City of Sarnia
Official Plan

Office Consolidation
Last Updated: July 2022











CITY OF SARNIA
OFFICIAL PLAN

JUNE 2014

OFFICE CONSOLIDATION TO JULY 2022

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EXPLANATORY NOTES

The 2014 City of Sarnia Official Plan was prepared to conform to the Province of Ontario's Provincial Policy Statement, 2014, as required by the *Planning Act*. It replaces the 2001 City of Sarnia Official Plan, and applies to all lands within the City.

The Official Plan was adopted by the Council of The Corporation of the City of Sarnia on June 30, 2014 through By-law 68 of 2014. It was approved by the County of Lambton on February 6, 2015, with modifications, as it was deemed to conform to the County's Official Plan and be consistent with the Provincial Policy Statement, 2014.

A party appealed the County's approval to the Ontario Municipal Board. The Board approved the City of Sarnia Official Plan with further modifications on July 15, 2016 at which time the entire Official Plan came into force and effect.

This office consolidation incorporates all of the amendments to the text and schedules of the City of Sarnia Official Plan that were approved up to, and including, July 31, 2022. A list is provided below.

LIST OF AMENDMENTS

OPA #	Description	By-law	Date in Effect
N/A	Settlement of appeal by Sifton Properties Ltd. re: Secondary Plan Area 1 and Pt. Lt. 46, Concession 9. (OMB Case No. PL150158 and PL150567)	N/A	07/15/2016
2	656 Lakeshore Road (Under Appeal – OMB Case No. PL180052)	144 of 2017	2/14/2018
3	1326 London Road	34 of 2017	3/27/2017
4	1992 Estella Street	120 of 2017	2/12/2018
5	321 Devine Street	123 of 2017	12/4/2017
6	481 London Road	103 of 2017	10/26/2017
7	229 Wellington Street	63 of 2018	10/18/2018
8	696 Oxford Street	29 of 2018	7/4/2018
9	1265 Vidal Street	9 of 2018	5/22/2018

10	1279 – 1283 London Road	100 of 2020	9/14/2020
11	220 Mitton Street & 327 George Street	59 of 2018	7/3/2018
13	1081 Brenchley Street	121 of 2018	11/5/2018
14	1115 Lakeshore Road	134 of 2018	12/17/2018
15	1330 Exmouth Street	132 of 2018	12/17/2018
16	146 Cameron Street	149 of 2019	10/28/2019
17	General Amendment – Source Water Protection	165 of 2019	11/18/2019
18	1873 London Line	98 of 2020	09/14/2020
19	1265 Vidal Street South	174 of 2019	12/09/2019
20	1249 London Road	47 of 2020	06/01/2020
21	939 Michigan Avenue	11 of 2020	02/10/2020
22	L'Heritage Drive	80 of 2020	08/10/2020
24	834 Lakeshore Road	102 of 2020	09/14/2020
26	The Rapids Parkway	78 of 2020	08/10/2020
27	Berger North	109 of 2020	10/05/2020
28	291 Wellington Street	138 of 2020	12/07/2020
31	174 Nelson Street	28 of 2021	03/22/2021

32	1324 Michigan Avenue	39 of 2021	04/19/2021
33	Confederation Line at Ronald Bloore	62 of 2022	06/06/2022
34	220 George Street	80 of 2021	07/12/2021
35	1299 Murphy Road	11 of 2022	01/17/2022
38	Sarnia District Humane Society (Exmouth Street)	52 of 2022	06/06/2022
40	1475 Vidal Street South	76 of 2022	07/25/2022
41	1244 Exmouth Street	32 of 2022	03/21/2022
42	275 Wellington Street	65 of 2022	06/27/2022
43	1550 Confederation Line	78 of 2022	07/25/2022

TABLE OF CONTENTS

1 OFFICIAL PLAN USER'S GUIDE 1
2 PRINCIPLES FOR A VIBRANT CITY 7
2.1 Strengthen the Existing City Structure 7
2.2 Encourage Inclusive and Stable Neighbourhoods 7
2.3 Enhance the Protection of the Environment 8
2.4 Pursue Economic Retention and Diversification 8
2.5 Implement Good Community Design 8
2.6 Improve Accessibility and Connectivity 8
3 CITY STRUCTURE 11
4 LAND USE POLICIES 19
4.1 GENERAL PRINCIPLES FOR LAND USE 19
4.2 PRIME AGRICULTURAL AREAS 20
4.2.1 General Policies 20
4.2.2 Agriculture designation 23
4.2.3 Resource Extraction designation 27
4.3 NATURAL HERITAGE 30
4.3.1 General Policies 30
4.3.2 Natural Hazards 33
4.3.3 Natural Areas 39
4.4 STABLE RESIDENTIAL AREAS 45
4.4.1 General Policies 45
4.4.2 Urban Residential designation 47
4.4.3 Suburban Residential designation 50
4.4.4 Apartment Residential designation 51
4.4.5 Private Residential designation 52
4.4.6 Institutional designation 53
4.5 PARKS AND OPEN SPACES 54
4.5.1 General Policies 54
4.5.2 St. Clair River Waterfront 56
4.5.3 Parks designation 58

4.5.4 Open Space designation 61
4.6 MAINSTREETS AND COMMERCIAL AREAS 61
4.6.1 General Policies 62
4.6.2 Downtown designation 63
4.6.3 Commercial Centre designation 67
4.6.4 Mixed Use designation 68
4.6.5 Highway Commercial designation 69
4.7 EMPLOYMENT AREAS 70
4.7.1 General Policies 71
4.7.2 Heavy Industrial designation 73
4.7.3 Light Industrial designation 75
4.7.4 Business Park designation 76
4.8 CHRIS HADFIELD AIRPORT 79
5 COMMUNITY DEVELOPMENT 83
5.1 BROWNFIELDS 83
5.2 COMMUNITY DESIGN 84
5.2.1 Guidelines for New Development 85
5.2.2 Public Realm 86
5.2.3 Building New Neighbourhoods 87
5.3 COMMUNITY IMPROVEMENT 88
5.4 COMMUNITY SERVICES AND FACILITIES 90
5.5 CULTURAL HERITAGE AND ARCHAEOLOGY 92
5.6 CULTURAL VIBRANCY 97
5.7 ECONOMIC DEVELOPMENT 98
5.7.1 Supporting Competitiveness 98
5.7.2 Retailing 99
5.8 ENERGY 100
5.9 FOOD SYSTEMS 102
5.10 HOUSING 105
5.11 LAND USE COMPATIBILITY 106
5.12 NATURAL ENVIRONMENT 108

6 CITY SYSTEMS 113
6.1 CITY SYSTEMS AND THE NATURAL ENVIRONMENT 113
6.1.1 Climate Adaptation 113
6.2 WATER RESOURCES 114
6.2.1 General Policies 114
6.2.2 Stormwater Management 118
6.2.3 Drinking Water Source Protection 120
6.3 WATER AND WASTEWATER INFRASTRUCTURE, WASTE MANAGEMENT AND PUBLIC UTILITIES 121
6.3.1 General Policies for Infrastructure and Utilities 122
6.3.2 Water Distribution 122
6.3.3 Sanitary Sewage 123
6.3.4 Waste Management Systems 125
6.3.5 Public Uses and Utilities 126
6.4 TRANSPORTATION SYSTEM 127
6.4.1 General Policies 128
6.4.2 Road Network 128
6.4.3 Parking Facilities 131
6.4.4 Transit 133
6.4.5 Active Transportation 133
6.4.6 Railways 135
7 IMPLEMENTATION 140
7.1 INTERPRETATION 140
7.2 IMPLEMENTATION MECHANISMS 141
7.3 AMENDMENTS TO THE OFFICIAL PLAN 149
7.4 PRE-APPLICATION CONSULTATION AND PRESCRIBED INFORMATION FOR PLANNING APPLICATIONS 150
7.5 PUBLIC PARTICIPATION AND NOTIFICATION 151
7.6 MONITORING 151
8 SECONDARY PLANS 156
8.1 SECONDARY PLAN – DEVELOPMENT AREA 1 156
8.1.1 Goals for Development Area 1 156

8.1.2 Objectives for Development Area 1 156
8.1.3 Land Use Plan and Policies 159
8.2 SECONDARY PLAN – DEVELOPMENT AREA 2 180
8.2.1 Goals for Development Area 2 180
8.2.2 Objectives for Development Area 2 180
8.2.3 Land Use Plan and Policies 183
9 SITE- AND AREA-SPECIFIC POLICIES 204

LIST OF MAPS AND SCHEDULES

Map 1: City Structure Plan
Map 2: Settlement Boundaries
Map 3: Water Resources
Map 4: Transportation and Road Widening Plan
Map 5: Natural Heritage
Map 6: Natural Hazards
Map 7-11: Land Use Plan
Map 12: Site and Specific Area Policy Map
Schedule A: Secondary Plan – Development Area 1
Schedule B: Secondary Plan – Development Area 2
City Parkland Map
Regional Settlement Areas
Regional Structure



1

OFFICIAL PLAN USER'S GUIDE

1 OFFICIAL PLAN USER'S GUIDE

1.1 What is the Official Plan?

The Official Plan sets a broad vision for all lands within the City of Sarnia and supports the overall goal of achieving a healthy community built on the foundations of social responsibility, cultural identity, economic vitality, and environmental excellence.

This legislative document contains provisions intended to ensure:

- a comprehensive, community-based planning policy framework for decision-making by the City and its Committees, and by other public bodies;
- consistency in decision-making with Provincial and County planning policies;
- appropriate responses to change in the City of Sarnia, in particular through the coordination of land uses, infrastructure, and public service facilities;
- the protection of resources, public health and safety, and the natural environment;
- quality of life for people of all ages, backgrounds, and capabilities.

The Plan applies to all lands within the corporate boundaries of the City of Sarnia.

1.2 How was the Official Plan created?

The City of Sarnia developed this plan with extensive public engagement, particularly through the Planning Advisory Committee, a committee of Council made up of seven dedicated city residents tasked with the creation of a new Official Plan.

Hundreds of residents and stakeholders contributed to its creation by attending and participating in meetings and workshops or by submitting written correspondence that provided direction for the Planning Advisory Committee and City.

1.3 How does the City of Sarnia's Official Plan fit into the provincial and local planning context?

All municipal Official Plans in the Province of Ontario must be consistent with the Provincial Policy Statement, as prescribed by the *Planning Act* (RSO, 1990).

Moreover, the City of Sarnia is a local municipality within the County of Lambton. As part of this larger jurisdiction, the City of Sarnia must also ensure that its Official Plan conforms to that of the County of Lambton. The regional context is shown on Figure 1.

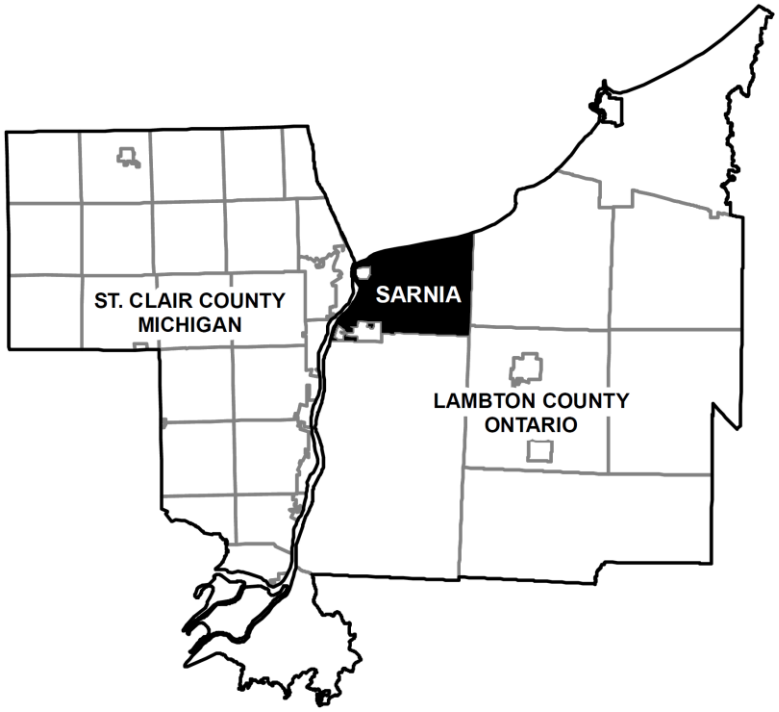


Figure 1: Map of Sarnia and the surrounding counties

The County Plan sets out settlement area boundaries that distinguish between rural and urban land uses and general land use categories and definitions. The Sarnia Official Plan provides more detailed policies to reflect local circumstances and the long-term goals and aspirations of the City of Sarnia and to direct proposed development to the most appropriate locations.

Many of the principles in the Official Plan reflect provincial and county policies that foster efficient development patterns through the strategic use of intensification opportunities, the effective management of new and existing infrastructure, and the protection of prime agricultural areas.

1.4 What is the underlying goal of the Official Plan?

This Plan recognizes existing, historic land use patterns and development trends and builds upon these patterns and trends to promote efficient, cost-effective development and land use changes that will stimulate economic growth while protecting the natural environment and public health.

1.5 How long will the Official Plan remain in effect?

This Plan is based on the current designated land base which, over a planning horizon to 2031, is sufficient to accommodate the changing land needs of approximately 81,580 inhabitants.

Every five years, the Corporation of the City of Sarnia will consider the need for a major review of the Official Plan to ensure that changes in social, economic, environmental, technological, and demographic conditions are reflected in this Plan.

1.6 How will the Official Plan be implemented?

The policies in this plan, together with the accompanying maps, schedules, and any amendments, adopted and finalized according to the requirements of the *Planning Act*, constitute the Official Plan for the City of Sarnia.

Once this Official Plan is formally adopted under the Ontario *Planning Act*, all by-laws passed by the City of Sarnia must be consistent with the provisions of this plan, and all new public and private development must be considered in terms of its conformity with the plan.

Further implementation plans and strategies are needed to bring this Plan to life. These include a regional housing strategy, a transportation plan, a parks and recreation master plan and community service and facility strategies. Some areas identified for intensification will also need more detailed guidance through Secondary Plans, area studies, and urban design guidelines.

Other County and City plans and strategies complement the Plan. These include strategic plans, a wastewater master plan, a culture plan, a transportation master plan, a food policy plan, an integrated sustainability plan and a tourism strategic plan. All these plans must support one another and the vision for city-building set out in this Official Plan.

1.7 How is the Official Plan organized?

This Plan is organized into nine chapters, including this opening chapter.

Chapter 2 articulates a vision for the future and outlines the principles upon which the Plan is based.

Chapter 3 sets out the main elements in the city structure, and includes provisions for the way in which the city can grow.

Chapter 4 describes the land use designations that apply across the City. Together with the land use maps, these designations will help implement the strategy for managing change set out in Chapters 2 and 3.

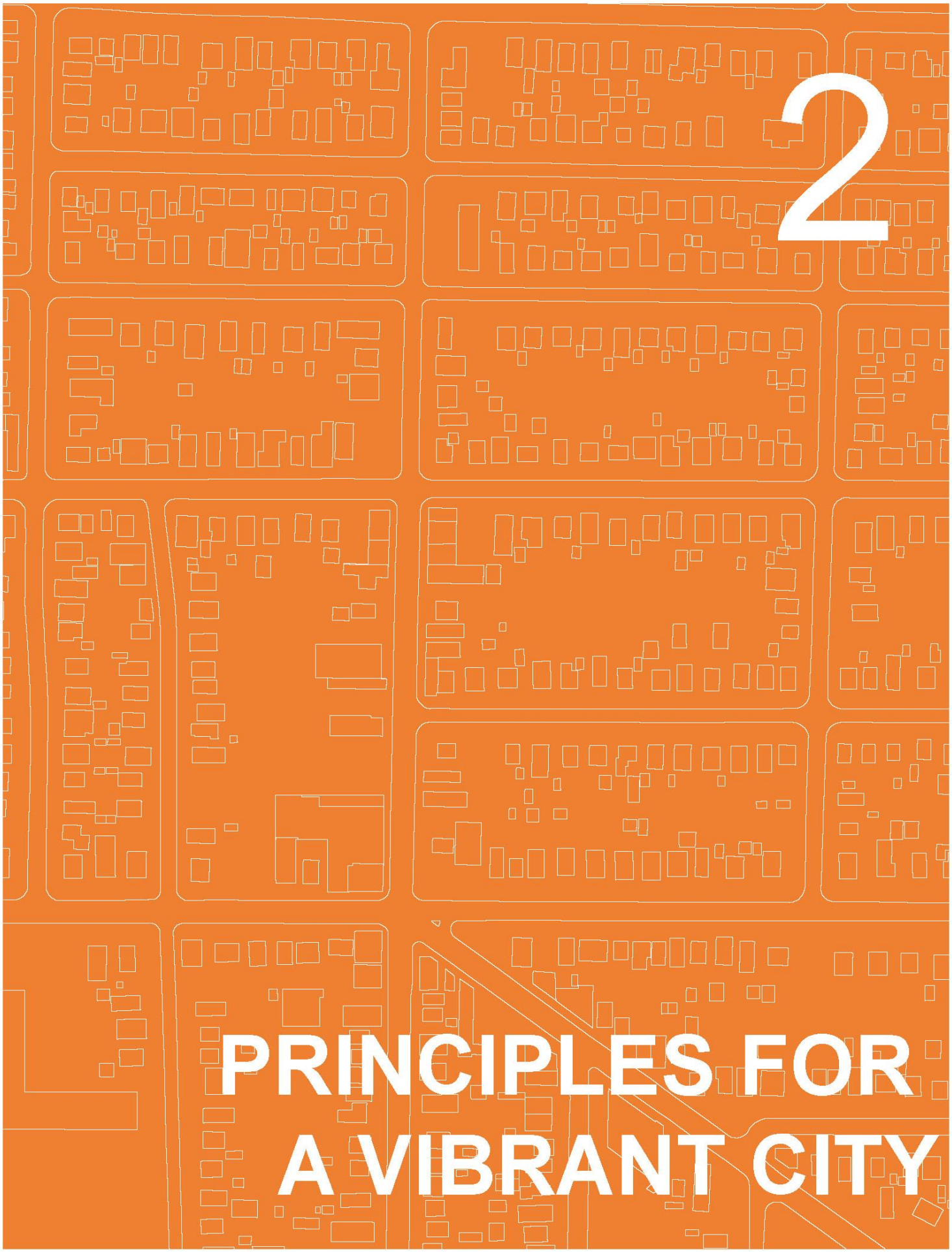
Chapter 5 contains policies to guide decision making based on the City's goals for the human, built, economic, and natural environments.

Chapter 6 includes policies for City systems: water resources, water and wastewater infrastructure, public utilities, waste management and transportation system.

Chapter 7 explains how the City will implement the Official Plan using development approval processes and planning tools.

Chapter 8 contains Secondary Plans for two special planning areas within the City of Sarnia.

Chapter 9 contains site- and area-specific policies for individual locations in the City of Sarnia.



2

PRINCIPLES FOR A VIBRANT CITY

2 PRINCIPLES FOR A VIBRANT CITY

Building a sustainable city means making informed choices that take into consideration the interrelated elements of a complex city. Every decision has implications for infrastructure, for quality of life, for growth management, for economic development, for environmental protection, for social cohesion. Therefore, decisions must be interdisciplinary, integrated and strategic to ensure economic, cultural, environmental and social rewards. Decision-making must take into account:

- economic/operational sustainability
- environmental sustainability
- social/cultural sustainability
- institutional sustainability

Through public consultation, six principles have been identified that together can help Sarnia achieve this sustainable vision:

2.1 Strengthen the Existing City Structure

- maintain an urban area boundary and reinforce existing land use patterns
- promote compact development patterns that are integrated and sustainable over the long term
- direct growth to appropriate designations in urban areas, including a network of centres and corridors, to support all residential neighbourhoods, agricultural land, natural areas, and the efficient use of existing infrastructure and services
- ensure that the City and its residents can pay for the reconstruction and ongoing maintenance of infrastructure and services, such as roads, transit, sewers, community centres, policing, fire, etc. over the long term
- incorporate disaster resilience and mitigation into decisions and actions
- support continuous reinvestment and regeneration in existing communities
- foster an attractive, dynamic and healthy downtown with a strong waterfront connection where people can live, work and play

2.2 Encourage Inclusive and Stable Neighbourhoods

- promote health, social cohesion, civic engagement and citizen participation
- respect stable areas including residential, agricultural and industrial areas
- support Sarnia as a complete community that provides a mix of land uses, including a balance of housing, shopping, employment, community services and parks
- promote excellence in health care, education, recreational and social services
- encourage equity, inclusion, information and participation as key building blocks in accountable and transparent decision-making, and ensure all residents of Sarnia can live and fully participate in their communities
- ensure that residents have safe, stimulating and inviting surroundings, and live comfortably and securely in the city
- support housing choices for people in their communities at all stages of their lives
- celebrate cultural diversity and multiculturalism
- recognize aboriginal interests and improve coordination in decision making with aboriginal communities

2.3 Enhance the Protection of the Environment

- conserve and nurture ecological diversity for future generations
- protect, restore, and enhance air, water and soil resources
- make more efficient use of urban land and existing infrastructure
- protect natural areas and their ecological functions over the long-term
- avoid natural hazards to protect public health and safety
- recognize agricultural areas as working landscapes, and protect farmland for the long-term production of food, fibre, and fuel
- respect drinking water sources, vulnerable aquifers and groundwater recharge areas
- support sustainable development, including green infrastructure and local energy systems, that promote fiscal, social and environmental well-being
- manage municipal waste effectively and safely

2.4 Pursue Economic Retention and Diversification

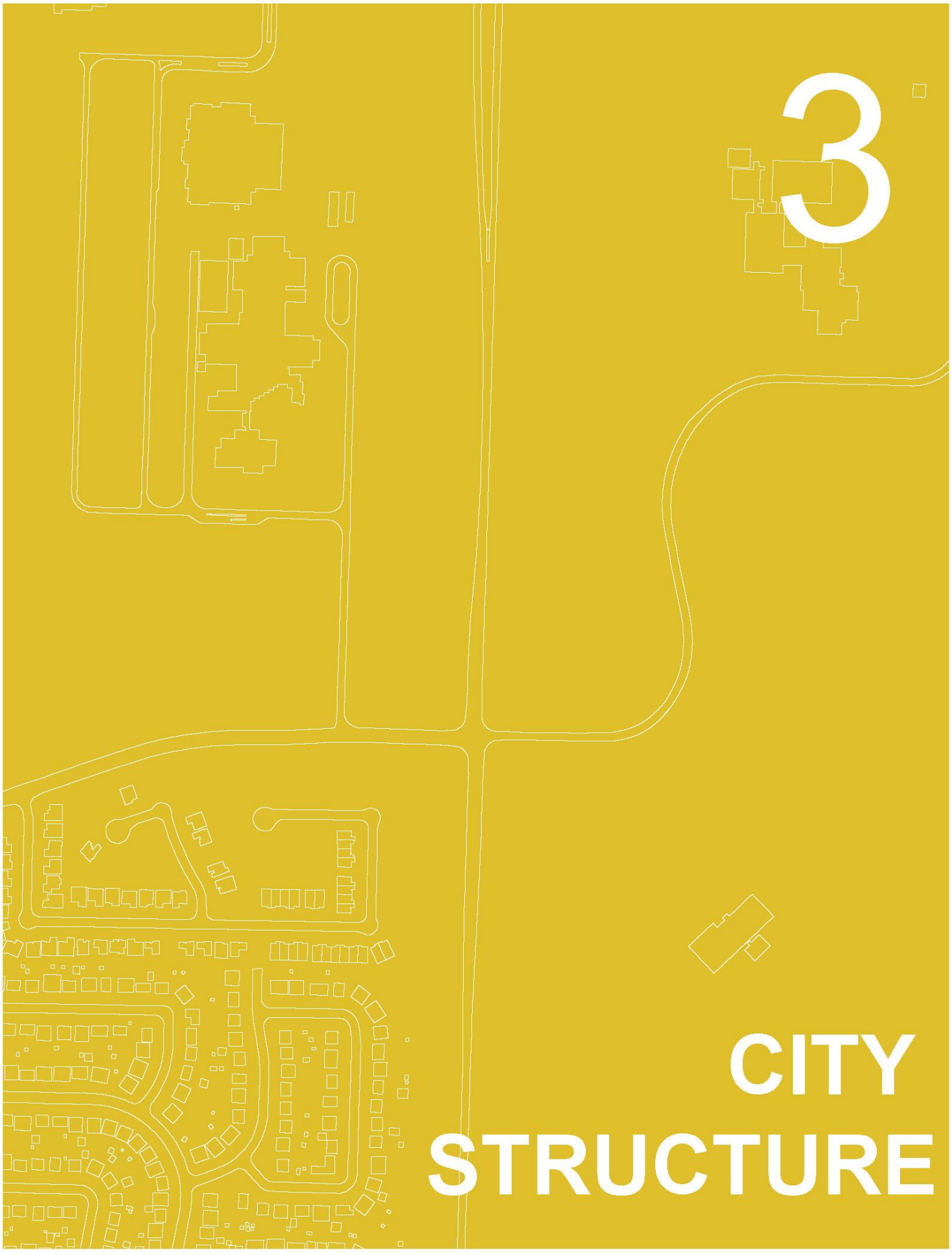
- support a diversified economic base that helps businesses adapt to changing trends and seize new opportunities that enhance all pillars of sustainability
- retain, promote and enhance economic clusters
- promote cultural, social and natural assets and activities that support innovation and creativity
- facilitate well-paid, stable, safe and fulfilling employment opportunities for people with a range of education and ability levels
- promote opportunities for citizens to obtain the majority of their goods and services in the City
- promote a sustainable agri-food sector by protecting agricultural resources
- ensure superior educational and research opportunities in the City

2.5 Implement Good Community Design

- preserve and enhance the unique features of Sarnia
- strive for design excellence in the public and private realms to ensure attractive street proportions, pedestrian friendliness and safety
- conserve and protect natural and cultural heritage resources, features and landscapes
- promote public safety through environmental design
- animate streets as people places that support social interaction and physical activity
- preserve significant public views and focal points throughout the city
- promote arts and culture and support public art that graces public spaces

2.6 Improve Accessibility and Connectivity

- ensure equitable access to resources and opportunities regardless of ethnicity, income level, age, gender, cultural background, religion or other characteristics
- support an integrated transportation network that accommodates all means of movement including walking, bicycling, transit, vehicles and the transportation of goods
- plan for pedestrian-oriented development that is fully accessible to all
- ensure a green space network that connects intensification areas, institutions, natural heritage, parks and open spaces
- provide public transit that is an attractive and accessible choice for travel



3

CITY STRUCTURE

3 CITY STRUCTURE

Sarnia's development has been shaped by its geographical features, principally the shorelines of Lake Huron and the St. Clair River, and by the historical pattern of settlement. The city structure that has emerged reflects areas characterized by types of function and intensity.

This chapter describes the city structure, articulates the strategy for directing growth within the structure, and sets out policies for the management of change through the integration of land use, transportation and infrastructure in support of efficient service delivery, natural resource protection and urban revitalization. The Official Plan recognizes that further population dispersal will erode the quality of public services such as transit, fire protection and the sewer system, because fixed services must be provided to ever-expanding areas.

Some parts of the *urban area* have a greater capacity to accommodate change according to a range of factors and goals. Long-term decision-making must consistently reinforce existing land use patterns, and promote stability, pedestrian-supportive built form, housing choice, resource protection, and alternative forms of transportation.

The *city structure* presented on **Map 1** is classified into structural elements that represent different functions, and therefore must be managed differently:

Natural Resource Elements (resource areas to be protected and improved)
- *Prime agricultural area*

Growth Area Elements (areas in which change is anticipated and planned for)
- *Downtown*
- *Centres*
- *Corridors*
- *Commercial hubs*
- *Employment areas*
- *Airport*

Stable Area Elements (areas in which the existing and planned physical character should be preserved and enhanced)
- *Stable residential areas*
- *Parks and open spaces*

Sarnia's *natural heritage system* is an environmental element within the municipal boundary that requires particular consideration and attention by those making land-use decisions.

Continuous regeneration and wise management are essential to long-term sustainability. Directing growth to appropriate areas helps ensure continual renewal and revitalization; promotes the more efficient and cost-effective use of infrastructure; and protects natural resources, public health and safety, and the character of stable neighbourhoods. This chapter also presents ways to plan for change in a manner that avoids destabilization, prevents unnecessary expansion of the urbanized area and supports efficient development and growth.

The City Structure on **Map 1** is sufficient to accommodate land needs over the planning period and is not expected to change over the life of this Plan; any change shall be considered only after a municipal comprehensive review.

1. Regional Co-ordination

Success over the long term requires a coordinated regional approach to promoting and managing change, planning and developing infrastructure, and protecting the environment and natural resources. As an international gateway to Canada and Ontario, and the major urban centre and service node in Lambton County, the City supports international and regional cross-jurisdictional strategic initiatives that:

a) identify and invest in a system of service nodes and sectoral networks;
b) protect and enhance the natural environment and resources and the quality of life through effective planning, co-ordination and co-operation;
c) support a strong and viable agricultural sector;
d) facilitate the efficient movement of people, goods and information;
e) ensure a sustainable, reliable and affordable supply of energy;
f) ensure access to high-quality health care; and
g) promote a strong and vibrant economy, supported by leading-edge education, research and development.

2. Urban Boundary

The City contains two distinct environments – urban and prime agricultural – separated by the *urban boundary*, as identified on **Map 1**. The *prime agricultural area* is a non-renewable resource base that shall be protected for agriculture for the long term. Growth is therefore directed to the *urban area*, which is designated to contain the full range of land needs over the period covered by this Official Plan. The urban and prime agricultural areas are integrated with transportation networks and natural heritage systems that extend beyond Sarnia across the international border and throughout the watershed of which the city is a part.

3. Growth Areas

The *urban area* consists of concentrated areas, corridors and hubs of varying function and intensity that play distinct and interrelated roles in the larger city. *Growth areas* are lands within the *urban area* identified on **Map 1** that are to be the focus of development, redevelopment and intensification. These include the *downtown*, *centres*, *corridors*, *commercial hubs* and *employment areas*.

The majority of growth within the *urban area* is directed to *growth areas* to:

a) recognize and support historic land use patterns, precedents, and boundaries;
b) focus intensification in existing mixed use and commercial centres and corridors to ensure that infrastructure, transportation and public services are used efficiently;
c) form a basis for long-term investment in hard and soft infrastructure and transportation facilities;
d) concentrate jobs and people in areas well served by transit and transportation to provide opportunities for residents to live close to their work and to encourage walking and cycling;
e) protect *stable residential areas* and open space and conserve natural resources, including agricultural land and environmentally sensitive areas;
f) offer opportunities for people at all income levels to be affordably housed;
g) facilitate social interaction, public safety and cultural and economic activity; and
h) improve air quality and energy efficiency.

4. Growth Area Hierarchy

The *downtown* is recognized as the highest priority *growth area* in the City of Sarnia and County of Lambton. *Centres* are higher-order *growth areas* that together with the *downtown* shall serve as the primary nodes for the City and County, and serve surrounding communities. They are intended to be developed primarily as mixed use centres and commercial areas with transit-supportive development, and are intended to accommodate the highest level of intensification.

Corridors and *commercial hubs* are lower-order *growth areas* intended to develop as mixed use and commercial areas with viable main streets to serve the daily needs of surrounding residential communities.

Employment areas provide a land base for a wide range of non-retail business and economic activities, and ancillary uses. *Employment areas* shall be protected in order to meet current and future employment growth needs. The *airport* provides a secure land base for the municipal airport and airport-related uses.

5. Intensification Outside Growth Areas

Within the *urban area*, most areas outside *growth areas* are existing and planned *stable residential areas* and *parks and open space* that will develop, mature and gradually adapt as the City evolves. Maintenance and enhancement of assets is a City priority in these areas. Re-investment and upgrading will be encouraged through minor infilling and development that respect and reinforce the prevailing built form standards of height, density and amenity.

6. Intensification Target

Urban areas include *built-up areas* and *greenfield areas*. *Built-up areas* are the developed portion of the *urban area*. *Greenfield areas* represent the undeveloped area between the *built-up area* and the *urban boundary*. The *built boundary* represents the limits of the *built-up area* for the purposes of this Plan.

Over the period covered by this Official Plan, a minimum of 40% of all new residential units constructed within the City of Sarnia shall be constructed within the *built boundary* as shown on **Map 2**. The County and City will monitor the number of units constructed within and outside the *built boundary* to ensure conformity with this intensification target.

7. Greenfield Areas

Greenfield areas consist of *non-residential greenfield areas,* future industrial and commercial areas, and *residential greenfield areas*. The latter are areas planned to accommodate long-range residential needs. Land uses in these areas shall be consistent with the *city structure* and shall be integrated with surrounding urban areas. *Non-residential greenfield areas* and *residential greenfield areas* are identified on **Map 2**.

Residential greenfield areas shall be developed in accordance with a secondary plan under Section 7.2(12) to ensure orderly and efficient development that co-ordinates the requirements of land use, transportation, public services, infrastructure, parks and open spaces, urban design guidelines, site design standards, and environmental management.

8. Phasing

Secondary plans shall include phasing policies to implement the orderly progression of development within a *residential greenfield area* and the timely provision of the transportation systems, infrastructure and public service facilities required to meet current and projected needs.

During a municipal comprehensive review, the City shall review development trends to ensure that the intensification target identified in Section 3.1(6) is being achieved prior to, or concurrent with, new development within *residential greenfield areas*.

9. Municipal Comprehensive Review

Municipal comprehensive reviews are necessary to properly manage the City's development and growth, avoid destabilization and prevent unnecessary expansions. In conjunction with any required Official Plan review, the City may initiate a municipal comprehensive review that shall include a detailed analysis of the following:

a) identified land needs based on a review of population projections consistent with the projections and allocations of the County of Lambton;
b) the pace and type of development and anticipated needs for a range of housing types;
c) consideration of planning approaches that encourage compact urban form and urban regeneration;
d) an inventory of underused land, including undeveloped g*reenfield areas*;
e) a review of opportunities for intensification and redevelopment;
f) integration of planning for infrastructure and public service facilities; and
g) measures to co-ordinate cross-jurisdictional planning matters.

The settlement area shall not be divided into sub-areas when calculating or allocating land needs. Any warranted land needs identified through the municipal comprehensive review shall be accommodated through intensification and redevelopment, and if necessary, *greenfield areas*. Should a land need be identified that cannot be accommodated, the City shall consider amending the *city structure* within the existing *urban boundary* in accordance with section 3.1(10) of this Plan. If the City determines that accommodating the land need within the *urban boundary* is not feasible, Council may request the County of Lambton to consider an *urban boundary* expansion.

10. Alternative Land Allocation Assessment

Any proposed amendment to the *city structure* shall be evaluated through a process that engages a diverse range of stakeholders and the general public. Council shall consider such amendments in the context of the following requirements:

a) the need for additional urbanized areas, the extent to which existing areas are developed, and the nature and adequacy of existing development;
b) the potential of development to damage the stability and/or planned function of existing area(s) of the City;
c) the avoidance of development within or near natural features and areas, and environmental constraints such as flooding and erosion hazards;
d) efficient integration of transportation, infrastructure and public service facilities;
e) the capital and operating costs associated with servicing new development areas, including providing and maintaining: police, fire, roads and transit services, sewers, stormwater management, protective works, and potable water treatment and distribution systems;

f) a review of the *natural heritage system* and natural features and areas in accordance with Section 4.3; and
g) the potential impact on groundwater quantities and quality, flow regimes, and surface recharge and discharge.

11. Urban Boundary Expansion

The County of Lambton is the responsible planning authority for alterations to the *urban boundary* shown on **Map 1**. The City requests that any County process be coordinated with the City of Sarnia. This consideration is required to include an evaluation of alternative directions for growth. Only areas adjacent to the *urban boundary* shall be considered for *urban boundary* expansions and any approved alteration shall be limited to the demonstrated land need.

Any input from the City to the County shall be based on an assessment in accordance with sections 3.1(9) and 3.1(10). Directions must avoid lands subject to *natural hazards* and must be directed toward the lowest priority agricultural land.

If an *urban boundary* expansion is approved by the County of Lambton, the City shall amend **Map 1** through an Official Plan Amendment to reflect the *urban boundary* alteration, and amend **Map 2** to identify the area as *greenfield areas*. Any identified area shall be planned, designed and zoned in accordance with the policies of this Plan.

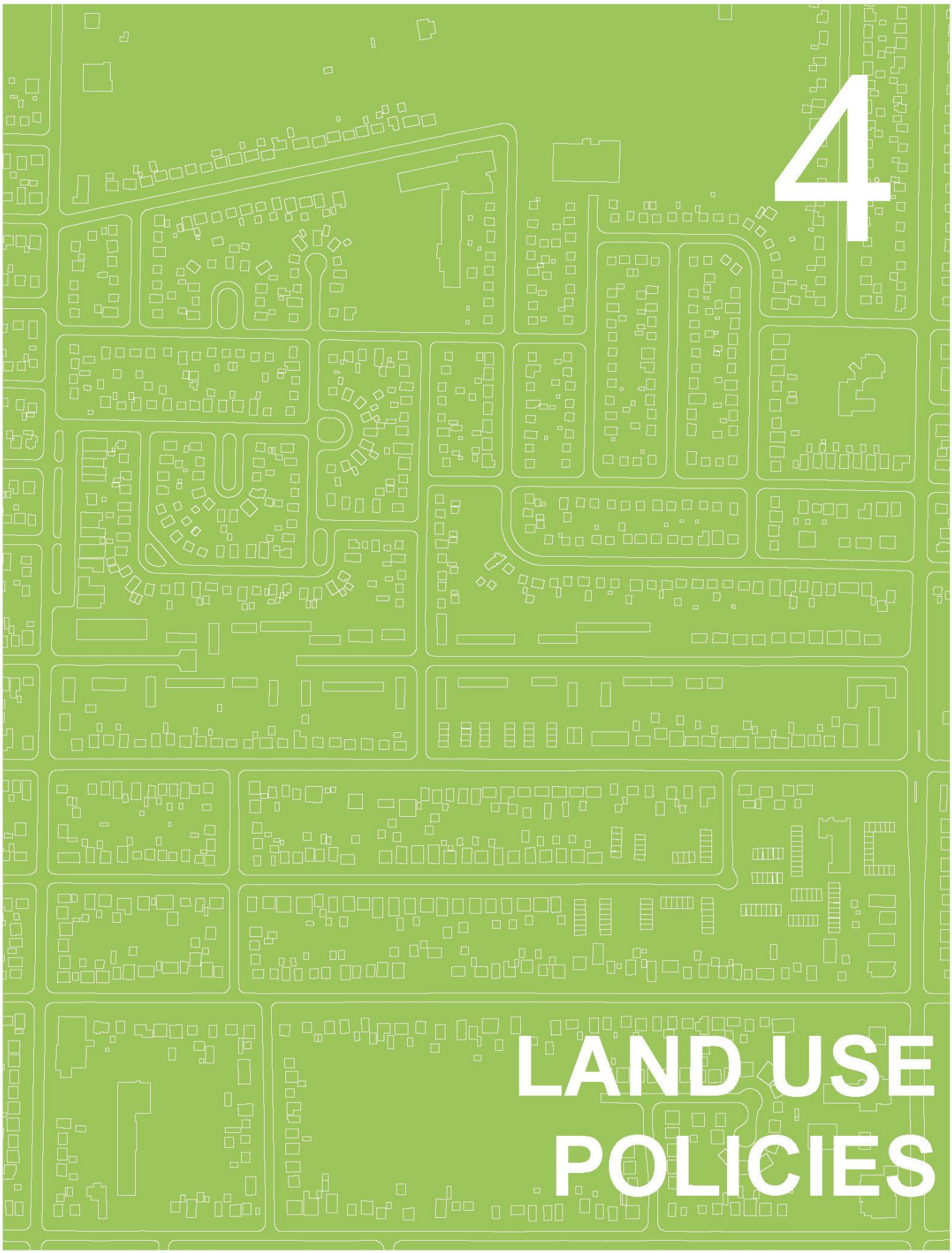
12. Employment Area Urban Boundary Expansion

In accordance with the *employment areas* policies of this Plan, the City shall give priority to the intensification and redevelopment of existing industrial areas over the development of new industrial sites. This direction is intended to optimize the substantial investments already made in infrastructure and help protect environmental and ecosystem integrity.

However, should a large-scale industrial use be proposed that cannot be accommodated within existing *employment areas*, the City may initiate a municipal comprehensive review and request the County of Lambton to consider an *urban boundary* expansion.

Any proposal to designate additional *employment areas* shall be based on the following criteria:

a) any proposed expansion is limited to the specific use that cannot be accommodated within existing *employment areas;*
b) the proposal is large-scale and will result in substantial direct permanent employment;
c) the proposed *employment area* expansion is contiguous with an existing *employment area*;
d) an Environmental Impact Study prepared in accordance with Section 4.3 demonstrates that there will be no negative impacts on any identified natural features or their ecological functions;
e) the existing or planned infrastructure required to accommodate the proposed expansion can be provided in a financially and environmentally sustainable manner; and
f) the proposed expansion avoids *natural hazards* and is directed toward lowest-order agricultural land, where feasible.



4

LAND USE POLICIES

4 LAND USE POLICIES

Land use designations are among the Official Plan's key implementation tools for achieving the *city structure* strategy set out in Chapter 3 – to direct major growth to some parts of the City and away from others.

This chapter identifies land use designations that establish general uses and development criteria for each one. They describe where housing can be built; where stores, offices and industry can locate; and where a mix of uses is desired.

The land uses for each Official Plan designation are generalized; the City's Zoning By-law provides more precise requirements for each designation.

The development criteria set out in this chapter shall apply whenever the City evaluates a development proposal, but they do not constitute the only considerations for approval or rejection of a development. All of the policies of the Plan apply when evaluating development proposals.

4.1 GENERAL PRINCIPLES FOR LAND USE

Sustainability is an important consideration when reviewing applications for land use change, public works and capital expenditures. This Plan encourages the development of a sustainable development checklist to be used as a tool for assessing features of development applications and projects, including those matters set out in this section or other initiatives.

The checklist may be used to encourage sustainable design through incentives such as lowered development charges and reduced stormwater management requirements.

1. Elements and Designations that Reinforce Physical Character

Eleven land use designations shown on the Plan's land use maps, *agricultural*, *natural areas*, *natural hazards*, *parks*, *open space*, *extractive resource*, *urban residential*, *suburban residential, apartment residential*, *private residential*, and *institutional* will help to protect and reinforce the existing and planned physical character of these areas.

Residents prize Sarnia's *stable residential areas*, with their distinctive character, together with local institutions, retail and services that serve their populations. These existing and planned areas are differentiated by designation based on the type and scale of the buildings in each area, yet share the need for contextual stability, better amenities and environmental sustainability.

The *institutional* designation represents stable locations for regionally significant institutional land uses. Within this designation, hospitals, college campuses and key government centres can help grow and sustain the City's economic future.

The City's *natural heritage system* is identified as *natural areas*, *parks* and *open space*. These assets are to be protected and improved to provide respite and recreation for Sarnia residents, and ecological and hydrological functions for the City as a whole.

Natural hazards include watercourses, floodplains and erosion prone areas. Policies for these areas are intended to identify environmental constraints, respect ecological integrity and address public health and safety.

Finally, the *agriculture* designation protects the City's *prime agricultural area* resource from competing and incompatible uses, thus providing a secure base for agricultural activities.

2. Elements and Designations for Growth

Eight land use designations distribute most of the additional jobs and population anticipated by the Plan's city structure strategy: *downtown, commercial centre, mixed use*, *highway commercial*, *heavy industrial*, *light industrial*, *business park* and *airport*.

The *downtown* and *mixed use* designations permits and encourages a contextually appropriate range of commercial, residential, institutional and open space uses. Flexibility for future development and redevelopment is provided in these areas to accommodate increases in population and jobs.

The *commercial centre* and *highway commercial* designations prioritize major commercial development and limit other uses.

The designations *heavy industrial*, *light industrial* and *business park* apply to Sarnia's industrial districts and office parks, reflecting the needs of these unique areas while respecting the broad objectives of retaining *employment areas* as places of business and development, and of intensifying job growth.

The *airport* designation applies to the Chris Hadfield Airport and related land uses.

4.2 PRIME AGRICULTURAL AREAS

The *prime agricultural area* is a non-renewable resource base characterized by good farmland. Prime agricultural land uses include agricultural operations, activities that support agriculture, infrastructure, transportation networks, and natural heritage features and linkages.

The long-term future of agriculture shall be protected in a manner that maintains the integrity of agricultural lands while ensuring that environmental and human health is not compromised.

4.2.1 General Policies

1. Prime Agricultural Area Objectives

The lands identified as the *prime agricultural area* on **Map 1** are predominated by class 1 to 3 and associated class 5W prime agricultural lands.

Agricultural uses shall be given priority over all other uses in the *prime agricultural area*. Non-agricultural uses shall be directed to appropriate *urban area* designations to preserve the integrity of agricultural land and to avoid conflicts between farm and non-farm land uses.

The Blackwell District is recognized as the highest priority agricultural land in the City. This area's location and prime agricultural soil resource provides unique opportunities for

near-urban agriculture and an integrated urban-rural food system, both which should be supported over the long-term.

The City shall protect, maintain and improve the *prime agricultural area* over the long-term for farming by:

a) limiting lot fragmentation and preventing non-agricultural uses from establishing;
b) respecting farmers ability to farm and supporting farm operations of all types and scales;
c) supporting small-scale on-farm economic activities that enables farmers to diversify agricultural activities and add value to primary products;
d) encouraging farm operators to use sustainable agricultural practices and undertake farmland improvement that protect resources and maintains high environmental standards; and
e) supporting the retention and re-establishment of woodlands, wetlands and other natural areas as beneficial for agriculture and the natural environment.

Limited petroleum and mineral aggregate resource exploration and extraction are permitted activities in the *prime agricultural area*, subject to the policies of Section 4.2.3 of this Plan.

2. Land Use Designations

The City's *prime agricultural area* resource base consists of three land use designations that differentiate resource management areas: the *agriculture* designation permits agricultural uses, the *resource extraction* designation allows for temporary resource extraction, and the *natural areas* designation protects significant natural features and areas. These designations are shown on **Map 7**.

3. Farm Management Practices

Landowners will use farm management practices that are sensitive to the natural environment including the following:

a) cultivation methods aimed at minimizing erosion, such as 'no-till' cultivation;
b) the restoration of natural features;
c) the planting of stabilizing vegetation on creek flats and slopes to minimize erosion and run-off;
d) proper construction of drainage tile outlets to minimize erosion along water courses;
e) restricting livestock access to watercourses;
f) sustainable woodlands management;
g) the application of fertilizers and herbicides in ways that minimize chemical run-off;
h) proper storage, handling and disposal of hazardous and non-hazardous pollutants;
i) the maintenance of a buffer strip along watercourses, ditches and open drains; and
j) the preparation of nutrient management plans and environmental farm plans.

4. Transportation Systems within the Prime Agricultural Area

Safe, accessible movement for agricultural goods and machinery is a vital aspect of a sustainable agricultural industry. Transportation systems connect producers through transportation routes to farmland, processing and distribution opportunities. Therefore, the City supports improvements to the rail network, Provincial, County and City road systems, and marine ports and facilities.

5. Natural Heritage System within the Prime Agricultural Area

The *natural heritage system* identified on **Map 1** generally follows watercourses and woodlands and supports natural features and ecosystem functions that enhance the agricultural and ecosystem health of the *prime agricultural area*.

