quality		Extended Detention for Water Quality		Erosion Control				2-Year Control				100-Year Control						
								Release Rate		Storage Volume		Release Rate		Storage Volume		Release Rate		Storage Volume				
				(m^3/ha)	(m^3)	(m^3/ha)	(m^3)	(m^3/s)	(L/s/ha)	(m^3)	(m^3/ha)	(m^3/s)	(L/s/ha)	(m^3)	(m^3/ha)	(m^3/s)	(L/s/ha)	(m^3)	(m^3/ha)			
SCUBE East																						
12-1	11.8	employment	80%	105	1,239	40	472	0.013	1.1	2,401	203	0.087	7.4	3,430	291	0.333	28.3	7,730	655	8,969	1.2	12-1
12-2	14.5	employment	80%	105	1,523	40	580	0.016	1.1	2,947	203	0.107	7.4	4,210	290	0.410	28.3	9,490	654	11,013	1.4	12-2
9-1	14.7	residential	50%	65	956	40	588													1,544	0.6	9-1
9-2	54.0	residential	50%	65	3,510	40	2,160	0.035	0.6	7,952	147	0.231	4.3	11,360	210	0.942	17.4	30,550	566	34,060	2.8	9-2
9-3	23.1	residential	50%	65	1,502	40	924	0.015	0.6	3,409	148	0.099	4.3	4,870	211	0.403	17.4	13,090	567	14,592	1.6	9-3
9-4	16.2	employment	80%	105	1,701	40	648	0.023	1.4	3,171	196	0.151	9.3	4,530	280	0.582	35.9	9,980	616	11,681	1.4	9-4
9-5	24.8	employment	80%	105	2,604	40	992													3,596	0.9	9-5
10-1	16.4	employment	80%	105	1,722	40	656					0.208	12.7	3,580	218	0.798	48.7	8,040	490	9,762	1.2	10-1
10-2	9.6	employment	80%	105	1,008	40	384					0.128	13.3	2,050	214	0.490	51.1	4,600	479	5,608	0.9	10-2
10-3	9.3	employment	80%	105	977	40	372					0.127	13.7	1,940	209	0.489	52.6	4,360	469	5,337	0.9	10-3
7-2-1	10.3	employment	80%	105	1,082	40	412	0.027	2.7	1,659	161	0.182	17.7	2,370	230	0.707	68.6	4,890	475	5,972	1.0	7-2-1
7-2-2	4.8	employment	80%	Catchment areas may be less than minimum recommended for a SWM Pond, and other traditional source control methods may be necessary instead. Unit storage and release rates from SWM Pond catchment #7-2-1 would apply.																		7-2-2
7-2-3	4.3	employment	80%																			7-2-3
7-2-4	2.4	employment	80%																			7-2-4
SCUBE West																						
1	39.8	residential	50%	65	2,587	40	1,592	0.025	0.6	4,011	101	0.166	4.2	5,730	144	1.143	28.7	16,830	423	19,417	1.9	1
2	24.5	residential	52%	65	1,593	40	980	0.024	1.0	2,625	107	0.159	6.5	3,750	153	0.997	40.7	11,180	456	12,773	1.5	2
3	26.4	residential	48%	65	1,716	40	1,056	0.026	1.0	2,611	99	0.171	6.5	3,730	141	1.071	40.6	11,500	436	13,216	1.5	3
4	26.5	residential	52%	65	1,723	40	1,060	0.037	1.4	2,800	106	0.248	9.4	4,000	151	1.477	55.7	11,850	447	13,573	1.6	4
5	21.1	residential	50%	65	1,372	40	844	0.013	0.6	2,198	104	0.084	4.0	3,140	149	0.564	26.7	9,330	442	10,702	1.3	5

* Note - Total volume includes permanent pool storage plus the higher of extended detention storage for water quality or flood control.

** Note - Actual footprint areas will depend on physical constraints including grading / storm sewer inverts / outlet (creek) elevations, etc. For conceptual purposes, the pond footprint areas were estimated assuming a 3:1 length to width flowpath, max. water depth of 2.5m for flood control ponds, 1.5m for ponds with water quality control only, and included allowances for sideslopes, etc.

Janna Ormond

To: Rob Merwin
Subject: RE: Block 1 SS - HCA previous supplemental review comment regarding difference in peak flows between Block 1 modeling and HCA FPM modeling

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From: Jonathan Bastien <Jonathan.Bastien@conservationhamilton.ca>
Sent: June 4, 2025 12:06 PM
To: Fazio, Margaret <Margaret.Fazio@hamilton.ca>; Rob Merwin <rmerwin@urbantech.com>
Cc: Mike Stone <Mike.Stone@conservationhamilton.ca>
Subject: Block 1 SS - HCA previous supplemental review comment regarding difference in peak flows between Block 1 modeling and HCA FPM modeling

Good afternoon Margaret and Rob,

HCA staff previously provided a supplemental review comment for the SCUBE Block Servicing Study – Block 1 study noting that the adopted peak flow rates were based on Urbantech's revised SCUBE Subwatershed Study modeling, which are significantly higher than those estimated by HCA's nearly-completed Stoney Creek Numbered Watercourses Flood Plain Mapping study.

However after further internal technical review, HCA staff can support the Block 1 Land Owners Group decision to proceed with design and hydraulic impacts assessments for the SCUBE Block Servicing Study – Block 1 study using flow information based on Urbantech's revised SCUBE Subwatershed Study modeling.

It is suggested that the SCUBE Block Servicing Study – Block 1 final report note this decision by the Block 1 Land Owners Group. It should also be noted in the final report that additional assessments may be required should this decision be altered and/or if the key design parameters / assumptions adopted within the Block 1 final report are altered at a later time.

The above will resolve this particular supplemental review comment, as highlighted in yellow in the attached *2025-05-26 – Outstanding Issues List.xlsx*.

However, there remain outstanding review comments related to the SCUBE Block Servicing Study – Block 1 study, as follows:

- as per the attached *2025-05-26 – Outstanding Issues List.xlsx*, many of which are expected to be addressed as part of the ongoing finalizing of the Block 1 report;
- as per the attached *24-10-01_2nd Submission Matrix w MTG notes_withEXP comments.xlsx*, many of which are expected to be addressed at subsequent design stages.

HCA staff look forward to addressing these outstanding review comments with the Land Owners Group and consultants.

Have a nice rest of your day,

Jonathan Bastien, P. Eng.
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Hamilton Conservation Authority
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Cell: 905-515-3087