Natural features, including woodlands and hedgerows, are integral components of a viable farm operation. They provide windbreaks, help reduce soil erosion, and provide opportunities for maple syrup and firewood production. Agricultural best management practices, including planting riparian buffer strips and windbreaks, managing woodlands, crop rotation and conservation tillage help protect the environment and/or the public interest.

Within the *natural heritage system*, new development must be compatible with, and enhance linkages between water, and groundwater features and other ecological functions.

Nothing in this Plan shall limit the continuation of existing agricultural uses in the *natural heritage system*.

6. Drainage Networks within the Prime Agricultural Area

The City depends on a complex system of public and private drainage works to facilitate the efficient drainage of agricultural land and urban areas. To mitigate agricultural land flooding and erosion, the City shall maintain drainage infrastructure in accordance with the *Drainage Act*. Any municipal and/or private drainage works (including field tile) shall not negatively impact or diminish the capability of prime agricultural land or the function of natural features and corridors.

The City supports farm infrastructure improvements including irrigation and field drainage in accordance with the Provincial *Drainage Act*, Federal *Fisheries Act* and any other applicable legislation.

7. Agricultural Community Development

The City recognizes that the *prime agricultural area* provides meaningful economic opportunity, food security, and environmental benefits to operators, residents and the City as whole. Long-term success depends on improving agricultural resources, supportive infrastructure, education and access to markets. In conjunction with Section 5.9 on Food Systems, the City encourages:

a) initiatives that promote food security and high quality local food availability;
b) coordination between producers and the City's petro-chemical and bio-industrial clusters;
c) the development of fair tax policies that address value-added agricultural activities and economic diversification on farms;
d) increased public education and awareness of how food is produced and consumed; and
e) increased connectivity between the City's agricultural producers and consumers, and support for agricultural routes, food processing, distribution and food access.

8. Illegal Dumping

This Plan supports improved policing, enforcement and fines to prevent trespassing and illegal dumping in agricultural areas.

4.2.2 Agriculture designation

In areas within the *agriculture* designation, the protection of a secure land base for agriculture is fundamental, and the right-to-farm paramount. Permitted uses in the *agriculture* designation encourage a wide range of agricultural and related small-scale uses to support the land base for current and future agricultural use.

Lot creation within the *agriculture* designation is prohibited unless the new lot will be used for specific agricultural purposes, as fragmentation undermines the integrity of the land base. Non-farm uses are directed to *urban areas* to support urban growth and protect the agricultural land base from competing and incompatible uses.

1. Permitted Uses

The *agriculture* designation shall permit *agricultural uses*, *secondary agricultural uses*, and *small-scale agriculture-related uses*. Non-agricultural uses, other than those specifically permitted by this Plan, shall be directed to the designated *urban area*.

2. Agricultural Uses

Agricultural uses include the growing of crops, including nursery and horticultural crops; raising of animals for food, recreation or fur, including poultry and fish; aquaculture; agro-forestry; maple syrup production; apiaries; and associated on-farm buildings and structures including accessory farm dwellings.

An accessory farm dwelling may be converted or enlarged to accommodate not more than two dwelling units. An additional temporary dwelling for seasonal labour is permitted on the same parcel provided it is grouped with existing buildings. The severance of this dwelling will not be permitted. A second permanent dwelling on a parcel is not permitted.

3. Right-to-Farm

Non-farmers are often attracted to the agricultural area by lower land prices and an expectation of peaceful open space, and may wish to create non-farm residential uses. In reality, normal farm practices create odours, noise and dust associated with livestock, and heavy machinery, and involve early-morning and late-evening activities especially during planting and harvesting periods.

In preventing the establishment of non-farm uses in the prime agricultural area, the City of Sarnia supports farmers ‘Right-to-Farm’ and protects normal farm practices in accordance with provincial standards.

4. Lot Size in the Agricultural designation

A minimum lot area of 35 hectares shall apply to all lots being created or reconfigured in the *agriculture* designation in order to discourage the unwarranted fragmentation of farmland. Leasing of land is preferred as an alternative to creating small farm parcels.

Notwithstanding the 35 hectare minimum, a smaller lot size may be permitted under certain circumstances; see Section 4.2.2(18) on Severances.

Existing parcels too small for agricultural use may be amalgamated with adjoining farm lands. This plan encourages such amalgamations, where possible.

5. Minimum Distance Separation

New land uses, including the creation of new lots, and new or expanded livestock facilities shall comply with the Minimum Distance Separation (MDS) I and II formulae and other provincial regulations to minimize the impact of odour from livestock facilities on residential and other land uses.

6. Nutrient Management

Farm operators shall complete nutrient management plans and other environmental studies as required by the County, the City or provincial agencies. All animal operations shall have a sufficient land base to properly apply all manure generated by the operation. Livestock operators will be required to demonstrate to the satisfaction of the Province, County and/or City that they have made adequate arrangements for manure disposal.

7. Greenhouses

Greenhouse development is a permitted agricultural activity and permitted land use within the *agriculture* designation. The City may establish development standards in the Zoning By-law to address maximum lot coverage and minimum distance to neighbouring residences.

The Zoning By-law may require a rezoning for a greenhouse greater than a certain size, and site plan approval may be required. New large development shall be compatible with the surrounding area, and shall ensure minimal impact on groundwater and surface water quality and quantity.

Given the intensive use of fertilizer supplements involved, greenhouses may be subject to nutrient management requirements.

8. Natural Environment within the Agriculture designation

Natural features and ecosystem functions form an integral part of the *agriculture* designation and cannot be severed from a farm holding. Limited development may be permitted adjacent to *natural areas* in accordance with the *natural heritage system* policies in Section 4.3 of this Plan.

This Plan recognizes the importance of trees to agriculture due to their wind protection and moisture holding capabilities. The naturalization of natural heritage corridors, other natural area linkages and hedgerows is encouraged in support of soil retention, biological and geological diversity, natural functions, maintenance of indigenous species, and ecosystem health.

9. Secondary Agricultural Uses

This Plan recognizes the changing nature of agriculture and encourages on-farm economic diversification that increases the economic value of an agricultural product or agricultural activity. Secondary uses are permitted in the *agriculture* designation provided that:

a) the use is clearly secondary to the principal agricultural use of the lot;
b) uses are limited to small-scale home occupations, bed and breakfasts operations (with a maximum of 3 guest bedrooms), agri-tourism activities and the processing and/or distribution of value-added agricultural products produced on the farm and/or by surrounding local operations;

c) any buildings or structures associated with such uses are of a design and style that will allow for ease of conversion to an agricultural use if the secondary use should cease;
d) the activity has minimal impact on, does not interfere with and is compatible with surrounding agricultural land uses;
e) the activity is located within an existing building or in a new building grouped with existing buildings and results in the removal of a minimal amount of farmland from production; and
f) the activity does not cause traffic impacts or safety concerns.

Before establishing secondary uses, farm operators must consider the following:
a) the Zoning By-law may contain development standards regarding the maximum floor area for such uses, access, parking, outside storage, etc. to ensure any use remains small-scale;
b) site plan approval and site plan agreements may be required; and
c) the severance of secondary uses from the farm lot will not be permitted.

The City may limit the number of farm diversification activities permitted in association with a farm operation.

10. Veterinarians' Clinics and Kennels as Secondary Uses

In support of the agricultural economy, veterinarians' clinics are permitted in the *agriculture* designation provided that agriculture is the primary use on the lot and the veterinary practice serves primarily farm animals.

Kennels are permitted in the *agriculture* designation, provided they are clearly accessory to an agricultural operation and shall be limited to small-scale ancillary operations. The Zoning By-law shall contain development standards for kennels, including the maximum numbers of animal allowed, the minimum setbacks for dog runs, and parking standards based on the number of animals boarded or kept.

Veterinarians' Clinics and Kennels are subject to the Secondary Agricultural use criteria in Section 4.2.2(9).

11. Small-Scale Agriculture-Related Commercial and Industrial Uses

Agriculture-related uses are small-scale commercial and industrial activities for processing agricultural products or providing services to farms. Examples of such uses may include grain dryers, feed mills, grain and seed storage facilities, agricultural products and produce processing facilities, bulk farm supply dealers, farm machinery sales and service, and livestock assembly points. Agriculture-related uses may be permitted in the *agriculture* designation by rezoning provided that:
a) the use is directly related to commercial-scale agriculture, is required close to agricultural operations and involves an activity not intended for the general public;
b) the need and demand for the use at the location proposed can be demonstrated to the satisfaction of the City,
c) where possible, the use is located in a grouping of existing buildings and structures, not on agricultural land, where possible;
d) the use is located on a road capable of accommodating the traffic generated, such as an arterial or collector road;

e) the requirements of the Province, the County, the City (or a designated agent) regarding water supply and sewage disposal can be met;
f) the use is located in conformity with the Minimum Distance Separation formulae and does not adversely impact surrounding agriculture activities;
g) the use does not negatively affect environmental features;
h) any accessory residence remains part of the use and not on a separately titled lot;
i) applicable provincial requirements are met (e.g. certificate of approval); and
j) additional requirements are addressed through site plan approval.

12. Alternative and Renewable Energy Systems

Small-scale on-farm alternative or renewable energy systems are encouraged in association with agricultural operations provided the majority of the energy produced is intended to be consumed on site and that provincial or federal requirements regarding these systems are met.

13. Local Institutions

New local institutions that serve social, recreational, administrative or other purposes, such as community centres, sports facilities, government offices and cemeteries are not permitted in the *agriculture* designation and shall be located in areas with urban land use designations to avoid conflicts with agriculture and to enhance urban areas.

Existing local institutional uses that serve the rural community such as places of worship, schools and community centres are recognized as contributing to the rural fabric and will be permitted in the *agriculture* designation.

14. Existing Non-Farm Dwellings

Lawfully existing non-farm dwellings are recognized in the *agriculture* designation. Such dwellings may be replaced or expanded provided they do not further encroach into a required minimum distance separation.

15. Vacant Non-Farm Lots

Where a vacant existing lot of record is two hectares or less, and held in separate ownership from abutting lands, it may be used for a single-detached dwelling, subject to the following conditions:

a) the lot is suitable for residential construction;
b) the lot meets the requirements of the Province, the County and the City regarding water supply and sewage disposal;
c) the site satisfies the adjacent land requirements of the *natural areas* policies;
d) direct access is available from a fully maintained public road and the access does not result in traffic hazards due to poor sight lines or proximity to an intersection;
e) where access is available to a public road across an abandoned railway line it shall be accepted as access to an improved public road; and
f) the lot is located in conformity with the Minimum Distance Separation formulae.

16. Surplus Farm Dwellings

Where possible, residences that become surplus to a farm operator should not be severed from the farmland and should remain as part of the agricultural operation. However, under certain circumstances, farm residences that become surplus to a farm operator may be severed according to the policies in Section 4.2.2(18) of this Plan.

17. Infrastructure, Drainage and Utility Corridors

Where a new transportation, drainage or utility corridor crosses a farm parcel, the transportation authority or utility will be encouraged to select a route that causes the least disruption to farm operations and productivity, provided that such routing is practical and does not negatively affect environmental features. Where possible, such corridors should be along the edge of the farm parcel.

18. Non-Farm Severances

Non-farm lot creation in the *agricultural* designation will not be allowed with the following exceptions:

18.1 Small-Scale Agriculture-Related Commercial and Industrial Uses

Severances for small-scale agricultural-related commercial and industrial uses may be considered subject to a Zoning By-law amendment, where:

a) the proposal complies with Section 4.2.2(11); and
b) the lot is being severed from an parcel that is a minimum of 35 hectares.

18.2 Infrastructure and Utility Corridors

Wherever possible, utility corridors should be accommodated on easements or rights-of-way rather than on newly created separate lots.

18.3 Surplus Farm Dwellings

A severance to create a new non-farm lot to dispose of a surplus farm residence may be permitted subject to a site-specific Zoning By-law amendment, provided that Council is satisfied that the lot to be created and the proposed retained farm lot complies with the following policies:

a) there have been no separations of the agricultural parcel since November 26, 1971;
b) the total parcel to be severed is a minimum of 35 hectares and the farm residence is surplus to the agricultural operation as a result of farm consolidation, meaning the acquisition of additional farm parcels to be operated as one farm operation;
c) the remaining portion is rezoned to ensure residential dwellings are prohibited on any vacant remnant parcel of farmland created by the severance;
d) the proposed severed lot complies with the Minimum Distance Separation Formulae (Type A Land Use);
e) where agricultural buildings or structures exist close to the surplus residence, they are either included with the residential lot or demolished; and
f) all retained structures are limited in scale and are secondary to the residential use.

18.4 Non-Farm Lot Size

New non-farm lots shall not include any more agricultural land than required to support the use and shall be limited to the size needed to accommodate necessary water supply and sewage disposal.

4.2.3 Resource Extraction designation

The City of Sarnia contains oil, gas, salt, brine and mineral aggregate resources. Oil fields have been in operation since the 1880s, while salt was extracted from 1904 to 1964. Brine continues to be extracted today. Beginning in the 1950s, many of the depleted resource caverns were converted to storage of hydrocarbons for the petro-chemical and energy industries. Depleted and active reservoirs in the City are also injected with natural

gas during the summer months, with withdrawal occurring during the winter to meet energy needs across the Province.

Limited mineral aggregate resource extraction opportunities remain in the *prime agricultural area*. While significant resources of good quality sands exist along the Lake Huron shoreline, these resources are restricted by urban development, and are not considered viable for extraction.

Viable resource areas shall be protected from incompatible land uses to allow for future extraction. Uses that do not preclude future resource extraction such as agriculture, forestry and conservation are permitted.

1. Long-Term Resource Protection

Mineral, petroleum and mineral aggregate resources shall be recognized and managed as non-renewable resources and protected for long-term use.

Petroleum resources include oil, gas and brine and may include sites where mineral (salt) resources are still present and former sites that have been or may be converted to underground storage for natural gas or other hydrocarbons. Petroleum pools are identified on **Map 3**.

Mineral aggregate resources include clay, gravel, sand and any other material identified under the *Aggregate Resources Act* of sufficient quantity or quality to warrant present or future extraction.

2. Development Adjacent to or Above Resource Extraction Areas

Development proposed adjacent to or above known petroleum, mineral and mineral aggregate resources including pools, deposits or storage areas is discouraged. Development may be permitted only if it is determined, in consultation with the Province, that resource extraction or underground storage would not be feasible and that issues of public health, public safety, and environmental impact are addressed.

Agricultural uses and natural areas may locate on or near these resources, provided they do not include any buildings or structures.

3. Natural Areas and Groundwater Protection in Resource Extraction Areas

Petroleum, mineral and mineral aggregate resource exploration and operations will be undertaken in a manner that protects natural areas and groundwater. The proponent of such activities shall conduct studies to identify any negative effects on natural features and functions resulting from extraction to ensure the continued integrity of the ground water quality and quantity as well as the adequate detection and disposition of gas and oil by-products. If extraction is proposed near or above the water table, and on or near potential groundwater recharge areas, the proponent must also conduct hydrogeological studies to address adverse effects in the quality and/or quantity of groundwater. These studies must be completed to the satisfaction of the Ministry of Natural Resources and the Ministry of Environment or any designated agent and shall be conducted at the sole expense of the persons or corporations engaged in exploration and/or extraction.

4. Petroleum Resource Operations

Petroleum resource exploration and extraction is a permitted activity in the *prime agricultural area* in accordance with Provincial regulations and standards. Petroleum resource operations include oil, gas, and brine wells, oil field brine disposal wells, and wells for the underground storage of natural gas and other hydrocarbons. Petroleum resource operations are subject to site plan control and site rehabilitation.

Associated development and use of buildings and structures shall be limited to those required to accommodate pumping equipment and to store pumped petroleum resources that are recognized by the Ministry of Natural Resources as a resource and not as waste. Refining, blending or processing of any resource or waste is prohibited and shall be directed to *employment areas*. Compressor and regulator stations associated with petroleum pipelines and underground storage are permitted in the *prime agricultural area*.

New development shall not be permitted within 75 metres of active petroleum or brine resource/waste extraction or associated operations. Offshore drilling for oil or gas shall not be permitted.

4.1 Petroleum Extraction Rehabilitation

Any development on or adjacent to lands affected by former petroleum resource operations shall be permitted only if rehabilitation measures have been completed, including contaminated sites discovered during the planning or implementing of a development proposal.

5. Mineral Aggregate Operations

All mineral aggregate operations must be licensed under the *Aggregate Resources Act* and must comply with the *Act* and regulations. Before licensing and extraction can occur, the land on which mineral aggregate operations take place must be designated *resource extraction* in this Plan and zoned appropriately. Permitted activities associated with mineral aggregate extraction include crushing, screening, washing, stockpiling and the manufacture of asphalt.

5.1 Basis of Consideration

All mineral aggregate operations shall minimize conflict and maximize compatibility with adjacent uses. The protection of agricultural lands, natural areas and existing development is a high priority.

No amendment to this Plan to permit a new or expanded mineral aggregate operation shall be considered until it has been determined that the following matters have been addressed to the satisfaction of the City:

a) the significance of the resource takes precedence over the loss of good farmland;
b) the site is not located within *natural areas* or *natural hazards*;
c) all extraction, processing and associated activities are located, designed and operated to minimize environmental and social impacts and ensure no negative impacts on surround properties;
d) an appropriate separation distance can be provided between agricultural operations and areas of existing or proposed residential development; and
e) the site can be demonstrably rehabilitated to ensure future viable agricultural use.

The City may require operators to conduct specific studies to address the above matters and require specific conditions that shall be attached to an aggregate extraction license.

Mitigation measures may be required, such as increased setbacks, berms, landscaping, road improvements and dust and noise control. Mineral aggregate operations shall be screened from public view wherever possible. Screening may be provided by planting, fences and/or landscaped berms.

5.2 Wayside Pits and Asphalt Plants

Wayside pits and quarries used on public authority contracts, including portable asphalt and concrete plants, shall be permitted in all land use designations including the *agriculture* designation, with the exception of sites designated as *natural areas* or *natural hazards*. Such wayside pits and quarries shall be operated on a temporary basis for the purpose of local road construction or an associated road project.

5.3 Aggregate Extraction Rehabilitation

Progressive or sequential rehabilitation of lands within resource extractive areas is required in accordance with a rehabilitation plan prepared under the *Aggregate Resources Act* and a Site Plan Control Agreement. For aggregate resource operations proposed on agricultural lands, rehabilitation of the site shall be carried out in such a way that substantially the same areas and same average soil quality for agriculture are restored. Where substantial extraction occurs below the water table, rehabilitated sites may be used for either agricultural uses or as *natural areas*.

4.3 NATURAL HERITAGE

Clean air, soil and water and abundant trees, parks and open spaces support human health and attract people to live, work and invest in the City. Since settlement in the 1800s, extensive areas of Sarnia's natural environment have been diminished through clearing, drainage and development. The remaining natural environment therefore takes on a greater significance for the health and integrity of the ecosystem.

Heightened public awareness, increased stewardship and strong municipal leadership are essential for the protection of the natural environment. Through the application of the policies of this Plan, the City will endeavour to ensure that future actions maintain and improve the natural environment of the City.

4.3.1 General Policies

1. Natural Heritage System

The City's *natural heritage system* consists of core natural areas, linkages, landforms and functions that together are recognized as essential to the maintenance of biological and geological diversity, natural functions, viable species population and ecosystem connectivity. The *natural heritage system* generally follows floodplains and woodlands, and their associated ecological functions.

The City's natural heritage elements are identified on **Map 5** and include: *natural areas*, *natural hazards*, their hydrological and ecological functions and linkages. Integrated management can contribute to ecosystem health, protect public health and safety and

improve community well-being. Development shall generally be directed away from the *natural heritage system*.

2. Natural Heritage Objectives

It is the intent of this Plan to protect the City's natural heritage resources by:

a) using watershed boundaries as the ecologically meaningful scale for planning;
b) recognizing ecosystem services that benefit current and future generations;
c) identifying *natural areas*, *natural hazards* and their ecological functions for long-term protection;
d) protecting species at risk and their significant habitats;
e) implementing a systems approach that ensures connectivity between and among natural heritage features and areas, and surface water and groundwater features to maintain ecological and hydrological functions;
f) protecting, maintaining, enhancing and restoring the *natural heritage system* to the greatest extent feasible;
g) providing clear mechanisms for assessing the potential immediate and long term impacts of development, site alteration and other activities on the *natural heritage system*;
h) fostering appreciation and local stewardship of the *natural heritage system*; and
i) supporting the ongoing monitoring and management of the *natural heritage system* to ensure its long term health.

i)

3. Watershed Planning

The City is located within the jurisdiction of the St. Clair Region Conservation Authority and within three watersheds:

- Perch Creek;
- Cow Creek; and
- St. Clair River Tributaries

Watershed and sub-watershed planning integrate water management, environmental management and land use planning on an ecosystem basis. The City will participate in watershed and sub-watershed studies in co-operation with the Conservation Authority, the County, adjacent municipalities, community groups and other agencies. Relevant findings of watershed planning may be implemented through amendment to this Plan and/or the Zoning By-law.

4. Natural Heritage Linkages and Restoration

Linkages within the *natural heritage system* accommodate the spread of plants and movement of animals, thus reducing system fragmentation and isolation, supporting biodiversity conservation and improving the long-term viability of ecological systems. Existing linkages shall be protected.

Any tree preservation, reforestation or naturalization measures required as part of a development process should enhance natural cores, corridors, and improve linkages. Natural heritage enhancements may include reforestation, buffer strips, restoration of tall-grass prairie coverages, lot line tree plantings and conservation easements.

5. Huron Shore Flyway

The Huron Shore Flyway is a migration route for many species of birds. The Flyway is generally located north of Michigan Avenue/Line with several natural features and areas

that should be protected as resting and staging areas for migratory birds and popular areas for observing birds. This Plan recognizes and supports the protection and enhancement of the Huron Shore Flyway.

6. Accessibility within the Natural Heritage System

To create a comprehensive network or recreational trails, the establishment of walking and bicycling routes along natural corridors within the *urban area* is encouraged, provided it can be demonstrated that there will no negative impact of these trails on natural features and function. This Plan supports the continued maintenance and enhancement of the Howard Watson Nature Trail for use as a walking and bicycling path linking various areas of the City.

7. Community Stewardship of Natural Heritage

Education, stewardship and collaboration are essential to achieving a sustained healthy natural environment over the long term. The City shall provide leadership and employ best management practices with respect to its operations and land management. The City will also work with the St. Clair Region Conservation Authority, the County, Council Committees and community groups to promote a healthy environment. The City supports new and ongoing community initiatives and voluntary land stewardship programs that contribute to the understanding, health and protection of the City's natural heritage.

8. Private Ownership of Natural Heritage Features

Except at the discretion of the owner, portions of the *natural heritage system* that are privately owned are not open to the general public. The preservation and management of the *natural heritage system* can be accomplished through stewardship, partnerships, land trusts, conservation easements, acquisitions or conveyance of land to the City, public agency or land trust, and implementing by-laws.

9. Blackwell District

The Blackwell District shown on **Map 5** is a low-lying geological depression once marked by a lake and marsh system that was drained and improved for agricultural purposes between 1859 and 1912.

Despite drainage improvements, the Blackwell District is subject to environmental constraints such as flood-susceptible areas, alluvial soils and perched water tables, and is a major floodplain because its elevation is similar to that of Lake Huron. This lack of slope restricts effective drainage.

The size and scale of the Blackwell District make it a unique geographical feature of the City.

Much of the Blackwell District is impacted by *natural hazards* as defined by Provincial policy. These lands are subject to flooding under a 1:100 frequency event. The District also contains high-quality agricultural soil and has long been recognized as a productive agricultural area.

Together, the *urban areas* and *prime agricultural area* of the Blackwell District must be managed in a manner that recognizes and protects natural resources and hazards. While development is generally directed away from *natural hazards*, the area's location and

prime agricultural soil resource provide unique opportunities to support near-urban agriculture and an integrated urban-rural food system over the long-term.

4.3.2 Natural Hazards

Structures and property within floodplains, slopes and valleys, unstable land and shorelines may be susceptible to damage from processes such as flooding, erosion, slope failure and dynamic beaches. These processes become natural hazards when people and property are located in areas where they occur.

Prevention of harm is best accomplished by directing development away from *natural hazards*.

Development is not permitted in areas where the risk is the greatest, such as unstable beaches, slopes and within floodways. In other areas designated as *natural hazards*, development may be possible where effects and risk to public safety can be safely managed and mitigated by protective works to prevent impacts on ecological/littoral functions, property damage and potential loss of life. The City recognizes that the cost of maintaining protection works often requires on-going expensive maintenance and long-term capital investment commitments.

1. Natural Hazards

Development shall avoid *natural hazards*. *Natural hazards* are areas with environmental constraints designated on **Map 6** including:

- flooding, erosion and dynamic beach hazards related to the Great Lakes System;
- flooding and erosion hazards related to rivers and streams;
- hazardous sites with unstable soils (marine clay soils, organic soils); and
- areas in which the water table is high.

2. General Policies

No alteration to a watercourse and no placing or removal of any fill of any kind whether originating on the site or elsewhere shall be permitted in lands designated as *natural hazards* unless such action is approved by the City or where fill regulations apply. The Conservation Authority Regulation text governs the extent of the Regulation where mapping is in dispute. The City may enact a Site Alteration By-Law under the authority of the *Municipal Act* to regulate such actions.

For any construction proposed within a *natural hazard*, the proponent must obtain written permission from the St. Clair Region Conservation Authority before the City will issue a building permit.

If buildings and structures that have been destroyed by fire or unusual circumstances, including natural disasters (not including flooding or erosion), are reconstructed, they must be flood-proofed to the regulatory flood elevation level or to the greatest extent possible.

In areas where engineered flood lines have not been determined, the development proponent may be required to conduct a technical study to determine the extent of the floodplain. The cost of required studies, and any peer review, shall be borne by the development proponent.

The creation of lots, parts of which extend into flood-susceptible areas, may be permitted provided that no buildings, structures or outdoor storage are located on any portion of the lot within the one-zone floodplain policy area or the floodway of a two-zone floodplain policy area. Hazardous lands will be zoned accordingly and/or registered on title and non-compatible uses enforced.

3. Natural Hazards Associated with the Great Lakes System

Within the City, the Great Lakes System includes Lake Huron and the St. Clair River and their associated shorelines, dynamic beaches, and flooding and erosion susceptible areas. Within these areas, sand and sediment are constantly moving, and water levels, wind, soil type, degree of slope, rainfall, storms, dunes, bank stability and vegetation vary.

Erosion and flooding are natural processes that are essential to the ecological balance of large reaches of shoreline. The principal goals of shoreline management are to protect ecological functions, prevent risks to human life, and minimize property damage. The City shall implement shoreline protection measures consistent with these objectives on a phased basis as the need arises and as funding can be made available.

3.1 Lake Huron Shoreline

These policies apply to lands along the Lake Huron Shoreline that are susceptible to flooding, erosion and dynamic beach hazards according to the Shoreline Management Plan prepared by the St. Clair Region Conservation Authority (SCRCA). Shoreline Management Area 1 is the high hazard area and Shoreline Management Area 2 is the medium hazard area. The Shoreline Management Plan contains an accurate illustration of the Shoreline Management Area (SMA) boundaries and shall be identified in the Zoning By-law. The Shoreline Management Areas were introduced in the 1992 SCRCA SMP and brought forward as updated SMP's. SMA's serve to assist in the implementation of technical standards prepared by MNR and SCRCA's Shoreline Development Guidelines.

For sites within 75 metres of Lake Huron which lie below the flood elevation of 179.2 metres CGD (Canadian Geodetic Datum), the required minimum elevation of any openings to new buildings shall be 179.2 metres CGD along with any additional floodproofing. It will be the responsibility of the proponent of any new development within this area to determine the 179.2 metres CGD flood elevation on the subject property.

The shoreline development policies applicable to the Shoreline Management Areas are summarized in the following chart:

Development Activity	Shoreline Management Area 1	Shoreline Management Area 2
Existing Buildings and Structures		
repairs/maintenance (no intensification of use)	permitted	permitted
interior alterations (no intensification of use)	permitted	permitted
dwelling additions	not permitted	30% addition permitted under the following conditions: no encroachment into Shoreline Management Area 1; and flooding, erosion and/or dynamic beach hazards are appropriately addressed (1)(2)

rebuilding of dwelling destroyed by flooding and/or erosion	not permitted	not permitted
New Buildings and Structures		
new dwellings	not permitted	not permitted in dynamic beach hazard areas; otherwise permitted on condition that flooding and/or erosion hazards are appropriately addressed (2)
accessory buildings and swimming pools	not permitted	not permitted in dynamic beach hazard areas; otherwise permitted on condition that flooding and/or erosion hazards are appropriately addressed (2)
septic systems	not permitted	permitted on condition that flooding, erosion and/or dynamic beach hazards are appropriately addressed (2)
boardwalks and/or stairs	not permitted in flooding hazard; otherwise permitted on condition that erosion and/or dynamic beach hazards are appropriately addressed (2)	permitted on condition that flooding, erosion and/or dynamic beach hazards are appropriately addressed (2)
decks	not permitted in flooding and/or dynamic beach hazard; may be permitted in erosion hazard provided hazards are appropriately addressed (2)	permitted – provided that flooding, erosion and/or dynamic beach hazards are appropriately addressed (2)
shoreline protection	permitted on condition that works are approved by the St. Clair Region Conservation Authority; new groynes not permitted.	
New Lots		
creation of lot(s) ie. severance, subdivisions	not permitted (3)	not permitted (3)
lot consolidation	permitted	permitted
technical severances	permitted	permitted

NOTE: (1) Additions are expressed as a percentage of the ground floor area of the dwelling existing on the date of adoption of this Plan.

(2) Addressing flooding, erosion and/or dynamic beach hazards in conjunction with the development or redevelopment of a shoreline property can take the form of structural or non-structural measures, or a combination of these measures meant to reduce potential damages. These measures may include (but are not limited to) moveable dwelling designs, dwelling relocation, bluff stabilization measures, protection works, drainage, and beach nourishment. Where protection works are proposed to address the hazards, these works must meet established standards and procedures.

(3) The creation of lots that extend into Shoreline Management Areas 1 and 2 may be permitted provided that new buildings and structures conform with applicable requirements. Hazardous lands will be zoned accordingly and/or registered on title and non-compatible uses enforced.

3.2 St. Clair River Shoreline

For the St. Clair River shoreline, the Province has determined the 1:100 year flood elevation level shall be 178.0 metres CGD as these lands are less susceptible to wave uprush than lands on the Lake Huron shoreline. For sites near the St. Clair River, the required minimum elevation of any openings to new buildings shall be 178.3 metres CGD along with appropriate floodproofing.

For sites bordering the St. Clair River that have no shoreline protection, any new habitable building shall have a minimum setback of 15 metres from the top of the shoreline bank unless identified in an appropriate profressional study following established standards and approved by SCRCA and the City. Additions to existing habitable buildings having less than the required setback from the top of the shoreline bank along the St. Clair River are permitted provided that the addition does not reduce the existing setback. Development within the hazard on the St. Clair River can occur provided the hazard is safely addressed following established standards.

Minor land filling and modifications to the configuration of the shoreline shall be permitted for the purpose of stabilizing slopes and shorelines, creating or enhancing aquatic habitat, naturalizing the shoreline, improving water quality, or providing public access to the water's edge where appropriate.

4. River and Stream Floodplains

Floodplains are the areas, usually lowlands adjoining a watercourse that have been or may be subject to flooding hazards. The City's floodplains consist of "one-zone floodplain policy areas" and "two-zone floodplain policy areas" as identified on **Map 6**.

The regulatory flood standard for the Perch Creek watershed is based upon the 1:100-year frequency based flood.

The regulatory flood standard for the Cow Creek and St. Clair River Tributary watersheds are based on a storm centred event; that being the Hurricane Hazel storm that occurred in 1954.

4.1 One-Zone Floodplain Policy Areas

In these areas, the entire flooding hazard limit defines the floodway. The one-zone concept is the preferred approach for the management of flooding hazards as it provides the most cost-effective means of minimizing potential threats to life and risks of property damage and social disruption.

Within one-zone floodplain policy areas, no buildings or structures are permitted except for those necessary for flood and/or erosion control. The construction of new public roads, or new structures necessary for conservation, public recreation, utilities or agricultural purposes may be permitted provided they do not affect flood flows.

Minor expansions or alterations to lawfully existing buildings and structures may be permitted provided that:

a) no new dwelling units are created;
b) no new floor space, including basements, is created below the regulatory flood elevation; and

c) all mechanical and electrical services are floodproofed to the regulatory flood elevation level.

4.2 Two-Zone Floodplain Policy Areas

Two-zone floodplain policy areas divide floodplains into two zones:

a) ***Floodway***: the contiguous inner portion of a floodplain required for the safe passage of flood flows where flood depths and/or velocities are considered to be such that they pose a potential threat to life and/or property damage.

b) ***Flood fringe***: the outer portion of the floodplain between the floodway and the flooding hazard limit. Flood depth and velocity are generally less severe than in the floodway.

The two-zone approach is not the preferred method of floodplain management. While development may be adequately flood-proofed over the short term, continuous maintenance and upkeep would be required to ensure protection works and local services remain effective.

Within an approved two-zone floodplain policy area, development within the *floodway* shall be restricted to minor expansions or alterations of existing buildings as set out in *one zone floodplain policy areas*.

Development within the *flood fringe* shall be restricted to infilling, redevelopment or replacement of existing buildings or structures, and minor additions or alterations to existing buildings, provided the following conditions are met:

a) written permission is issued by the St. Clair Region Conservation Authority on the basis that no adverse effects on the hydraulic characteristics of flood flows will occur; no hazards will be aggravated and no adverse environmental impacts will result;
b) all development is suitably flood-proofed to the regulatory flood elevation level as determined by and to the satisfaction of the St. Clair Region Conservation Authority and the City of Sarnia;
c) all habitable floor space is constructed at or above the regulatory flood elevation level;
d) all essential building services (i.e. electrical, telephone, heating etc.) are constructed at or above, or are protected, to the regulatory flood elevation level;
e) no uninhabitable floor space is created below the regulatory flood elevation where there is the possibility of its conversion to habitable floor space;
f) the proposed use is not an institutional use, essential emergency service, or operation related to the disposal, manufacture, treatment or storage of hazardous substances;
g) safe access is maintained for the maintenance and repair of protection works during times of flooding; and
h) safe vehicular and pedestrian movement for all new habitable buildings is guaranteed in order that safe access/evacuation is ensured. The St. Clair Region Conservation Authority shall determine what is considered safe access, based on flood depth and velocity factors.

The City may consider applying the two-zone concept to portions of the floodplain where it can be demonstrated that *'flood fringe'* areas can be safely developed with no adverse impacts. Consideration of the two-zone concept may only be initiated by a planning authority.

Applying the two-zone concept requires considerable review and is to be applied on a reach/watershed/subwatershed basis. In accordance with Provincial technical guidelines, the City, in consultation with the St. Clair Region Conservation Authority and Ministry of Natural Resources, shall assess the suitability of applying the concept including (but not limited to) the following factors:

- historic and projected frequency of flooding;
- the physical characteristics of the valley;
- the impacts of proposed development (including flood levels at the site and upstream, and flood levels downstream;
- feasibility and costs of flood-proofing;
- constraints to the provision of services;
- access points; and
- existing land uses and the potential for changes to those land uses.

Prior to approval, Council shall be satisfied that no adverse impacts will result and that the City maintains the long-term administrative and financial capability to effectively manage the identified two-zone floodplain policy area in perpetuity.

The proponents of any development in a designated *flood fringe* shall prepare a protective works and emergency plan prepared prior to permitting conditional development. All communal protective works identified through a two-zone analysis shall be owned, operated and maintained by the City.

4.3 Protective Works and Emergency Planning

Past approvals have resulted in urban development located within *natural hazards*. A flood protection management plan shall be prepared by the City for each existing two-zone floodplain policy area to ensure the following:

a) the life cycle costs of protection works are identified and infrastructure kept in a state of good repair;
b) climate change impacts are considered and new works are built as necessary to protect from the regulatory flood event over the long-term;
c) safe access must be ensured for the repair of protection works during times of flooding;
d) effective coordination with Provincial, County and City emergency planning;
e) back-up electrical systems are maintained in a state of readiness and good repair;
f) existing institutional uses, such as schools and homes for the aged, can be safely accessed/evacuated during times of flooding; and
g) best management practices are used in the floodproofing of development.

5. Erosion Hazards

Erosion is a natural process in all rivers, streams and coastal shorelines of the Great Lakes. The rate of erosion may be accelerated by flooding and increased runoff associated with changing land uses in the watershed. Slope failures can damage homes or highways and can be fatal to humans and wildlife. In most cases, damage is exacerbated by human modification to the slope. Slope failures can be triggered by atmospheric processes (heavy rainfall), geological processes (earth tremors, freeze-thaw cycles), human modification or a combination of the above.

Development adjacent to steep slopes or watercourse valleys must be set back from the toe erosion allowance plus stable top-of-bank. This erosion setback will be determined by

the proponent in consultation with the City of Sarnia and the St. Clair Region Conservation Authority or a provincial authority. The required development setback will reflect the degree, severity and extent of the erosion hazard. A standard setback may be included in the implementing Zoning By-Law.

Where slope stabilization, development or redevelopment is proposed near the top-of-bank of a major watercourse or significant slope, the proponent will consult with the City of Sarnia and the St. Clair Region Conservation Authority regarding the need for geotechnical or engineering studies. Outside regulated areas, the City may consult with the St. Clair Region Conservation Authority at its own discretion. The City will reserve the right to require geotechnical and/or engineering studies and/or works from development proponents.

4.3.3 Natural Areas

Environmental features provide social, ecological, and economic benefits, and contribute to overall quality of life by maintaining air, land and water quality, as well as by providing biological diversity. Natural features identified as *natural areas* form part of a larger system, and shall be protected from development with a view to enhancing the entire ecosystem. Uses such as conservation, forestry, wildlife areas and passive recreation are permitted.

Definitions

Adjacent lands: lands contiguous to a specific natural heritage feature or area where it is likely that development or site alteration would have a negative impact on the feature or area.

Areas of natural and scientific interest (ANSIs): areas of land and water containing natural landscapes or features that have been identified as having life science or earth science values related to protection, scientific study or education. The Ontario Ministry of Natural Resources identifies and confirms ANSIs as being provincially, regionally or locally significant in accordance with the ANSI identification and confirmation procedure.

Ecological function: the natural processes, products or services that living and non-living environments provide or perform within or between species, ecosystems and landscapes. These may include biological, physical and socio-economic interactions.

Fish habitat**:** spawning grounds and nursery, rearing, food supply, and migration areas on which fish depend directly or indirectly in order to carry out their life processes, as defined in the *Fisheries Act*. Fish includes fish, shellfish, crustaceans and marine animals, at all stages of their life cycle.

Significant: ecologically important in terms of features, functions, representation or amount and contribution to the quality and diversity of an identifiable geographic area or natural heritage system.

Significant Habitat of Endangered Species and Threatened Species*:* the habitat of a species that is listed as *"endangered"* or *"threatened"* on the Ministry of Natural Resources

(MNR) official Species at Risk list, as updated and amended. MNR identifies such habitat by delineating, describing, reviewing and approving the work of others.

Wetlands: lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to the surface, and where the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic plants or water-tolerant plants.

Significant wetlands include both provincially and locally significant wetlands identified by the Ontario Ministry of Natural Resources (MNR) using the Ontario Wetland Evaluation System (OWES) Southern Manual for evaluating wetlands. MNR is the approval authority for wetland evaluations and determines the level of significance.

Wildlife Habitat: areas where plants, animals and other organisms live, and find adequate amounts of food, water, shelter and space to sustain their populations. Specific wildlife habitats of concern may include areas where species concentrate at a vulnerable point in their annual or life cycle, and areas that are important to migratory or non-migratory species.

Significant wildlife habitat include seasonal concentration areas, rare vegetation communities or specialized habitats for wildlife (such as a tall grass prairie), habitats of species of conservation concern excluding the *habitats of endangered species and threatened species*, and animal movement corridors.

Woodlands: treed areas that provide environmental and economic benefits to private landowners and the general public, such as erosion prevention, hydrological and nutrient cycling, clean air, the long-term storage of carbon, provision of wildlife habitat, outdoor recreational opportunities and the sustainable harvest of a wide range of woodland products.

Significant Woodlands are identified by the County of Lambton in accordance with the Provincial Natural Heritage Reference Manual and include *woodlands* 2 hectares or larger; and smaller *woodlands* having a minimum size of 0.5 hectares and located within 150 metres of another natural heritage feature, 120 metres of two or more other natural heritage features, within a surface water feature, above a groundwater feature, within 750 metres of a surface water feature, being of economic or social value, having native forest species that have declined significantly, or unique in terms of species composition, cover type, age or structure.

Valleylands: a natural area that occurs in a valley or other landform depression that has water flowing through or standing for some period of the year. *Significant valleylands* include land with a slope of 10% or greater, and undeveloped areas within the regulatory floodplain and erosion hazard areas identified by the SCRCA.

1. Types of Natural Areas

Natural Areas shown on **Map 5** consist of:

- *provincially significant wetlands;*
- *locally significant wetlands;*
- *fish habitat;*
- *significant* habitat of *endangered species* and *threatened species;*

- *significant woodlands;*
- *significant valleylands;*
- *significant wildlife habitat;*
- *areas of natural and scientific* interest (ANSIs); and
- other areas identified by Council, including nature reserves and prairie grasslands.

Where two or more types of *natural areas* overlap, the policies that provide the most protection shall apply. If there is a discrepancy between the maps and the policies, the policies shall prevail.

The location of the *habitat of endangered species and threatened species* is considered to be sensitive information, thus is not available to the general public, and must be determined through consultation with the Ministry of Natural Resources.

Natural areas shall be zoned in the implementing Zoning By-law.

2. Permitted Uses in Natural Areas

Permitted uses in *natural areas* include conservation, forestry, fish and wildlife areas, passive recreation, low impact scientific and educational activities, and restoration activities, subject to the policies of this Plan. Permitted uses will be set out in the Zoning By-law. If a development proposal for permitted uses has the potential to result in a negative impact to *natural areas*, the proponent may be required to conduct an Environmental Impact Study (EIS).

This Plan recognizes that the primary role of the Bright's Grove Sewage Lagoons, shown on **Map 5**, is as a municipal waste water treatment facility and its role as *natural areas* is secondary.

3. 'Type A' Protection

Areas of greatest significance are categorized as 'Type A' *natural areas*. These include *provincially significant wetlands*, *locally significant wetlands*, *fish habitat* and *significant habitat of endangered species and threatened species*. Development and site alteration are not permitted in "Type A" *natural areas* as it is intended that they remain in their natural state.

All development applications shall be screened against known or probable locations of *habitat of endangered species and threatened species*. Where a known or probable location of *habitat of endangered species and threatened species* is identified on or is in close proximity to the subject lands, the development proponent shall consult with the Ontario Ministry of Natural Resources to confirm the identification and determine whether specific technical studies may be required.

All permanent and intermittent streams, watercourses, lakes, wetlands and ponds, other than artificial off-stream ponds, are deemed to be *fish habitat* and are identified as *surface water features* on **Map 5.** If it can be demonstrated to the satisfaction of the City of Sarnia and St. Clair Region Conservation Authority that a feature does not constitute *fish* habitat (e.g. through an Environmental Impact Study), it may be removed from **Map 5**.

4. 'Type B' Protection

'Type B' *Natural Areas* are essential components of the City's natural environment and include:

- *lands adjacent to 'Type A' features;*
- *significant woodlands;*
- *significant valleylands;*
- *significant wildlife habitat;*
- *areas of natural and scientific* interest (ANSIs); and
- other areas identified by Council.

Development shall be directed away from *natural areas*. However, in certain instances development and site alteration may be permitted in 'Type B' *natural areas* provided that such development or site alteration does not negatively impact natural features or their ecological functions. The City will consider development and site alteration provided that:

a) an accepted Environmental Impact Study or an Environmental Assessment demonstrates that the proposal will not have a negative impact on the natural heritage features or ecological functions for which the area is identified;
b) no alternative location exists that is outside of the *natural area* designation;
c) the affected area is not a wetland, floodplain, hazardous area (e.g. unstable slopes, soils or sinkholes);
d) groundwater will be protected, particularly in *vulnerable areas*;
e) the St. Clair Region Conservation Authority, and other appropriate agencies, shall be consulted; and
f) the development is not severed from the holding on which it is located.

Development in "Type B" *natural areas* is conditional on natural environment enhancements such as forest improvement, reforestation, linkages, stewardship agreements and conservation agreements.

5. Boundary Confirmation and Feature Evaluation

The City recognizes that natural features change over time and that it may be necessary to update *natural areas* designations to recognize these changes. Where insufficient information exists on the presence and significance of *natural areas*, development applicants shall be required to conduct an Environmental Impact Study (EIS). The appropriate level of protection shall be given to identified *natural areas* in accordance with the policies of this Plan. Any additional *natural areas* that are identified from time to time may be added to **Map 5** without amendment to this Plan.

The boundaries of *natural areas* and adjacent lands shall be accurately surveyed and illustrated on all plans submitted in support of development and site alteration applications. Such boundary interpretations, and any minor refinements to the boundaries, may be made without an amendment to this Plan.

Any unauthorized development or site alteration of a *natural area* shall not be recognized as a new existing condition, and such alteration or removal shall not constitute a basis for redesignation. Restoration of any disturbed area shall be required to the satisfaction of the City.

6. Lands Adjacent to Natural Areas

Lands adjacent to significant natural features shall be protected from incompatible

development. The proponent of any development or site alteration within 120 metres of *natural areas* may be required to undertake an Environmental Impact Study to assess the impact of a proposed development or site alteration.

An Environmental Impact Study is required where development or site alteration may cause degradation that threatens the health and integrity of the natural features or ecological functions of the area. See Section 4.3.3 for Environmental Impact Study requirements.

Development on lands adjacent to *natural areas* will be approved only where the ecological functions of the adjacent lands have been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.

The Zoning By-law may use an overlay and/or a holding symbol (H) in these areas.

7. Watercourses

The City recognizes that the health of aquatic communities and *fish habitat* is an indicator of a healthy environment. Development and site alteration shall not adversely affect watercourses. Development along watercourses shall be planned to ensure that harmful alteration, disruption and destruction of fish habitat is avoided. The following principles apply to any development along a watercourse in the City of Sarnia:

a) natural vegetation and other suitable erosion control methods should be introduced and maintained on the banks of watercourses;
b) construction of tile outlets shall not contribute to erosion along watercourses;
c) trees shall be planted or other buffer measures installed where appropriate to protect watercourse banks and enhance the ecological corridor role of watercourses;
d) interim measures to protect the watercourse from erosion and sedimentation during construction shall be implemented; and
e) an appropriate setback for all development from the top of the bank of watercourses shall be required to prevent erosion, improve water quality, enhance wildlife corridors and protect fish habitat, in addition to protecting the development from flooding and slope instability.

The Zoning By-law shall establish setbacks from watercourses to minimize the effect of development and site alteration.

8. Fish Habitat

The City may permit development near or adjacent to *fish habitat* where it is demonstrated to the satisfaction of the Department of Fisheries and Oceans (DFO), its designate and/or the City that the proposal will not harmfully alter, disrupt or destroy *fish habitat*. The goal is no net loss of the productive capacity of *fish habitat*.

Development proponents may be required to conduct an Environmental Impact Study to determine appropriate buffer zones, opportunities for near-site habitat replacement, off-site habitat replacement or on-site increased habitat capacity to the satisfaction of DFO, its designate and the City.

If it is determined by DFO, its designate and the City that any development would cause negative impacts, such development and site alteration may be prohibited.

Any development conditions identified through an Environmental Impact Study must be implemented by the development proponent to the satisfaction of DFO, its designate and the City.

9. Environmental Impact Studies

An Environmental Impact Study is an objective, science-based study, prepared by a qualified expert, which assesses the potential impacts of proposed development or site alteration on the natural environment, and provides measures to ensure no negative impacts on the *natural heritage system*, *natural areas* or their ecological functions. The level of detail will vary, depending on the characteristics of the site and the proposed development.

Any Environmental Impact Study shall be conducted in two phases:

Phase 1 evaluations examine and assess the suitability for the proposed development of the site and adjacent lands, including an inventory and assessment of the following:

a) vegetation communities, and terrestrial natural habitat features and functions including wetlands, trees, flora and fauna, and wildlife habitat;
b) water catchment areas, known watercourses, and hydrologic features and functions;
c) physical features, soils and landforms;
d) riparian zones or buffer areas and functions, and
e) aquatic habitat features and functions.

Phase 1 evaluations must be reviewed and approved by the City and appropriate agencies, before Phase 2 can be initiated.

Phase 2 evaluations shall identify and assess the impacts of a proposed development, both during construction and after completion, on natural heritage features and functions. Methods and measures for the mitigation of potential environmental effects shall be identified, and the measures that will be used to mitigate negative impacts and the effectiveness of these measures will be specified. Where possible, negative impacts will be avoided rather than mitigated, and proposals may need to be modified. Monitoring and further mitigation may be required. Any measures that will be undertaken to improve natural heritage features and functions shall be described, including measures to compensate for lost features or functions and enhancements to the natural heritage system.

Applicants shall discuss with appropriate City and agency staff the purpose, scope and content of an Environmental Impact Study before commencing the study. The Environmental Impact Study should be prepared early in the planning process to ensure that the constraints and opportunities associated with natural heritage on or near the site are known and can inform the review. City and agency staff will provide input into the terms of reference.

The City will review each Environmental Impact Study to determine whether it is complete. The City may commission a qualified expert to carry out a peer review at the applicant's expense, and may request the applicant to provide additional information. Public input and review should also be integrated into the process to ensure that all issues have been adequately addressed and that the assessment is complete and technically accurate.

The completion of an Environmental Impact Study does not guarantee that development proposals will be approved.

10. Severances in Natural Areas

Lot creation in *natural areas* is discouraged. Severances may be permitted only for:

a) the conveyance of land to public bodies or agencies engaged in the protection, reestablishment and management of the natural environment; and
b) for minor lot boundary adjustments.

4.4 STABLE RESIDENTIAL AREAS

Residential areas are essential components of the City. In addition to residences, they include schools, parks, places of worship, and community centres. Over the long-term, *stable residential areas* will remain stable but not static. While some *stable residential areas* are being developed or are planned to develop as new residential neighbourhoods, existing older areas may need to be strengthened to ensure a better quality of life for residents. There may be gaps in facilities and services, buildings may need to be upgraded, or residents may face hardships, social vulnerability or difficulty accessing essentials such as healthy foods. Strategies and specific measures may be needed to address these issues.

The maintenance and enhancement of existing assets is a priority of this Plan. Limited residential intensification may be permitted through contextually sensitive techniques and the redevelopment of sites that contain obsolete and incompatible land uses. Intensification of land adjacent to *stable residential areas* will be carefully controlled so that existing and future neighbourhoods are protected from negative impacts.

4.4.1 General Policies

1. Stable Residential Areas Objectives

The lands identified as stable residential areas on **Map 1** represent the areas that provide for existing and future stable residential communities.

Stable residential areas are to be developed and be maintained as physically stable areas that may mature and adapt gradually for residential purposes as the City evolves. New development and reinvestment is to achieved by residential development that reinforces the prevailing built form standards found in, or planned for, each neighbourhood. In support of these goals, the City shall:

a) support the improvement and renewal of all neighbourhoods;
b) encourage the maintenance and rehabilitation of existing housing stock as the preferred form of providing housing in these areas;
c) prevent the encroachment of commercial and industrial uses into *stable residential areas*;
e) support the relocation of existing incompatible uses out of *stable residential areas*;
f) encourage infill and redevelopment in appropriate locations;
g) ensure any permitted development proceeds in such a manner so as not to impose a financial burden on the City or municipal taxpayers; and
h) enforce standards to ensure that all properties are well maintained and in compliance with housing, building, and health codes.

2. Stable Residential Area Land Use Designations

A variety of residential uses are accommodated through five stable residential area land use designations: *urban residential*, *suburban residential*, *apartment residential*, *private residential*, *recreational residential* and *institutional*. These designations provide for a full range of housing types, forms and densities.

3. Development and Redevelopment within Stable Residential Areas

Development and redevelopment within stable residential areas shall respect and reinforce the existing and planned physical character of buildings, streetscapes and open space patterns in these areas, and shall be undertaken by means of planned subdivision development, or where a plan of subdivision is not required, by severance of lands to make the most efficient use of municipal services.

Opportunities for intensification of lands to create higher residential densities or remove existing obsolete uses will be done in a manner that respects and reinforces existing and planned patterns and physical character. Techniques may include permitting second units in existing dwellings, encouraging the creation of infilling lots, converting non-residential buildings for residential use, and redeveloping sites not previously used for residential purposes.

4. Intensification Adjacent to Stable Residential Areas

The intensification of land within *growth areas* adjacent to *stable residential areas* shall be carefully controlled to ensure that existing and planned neighbourhoods are protected from negative impacts. Development in land use designations adjacent or close to *stable residential areas* shall:

a) be compatible with the built form and scale of adjacent or nearby *stable residential areas*;
b) provide a gradual transition of scale and density through the use of setbacks and the stepping down of high-rise or mid-rise close to low-rise residences in *stable residential areas*;
c) maintain adequate light and privacy for residents in *stable residential areas*;
d) minimize traffic and parking impacts on adjacent neighbourhood streets; and
e) add vegetative buffers to reduce noise and provide buffering and screening.

5. Special Residential Uses

Special residential uses include residential care facilities, senior citizens housing, short-term accommodation operated or authorized by a public agency, and facilities for special population groups. Special residential uses are subject to the following criteria:

a) the proposed use is located on an Arterial or Collector road as shown on **Map 4**;
b) the proposed use is compatible with the scale, intensity, density and character of existing and proposed surrounding land uses;
c) adequate buffering is provided to protect surrounding existing development;
d) adequate on-site parking is provided to serve residents, staff and visitors while retaining sufficient yard space to maintain the residential character of the area;
e) provision is made for off-street drop-off and pick-up of the users of such facilities; and
f) the location is close to community services and facilities and to regular transit service.

The Special Residential uses to be permitted will be established in the Zoning By-law. Special residential uses will generally be subject to the policies governing *apartment residential* dwellings.

6. Transportation within Stable Residential Areas

The functioning of the local network of streets in stable residential areas will be improved by:

a) maintaining roads and sidewalks in a state of good repair;
b) investing in the improvement of transit for neighbourhood residents;
c) minimizing through-traffic on local streets within the area; and
d) discouraging parking on local streets for non-residential purposes.

The design and layout of roads in new subdivisions and/or areas subject to severance shall be well-integrated with the existing road network and shall not preclude or prevent the orderly and efficient integration of future development on abutting vacant or underused lands. Access roads to such parcels shall be dedicated as public rights-of-way.

Development on private roads shall be discouraged. Where it is demonstrated that a public road is not warranted, to the satisfaction of the City, development through plans of condominium on private roads may be permitted provided all required services are appropriately accommodated and all applicable policies of this Plan are satisfied.

7. Environmental Sustainability in Stable Residential Areas

The City will promote environmental sustainability in *stable residential areas* through naturalization and landscaping improvements, tree planting and preservation, sustainable technologies for stormwater management, energy efficiency and programs for reducing waste.

The City shall encourage housing designs that offer improved energy or water-use efficiency or alternative forms of heating, in order to reduce municipal expenditures and lower costs to purchasers.

4.4.2 Urban Residential designation

The *urban residential* designation reflects the City's existing and planned lower scale residential neighbourhoods, as well as parks, schools and local institutions. They contain a full range of residential uses within lower-scale buildings. Physical changes to *urban residential* designations must be sensitive, gradual and generally 'fit' the existing and planned physical character. A key objective of this Plan is that new development respects and reinforces the general physical patterns in stable residential areas.

1. Permitted Uses

Urban residential designations apply to physically stable areas made up of low-density housing types, such as single and semi-detached dwellings, group homes, duplexes, triplexes and townhouses, including building conversions to such uses.

Parks, minor institutions, home occupations, bed and breakfasts, cultural and recreational facilities, and small-scale retail, service and office uses are also provided for in the *urban residential* designation.

2. Urban Residential Development Criteria

Development in the *urban residential* designation shall respect and reinforce the existing and/or planned physical character of the neighbourhood, including in particular:

a) patterns of streets, blocks and lanes, parks and public building sites;
b) size and configuration of lots;
c) prevailing building type(s);
d) height, massing, and scale of nearby residential properties;
e) setbacks of buildings from the street or streets;
f) prevailing patterns of rear and side yard setbacks and landscaped open space;
g) continuation of special landscape or built-form features that contribute to the unique character of a neighbourhood; and
h) conservation of heritage buildings, structures and landscapes.

No changes shall be made through rezoning, minor variance, consent or any other public action that do not reinforce and respect the prevailing physical character of the neighbouhood.

3. Large Sites and Redevelopment Opportunities

The redevelopment of lands to create higher residential densities or to remove existing obsolete uses will be encouraged within the *urban residential* designation provided that such redevelopment is compatible with the existing physical character and pattern of surrounding development. Infill residential development on properties that vary from the local pattern in terms of lot size, configuration and/or orientation in established *urban residential* shall:

a) have heights, massing and scale appropriate for the site that are compatible with those permitted by the zoning for adjacent and nearby residential properties;
b) front onto existing or newly created public streets wherever possible, with no gates limiting public access;
c) provide adequate privacy, sunlight and sky views for residents of new and existing buildings by ensuring adequate distance and separation between building walkways and using landscaping, planting and fencing to enhance privacy where needed;
d) provide on-site parking and recreational amenities; and
e) locate or screen service areas, mechanical equipment and garbage storage to minimize the impact on new and existing streets and residents.

4. Existing Apartment Buildings

Apartment buildings legally constructed prior to the approval date of this Official Plan are permitted in *urban residential* designation.

5. Zoning By-laws

It is the intent of this Plan to protect *stable residential areas* in the implementing Zoning By-law through the establishment of zoning categories that recognize established and planned land uses, land use patterns and development standards. Zoning by-laws shall contain numerical site standards for matters such as building type and height, density, lot sizes, lot depths, lot frontages, parking, building setbacks from lot lines, landscaped open space and any other performance standard to ensure that new development is consistent with the physical character of established or planned residential neighbourhoods.

Non-Residential Development

6. Minor Institutions

Minor institutions are permitted in the *urban residential* designation and include such uses as: schools, places of worship, community centres, libraries, day nurseries, private home daycare facilities, utility and telecommunication installations, and private services and facilities operated by local, provincial and federal governments.

Minor institutions shall incorporate open space and landscaping, and be designed and operated to limit noise, offer privacy, and limit traffic impacts on neighbouring streets and properties.

7. Home Occupations

A home occupation is defined as a business activity (full or part-time) carried out by a person in his or her own residence. Home occupations may be permitted in the *urban residential* designation. To ensure that home occupations do not result in conflict with residential uses or the physical character of the neighbourhood, such home occupations will be encouraged to locate in other appropriate non-residential or mixed use areas.

A home occupation will be clearly secondary to the residential use and must be contained entirely within the residential unit. A limited amount of space may be used within accessory buildings. Outdoor storage associated with a home occupation shall not be permitted.

Home occupations will be regulated by the Zoning By-Law.

8. Bed and Breakfast Establishments

Bed and Breakfast Establishments are private homes in which the owner makes temporary accommodation available for a fee to the traveling public (usually tourists) in their own homes. Generally, the impact is similar to that which occurs when a homeowner has houseguests. However, regulation is required to ensure that a successful Bed and Breakfast Establishment does not evolve into a restaurant or hotel.

Bed and Breakfast uses will be subject to the following policies:

a) Bed and Breakfast Establishments must be operated only by persons permanently residing in the dwelling;
b) only temporary, short term accommodation to the general public will be provided;
c) a minimum separation distance of 100 metres shall be maintained between existing and/or proposed bed and breakfast uses, fronting on the same street;
d) no external alterations to the dwelling shall be permitted to accommodate the bed and breakfast use;
e) the establishment must have minimal noise, parking or other adverse impacts upon adjacent or nearby residents;
f) construction or conversion of buildings accessory to the dwelling to accommodate guests will not be permitted; and
g) bed and breakfast establishments shall be regulated by the Zoning By-law.

9. Local Commercial Uses

Small-scale retail, service and office uses that serve the needs of surrounding residents are permitted on properties in the *urban residential* designation that legally contained such uses prior to the approval date of this Official Plan.

New small-scale local commercial uses that are incidental to and supportive of *stable residential areas* may be permitted through an amendment to the Zoning By-law on properties which front onto a major street shown on **Map 4**, with the exception of portions of streets which have reversed lot frontages. Permitted uses include small scale retail stores, laundromats, small-scale restaurants, personal service uses and small scale general offices, but shall not include medical offices.

To maintain the residential amenity of *stable residential areas*, new small-scale retail, service and office uses shall:

a) be permitted only through a process of replacement of an existing local commercial use, or infilling between two existing local commercial uses which are not more than 30 metres apart;
b) serve the needs of area residents and potentially reduce automobile trips;
c) have a physical form which is residential in nature, maintaining the scale, density and character of existing land uses;
d) provide adequate buffering and transition to protect impacts on surrounding properties and residents; and
e) have minimal noise, parking or other adverse impacts on adjacent or nearby residents.

10. Neighbourhood Parks

Neighbourhood parks will generally consist of recreational facilities at the neighbourhood level and natural and recreational areas that serve individual neighbourhoods within a community. More specifically, neighbourhood parks will:

a) be centrally located within *urban residential* areas;
b) be accessible to pedestrians;
c) provide opportunities for recreational activities and for passive enjoyment of the environment;
e) be located in conjunction with an elementary school, where appropriate and feasible; and
f) be generally located on a Collector or Local Road on **Map 4**, wherever feasible.

4.4.3 Suburban Residential designation

Suburban residential designations generally reflect historic cottage development along Lake Huron. During the 1970s and 1980s, this area was largely redeveloped with permanent dwellings. The area has not been serviced by the municipal sewage system. The area is characterized by large lot patterns that provide the minimum size needed to accommodate individual on-site sewage treatment systems.

1. Permitted Uses

The s*uburban residential* designation represents low-density detached residential development for which a piped municipal water supply is available but not sanitary sewers. Minor institutions, home occupations, bed and breakfast establishments and

neighbourhood parks are also permitted, subject to the development criteria identified in Section 4.4.2.

Non-residential uses are intended to be ancillary to the predominantly low-density residential character of the *suburban residential* designation and primarily serve the day-to-day needs of the local population.

Existing small-scale retail, service and office uses are permitted on properties that legally contained such uses prior to the approval date of this Official Plan.

2. Servicing

All existing suburban residential development shall be connected to a piped municipal water supply, and new *suburban residential* development shall not be considered until a piped municipal water supply is available. The City shall reserve municipal sanitary sewage treatment capacity for the *suburban residential* designation, with municipal sanitary sewers to be provided as opportunities arise.

Prior to municipal sanitary sewers being provided, sewage disposal may be handled by individual sewage treatment systems. Proponents of new development in the *suburban residential* designation must obtain approval from the County of Lambton for any proposed sewage disposal system before the City can issue a building permit or final approval of a severance or plan of subdivision.

Applications for any development proposed for which individual on-site sewage treatment systems are planned must be supported by studies that include, as a minimum, evaluations of soil percolation rates, and likely impacts on ground water resources, ground water mounding and adjacent watercourses. Reserve areas for replacement septic systems will be required for such development.

3. Development Criteria

The *suburban residential* designation is not intended to be a location of significant development. However, infill development that is compatible in terms of size and character with existing surrounding development may be permitted to create a compact, coherent land use pattern. The continuity and completion of the local road system shall be encouraged. Any development that is permitted shall:

a) meet the development criteria set out in Section 4.4.2(2) for the *urban residential* designation;
b) provide a minimum lot area for all new development of 1,850 square metres; and
c) have frontage and access onto an opened public road.

The continuity and completion of the local road system within the *suburban residential* designation shall be encouraged so as to create a compact, coherent land use pattern.

4.4.4 Apartment Residential designation

Rental and condominium apartment buildings are becoming increasingly important to meet the housing needs of current and future residents. Within the City, existing apartment buildings are generally clustered in areas already developed as apartment neighbourhoods. In the *apartment residential* designation, improving amenities, accommodating sensitive infill and improving quality of life are key considerations.

Residents in *apartment neighbourhoods* should have a high quality urban environment, safety, quality services and residential amenities.

Apartment neighbourhoods are distinguished from low-rise neighbourhoods because a greater scale of buildings is permitted and different scale-related criteria are needed to guide development.

1. Permitted Uses

Apartment residential designations permit apartment buildings and all other land uses permitted in the *urban residential* designation. Also permitted are parks, minor institutions, cultural and recreational facilities, and limited small-scale retail, service and office uses that serve the daily needs of neighbourhood residents.

2. Development Criteria

Development in *apartment residential* shall contribute to efficient development patterns that respect neighbourhood character and support quality of life. Proponents of such development shall:

a) ensure that development will not place a burden on the existing road system, or exceed the available capacity of water, storm, and sanitary treatment and distribution system services;
b) locate the development near major open space, commercial areas, and public transit routes;
c) locate and mass new buildings to frame the edge of streets and parks with good proportion and maintain sunlight and comfortable wind conditions for pedestrians using adjacent streets, parks and open spaces;
d) locate and mass new buildings to provide a transition between areas of different development intensity and scale by providing setbacks from, and/or stepping down heights toward, lower-scale *urban residential* designations;
e) locate and mass new buildings to adequately limit shadow impacts on properties in adjacent lower-scale *urban residential* designations, particularly during the spring and summer equinoxes;
f) include sufficient off-street motor vehicle and bicycle parking for residents and visitors;
g) locate and screen rooftop mechanical areas, service areas, ramps and garbage storage to minimize the impact on adjacent streets and residences;
h) provide indoor and outdoor amenity space for building residents in every significant multi-use residential development;
i) limit the height of the building to a level at which the City can provide adequate fire protection.
j) provide ground floor uses that enhance the safety, amenity and animation of adjacent streets and open spaces; and
k) conform to the principles of universal design in the development, and where possible, include units that are accessible or adaptable for persons with disabilities.

Non-residential uses are permitted in accordance with Section 4.4.2(6-10).

4.4.5 Private Residential designation

The p*rivate residential* designation applies to communities of park model trailers, mobile homes and land-lease community homes.

Private Residential Definitions

Private Residential Community shall mean a parcel of land containing two or more residential community lots that is under single management or ownership.

Private Residential Community Lot means a parcel of land within a private residential community fronting on a private street that is intended for occupancy by either one park model trailer, one mobile home or a land-lease community home.

Land Lease Community Home means any single detached dwelling (other than a mobile home) that is a permanent building for which the owner of the dwelling leases the land used or intended for use as the site for the dwelling.

1. Private Residential Policies

It is the intent of this Plan to ensure that *private residential* communities are developed to adequate standards as determined by the City, are properly maintained, and that contribute positively to the character and amenities of the City. Therefore, private residential developments shall be permitted only if they meet the following requirements:

a) each park model trailer, mobile home and land lease community home within the *private residential community* is connected with municipal water supply, municipal sewage disposal, stormwater management, electricity, street lighting, telephone, fuel supply and access road(s) and all services have been approved by the appropriate authority;
b) all services such as fuel supply, electricity, telephone, water and sewer connection and television cables are located underground;
c) each *private residential* lot is located on a private internal paved access road approved by the City of Sarnia; and
d) each *private residential* lot includes at least one off-street parking space.

For the purposes of all standards and policies in this Plan concerning services and community facilities, proposals for *private residential* development will be considered on the same basis as plans of subdivision and may be subject to corresponding requirements.

4.4.6 Institutional designation

The *institutional* designation is intended to provide sufficient lands for large-scale institutional and educational facilities that serve the entire city or region. Lands designated institutional include, but are not limited to, the Court House lands, Bluewater Health Centre, long-term care facilities, Huron Home for Boys, Lambton College and secondary schools.

1. Permitted Uses

Uses permitted in the *institutional* designation may include government and cultural facilities, health care facilities with ancillary uses, and educational facilities including universities, colleges and secondary schools.

Secondary uses permitted within the *institutional* designation include only pharmacies and medical offices, and ancillary residential and office facilities serving the institutions.

Within the *institutional* designation, a broad mix of housing types is permitted in locations that do not undermine large-format institutional and educational facilities. Residential uses should be located in medium- and high-density buildings. New low-density residential uses are not permitted. Appropriate locations will be established by the Zoning By-law.

2. Development Criteria

The following criteria shall apply to development proposed within the *institutional* designation, or in new areas proposed for designation as *institutional*:

a) development shall be located to minimize any potential conflict between these uses and adjacent land uses particularly residential uses, and shall be located on a site with sufficient land to provide for adequate buffering, landscaping, drop-off and parking, and associated facilities;
b) joint planning for and the joint use of facilities provided by different public agencies shall be encouraged with particular emphasis on community and educational facilities;
c) the site shall be located on and accessed from an arterial or a collector roadway;
d) the site shall have access to public transit and pedestrian linkages in proximity; and
e) the site shall be strategically located in relation to the population served.

Residential uses shall be assessed in accordance with section 4.4.4(2).

3. Local Institutional Uses within Residential and Other Areas

Local institutional uses are permitted within other land use designations as indicated and implemented through the policies of this Plan. Local institutional uses in residential areas shall be compatible with adjacent land uses and conform to Section 5.2(6) of this Plan.

4.5 PARKS AND OPEN SPACES

Public recreational space and facilities support the social well-being of existing and future residents of City residents. The City of Sarnia encourages opportunities for the continued maintenance, improvement and creation of public parks and recreational facilities and will work with local service clubs, school boards, and private citizens to improve and expand the park system.

Parks and open spaces include parkland and open space that is regional and city-wide in purpose. Public agencies and citizens are encouraged to support the protection, enhancement and restoration of links within and between *parks and open spaces* and the *natural heritage system*.

4.5.1 General Policies

1. Parks and Open Spaces Objectives

It is a goal of this Plan to provide a range of passive and active recreational activities for all ages, to preserve and enhance the natural features of the City's environment and to ensure that active recreational uses and passive conservation activities are in balance with the natural environment. In support of these goals, the City shall:

a) ensure interconnected open space network that links neighbourhoods, supports active transportation, and protects the natural heritage system;
b) develop and maintain a balanced distribution of parks, recreational facilities, and open spaces that are accessible and safe;

c) develop a hierarchy of parks and establish specific guidelines for each type;
d) promote parkland and open space naturalization where appropriate;
e) provide parks, trails and leisure facilities that are attractive, multi-purpose and multi-season, and that appeal to all ages and skill levels in order to attract and retain residents, especially young adults and families; and
f) capitalize on the City's parks and open space system to promote tourism and community collaboration.

All established parks and open spaces within the City should be assessed regularly to ensure that accessible parks and recreational facilities correspond with the recreational demands of local residents. The City shall maintain a *Parks and Recreation Master Plan* to provide guidance to Council in its decisions regarding parks and recreational facilities.

Maintaining, enhancing, and improving the system requires the following actions:
a) maintaining and improving existing parks, and adding new parks and amenities where necessary;
b) designing high-quality parks and their amenities to promote user comfort, safety, accessibility and year-round use and to enhance the experience of "place";
c) providing experiential and education opportunities so that residents and visitors can interact with the natural world;
d) protecting access to existing publicly accessible open spaces including public beaches, as well as expanding the open space system and developing new linkages; and
e) promoting and using private open space and recreation facilities, including areas suitable for community or allotment gardening, to supplement the City's parks, facilities and amenities.

Public access to the Lake Huron shoreline is identified on **Map 5**. Public access will be maintained and improved where possible.

2. Parks and Open Spaces Land Use Designations

The City's parks and open spaces consists of two land use designations that distinguish areas based on public and private ownership: the *parks* designation includes areas that provide public parkland and associated facilities, and the *open space* designation includes lands in private ownership that provide recreational opportunities in addition to the *parks* lands.

3. Parks and Open Space Concept

The City of Sarnia promotes the concept of developing a continuous open space system along the St. Clair River and Lake Huron waterfronts to link major park areas, inland watercourses and open municipal drains. This system will allow for the development of passive recreation areas and activities such as cycling, walking, bird watching and jogging. The City shall promote the use of bicycle and pedestrian corridors in the interests of residents' health and recreation and of environmental protection and energy conservation.

The acquisition of lakefront and riverfront property for public purposes is an objective of this Plan. The City will seek the co-operation of the St. Clair Region Conservation Authority and appropriate City Council committees in the acquisition and development of

waterfront parkland. These properties shall be in locations that make a significant contribution to the City's open space network.

Transportation or utility corridors that are no longer required for original purposes should be incorporated into the municipal open space system where appropriate. The City will facilitate the co-operation and participation of public service groups and private citizens in developing such corridors as open space linkages. Consideration will be given to the potential for improving linkages to the City's open space system and those of neighbouring municipalities.

4. Canatara Park

Canatara Park is the largest and most diverse of the *parks and open spaces* in the City. With an area of approximately 75 hectares, Canatara Park is characterized by a variety of landscapes: some are in a natural state and others have been altered to accommodate public recreational and educational activities. It is a policy of this Plan that the future enhancement and development of Canatara Park shall be guided by the area-specific *Canatara Park Master Plan*.

The *Canatara Park Master Plan* identifies many environmentally sensitive areas that support locally unique plant communities and wildlife habitat such as various types of woodlands, wetlands and grasslands. It is a policy of this Official Plan that the environmentally sensitive areas in the park shall be protected, restored and improved.

5. Partnerships

This Plan encourages the development of public-private agreements between the City and other organizations, such as public service clubs or school boards, for the increased use of space and facilities such as open space, gymnasiums or buildings, to serve the needs of Sarnia’s residents.

4.5.2 St. Clair River Waterfront

The St. Clair River waterfront is dominated by a regionally significant *parks and open space* area that is highly valued by city residents. This parkland is complemented by international and recreational transportation facilities that provide water-based access to the Great Lakes system and beyond. This Plan seeks to improve these assets through their protection, maintenance and enhancement.

The enhancement and development of the St. Clair River waterfront shall be guided by the area-specific *Waterfront Master Plan*. No City-owned land will be disposed of in these areas and Council will acquire privately owned lands on the waterfront where appropriate and feasible.

1. Public Open Space on the St. Clair River Waterfront

The St. Clair River waterfront shall be developed and maintained primarily as a public open space system. This Plan supports a broad range of active and passive recreational and cultural uses, and restricted commercial uses that serve the public open space function. Residential uses are prohibited in this area.

2. Public Facilities in the St. Clair River Waterfront

Public parks and open space areas shall include a range of water and land based facilities that accommodate both active and passive recreational pursuits and appeal to all age groups. A range of recreational facilities are permitted, including conservation, athletic fields, playgrounds and community gardens.

To the extent possible, recreational facilities in this area will be appropriate to its waterfront location and will provide opportunities that are not available elsewhere in the community.

Such facilities may include performance venues, community centres, and educational or heritage exhibits on matters of local importance such as the petro-chemical industries and the uses of the Great Lakes. These facilities shall maintain washrooms for use by the general public.

3. Natural Heritage System in the St. Clair River Waterfront

The St. Clair River waterfront is entirely within the *natural heritage system* and shall be developed in conjunction with Section 4.3.2 of this Plan. The protection and enhancement of wildlife habitat is a priority of the City. The City will ensure that development along the St. Clair River waterfront will maintain and improve, wherever feasible, the natural environment of the area.

4. Amenity and Design in the St. Clair River Waterfront

A continuous public walkway at or near the water's edge shall be maintained. The walkway will be primarily designed for passive activities such as walking, sitting, viewing, fishing, etc. Where feasible, portions of the walkway may incorporate a bicycle path. Where suitable, parking areas, rights-of-way, or scenic easements will be established to provide pedestrian or visual access to the waterfront.

The landscape design of parks and open space areas shall be conducive to the creation of a common identity for the waterfront. The architecture of buildings on the waterfront should reflect a common theme and elements such as benches, railings, lighting fixtures, walkways and signs should have a uniform design.

Landscaping and signage upgrades of entry points to the St. Clair River waterfront are encouraged. Public parking shall be provided close to these access points.

5. Supportive Commercial Uses in the St. Clair River Waterfront

The general amenity and tourist potential of the St. Clair River waterfront may be enhanced through the limited development of water-related recreational, commercial and entertainment facilities. The location and design of such supportive facilities along the waterfront shall not interfere with the development of a continuous public walkway at or near the water's edge, and shall ensure that the enjoyment of the area by public park users, marine users and local residents is respected. Facilities shall be distributed to provide an adequate separation of activity-generating uses from passive recreational areas to minimize problems of incompatibility.

Among the uses that may be considered, subject to appropriate design and the availability of support services, are restaurants, a theme park, pioneer village, a hotel, a

microbrewery, boutiques, eco-industrial uses, board sailing and scuba diving schools, marine outfitters and tour boat operators.

The leasing of waterfront lands for commercial ventures may be permitted when the proposed use is compatible with the objectives for *parks and open spaces* and if the proposed use:

a) supports the major public open space function;
b) serves the interests or needs of people attracted to the waterfront;
c) requires or benefits significantly from a waterfront location;
d) does not detract from the usability of adjacent open space areas or the quality of the recreational experience that these open spaces provide; and
e) does not create or contribute to water quality problems in Sarnia Bay or the St. Clair River.

6. The Port of Sarnia

The Port of Sarnia on the St. Clair River waterfront is recognized as a significant transportation hub accessible by freighters that provides important water access to international markets for the City and surrounding region.

The docking of ships, related repair activities, and the terminal grain elevator operation are permitted within the Port, as are associated water-related uses such as warehousing, storage and shipment of goods and products. The Port is designated *heavy industrial* on **Map 7**. Supporting road and rail systems will be protected, maintained and improved in support of marine activities over the long term.

The berthing of ships for servicing and repair along the St. Clair River may be permitted provided that such use does not prevent the provision of a public walkway at or near the water's edge and does not detract from surrounding existing or proposed recreation or open space. To the extent possible, permanent on-shore dock installations shall be minimized and shall be located and designed to avoid view obstructions or other adverse impacts on the waterfront area.

7. Recreational Docking Facilities

Docking facilities for transient pleasure boats, display ships and tour boats are permitted along the shoreline of the St. Clair River waterfront. The City supports the development of public docking and mooring facilities, and boat ramps for pleasure crafts along the City's waterfront, in accordance with the policies of this Plan.

4.5.3 Parks designation

Lands designated as *parks* include *community parks*, *city-wide parks* and *regional parks*. Permitted uses within *parks* include public open space uses. However additional uses such as land, water, forest and habitat conservation; stormwater detention areas; and ancillary structures or buildings, are permitted.

Secondary public uses, including any ancillary buildings or structures that are clearly secondary to the public open space, use may be permitted, such as:

a) golf courses including driving ranges and putting greens;
b) public campgrounds;
c) non-commercial gardens including urban agriculture and nurseries;

d) botanical gardens;
e) zoological parks;
f) swimming pools, skating rinks and other recreational structures;
g) public emergency facilities such as police, fire and ambulance stations; and
h) ancillary retail commercial uses and parking facilities provided that such uses do not inhibit the operation of the primary use.

1. Public Park Types

The City's public parkland system is organized into two primary categories: *local parkland* is intended to serve communities within a reasonable walking distance, and *citywide parkland* is intended to serve residents from across the City and greater region. These broad categories can be further subdivided into four park types as follows:

A ***Neighbourhood Park*** is a local park, parkette or open space that provides residents living within its general vicinity an opportunity to engage in passive, unorganized, unstructured recreation and leisure activities. Neighbourhood Parks shall be designed to enhance the visual and natural quality of the surrounding neighbourhood. Neighbourhood Parks are permitted uses in all designations and therefore are not generally included within the *parks* designation.

A ***Community Park*** is a park or open space that provides residents of more than one neighbourhood with opportunities to engage in a variety of passive or non-organized active recreation and leisure activities. Community Parks are a focal point for several surrounding neighbourhoods and create opportunities for civic engagement.

A ***City-Wide Park*** is a park or open space that provides all individuals, family types, and communities living within the City with opportunities to engage in passive or active organized recreation. These parks should integrate standardized sporting facilities.

A ***Regional Park*** is a large park or open space that serves a function greater than that of the community or City. A Regional Park provides local citizens, city residents, and regional tourists with opportunities to engage in passive and/or active recreation. Regional Parks should incorporate environmental features including shorelines, wooded areas, and wetlands as applicable.

2. Development in Parks

Development is generally prohibited within the *parks* designation except for recreational, cultural and emergency facilities as identified above, conservation projects, public transit, and essential public works and utilities where supported by an appropriate assessment.

Any development provided for in the *parks* designation shall:
a) protect, enhance or restore trees, vegetation, and other natural heritage features;
b) be consistent with the planned park function established in Section 4.5.3(1);
c) preserve or improve public visibility and access, except where access will damage sensitive natural heritage features or areas;
d) maintain, and where possible, create linkages between *parks* and surrounding areas to create continuous recreational corridors;
e) maintain or expand the size and improve the usability of publicly owned *parks* spaces for public park, recreational and cultural purposes;
f) respect the physical form, design, character, and function of *parks*; and

g) provide comfortable and safe conditions for park users.

3. Parkland Dedication

As a condition of residential development or redevelopment, conveyance of land to the City for park purposes will be required at a rate of 5% of the land proposed for development or one hectare for each 300 dwelling units proposed or, cash-in-lieu of land. As a condition of industrial and commercial development or redevelopment, the conveyance of land to the City for park purposes shall be required at a rate of 2% of the land proposed for the development to the City for park purposes, or cash-in-lieu of land.

Cash-in-lieu of dedicated parkland will be based on the appraised value of any lands required to be conveyed for park purposes with the appropriate provisions of the *Planning Act*. Cash-in-lieu will be accepted, for example, when there is no deficiency in parkland based on parkland density standards, or the parcel proposed is not appropriate for parkland.

Combinations of cash-in-lieu and parkland dedication may be accepted in some instances. For example, it may be accepted when partial dedication would achieve the desired parkland standard for the area or where private recreational facilities are being constructed.

The City will generally not accept lands that are required for drainage purposes, natural hazards susceptible to flooding and erosion, connecting walkways, and other lands unsuitable for development as part of the minimum parkland conveyance. At its discretion, the City may accept some lands that contribute to trail and linear linkages between existing parks in the system and along roadways as part of the dedication. Additional lands may be acquired through developer donations, purchase from the developer or through the use of the height and/or density incentive provisions of this Plan. All lands conveyed to the City will be in a physical condition satisfactory to the City.

Dedicated lands should take advantage of favourable topography, vistas and mature stands of trees.

4. New Parks and Open Spaces

New parks and open spaces, including school yards, should maintain wide frontages onto streets for good visibility, access and safety, and be located and designed to:

a) connect and extend, wherever possible, to existing parks, natural areas, and other open spaces such as school yards and public beaches;
b) provide a comfortable setting for community events as well as for individual use;
c) provide appropriate space and layout for recreational activities, including forms of productive recreation such as community gardening;
d) emphasize and improve unique aspects of the community’s natural and human-made heritage; and
e) direct human activities away from sensitive natural features.

Where municipal parkland is obtained adjacent to a school site, such parkland shall be of a location, size and configuration to ensure the parkland can function independently should the school site not be developed.

5. Disposal of Parkland

The City shall not dispose of any *community park*, *city-wide park* or *regional park.* Any disposal of all or part of a *neighbourhood park* or any redesignation of a *neighbourhood park* to another use shall be consistent with Section 4.5.4(1).

4.5.4 Open Space designation

Lands designated *open space* include private open spaces, golf courses, cemeteries, and other specialized uses and facilities that provide land and locations for recreational opportunities and physical linkages that enhance the community and neighbourhood character within the City.

Any permitted uses and development within the *open space* designation shall be in accordance with Section 4.5.3.

1. Disposal of Open Space

This Plan does not intend that land within the *open space* designation that is under private ownership shall necessarily remain as *open space* indefinitely, nor that such land is free and open to the general public, nor that the land will be purchased by the City or any other public agency.

Applications for redesignation to another use of all or part of an existing *open space* designation may be permitted by the City after considering the following:

a) the existence of any significant or unique natural features and/or environmentally sensitive areas;
b) the proposed methods by which such features or areas would be handled in a manner consistent with accepted engineering practice and environmental management methods;
c) the concerns of the St. Clair Region Conservation Authority, appropriate City Council Committees, and the Province; and
d) the other policies of this Plan related to parks and open space.

4.6 MAINSTREETS AND COMMERCIAL AREAS

The City maintains existing and planned mixed-use and commercial areas of varying forms and functions. Each of these *mainstreets and commercial areas* is different in terms of its character, potential to grow, and scale. Some reflect historic main streets, while others represent short- and medium-term opportunities for consolidation, intensification and redevelopment.

While these areas are expected to retain a commercial character, this Plan supports housing in locations that do not undermine large-scale retail opportunities. Renewal and regeneration of *mainstreets and commercial areas* is encouraged in a manner that introduces strategic mixed-use flexibility and improves integration with surrounding neighbourhoods. Institutional and social service uses that serve surrounding neighbourhoods are also provided for in these areas.

Context-sensitive development is a key aspect of ensuring appropriate growth. Respecting adjacent stable areas, improving the public realm, providing adequate parking and maintaining commercial functions at street level are essential aspects of ensuring that *mainstreets and commercial areas* are renewed, vibrant and accessible. It is anticipated that automobile traffic

will remain important; however it is the intent of this Plan to develop *mainstreets and commercial areas* in a manner that will support transit and active transportation over the long term.

4.6.1 General Policies

1. Mainstreets and Commercial Area Objectives

Mainstreets and commercial areas are shown as *downtown*, *centres*, *corridors* and *commercial hubs* on **Map 1**. It is the intent of this Plan to:

a) provide for a functional mix, balanced representation, and hierarchical organization of mixed-use and commercial uses and activities within the City;
b) promote a strong *downtown* focus with continuous renewal and regeneration of existing *mainstreets and commercial areas*;
c) prioritize the *downtown* and *centres* as the primary locations for comparison and specialty retail activity in the City;
d) allow for the concentration and mix of uses, including residential, institutional, retail, office and community services, in appropriate locations in *mainstreets and commercial areas*;
e) establish linkage policies that connect mixed-use and commercial development with other elements of the city structure and with adjacent land uses, supporting infrastructure and services, while ensuring convenient access to all modes of transportation;
f) facilitate development and redevelopment in a manner that limits negative impacts on adjacent sensitive uses; and
g) ensure that *mainstreets and commercial areas* function as locations for social interaction.

Where a portion of a *downtown*, *centre*, *corridor* or *commercial hub* on **Map 1** is designated *urban residential*, *suburban residential*, *apartment residential*, *private residential*, *recreational residential*, *institutional*, *parks* or *open space* on **Map 7**, the land use designation policies prevail to ensure that any new development reinforces the general physical character of established or planned neighbourhoods, and that parks and open spaces are protected and enhanced.

2. Mainstreet and Commercial Areas Land Use Designations

Given the basic differences in the types and general functions of *mainstreets and commercial areas* and the need to establish different policies for their development, four land use designations are included as follows: *downtown*, *commercial centre*, *mixed use* and *highway commercial*.

3. Transportation within Mainstreets and Commercial Areas

Automobile access will continue to be the primary mode of transportation into *mainstreets and commercial areas*, but such access must be balanced with the need to support the use of transit and active forms of transportation through public realm improvements. *Mainstreets and commercial areas* shall therefore be designed to accommodate increasing numbers of residents, visitors and employees arriving by a range of transportation modes.

All *mainstreets and commercial areas* shall be served by regular, reliable, accessible transit service. This Plan supports an off-street regional transit terminal. The *downtown*

and each *centre* designation shall also contain a transit terminal that services a large portion of the *urban area*.

4. Area Studies for Mainstreets and Commercial Areas

Council will consider preparing Area Studies for each *mainstreet and commercial area* to guide reurbanization within these strategic *growth areas*. Each plan would engage local residents, businesses, Sarnia Transit, and other stakeholders, and identify:

a) investments in community improvements by public agencies that are needed to support city living and make the area attractive for residents and businesses including:
   i) streetscape improvements;
   ii) transportation improvements such as roadways, parking areas, transit priority measures, bikeways and walkways;
   iii) parks and open spaces, community and rooftop gardens, and community services and facilities; and
   iv) upgraded water, sewer, and stormwater infrastructure.
b) contextually appropriate as-of-right zoning and other regulations designed to achieve high quality development in *mainstreets and commercial areas* that establish:
   i) permitted uses, densities, and minimum and maximum building heights;
   ii) appropriate massing, scale, siting and organization of buildings;
   iii) appropriate scale and transitions to adjacent areas; and
   iv) restrictions on parking at-grade and driveways in front of buildings.
c) transit-supportive measures such as:
   i) minimum development densities; and
   ii) maximum and minimum parking standards.

Any implementing planning instrument shall establish guidelines for any warranted retail development and shall provide specific direction for the implementation of appropriate limitations on the size, type and phasing of development and/or particular retail uses.

5. Restricted Uses within Mainstreets and Commercial Areas

Uses that have the potential to generate activities that would be disruptive to residential areas, or that would hinder intensification and redevelopment, such as automobile repair shops, service stations and drive-through restaurants may be prohibited from locating in certain areas by the Zoning By-law, or required to provide adequate buffering to minimize the impact of the particular use on the surrounding area.

4.6.2 Downtown designation

This Plan recognizes Sarnia's *downtown* as the highest-priority *growth area* in the City of Sarnia and the County of Lambton. It is a diverse and unique area that provides a range of uses that allow for access to housing, jobs, services and recreation in proximity to each other. In support of the *downtown*, this Plan:

a) promotes the *downtown* as the primary commercial, office, business, cultural, entertainment and administrative centre within the County and City;
b) reinforces the *downtown* as a vibrant area offering a full, balanced and diversified range of land uses, including residential;
c) maintains and improves the unique sense of place and human scale derived from the heritage streetscapes and pedestrian-oriented characteristics of the *downtown*;
d) supports and encourages the development of services, facilities and strong economic linkages to support the tourism sector; and

e) recognizes the *downtown* and *St. Clair River waterfront* as interdependent areas and supports their connectivity, integration and renewal.

The *downtown* designation is intended to support major concentrations of commerce, finance, tourist, recreation, residential and business activities. This Plan supports the continued revitalization of the *downtown* as the region's most significant social, cultural and entertainment centre. Accommodating change, while preserving its scale and character, will be essential in ensuring the area remains a city-wide and regionally significant element of the *city structure*.

1. Downtown as an Employment Centre

The *downtown* is the County-wide hub of several federal, provincial and County of Lambton offices, as well as the location of Sarnia's City Hall. This Plan directs service providers and major institutions to the *downtown* because of its role in the *city structure*, its transit connectivity and its diversity of uses.

The *downtown* is a major employment centre that provides a range of job opportunities. This Plan directs major business, professional and government offices to the *downtown* and promotes the development of office buildings, hotels, convention facilities, cultural uses and government buildings in the *downtown*. A full range of office uses are encouraged to locate within the *downtown*, particularly larger office buildings and medical/dental offices.

2. Commercial Establishments and Services within the Downtown

Within the *downtown*, a full and diversified range of land uses are permitted: all forms of retailing (including department stores and shopping centres), wholesaling, hotels, motels, convention facilities, hospitality and tourism services, recreation and entertainment facilities, personal services, community facilities and parking structures.

Together with *centres*, the *downtown* shall serve the comparison and specialty shopping needs of the City and County, and provide daily and weekly convenience shopping facilities for surrounding communities and neighbourhoods. Renewed investment is encouraged to support the retention and development of retail, personal service, office, entertainment, tourism and specialty shopping activities to meet local, regional and tourist needs.

3. Downtown Residential Community

Residential uses that support and reinforce the community focus of the area are encouraged in the *downtown* designation to help fulfill its function as a vibrant, mixed-use area with a large and diverse population. A range of housing types, including affordable and supportive housing, shall be encouraged.

The predominant form of new housing in the *downtown* designation shall be located in high- and medium-density mixed use buildings with commercial (and to a lesser extent, office) space at street level and residential units in the upper storeys. Specialized residential uses such as senior citizens apartments are also permitted.

The residential conversion or renovation of the upper floors of vacant or underused commercial buildings is supported; however commercial and office uses must be maintained at-grade.

4. Downtown as Cultural District

The Sarnia Library, the County of Lambton Art Gallery, and the Lawrence House are major public cultural facilities in the *downtown* that together with entertainment facilities, specialty industries and artisans form a regionally significant cultural cluster. This Plan promotes the continued development of the *downtown* as a regional centre for cultural industries, cultural tourism, and cultural investment.

5. Downtown Cultural Heritage

The *downtown* maintains a unique sense of place and human scale derived from its historic role, its streetscapes and its pedestrian-supportive characteristics. These attributes shall be revitalized and strengthened over the long term through the protection of cultural heritage resources. The City shall identify specific heritage attributes in the *downtown* in accordance with the *Ontario Heritage Act*; these include architectural features, buildings, spaces and landscapes based on their cultural value. Cultural heritage resources shall be conserved over the long-term in accordance with Section 6.5 of this Plan.

6. Building Design in the Downtown

Any development, redevelopment, infilling or conversion proposals in the *downtown* designation are subject to Section 4.6.4(4) and the following criteria:

a) the design of any new building or alteration shall respect the scale, form and massing of the surrounding area, the architectural and heritage character of the surrounding area, and maintain the cohesive impression of the *downtown*;
b) multiple-floor buildings should step back the upper floors to avoid overshadowing the street and to maintain a consistent streetscape and pedestrian scale;
c) wherever feasible, existing buildings shall be conserved; and
d) that renovations, additions and conversions that revitalize existing buildings and extend their functional life shall be encouraged.

Maximum and minimum height limits, including step backs, will be set out in the Zoning By-law.

The primary consideration in dealing with the height of development in the *downtown* designation is the precedent that could be set for the form, scale and massing of future developments, and the impact such developments can have on existing streetscapes, and the lower-scale, lower-density development nearby. This Plan anticipates high-rise structures could occupy the western and central portions of the *downtown* designation with a limited detrimental impact on the surrounding areas, but building height should be stepped down in the southern and eastern parts of the *downtown* designation.

7. Downtown Open Space

The provision of public open space in the form of active and passive parks is recognized as an essential component of the *downtown* for the enjoyment of workers, residents and visitors to the City. Veterans (Victoria) Park and City Hall are valuable assets to be protected and managed over the long term through design that recognizes historical patterns and responds to community desires.

8. Downtown Laneways

This Plan recognizes the role and importance of public and private laneways, alleyways, and rights-of-way for such purposes as service, emergency and delivery access and pedestrian circulation in the *downtown*. The functional role of adjacent laneways, alleyways, and rights-of-way shall be integrated into the design of new developments, redevelopments, infill buildings or conversions.

9. Downtown Parking

Vehicle parking shall be provided within the *downtown* to serve the needs of employees, residents, customers, clients and visitors and shall increasingly be located in underground or above ground structures. Reduced parking requirements shall be considered to encourage a broader range of uses and densities and to support transit.

The following policies apply to parking in the *downtown*:

a) proposals for the development or redevelopment of or renovations to commercial properties shall not be required to include parking; however such development is encouraged to provide parking areas, parking structures or parking decks as part of any proposal;
b) parking shall be required in conjunction with new residential development and redevelopments, but not for the conversion of the upper floors of vacant existing commercial buildings;
c) medium- or high-density mixed-use developments are to provide on-site underground parking areas or parking structures as part of any proposal; and
d) where appropriate, commercial uses and a complementary parking structure open for public use should be combined in a single development.

Along *downtown* streets, no parking area shall be located between the front wall of a building and the street line; buildings shall be located with storefronts and other active uses opening onto, and integrated with, the public realm.

10. Integration of Downtown with Surrounding Communities

This Plan aims to strengthen the relationships between the *downtown* and adjacent areas and improve accessibility for residents and visitors. Public access to the St. Clair River waterfront shall be maintained at street-ends, from public lands and public open space areas, and along the water's edge to improve accessibility for residents of the area, visitors, tourists, recreational users, marine users, and the general public. Any new development west of Front Street shall be integrated both visually and by pedestrian linkages with the public open space system along the St. Clair River waterfront.

West of Front Street, the orientation, spacing and location of new buildings shall maintain views to the St. Clair River. New development shall be orientated and designed to ensure structures do not entirely block views of the St. Clair River and Sarnia Bay from in-shore areas and shoreline locations. Areas around buildings located adjacent to the St. Clair River *waterfront* shall be maintained in association with open space areas.

11. Special Initiatives in the Downtown

In support of the continued regeneration of the *downtown*, Council may from time to time:

a) participate with senior governments and private enterprises to develop, redevelop, improve and revitalize the *downtown* including acquiring or disposing of land,

rehabilitating buildings, encouraging the private assembly of land, pooling land ownership and developing land;
b) carry out special studies and monitoring programs in the *downtown*;
c) develop and implement policies and programs to facilitate discussion, negotiations and agreements involving both public agencies and private enterprise with respect to matters relevant to the *downtown*;
d) carry out public works such as the creation of pedestrian linkages, improvements to sidewalks, the construction of parking garages or an off-street transit terminal, the development of streetscape themes and designs, the placement of street furniture and fixtures, and the landscaping of parking areas; and
e) support co-operative schemes to improve the general attractiveness of public and private properties, particularly the development of a downtown theme or projects that recognize the historical importance of the area and the need to integrate existing and new buildings both architecturally and aesthetically.

4.6.3 Commercial Centre designation

Lands designated as *commercial centre* reflect major concentrations of shopping facilities serving the City and broader regional community, as well as community shopping for surrounding communities and neighbourhoods. In support of the *centres*, this Plan:

a) prioritizes *centres* as the primary locations for comparison and specialty retail activity in the City, and provides for a range of convenience retail and service functions serving nearby communities and neighbourhoods;
b) encourages mixed-use development, in appropriate locations, that support a range of housing types in medium- and high-density buildings;
c) recognizes *centres* as local employment centres that provide a range of offices, personal services, and local institutions to surrounding communities; and
d) recognizes *centres* as important transit hubs in the City, and encourages active transportation through public realm improvements such as improved pedestrian and cycling routes.

1. Retail Uses in Commercial Centres

Retail commercial is recognized as the primary use within the *commercial centre* designation. Major commercial development shall be directed to the *commercial centre* designation in the form of retail stores, retail warehousing and services that serve the comparison and specialty shopping needs of residents across the regional market area. The *commercial centre* designation shall also serve the daily and weekly convenience shopping needs of residents in surrounding communities and neighbourhoods.

2. Employment in Commercial Centres

Retail commercial uses may be complemented by small-scale employment and minor institutional uses, including offices, medical clinics, personal services and public service providers.

3. Housing in Commercial Centres

Within the *commercial centre* designation, a broad mix of uses is permitted in locations that do not undermine large-format retail opportunities. Residential uses should include a range of housing types located in medium- and high-density buildings above commercial uses at street level. New low-density residential uses are not permitted.

The redevelopment of larger sites provides significant opportunities to transform the character of a *centre*. Major redevelopment proposals must be integrated with infrastructure and transportation systems and community service facilities.

Appropriate mixed use areas will be established by the Zoning By-law.

4. Commercial Centre Development Criteria

Within the *commercial centre* designation, commercial development shall comply with section 4.6.4(4) and the following criteria:

a) provide primarily a retail and/or service commercial function;
b) not adversely affect the function and amenity of the area for businesses and residents, and the economic health of city-wide and nearby shopping districts;
c) ensure sufficient transportation capacity and transit connectivity is available to accommodate the additional traffic generated by the development, resulting in an acceptable volume of traffic on adjacent and nearby streets; and
d) review opportunities for parking structures to provide for the efficient use of land.

4.6.4 Mixed Use designation

Lands designated as *mixed use* generally reflect *corridors* and *commercial hubs*. These areas are dominated by community-scale retail commercial and/or office uses that have grouped along major streets or have developed in a nodal configuration around specific intersections. Through the *mixed use* designation, it is the intent of this Plan to:

a) provide convenience retail, office and service functions to serve the daily and weekly needs of surrounding communities and neighbourhoods; and
b) revitalize existing commercial areas as local focal points for pedestrian activity and transit routes.

1. Retail Uses in Mixed Use Areas

Convenience retail uses that serve the daily shopping needs of surrounding communities and neighbourhoods are recognized as the primary function of *corridors* and *commercial hubs*. Comparison and specialty shopping are directed to the *downtown* and *centres*.

The commercial floor space of a building devoted to commercial use shall be appropriate to support and serve only the surrounding population. Regulation of the size and location of uses within the *mixed use* designation may be defined by the implementing Zoning By-law.

2. Employment and Community Services in Mixed Use Areas

The daily convenience retail function may be complemented by local employment and minor institutional uses, including offices, medical clinics, personal services, and public service providers. It is the intent of this Plan to promote a wide range of minor employment uses and institutions that serve the weekly and daily needs of surrounding communities and neighbourhoods.

3. Housing in Mixed Use Areas

Within the *mixed use* designation, a wide range of housing types are promoted in contextually appropriate buildings provided residential uses are directed to the rear or the upper floors above commercial uses.

The location and size of any use on upper and/or lower floors within mixed-use buildings may be further determined through the development process and regulated by the implementing zoning.

4. Mixed Use Development Criteria

All mixed-use development in the City necessitates a design that integrates new and existing buildings, as well as building façade treatment. Development shall:

a) locate and mass new buildings to provide a transition between areas of different intensity and scale through means such as providing appropriate setbacks and/or stepping down heights, particularly close to lower-scale *stable residential area* designations;
b) locate and mass new buildings to limit shadow impacts on adjacent *stable residential areas*, particularly during the spring and fall equinoxes;
c) locate and mass new buildings to frame the edge of streets and parks to maintain sunlight and comfortable wind conditions for pedestrians on adjacent streets, parks and open spaces;
d) provide an attractive, comfortable and safe pedestrian environment;
e) ensure access to schools, parks, community centres, libraries, and childcare;
f) take advantage of nearby transit services;
g) provide good site access and circulation and an adequate supply of parking, including bicycle parking, for residents and visitors;
h) locate and screen service areas, ramps and garbage storage, and rooftop mechanical areas to minimize the impacts on adjacent streets and residences; and
i) provide indoor and outdoor amenity space for building residents in every significant multi-use residential development.

4.6.5 Highway Commercial designation

The *highway commercial* designation reflects the London Line *corridor* that originally served the highway-oriented needs of the travelling public by providing access to food, fuel and accommodation. Today, it serves some of the comparison shopping needs of the City and daily needs of surrounding residential areas. The *highway commercial* designation has underused lands capable of accommodating substantial development.

This Plan supports the continued evolution of the “Golden Mile” in a comprehensively planned manner that does not undermine existing planned functions in other areas of the City. Extensions to the *highway commercial* designation are discouraged.

1. Highway Commercial Retail Uses

Permitted uses may include, but are limited to, hotels, motels, vehicle fuelling stations, automobile sales, trailer and marina sales, repair and service facilities, public garages, vehicle washes, restaurants, places of amusement and recreation, nursery or garden centres, industrial and agricultural equipment sales and service, farmer's markets, flea markets, retail warehouses, retail uses, contractor supply stores, service industrial uses with limited open storage, churches, and funeral service establishments.

Large-format retail may be permitted in accordance with the provisions of section 5.7.2.

2. Highway Commercial Employment and Community Services

Local employment and minor institutional uses, including offices, medical clinics and personal services are permitted that cater to the needs of surrounding residential areas.

Residential uses are not permitted in the *highway commercial* designation.

3. Highway Commercial Development Criteria

Within the *highway commercial* designation, development shall:

a) provide a predominantly retail and/or service commercial function;
b) ensure the function and amenity of the area for businesses and residents, and the economic health of city-wide and nearby shopping districts is demonstrably not adversely affected in accordance with section 5.7.2; and
c) ensure sufficient transportation capacity and transit connectivity is available to accommodate the additional traffic generated by the development, resulting in an acceptable volume of traffic on adjacent and nearby streets.

Provisions shall be made for a continuous strip of land intended for landscaping purposes between any use or parking area and the adjacent road, except for designated entrances and exits.

4.7 EMPLOYMENT AREAS

The historic prosperity of Sarnia can be directly correlated with the development of its *employment areas*. These areas are where industrial and related land use designations apply. These areas can accommodate substantial industrial growth in jobs and meet the needs of some of the key economic clusters that are the focus of the *Sarnia-Lambton Economic Development Strategy*.

The largest cluster of businesses and economic activity in the City is characterized by oil refineries, petro-chemical manufacturing and bio-industrial applications. Recently, additional *employment areas* have been created within the City to achieve particular objectives, including a Research Park and a Business Park.

The lands and buildings in *employment areas* are important economic assets for new and expanding businesses. Therefore, in the *employment areas*, the intent of this Plan is to provide a climate of stability and certainty in which businesses can make major investments. Once lands are lost for economic activity through, for example, conversion to residential or major retail uses, it is almost impossible to return them to industrial uses. *Employment areas* will be protected from the encroachment of such uses, and marketing and infrastructure investment will continue to keep them competitive in the regional and international economy.

The land use designations and the Zoning By-law will direct the location of specific business activities within these *employment areas* by recognizing the varying impacts that businesses can have on one another and on adjacent non-employment areas and uses.

In addition to Official Plan and Zoning By-law protection, investment and international marketing is required to enhance the competitive position of *employment areas* within the regional economy. Where key infrastructure is outdated or lacking altogether, a range of approaches, such as brownfield incentives, might be needed. The City will also work with area businesses to

market *employment areas* to new businesses and to develop and establish revitalization programs in these areas.

4.7.1 General Policies

1. Employment Area Objectives

The lands identified as *employment areas* on **Map 1** accommodate current and future industrial and non-retail business and economic activities. These areas will be protected and promoted exclusively for employment functions in order to:

a) provide a stable and secure land base for long-term investment;
b) nurture key clusters of producers, suppliers, customers and services that benefit from strategic locations, and are key to the City's competitive advantages;
c) develop as globally competitive locations for local, national and international business, and offer a choice of sites for new businesses;
d) optimize existing investments in infrastructure and services;
e) support the diversification of Sarnia's economic base;
f) offer suitable locations for a variety of employment uses including those that require separation and/or buffering; and
g) ensure a supply of accessible locations for firms that are part of regional clusters.

The City favours the intensification and redevelopment of existing industrial areas compared with the development of new industrial sites.

2. Employment Functions in Employment Areas

Employment areas shall be protected, maintained and improved for non-retail employment functions over the long term. Uses that support this direction consist of manufacturing, offices, warehousing, distribution, research and development facilities, utilities and retail outlets ancillary to the preceding uses.

The City favours the development of eco-industrial development where occupants seek to minimize or eliminate waste generation, energy use, and other environmental impacts through symbiotic arrangements with other facilities.

Within *employment areas*, restaurants and small-scale shops and services that mainly serve area businesses and workers may locate on Arterial and Collector roads only, as shown on **Map 4**.

3. Land Use Designations

Employment areas permit a wide range of non-retail business and economic activities and include three land use designations: *heavy industrial*, *light industrial* and *business park*. These land use designations provide for compatible uses in appropriate locations with a variety of form, scale and intensity of development.

4. Land Use Compatibility in Employment Areas

Development adjacent to or near *employment areas* shall be designed, buffered and/or separated from industries and to promote safety and security.

In reviewing the suitability of a site for a proposed employment use or facility, incompatible land uses shall be subject to measures including land use separation from other uses in accordance with the guidelines of the Province of Ontario and in particular those of the

Ministry of the Environment, including MOE Guidelines D-1, D-1-1, D-2, D-4 and D-6. Separation distances will vary depending on the nature of the facility and intervening land uses; generally, the greater the scale and intensity of the facility, the greater the required separation distance. The City may require Health Impact Assessments.

Industrial uses which, because of their nature or the materials they used, are classified as noxious trades, businesses or manufacturers under Provincial legislation or related regulations shall not be permitted in *employment areas*.

5. Transportation in Employment Areas

Transit use will be encouraged in *employment areas* by investing in improving levels of service, encouraging development in a form and density that supports transit use, and promoting travel demand management. Measures will be introduced and standards applied on roads within employment areas that give priority to the movement of trucks and transit vehicles.

Walking and cycling shall be promoted in *employment areas* by creating safer and more attractive conditions for active transportation.

6. Infrastructure in Employment Areas

The City shall ensure that the necessary infrastructure is provided to support the current and projected needs of *employment areas*. All new industries within *employment areas* are required to connect to the municipal water supply and sanitary sewer systems.

No industrial chemical wastes that may have a negative impact on the City's infrastructure system and water resources, shall be discharged into the municipal sewerage or drainage system. In disposing of wastes, hauled or otherwise, businesses must comply with all applicable Federal, Provincial and local regulations.

7. Natural Heritage in Employment Areas

The *natural heritage system* shown on **Map 1** generally follows floodplains and woodlands, and supports a series of natural features and ecosystem functions that enhance ecosystem health. In support of the improved integration of *employment areas* with the *natural heritage system*, the City supports the preparation of a Natural Area Corridor Strategy in conjunction with the St. Clair Region Conservation Authority and neighbouring municipalities to:

a) undertake natural heritage inventories and provide recommendations on the enhancement of natural features, with an emphasis on connections to the St. Clair River;
b) identify areas for protection and restoration;
c) determine tributary lengths, riparian habitat, land use and ownership;
d) establish priorities for restoration, including the addition of buffers or reforestation; and
e) set percentage targets and limits for imperious surfaces in *employment areas* based on watershed ecological needs and conditions such as hydrology, hydrogeology, fish habitat, natural area sustainability, watercourse base flow requirements, procedures for water quality and quantity monitoring.

Within *employment areas*, areas identified as *natural areas* are recognized as significant environmental features. Any proposed development or site alteration within or adjacent to

natural areas shall be subject to an Environmental Impact Study in accordance with Section 4.3.3.

8. Supportive Initiatives for Employment Areas

Employment areas will be enhanced to ensure they are attractive and function well through actions such as:

a) permitting a broad array of economic activity, supporting a diversity of activity within existing buildings and facilitating firms with functional linkages to locate in proximity to one another;
b) investing in key infrastructure, or facilitating investment through special tools, programs, or partnerships, in order to:
    i. revitalize *employment areas* that may be experiencing decline because of vacancies and closures, absence of key infrastructure, poor accessibility, or poor environmental conditions;
    ii. promote the distinctive character or specialized function of an *employment area* to attract firms within a particular targeted cluster of economic activity;
    iii. facilitate the redevelopment of vacant lands;
    iv. create comfortable streets, parks and open space for workers and landscaped streetscapes to attract new business ventures; and
c) supporting business associations that promote and provide a business voice for *employment areas.*

9. Cultural Heritage in Employment Areas

The Petrochemical Complex is recognized as an internationally important cultural heritage landscape rooted in petro-chemical production and innovation. The City of Sarnia encourages the preservation and adaptive reuse of culturally significant elements of the industrial landscape, including Horton Spheres, administration and research buildings, and power plants.

The City encourages the undertaking of a Cultural Landscape Master Plan for the industrial corridor between Confederation Street and LaSalle Line. This Master Plan should include an inventory and management plan of heritage assets, and the development of a plan for the physical landscape.

4.7.2 Heavy Industrial designation

The main function of the *heavy industrial* designation is to accommodate existing and future large-scale industrial uses that are inappropriate elsewhere in the City. These industries require locations in proximity to a variety of transportation modes including rail, marine shipping and truck routes.

1. Permitted Uses in Heavy Industrial Areas

Lands designated *heavy industrial* shall be used for manufacturing, assembly, processing, fabricating, repairing, warehousing, wholesaling and petro-chemical processing facilities, primarily within enclosed buildings.

Secondary uses in the *heavy industrial* designation include the following:

a) public uses;
b) accessory office uses provided they are on the same lot and related to the main industrial use;

c) limited ancillary commercial uses including banks, restaurants, service stations, vehicle washes and industrial equipment and supply outlets on Arterial or Collector roads shown on **Map 4** provided they do not result in conflicts with permitted heavy industrial uses;
d) industrial and scientific research facilities;
e) greenhouses;
f) truck storage;
g) transportation terminals;
h) scrap yards, salvage yards, storage yards, including outside storage of scrap and other materials;
i) storage of petroleum and petrochemical products; and
j) uses permitted in the *light industrial* designation.

It is the intent of this Plan to permit those industries with potentially offensive characteristics in terms of appearance, odours, noise and dust emissions and truck traffic generation, which would be precluded from the *light industrial* or *business park* designation, to locate in the *heavy industrial* designation as long as their normal operations do not create an environmental hazard.

2. Development Criteria in Heavy Industrial Areas

New development or redevelopment shall be in accordance with the criteria specified in Section 4.7.3(3) of this Plan.

3. Outdoor Storage in Heavy Industrial Areas

The outside storage of goods, materials and equipment is permitted in the *heavy industrial* designation provided it is buffered from public roads and residential areas by berms, setbacks, landscaping and/or screening. Along Arterial and Collector roads identified on **Map 4**, Site Plan Control shall be used to improve the appearance of the area, as well as to protect adjacent residential and rural uses and the *heavy industrial* uses themselves. Such standards may include special requirements for restricted uses; screening and buffering; criteria for siting buildings and outside; landscaping; setbacks; parking; signage; and access requirements.

4. Railway Access in Heavy Industrial Areas

It is the policy of the City to encourage the extension and installation of spur line railway track facilities within the *heavy industrial* designations of the City. Proponents of new development in the heavy industrial designation must demonstrate how the development of lands will not preclude the future extension and installation of spur rail lines, if at all possible.

5. Conceptual Plans for the Plank Road Industrial Area

The City may prepare a Conceptual Development Plan in accordance with the provisions of Section 7.2(11) of this Plan for the Plank Road industrial area. Such a Conceptual Development Plan would indicate the future general alignment of local roads, collector roads and spur line railway track facilities within the *heavy industrial* designation, in addition to the provisions of this Plan.

6. Zoning By-law Standards in Heavy Industrial Areas

The Zoning By-law will prescribe specific development standards related to parking requirements, setbacks, coverage, buffering, separation, among other matters, to ensure

that conflict with surrounding uses is minimized to the satisfaction of the City. Buffering will be considered in light of Provincial guidelines on separation distances between industrial facilities and sensitive land uses.

4.7.3 Light Industrial designation

The *light industrial* designation permits a full range of non-noxious employment uses and specifies detailed locational criteria to ensure that development supports the *employment areas* objectives of this Plan and that the quality of any overall development is not compromised.

1. Permitted Uses in Light Industrial Areas

Within the *light industrial* designation, the primary permitted use of land will generally be non-noxious industrial uses such as general manufacturing, research and development, warehousing, wholesaling and light assembly or any combination thereof taking place within enclosed buildings subject to the policies covering outdoor storage.

Secondary uses may include:

a) public uses;
b) general office, commercial and institutional uses which do not inhibit the industrial use function of the *employment area*;
c) service stations, automobile repair garages, vehicle and equipment rental outlets and vehicle, trailer and boat sales outlets;
d) certain ancillary commercial uses, such as the following:
    i) banks and other financial institutions serving the *light industrial* designation;
    ii) restaurants, caterers, banquet halls and night clubs;
    iii) existing retail building and contractor's supply stores;
    iv) commercial sports or recreation uses;
    v) service organization establishments and facilities for private associations;
    vi) other similar uses;
e) limited retailing within industrial buildings for the sale of goods manufactured on the premises, the amount of which is set out in the Zoning By-law; and
f) parks and public open space.

Secondary uses, except for accessory retailing uses within industrial buildings, shall locate on Arterial or Collector roads identified on **Map 4**, preferably grouped at or near the entrances to industrial areas, and at major road intersections wherever possible.

Industrial uses which are considered a noxious trade business or manufacture under Provincial legislation or regulations will not be permitted in *light industrial* designation.

2. Residential Uses in Light Industrial Areas

Residential uses are not permitted in the *light industrial* designation, however a dwelling unit for a caretaker or watch person may be permitted provided that it is structurally attached to the main permitted use on the lot.

3. Development Criteria in Light Industrial Areas

In the competition for new growth among city-regions in the global economy, it is not enough to have lands set aside for employment. Industrial areas need to function well and be attractive to new firms. This is the responsibility of both the City and firms in each

employment area. Development criteria are needed to ensure that industrial areas work well and attract new industries.

Businesses and property owners in the *light industrial* designation will contribute to the creation of competitive, attractive, and highly functional industrial areas by:

a) supporting the economic function of *employment areas* and the amenity of adjacent areas;
b) supporting the establishment of key clusters of economic activity with significant value-added employment and assessment;
c) avoiding excessive car and truck traffic on the road system within industrial areas and adjacent areas;
d) sharing driveways and parking areas/structures wherever possible to ensure safe and adequate access from the road;
e) limiting the number of individual access points and ensuring they are designed to minimize any danger to vehicular and pedestrian traffic; continuous access will be discouraged in favour of a curb and designated entries and exits;
f) providing adequate off-street parking and loading spaces, in accordance with the provisions of the Zoning By-law; parking spaces should be located beside or behind the establishment;
g) treating the boundary between industrial and residential lands with landscaping, fencing, screening or other measures to minimize nuisance impacts;
h) landscaping the front and any flanking yard and adjacent to any public parks and open space to create an attractive streetscape and screened parking, loading and/or service areas; and
i) mitigating the effects of noise, vibration, dust, odours or particulate matter that would be detrimental to other businesses or the amenity of neighbouring areas.

4. Outdoor Storage in Light Industrial Areas

Outdoor storage of materials and equipment shall be limited in extent and permitted only as an ancillary use to the permitted uses in the *light industrial* designation. Accessory outdoor storage of industrial materials and equipment shall generally be located to the rear of the property. Outdoor storage is discouraged along Arterial Roads, Collector Roads, Provincial Highways, and on the periphery of *light industrial* designations.

Fencing, screening and minimum separation distances from non-industrial uses shall be required as part of site plan control provisions. Permitted outdoor storage should not extend above the height of the required screening.

5. Development Standards in Light Industrial Areas

The Zoning By-law will prescribe specific development standards related to parking requirements, setbacks, coverage, buffering and separation to ensure that conflict with surrounding uses is minimized to the satisfaction of the City. Buffering will be considered in light of Provincial guidelines on separation distances between industrial facilities and sensitive land uses.

4.7.4 Business Park designation

The main function of the *business park* designation is to accommodate the demand for *employment areas* and to enhance the City's competitiveness in attracting new businesses and retaining existing businesses.

1. Permitted Uses in Business Parks

Within the *business park* designation, permitted uses shall include non-noxious, non-offensive light industrial uses that involve assembly, fabrication, manufacturing, warehousing, storage or distribution within wholly enclosed buildings. Freestanding office uses, wholesaling, research and technological uses, laboratories and printing and publishing establishments are permitted.

A showroom, retail and sales operations in association with and ancillary to the permitted uses may be permitted in buildings in the *business park* designation provided that such space does not exceed 25% of the gross leasable floor area of the permitted use.

Manufacturing and assembly plants which have or would have a significant detrimental effect on the safety, use, amenity or enjoyment of adjacent or nearby sites due to appearance, noise, odour, emission of contaminants, vibration, fire or explosive hazards, or the manufacture or use of dangerous goods shall not be permitted.

2. Development Criteria

New development in the *business park* designation shall be in accordance with Section 4.7.3(11) of this Plan.

In addition, the City shall encourage conformity to a set of architectural guidelines, prepared by the City, to enhance the visual amenity and encourage the development of a prestigious, high quality business park. The guidelines shall include provisions respecting landscaping. Substantial landscaping and buffering shall be used to buffer all parking areas from adjacent uses, site boundaries, site boundary roads and internal roads. Buildings shall be substantially setback from the streetline and adjacent dwellings so that substantial landscaping in the form of berms, vegetation or fencing can be incorporated into yards directly adjacent to the street line or dwellings in order to create a park-like setting. Any outdoor mechanical equipment and facilities such as garbage containers shall be adequately screened from view.

The architectural design of buildings located within the *business park* designation, which are located on lots abutting Highway 402 and internal local roads, shall be designed in such a manner so as to appear to front onto both roads.

Parking between the building and the street line will be limited to the amount necessary to adequately serve customers. No parking is permitted adjacent to any road along the boundary of a *business park* designation. Employee parking, loading docks, and service areas, where feasible, shall be located in a yard that does not abut a street. The appearance of parking lots, loading docks and service areas which are visible from the road shall be enhanced using fencing, vegetation and berms and other features to provide visual relief and screen the use from adjacent uses.

3. Access to Business Parks

Arterial access shall be restricted to London Line and Airport Road in order to provide for the safe, logical and efficient movement of people and goods. Access to Airport Road will be restricted to one public road. No direct access to individual sites will be permitted from Airport Road. Proposed access points shall be deemed to be an intersection for future

improvement that may include turning lanes, acceleration and deceleration lanes, signalization, daylight triangles and improvements to sight lines.

Direct access to Telfer Road from the business park shall be prohibited in order to preserve the existing residential character along the east side of Telfer Road.

4. Noise Attenuation within Business Parks

In order to mitigate any potential impact associated with development near the *business park* designation, a solid noise barrier fence and/or berm sufficient to meet the requirements of the *Ministry of Environment Noise Guidelines* will be required prior to the development of the subject lands for business park purposes.

A barrier shall also be erected along the westerly boundary of the Airport Road right-of-way. Berms and landscaping requirements are also required along the eastern portion of the site abutting Telfer Road and adjacent to the existing dwellings on London Line and Telfer Road.

5. Restricted Use Area

To provide for land use transition between planned business park uses and existing residential areas, only the following uses shall be permitted within 150 metres of London Line or Airport Road: animal clinics, assembly halls, automotive service stations, automobile washing establishments, bakeries, call centres, catering establishments, commercial recreation establishments, convenience stores, duplicating shops, financial institutions, funeral homes, laboratories, offices, public halls, research and development establishments, restaurants, service establishments, social or service clubs and buildings and uses accessory to permitted uses.

To provide for a buffer area between planned business park uses and dwellings situated along the east side of Telfer Road, no buildings or structures will be permitted to locate within 50 metres of Telfer Road with a minimum 15 metres bermed planting strip.

6. Outdoor Storage

Open storage shall not exceed 10% of the area of the lot.

No outdoor storage of goods or material shall be permitted within any yard adjacent to Highway 402 or within 100 metres of Highway 402 or any public road. All open storage shall be adequately screened by a combination of solid screening and natural landscape materials so as it is not visible from any public road or adjacent residential property. No open storage shall exceed the height of the screening.

No open storage shall be permitted in association with any use located within 150 metres of London Line or Airport Road.

7. Development Standards for Business Parks

The Zoning By-law will prescribe specific development standards related to parking requirements, setbacks, coverage, buffering and separation to ensure that conflict with surrounding uses is minimized to the satisfaction of the City.

In recognition of the scale of adjacent residential uses and the restrictions associated with the flight paths of the nearby Chris Hadfield Airport, provisions shall be included in the

Zoning By-law to regulate the height of buildings and coverage of the site within the *business park* designation.

4.8 CHRIS HADFIELD AIRPORT

The Sarnia Chris Hadfield Airport was developed as an airfield in 1938. Today, it is a municipally owned facility regulated by Transport Canada that provides regional passenger and freight services. It is designated as an 'airport of entry' that provides custom and immigration for incoming flights, and shall be protected solely for airport and related uses.

This Plan shall protect this significant transportation asset from land use conflicts, competing uses, and ensure there are no negative impacts on the long-term function of the Airport.

1. Airport Objectives

The Sarnia Chris Hadfield Airport as shown on **Map 1** is recognized as a unique major transportation asset that shall be protected and improved for the airport function over the long-term by:

a) protecting the airport from incompatible development; and
b) providing a land base for the establishment of airport-related services.

The City supports the maintenance of air passenger and freight service to and from Sarnia, and promotes the upgrading of the facilities and level of service available at the Sarnia Chris Hadfield Airport.

2. Permitted Uses

Lands designated *Airport* are to be protected for airport and airport-related uses to protect the long-term operation and economic role of the Sarnia Chris Hadfield Airport and provide a land base to attract firms that require access to airport facilities.

Permitted uses shall be limited to airport functions, including airport terminals and facilities for the proper movement, servicing and storage of private and commercial aircraft. Supportive uses such as flying schools, facilities for the shipment of goods by air, and aircraft manufacturing shall also be permitted.

3. Development Criteria

Any development within the *airport* designation shall be consistent with the permitted uses identified in Section 4.8(2) and be in accordance with the *light Industrial* development criteria in Section 4.7.3(3).

4. Restrictions on Development in the Vicinity of the Airport

Development in the vicinity of the Sarnia Chris Hadfield Airport will be controlled to reduce the potential for land use conflicts and to ensure there will be no negative impacts on the airport's long-term function. Noise Exposure Forecasts (NEF) approved by Transport Canada and as shown on **Map 7** will be used in evaluating any development proposals in proximity to the airport. New development contrary to Provincial and Federal policy in this regard will be prohibited.

New residential development and other sensitive land uses shall be prohibited in areas above the 30 NEF contour.

Redevelopment of existing residential uses and other sensitive land uses or infilling of residential and other sensitive land uses may be considered above the 30 NEF contour if it can be demonstrated such development will not negatively affect the long-term function of the airport. A noise study and noise attenuation measures may be required to be completed to the satisfaction of the City before such development takes place.

New development within areas up to the 30 NEF contour shall be regulated in accordance with the Transport Canada publication *Land Use in the Vicinity of Airports*, as amended from time to time.

5. Restricted Building Height

The height of buildings shall be restricted by the Zoning By-law and Transport Canada Airport Zoning to ensure a satisfactory level of safety for lands in the vicinity of the Sarnia Chris Hadfield Airport. The application of site plan control in accordance with Section 41 of the *Planning Act* shall restrict landscaping to within safe maximum heights so that appropriate standards established by Transport Canada are met.



5

COMMUNITY DEVELOPMENT

5 COMMUNITY DEVELOPMENT

A healthy and livable City that consistently attracts and retains population depends on policies and strategies that build strong, vibrant communities where citizens are valued, resources are managed responsibly and prosperity is broadly shared. Through the consistent application of the policies of this Plan, the City can achieve sustainable outcomes that:

a) optimize the long-term availability and use of land, resources, infrastructure and public service facilities;
b) minimize the City's ecological footprint and enhance the City's air, soil and water quality;
c) support an efficient, cost-effective and reliable multi-modal transportation system;
d) achieve functional, aesthetic and accessible buildings and community design;
e) maintain and enhance the vitality and viability of *downtown*, *centres* and *corridors*;
f) promote active living and good citizen physical and mental health;
g) protect and enhance natural resources, environmental features, natural heritage systems, shorelines and ecological processes;
h) ensure a range of housing options that are responsive to community needs;
i) promote the sustainability of the agri-food sector by protecting agricultural resources and minimizing land use conflicts;
j) encourage sustainable tourism development; and
k) provide opportunities for increased energy generation, supply and conservation, including alternative and renewable energy systems.

A number of planning tools are available to help plan, design, direct, and manage land use decisions in ways that are beneficial for future generations. This chapter provides objectives and policies to implement the principles of community sustainability where the City has jurisdiction.

5.1 BROWNFIELDS

Brownfields are derelict or underused buildings and lands where renewal and revitalization is complicated by real or perceived environmental contamination. Despite the complexity of developing these properties, they are often located in desirable and strategic locations. These sites often have infrastructure in place and can support a variety of uses. Redevelopment of these areas can contribute to urban intensification, economic development and jobs, and/or new housing to take development pressure off g*reenfield areas* outside the *built boundary*.

1. Facilitation and Incentives for Brownfields Redevelopment

The City can play an active role in successfully redeveloping brownfields into new sustainable developments. The City shall facilitate brownfield redevelopment while strategically meeting other community goals by:

a) working with owners, prospective developers and the public to provide a sense of clarity about process and requirements;
b) creating and maintaining an inventory of underused land parcels in the City;
c) providing financial incentives, where appropriate, to rehabilitate obsolete, deteriorated and contaminated buildings and sites;
d) protecting cultural heritage resources and promoting adaptive reuse of heritage buildings; and
e) encouraging sustainable methods of demolition and cleanup, including natural, ecological forms of remediation and the reuse of building materials.

Financial incentives can help applicants overcome some of the hurdles encountered in the brownfield redevelopment process. The City may offer financial incentives as permitted by the *Planning Act* and *Municipal Act* through an approved Community Improvement Plan. Applicants are required to provide a Record of Site Condition to become eligible for municipal financial incentives.

The County of Lambton is encouraged to participate in City brownfield programs.

2. Environmental Investigation and Remediation

Contaminated sites policies apply to sites and facilities within the City of Sarnia which are or may be contaminated and may pose a risk to human and environmental health. The purpose of these policies is to ensure that site restorations are completed in a manner that meets criteria set by the Province before the City issues any development approvals. When development is proposed on or adjacent to a property known to be, suspected to be, or potentially a contaminated site, the proponent will be required to conduct an appropriate level of Environmental Site Assessment in accordance with Provincial requirements.

Development applications will not be considered until the proponent demonstrates that the site assessment and restoration process has been completed and a Record of Site Condition has been filed with the Brownfield Environmental Site Registry and provided to the City.

3. Condition of Public Lands

Whenever the City is deeded land for public highways, road widening, parkland, stormwater management, easements or for any other purpose, the City may require evidence, as a condition of the transfer, that no environmental contamination has occurred on the subject lands or that the lands have been satisfactorily restored.

These policies are not intended to apply to the closure of landfill sites or other facilities that are required to meet closure conditions of a Certificate of Approval issued under the *Environmental Protection Act.*

5.2 COMMUNITY DESIGN

Good community design adds value to a community – socially, culturally, environmentally and economically – resulting in greater community distinctiveness and identity. Spaces and buildings that help create visually attractive streets, neighbourhoods and landscapes make a city attractive to residents, visitors and businesses. Good design also improves accessibility, safety and can contribute to crime prevention.

The City recognizes the importance of community design to the quality of its environment. High-quality architecture, landscaping and construction will be promoted to ensure new development enhances the quality of the environment, including:

a) conservation of the natural environment and cultural heritage resources;
b) compact urban form in the interests of the efficient use of land and services;
c) integration of compatible land uses;
d) linkages and connectivity (pedestrian, cycling, vehicular and transit);
e) longevity of public and private services and facilities;

f) safety and accessibility;
g) consistency in building setbacks and other features, where appropriate;
h) aesthetics; and
i) flexible standards, such as road allowance widths, tree plantings in boulevards, and stormwater management practices.

Creativity and excellence in architecture, landscape and design should be encouraged in private developments through such programs as Community Design Awards.

5.2.1 Guidelines for New Development

1. Location and Organization

New development shall be located and organized to fit the existing or planned character of the neighbourhood or district and shall frame and support adjacent streets, parks and open spaces. New buildings shall contribute to a pedestrian-friendly public realm in the following ways:

a) buildings shall be located parallel to the street or along the edge of a park or open space with a consistent front yard setback. On a corner site, the development should be located along both adjacent street frontages;
b) main building entrances shall be located so that they are clearly visible and directly accessible from the public sidewalk;
c) ground floor uses shall have views into, and where possible, access to, adjacent streets, parks and open spaces;
d) existing mature trees shall be preserved wherever possible and incorporated into landscape designs; and
e) use Crime Prevention Through Environmental Design (CPTED) principles to enhance the safety of the community.

2. Massing, Scale and Design

New buildings shall be massed and exterior façades designed to fit harmoniously into the existing or planned context. The impact on neighbouring streets, parks, open spaces, and properties shall be limited in the following ways:

a) new buildings shall be massed to frame adjacent streets and open spaces in a way that respects the existing and/or planned street proportion;
b) new buildings shall allow for appropriate transitions in scale to neighbouring existing or planned buildings;
c) adequate light and privacy shall be provided for users of the building and for users of adjacent buildings and spaces; and
d) shadowing of and uncomfortable wind conditions on neighbouring streets, properties, parks and open spaces caused by the buildings shall be minimized.

3. Parking and Servicing

Vehicle parking, vehicular access, service areas and utilities shall be located and organized to minimize their impact on the property and on surrounding properties to improve the safety and attractiveness of adjacent streets, parks and open spaces by:

a) using shared service areas where possible, including public and private lanes, driveways and service courts to minimize points of conflict;
b) consolidating and minimizing the width of driveways and curb cuts across the public sidewalk;
c) screening surface parking lots from adjacent streets;

d) integrating service and utility functions within buildings where possible;
e) providing underground parking where possible;
f) limiting surface parking between the front face of the building and public street or sidewalk; and
g) integrating above-ground parking structures, where permitted or appropriate, with building design, and have usable space at-grade facing adjacent streets, parks and open spaces.

4. Amenity Space

Every significant new multi-residential development will provide indoor and outdoor amenity space for residents of the new development. Each resident of such development will have access to outdoor amenity spaces such as balconies, terraces, courtyards, rooftop gardens and other types of outdoor spaces.

5. Buffering and Screening

In order to minimize the negative effects of development on other land uses**,** buffering and/or screening will be provided wherever conflicts are identified. The City's Zoning By-law, site plan agreements and other special agreements will ensure that adequate buffering and/or screening is provided as required.

Buffering and/or screening may include one or more of the following measures:
a) the separation of uses and/or buildings by means of greater-than-normal setbacks;
b) restrictions on outside storage of goods, materials or equipment;
c) restrictions on parking facilities;
d) restrictions on loading facilities in industrial or commercial areas;
e) restrictions on the location and type of outdoor lighting equipment, including the direction of illumination;
f) the installation of fences, walls and earth berms to create a visual barrier; and
g) vegetative screens and other forms of landscaping.

6. Light Pollution

Excess or unwanted artificial lighting in the evening and at night can cause individual nuisance and safety problems and be detrimental to the enjoyment of the night sky by the community.

The City will endeavour to ensure that all external lighting is fit for its purpose and that such lighting is power-efficient, downward-directed and shielded so as to prevent light pollution, and minimize cost, energy waste, and other adverse environmental consequences.

7. Urban Design Briefs

For new development or redevelopment, the submission of an Urban Design Brief shall be required to demonstrate consistency with the design policies of this Plan to the satisfaction of the City.

5.2.2 Public Realm

City streets serve pedestrian and vehicles and provide space for public utilities and services, trees, landscaping and building access. They act as public gathering spaces and provide amenities such as view corridors, street furniture, sky views and sunlight.

Streets are to be designed to perform their diverse roles, in a manner that balances the needs of existing and future users.

1. Public Realm Improvement

New development and redevelopment shall enhance the appearance and function of adjacent streets and open spaces by providing:

a) improvements to adjacent boulevards and sidewalks that include such sustainable design elements as trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers, lighting, and bicycle parking facilities;
b) coordinated landscape improvements in setbacks to create attractive transitions from private to public realms;
c) weather protection such as canopies and awnings;
d) landscaped open space within the development site;
e) landscaped edges of surface parking lots along streets, parks and open spaces to define the street edge and visually screen parked automobiles;
f) safe pedestrian routes and tree plantings within parking lots; and
g) public art, where the developer agrees to provide this, to make the building and its open spaces more attractive and inviting.

2. Street Trees

The City recognizes the environmental, health, safety, aesthetic and heritage values of planting and maintaining trees along urban and rural boulevards, streets, and roadways. The City shall promote and encourage the protection and management of such trees and encourage public authorities and agencies to ensure their preservation when undertaking utility projects and regular maintenance by:

a) protecting and preserving street trees located within road rights-of-way wherever practical;
b) encouraging private landowners to protect and preserve trees located outside of road rights-of-way; and
c) encouraging the planting of trees in boulevards within road allowances in accordance with the City's Tree By-law.

5.2.3 Building New Neighbourhoods

Once a decision has been made to develop an area as a new neighbourhood, a *residential greenfield area* or a large redevelopment within the *built-up area*, a comprehensive planning framework is generally required. New neighbourhoods must function as communities and not just as housing. The approach to new neighbourhoods described in this section shall be implemented together with other parts of the Plan. A secondary plan in accordance with Section 7.2(12) may be required.

1. Planning Framework

New neighbourhoods will be developed with a comprehensive planning framework that reflects the Plan's city-wide goals as well as the local context. The framework should include:

a) the pattern of streets, development blocks, parks, open spaces and other infrastructure;
b) the mix and location of residential and complementary land uses;
c) a strategy to protect and enhance natural and cultural heritage;

d) a strategy to provide community services and local institutions; and
e) a strategy to provide affordable housing.

2. Neighbourhood Design

In order to function as communities, new neighbourhoods should have:

a) a community focal point within easy walking distance of the neighbourhood's residents and workers;
b) a fine grain of interconnected streets that define development blocks;
c) few or no dead-end streets or cul-de-sacs to maximize efficient service delivery, street connectivity and walkability.
d) dwellings that face onto major roads with automobile access provided from a rear drive or lane;
e) higher-density buildings located close to transit stops to support a greater mix of uses, higher levels of pedestrian activity and transit ridership;
f) integrated natural and cultural heritage features and landscapes;
g) an active transportation network connecting with major roads and natural corridors;
h) high quality parks, community recreation centres, open space and buildings; and
i) services and facilities that meet the needs of residents, workers and visitors.

3. Urban Integration

New neighbourhoods shall be carefully integrated into the surrounding fabric of the City through:

a) good access to transit and good connections to the surrounding streets and open spaces;
b) uses and building scales that are compatible with surrounding development;
c) community services and parks that fit within the wider system; and
d) a housing mix that contributes to the full range of housing.

4. Urban/Prime Agricultural Interface

Where lands are to be developed abutting or close to the *urban boundary,* the City will ensure that adequate buffering measures are provided between the *urban area* and *prime agricultural area* to avoid conflicts over the long term.

Buffering measures including land use density gradients, landscape buffers, greater-than-normal building setbacks and access restrictions shall be secured as part of a secondary plan process, or Official Plan Amendment process where a secondary plan is not required. Specific design measures such as subdivision and site layout, and vegetative screens, fencing and berms to create a visual barrier shall be achieved through site plan and/or plan of subdivision processes.

5.3 COMMUNITY IMPROVEMENT

The community improvement provisions of the *Planning Act* give municipalities a range of tools to stimulate renovation, rehabilitation, revitalization and environmental remediation of lands and buildings. The provisions include incentives to stimulate or leverage other private and/or public investment that advances the community interest and the objectives of this Plan. This Official Plan deals with various aspects of community improvement. The policies of this particular section are designed to assist the City in the identifying and prioritizing of Community Improvement Areas and projects, subject to available resources.

1. Community Improvement Area

The entire City shall be designated as a Community Improvement Area in order to:

a) contribute to and enhance a sense of community;
b) upgrade and improve municipal infrastructure where it is deficient;
c) maintain and rehabilitate neighbourhoods;
d) enhance social and recreational facilities;
e) increase the economic potential of commercial districts;
f) enhance the economic potential of the City's employment districts; and
g) enhance environmental attributes.

The Community Improvement Area may be designated, in whole or in part, by by-law, as one or more defined Community Improvement Project Areas for which detailed Community Improvement Plans shall be prepared.

2. Community Improvement Project Area Criteria

In order to achieve the objectives listed above, candidates for Community Improvement Project Areas shall be identified for areas exhibiting one or more of the following characteristics:

a) the area is identified as a *growth area* on **Map 1**;
b) the local building stock is in need of repair;
c) there are conflicts between incompatible land uses and activities;
d) public infrastructure and/or amenities, including parks, open spaces, beach access, community facilities and streetscapes are deficient or deteriorated;
e) public access to the Lake Huron waterfront is deficient;
f) barriers to the improvement or redevelopment of vacant or underused land or buildings include contaminated soil, fragmented ownership or financial disincentive to private investment; or
g) social, environmental and/or economic conditions are declining.

The City may acquire and hold land within a Community Improvement Project Area and clear, grade, or otherwise prepare the land for community improvement.

3. Community Improvement Plans

For Community Improvement Project Areas, Community Improvement Plans shall be prepared to provide direction for one or more of the following:

a) strategic and co-ordinated public investment to repair or upgrade municipal infrastructure, community services and/or public amenity;
b) allocation of public funds, in the form of grants, loans or other finance instruments, for the physical rehabilitation or improvement of private land and/or buildings including rehabilitation of contaminated properties;
c) municipal acquisition of lands or buildings and any subsequent clearance, rehabilitation, redevelopment or resale of these properties;
d) municipal investment to complement projects sponsored by a Business Improvement Area or Employment Area Association; and
e) other municipal actions, programs or investments to stimulate the production of affordable housing, strengthen neighbourhood stability, facilitate local physical or economic growth, improve social or environmental conditions, or promote cultural development.

4. Cultural and Natural Heritage in Community Improvement Project Areas

Any community improvement plan shall identify cultural heritage resources and provide for their conservation. In addition to other measures described in this Plan, the City may make use of programs under the *Ontario Heritage Act* to support the preservation of historic buildings.

In addition to other measures described in this Plan, the City may make use of and work with provincial or federal government programs to support the preservation and conservation of cultural and natural heritage in Community Improvement Project Areas.

5. Cooperation with Community Groups

Local service clubs and organizations can help provide needed or desired community facilities, and organize and host special events, festivals and promotions.

During the preparation of a Community Improvement Plan and any subsequent amendments, the public will be kept informed and public input will be obtained in keeping with the policies for Public Notification contained in this Plan.

5.4 COMMUNITY SERVICES AND FACILITIES

Civic quality of life, health and well-being depend on human and social services delivered by a network of public providers and not-for-profit groups. To meet community needs, service providers require ready access to community facilities such as community and recreation centres, arenas, public health clinics, community gardens, and publicly funded schools and libraries.

An existing network of community facilities provides a strong foundation for social programs and services. The responsibility for maintaining and improving these facilities must be shared by the City, public and not-for-profit agencies, and the development community.

The City shall encourage adequate and equitable access to community services and facilities by:

a) providing and improving local community facilities and local institutions across the City in locations that are readily accessible by active and public transportation;
b) improving and expanding local community facilities and local institutions in established neighbourhoods that are underserved or poorly served; and
c) ensuring that an appropriate range of community services and facilities and local institutions are provided in *growth areas* and *residential greenfield areas*.

1. School Sites

The City recognizes that schools are integral community resources that serve not only as learning institutions, but also as socio-cultural centres and as a source of valuable community open space. Therefore, the City will continue to cooperate with school boards in obtaining new school sites where necessary and integrating such sites with municipal parkland. More specifically, the City will pursue the following:

a) encourage school locations that reduce the need for busing, maximize active transportation opportunities and minimize exposure to major transportation facilities such as major highways;
b) where feasible, develop municipal parkland in conjunction with elementary or secondary school sites;

c) where there is a shortage of neighbourhood or community parks and there are undeveloped school sites within the neighbourhood, the City may enter into an agreement with the respective school board regarding the development of the land for park purposes;
d) encourage school boards to enhance their playgrounds through tree planting and other naturalization programs where appropriate; and
e) encourage the inclusion of traffic calming measures within non-bussing distance of schools to reduce traffic speed without the need for enforcement.

Shared use of municipal and/or school facilities, spaces associated with places of worship, and land for community service purposes is encouraged. The addition of other uses on school sites, including other community services and associated office space, are permitted provided that all uses can be adequately accommodated.

The City prioritizes the location of Child Care services within schools to minimize transitions for young children and to provide a single point of access for early childhood services. Child Care services are also permitted to locate in places of worship, community facilities, shopping areas and places of employment.

2. Surplus Institutional Sites

The City encourages the retention of surplus institutional sites such as schools and places of worship for community service purposes. Alternative uses of redundant institutional uses in *stable residential areas* shall be residential in nature and any redevelopment shall be undertaken in a manner consistent with the policies of this Plan and compatible with surrounding neighbourhoods.

Where residential uses are not feasible, limited small-scale community service and office uses, but not medical offices, may be considered that clearly serve the surrounding neighbourhood provided they are located within a retained building.

3. Community Services and Facilities Strategies

Where large-scale development or major changes in land use are being contemplated, the City may require a development proponent to prepare of a community services and facilities study to identify existing conditions and assess any impacts of the development or change in consultation with local residents, service providers, and other stakeholders. The inclusion of community services and facilities will be encouraged in all significant private sector development across the City.

Community services and facilities strategies may also be initiated by the City in response to demographic or social change. The needs of children, youth and seniors require special attention. Strategies for improving existing community service facilities or providing new social infrastructure will be developed for areas inadequately serviced or experiencing major change, and will be informed through the preparation of a community services and facilities strategy, which will include:
a) a demographic profile of area residents;
b) an inventory of existing services within the area and those that are readily accessible to residents;
c) the identification of capacity and service gaps in local services and facilities;
d) the identification of local priorities;

e) recommendations for service improvements and the identification of co-location opportunities; and
f) the identification of funding strategies including, but not limited to, funds secured through the development approval process, the City's capital and operating budgets, and public-private partnerships.

5.5 CULTURAL HERITAGE AND ARCHAEOLOGY

Sarnia has retained a variety of cultural heritage resources that provide links to the City's past. These cultural heritage resources include historic homes and heritage districts, as well as cultural landscapes and archaeological remnants. Many of these resources played a significant role in Sarnia's past and offer important stories for Sarnia's present and future. The City will ensure the protection of its many cultural heritage resources, and support the use and educational potential of these resources.

1. Cultural Heritage Resources

The City will protect and conserve its cultural heritage resources, including buildings and structures, monuments or artifacts, cultural heritage landscapes and districts, and archaeological sites, and promote the maintenance and development of an appropriate setting within and around all such resources in accordance with applicable legislation and recognized heritage protocols. In support of these goals, the City may:

a) designate cultural heritage resources;
b) establish heritage conservation districts and adopt heritage conservation plans for each district;
c) enter into easement agreements and establish guidelines for the protection and management of cultural heritage resources;
d) designate cultural heritage landscapes;
e) designate burial places and pioneer cemeteries;
f) pass by-laws providing for easements or covenants to ensure the conservation of property of cultural heritage value or interest; and
g) establish policies and/or urban design guidelines to recognize the importance of built heritage and cultural landscape context.

2. Sarnia Heritage Committee

The City shall appoint a Municipal Heritage Committee under the *Ontario Heritage Act* to:

a) advise and assist Council with the protection of cultural heritage and archaeological resources;
b) undertake public awareness programs; and
c) publish information or otherwise stimulate interest in cultural heritage resources.

Prior to enacting or repealing a by-law under the *Ontario Heritage Act*, Council shall first consult the Municipal Heritage Committee.

3. Register of Cultural Heritage Resources

The City's *Register of Cultural Heritage Resources* is an important tool for identifying and monitoring cultural heritage resources. The City shall maintain a register of properties that are of cultural heritage value or interest. These include properties that have been designated under the *Ontario Heritage Act* and those that have not. For each property, the register shall include the architectural and associative historic and contextual cultural heritage value.

The identification of cultural heritage resources is an on-going process of surveying, inventorying and evaluation. There may be cultural heritage resources that have not yet been identified and listed in the Register. Properties may be identified through development approval processes and evaluated through the submission of a Cultural Heritage Impact Assessment. Identified cultural resources shall be considered by the City for potential inclusion in the Register.

4. Cultural Heritage Value or Interest

A property shall be considered to have cultural heritage value or interest if the property has been designated as being of archaeological or historical significance under the *Ontario Heritage Act*, or in the opinion of the City, satisfies at least one of the following criteria:

a) the property has design value or physical value because it:
   i. is a rare, unique, representative or early example of a style, type, expression, material or construction method;
   ii. displays a high degree of craftsmanship or artistic merit; or
   iii. demonstrates a high degree of technical or scientific achievement.

b) the property has historical value or associative value because it:
   i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community;
   ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture; or
   iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.

c) the property has contextual value because it:
   i. is important in defining, maintaining or supporting the character of an area;
   ii. is physically, functionally, visually or historically linked to its surroundings; or
   iii. is a landmark.

5. Resource Conservation

Cultural heritage protection does not require that cultural resources remain static. This Plan promotes the continual conservation and use of cultural resources through rehabilitation, renovation, restoration, preservation and reuse. Through the application of heritage protection tools, Sarnia can maintain a legacy of heritage resources that reflect the City's rich past and contribute to its long-term success. Council shall lead by example and ensure that all City owned heritage resources are conserved and maintained in a state of good repair.

For any proposed alteration, addition, demolition or removal of a cultural heritage property, including the erection of new structures in a heritage conservation district, applicants may be required to submit a Cultural Heritage Impact Assessment at the discretion of the City. In all decision-making, the City shall be guided by the following principles:

a) good heritage conservation practices must be followed in accordance with the *Standards and Guidelines for the Conservation of Historic Places in Canada*;
b) heritage buildings, cultural heritage landscapes and archaeological sites, including their environs, are to be protected from any adverse impacts of any proposed alteration, additions, works, or development;
c) new additions and features are generally not to be any higher than the existing building and wherever possible be placed to the rear of the building or set back

substantially from the principal façade so as to make the addition unobtrusive from the public realm; and

d) non-heritage development within Heritage Conservation Districts shall be designed to fit harmoniously with its immediate physical or broader district context and streetscapes, and be consistent with the existing heritage architectural style through similar in height, width, mass, bulk and disposition.

Any property, or portions or attributes of a property, may be considered for heritage designation to secure the conservation of significant cultural heritage resources. The City may impose, as a condition of any development approvals, the implementation of appropriate conservation, restoration or mitigation measures to ensure the conservation of any affected cultural heritage resources. In keeping with the provisions of the *Ontario Heritage Act*, the City shall establish minimum standards for the maintenance of heritage attributes of designated heritage properties.

6. On-Site Retention

The on-site retention of cultural heritage buildings and landscape features is a priority of the City, particularly where associate or contextual values have been identified. Before the City considers any application to relocate or demolish a cultural heritage resource, the proponent must address the following alternatives in order of priority:

a) on-site retention in the original use, and integration with the surrounding and/or new development;
b) on-site retention as an adaptive use;
c) relocation to another site within the same development; and
d) relocation to an appropriate site within the City.

Before the City will approve any development application that would result in the destruction of a cultural heritage resource, the applicant shall provide measured drawings, a land use history including the use/occupants of the property over time, photographs and other available documentation of the cultural heritage resource in its surrounding context.

7. Adjacent Development

For all development applications, demolition control applications and infrastructure projects adjacent to a property on the Register or a Heritage Conservation District, the proponent must demonstrate that the proposal is compatible by:

a) respecting the massing, profile and character of adjacent cultural heritage resources;
b) maintaining a building width along the street frontage that is consistent with the width of adjacent heritage buildings;
c) maintaining the established setback pattern on the street;
d) orienting the development to the street in a similar fashion to that of existing heritage buildings;
e) minimizing shadowing on adjacent heritage properties, particularly on landscaped open spaces and outdoor amenity areas;
f) minimizing impact on the heritage qualities of the street as a public space;
g) minimizing the loss of landscaped open space; and
h) requiring local utility companies to place metering equipment, transformer boxes, power lines, conduit equipment boxes, and other utility equipment devices in locations that do not detract from the visual character or architectural integrity of the heritage resource.

8. Heritage Conservation Districts

It is the policy of the City to control as fully as possible the demolition, removal or inappropriate alteration of heritage buildings or the erection of inappropriate buildings in a heritage area. The designation of an area as a Heritage Conservation District is an important means of protecting a cultural landscape through the control of new development and site alteration within the district. Heritage Conservation Districts possess one or more of the following attributes:

a) a property, group of buildings, features and spaces that reflect an aspect of local history through association with a person, group, activity or development of a community or neighbourhoods;
b) buildings and structures that are of architectural or vernacular value or interest; and
c) important physical and aesthetic characteristics that provide context for cultural heritage resources or associations within the area, including features such as buildings, structures, landscapes, topography, natural heritage, and archaeological sites.

The City shall develop Heritage Conservation District Studies and Plans and corresponding design guidelines for all identified Heritage Conservation Districts in accordance with the *Ontario Heritage Act*. Heritage Conservation Districts shall be conserved by approving only those alterations, new developments, demolitions, removals and public works within the district that conform to the policies in the Heritage Conservation District Plan and this Official Plan.

A demolition permit for a building or part of a building within a Heritage Conservation District shall not be issued until plans for a replacement structure have been submitted to the City and Council has approved the replacement structure and any related proposed landscaping features in accordance with the relevant Heritage Conservation District Plan, and the policies of this Official Plan.

9. Cultural Heritage Impact Assessments

Cultural Heritage Impact Assessments provide the City with information about the potential impacts that new development may have on a cultural heritage resource and how those impacts may be avoided or mitigated. Cultural Heritage Impact Assessments may be required for development activity on or adjacent to heritage resources.

Cultural Heritage Impact Assessments shall be prepared by a professional with expertise in cultural heritage resources and must:

a) demonstrate whether, and by what method, the heritage values and character of cultural resources, as identified by the City, are being retained, improved, adversely impacted, or lost by the proposed development; and
b) document to the City's satisfaction, the cultural heritage values of the property in cases where there is no designation by-law or approved heritage conservation plan.

Cultural Heritage Impact Assessments are subject to City review. The City shall:

a) be guided by good heritage conservation practices and heritage conservation principles as identified in Section 5.5(5) of this section, the priorities for on-site retention in Section 5.5(6), and by any other relevant policies of this Plan; and
b) may impose conditions of approval to secure the long-term conservation of the resource, including heritage easement agreements.

If a cultural heritage resource is to be demolished and the City has approved the demolition, the Cultural Heritage Impact Assessment must recommend mitigation measures (such as the reuse of material or building elements in the development, or in other developments, interpretation and commemoration) and provide detailed archival documentation.

10. Archaeological Resources

The City may require the protection, conservation or mitigation of sites of archaeological value and areas of archaeological potential, as provided for under the *Planning Act*, the *Environmental Assessment Act*, the *Ontario Heritage Act*, the *Municipal Act*, the *Cemeteries Act*, or any other applicable legislation.

Where a development or redevelopment may affect archaeological resources or areas of archaeological potential, a qualified professional must complete an Archaeological Resource Assessment in accordance with provincial standards and guidelines to:

a) survey and assess the value of the archaeological resource;
b) assess the impact of the proposed development or redevelopment on the archaeological resource; and
c) indicate the methods proposed to mitigate any negative impact of the proposed development or redevelopment on the archaeological resource.

Archaeological resources located on a proposed development site will be conserved in accordance with the recommendation of the approved assessment. Where significant archaeological resources must be preserved on site, only development and site alteration which maintain the heritage integrity of the site may be permitted.

11. Burial Places

When burial places are encountered during any excavation activity in the City, the provisions of the *Cemeteries Act* and its regulations shall apply.

12. Partnerships

The City recognizes that stewardship of the community's heritage resources requires strong partnerships amongst a variety of stakeholders. The City therefore encourages partnership arrangements that foster heritage resource stewardship. These partnerships may include City and County representation, members of municipal heritage committees, members of community-based advocacy groups, property owners, and representatives of the development industry.

13. Incentives

It is the policy of the City to encourage the restoration or rehabilitation of privately owned properties under the *Ontario Heritage Act* and *Municipal Act*. Council may pass by-laws providing for grants, tax rebates or loans to the owner(s) of a designated heritage property to pay for all or any part of the cost of the alteration the designated property on such terms and conditions as Council may prescribe provided that the alteration will protect or enhance the heritage characteristics of the property.

5.6 CULTURAL VIBRANCY

A flourishing cultural life is a magnet to attracts tourists, residents and businesses to the City and encourages existing residents and businesses to stay. Cultural vibrancy plays an important role in the City's identity and the image it projects beyond the City's borders.

In support of cultural vibrancy, the City recognizes that:
a) culture is a meaningful and tangible contributor to the residents' quality of life;
b) cultural industries are an economic driver in the City;
c) culture helps attract and retain population;
d) the appearance of the city is a source of community pride and long-term economic competitiveness; and
e) cultural activities foster community participation and social cohesion.

The City supports and promotes a full range of arts and cultural activities, from community-based endeavours to regionally prominent festivals. Concentrations of cultural activities will be encouraged to create and support arts districts and corridors that can collectively draw visitors, engage communities, and revitalize neighbourhoods.

1. Arts, Heritage and Cultural Plan

In support of cultural vibrancy, the City is encouraged to develop an Arts, Heritage and Culture Plan to:
a) undertake cultural mapping to identify tangible arts, cultural, and heritage resources, and record intangible resources such as unique stories and traditions;
b) identify cultural initiatives that can revitalize and positively transform communities and improve quality of life;
c) define and reinforce City and individual neighbourhood identity by enhancing their unique characteristics;
d) develop high quality amenities and urban spaces that are accessible, inviting, and walkable to stimulate tourism and economic development; and
e) facilitate the active participation of diverse members of the community.

The City is encouraged to make use of municipally owned facilities and properties, including surplus properties, to support arts education and training programs, non-profit community arts performance venues, meeting venues, and studio, rehearsal and administrative space.

2. Public Art

Public art installations, both publicly and privately owned, make walking through the City's streets, open spaces and parks a pleasure for residents, workers and visitors alike. Public art can contribute to the character and identity of a place by creating community legacies that serve as a catalyst for economic development and tourism. Public art will be supported by:
a) recognizing public participation as essential to any public art planning process;
b) maintaining a public art reserve fund to establish new public art and maintain existing art installations, and actively solicit gifts of cash and in-kind contributions to the City;
c) encouraging public art initiatives on City properties;
d) encouraging a portion of the capital budget of all major municipal projects to be dedicated to public art; and
e) encouraging the inclusion of public art in all significant private sector developments.

5.7 ECONOMIC DEVELOPMENT

An Official Plan is one component of a holistic economic development strategy. Effective economic development supports economic clusters, fosters a culture of entrepreneurship, encourages lifelong learning and innovation, nurtures workforce development and seeks to constantly improve the quality of life of the City. In support of long term economic prosperity it is the intent of this Plan to:

a) develop and promote the City as an affordable, attractive, clean, inclusive, friendly and safe community;
b) optimize the long-term availability and wise management of land, resources, infrastructure, and community services;
c) ensure that the City is efficient and financially strong;
d) maintain and enhance the vitality and viability of existing mainstreets;
e) increase the diversity of the economy to ensure it is more resilient during downturns and transitions;
f) promote long-term community benefits such as good air, water and soil quality, inviting public spaces, housing choice, and population densities that support local businesses and transportation systems;
g) promote brownfield redevelopment, minimize land use conflicts and prevent adverse effects between industrial and sensitive land uses;
h) provide opportunities for sustainable tourism development by promoting local, cultural, historical, agricultural, waterfront and winter city themes;
i) foster green community infrastructure, improve energy efficiency and reduce resource consumption and waste;
j) localize more of the economy to create more products and services in the community, and reduce reliance on outside economic forces; and
k) prepare for possible environmental and economic shifts due to climate change, increased energy costs, reduced reliance on fossil fuels, and reduced resource consumption.

5.7.1 Supporting Competitiveness

The geographic concentration of firms, industries, services, technologies, people and other assets play a powerful role in innovation and economic growth. Today, the real competitive advantage for local economies lies in the foundations that support economic clusters that bring new wealth to a region. These include:

a) a well-educated, highly-skilled labour force;
b) research and development leading to innovation;
c) access to financial capital;
d) adequate infrastructure, including advanced information and communication networks;
e) a dynamic business climate;
f) an enviable quality of life; and
g) safe, cohesive, congenial, and inclusive neighbourhoods.

Investment in these foundations is critical to helping achieve the goals of long-term economic competitiveness and prosperity. This Plan's land use strategy and policies support the above economic foundations by:

a) directing growth and intensity to key locations where it is most suitable;
b) protecting *employment areas* from the incursion of non-employment activity;
c) facilitating development through clear, easily understood rules;

d) ensuring high-quality urban and rural infrastructure to support directed growth;
e) permitting a wide range of business activity in appropriate locations across the City;
f) protecting prime agricultural resources over the long-term; and
g) improving the quality of natural resources and showing respect for stable areas, including natural and cultural heritage.

5.7.2 Retailing

Unlike industrial and office uses which bring new wealth to a region, retail activities are generally dependent on local trade areas. Retail activity in Sarnia includes a full spectrum from neighbourhood convenience stores, small plazas, and traditional “main street” shopping areas to large shopping centres and big-box stores.

This Plan seeks to reinforce the role of existing shopping areas as the retail fabric continues to change. New retail development must suit the local context. Large-scale retail stores and “power centres” that attract significant traffic are directed to *centres*. As well, new large-scale retail development must take into account its potential impact on existing shopping areas, and city-wide and local patterns of retail activity.

Several retail areas and commercial districts are designated to allow for the introduction of residential uses to support existing retail and implement the reurbanization goals of this Plan.

1. Retail Hierarchy

This Plan intends to maintain and enhance Sarnia’s strong commercial structure, which is focused on the *downtown* and *centres* as shown on **Map 1**. These areas together shall serve the comparison and specialty shopping needs of Sarnia and Lambton County, as well as the daily and convenience shopping needs of nearby communities and neighbourhoods. *Corridors* and *commercial hubs* are much smaller in scale and intensity and are intended to provide for the daily and convenience shopping needs of residents in surrounding communities and neighbourhoods only.

The retail commercial health of the *downtown* and *centres* can be profoundly affected by the amount and location of retail development that is permitted to occur in other areas of the City.

2. Implementation Provisions for Retail Development

Applications for Official Plan Amendments, Zoning By-law Amendments and/or Minor Variances to permit new or expanded retail commercial uses or development shall be accompanied by appropriate studies to assess the justification for and the potential impact of the proposal. These studies shall include:

a) planning report(s) assessing the appropriateness of the proposed application and the potential impact of the proposal on the structure of the City and on the neighbourhood or community where the development is to be located;
b) a retail market demand and impact study assessing retail demands and impacts based on acceptable population projections, information on changes in the retail inventory, spending patterns and other factors; the study shall specify the type and size of warranted development and shall identify impacts on the role, planned function and economic viability of existing and planned commercial areas in the City;

c) traffic impact studies addressing traffic generation, road and intersection capacity, access points, transit, pedestrian and cyclist accessibility, turning movements and other road network or operational improvements to accommodate the proposal; and
d) any other studies that may be required by the City.

The City may obtain peer review assistance in assessing the pre-requisite studies submitted by the applicant. The City's costs for such peer review shall be reimbursed by the applicant.

The study requirements set out in a) through d) above may be varied or waived if the application does not involve new or expanded retail uses of a type or amount sufficient to pose a planning concern in relation to the policies of this Plan and/or if sufficient up-to-date information is already available to enable full and proper consideration of the application. In general, a retail market study may not be required for applications involving less than 1,858 square metres of new or expanded retail floor area; although a Retail Market Demand and Impact Study may be required by the City at its discretion for such an application.

3. Additional Large-Format Retail Development

While the *downtown* and *centres* shall be regarded as the location of first choice for large-format retail development, such a location may not be available for warranted new retail uses. In such circumstances, this Plan recognizes the potential for retail intensification and redevelopment within the London Line *corridor*, also known as the 'Golden Mile'.

In addition to the requirements of the Implementation Provisions for Retail Development in 5.7.2(2), the additional retail potential of the London Line *corridor* for new large-format retail development shall be considered in accordance with the following:

a) a planning study of potential locations within the *downtown* and *centres* that demonstrates that a *downtown* or *centre*s location is not available or appropriate for the proposed uses;
b) updated market support and impact studies in accordance with the requirements of the Implementation Provisions for Retail Development in 5.7.2(2) to establish that the proposed retail use(s) respond to identified public needs and the level of adverse impact on the planned function of other retail areas is acceptable; and
c) site-specific zoning by-law amendments to set appropriate limits on the size, type, uses and phasing of the development.

5.8 ENERGY

The City recognizes the unsustainable and adverse environmental, economic, and social effects of conventional patterns of energy consumption. In support of a healthy, prosperous and secure quality of life for citizens of Sarnia over the long term, the City supports energy conservation, energy efficiency and energy diversity through sustainable development, energy-efficient urban and building designs, alternative modes of transportation, and a diversity of reliable energy sources that are sensitive to their surrounding context.

1. Energy Conservation and Air Quality

The City will promote a culture of energy conservation, energy efficient land use and development patterns, an efficient transportation network, and a diversification of energy systems throughout the City by:

a) promoting compact form and an urban structure of nodes and corridors;
b) providing convenient and efficient transit service;
c) providing a well-connected pedestrian and bicycle network where feasible;
d) encouraging a mix of uses, where appropriate, to minimize motor vehicle trips;
e) encouraging energy-efficient building and site design to ensure safe and efficient movement of pedestrians and vehicles, maximize solar gain, and minimize heat loss;
f) promoting landscaping that conserves water, provides shade, improves air quality, and protects buildings and infrastructure from the effects of excess wind and sun, and that reduces urban heat island effects;
g) ensuring that all proposed development has regard to the Ministry of Environment *Land Use Compatibility Guidelines*; and
h) promoting public awareness and education initiatives on matters relating to energy efficiency and diversity.

2. Green Buildings and Infrastructure

The City will encourage innovative programs and construction methods that support the sustainable development and redevelopment of buildings. Sustainable features sought by the City include, but are not limited to:

a) renewable energy systems such as wind, geothermal and solar power installations;
b) energy-efficient technologies that are consistent with high efficiency standards, design features and construction practices;
c) green roofs or high albedo roofs that contribute to the reduction of the urban heat island effect;
d) bicycle parking and secure bicycle storage facilities;
e) the use of permeable paving materials and other innovative stormwater management methods;
f) water conservation and efficiency measures, including landscaping; and
g) conserving building materials to reduce landfill waste and lessen the energy and resources needed for new construction.

The City shall take a leadership role in sustainable building design through the design, construction and maintenance of municipal buildings, and promote educational programs that support achievable green development and technologies.

3. Energy Generation

Renewable energy systems such as wind, solar and biomass facilities are permitted within the City in accordance with provincial legislation. The City supports provincial regulation of renewable energy systems that addresses local issues and ensures the appropriate protection of the public, settlement areas, and the natural environment.

The City encourages proposals for power facilities at scales compatible with surrounding existing and proposed land uses. During energy approval consultations, the City will emphasize the need for compatibility with all surrounding existing and proposed sensitive land uses. In addition to the policies of this section, non-renewable energy generation is permitted in accordance with Section 6.3.5 of this Plan.

In the *prime agricultural area*, renewable energy systems are encouraged to be designed and constructed accessory to an agriculture use to minimize negative impacts on agricultural operations and encourage the preservation of prime agricultural lands.

Within the *urban area*, the City encourages renewable energy systems that are located above existing buildings and/or incorporated into new development and redevelopment in a manner that is sensitive to the surrounding context. This approach supports energy diversity and ensures that land is developed efficiently over the long-term.

5.9 FOOD SYSTEMS

Food-related activities extend well beyond the *prime agricultural area* and involve all of the processes and resources involved in feeding a population. Sarnia's food system is a diverse network that stretches from farm to kitchen table, including commercial agriculture, urban gardening, urban and rural transportation routes, fisheries, community service providers, restaurants, grocery stores, farmers markets and bakeries. Generally, a food system consists of the following components:

- **Production** (the growing and harvesting of food, fibre and livestock);
- **Transportation** (the movement of food by wagons, trucks, rail, ships, etc.);
- **Processing** (changing the character or structure of food in factories, workshops or homes);
- **Distribution** (distributing food to consumers through marketing, wholesaling, retailing or other methods);
- **Access** (places where food can be purchased or consumed, including retailers, farmers markets, restaurants, food services or food banks);
- **Consumption** (eating of meals, snacks, nutrition); and
- **Waste** (the disposal of food through landfills, sewage, recycling, composting and other methods)

The City's land base is not only capable of producing a wide range of food; it also produces a large quantity of feedstocks for bio-industrial applications including fuels and plastics. The City recognizes and supports linkages between producers, researchers, distributors and the City's bio-industrial cluster.

1. Food System Planning

The City shall strengthen and diversify the local agricultural sector through local and regional food system planning by:

a) collaborating with a diverse range of community stakeholder groups, including agriculture, health/nutrition, social justice interests and the Aamjiwnanng First Nation, to identify and achieve community food objectives;
b) participating in a local food advisory committee to support the development of a sustainable food system and the implementation of a Local Food Charter;
c) supporting the establishment of municipal requirements and targets for supporting local farmers (for example, by purchasing local foods for city events or encouraging local organizations to procure foods from local producers);
d) supporting the creation of marketing networks to bring together farmers, processors and purchasers of locally grown and produced foods; and
e) supporting the establishment of a Local Food Coordinator who can provide research and educational support for residents and city staff, and connect with local research institutions.

2. Food and the Environment

Extensive energy inputs are required at various points in the food system. The City will promote environmental stewardship by:

a) minimizing energy use and waste in the food system, and encouraging the use of local and renewable/alternative energy resources;
b) supporting activities to divert food waste from landfills (for example, by recycling food wastes through composting and bio-fuel development); and
c) promoting the adoption of water and soil conservation practices in agriculture.

3. Agricultural Diversification

In accordance with the *prime agricultural area* and *agriculture* designation policies of this Plan, the City supports the ability of local farmers to develop agricultural value-added activities to facilitate a diversified, profitable and sustainable agricultural industry. In support of improved agricultural diversification, the City encourages:

a) efforts to help local farmers diversify their products and produce, and market products desired by consumers (including organic or non-traditional fruits and vegetables and specialty products);
b) efforts to help existing farmers find workers and to help young and workers to make the transition into farming;
c) collaborations and partnerships with government agencies, agricultural organizations and institutions to provide relevant training, technical assistance, and capital for farm, food processing, and distribution operations;
d) food production and research activities including direct marketing to consumers by local farmers (including farmers' markets, farm-gate sales and local food outlets);
e) biotechnology research initiatives and local sourcing of feedstocks; and
f) the designation of direct food marketing to consumers and food processing as strategic economic assets.

4. Supporting Services and Infrastructure

This Plan supports the maintenance and establishment of local and/or regional facilities to support the year-round availability of locally produced food. The City supports reduced reliance on external food suppliers (such as the Toronto Food Terminal) and processing facilities. In support of this objective, the City shall encourage the following:

a) the development of incentives to help public institutions (schools, hospitals, government offices) and private food outlets (grocery stores and restaurants) to source locally produced foods;
b) the establishment of year-round food storage facilities to grade, process, market and distribute local produce;
c) agri-tourism activities that thrive in near-urban environments; and
d) the development of agri-business incubator facilities (such as food business test kitchens and processing facilities).

5. Urban Food Clusters

Farmers Markets have been an integral part of urban and rural life in the City since 1856. The City encourages the maintenance of existing farmers' markets and promotes new markets as urban regenerators that provide access to local food, serve as important producer marketing opportunities, and act as vibrant community hubs.

Within the *urban area*, the outdoor temporary sale of agricultural produce is permitted in the *downtown, commercial centre, mixed use*, *highway commercial*, *parks*, *open space*, *light industrial* and *business park* designations and shall be regulated through the Zoning By-law.

6. Urban Agriculture

This Plan supports limited accessory agricultural uses within the *urban area* including home gardens and community gardens. Urban gardens can function as important community resources that improve healthy food access and food literacy, build social connections, offer recreation, education and economic development opportunities, provide open space and act as a source of local food.

Community gardens, where individuals and groups grow food for personal consumption or donation, are permitted in all designations. The zoning by-law may contain criteria to ensure appropriate operating standards, including landscaping and setback requirements, structure setbacks, and temporary small-scale produce sales.

7. Emergency Food Planning

The City supports the development of plans for ensuring local food supplies and related activities in the event of an emergency. This activities include:

a) assessing the potential food needs of the City and surrounding area during different types of emergencies and the capacity of local and regional food sources and distribution systems to supply the food needed; and
b) collaborating with relevant government department/agencies, private stakeholder groups and community organizations to develop plans to establish adequate local and regional food reserves for emergencies (as well as related communication and distribution logistics) and restore food system integrity following the emergency.

8. Public Awareness, Education and Communication

An engaged and informed city is a vibrant city. In support of agriculture, the City encourages:

a) an urban/rural awareness program to increase respect and commitment for agriculture in consultation with local agricultural organizations;
b) communication and education to increase public awareness about the importance and benefits of agriculture in the City and County;
c) announcements about local or regional agricultural activities and events in City advertisements and publications;
d) opportunities for residents and tourists to buy fresh and value-added products from local producers;
e) the development of Food Resource Guides that identify organizations and businesses that are involved in local and regional food production, processing, and retailing to better educate the public and build links between local producers and local consumers;
f) information/education programs for motorists on sharing the road with farm equipment on urban and rural roadways; and
g) community education and outreach programs that highlight the importance of agricultural food skills and support the use of urban agriculture initiatives.

9. Monitoring and Evaluation

In support of urban and rural agricultural communities, the City encourages:

a) studies that examine the economic and social impact of agriculture and local food production as well as food distribution and marketing activities to gain a better understanding of the economic impact and future potential of local and regional agriculture, food processing, food wholesaling and retailing, and food waste management activities;

b) routine assessments of City/County food issues that incorporate broad public consultation in the process; and
c) findings from consultations are integrated into planning, economic development plans, transportation plans, health service plans, environmental plans, etc.

10. Agricultural Advisory Committee

This Plan supports the establishment of an Agricultural Advisory Committee (AAC) to advise City Council on matters affecting agriculture and the farming community in the City. The activities of the AAC could include:

a) advising on proposed policies, bylaws and initiatives that impact on agricultural and rural matters;
b) mediating complaints related to agricultural practices;
c) recommending studies to help resolve agricultural problems or improve agricultural conditions;
d) providing advice on raising agricultural awareness; and
e) assisting with the development of community development strategies (e.g. agricultural economic strategies, local food system planning).

5.10 HOUSING

The City supports the provision of a full range of housing accommodation, in terms of form, tenure and affordability to meet the needs of present and future residents, including those with disabilities.

Individual developments should contain a range and mix of housing forms, types, densities and tenures in accordance with the policies of this Plan. Proponents of new housing shall consider, among other things, the surrounding context, the preservation of open space and trees, the provision of parkland, ways to accommodate additional traffic, and the capacity of municipal infrastructure including water, transit, sanitary sewage and stormwater drainage.

1. Affordable Housing

Affordable housing is defined as:

a) ownership housing for which the purchase price:
    i) represents annual accommodation costs that do not exceed 30% of gross annual income for low- and moderate-income households (households with incomes in the lowest 60% of income distribution in the County of Lambton); or
    ii) is at least 10% below the average purchase price of a resale unit in the County of Lambton.
b) rental housing for which the annual rent:
    i) does not exceed 30% of gross annual household income for low- and moderate-income households (households with incomes in the lowest 60% of income distribution for rental households in the County of Lambton); or
    ii) is at or below the average market rent for a unit in the County of Lambton.

This Plan sets a target of 25% affordable units for all new housing developments. In support of this target, the City may use height and/or density incentives in accordance with Section 7.2(8) of this Plan.

2. Rental Housing Conversion

The conversion of rental housing to condominium tenure refers to the change in status of purpose-built multi-unit rental housing units to condominium ownership. Existing rental housing buildings include those that are totally occupied, partially occupied, or unoccupied.

The supply, availability and quality of rental housing in the City should meet the housing requirements of current and future residents. Therefore, the City shall not support the conversion of multi-unit rental housing to condominium ownership unless all of the following criteria have been met to the satisfaction of the City:

a) the rental vacancy rate by dwelling structure/type for the City of Sarnia has exceeded 3.0% for the preceding four year reporting period as defined and reported yearly through the Canada Mortgage and Housing Corporation (CMHC) Rental Housing Market Survey;
b) the existing market rents of the units proposed for conversion are above the average market rent levels for the City of Sarnia as reported yearly by the CMHC Rental Housing Market Survey for rental units of a similar dwelling/structure and bedroom type. The City may require applicants to submit rental rolls on a per unit basis as proof of rental values in this regard;
c) the proposed conversion will not result in the loss of 10% or more of the existing rental stock of the same dwelling type within the City of Sarnia;
d) a community consultation and public meeting has been held on the proposed conversion, to which the owner and all tenants of the subject building(s) have been invited;
e) the building proposed for conversion meets the City's standards of maintenance and occupancy, and the requirements of the *Ontario Building Code* and the *Ontario Fire Code* or is proposed to be brought into full conformity in accordance with such standards as a condition of the conversion;
f) the applicant has agreed to dedicate lands for parkland purposes, or provide cash-in-lieu of parkland to the City in accordance with the requirements of the Planning Act as a condition of the conversion;
g) the proposed use of the land and building to be converted conforms, or will be brought into conformity, with the City's zoning regulations affecting such land(s) and building(s) as a condition of the conversion;
h) tenants of the building have the option to continue to lease their units following an approval for conversion to condominium in accordance with the provisions of the *Residential Tenancies Act* or any successor legislation; and
i) tenants of the building are given the first right of refusal to purchase a condominium unit in the conversion in accordance with the provisions of the *Residential Tenancies Act* or any successor legislation.

3. Tenant Notification

When units are approved for conversion, the City shall notify the tenants of their rights under the *Residential Tenancies Act* or any successor legislation.

5.11 LAND USE COMPATIBILITY

Development proponents shall minimize or prevent, through the use of buffers, adverse effects associated with the operation of specified facilities on the owners and users of neighbouring properties. For the purposes of this section, adverse effects mean one or more of the following:

a) impairment of the quality of the natural environment for any use that can be made of it;
b) injury or damage to property or to plant or animal life;
c) harm or material discomfort to any person;
d) an adverse effect on the health of any person;
e) impairment of the safety of any person;
f) rendering any property or plant or animal life unfit for use by humans,
g) loss of enjoyment of normal use of property, and
h) interference with the normal conduct of business.

1. Noxious Uses

All land uses and transportation facilities that may be noxious due to noise, visual characteristics, vibration, dust or odours will be physically separated from residential uses wherever possible. Before the City approves any development that may be incompatible with adjacent uses, the proponent must satisfy the City that appropriate steps have been or will be taken to reduce any land use conflicts to a tolerable level, or to eliminate them entirely.

The Ministry of Environment *Land Use and Compatibility Guidelines* will be used to assess the proposed use of all land in the City. Residential areas and other sensitive uses, such as hospitals, schools and nursing homes, will be protected through the policies of the Plan, the Zoning By-law and the use of Site Plan Control. Developers may be required to carry out noise, dust, odour and/or vibration assessments and determine control measures, if feasible, that are satisfactory to the City and the Province.

2. Noise Guidelines

The appropriate Provincial noise guidelines standards shall be maintained for all new development within or adjacent to residential areas.

Council may require that applications for residential uses adjacent to Provincial Highways and railways be supported by a Noise Impact Study, prepared in accordance with normal accepted standards, which shall include the following:

a) a description of the proposed development, including plans and physical site characteristics, including elevations and contours;
b) a statement of noise measurement techniques and the methods used to measure noise;
c) the results of noise measurement and prediction studies for the site, during both daytime and nighttime;
d) the extent to which noise levels throughout the site vary from accepted noise level standards, as set by the Province from time to time;
e) noise attenuation measures to be installed to reduce excess noise levels; and
f) noise level prediction results anticipated after attenuation measures are installed, for both daytime and nighttime.

No new residential development adjacent to Provincial Highways or railways shall not be permitted unless predicted noise levels after development are at or below the levels acceptable to the Province. However, the City may approve development and require that notice be given to prospective purchasers and tenants where predicted noise levels exceed maximum acceptable Provincial standards.

3. Adult Entertainment Establishments

Adult entertainment establishments shall be permitted only on lands designated *heavy industrial* and *light industrial* that are at least 120 metres away from any lands designated and/or zoned for residential or open space purposes.

In such areas, adult entertainment establishment uses shall be considered only on the basis of individual applications to amend the Zoning By-law in accordance with the following additional locational criteria:

a) any building erected or altered for use as an adult entertainment establishment shall not be permitted on a site that abuts Vidal Street, London Road/Line, Indian Road, Murphy Road, Exmouth Street, Mitton Street, Wellington Street, Front Street or Christina Street; and
b) any adult entertainment establishment shall not be permitted on any lot that has a lot line located within 320 metres of any other lot occupied by an existing adult entertainment establishment use.

5.12 NATURAL ENVIRONMENT

A healthy and clean natural environment is essential for human health, well-being, and for the integrity and proper functioning of ecosystems. All decisions, whether public or individual, impact on the quality and condition of the City's natural environment. Together with all applicable policies of this Plan, this section provides policy guidance to recognize and protect environmental quality, and improve natural environment functions.

1. Natural Environment

The City shall develop and implement an Urban Forestry Management Plan to ensure the proper management and long-term health of the City's urban and rural trees and vegetation, including strategies for education, stewardship initiatives and partnerships.

The City will incorporate best management practices for municipal buildings, property, and roads, in order to reduce the amount of contaminants entering the environment through activities such as street cleaning, snow removal, and weed control.

2. Woodlands Management

Woodland habitat loss is one of the most serious threats to biological diversity. While Environment Canada recommends that 30% of a watershed should be in forest cover, only 14.9% of the watershed of the St. Clair Tributaries is forest cover. The Cow and Perch Creek watersheds have only 8.9%.

The City encourages improved forest cover through increased urban canopy cover and strategic restoration efforts that support existing natural areas, including hedgerows, and that minimize any loss of existing agricultural land used for crops or as pasture.

In support of woodlands protection and sustainable management practices, the City may consider implementing relevant sections of the *Forestry Act*, the *Woodlands Improvement Act*, the *Municipal Act*, and any other relevant legislation.

3. Reforestation Requirements

Where *natural areas* forest cover and/or naturalized areas are permitted to be removed in accordance with the policies of this Plan, they are to be replaced as a condition of any development approval in accordance with the following:

a) in *prime agricultural areas* and *employment areas*, any proposed development or site alteration shall require reforestation of at a minimum, an equivalent area of land,
b) in any other designations, restoration of forest cover shall be required at a rate of twice the area removed;
c) preference will be given in the following order of priority: reforestation at the same site; adjacent to a designated *natural areas*; and/or within *natural hazards*; and
d) any reforestation should consist of indigenous species, and shall be maintained by the proponent to the free-to-grow stage; long term management of these replacement trees shall comply with the County of Lambton Woodlands Conservation By-law.

Council may consider the reduction or re-allocation of development densities in order to preserve existing woodlots and mature trees, and other natural areas and features which are not identified within the *natural areas* designation of this Plan.

4. Urban Canopy

Urban trees provide shade, privacy, and wildlife habitat, help clean air and water, cool homes and parking lots, and beautify parks and streets. A healthy urban canopy contributes to environmental stability and resiliency, and ensures a better quality of life. The City shall ensure the proper management and long-term health of the City's trees by:

a) developing and implementing an Urban Forest Management Plan
b) protecting, preserving and planting street trees within road rights-of-ways, including during reconstruction, utility projects and regular maintenance;
c) ensuring new tree plantings and landscaping, including street trees, are an integral part of any development approval process;
d) encouraging private landowners to protect and preserve trees located on private property;
e) supporting native species recovery and naturalization on both private and public lands;
f) controlling and eradicating invasive species that are destructive to forest health; and
g) improving the resilience of the urban canopy through diversity of tree species, structure and age class.

5. Tree Preservation Plans

The proponent of any proposal for development or site alteration may be required to submit a Tree Preservation Plan, prepared by a qualified expert, to the satisfaction of the City. The City recognizes that not all trees can and should be preserved. Trees that are structurally unstable, in poor health, or an undesirable species may be candidates for removal.

A Tree Preservation Plan shall:

a) contain an inventory of existing trees, health, and size;
b) indicate the impact of development on existing trees and the wildlife habitat that they provide;

c) indicate measures necessary to reduce the negative effects of development, including the identification of opportunities to restore tree and woodland health through pruning, transplanting, replanting and landscaping;
d) identify all trees to be removed and all trees to be preserved;
e) indicate a plan for the replacement of all removed trees with suitable quality stock, preferably of indigenous species and the maintenance of replacement trees to a free-to-grow stage;
f) be included in the development agreement; and
g) incorporate the requirements of any applicable Environmental Impact Study.

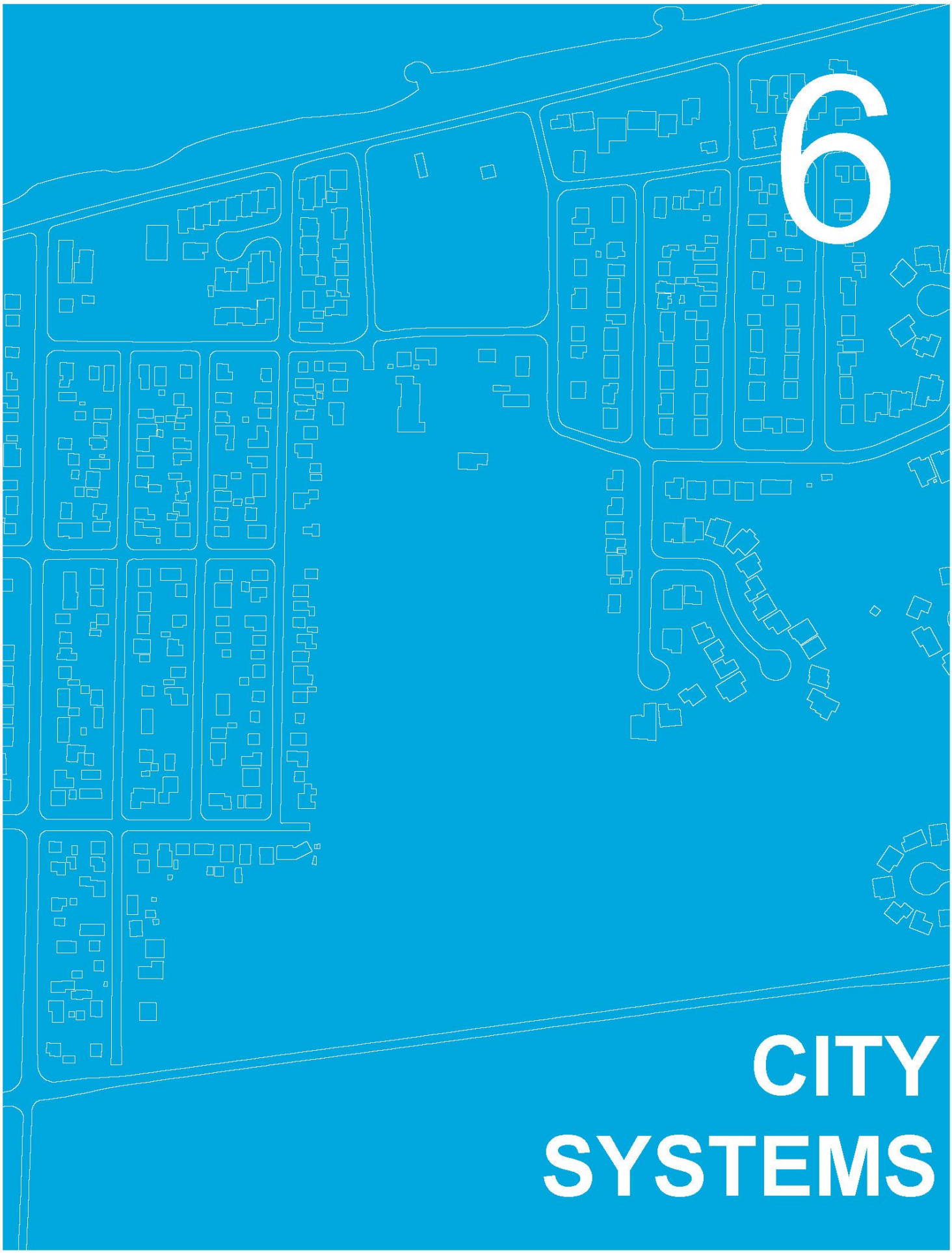
6. Restoration

In many instances, human activities have degraded the natural environment. The effects are continued and cumulative, and few high-quality aquatic and terrestrial ecosystems remain. To avoid restoration efforts that are well-intentioned but ineffective, restoration strategies shall:

a) begin with a watershed analysis;
b) provide a broad range of benefits to terrestrial, riparian and aquatic ecosystems;
c) address the causes of degradation, rather than the symptoms;
d) have a well-defined project life span and understanding of expected benefits over time;
e) be self-sustaining once completed, requiring minimum maintenance or operation;
f) contribute to restoring historical composition and biodiversity; and
g) link isolated habitat units.

7. Shorelines

The Lake Huron and St. Clair River shorelines provide essential ecological functions, improve citizen quality of life, and are recognized as vital tourist destinations. The goal of the City is to protect, enhance and restore the quality of shorelines and to improve public access to the Lake and River. All development, existing and proposed, is encouraged to minimize negative impacts and improve the natural conditions of shorelines through stewardship and community partnerships.



6

CITY SYSTEMS

6 CITY SYSTEMS

The *Provincial Policy Statement* recognizes that a fundamental element of a compact and efficient city is suitable and coordinated supportive water resource, infrastructure and transportation systems over the long-term. These include stormwater, drinking water sources, water distribution, sanitary sewage, waste management, public utilities, roads, transit, active transportation, rail and parking. The systematic evaluation and integration of these components is essential to achieving growth that supports the long-term operational, economic, social/cultural, and institutional sustainability goals of the City.

6.1 CITY SYSTEMS AND THE NATURAL ENVIRONMENT

It is a principle of the City that all residents will be protected from pollution, and provided with a clean and healthy environment. The City shall ensure the fair treatment and meaningful involvement of its residents in matters where it has jurisdiction. This section's environment-related goals and policies shall apply to all land uses, infrastructure and utilities, and form the basis for educational programs.

It is the intent of this Plan to foster a resilient City that does not waste energy, that promotes improved environmental quality, and that can anticipate and adapt to change. The general objectives for environmental sustainability are:

a) to minimize the City's ecological footprint;
b) to achieve sustainable community and infrastructure design;
c) to preserve, enhance and protect the City's natural resources, natural heritage systems, environmental features, and waterfronts;
d) to improve the City's soil, air and water quality; and
e) support a diversity of sensitive renewable energy generation.

The City, in cooperation with other public agencies, shall enhance environmental quality through such mechanisms as pollution control, sustainable natural resource management, reduction of waste products, conservation of energy, use of renewable energy, and the promotion of energy-efficient facilities in the planning and development of public works and infrastructure expansion.

6.1.1 Climate Adaptation

Climate change and extreme weather events, whatever their cause, are inevitable, and will expose the City's resources and infrastructure to conditions not originally designed to withstand. Resilient city systems maintain their functions in the face of stresses and change. Major weather events and their effects, such as windstorms, flooding, erosion, heat waves and drought pose the greatest risk to the City.

This Plan prioritizes prevention over mitigation as the preferred method of managing risks related to climate change. In recognition of long-term sustainability and a City that can adapt to a range of foreseen and unforeseen stresses, this Plan:

a) directs growth away from areas of risk such as flooding and erosion hazard areas;
b) favours environmental designs and retrofits of buildings and infrastructure that are resilient to the stresses of extreme weather events;

c) supports measures to improve watershed carrying capacity, including stormwater management, improved tree cover, and ecological restoration;
d) recognizes the need for on-going maintenance, reconstruction, and upkeep of infrastructure and protective works over the long-term;
e) supports compact land use patterns, and water- and energy-efficiency goals; and
f) promotes the growing of food and the protection of agricultural land, to enhance food security and support community interaction.

1. Adaptation Strategy

The City supports the preparation of a climate adaptation plan for its water resource, infrastructure and transportation systems to:

a) efficiently allocate financial resources, ensure public health and safety, mitigate property damage, and reduce or eliminate reliance on costly preventative works;
b) assess the risks to human systems as well as natural systems;
c) assess adaptation options and their costs and benefits in reducing unacceptable risks;
d) identify the most effective adaptation option(s);
e) develop polices and action plans to reduce risks to acceptable levels; and
f) identify the most effective approaches and mechanisms, and incorporate them into development planning and decision-making.

6.2 WATER RESOURCES

A clean and abundant supply of fresh water is essential for the health of the ecosystem and for the social and economic well-being of the City's residents. Water is a common, precious, and shared resource that circulates through the earth and its atmosphere. This is known as the hydrologic cycle.

To ensure the overall health and integrity of the hydrologic cycle and associated ecosystems, this Plan seeks to establish a strong foundation to protect, improve and restore the existing and future quality and quantity of water resources in the City. Through conformity with the *Safe Drinking Water Act*, the *Clean Water Act*, and other legislation and policies, this Plan seeks to ensure the long-term safety and security of municipal drinking water supplies.

Water resources, including surface water and groundwater features, are shown on **Map 3**.

6.2.1 General Policies

DEFINITIONS

Hydrologic cycle includes the processes of: evaporation, transpiration, condensation, precipitation, surface runoff, infiltration, recharge, and groundwater flow.

Surface water features include headwaters, rivers and stream channels, municipal drains and private tiled/closed drains, ponds (excluding artificial ponds in the *agriculture* designation), seepage areas, recharge and discharge areas, springs, wetlands, and all associated riparian lands.

Groundwater features include: recharge and discharge areas, water tables, aquifers and unsaturated zones defined by surface and subsurface hydrogeological investigations.

1. Water Resource System Objectives

It is the intent of this Plan that land use planning shall:

a) contribute to the protection, improvement, or restoration of surface water and groundwater features, and hydrologic functions on a watershed basis;
b) maintain and enhance the integrity of aquatic, riparian and related terrestrial ecosystems;
c) sustain the natural ecosystem and apply ecological planning principles in the management of the watershed and the conservation of natural areas such as woodlands, wetlands, and natural heritage corridors;
d) protect human life and property over the long term from natural hazards such as increased flooding and erosion;
e) reduce sedimentation and pollution through the coordination of stormwater management facilities; and
f) ensure that all land use decisions promote water conservation and support the efficient use of water resources.

2. Surface Water and Groundwater Features

Surface water and groundwater features are an integral part of the hydrologic cycle and shall be protected and enhanced to ensure that the ecological and hydrological integrity of watersheds is maintained for the long-term. Water resources, the *natural heritage system*, *natural areas* and *natural hazards* often coincide. All systems require protection on an integrated watershed management basis.

3. Natural Hazards

Natural hazards provide essential hydrological functions, and include:

- flood-prone and erosion-prone areas along inland surface water features; and
- shoreline management areas that are prone to flooding and erosion and dynamic beach hazards along the shorelines of Lake Huron and the St. Clair River.

Natural hazards are shown on **Map 6**. To minimize property damage and prevent social disruption, development shall be directed away from *natural hazards*, in accordance with Section 4.3.2 of this Plan.

4. Watershed Planning

The City is located within three watersheds, including the Perch Creek, Cow Creek, and the St. Clair River Tributaries. The boundaries of these watersheds are shown on **Map 3**.

This Plan recognizes watershed planning as a comprehensive approach for integrating water and natural area management principles and land use planning on an ecosystem basis. The boundaries of watersheds provide natural limits for managing the interconnections and relationships between human activities, surface water and groundwater features, natural hazards, and natural areas.

To ensure integrated watershed planning and management, the City shall:

a) undertake initiatives in cooperation with the St. Clair Region Conservation Authority, the Province, the County, surrounding municipalities, community groups, and other agencies;

b) establish watershed boundaries as the ecologically meaningful scale for the protection and enhancement of water quality and quantity;
c) identify surface water and groundwater features, hydrologic functions and natural heritage systems that contribute to the hydrological and ecological integrity of watersheds;
d) protect, improve, or restore the quality and quantity of the City's surface water and groundwater resources and related hydrologic functions through the policies of this Plan, municipal initiatives, and community stewardship;
e) protect existing and future municipal drinking water sources from incompatible land uses, and negative impacts associated with development, and site alteration; and
f) ensure water resource management practices are applied to individual land parcels, and specific water management techniques are used through site plan controls, stormwater management plans, subdivision agreements, and erosion and sedimentation control.

5. Watershed and Water Conservation Plans

The City recognizes the preparation and implementation of watershed and water conservation plans as the primary vehicle to evaluate water resources, identify management strategies, and provide directions to guide land use planning decisions. Such plans can improve public and technical understanding and help launch and maintain successful water conservation programs. The City recognizes public engagement as an essential aspect of any initiative.

Any watershed and water conservation plan shall include, as a minimum:
a) a water budget that quantifies and compares components of the hydrologic cycle and assesses the availability, quality and quantity of water resources;
b) criteria for evaluating the protection of water quality and quantity, hydrological features, and hydrological functions;
c) targets required to meet the water needs of the ecosystem;
d) a public consultation plan including public education and outreach;
e) a water conservation plan that promotes the efficient and sustainable use of water;
f) an implementation framework and environmental monitoring plan to meet the water needs of the ecosystem, including water conservation measures, land and water management, pollution prevention strategies, and established best practices; and
g) provisions for ongoing monitoring and evaluation of the plan.

Where a watershed and water conservation plan is completed and approved, the City will amend this Official Plan, as necessary, to incorporate relevant parts of the watershed plan.

6. Studies in Support of Development Applications

To ensure that water quality and quantity are protected, the City may require that the proponents of development applications:
a) take into account the recommendations of watershed studies and related master plans;
b) consider the potential impacts of the development on the quantity and quality of the City's water resources;
c) demonstrate in consultation with the Province and the St. Clair Region Conservation Authority, that all development meets provincial water quality objectives for surface and groundwater;

d) provide a Water Conservation Efficiency Study;
e) provide a stormwater report for an official plan amendment, zoning by-law amendment, temporary use authorizations, site plan control, minor variances, subdivision/condominium and severance applications;
f) pay for peer review of these studies by a qualified person; and
g) ensure that relevant findings from these studies are implemented through the development approval process.

7. Stewardship of Water Resources

This Plan encourages the development and promotion of education and outreach programs, incentives, stewardship programs, best management practices, and research projects directed at the protection, maintenance, and improvement of the quality and quantity of *water resources*.

Recognizing the importance of education, outreach, and stewardship programs, the City shall:

a) promote the use of existing education and outreach programs to increase awareness and understanding of threats to drinking water quality, and where needed, develop new programs to support the protection of drinking water sources;
b) build on and support existing programs such as the Environmental Farm Plan, Soil and Crop Improvement Plans, Nutrient Management Plans, Clean Water Programs, Ontario Drinking Water Stewardship Program, salt efficiency programs, and other programs that contribute to the protection of drinking water sources.
c) promote best management practices to reduce threats to water quality in agricultural areas, such as livestock fencing near watercourses, planting of windbreaks and decommissioning unused or abandoned wells;
d) promote incentive programs for the maintenance, repair or replacement of inadequate septic systems in *vulnerable areas*; and
e) encourage and support programs to protect, restore and rehabilitate natural water-related ecosystems in cooperation with the St. Clair Region Conservation Authority and other interested agencies and groups.

8. Monitoring and Evaluation

The City is encouraged to establish environmental monitoring and programs in cooperation with community partners and appropriate government agencies to:

a) evaluate and report on the effectiveness of the Thames-Sydenham and Region Source Protection Plan and any Watershed/Water Conservation plans;
b) assess long-term impacts on water features and ecological functions through benchmarking;
c) assess impacts and identify corrective or mitigation measures where water features and ecological functions have been negatively impacted;
d) explore subject areas that require further study and policy options to enhance the protection of water resources and the natural environment;
e) encourage the development and implementation of general spills awareness programs where significant threats may occur; and
f) increase awareness about the changing state of the environment.

6.2.2 Stormwater Management

Stormwater is an essential component of the hydrologic cycle. Stormwater is defined as rainfall and snowmelt that seeps into the ground or runs off the land into storm sewers, rivers, streams and lakes. It may include runoff from urban activities such as lawn watering, washing cars or draining pools.

The goal of effective stormwater management is to regulate urban runoff, protect ecosystems, prevent flooding and property damage, preserve the integrity of the infrastructure system, and protect drinking water sources. The City's stormwater management system includes facilities as diverse as rooftop storage, management ponds, and agricultural drains.

To ensure the protection, improvement and restoration of water resources over the long-term, the City's objectives for stormwater management are to:

a) manage stormwater as a resource;
b) recognize stormwater management as an integral component of the overall land use and environmental planning process;
c) sustain the hydrologic balance of surface water and groundwater;
d) protect and enhance water resources and provide for recreational and interpretive opportunities;
e) focus on runoff prevention and treat runoff as close to the source as possible;
f) enhance the performance of water facilities, minimize maintenance requirements, ensure longevity and address public safety issues; and
g) recognize public education and interpretation as an integral component of any stormwater management strategy.

1. Separation of Stormwater from Sanitary Sewers

The City shall prevent stormwater flowing into the municipal sanitary sewage system, including a program to require the disconnection of rooftop leaders from sewage systems and eliminating other factors that add stormwater to sewers.

2. Stormwater Master Plan

The City shall prepare, maintain, and implement a Stormwater Master Plan to manage the City's stormwater resources and administer the development, operation and maintenance of the stormwater management system. The Master Plan shall address such matters as integration of land use planning and environmental planning, location, design, education and enforcement.

3. Stormwater Management Facilities

Stormwater management facilities are landscape and structural features that gather and filter rainfall and surface water runoff and gradually release it back into the ground and natural watercourses. Stormwater management facilities are permitted in all land use designations, with the exception of *natural areas*. All stormwater management facilities shall be designed to:

a) maintain the natural hydrologic cycle and function of the watersheds through a range of mechanisms, including stormwater management practices and principles;
b) control and eliminate water pollution, soil pollution, noise pollution and air pollution to safeguard the natural and human environment;
c) be efficient and ecologically sensitive;

d) minimize life cycle costs;
e) prevent flooding and stream erosion;
f) minimize volumes and contaminant loads; and
g) use best management practices to reduce runoff volume and to treat stormwater runoff on-site through the use of source, conveyance and end-of-pipe controls.

The City may develop and implement design principles for stormwater drainage and grading to augment the Ontario Ministry of the Environment's *Stormwater Management Practices Planning & Design Manual.* The intent is to achieve the highest level of land use, aesthetics, environmental benefits, and ease of maintenance for stormwater management facilities over the long term.

4. Stormwater Management Ponds

The use of green space for stormwater detention and retention ponds is encouraged, including the integration of detention and retention ponds into the municipal open space system. Environmental features and passive recreational uses shall be incorporated where feasible, including:

a) walking and cycling facilities;
b) rest areas;
c) protected areas for wildlife; and
d) innovative design features such as wetland forebays and outlets.

The *natural heritage system* and its associated vegetative areas are recognized as integral components of the ecosystem and shall be left as much as possible in their natural state. The provision of vegetative “buffers” in association with new stormwater management facilities will be encouraged.

5. Municipal and Agricultural Drains

Municipal and agricultural drains act as receptors for the urban stormwater system and runoff from agricultural operations. The principles of natural channel design will be used in the design of drains to decrease pollution and improve habitats. For example:

a) grassed slopes and other forms of plantings, or other suitable erosion control methods should be introduced and maintained on the banks of drains to add to the stability of the drainage channel;
b) tile outlets should be constructed to minimize erosion;
c) tree planting or other buffer measures should be installed where appropriate to act as a windbreak, protect drain banks, and restrict cultivation near drain banks;
d) ponding areas should be incorporated in drains to reduce the speed and volume of flow, act as settling areas for water borne particulates, enhance evaporation and serve as water storage areas; and
e) owners of land near municipal and agricultural drains should be encouraged to employ best farm management practices.

6. Stormwater Management Report

Urban development interferes with the natural movement of water in the hydrologic cycle. Decreased infiltration of rainfall and snowmelt leads to increased stormwater runoff.

The objective of a Stormwater Management Report is to evaluate the effects of a proposed development on the stormwater and drainage system, and to recommend how

to manage rainwater and snowmelt within a proposed development. Stormwater Management Reports shall, to the satisfaction of the City:

a) identify the water quality and quantity impacts of the change in stormwater runoff on existing infrastructure and watercourses caused by a proposed development;
b) assess any potential impacts on local and regional flooding;
c) identify improvements to municipal infrastructure required to support the proposed development;
d) determine mitigation measures to minimize any negative impacts of the development on surface and groundwater features, water quality, the drainage system, and the natural environment; and
e) identify opportunities for on-site water storage, infiltration, and pre-treatment control facilities and features in development and redevelopment sites.

The City may require that the stormwater management report submitted by an applicant be subject to peer review. The applicant shall reimburse the City for costs of such peer review.

7. Ministry Review and Approval

Development applicants are responsible for obtaining all necessary approvals from relevant authorities and agencies. All stormwater management plans and reports shall be forwarded to the Ministry of Transportation for their review and approval for all developments in which stormwater may affect a provincial highway.

6.2.3 Drinking Water Source Protection

The *Clean Water Act* sets out a framework for the protection of Ontario's drinking water sources on a watershed basis. Under this legislation, the City is part of the Thames-Sydenham and Region Source Protection Region. To address existing and potential threats that could contaminate or reduce the quality and quantity of the municipal drinking water supplies, the Source Protection Region must prepare a Source Protection Plan for approval by the Ministry of Environment, as required by the *Clean Water Act*.

The City is responsible for implementation of the water source protection plan and shall ensure that all planning for any infrastructure or decisions under the *Planning Act* and *Condominium Act* conform to the significant threats policies of an approved source protection plan. The City shall have regard to other policies set out in the plan and may place restrictions on land use activities that have the potential to impact water supplies.

1. Drinking Water Sources

The City and several surrounding municipalities rely on the Great Lakes system for the majority of their water supply. The Lambton Area Water Supply System (LAWSS) draws untreated water directly from the St. Clair River, and the Petrolia Water Supply System (PWSS) draws water from Lake Huron at Bright's Grove. These supplies are directly impacted by the quality of the City's surface and groundwater features.

2. Vulnerable Areas

Vulnerable areas that require protection to ensure a safe drinking water supply are shown on **Map 3** and include:

- the in-land component of *intake protection zones*;

- *highly vulnerable aquifers*; and
- *significant groundwater recharge areas*.

Under the *Clean Water Act*, *vulnerable areas* in the City require protection to ensure the safety and security of municipal drinking water supplies. In these areas, the level of vulnerability has been quantified, and issues and activities that pose threats to the system have been identified.

Land uses and activities within *vulnerable areas* that have the potential to pose significant, moderate or low threats due to chemicals or pathogens may be prohibited, restricted or regulated.

All storage and handling of liquid waste, petroleum, fuels, solvents, fertilizers and related chemicals shall be provided for in properly designed and engineered containment areas in accordance with all applicable policies, guidelines, technical standards and legislation.

The City may require technical studies and risk management plans to be prepared by a qualified professional as part of any development application to identify, assess and mitigate any potential impacts within *vulnerable areas*. These studies may include, but are not limited to, a hydrogeological study and a spill prevention and contingency plan.

3. Municipal Initiatives

In support of the protection of water resources, the City is encouraged to:

a) work with the airport management authority of the Sarnia Chris Hadfield Airport to develop and implement a management plan for runoff that contains chemicals used in the deicing of aircraft;
b) enact and enforce sewer use by-laws through the powers granted under the *Municipal Act*, to limit and regulate the quality and quantity of substances discharged into the municipal sanitary and stormwater systems;
c) develop and implement a road salt management plan for all City streets, with special consideration given for salt application in *vulnerable areas*;
d) in cooperation with the County, encourage the development and implementation of a septic system maintenance inspection program. Priority would be given to inspecting older and failing systems; and
e) continually review and update any spill prevention plans, spill contingency plans, and emergency response plans.

6.3 WATER AND WASTEWATER INFRASTRUCTURE, WASTE MANAGEMENT AND PUBLIC UTILITIES

The City's infrastructure and utilities assets will be managed in a manner that supports the *city structure* by:

a) recognizing the life-cycle costs of infrastructure;
b) maintaining municipal infrastructure in a state of good repair;
c) ensuring growth pays for growth, and helps pay for existing infrastructure upgrades;
d) ensuring infrastructure and utilities are located on public rights-of-way; and
e) encouraging and implementing measures and activities that reduce resource consumption, waste and pollution.

Infrastructure tends to be capital-intensive and carries high fixed costs that do not decrease when population density decreases. This Plan promotes the optimal use and functioning of existing infrastructure in ways that reduce current costs and minimize future obligations, while preserving opportunities for future development.

Before the City will consider developing new infrastructure, the use of existing infrastructure should be optimized, opportunities for adaptive re-use should be considered, and the use of green infrastructure be encouraged to augment infrastructure efficiency, and for other associated ecological and hydrological benefits.

6.3.1 General Policies for Infrastructure and Utilities

1. General Policies

Minimum requirements for infrastructure may be established by the City from time to time and all future development shall conform to such requirements. No development shall be approved until the City is satisfied that suitable municipal infrastructure is available to serve the development. The calculation of any uncommitted reserve capacity will consider any allocations made to planned developments that have not yet been approved.

Where constraints on infrastructure and utilities have been identified, the City may require that development proceed on a phased basis and may require the approval of each phase to be conditional upon a detailed engineering review of the available infrastructure and utilities. Priority shall be given to intensification and redevelopment opportunities within the *built boundary*.

Proponents of development shall bear the capital cost of municipal infrastructure both on-site and off-site, and any related studies, as required.

2. Local Improvement Act

The *Local Improvement Act*, as amended, may be implemented wherever appropriate to permit infrastructure installation as required, and as local conditions dictate.

6.3.2 Water Distribution

Local water distribution systems shall be installed as required throughout the City, either by the City or by private developers, in accordance with the municipal water distribution master plan. The most efficient and economical methods of providing water supply throughout the City shall be used, and future extensions of the water distribution system shall be undertaken only in conformity with the policies of this Plan.

1. Water Distribution Master Plan

To ensure a continued and quality supply of water for drinking and domestic purposes, the City shall prepare and implement a Water Distribution Master Plan to support the policies of this Plan. The Master Plan will be developed in co-operation with water system operators, the County and the surrounding municipalities and shall:

a) identify current and future potable water demand and supply areas, including a municipal water distribution area;
b) identify how development on lands designated for urban use will be serviced;
c) specify drinking water supply allocation procedures for development applications

approved under the *Planning Act*, including reserve capacity allocations for redevelopment in the *built-up area*, and development in *greenfield areas*;
d) provide direction for planning and staging investments in the drinking water supply systems based on servicing capacity calculations required to accommodate land needs as projected by this Plan;
e) protect drinking water sources, human health and the natural environment; and
f) develop and implement programs and policies to efficiently use water and to reduce requirements for additional water supply and water treatment.

2. Municipal Water Distribution Area

All development within the municipal water distribution area will be served by municipal piped water facilities. When development is proposed in the water distribution area and the necessary lines are not yet installed, the developer will be responsible for providing the necessary extensions. The City shall pass a By-law pursuant to the *Municipal Act* defining areas in which water system connections are mandatory.

New development in the *urban area* shall be connected to a piped water supply.

3. Water for Agricultural Purposes

Parts of the *prime agricultural area* may be provided with a piped municipal water supply where looping is required, or if it can be shown that such supply will support agricultural operations and not create a financial burden for the City. The extension of piped municipal water is intended to support agricultural uses, and shall not be construed as an endorsement of urban development outside the *urban boundary*.

Development may be permitted on private water systems in the *prime agricultural area*, subject to proof that water quality and quantity are adequate.

4. Water for Industrial Processes

The City may provide water to industrial operators for industrial processes or cooling. As an option, industrial uses may provide their own water supply system, subject to municipal and provincial approval.

High-volume industrial users using the municipal water supply system may be required to enter into an agreement with the City whereby the industrial user will provide its own system and cease use of the municipal system in the event that the capacity taken by the industrial use is needed for other purposes, subject to sufficient notice as defined in the agreement. Depending upon the volume of groundwater or surface water required, a Permit To Take Water under the *Water Resources Act* may be required.

5. Unused and Abandoned Wells

Unused and abandoned wells are to be decommissioned in accordance with Ministry of Environment guidelines.

6.3.3 Sanitary Sewage

The City owns and operates two sanitary sewage collection systems – one serving the main urban area and a second that services the community of Bright's Grove. These complex systems include trunk sewers, sanitary pumping stations, related forcemains,

combined sewer overflows and wastewater treatment facilities. Effective management supports the efficient allocation of resources, improves operational efficiencies and benefits the natural environment by reducing groundwater pollution and the frequency and severity of sanitary sewage overflows to watercourses.

1. Sanitary Sewer/Wastewater Master Plan

The City will prepare, maintain and implement a Sanitary Sewer/Wastewater Master Plan for the development, maintenance and improvement of the City's sanitary sewage system. Through this Plan, the City will work to:

a) co-ordinate servicing solutions with the *city structure*, and deliver services through combined infrastructure projects;
b) prioritize existing systems to accommodate current residents and anticipated growth;
c) achieve a fully separated municipal sanitary sewer system in a systematic and sustainable manner;
d) undertake servicing solutions in accordance with a comprehensive program of improvement that minimize complexities and life cycle costs, and are fully funded through adequate planning, budgeting and identified revenue streams;
e) maintain the principle that growth pays for growth, and helps to pay for upgrades to existing infrastructure; and
f) bring the *suburban residential* designation into the municipal sanitary sewage system.

New residential developments and other sensitive land uses will not be permitted within 400 metres of any existing sewage lagoons within the City or an adjoining Municipality, in order to provide an odour buffer.

A reduced separation distance may be considered in consultation with the Ministry of the Environment through an amendment to this Plan. In determining a suitable separation distance, a qualified person shall consider factors including, but not limited to, lagoon design, hauled sewage or sludge handling and whether there is a supplemental aeration system. Odours and the aerosols emitted from the lagoons are also dependent upon the operation, design, environmental conditions and the seasons in some cases.

2. Municipal Sewer Service Area

A municipal sewer service area shall be established only within the *urban area* of the City. All development within the municipal sewer service area will be served by the municipal sanitary sewage system. When development is proposed in the municipal sewer service area and the necessary system is not yet installed, the developer will be responsible for providing any necessary sewer extensions. The City will pass a By-law under the *Municipal Act* defining areas where sewer system connections are mandatory.

To protect public and environmental health, the City shall reserve sewage treatment capacity for the *suburban residential* designation with municipal sewers provided when feasible. Areas outside the *urban area* will not be provided with municipal sanitary sewers.

3. Special Industrial Servicing

Industrial Areas within the sanitary sewer service area may, at the discretion of the City and in consultation with the Province or its designated agent, be permitted to develop individual services where specialized treatment related to industrial processes is required. Council will pass a By-law specifying such services. Dry industrial uses on private sewage systems will not be permitted in a municipal sewer service area.

4. Communal Sewage Systems

Given the potential impacts to City operational efficiency, public health and the environment, the City discourages the creation and use of private communal sewage systems. As proper operation and maintenance are key factors in ensuring the long term viability of communal services, the City, as a publicly accountable body is the appropriate authority to be responsible for ensuring the proper management of communal sewage systems over the long term.

Where City ownership of communal services cannot be achieved, a Responsibility Agreement between a development and the City is required at the discretion of the City to the satisfaction of the Ministry of the Environment. Such agreements shall include provisions for municipal assumption of the communal services in the event of default and the provision of up-front secured funds.

In no instance shall the City consider the use of 'Responsibility Agreements' for applications proposing multi-lot or multi-unit freehold residential development. For such developments, all sewer servicing shall be provided through the municipal sanitary sewage system.

5. Individual Sanitary Sewage Treatment and Disposal Systems

New development outside the municipal sewer service area that requires individual systems will be permitted provided that the proposed site can accommodate an individual sanitary sewage treatment and disposal system based on the following criteria:

a) the lot area must comply with the requirements of the Province or its designated agent and be large enough for the type of development proposed and the system(s) to be used;
b) a Certificate of Approval for an individual sanitary sewage treatment and disposal system must be obtained if required;
c) the proponent of a development or expansion of any use must obtain a Certificate of Approval for the expansion or alteration of an existing sewage system; and
d) no redevelopment or expansion should create or aggravate a pollution problem.

Any proposed development for which full municipal services are not available must be supported by the following studies: evaluations of soil percolation rates, and impacts of the proposed development on ground water resources, ground water mounding and adjacent watercourses. Other studies may be required. Reserve areas for replacement septic systems will be required for each lot.

6.3.4 Waste Management Systems

Waste Management Systems include sites and facilities to accommodate solid waste from one or more municipalities and includes landfill sites, recycling facilities, transfer stations, processing sites and hazardous waste depots.

1. Development on or in Vicinity of Waste Disposal Sites

Map 3 identifies the location of all known active and former waste disposal sites (as of the date of approval of this Plan).

Any new development, or change of use at or within 500 metres of the perimeter of an

active or closed waste disposal site located in this or an adjoining Municipality will be subject to consultation with the Province before any Zoning By-law, Zoning By-law amendment, Official Plan amendment or other *Planning Act* approval is adopted for such lands. A study by a qualified professional may be required that evaluates the presence and effect of environmental contaminants, including methane gas and leachate. The study will address the feasibility of mitigation measures.

Where necessary, development or redevelopment proposals will incorporate measures, including technical controls, buffering or rehabilitation, as required by the Province to prevent any adverse environmental effects originating from a former waste disposal site.

The designation or establishment of a private landfill site shall be prohibited.

6.3.5 Public Uses and Utilities

The following public services and facilities are permitted in all land use categories, subject to the development policies of this Plan:

a) transportation, communication, electricity generation facilities and transmission and distribution systems, and associated facilities in accordance with applicable legislation and regulations;
b) water supply, sewage treatment, stormwater drainage facilities, and utility services;
c) municipal government buildings and facilities;
d) abandoned utility and/or transportation corridors for public purposes;
e) public open space; and
f) natural gas pipelines and accessory works.

1. Restrictions on Public Uses

In the *urban area*, the public services and facilities listed above will be designed and constructed so that they are compatible with the surrounding area. Public services and utilities shall be prohibited in significant natural areas and hazardous lands unless authorized in accordance with environmental assessment legislation and/or the *Drainage Act*.

Where public services and facilities are proposed in the *prime agricultural area*, the need must be documented, as must the reasons why lower capability or marginal land cannot be used, before the services can be provided or the facilities installed.

2. Underground Lines Required

Underground utilities, including local electricity distribution and telecommunication lines, will be required in all new *urban area* developments, including the *heavy industrial* designation where feasible. With the approval of the local utility authorities, both public and private, the City encourages the reinstallation underground of all existing overhead wiring.

3. Multiple Uses on Rights-of-Way

The City will encourage multiple uses of electric power utility rights-of-way to accommodate drainage or service corridors, parking areas, parkland, agricultural operations and natural gas, oil and petrochemical pipelines in accordance with the land use policies and designations of this Plan and in accordance with the technical requirements of the appropriate utility provider. Natural gas, oil and petrochemical

commercial delivery pipelines will be installed within existing rights-of-way wherever feasible and practical.

To ensure efficient utility maintenance and not impede the placement and growth of street trees, services shall be bundled in a common trench wherever feasible.

4. Non-Renewable Power Facilities

All existing power facilities and the development of any new non-renewable power facilities, including all works as defined in *The Power Corporation Act* and succeeding legislation, shall be permitted in the *heavy industrial* designation without an amendment to the Plan, provided that such development satisfies the provisions of the *Environmental Assessment Act*, including regulations made under the *Act*, and any other relevant statutes. The electric power utility will be required to consult with the City regarding the location of new non-renewable power facilities.

A non-renewable power facility may be an accessory use in a *heavy industrial*, *light industrial* and *institutional* designation provided that the accessory use is located on the same lot, and is clearly subordinate to and directly related to the functioning of the permitted use. Accessory power generation facilities shall be designed to be compatible with the surrounding existing and proposed land uses.

All non-renewable power facilities must be compatible with adjacent land uses, and have regard to the Ministry of Environment *Land Use and Compatibility Guidelines*. Any proposal that does not comply with these guidelines shall be subject to rezoning. Minimum separation distances shall be determined through required technical studies.

Associated buildings, structures and uses not used directly for the generation and supply of power shall comply with the provisions of this Plan and the Zoning By-law.

5. Secondary Uses

Secondary uses, such as active and passive recreation, agriculture, community gardens, other utilities and uses such as parking lots and outdoor storage that are accessory to adjacent land uses, are encouraged on hydro corridor lands, where compatible with surrounding land uses. However, a proponent should be aware of the primacy of the electricity transmission and distribution facilities and that secondary uses require technical approval from Hydro One Networks Inc.

6.4 TRANSPORTATION SYSTEM

The *city structure* is connected locally, regionally and internationally by the City's transportation system, the viability of which is essential to supporting the travel needs of all residents, visitors and workers over the long-term. For the City to develop in an efficient manner, land use and transportation policies must be mutually supportive. The City's transportation system consists of the following elements:

a) road network;
b) transit system;
c) active transportation (human-powered transportation); and
d) rail network

Air and marine services also form part of the transportation system. These elements are concentrated within particular areas thus air service is included in the *airport*, and port facilities in the *employment areas* and *parks and open space* policies.

6.4.1 General Policies

1. Transportation System Objectives

Although automobiles will likely remain the predominant form of transportation over the planning horizon, this Plan facilitates a wide range of sustainable transportation options in a manner that is co-ordinated, safe, convenient, affordable and economically competitive.

The City seeks to maximize the efficient use of land through urban development and mobility alternatives by:

a) promoting policies and practices for moving goods and people that boosts the economic competitiveness and social cohesion of the City and County;
b) developing an integrated multi-modal transportation system that is efficient and sustainable based on good planning, traffic engineering, and street design;
c) promoting development and urban form that leads to fewer and shorter trips;
d) improving access to affordable public transit and encouraging active transportation; and
e) incorporating safeguards for the protection of the natural environment.

2. Transportation Master Plan

The City will prepare, maintain, and implement a Transportation Master Plan that coordinates the development of City's numerous transportation elements, and shall address such matters as location, design, education, enforcement and encouragement.

3. Transportation Demand Management

The City will encourage opportunities for developing Transportation Demand Management (TDM) measures to reduce single occupancy automobile use, especially during peak travel periods. TDM measures include, but are not limited to, carpooling programs, preferential parking for carpool members, transit pass incentives, cycling and walking infrastructure, telecommuting, flex hours, and the provision of private shuttles.

6.4.2 Road Network

Existing and proposed City roads are identified on **Map 4**. This map, together with Table 1, Functional Classification of Roads, shall be the basis for the provision of roads, right-of-way widths, and access control within the City.

The following hierarchy of roads is established:

- Provincial Highways;
- Arterial Roads;
- Collector Roads;
- Local Roads; and
- Private Roads.

1. Complete Streets

The City's road network will be designed and operated to allow for the safe and efficient

movement of goods, transit, people, bicycles, mobility aids, vehicles, emergency vehicles, and include provisions for infrastructure and utilities. In support of safety, health benefits, and accessibility, the City shall support the development and redevelopment of its road network in a manner that:

a) considers all users during the design, maintenance, and operations of a right-of-way, and recognizes all ages and ability levels of users;
b) encourages street connectivity to create a comprehensive, integrated network for all modes of transportation;
c) uses the latest and best design criteria and guidelines, while recognizing the need for flexibility in balancing user needs;
d) ensures that solutions complement the context of the community; and
e) establishes performance standards with measurable outcomes.

Table 1: Functional Classification of Roads

Classification	Function	Criteria[1]
Provincial Highways	• accommodate high-speed, high-volume, longer-distance goods movement and vehicular traffic	• grade separated intersections • access restricted to properly designed interchanges/future interchanges • direct local access not permitted • rights-of-way determined by Province • nearby development subject to safety and geometric requirements of the Ministry of Transportation
Arterial Roads (includes all County Roads)	• accommodate high traffic volumes between different areas within the City and through the City. • act as major transit corridors	• high degree of access and movement control • access generally limited to road intersections • direct access from abutting properties discouraged in the development of new communities • 23-30 metres wide
Collector Roads	• carry traffic volumes to and from major traffic generators or within or between residential neighbourhoods. • may act as local transit corridors	• direct driveway access from abutting properties permitted. • transit-supportive land uses encouraged along rights-of-way • 30 metres wide in the *prime agricultural area* • 20 metres wide in the *urban area*
Local Roads	• do not accommodate through traffic • designed to service only the properties that abut the roadway	• unrestricted access from abutting individual properties to the municipal road system. • 20 metres (15 metres where alternative development standards are deemed appropriate by the City)

Private Roads	• located primarily in the Lake Huron area where they serve areas historically developed for cottage use • also found in private residential communities and in condominium developments.	• owners ensure adequate snow removal, maintenance of paving, and surface drainage.

Notes:

1 Roads already meeting the right-of-way width may require additional widening if the need is identified through an environmental assessment, the planning application process or detailed design studies.

Where different road classifications intersect, adjoin or abut, the greater right-of-way width, as shown on Table 1, may extend over another road classification, if necessary, to provide for the required infrastructure, function or operation.

Where appropriate and public safety is not affected, the City will minimize the amount of land used for daylight triangles and maximize the efficient use of land.

2. Rights-of-way

The City's road system will be improved and maintained to support the growth management objectives of this Plan by protecting and developing the network of rights-of-way shown on **Map 4** through:

- the acquisition over time of the additional property needed to achieve the designated width;
- the conveyance of land for widening for nominal consideration from abutting property owners as a condition of subdivision, severance, condominium or site plan approvals;
- unequal widenings where topographic features, federal land ownership, cultural heritage resources, environmental constraints or other unique conditions necessitate taking a greater widening or the total widening on one side of an existing municipal road right-of-way; and
- giving high priority to preventative and restorative maintenance and rehabilitation of the road (pavement and sidewalk) network.

Additional rights-of-way may be required along roads and at intersections to provide for multi-use paths, exclusive queue-jump or turning lanes and other special treatments to accommodate the optimum road and intersection design. Arterial Road widenings will not be undertaken until the impact on abutting properties is studied and any negative effects are minimized.

3. Future/New Road Alignments

The City may protect land for new alignments and additional right-of-way requirements. Final rights-of-way and alignments will be determined through detailed transportation studies, environmental assessments where required, and the planning approval process. Alignments may be secured which may differ from those shown on **Map 4**.

In selecting locations for road and bridge crossings of valleys and other natural features, the City shall take care to minimize adverse effects on the natural landscape and natural resources in particular. An environmental impact study will be required for all such crossings.

4. Agricultural Routes

Safe, accessible movement for agricultural goods and machinery is a vital aspect of a sustainable agri-food industry. Transportation systems connect producers to farmland, processing, and distribution opportunities. In support of agriculture, the City supports continuous improvements to the rail network, Provincial, County and City road systems, and marine facilities and ports.

Farm machinery movement is often slow and the machinery is often oversized. Several agricultural practices, such as sugar beet harvesting, require temporary parking of machinery on *prime agricultural area* roads. Before undertaking any municipal road works, the City will consider agricultural requirements. The Zoning By-law shall specify daylight triangle requirements within the *agriculture* designation.

6.4.3 Parking Facilities

The overprovision of parking and the creation of areas dominated by parking infrastructure can have a negative impact on the pedestrian environment and transit ridership, as well as providing an incentive for single-occupant vehicle use. An effective parking management strategy should provide a range of parking options suited to different users while acknowledging that the ultimate goal is a reduction in overall auto use and an increase in more active, shared forms of transportation.

1. Parking Standards

The Zoning By-law shall establish minimum and maximum off-street parking standards for all appropriate land uses and forms of development. These minimum parking standards will be related to the amount of traffic generated by individual uses.

2. Area Specific Standards for Parking

There shall be no parking requirements for permitted uses in the area bounded by Wellington Street to the south, Brock Street to the east, the St. Clair River to the west, and Charlotte Street/Derby Lane to the north, except for multiple-unit apartments.

There shall be no parking requirements for permitted uses within the Mitton Village and East Street (between Maple Avenue and Kathleen Avenue) commercial districts. These areas will be delineated in the Zoning By-law.

3. Accessibility

The City will ensure that off-street parking facilities, whether public or private, are accessible to persons with disabilities.

4. Off-Street Parking

Off-street parking, loading and truck storage facilities will generally be provided on the same lot as the land use that the parking facilities serve. However, off-site locations may be permitted for non-residential uses if a long-term commitment for the provision of parking, which is acceptable to the City, can be provided.

5. Cash-in-Lieu

The City may accept cash in lieu of parking spaces subject to the following provision:

a) cash in lieu of parking will not be acceptable for operations that provide short term accommodation (e.g., motels, bed and breakfasts).

6.4.4 Transit

Public transit helps provide access for all residents to employment, shopping, medical, educational and recreational opportunities, as well as helping to achieve energy conservation and emission reductions.

The City shall support a municipal transit system that provides safe, convenient, efficient and cost-effective service to all residents of the *urban area*. The intent is to achieve a system that ensures quick, direct routes to destinations that are comfortable for all users, including persons who use mobility devices such as walkers, wheelchairs and strollers.

Providing transit in a City primarily designed and shaped for automobiles can be a challenging task. It requires a greater effort to provide convenient transit service.

1. Transit Accessibility

The transit system will be developed to be inclusive of the needs of all people by:

a) ensuring that new transit facilities and vehicles are accessible;
b) modifying existing terminals and infrastructure to become accessible over time;
c) supplementing the conventional transit system with specialized services; and
d) taking accessibility into account from the design stage forward.

2. Transit-Supportive Land Use Patterns

Fostering a transit-supportive city relies on the effective coordination of land use and transit so that they are mutually supportive. The layout and design of roads, buildings, and public spaces can help improve transit efficiency, connectivity and accessibility. As such, the City shall:

a) locate all transit terminals within *growth areas*, and ensure that coordinated, frequent and reliable transit is provided prior to, or concurrent with new development;
b) provide a full range of mainstreet uses in appropriate locations within *mainstreets and commercial areas*, including retail, cultural, institutional, residential, personal services, and offices to support transit ridership;
c) support a road pattern and related pedestrian and cycling networks and facilities that provide safe and direct access to transit routes and stops;
d) co-ordinate the planning and design of *greenfield areas* with planned long-term investments in transit to ensure new development is transit-supportive; and
e) develop policies to support ridership and high quality service through urban design and traffic measures that improve pedestrian waiting area comfort, and parking policies that complement transit use.

3. Inter-City Bus Service

The City supports the maintenance of bus passenger and freight service to and from Sarnia and intends to work with private carriers in any consideration of the location, relocation, or expansion of bus station facilities to ensure the convenience of City and area users of bus services.

6.4.5 Active Transportation

Walking and cycling can play a positive role in improving mobility, access to employment and education, and health and well-being and reduce vehicle emissions. The City will

promote and initiate improvements to enhance opportunities for human-powered transportation that are safe, accessible, convenient, and comfortable. Consideration will be given to the potential for linking the City of Sarnia's active transportation routes with those of neighbouring municipalities.

The City supports policies, programs and infrastructure that create a safe and comfortable environment that encourages people of all ages to walk and cycle for everyday transportation and enjoyment including:

a) expanded pedestrian and cycling routes to serve major activity centres, including employment nodes, commercial areas, institutions, beaches and open spaces;
b) development that integrates walking- and cycling-supportive design standards;
c) provision of adequate and secure bicycle parking in key areas such as schools, transit terminals, civic facilities and places of worship, and in new developments; and
d) measures to improve the safety of pedestrians and cyclists through the design and operation of streets, including traffic calming, and through education and promotion programs.

1. Active Transportation Routes

The location of active transportation routes shall generally conform to the approved Transportation Master Plan and consist of the following elements:

a) on-road bicycle routes;
b) multi-use trails;
c) pedestrian walkways and sidewalks; and
d) pedestrian and bicycle facilities.

In recognition that the alignments shown in the Transportation Master Plan are diagrammatic, an amendment to this Plan will not be required for changes in pedestrian and cycling route alignment provided that the general intent and purpose of this Official Plan and the Transportation Master Plan are maintained.

The City will ensure consistent wayfinding standards are implemented across pedestrian and cycling networks, including the use of common signage, symbols and distinct surface treatments to distinguish the different networks.

2. On-Road Bicycle Routes

In accordance with the Transportation Master Plan, the City will design and maintain a system of mixed-traffic and exclusive bicycle routes to serve the main community, civic, commercial, service, recreational, institutional and cultural destinations within the City.

Where exclusive bicycle lanes are incorporated into the paved roadway surface, the City shall ensure that stormwater grates, on-street facilities, and road and rail signalized crossings are designed and oriented in a manner that will not create safety hazards for cyclists.

3. Multi-Use Trails

Along multi-use trails, bicycle and pedestrian networks will be separated from each other by distinct line markings, wherever feasible. The use and expansion of multi-use trails through the *natural heritage system* and *parks and open space* areas is supported where such facilities will not adversely impact significant environmental features or functions.

4. Pedestrian Walkways and Sidewalks

Pedestrian walkways and sidewalks shall be provided within the *urban area* to ensure safety and comfort and to minimize walking distances between dwellings, schools, parks, transit stops, services, employment and local commercial uses.

In new development and redevelopment, sidewalks will generally be provided as recommended by the Transportation Master Plan. Priority shall be given to school non-busing areas.

Pedestrian walkways and sidewalks shall be provided within residential subdivisions. Sidewalks shall be separated from road pavement by boulevards wherever possible.

5. Pedestrian and Bicycle Facilities

New development and redevelopment shall ensure the safe and convenient movement of pedestrians through site design, building orientation, and the on-site and off-site provision of pedestrian and cycling facilities. Pedestrian amenities such as appropriate sidewalk widths, benches and other forms of street furniture, and protection from the sun and rain using trees, canopies and arcade designs, are encouraged. Wider sidewalks shall be considered in areas of high pedestrian volumes, such as within *growth areas* and near major institutions.

Multi-unit residential and mixed-use buildings shall require secure, long-term indoor bicycle parking for residents in addition to a smaller amount of short-term visitor bicycle parking. Long-term bicycle parking should be easily accessible to encourage regular bicycle use while protecting residents' property from both visitors and other residents in the building. Other forms of development shall be encouraged to provide short-term visitor bicycle parking and bicycle storage facilities.

Bicycle parking standards shall be implemented through the Zoning By-law.

6.4.6 Railways

Given its strategic location and numerous heavy industrial uses, the City maintains an extensive rail system and important rail yards that are primarily used to move bulk shipments and other commodities. The City is also serviced by passenger rail. Preserving and protecting the rail system and supportive transportation and employment land uses is essential to the City's economic competitiveness and the efficient movement of goods and people on local, regional and international scales.

In order to minimize and alleviate the conflicts of the rail network with adjacent land uses and the road network, the City shall:

a) require adequate physical separation between railway rights-of-way and adjacent residential land uses wherever possible;
b) co-operate with other orders of government and railway companies in relocating existing facilities, and locating and designing new rail facilities to ensure they are compatible with the transportation network and existing or proposed land uses; and
c) implement safety measures such as berms, landscape buffers, security fencing and building setbacks between railway rights-of-way and adjacent land uses in consultation with the owner of the railway right-of-way; and

d) implement aesthetic measures to recognize the importance of the railway rights-of-way as commuter and inter-regional corridors through the City.

1. Distance Separation and Required Studies

New residential development and other sensitive land uses that require a rezoning will not be permitted within 300 metres of a rail yard.

Proponents of all new residential development and other sensitive land uses located between 300 metres and 1,000 metres from a rail yard that require a rezoning will be required to undertake a noise study to the satisfaction of the City, the Ministry of the Environment and the appropriate railway to support the feasibility of the proposed development. If the development is found to be feasible, the proponent shall undertake appropriate measures to mitigate any adverse effects from noise that were identified in the study.

Proponents of all proposed development within 300 metres of a railway corridor may be required to undertake noise studies, to the satisfaction of the City and the Ministry of the Environment and in consultation with the appropriate railway, and shall undertake appropriate measures to mitigate any adverse effects from noise that were identified in the study.

Proponents of all proposed development within 75 metres of a railway corridor may be required to undertake vibration studies, to the satisfaction of the City and the Ministry of the Environment , and in consultation with the appropriate railway, and shall undertake appropriate measures to mitigate any adverse effects from vibration that were identified in the study.

2. At-Grade Crossings

The City will work with other orders of government and railway companies to reduce the number of at-grade rail/road intersections.

The City shall interpret the required right-of-way widths shown on **Map 4** to denote only the basic requirement for the section of rail that intersects with an at-grade railway crossing. Additional rights-of-way may be required at railway crossings to provide for future grade separations where warranted. Any such additional right-of-way requirements shall be determined at the time of the design of the grade separation and will become part of the total required right-of-way.

3. Abandoned Rail Rights-of-Way

The City has an interest in acquiring discontinued or abandoned railway lines or other railway lands which have a potential use as future transportation, utility or recreational corridors. The City will co-operate with the railway and other agencies to purchase, lease, obtain easements, or enter into other appropriate agreements as means of acquisition of these rights-of-way. Where the City does not indicate an interest in acquiring discontinued or abandoned railway lines or other railway lands which become surplus to the needs of the railway, the City will co-operate with the railway or purchasers of such lands to encourage appropriate re-use of the lands.

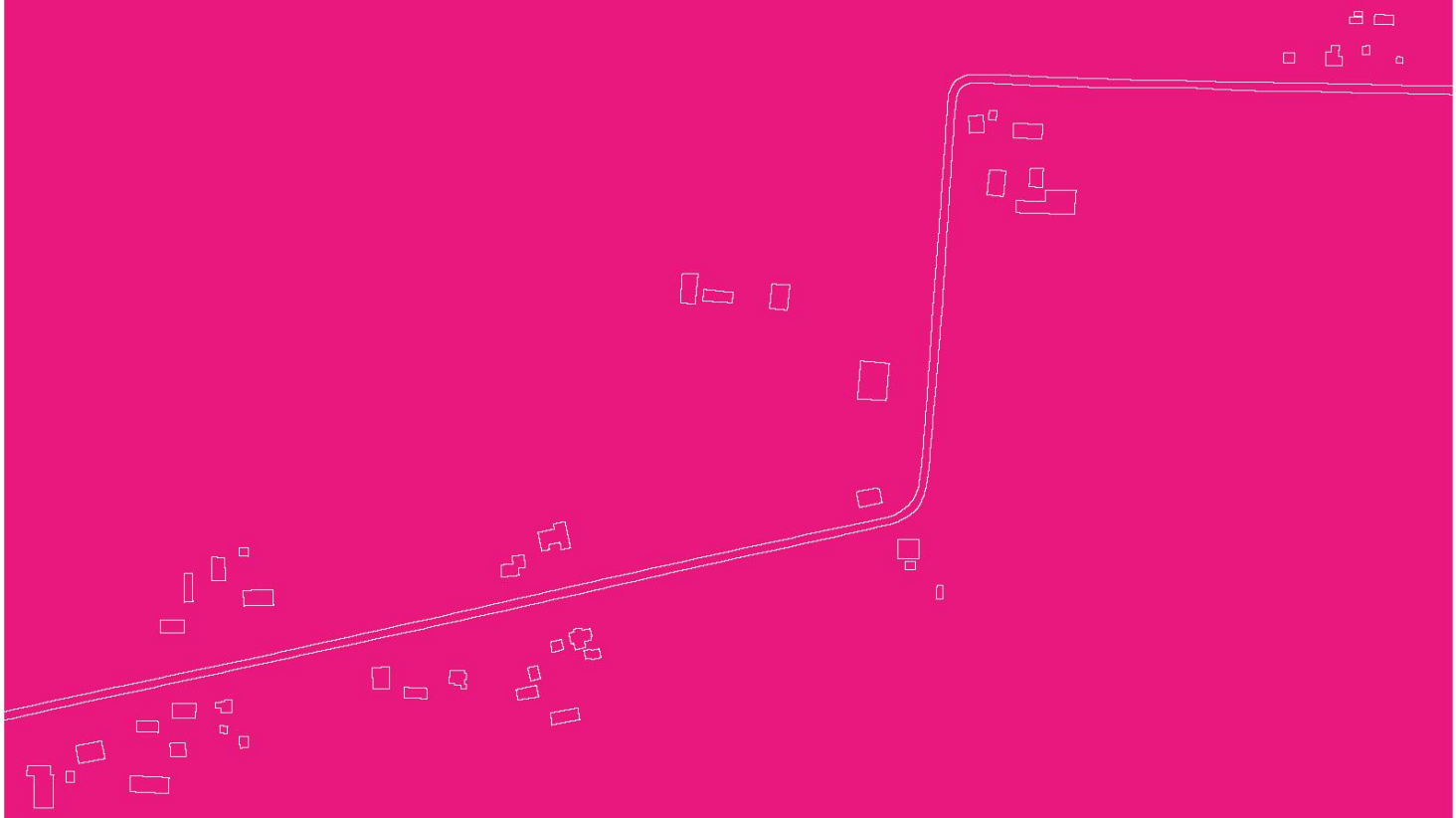
4. Marine Ports

The City maintains public and private port facilities that depend on an accessible rail network to deliver and receive raw materials including grain, fuels, petrochemicals, and aggregates. The City supports the long-term maintenance and improvement of the rail corridors servicing these marine facilities and ports.

5. Passenger Rail

The City supports the use of passenger rail service as an alternative to highway travel, and encourages market-responsive, convenient and efficient train scheduling. The integration of passenger rail transportation services with other transportation modes is encouraged. The VIA Rail Station is recognized as a key feature of the City`s transportation network and shall function as a municipal transit terminal.

7



IMPLEMENTATION

7 IMPLEMENTATION

The Implementation section of this Plan provides a description of the tools that the City can use to implement its Official Plan. Basic planning tools, including zoning by-laws and subdivision control, along with more specialized planning tools and mechanisms, such as holding by-laws and secondary plans, will ensure that the City can achieve its guiding principles. Policies for amendments, required studies, monitoring and review are established in this section. In addition, the City is guided by policies and guidelines of other levels of government and public agencies, many of which appear in policies throughout this Plan.

Ongoing monitoring and public participation will ensure that the Plan is effective over the long term. Used thoughtfully and consistently, these mechanisms help ensure balanced development that supports Sarnia as a good place to live, work and play.

7.1 INTERPRETATION

The following policies provide guidance for the understanding and interpretation of the text, tables, schedules and maps of this Plan.

1. General

This Plan should be read as a whole to understand its intended use as a framework for policy setting and decision-making.

Where the Plan refers to studies, guidelines, and other documents (such as watershed plans, infrastructure plans, or road design guidelines), they may be used to guide Council decisions on development applications, public works, and other matters but do not have the status of policies and are not part of the Plan unless the Plan is amended specifically to include the document in whole or in part.

2. Land Use Boundaries

The boundaries shown on **Maps 1-11** inclusive are general, except where delineated by a defined Secondary Plan or area-specific policy, or where they coincide with fixed distinguishable features such as roads, railways, utility corridors, watercourses or other physical or geographical features.

In all other instances, the boundaries of land use designations shall be determined by a review of:

a) existing zoning by-laws,
b) prevailing lot depths,
c) orientation of lot frontages,
d) lot patterns, and
e) land use patterns.

Minor adjustments to boundaries will not require an amendment to this Plan provided that the intent of the Plan is maintained. If Council determines that greater certainty is needed for the boundaries of all land use designations, area-specific mapping shall be adopted through an amendment to this Plan.

3. Meaning

Where the meaning of any sentence or any part of any section is unclear, the interpretation of the sentence or section will be determined within the context of the general policy direction provided by this Plan.

The implementation of this Plan will take place over time and the use of the word “will” or “shall” to indicate a commitment to action on the part of the City should not be construed as a commitment to proceed with all of these undertakings immediately. These commitments will be undertaken in a phased manner, as determined by Council, and subject to the availability of funds and other resources.

The indication of any proposed roads, bridges, parks, municipal services or infrastructure in text, in tables or on maps, will not be interpreted as a commitment by the City to provide such services within a specific timeframe. Such commitments shall be subject to the decisions of Council in its annual capital budget considerations. Minor adjustments to the location of these facilities do not require amendments to the Plan provided the adjustments are consistent with the objectives and policy directions of the Plan.

4. Permitted Uses

The examples of permitted uses listed in the Plan are not meant to be exhaustive, but to illustrate the range of activities or uses permitted within each land use designation. However, certain uses that are not permitted may be specified.

5. References to Acts

Where reference is made in the Official Plan to documents that rest outside the Plan, such as provincial or federal Acts or other legislation, or to other documents that are not part of the Plan, it is understood that the latest approved version of the documents is being referenced, unless otherwise specified.

Any reference to specific public agencies or bodies includes their successors.

6. Maps

The Maps form part of the Official Plan and must be read in conjunction with the text. The following Maps form part of the Plan:

a) Map 1: City Structure Plan
b) Map 2: Settlement Boundaries
c) Map 3: Water Resources
d) Map 4: Transportation and Road Widening Plan
e) Map 5: Natural Heritage
f) Map 6: Natural Hazards
g) Maps 7-11: Land Use Designations
h) Map 12: Site and Area Specific Policies
i) Schedule A: Secondary Plan - Development Area 1
j) Schedule B: Secondary Plan - Development Area 2

7.2 IMPLEMENTATION MECHANISMS

In general, the Official Plan will be implemented by Council exercising the authority conferred by the *Planning Act*, the *Municipal Act*, and such other statutes as may be applicable. In particular, this Plan shall be implemented by the Zoning By-Law, by Conceptual Development Plans, by

Secondary Plans, by Site Plan Control, and by other by-laws respecting such items as demolition control, holding, temporary use, interim control, and development charges. This list is not intended to be exhaustive and the implementation of the Official Plan will also be furthered by other by-laws regarding, for example, subdivisions, part-lots, consents, severances, property standards, signs, and municipal services.

In order to ensure that the policies of the Official Plan are being implemented, controls, practices and procedures should be reviewed regularly.

1. Zoning

Zoning by-laws shall be used to implement the objectives and policies of this Plan by regulating the use of land, buildings or structures in accordance with the provisions of the *Planning Act* and may be more restrictive than the provisions of this Plan. It is not intended that the full range of uses or densities permitted by this Plan will be permitted by the Zoning By-law in all locations. The Zoning By-law shall be reviewed and periodically consolidated.

2. Plans of Subdivision, Plans of Condominium and Part Lot Control

In considering a draft plan of subdivision or condominium, the City shall have regard to:

a) Provincial guidelines, policies and legislation, including the criteria identified in the *Planning Act;*
b) whether the proposed plan conforms to the policies of this Plan; and,
c) whether the proposed plan can be provided with adequate services and facilities as required by this Plan.

The provisions of the *Planning Act* relating to subdivision control, including subdivision agreements, shall be used by the City to ensure that the land use designations and policies of this Plan are complied with, and that a high standard of layout and design is maintained in all development. Subdivision agreements shall ensure that the provision of funds, services, facilities, and other matters are to the satisfaction of the City, the County and other agencies. The applicant shall be required to post security with the City to ensure the conditions of the subdivision agreement are fulfilled.

The City may, in a by-law, exempt all or parts of a registered plan of subdivision from part lot control to permit the conveyance of portions of lots or blocks. By-laws to exempt lands from part lot control shall be limited to a period of not more than 3 years.

3. Committee of Adjustment

The City shall appoint a Committee of Adjustment to implement certain mechanisms in accordance with the *Planning Act*. In particular, the Committee's mandate is to:

a) consider and make decisions on applications for Consent to "sever" for the creation of a new lot, boundary adjustments, rights-of-way, easements, long-term leases and to convey additional lands to an abutting lot, provided an undersized lot is not created
b) consider and make decisions on applications for Minor Variances from the provisions of the Zoning By-law
c) consider and make decisions on applications for permission to enlarge or extend a building or structure that is legally non-conforming, or a change in non-conforming use

All decisions and processes of the Committee of Adjustment shall be consistent with the *Planning Act* and with the policies of this Official Plan on applications for consents, non-conforming uses, and relief from the provisions of the zoning by-law.

3.1 Consents

Applications for consent to create new lots may only be granted where:

a) a plan of subdivision is not necessary;
b) the number of resulting lots is less than five;
c) the lot can be adequately serviced by water, wastewater and storm drainage facilities;
d) no extension, improvement or assumption of municipal services is required;
e) the lot will have frontage on a public street and access will not result in traffic hazards;
f) the lot will not restrict the ultimate development of adjacent lands;
g) the size and shape of the lot conforms with the requirements of the Zoning By-law, is appropriate to the use proposed and is compatible with adjacent lots; and,
h) the consent conforms to all relevant policies of this Plan.

3.2 Minor Variances

When considering an application for minor variance from the City Zoning By-law, or any other By-law as directed by Council, the Committee must consider the following 'four tests' as set out in the Planning Act:

a) whether the variance is minor
b) whether the variance is desirable for the appropriate development or use of the land
c) whether the general intent and purpose of the Zoning By-law is maintained
d) whether the general intent and purpose of the Official Plan is maintained

3.3 Legal Non-Conforming Uses

The use of land, a building or a structure which does not conform to the Zoning By-law but which lawfully existed prior to the approval of the Zoning By-law is a legal non-conforming use. If such legal non-conforming use ceases, then the rights derived from the legal non-conforming use shall terminate.

It is the intention and expectation that non-conforming uses, buildings or structures shall eventually cease and be replaced by uses, buildings or structures that conform with the intent of this Plan and the Zoning By-law. In special circumstances, however, it may be appropriate to consider the extension or enlargement of non-conforming uses.

4. Demolition Control

In order to prevent the premature demolition of usable dwellings, Council may pass a By-law to designate any area within the City as an area of demolition control. Thereafter, no person shall demolish the whole or any part of any residential property in such area unless a demolition permit is issued by Council.

5. Holding

Council may pass a holding by-law that applies to a specific area in the City. Through this by-law, Council may apply a holding symbol ("H" or "h") to the zoning of the area to specify the use to which lands in that area may be put in the future, but which are considered premature or inappropriate for development until certain conditions set out in the Plan or the by-law are satisfied.

Holding by-laws may specify interim uses and additional regulations that are permitted while the by-law is in effect, provided that such uses do not conflict with the ultimate designated use of the lands. Interim uses may include agricultural uses, one single-detached dwelling per lot, and uses existing at the date of adoption of this Plan.

Conditions to be met before Council removes the holding provision may include:

a) transportation or servicing improvements;
b) provision of parks and open space, recreational, and community services and facilities;
c) environmental protection, remediation or mitigation measures;
d) measures to protect natural areas and features;
e) professional or technical studies to assess potential development impacts;
f) plans for the phasing of development;
g) entering into agreements, including subdivision agreements or agreements under Section 41 of the *Planning Act*, to secure any of the matters required to satisfy the conditions for removal of the holding provision; and
h) measures to protect heritage buildings, properties with archaeological potential and archaeological sites.

The holding ("H" or "h") symbol will be removed by a by-law passed under *the Planning Act*.

Vacant lands in a holding zone that are designated for specific uses, particularly areas that may be the subject of a Secondary Plan, may be zoned in an implementing Zoning By-law as an interim measure. When such areas are deemed necessary for development, they shall be rezoned to an appropriate category to permit the uses set forth in this Plan.

6. Temporary Use

Council may enact temporary use by-laws in accordance with the *Planning Act* to allow land and buildings to be temporarily zoned for uses that are otherwise prohibited by the Zoning By-law. A temporary use by-law must conform with this Official Plan.

Any temporary use by-law shall describe the specific area affected and establish an expiry date for the by-law that shall not exceed three years in duration, or in the case of a garden suite as defined by the *Planning Act*, for a period of not more than 20 years. Council may grant an extension of the temporary use of not more than three years for each extension. When the temporary use by-law expires, the use permitted by that by-law shall cease.

Council shall be satisfied that the temporary use shall:

a) ensure that any proposed development or redevelopment is consistent with the temporary nature of the use and maintains the long-term viability of the lands for the uses permitted in the Official Plan and Zoning by-law;
b) be compatible with adjacent land uses, or be made compatible through site mitigation;
c) not have an adverse impact on traffic, transportation or parking facilities in the area; and
d) be suitable for the site in terms of site layout, building design, accessibility, provision of landscaping for screening and buffering, and available services.

The temporary use by-law shall establish all necessary site regulations within the by-law, or by reference to the comprehensive Zoning By-law.

7. Interim Control

Council may direct that a study or review of land use policies be undertaken for a defined area. To allow time for the study to be completed, Council may pass an interim control by-law in accordance with Section 38 of the *Planning Act*, to restrict the use of land, buildings or structures to those established in such a by-law.

The effective period of an interim control by-law shall not normally exceed one year. Council may amend the by-law to extend the period provided that the total effective period of the by-law does not exceed two years from the date of passing of the original interim control by-law.

When an interim control by-law ceases to be in effect, Council may not pass a further interim control by-law applying to the subject lands for a minimum of three years.

8. Community Benefits

Any development involving increases in height and/or density beyond those specified in the Zoning By-law must constitute good planning and be consistent with the objectives and development policies of this Plan. Zoning by-laws passed under the provisions of Section 37 of the *Planning Act* may be enacted to permit more height and/or density in a new development than is otherwise permitted by the Zoning by-law in return for the provision of community benefits in the form of facilities, services or matters that are set out in the Zoning By-law. If the increased height or density requires measures to mitigate adverse impacts to achieve good planning, it is not eligible for consideration under the provisions of Section 37.

An owner may elect either to develop at the increased density and/or height in return for providing specific community benefits, or develop in accordance with the height and density permitted by the Zoning By-law without providing additional community benefits. Where the owner elects to provide community benefits, these will be secured in one or more agreements that are registered on title to the lands.

Increases in height and/or density shall be measured from the maximum height and/or density for the use in the Zoning By-law or a prevailing Secondary Plan or a site- or area-specific policy in the Plan, whichever is greatest.

Section 37 community benefits are capital facilities and/or cash contributions toward specific capital facilities, above and beyond those that would otherwise be provided under the provisions of the *Planning Act* or *Development Charges Act* including:

a) the conservation of designated or listed heritage resources;
b) fully furnished and equipped non-profit child care facilities, including start-up funding;
c) public art installations;
d) other non-profit arts, cultural, community or institutional facilities;
e) provision of a community centre or other community/cultural facilities;
f) parkland and/or parkland improvements;
g) streetscape improvements on a public boulevard not abutting the site;
h) land for municipal purposes;
i) the preservation of woodlots or environmentally significant/sensitive areas that would not be accepted as parkland dedication;
j) purpose-built rental housing available at mid-range or affordable rents, land for affordable housing or, at the discretion of the owner, cash-in-lieu of affordable rental units or land; and

k) other local improvements identified through Community Improvement Plans, Secondary Plans, Area Studies, environmental strategies, sustainable energy strategies, the capital budget, community service and facilities strategies, or other implementation plans or studies.

In all cases, the increased height and/or density shall be based on a site-specific review, taking into account location, surrounding land uses and design considerations. In each instance, the standards proposed must comply with the policies of this Plan. Section 37 by-laws shall only apply to lands for which full municipal servicing is available.

9. Site Plan Control

The entire City of Sarnia is a site plan control area under the provisions of the *Planning Act*. Site Plan Control shall be used to implement the policies of this Plan and to achieve attractive, functional, safe, environmentally sound and universally accessible development. The City shall require the fulfillment of conditions and agreements respecting road widening, landscaping, parking and loading areas, pedestrian walkways, sewer and water easements, fire routes and other design elements as a condition of development approval.

Low-density residential development and agricultural buildings and structures are not normally subject to site plan control unless specifically indicated in the implementing Site Plan Control By-law.

No person will undertake any development in an area designated as a site plan control area unless the City has approved any plans or studies required by the City. These requirements may include:

a) plans showing the location of all buildings and structures to be erected and showing the location of all facilities and works to be provided in conjunction with the development and of all facilities and works required;
b) drawings showing plans, elevation and cross-section views for each building to be erected, and displaying:
    i) the massing and conceptual design of the proposed buildings;
    ii) the relationship of a proposed building to adjacent buildings, streets, and exterior areas to which members of the public have access;
    iii) the provisions of interior walkways, stairs, elevators to which members of the public have access from streets, or open spaces, or interior walkways in adjacent buildings;
    iv) treatment of the public realm;
    i) finish, texture, materials, patterns and colours of all building exteriors, including roofs;
    v) location, size, colour, and type of all exterior building signage and lighting;
    vi) any sustainable design features to be incorporated, such as green roofs or walls, sun traps, reflective or permeable surfaces; and
    vii) placement, size and finish of any exterior mechanical systems such as elevator machine rooms, heating and air conditioning, electronic transmission / receiving devices, and all above ground utilities (whether stand-alone or attached to the building) including any screening materials.

10. Development Charges

A Development Charges By-law, authorized under the *Development Charges Act* is another means for the City to achieve fiscally responsible growth. The Act permits the

collection of development charges from developers or redevelopers of land to meet the cost of growth-related infrastructure and community service facility requirements. This ensures that new development pays for itself and that additional capital costs do not fall on existing residents in the form of higher property taxation and user fees. Without limiting the generality of the foregoing, matters which may be considered as subject to development charges include:

a) electrical distribution facilities;
b) storm sewers and stormwater management facilities;
c) sanitary sewers;
d) water distribution mains;
e) Transit facilities and vehicles;
f) Public Works facilities and vehicles;
g) Fire protection facilities and vehicles;
h) Police protection facilities and vehicles;
h) Parks and Recreation facilities and vehicles; and
i) seniors centres.

11. Conceptual Development Plans

Conceptual Development Plans are more detailed land use, transportation and servicing policy plans covering specific areas of the City. Conceptual Development Plans may be required (but not as amendments to this Plan) before Council considers development proposals for parts of the City where, due to local circumstances, such as vacant lands in separate ownerships, or large amounts of land in one ownership prior to severance application, it is necessary to plan in greater detail to ensure that the policies of this Plan will be properly implemented. In certain parts of the City, to be identified from time to time, Conceptual Development Plans may be a prerequisite for any major new development or redevelopment.

The main objectives of Conceptual Development Plans are to assure Council and staff that:

a) development of extensive areas of vacant land in several ownerships is carried out in a comprehensive and integrated manner which reinforces the community structure;
b) major new development or redevelopment takes place in harmony with existing uses.

Conceptual Development Plans must conform to and implement the policies and land use designations of the Official Plan. A Conceptual Development Plan does not amend the Official Plan but may be adopted by resolution of Council as a policy guideline.

Conceptual Development Plans covering any defined area of the City may be required to::

a) indicate the general land use and development concept proposed;
b) indicate the proposed land use and road pattern, overall built form, density and intensity of development;
c) identify locations for community facilities, and relate the location, size and type of these facilities to an assessment of needs;
d) identify the need for, as well as the amount and location of, parkland, open space and recreational facilities;
e) establish a detailed road and pedestrian walkway system, if appropriate, and indicate how the proposed circulation systems integrate with the existing pattern of roads and land uses;
f) identify environmental features and methods to ensure their protection and preservation;

g) indicate appropriate alignments of railway spur lines and other transportation facilities in industrial areas; and
h) establish equitable arrangements among property owners for the provision of community facilities such as parkland or schools.

12. Secondary Plans

Secondary Plans establish local development policies to guide growth and change in defined areas of the City, including new neighbourhoods and employment districts, while ensuring adequate infrastructure and environmental protection.

Secondary Plans adapt and implement the objectives, policies, infrastructure and transportation plans, and the overall planning approach of the Official Plan to fit local contexts. When Secondary Plans are adopted, they become part of the Official Plan.

Secondary Plans should be prepared, in consultation with the community for:
a) large areas of vacant or underused land that would benefit from comprehensive planning to enable suitable development or redevelopment;
b) areas targeted for major public or private investment;
c) areas in which development is occurring, or proposed, at a scale, intensity or character that necessitates reconsideration or reconfiguration of local streets, block plans, public works, open space or other public services or facilities; and
d) other growth areas identified in provisions of this Plan, such as the *downtown*, *centres*, *employment areas*, selected *corridors* and *commercial hubs*.

Secondary Plans shall promote a desired type, form and density of physical development resulting in highly functional and attractive neighbourhoods and plan for an appropriate transition in scale and activity between adjacent districts in accordance with section 5.2.3.

Secondary Plans shall identify or indicate the following:
a) overall population capacity, including anticipated population, density and growth rates;
b) opportunities and constraints posed by unique environmental, economic, heritage, cultural and other features or characteristics;
c) the overall mix of housing and the type and density of residential dwellings by land block;
d) affordable housing objectives;
e) the location and area of commercial, institutional and industrial land uses;
f) the alignment of arterial and collector roads;
g) necessary infrastructure investment for: transportation services, environmental services, community and social facilities, cultural, entertainment and tourism facilities, pedestrian and cycling systems, parks and recreation services;
h) environmentally sensitive features and prescribed methods for their protection and preservation;
i) servicing plans to ensure policies and implementation methods for staging of development and servicing.
j) the location, type and area of lands for community service facilities based on an adequate assessment of community service needs, including the need for areas of open space, parkland, recreation facilities, school sites and conservation lands;
k) techniques to ensure equitable arrangements among property owners for the provision of community facilities such as parkland or schools;
l) flooding constraints and appropriate buffering measures and/or remedial works to ensure public health and safety;

m) where a Secondary Plan area is adjacent to an established neighbourhood or neighbourhoods, the measures taken to ensure new development will respect and reinforce the existing physical character and promote the stability of the established neighbourhoods; and
n) where a Secondary Plan area is adjacent to a *prime agricultural area*, buffering measures are required to avoid conflicts over the long-term including land use density gradients, and landscape buffers, greater-than-normal building setbacks and access restrictions along the *urban area*/*prime agricultural area* interface.

In addition, Secondary Plans for *employment areas* shall identify or indicate:
a) the location of land blocks of various general types of industry, classified by general physical and functional characteristics;
b) the location of lands to be left as open space including lands along the *urban area*/*prime agricultural area* interface;
c) the location and area of commercial and institutional land uses;
d) the alignment of arterial and collector roads, railroad main lines and spur lines, and where appropriate, major underground and above-ground services and utilities;
e) planned employment levels and densities in relation to the provision of roads and services; and
f) environmental constraints to development.

An implementing zoning by-law shall be prepared concurrently for a new Secondary Plan unless Council determines that development is to proceed by site specific zoning.

13. Acquisition, Holding, Sale or Exchange of Land

Land within the City may be acquired, held, sold or exchanged by the City to implement any policy of this Official Plan. The acquisition of land will depend on the City's financial resources, and whether circumstances warrant acquisition.

Before selling any land, the City shall publicly advertise its intent to sell; this announcement shall include a description of the land, any buildings and a map of the location. Before selling or altering any public open space, the City shall hold a public meeting to discuss the proposed sale or alteration.

Before the City disposes of any surplus lands, Council shall consider the following features of the lands: their adequacy for the provision of affordable housing, the need for any demolition, their value as a natural area, and the need for transportation facilities.

7.3 AMENDMENTS TO THE OFFICIAL PLAN

Amendments to this Plan may be initiated by the City whenever it decides, after careful consideration, that some change in public policy with which the Official Plan is concerned is required for the general welfare of the City. Amendments may be requested by other government agencies, private individuals, corporations or organizations. Such requests must include sufficient information and justification to enable the requested amendment to be evaluated. Council will consider such amendments provided that:
a) the amendment is consistent with the general intent of the Plan;
b) the amendment conforms to the County's Official Plan and the Provincial Policy Statement;
c) the amendment is needed and can be justified in light of accepted planning principles; and
d) the general public has had an opportunity for adequate and full participation.

Technical revisions to the Official Plan or the Zoning By-law are permitted provided they do not change the intent of the Plan or the By-law. Without adopting an amendment, the Clerk or Director of Planning and Building may make technical revisions such as:

a) deleting obsolete provisions;
b) altering the number and arrangement of any provisions;
c) changing the numbering, cross-referencing and arrangement of text, tables, schedules and maps;
d) altering language or punctuation for consistency;
e) correcting grammatical, dimensional, boundary, mathematical or typographical errors; and
f) changing the format.

7.4 PRE-APPLICATION CONSULTATION AND PRESCRIBED INFORMATION FOR PLANNING APPLICATIONS

The *Planning Act* permits the City to require applicants to consult with the City before they formally submit an application. In addition to the prescribed requirements of the *Planning Act*, the City may require additional information to allow it to properly evaluate an application. The City will consider an application to be complete if it is accompanied by the prescribed requirements identified in the *Planning Act*, and by the required studies and information listed in the policies below and discussed during pre-application consultation.

1. Pre-Consultation

Prior to submitting an application for an Official Plan Amendment, Zoning By-law Amendment, Plan of Subdivision, Plan of Condominium or Site Plan Application, applicants are required to meet with appropriate City staff to identify the information that will be required at the time of application submission. Applicants will also be strongly encouraged to meet with the affected community prior to finalizing their development applications.

2. Submission Requirements

Proponents of applications to amend the Official Plan or Zoning By-law, to register a Plan of Subdivision or a Plan of Condominium, or to submit a Site Plan Application, shall comply with the complete application submission requirements of the *Planning Act.* The applicant may also be required to submit such documents as are deemed necessary from this list:

a) Archaeological Resource Assessment;
b) Community Services and Facilities Study;
c) Conceptual Development Plan;
d) Contaminated Site Assessment;
e) Cultural Heritage Impact Assessment;
f) Environmental Impact Study;
g) Erosion and Sediment Control Plan ;
h) Geotechnical Study;
i) Groundwater Impact Assessment;
j) Impact Assessment for Adjacent Waste Disposal / Former Landfill Site;
k) Loading Study;
l) Minimum Distance Separation Report;

m) Noise Impact Study;
n) Parking Study;
o) Pedestrian Level Wind Study;
p) Phase 1 Environmental Site Assessment (ESA);
q) Phase 2 Environmental Site Assessment (ESA);
r) Planning Rationale;
s) Retail Market Demand and Impact Study;
t) Record of Site Condition;
u) Servicing Report;
v) Soil and Hydrogeological Study;
w) Stormwater Management Report;
x) Sun/Shadow Study;
y) Sustainable Development Checklist;
z) Traffic Operations Assessment;
aa) Transportation Impact Study;
bb) Tree Preservation and Protection Plan;
cc) Urban Design Brief; and
dd) Vibration Study.

7.5 PUBLIC PARTICIPATION AND NOTIFICATION

Believing that public participation in developing, implementing and evaluating this Official Plan is very important, the City encourages residents and community groups to participate in the discussion of planning and other municipal issues.

The City will achieve a fair, open and accessible public process for developing, implementing and reviewing this Plan by:

a) encouraging participation by all segments of the population, with special consideration for the needs of individuals of all ages, background, and abilities;
b) promoting community awareness of planning issues and decisions, through the use of clear, understandable language, a variety of processes to inform the public, including the use of both traditional and electronic media; and
c) providing adequate and various opportunities for those affected by planning decisions to be informed and to contribute to the planning processes.

Implementation of the Official Plan will follow the public notice and public meeting requirements of the *Planning Act.* The *Planning Act* contains provisions that allow municipalities to provide notice of the required public meetings in a manner different from those prescribed in the *Planning Act* and its regulations, provided that this alternative method is specified in the City's Official Plan.

7.6 MONITORING

The Plan shall be subject to a comprehensive review every five years, beginning five years from the date of adoption. The purpose of the review is to establish the degree to which the policies and goals of the Plan have been achieved and to amend the Plan to enhance its effectiveness if required. A special open meeting of Council will be held for this purpose to facilitate public input in the review process.

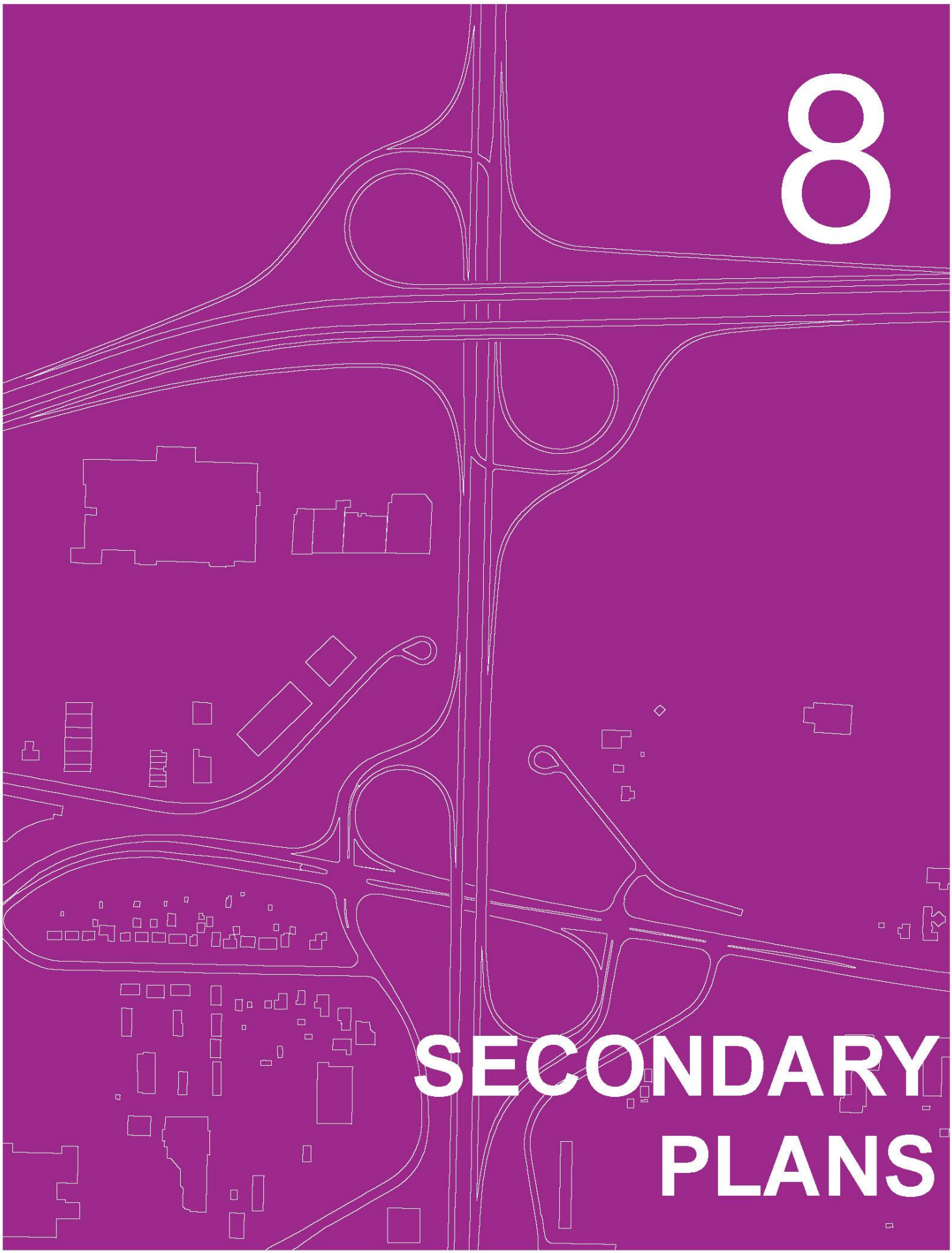
In order to support the review process in a systematic and comprehensive way, the City will establish a program (as funding permits) to monitor on an on-going basis:

a) population and employment trends;
b) land use and development trends;
c) the rate of development in units/year and floor space/year;
d) the balance between resident labour force and employment opportunities;
e) the balance between total labour force and housing availability;
f) changes in housing mix;
g) changes in wildlife habitats and fish habitats;
h) changes in the ratio of open space to population;
i) changes in the amount of farmland, woodlands, wetlands and other naturally vegetated areas;
j) servicing capacities;
k) surface and ground water quality and quantity; and
l) other factors affecting land use planning for the City, as deemed appropriate.

This monitoring program will help ensure that the goals and policies of this Plan remain meaningful and determine the effectiveness of policy implementation methods.

Programs provided by other orders of government will be monitored to determine what benefits might be derived from participation in such programs.

As part of the monitoring process, the Official Plan may be amended from time to time. A bi-yearly consolidation of the Plan, including all general amendments, will also be prepared as required.



8

SECONDARY PLANS

8 SECONDARY PLANS

8.1 SECONDARY PLAN – DEVELOPMENT AREA 1

Development Area 1 consists of the lands bounded by Highway 402 to the south, Modeland Road to the east, Blackwell Road to the north and the former Canadian National Railway right-of-way [now the Howard Watson Nature Trail] to the west.

8.1.1 Goals for Development Area 1

It shall be a Goal of this Secondary Plan:

a) to provide for the orderly development of Development Area 1 in such a manner as to ensure fairness and equity among affected landowners, and maintain and enhance the financial health of the City;
b) to recognize, conserve and to the extent possible, integrate with the planned land uses, the identified natural features and attributes of the development area;
c) to adequately provide for the equitable distribution of a wide variety of affordable housing and educational, social and recreational facilities;
d) to provide for the cost-effective and efficient design and use of transportation, sewer and water services;
e) to ensure that all development plans for the area are implemented so as to be in general conformity with the approved Land Use Map (**Schedule A**); and
f) to effectively integrate proposed development with existing development in order to minimize disruptions to both present and future residents.

8.1.2 Objectives for Development Area 1

1. Community Identity and Structure

It shall be an objective of this Secondary Plan:

a) to create a distinctive and diverse residential community that provides a range of opportunities to improve the lives of existing and future residents in Development Area 1 in a manner that is compatible with the City at large and existing residential areas in proximity to the development area; and
b) to create a neighbourhood structure that is integrated with the existing urban area and that is linked by pedestrian and transportation systems to community parks and open space, and institutional, commercial and educational facilities.

2. Residential

It shall be an objective of this Secondary Plan:

a) to provide a broad range of low- and medium-density housing types suitable for a range of age and income groups, lifestyles and household structures of future residents, including a range of affordable housing opportunities;
b) to locate medium-density housing types to facilitate residents' access to schools, commercial areas, parks, open space systems and other community facilities;
c) to encourage the integration of innovative housing designs that contribute to lower housing costs and encourage the provision of a range of affordable housing; and

d) to contribute to achieving within the City of Sarnia a 10-year supply of land for housing, and a 3-year supply of land for housing at the draft, final or registered plan stage of approval.

3. Commercial

It shall be an objective of this Secondary Plan:

a) to provide for an adequate supply of both local commercial and general commercial facilities consistent with the established hierarchy of commercial facilities in the City and located throughout the development area to ensure safe and convenient access for the future resident population; and
b) to establish design policies for the effective integration of local and community commercial facilities with other adjacent land uses.

4. Parkland and Open Space

It shall be an objective of this Secondary Plan:

a) to develop an integrated open space system comprising a network of natural areas, buffer areas, parklands, school sites and facilities, pedestrian paths, bikeways and nature trails to serve both the active and passive recreational needs of both existing and future residents in Development Area 1, as well as residents in surrounding urban areas; and
b) to provide for an off-street pedestrian system linking residential areas to parks, schools, institutional uses, local and general commercial facilities, public transit and super mailbox locations.

5. Institutional and Community Facilities

It shall be an objective of this Secondary Plan to reserve sufficient land and provide adequate opportunity for the development of educational, institutional and recreation facilities to meet the needs of residents in Development Area 1 and nearby urban areas. These facilities may include a range of active and passive uses such as recreational areas, churches, special-purpose public or quasi-public facilities, and public and separate elementary and secondary schools.

6. Environment

It shall be an objective of this Secondary Plan:

a) to establish, preserve and maintain a safe, attractive and high-quality environment for the existing and future residents in Development Area 1 and to encourage energy conservation through land use planning and design;
b) to provide sufficient buffer zones to reduce noise levels, air pollution and safety hazards between Highway 40, Highway 402, and other adjacent land uses in Development Area 1;
c) to provide, where required, studies and sufficient buffer zones within 500 metres of the site, and to create an adequate separation distance between the proposed land uses and the existing abandoned landfill site located in the development area; and
d) to provide for the preservation of natural areas and their integration with parklands, floodplain/drainage areas and stormwater management areas in proximity to the development area.

7. Transportation

It shall be an objective of this Secondary Plan:

a) to develop a road system of arterial, collector and local roads that provides for the logical, efficient and safe movement of people and goods in Development Area 1 and that integrates the development area with the rest of the City;
b) to discourage the use of local roads as bypasses for through traffic, especially during the process of phased development, by the careful review and approval of the limits of proposed development phases; and
c) to provide adequate bus stops and shelters close to residential and commercial areas and schools.

8. Services

It shall be an objective of this Secondary Plan:

a) to ensure that an adequate water supply and distribution system, sewage collection system, stormwater management and drainage system, and electrical and utility distribution systems, will be provided throughout Development Area 1; and
b) to identify and use surplus capacity in existing infrastructure and service facilities to make efficient use of existing systems and encourage and facilitate the development of proposed uses in Development Area 1.

9. Phasing and Staging

It shall be an objective of this Secondary Plan:

a) to provide that growth in Development Area 1 is phased and staged in such a manner that each phase of development represents a logical unit of development that can function independently relative to other parts of the development area, and contribute to the continuity of the area as a whole when development is complete;
b) to ensure that the servicing and development of Development Area 1 proceeds in a manner that is generally fair and equitable to all affected landowners within the area;
c) to ensure that the staging and phasing of development and the provision of public services proceeds in a logical and cost-efficient manner;
c) to ensure that development in Development Area 1 proceeds within the financial and physical capabilities of the City;
e) to facilitate the development of elementary and secondary schools, and where practical, to provide for the development of integrated parks, community and institutional facilities at a rate commensurate with the overall rate of development in Development Area 1;
f) to ensure the rate of development does not exceed the capacity of the arterial roads, utilities and other services and, where appropriate, to provide for the monitoring of service systems to ensure that such capacity is not exceeded;
g) to ensure that provision is made in the various stages of development for servicing and road requirements of subsequent phases and to facilitate the phased construction of arterial and collector roads that contribute to the cost-efficient and timely integration of the development area with the rest of the City;
h) to identify existing uncommitted reserve capacity in the sanitary sewer system and where required, establish a program to monitor the flows and the actual use of the sewer system to ensure that such capacity is not exceeded, and to ensure that where the installation of services or the provision of capacity is planned to be phased, there is an opportunity to provide additional sanitary sewer services well in advance of when currently provided capacity is projected to be exhausted;

i) to provide for the orderly transition from agricultural uses to urban uses in the development area, the continued use of farm lands for agricultural use for as long as practical, and where conflicts exist between existing agricultural uses and proposed residential uses, the creation of buffer zones, the maintenance of minimum separation distances, or the application of other measures to alleviate, to the extent possible, interim adverse impacts of incompatible land uses; and

j) to encourage the development of a servicing strategy that encourages the phased development of the Development Area 1 at a rate sufficient to support the goals and objectives of the Official Plan and this Secondary Plan.

8.1.3 Land Use Plan and Policies

8.1.3.1 General

Development Area 1 shall be developed primarily as a residential community. The density of development should not exceed an overall gross residential density of 9.5 units per hectare (3.8 units per acre.

Development Area 1 shall consist of a mixture of lower- and medium-density residential uses, including single detached dwellings, with mixed medium-density residential development in the southerly portion of the development area north of Highway 402. This development area shall also contain a broad range of support facilities and services including schools, parks, open space, institutional and local and general commercial facilities.

Notwithstanding the above, a 1.71 hectare (4.23 acre) mixed residential designation as shown within R8 on Schedule A is permitted to a maximum of 21.7 units per hectare (8.8 units per acre).

The land use designations for the Development Area 1 Secondary Plan are shown on **Schedule A**.

8.1.3.2 Residential

1. General Policies

The following general policies apply to Development Area 1:

a) A broad range of housing densities and housing types shall be encouraged to enable the area to accommodate an appropriate range of income groups. A mix of housing densities and types shall provide for single detached uses at densities ranging between 10 and 11 units per hectare (4.0 and 4.5 units per acre), and mixed residential uses at densities up to 17 units per hectare (7.0 units per acre). These residential development forms shall generally be reflected in land use designations in accordance with the following ratio:
   - Single Detached Residential Uses: 55% - 65%;
   - Mixed Residential Uses: 35% - 45%.

b) Gross residential density shall be measured in units per hectare and will include lot areas, roads, parkland, natural areas and open space, schools, institutional uses, roads, and commercial areas. The overall gross residential density in the

Development Area 1 Secondary Plan area shall not exceed 9.5 units per gross hectare (3.8 units per gross acre).

c) Net residential density shall be measured in units per hectare and will include lot areas for residential dwellings and local streets. The net residential density in Development Area 1 should not exceed an average of approximately 9.5 units per hectare (3.8 units per acre) for single detached dwellings and 17 units per hectare (7.0 units per acre) for mixed unit development. The overall average net residential density should not exceed an approximate density of 12.5 units per hectare (5 units per acre). In no case shall net residential density on any lot or block exceed 30 units per hectare (12.0 units per acre).
d) Mixed residential development shall include a mixture of unit types not exceeding three storeys in height that may include single detached, semi-detached, duplexes, triplexes, townhouses, street townhouses, and other similar forms of housing units consistent with the intent of this Secondary Plan.
e) All new residential development shall proceed on the basis of the provision of a full range of municipal services including sanitary sewer, water, electrical, stormwater management facilities, storm sewer services and public rights-of-way.
f) Where appropriate, more innovative housing types, zoning standards and subdivision designs shall be encouraged.
g) Energy conservation shall be encouraged in the design of plans of subdivision and the development of blocks of land or residential sites.
h) The development of vacant parcels of land shall be by plan of subdivision. Development by consents shall generally be discouraged except where consents are intended to facilitate the assembly of land for more comprehensive development by plan of subdivision or where it can be demonstrated that any such proposed development is consistent with the overall intent of this Secondary Plan and will not impede the co-ordinated development of lands in the area.
i) Where new residential development is located adjacent to existing or future arterial and collector roads, special attention shall be given to the provision of adequate buffers and aesthetically pleasing design sensitive to predicted road conditions.
j) Residential single detached development shall not be permitted direct access to any arterial road in the Secondary Plan area.
k) Techniques such as building setbacks, visual screening, planting, fencing, and other similar forms of buffering shall be provided where appropriate to minimize the impact of commercial facilities, schools and other institutional facilities in residential areas.
l) Senior citizens' housing and similar special residential uses shall be encouraged to locate close to commercial and institutional facilities and open space areas.

2. Affordable Housing

The following affordable housing policies apply to Development Area 1:

a) The review of residential development proposals for Development Area 1 shall provide for consistency with the Housing Policies contained in the *Provincial Policy Statement* and in particular, the extent to which Development Area 1 can contribute to the supply of affordable residential units in the context of the urban area of which the development area is a part.
b) In assessing development proposals, and in particular the mixture of housing forms proposed for the designated mixed residential areas, housing needs in terms of type and tenure shall be considered and encouraged for a broad range of income groups.
c) Innovative housing designs and alternative development standards shall be encouraged when considering development proposals for affordable housing. Alternative zoning standards may also be considered to permit development such as

zero-lot-line residential development, provided that such development is made subject to the provisions of site plan control.

3. Residential Design Integration

The following residential design policies apply to Development Area 1:

a) Where areas are to be developed for multi-unit residential use and are located adjacent or in proximity to either existing or planned areas of lower-density single- and semi-detached development, detailed site planning shall provide for effective screening, increased setbacks, and attention to the orientation of the buildings to minimize any potential compatibility problems such as loss of privacy or shadowing.
b) All residential development abutting arterial roads shall be sited and designed for a reverse frontage orientation.
c) All residential development abutting arterial or collector road allowances shall be required to provide additional front or rear yard setbacks from the road allowance sufficient to reduce the effects of noise, glare, and fumes. If traffic counts are sufficient, or are projected to be sufficient to warrant additional protection, buffers, berms, walls and/or fences may be required.
d) Any development proposal that includes provision for townhouses, street townhouses, row houses, or other forms of cluster-type housing shall have regard to municipal site plan guidelines and to the following matters, all to the satisfaction of the City:
    i) space shall be set aside for child play areas based on the bedroom count of dwelling units; such space should be accessible to dwelling units, not conflict with on-site circulation systems, and be visible to as many units as possible;
    ii) outdoor privacy areas of a reasonable size should be provided for the occupants of townhouse type dwellings by landscaping, berms, fencing, screening or other suitable methods;
    iii) variations in topography should be retained or created through effective landscaping;
    iv) where a development proposal is located adjacent to the pedestrian walkway/trail system or open space system, on-site open space areas shall be required to be integrated into the walkway system;
    v) plans shall show the height, shape, mass, colour, texture and material of proposed dwellings and the relationship to both adjacent sites and existing uses in proximity to the proposed development; and
    vi) street furnishings, including lighting fixtures, garbage and recycling receptacles, benches, and signs shall be designed and provided by the developer for the subject area.

8.1.3.3 Commercial

1. General Policies

The following general commercial policies apply to Development Area 1:

a) The development shall provide for the inclusion of both neighbourhood and community commercial facilities to serve the needs of the existing and future resident population.
b) Existing industrial uses shall be encouraged to convert to neighbourhood or community/general commercial use. Assessment and restoration of such sites shall be carried out to the satisfaction of the City in accordance with the *Guideline for Use at Contaminated Sites in Ontario*, prepared by the Ministry of Environment, prior to any conversion of an existing industrial use to a commercial use.

c) The development of neighbourhood, community and general commercial uses shall be subject to detailed site planning and shall have particular regard to appropriate measures to integrate site design with the surrounding residential areas. Special attention shall be given to the provision of landscaping, buffering and other measures to mitigate such potential impacts as excessive noise, glare, fumes, garbage or traffic movements on the lands in proximity to the planned commercial use.

2. Local Commercial Uses

The following local commercial policies apply to Development Area 1:

a) The lands designated for commercial use on both the north side of Michigan Avenue at Blackwell Road, at the south-west intersection of Michigan Avenue and The Rapids Parkway, at the north-west intersection of Modeland Road and Michigan Avenue and at the intersection of Modeland Road and Berger Road shall develop for local commercial uses.

b) The development of all local commercial uses shall be subject to detailed site planning as provided for in the *Planning Act* and shall have particular regard to appropriate measures to integrate site design with the surrounding land uses and residential areas. Special attention shall be given to the provision of landscaping, buffering and other measures to mitigate potential impacts such as excessive noise, glare, fumes, garbage or traffic movements on the lands in proximity to the planned commercial use.

c) Notwithstanding the policies of this Plan, the 0.81 hectare (1.99 acre) local commercial land use designation located at the north-west intersection of Modeland Road and Michigan Avenue may permit community commercial uses. Uses associated with the disposal, manufacture, treatment or storage of hazardous substances are prohibited.

3. General Commercial Uses

The following commercial use policies apply to Development Area 1:

a) The lands located on the south side of Michigan Avenue immediately east of the former C.N.R. right-of-way shown to be designated for General Commercial on **Schedule A**, Proposed Land Use, shall be used for General Commercial development.

b) In addition to the policies of Section 4.6.4 of the Official Plan, the following additional policies shall apply:

   i) the development of General Commercial uses shall be limited to the lands located on the south side of Michigan Avenue immediately to the east of the former C.N.R. right-of-way;

   ii) the development of general commercial use area mentioned in the preceding clause shall be encouraged to include a range of retail and service commercial uses that serve the surrounding residential areas;

   iii) the range of uses permitted to locate in general commercial use areas shall not be interpreted to include car dealerships, warehouse-style retail facilities, hotels or motels, department stores, or other large users of retail space;

   iv) the development of the new General Commercial use area mentioned in clause (i) of this section shall be by way of site plan agreement with the City;

   v) development of the General Commercial area shall provide for adequate access and egress, landscaping, buffering, parking, refuse/recycling and loading spaces to minimize any potential impact on adjacent residential development; special attention shall be given to the location of this site on Michigan Avenue opposite the intersection of Blackwell Road;

vi) in conjunction with site plan approval for the development of this commercial area, consideration shall be given to site access and possible intersection improvements or reconfigurations that may be required as part of the redevelopment of this site to provide safe access to the site and to ensure that the development of this site does not create or contribute to unsafe traffic conditions; and

vii) this General Commercial development area shall be designed to encourage the possible reuse of the existing industrial service building and shall be compatible with any surrounding or adjacent land use, residential or anticipated residential development, in respect of building design, height, landscaping and coverage; if the owner of the existing industrial use proposes to convert this use to a commercial use, assessment and restoration of such sites shall be carried out to the satisfaction of the City in accordance with the *Guideline for Use at Contaminated Sites in Ontario* prepared by the Ministry of Environment, prior to any conversion of an existing industrial use to a commercial use.

4. Design Integration

The following design integration policies apply to Development Area 1:

a) Wherever pedestrian walkways connect a neighbourhood to a local or general commercial use area, the walkway shall be designed with suitable landscaping and buffering to create a continuous defined pedestrian space leading from the adjacent residential area to the commercial area.

b) Screening, landscaping and buffer strips shall be required where any commercial buildings or their outdoor storage and parking areas abut properties designated for residential use.

c) Developments with large areas of parking shall be encouraged to provide landscaped areas within the parking lots to reduce their visual impact.

d) The design and positioning of new buildings should have regard for the impact of the proposed development on year-round sunlight conditions, on adjacent properties, and streets. The maintenance of continued access to sunlight for adjacent existing residential areas should be considered when reviewing proposed developments.

e) The design of new buildings should facilitate access and use by handicapped persons and senior citizens.

f) Commercial areas shall have a low-rise development form. The height restrictions shall be detailed in the implementing Zoning By-Law.

g) Access from any commercial use to arterial and collector roads shall be designed in accordance with accepted traffic engineering standards and shall generally be limited to the minimum number necessary for the proper functioning of the commercial use. Joint, shared access between properties shall be encouraged by the acquisition or granting of easements for rights-of-way.

h) In considering any development proposal in the local commercial or general commercial designation, the City shall be satisfied that the proposal does not interfere with the achievement of the following objectives:
   i) the reduction of the number of vehicle access driveways to any arterial or collector street;
   ii) the consolidation of any off-street parking areas, where possible;
   iii) the improvement of traffic circulation;
   iv) the enhancement of the architectural and landscaping design in the area.

i) The design of any facility and supporting infrastructure shall minimize impacts on the environment and the developer shall take all reasonable steps to mitigate impacts on, or enhance, the surrounding area.

8.1.3.4 Public Open Space

1. General Policies

The following public open space policies apply to Development Area 1:

a) The Secondary Plan for Development Area 1 provides for the reservation and integration of a range of open spaces including natural areas, drainage channels, an extension of a pedestrian nature trail, and community and neighbourhood parks. The provision of this range of open space shall be integrated with both the development of all of the other proposed uses in the development area as well as with the adjacent existing uses.

b) Each landowner in the development area may not be required to reserve or dedicate the required 5% of public open space land. Consequently, it shall be a policy of this plan to provide that each landowner in the development area share in a proportionate manner the costs of providing the required range of open space land.

2. Neighbourhood and Community Parks

The following neighbourhood and community park policies apply to Development Area 1:

a) Within each residential neighbourhood, it is intended that a combination of Community and Neighbourhood recreational land be provided to meet the standard of approximately 0.5 hectares of community parkland per 1,000 population and approximately 1.2 hectares of neighbourhood parkland per 1,000 population, and that either a community park, a neighbourhood park or related open-space-type use (such as an elementary or secondary school site) be within a 500-metre safe walking distance of all sections of the development area. In satisfying this standard, recognition shall be given to the location of elementary and secondary schools, integrated parkland, open space, and connecting pedestrian trail facilities that are designed to satisfy a portion of the park and open space needs in the development area.

b) In considering the amount of land to be reserved for neighbourhood and community parkland, and notwithstanding the standards set forth in the preceding paragraph, the required 5% of development land to be dedicated to the City may be reduced in area by the City in favour of a cash-in-lieu payment. Where such standards are reduced, any cash payment shall be expended for the purpose of servicing remaining parkland with equipment or facilities required for the parkland. Services and facilities may also be accepted in-lieu-of any cash payment.

c) recreational facilities that may be provided within each community or neighbourhood park or joint use park related area may include such facilities as:
   i) playgrounds with play equipment;
   ii) playing fields for soccer, football, baseball, softball or track and field;
   iii) hard surfaced areas for basketball, volleyball, shuffleboard or tennis;
   iv) passive recreational areas, landscaped open space or natural areas that may be supplied with shelters, benches or picnic tables;
   v) sleigh and toboggan slopes (topography permitting);
   vi) bicycle paths; and
   vii) service buildings and related facilities.

d) Elementary and secondary school sites within any residential neighbourhood shall for the purposes of this Secondary Plan be considered to be a neighbourhood or community recreation facility providing playgrounds and facilities for programs such as community schools or community centres. In the development area, although

elementary schools are not proposed to be located adjacent to neighbourhood park areas, facilities and programs shall be encouraged to be cooperatively planned, programmed and developed.

e) Plans shall be prepared by the City of Sarnia in consultation with other appropriate public authorities for those parts of Development Area 1 in which community and neighbourhood facilities are to be provided. Such plans shall show the location of the proposed facilities, and their associated parking areas, driveways and public walkways. The City of Sarnia shall ensure that these recreation facilities are provided in accordance with such plans.

f) Automobile parking areas may be provided at park and open space facilities designed for active or passive recreational use. On-site circulation systems shall be designed to minimize conflicts between vehicular and pedestrian traffic.

3. Open Space, Trail and Natural Areas

The following open space, trail and natural area policies apply to Development Area 1:

a) The existing former C.N.R. right-of-way in Development Area 1 extending from Michigan Avenue to a point south of the south limit of Wiltshire Park shall be preserved as an extension to the Howard Watson nature trail, and shall in part serve to integrate Development Area 1 into the linear park and open space system in the City.

b) A pedestrian trail extension to the extended Howard Watson Nature Trail shall be provided in the west half of the right-of-way and share with an arterial roadway that portion of the existing former C.N.R. right-of-way in Development Area 1 extending from a point south of the south limit of Wiltshire Park to London Road. The design and development of this pedestrian trail and trail extension shall function as a buffer between existing residential uses to the west and that part of the arterial road that shares the former C.N.R. right-of-way.

c) The design and development of the pedestrian trail, trail extension and buffer area south of the south limit of Wiltshire Park shall proceed well in advance of the design and development of the proposed future arterial road. It is intended that there be sufficient time provided for the maturing of supplementary plantings in the trail area that will strengthen the natural amenity and buffer function of both the nature trail and the nature trail extension.

d) The existing D2-C and Wilson Mathers drains are planned for enclosure/improvement as development proceeds in the area. The enclosure/improvement of these drainage facilities shall be undertaken in such a manner as to create an extension to the pedestrian trail system, and shall be designed and landscaped to provide an aesthetically pleasing multi-use trail facility that will integrate the development area with the existing urban area to the west.

e) The reservation, enclosure and improvement of the natural watercourses and drainage channels that traverse the development area shall not constitute any part of the lands required for parkland dedication as provided for by the *Planning Act*, nor shall any such land be recognized as a consideration in respect of a calculation for any agreed cash payment in lieu of such a required parkland dedication.

f) Where appropriate, applications for draft plans of subdivision shall be accompanied by a report identifying the potential impact of the proposed development on environmentally significant feature(s) and the methods by which such impacts can be mitigated in conjunction with the proposed development. This Plan does not encourage development in areas with environmentally significant features.

4. Pathways and Walkways

The following policies for pathways and walkways apply to Development Area 1:

a) The design of the development of the land uses proposed in Development Area 1 shall incorporate provisions for a linked open space system that includes the Howard Watson Nature Trail and trail extensions mentioned in Section 8.1.3.4(3) of this Secondary Plan, and that may comprise a combination of parks, institutional areas, woodlots and natural areas, open and enclosed municipal drains, storm water management facilities, pedestrian walkways, trails and bicycle paths. The planning and implementation of this system shall generally be established through the design, approvals, and servicing processes of both plans of subdivision and site plan agreements.

b) The linked open space system to be provided in conjunction with the development of Development Area 1 is intended to provide safe and accessible pedestrian linkages between residential areas, school sites, commercial areas, transit stops, super mailbox locations and other public facilities for all residents of the development area, including the disabled.

c) Special consideration shall be given to the provision of such features as hard surfacing, lighting, landscaping and benches along linkages, trails and walking/bicycle paths. Provision shall be made to ensure the creation of safe connections between these facilities throughout Development Area 1.

d) Public walkways shall be provided through residential blocks so as to create a convenient, safe, and efficient pedestrian circulation system.

e) Sidewalks shall be provided along both sides of Michigan Avenue, the Rapids Parkway between London Road and Michigan Avenue, and along at least one side of all other arterials and collectors.

5. Stormwater Management

The following stormwater management policies apply to Development Area 1:

a) The stormwater management facilities determined to be appropriate for Development Area 1 include the deepening and enclosure of existing municipal drains and the creation of an artificial wetland in a drain structure to the east of the development area. Development in the Secondary Plan area shall provide for the integration of these drainage channels and enclosures and the improvements required to achieve the stormwater objectives.

b) Stormwater quality control facilities are proposed to be located east of Highway 40/Modeland Road within a deepened and widened Marks Smith drain. The design of this proposed control facility is intended to create an artificial wetland area comprising pools and ponded areas, complete with appropriate vegetation and landscaping features.

c) Where possible, the required drain enclosures and improvements and the quality control facility shall be integrated with the system of public open spaces and linear open space systems, and designed to create functional and pleasing, linked open space areas. To the extent practicable, enclosures of existing open drainage channels shall be integrated with the park, trail and pathway system linking different parts of the development area to one another and to the rest of the City.

d) The planning and design of both the required drain enclosures and improvements and the proposed stormwater quality control facility shall accommodate a phased incremental approach to construction, concurrent with the phased development of Development Area 1.

8.1.3.5 Institutional and Community Services

1. General Policies

The following institutional policies apply to Development Area 1:

a) Institutional uses that may be located in Development Area 1 shall be encouraged to locate in proximity to arterial or collector roads.
b) Institutional uses in Development Area 1 shall be planned and designed to be both compatible and integrated with adjacent lands uses.

2. Schools

The following school policies apply to Development Area 1:

a) One elementary school site and one secondary school site (planned to accommodate both an English and a French language secondary school) have been identified and designated in Development Area 1.
b) School areas in the development area shall be incorporated into the linkage system of trails, pathways and walkways. The linkage system shall be designed so as to provide safe and convenient access to school lands.
c) School and related facilities should contribute to the provision of recreational and cultural opportunities in conjunction with municipal facilities and parks. Where possible, joint use of these facilities shall be encouraged.

3. Places of Worship

Lands have not been specifically designated in Development Area 1 for church and religious institution uses. All proposed sites for such uses shall be subject to the policies of the Official Plan.

4. Community Services and Facilities

The following community and social service policies apply to Development Area 1:

a) The development of municipal facilities for recreational and cultural facilities may be considered as a joint venture in conjunction with the development of the school facilities planned for development in the Secondary Plan Area.
b) The City of Sarnia shall cooperate with the appropriate agencies to ensure that the residents in Development Area 1 have access to a wide range of community and social services.
c) Shared use of community and school facilities shall be encouraged.
d) All community facilities shall include special provisions for special needs individuals.
e) The City prioritizes the location of Child Care services within schools to minimize transitions for young children and to provide a single point of access for early childhood services. Child Care services are also permitted to locate in places of worship, community facilities, shopping areas and places of employment.
f) Social and community service centres may be established in Development Area 1 when there is a need for such centres, as determined in conjunction with representatives of the public agencies working in the City.
g) Social and community service centres may provide educational and developmental services such as public health, social welfare, homemaker, legal aid, information and counselling, community development, and recreation for preschool children and senior citizens.

8.1.3.6 Environmental and Design Considerations

1. General Policies

The following general environmental policies apply to Development Area 1:

a) In the planning and design of the range of land uses proposed for Development Area 1, regard shall be given to measures necessary to preserve, sustain and enhance existing natural features and integrate such features with the proposed land uses.

b) Lands in Development Area 1 have a moderate to high potential as locations of archaeological sites. An archaeological assessment of these lands by a consultant archaeologist may be necessary as a condition of development. Any significant archaeological sites found in the development area will require proper mitigation (e.g., avoidance or excavation) prior to the initiation of land disturbances or development.

2. Environmental Protection

The following environmental protection policies apply to Development Area 1:

a) All necessary measures shall be taken to the extent feasible and practical to preserve and conserve of existing trees and woodlots that are determined by the City to warrant such preservation and conservation.

b) The protection and preservation of any woodlots identified by the City as being significant shall be considered in the assessment of appropriate applications for draft plans of subdivision, and shall be accompanied by a report identifying the potential impact of the proposed development on the significant feature(s) and the methods by which that impact may be mitigated.

c) Energy conservation shall be encouraged in the design of local and collector road networks to minimize trip lengths, and through street layouts, lot configurations, subdivision landscaping and dwelling design orientation that maximize passive solar gain during the winter months. These measures shall be encouraged while maintaining current subdivision design standards.

3. Floodplain and Floodfringe Areas

The following floodplain and floodfringe policies apply to Development Area 1:

a) The regulatory flood standard that applies to the Perch Creek watershed is the 100-year flood frequency based event. It has been determined that all of the lands in Development Area 1 are potentially subject to flooding under 100-year storm conditions. On the basis of the detailed two-zone analysis of the Perch Creek flood plain north of Highway 402 and the flood potential of this portion of the Perch Creek watershed, Development Area 1 is hereby declared to be a floodfringe area appropriate for development, subject to the policies set forth in this Section. The rest of the floodplain north of Highway 402 shall remain as a floodplain area to which St. Clair Region Conservation Authority policies and regulations shall continue to apply. Appropriate floodproofing shall be applied following established standards.

b) In Development Area 1, all building openings shall be set at an elevation no less than 179.3 metres CGD and the travelled portion of all public rights-of-way shall maintain a minimum elevation of no less than 179.1 metres CGD.

4. Area of Special Policy (Landfill)

The following special policies apply to Development Area 1:

a) Approximately 10.7 hectares (26.5 acres) located in the northwest corner of a portion of the development area south of Michigan Avenue designated for “Residential” use (and planned for development at a density of 4.5 units per acre) are subject to an

"Area of Special Policy (Landfill)" notation that shall be deemed to overlay the "Residential" designation. This Area of Special Policy (Landfill) is intended to reflect the limits of a landfill area (inclusive of the required buffer area) that, by virtue of a Notice issued by the Ministry of Environment is deemed to have ceased receiving any waste on October 22, 1993.

b) The lands designated for residential development and subject to special policies are lands that were used for landfill, and are subject to the provisions of Section 46 of the *Environmental Protection Act*, R.S.O. 1990, c.E.19. Section 46 of the *Environmental Protection Act* states that no use shall be made of land or land covered by water which has been used for the disposal of waste within a period of 25 years from the year in which such land ceased to be so used unless the approval of the Minister of Environment for the proposed use has been given.
c) The landfill be closed in accordance with an approved closure plan and these lands shall remain a closed landfill and not be permitted to develop for any other use for a period of 25 years, commencing October 22, 1993 (the date the site ceased receiving waste) without the approval of the Minister of Environment, as provided for in the *Environmental Protection Act*.
d) Any time after the 25 years have lapsed (on or after October 22, 2018), but before any use is permitted to develop on or within the lands used for landfilling, an application must be made to the Ministry of Environment to amend the Certificate of Approval #A032005. No development shall take place on or within the lands used for landfilling until an evaluation of the presence and impact of any adverse environmental effects, and risks to health and safety is completed; Certificate of Approval #A032005 is amended; and any necessary remedial measures are undertaken to the satisfaction of the City of Sarnia and the Ministry of Environment.
e) Any uses proposed to locate in proximity to that portion of the Residential designation to which special policies apply shall have regard to the area of the landfill site mentioned in this section of the Plan and shall make provision for the future integration of this area of special policy with adjacent residential development.
f) The policy set forth in Section 6.3.4(1) of the Official Plan shall not apply to this landfill site. Rather, it shall be the policy of this Secondary Plan that any development within 500 metres of the boundary of the "Special Policy Area (Landfill)" shall be subject to consultation with the Ministry of Environment before any Zoning By-law amendment, Official Plan Amendment, consent to sever approval, draft approval of a draft plan of subdivision or building permit is adopted or granted for such lands. The Ministry of Environment may require that the development proponent undertake a study to determine whether methane gas and/or leachate migration may cause any adverse environmental effect or cause a risk to health or safety. If a potential adverse effect or risk does exist, development may be restricted.

5. Design Considerations

The following design policies apply to Development Area 1:

a) Aesthetically pleasing streetscapes shall be encouraged through the careful use of architectural styles, varied setbacks, building materials, colours and landscaping.
b) Subdivision design shall be sensitive to the topography and natural landscape in the development area.
c) New residential development adjacent to arterial and collector roads shall be designed to be sensitive to both the existing and predicted characteristics of adjacent roadway conditions.
d) The design and construction of new arterial and collector roads shall recognize existing residential areas and reduce to the extent practicable and possible the impact

of such arterial and collector roads through such measures as increased setbacks, landscaping and buffers.

e) Special care shall be taken in the design of the new arterial road connecting the development area with Exmouth Street (to the south) to provide for the integration of a nature trail/pedestrian trail connection from the approximate south limits of Wiltshire Park southerly under Highway 402 to Exmouth Street. These design considerations shall preserve, to the extent possible, the existing trail facility and shall have particular regard to the potential for the trail area to act as a buffer between the proposed arterial road and the existing residential area.
f) Care shall be taken to design, develop and maintain visually significant entrance features for Development Area 1 that do not create a visual obstruction.
g) Building and site design, setbacks, landscaping, screening and buffering techniques shall be applied to minimize potential conflicts between adjacent land uses including roads.
h) All services within Development Area 1 shall be provided to City specifications.
i) The planting of trees in boulevards within the arterial, collector and local road allowances shall be required to comprise a part of the servicing and construction of residential districts throughout the Development Area.
j) Areas that maintain and encourage wildlife shall be created or enhanced.

8.1.3.7 Transportation

1. General Policies

The following general transportation policies apply to Development Area 1:

a) All development shall have setbacks from rights-of-way adequate to provide for acceptable access, recognize the need for parking, provide for the installation of services and maintain accepted traffic engineering standards to provide good visibility.
b) Arterial, collector and local roads in the development area shall, to the extent possible, be aligned, designed and constructed in such a way as to preserve natural features, and maximize the safe and efficient function of the right-of-way. In the development area, arterial, collector and local rights-of-way shall generally be constructed to urban cross-section standards that include paved streets, curbs and gutters, grassed boulevards, streetlights, and sidewalks. The phased construction of roadways in the development area may require some interim variation from these standards.

2. Highways

The following highway policies apply to Development Area 1:

a) Direct access to Highway 402 is prohibited. Access to the development area shall be provided by an internal road system comprising:
    i) the phased extension of The Rapids Parkway (a north/south arterial located both in the development area and part of the former C.N.R. right-of-way) from London Road to Michigan Avenue;
    ii) the extension of a collector road from the intersection of The Rapids Parkway and Michigan Avenue to Blackwell Road; and
    iii) the extension of a collector road from The Rapids Parkway easterly to Highway 40/ Modeland Road along the south side of the existing D2-C municipal drain.
b) Lands in proximity to Highway 402 or Highway 40/Modeland Road may be constrained for development as a consequence of exposure to noise, odour, vibration,

particulate and other emissions. Where such a constraint is identified or anticipated, landowners shall be required to provide buffering measures to mitigate identified or anticipated adverse environmental effects. Development in these areas shall also be required to include as background information in support of the development application a noise assessment/attenuation plan prepared by a qualified acoustical consultant to the satisfaction of both the City of Sarnia and the Ministry of Environment. The recommendations of the noise assessment/attenuation plan (as modified by the City of Sarnia and/or the Ministry of Environment if deemed necessary) shall be implemented through provisions in site plan agreements, subdivision approvals/development agreements and/or zoning.

c) For the purpose of attenuating noise, innovative subdivision and residential dwelling design shall be encouraged. The use of features and techniques such as subdivision design that provides for single-sided local rights-of-way development, increased setbacks, 2+ storey construction, reduced side yards, semi-detached and rowhouse development, air conditioning, construction materials and methods, landscaping and berms, fences and walls may all be useful means of attenuating noise levels.
d) The design and approval of the following roads shall be co-ordinated with the Ministry of Transportation to minimize disruption to adjacent lands and create a safe, well designed access to the development area:
    i. the collector road extending from The Rapids Parkway to Modeland Road together with any required improvements to the existing design of that portion of Modeland Road north Highway 402 and within the control limits of Highway 402; and
    ii. that portion of The Rapids Parkway through the Highway 402 right-of-way.
e) All dwelling units and commercial institutional buildings shall be located a minimum of 30 metres from the property line of any Controlled Access Highway.

3. Arterial Roads

The following arterial road policies apply to Development Area 1:

a) Arterial roads have been identified on **Map 4**. With the exception of institutional uses, parkland areas, commercial areas, and collector roads and local streets, direct access onto The Rapids Parkway extending from Exmouth Street to Michigan Avenue shall generally be prohibited.
b) The design and location of The Rapids Parkway and intersecting streets shall provide and maintain:
    i) a minimum standard of visibility for vehicles travelling at a speed of at least 60 km/h; and
    ii) where it is determined by the City to be reasonably possible, maintain a minimum standard of visibility of 70 km/h.

    To this end, Schedule A denotes areas in which access controls and restrictions shall apply. The detailed design of any roads to which these access controls apply shall include provisions to demonstrate that these standards can be achieved.
c) Where arterial roads intersect with arterial roads or with collector roads, the design of such intersections shall provide for the addition of traffic signals in future.
d) The intersection of local roads with arterial roads shall be spaced to prevent interference with the safe and efficient operation of the roads system in accordance with accepted traffic engineering practice.
e) Plans of subdivision shall be reviewed to assess the suitability of local road and collector road intersection points around and within the subdivision.
f) Transit routes have not yet been defined for the development area. However, transit vehicles may operate on some of the arterial roads in the development area.

Provision shall be made to inform the future owners of lands abutting these roads that they may be part of future public transit routes.

g) Arterial roads may be offset to permit wider boulevards on one side of the road, or designed to include a centre boulevard. The provision of a wider, offset boulevard would be intended to better accommodate pedestrian and/or bicycle paths. The provision of a centre boulevard would be intended to accommodate improved landscaping in the right-of-way and the phased construction of the arterial.
h) Sidewalks shall be provided along both sides of an arterial road.
i) On-street parking shall not be permitted on arterial roads.
j) The design and phased construction of The Rapids Parkway in the former C.N.R. right-of-way through the existing bridge structure under Highway 402 shall be co-ordinated with the provincial Ministry of Transportation to maintain the structural and functional integrity of both the arterial and the Highway 402 overpass structure.
k) The design and phased construction of The Rapids Parkway in the former C.N.R. right-of-way through the existing bridge structure under Highway 402 and immediately north of the Highway 402 structure shall be designed to incorporate noise attenuation features sufficient to ensure that to the extent practicable, the construction of the Rapids Parkway does not further impact on the amenity of the residential area in proximity to the Highway 402 overpass structure.
l) Notwithstanding the policies contained in this section, the 0.81 hectare (1.99 acre) local commercial land use designation located at the north-west intersection of Modeland Road and Michigan Avenue is permitted to have one right in/right out access off of Modeland Road (County Road 27) to the satisfaction of the City's Engineering Department and the County of Lambton.

4. Collector Roads

The following collector road policies apply to Development Area 1:

a) Collector roads for Development Area 1 have been designated on **Map 4**. The intersection of local roads with collector roads shall be spaced to prevent interference with the safe and efficient operation of the roads system in accordance with standard engineering practice.
b) The travelled portion of the east-west collector road to be located north of and adjacent to the existing elementary and secondary school lands and extending from Modeland Road westerly to the west limit of the secondary school lands, shall be aligned as far to the north as possible within the existing road allowance and the existing D2-C drain right-of-way, in order to achieve a maximum separation between the roadway and the St. Anne's/St. Christopher's school lands.
c) Plans of subdivision shall be reviewed to assess the suitability of local road and collector road intersection points.
d) Transit routes have not yet been defined for the development area. However, transit vehicles may operate on some of the collector roads in the development area. Provisions shall be made to inform the future owners of lands abutting these roads that they may be part of future public transit routes.
e) The location of stop signs in the development area shall be carefully evaluated to reduce air pollution and energy consumption.
f) Collector roads may be offset to permit wider boulevards on one side of the road. The provision of a wider, offset boulevard would be intended to better accommodate such facilities as a pedestrian and/or bicycle path.
g) Sidewalks shall be provided along one side of each collector road.
h) On-street parking shall be permitted on collector roads except where a conflict between vehicular and/or pedestrian traffic has either been identified or is predicted.

5. Local Roads

The following local road policies apply to Development Area 1:

a) Local roads are for residential access only. They shall be designed to discourage through traffic and minimize traffic volume.
b) On-street parking shall be permitted on local roads except where a conflict between vehicular and/or pedestrian traffic has been identified or is predicted.

6. Intersection Improvements

The design and construction of all arterials, collectors and local rights-of-way shall provide for future possible intersection improvements that may include, but are not limited to, turning lanes, acceleration or deceleration lanes, signalization, daylight triangles and improvements to sight lines.

7. Parking

The required parking for any proposed uses shall be accommodated on-site rather than on-street. The design of parking areas shall incorporate measures to reduce the visual impact of such areas on adjacent land uses.

8. Transit

The following transit policies apply to Development Area 1:

a) The arterial and collector road system has been designed so that most residents will reside within an acceptable walking distance of any public transit service system that may be extended to the development area. In plans of subdivision, local roads and pedestrian and bicycle paths should be designed to minimize walking distances to possible transit routes.
b) Public transit shall be accommodated on arterial and collector roads.
c) The future owners of lands fronting onto or abutting arterial or collector roads shall be informed that these rights-of-way may be part of a future public transit route.

8.1.3.8 Servicing

1. General Policies

The following general servicing policies apply to Development Area 1:

a) Development Area 1 shall be developed on the basis of the provision of a full range of municipal services, including public roads constructed with curbs, gutters and asphalt; sidewalks on arterial and collector roads, piped potable water; sanitary sewers; a sanitary pumping facility; stormwater management facilities; storm drainage facilities; streetlights and underground electrical distribution systems; and other utilities such as hydro, natural gas, telephone and cable television. Although the phased development of lands in the development area may require some interim variation from these standards, new development shall not proceed on the basis of the provision of individual wells and/or individual private sewage disposal systems.
b) Development proposals incorporating alternative development standards (such as narrower road rights-of-way, reduced pavement widths, lower-cost approaches to design and construction) that would lower housing costs will be considered. Municipal approval of alternative development standards shall be based on ensuring that the function, efficiency, durability and maintenance of the alternative service or standard does not increase long-term costs.

c) Development by way of plans of subdivision and/or phases of such plans of subdivision in Development Area 1 shall not be given draft approval by the City until Council is satisfied that sufficient uncommitted reserve capacity is available for the provision of a full range of municipal services and that the servicing scheme adequately incorporates provisions for the co-ordinated distribution of infrastructure in Development Area 1.
d) The cost of providing full municipal services necessary to facilitate the development of lands within Area 1 shall generally be borne by the developers of the lands. Development charges and development charge revenues, subdivider contributions, front-ending agreements, service-in-lieu agreements and other measures may be used to finance and facilitate both the installation of services and the recovery of the cost of any oversized services borne by developers, to ensure a fair and equitable distribution of servicing costs among benefitting owners in the development area.
e) In accordance with the provisions of the standard form of subdivision agreement used by the City, services that have been installed shall become the property of the City, notwithstanding any other requirement.
f) The City supports the fair and equitable distribution of costs among benefitting owners to provide a full range of municipal services.
g) Services extended into the development area must be designed and constructed to be capable of servicing the development area in a comprehensive manner.

2. Water Supply System

The following water supply policies apply to Development Area 1:

a) The design and construction of the water supply and distribution system shall be adequate to provide a reasonable and desirable level of service to all areas either currently developed or proposed for development or redevelopment. New development and/or redevelopment shall be permitted only where the water supply and distribution system is adequate to service such development and/or redevelopment.
b) Improvements to provide sufficient volume and storage capacity and water pressure in the distribution system, and to provide an adequate level of protection in the event of fires or other emergencies shall be required as necessary to the water supply and distribution system.

3. Sanitary Sewer System

The following sanitary sewer policies apply to Development Area 1:

a) The Sanitary Sewer Study prepared by the City of Sarnia Development Engineering Section of the Works Policy Area demonstrates that the South Huron Trunk Sanitary system has sufficient capacity to provide a sanitary sewer outlet for Development Area 1 and Development Area 2. To the extent permitted, in respect of any sanitary sewers to be provided in support of servicing the development area, this sanitary sewer study shall be deemed to satisfy Phase I and II of the Class Environment Assessment for Municipal Water and Wastewater Projects (as published by the Municipal Engineers Association, June, 1993).
b) Sanitary sewage collection and pumping facilities shall be provided to adequately serve the development area. New development or redevelopment shall be permitted only where sewage collection and treatment facilities are available to service such development.
c) As part of the first phase of providing sanitary sewer service to Development Area 1, a sanitary sewer monitoring system shall be installed with the sanitary sewer pumping

station, and provisions shall be made for the City to monitor the flow of effluent from the development area to the existing sanitary sewer system in Michigan Avenue.

d) All new development occurring by way of registered plan of subdivision or consent shall be serviced by the municipal sewage collection system; the developer shall be responsible for the installation of such works subject to the approval of the City and of the Ministry of Environment.

4. Stormwater Management System

The following stormwater management policies apply to Development Area 1:

a) The urbanization of Development Area 1 provides for the integration of a stormwater system to manage the stormwater discharged from both the development area and the existing residential areas to the west that currently flow through the development area. The D2-C, Wilson-Mathers, Marks Smith and Clark drains convey these stormwater flows to the Perch Creek, which is the drainage outlet for the development area. The servicing of the development area shall provide for the phased enclosure of the D2-C and Clark drains, the phased improvement of the Wilson-Mathers drain and the improvement of the Marks Smith drain (in phases) as a stormwater quality control facility, in such a manner as to resemble an artificial wetland area.

b) The Two-Zone Analysis undertaken for the portion of the Perch Creek watershed north of Highway 402 has determined that removal of Development Area 1 from the defined floodplain (and the consequent reduction in flood storage area) will have no significant or measurable impact on the extent or nature of flooding predicted to occur from time to time in the rest of the floodplain. Therefore, the City shall not approve any development in the development area unless the proponent has made appropriate provisions for floodproofing, following established standards. In these respects, all development in the development area shall be required to maintain a minimum elevation of 179.3 metres CGD and no building opening shall be permitted below this minimum elevation. The travelled portion of all public and private roadways shall maintain a minimum elevation of 179.1 metres CGD.

c) Before approving any Secondary Plan amendment, Zoning By-law amendment or development proposal or entering into a subdivision or site plan agreement, the City shall ensure that the proposal has been reviewed to determine the impact on the planned approach to stormwater quality control management. In reviewing the proposal, the City may set out additional specific requirements on a case-by-case basis and may prescribe the following measures that would support the function and operation of the planned stormwater management system:
   i) components of the planned stormwater management system; and
   ii) features such as grassed swales.

d) The City shall not approve any development that would have a significant adverse impact on the quality of discharged stormwater and increase the potential for flooding, erosion, sedimentation or pollution, both during and after construction.

e) Each development in the development area shall include a detailed plan, prepared by a Professional Engineer, that provides for the phased, incremental expansion of the overall stormwater quality control facility and documents acceptable calculation or modelling techniques to demonstrate that any proposed facility improvements will provide for an appropriate level of control as outlined in the Stormwater Management Plan for Development Area 1. The Area 1 Stormwater Management Plan prepared by Totten, Sims, Hubicki Associates in May 1995 shall, to the extent possible in respect of any storm sewer system to be installed in support of servicing this development area, be deemed to satisfy Phase 1 and 2 of the Class Environment Assessment for

Municipal Water and Wastewater Projects as published by the Municipal Engineers Association in June 1993.

f) The detailed design of the stormwater management facilities shall be in accordance with the general design guidelines outlined in the Stormwater Management Plan for Development Area 1 and shall give consideration to the most recent "Best Management Practices" available at the time of development.
g) Construction and maintenance of stormwater management facilities shall be the responsibility of the City, financed at the expense of the developer of the lands and undertaken in accordance with the general guidelines set out in the Stormwater Management Plan for Development Area 1 and to the satisfaction of the City.
h) The design and construction of an improved Wilson-Mathers drain, and an improved and expanded Marks Smith drain in the form of an artificial wetland area shall provide for the integration of a natural trail facility to extend from Modeland Road to Michigan Avenue and Perch Creek.

5. Storm Sewer System

The following storm sewer system policies apply to Development Area 1:

a) The design and construction of the storm sewer system shall be adequate to provide a reasonable and desirable level of service to all areas either currently developed or proposed for development or redevelopment. New development and/or redevelopment shall be permitted only where the storm sewer system is adequate to service such development and/or redevelopment.
b) The design and construction of the planned enclosure of the D2-C drain and the Clark drain and the planned improvements to the Wilson-Mathers drain shall provide for the integration of a natural trail facility.
c) The design of the storm sewer system shall be integrated with the design of the stormwater management system.
d) The storm sewer system shall be constructed in accordance with the standards of both the City and the Ministry of Environment.

6. Utilities

All wiring for local electricity distribution, street lights, telephone and cable television facilities shall, to the extent possible, be located underground.

8.1.3.9 Phasing and Development

a) Final approval for the development of any parcel of land within Development Area 1 shall not be granted until storm water, sanitary sewer, piped water facilities and all utilities necessary to serve the subject lands are available.
b) Where service capacity constraints are identified, development may be regulated to proceed on a phased draft-approval basis. The City shall require that the draft approval of each successive phase be conditional upon a detailed engineering review of the uncommitted reserve capacity.
c) Where it is determined that over-sizing of services is required for the co-ordinated installation of infrastructure, front-end agreements, development charges, services in-lieu agreements, or a combination of these measures may be applied to ensure the fair and equitable distribution and recovery of costs.
d) Front-ending agreements and development charges may be used to ensure the fair and equitable provision, distribution and recovery of costs associated with facilities

such as parkland, flood plain/drainage areas, stormwater management facilities and schools.

e) No development shall be approved until an agreement is entered into by the developer(s) and the City for contributions to cover the installation costs of services such as sewers, watermains, streets, sidewalks and the costs of planning and engineering services.

f) Stormwater quality control facilities required for the development area, as outlined in the Stormwater Management Plan for Development Area 1, may be subject to a phased installation as part of the servicing of any development or phase of development in Area 1. The City shall undertake a preliminary design of the stormwater management quality control facilities required for the development area to facilitate any required land acquisitions and the incremental implementation of the proposed facility. Negotiated front-ending agreement(s) with the City and/or other landowners may be used to facilitate the construction or phased construction of the stormwater management facility or improvement.

g) The phased construction of The Rapids Parkway shall proceed in the form of a two-lane road in the westerly and northerly portion of the right-of-way extending from Michigan Avenue both southerly and westerly towards Exmouth Street. Any expansion of The Rapids Parkway from a two-lane road to a four-lane road shall be based on a detailed traffic analysis that demonstrates that such an expansion is warranted. The first phase of The Rapids Parkway shall extend from Michigan Avenue to the most westerly access to St. Francois Xavier Secondary School. The eventual extension of The Rapids Parkway from the southern limit of the first phase of construction to Exmouth Street shall proceed as part of the subdivision of the lands between the St. Francois Xavier Secondary School and the former C.N.R. right-of-way, and shall incorporate noise attenuation features sufficient to ensure that to the extent practicable, the construction of The Rapids Parkway does not further impact on the existing amenity of this residential area in proximity to the Highway 402 overpass structure.

h) Buffering and landscaping (in the form of berms, planting and fencing) required in the lower portion of the Howard Watson Nature Trail south of Wiltshire Park to create a visual screen and effect noise attenuation shall be undertaken as soon as practicable and well in advance of residential development near this portion of the nature trail, to afford these improvements the maximum amount of time to mature and improve.

i) The approval of development applications in Development Area 1 shall be governed by the following principles:
    i) the avoidance of scattered development;
    ii) the planned, logical, sequential development of neighbourhood areas;
    iii) the provision of schools and parks and the logical, sequential development of an open space system;
    iv) the logical and sequential construction of arterial and collector roads and access to arterial roads;
    v) the logical and sequential construction of sanitary sewers, pump stations, and watermain extensions;
    vi) the need for approvals for the phased construction of a stormwater quality control facility for the area to be in place and provisions for the facility or improvement to be constructed before any construction occurs within that tributary area;
    vii) the adequacy of proposed storm drainage systems; and
    viii) the minimization of public front-end financing.

8.1.3.10 Implementation

The following implementation policies apply to Development Area 1:

a) An amendment or a series of amendments to the Zoning By-law will form the basis for the implementation of the land use policies of this Secondary Plan. The City shall give consideration to the merit of rezoning the lands in the development area from the existing Agricultural and Open Space zonings to a Future Urban type zone to reflect the intended use of the land for a mix of urban uses. Where appropriate, the City may (in conjunction with the approval of plans of subdivision) rezone the lands to apply a Holding “H” Zone to reflect the intended use of blocks and lots, and effect the proper staging and phasing of development.
b) The design of commercial, institutional, and residential buildings and facilities (except single detached and semi-detached dwellings) including position on the lot, lot coverage, parking layout, loading facilities, control and orientation of outdoor lighting, signs, poles, posts, noise attenuation, stormwater management and all other external features shall be subject to site plan control to ensure orderly and aesthetically pleasing development.
c) Development shall be permitted to proceed only when adequate municipal water, storm and sanitary sewer services, including both waste collection and waste treatment works, are provided; when streets, educational facilities, parks and recreational facilities are determined by the City to be adequate; and when such other works, facilities and services as the City shall from time to time require of the developer(s), are provided.
d) Open space and parklands required for municipal purposes shall be acquired by any of the following means:
    i) the provisions of *The Planning Act*;
    ii) the dedication of 5% of the land in a development or a cash-in-lieu payment (or a combination of the two) for parkland with respect to all lands proposed for development, except commercial and institutional development; and
    iii) the expenditure of funds allocated in the City budget or designated from reserve accounts; donations, gifts, or bequests from individuals or corporations; funds allocated by any authority having jurisdiction.
e) The cost of physical services associated with new development, including sanitary sewers, watermains, stormwater management facilities, storm sewers, streetlighting, electrical distribution on, roads, sidewalks, and curb and gutter shall generally be borne by the developer or benefitting landowner.
f) The City may co-operate in any cost-sharing program whereby the portions of costs of certain public facilities serving the development area or the City at large which may be initially chargeable to private development will be shared and recovered among the benefitting parties.
g) The City may revise the provisions of this Secondary Plan from time to time.

8.1.3.11 Interpretation and Effect

The following interpretation policies apply to Development Area 1:

a) The boundaries between the land use designations shown on **Schedule A** are approximate, except where they coincide with boundary roads, or any other clearly defined physical feature. Adjustments to features, proposed land uses or figures shall not require any amendment to this Secondary Plan provided that the general intent of the policies is maintained.

b) The location of roads shown on **Schedule A** are approximate and adjustments shall not require any amendment to this Secondary Plan provided that the general intent of the policies is maintained.
c) The provisions of the Official Plan regarding the interpretation of the Official Plan shall apply in regard to this Secondary Plan.

8.2 SECONDARY PLAN – DEVELOPMENT AREA 2

Development Area 2 consists of the lands bounded by the Canadian National Railway to the south, Highway 40 to the west, Blackwell Sideroad to the east, and to the north, the existing Highway Commercial designation from Blackwell Sideroad to Perch Creek, then south along Perch Creek to the existing “Light Industrial” designation, then westerly to Highway 40.

8.2.1 Goals for Development Area 2

It shall be a Goal of this Secondary Plan:

a) to provide for the orderly development of Development Area 2 in such a manner as to ensure fairness and equity among affected land owners, and maintain and enhance the financial health of the City;
b) to recognize and conserve the natural features and attributes of the development area, adequately provide for the equitable distribution of a wide variety of affordable housing and educational, social and recreational facilities, and adequately provide for the effective design and efficient use of transportation, sewer and water services; and
c) to ensure that all development plans for the area are designed in accordance with the accepted community structure plan and effectively integrated with existing development to minimize disruptions to present and future residents.

8.2.2 Objectives for Development Area 2

1. Community Identity and Structure

It shall be an objective of this Secondary Plan:

a) to create a distinctive and diverse residential community that provides opportunities to enrich the lives of existing and future residents in Development Area 2 and that is compatible with the City at large and adjacent residential areas; and
b) to create a neighbourhood structure that is integrated with the established urban area and linked by pedestrian and transportation systems to community, park, institutional, commercial and school facilities.

2. Residential

It shall be an objective of this Secondary Plan:

a) to provide for a broad range of low- and medium-density housing types that are suitable for the different age and income groups, lifestyles and household structures of future residents, including the provision of a range of affordable housing opportunities;
b) to locate medium-density housing types in locations that facilitate access to community facilities such as schools, commercial areas, parks and open space systems; and
c) to encourage innovative housing designs to control housing costs and encourage the provision of a range of affordable housing.

3. Commercial

It shall be an objective of this Secondary Plan:

a) to provide for an adequate supply of both local commercial and general commercial facilities consistent with the established hierarchy of commercial facilities in the City and within convenient access of the future resident population; and
b) to establish design policies for the effective integration of local and community commercial facilities with other adjacent land uses.

4. Industrial

It shall be an objective of this Secondary Plan:

a) to provide for the development of a range of industrial uses in a manner that is compatible with the City at large and adjacent land use areas, and to maximize the development opportunity represented by the potential availability of a full range of municipal services and potential direct access to primary rail facilities; and
b) to establish policies that provide for the effective integration of a range of both existing and proposed industrial uses with other land uses in the development area.

5. Parks and Open Space

It shall be an objective of this Secondary Plan:

a) to develop an integrated open space system comprising flooding/drainage areas, buffer areas, parks, storm water management areas, schools, bikeways, walkways and trails to serve the active and passive recreational needs of existing and future residents in Development Area 2; and
b) to provide for an off-street pedestrian system linking residential areas to parks, stormwater management areas, schools, institutional uses, local and general commercial facilities, public transit and super mailbox locations.

6. Institutional and Community Facilities

It shall be an objective of this Secondary Plan to reserve sufficient land and provide adequate opportunity for the development of educational, institutional and recreation facilities to meet the needs of both existing and future residents in Development Area 2. These facilities would include a range of active and passive uses such as recreational areas, churches, special purpose public or quasi-public facilities, and public and separate elementary and secondary schools.

7. Environment

It shall be an objective of this Secondary Plan:

a) to establish, preserve and maintain a safe, attractive and high-quality environment for the existing and future residents of Development Area 2;
b) to encourage energy conservation through land use planning and design;
c) to provide sufficient buffer zones to reduce noise levels, air pollution and safety hazards between Highway 40, and other adjacent land uses in Development Area 2; and
d) to provide for the preservation of natural areas and their integration with parks, floodplain/ drainage and stormwater management areas.

8. Transportation

It shall be an objective of this Secondary Plan:

a) to develop a road system of arterial, collector and local roads that provides for the logical, efficient and safe movement of people and goods in Development Area 2 and that integrates the development area with the rest of the City;

b) to discourage, through road design, the use of local roads as by-passes for through-traffic, especially during the process of phased development; and
c) to provide adequate bus stops and shelters close to residential and commercial areas and schools.

9. Services

It shall be an objective of this Secondary Plan:

a) to ensure that an adequate water supply, electrical distribution system, sewage collection and stormwater management and drainage system will be provided in Development Area 2; and
b) to identify and use surplus capacity in existing service facilities to make efficient use of these systems and encourage and facilitate the development of proposed uses in Development Area 2.

10. Phasing and Staging

It shall be an objective of this Secondary Plan:

a) to provide that the development of Development Area 2 is phased and staged in such a manner that each phase of development represents a logical unit of development that can function independently of other parts of the development area yet will maintain the continuity of the area as a whole when development is complete;
b) to ensure that the development of Development Area 2 proceeds in a manner that is fair and equitable to all landowners within the area;
c) to ensure that development in Development Area 2 proceeds within the financial and physical capabilities of the City;
d) to ensure that the staging and phasing of development and the provision of public services proceeds in a logical and cost-efficient manner;
e) to provide for the development of schools, parks, community and institutional facilities at a rate commensurate with the overall rate of development in Development Area 2;
f) to ensure the rate of development does not exceed the capacity of the arterial roads, utilities and other services, and where appropriate, to provide for the monitoring of service systems to ensure that such capacity is not exceeded;
g) to ensure that provision is made in the various stages of development for servicing and road requirements of subsequent phases and to facilitate the phased construction of arterial and collector roads that contribute to the timely integration of the development area with the rest of the City;
h) to identify existing surplus capacity in the sanitary sewer system and to establish a program to monitor the flows and the actual use of such capacity to ensure that such capacity is not exceeded and that there is an opportunity to provide alternate supplementary sanitary sewer services well in advance of the point at which existing surplus capacity is projected to be exhausted;
i) to provide for the orderly transition from agricultural uses to urban uses, the continued use of farmlands for agricultural use for as long as practical, and where conflicts may exist between existing agricultural uses and proposed residential uses, the creation of buffer zones, the maintenance of separation distances, or the application of measures to alleviate, to the extent possible, interim adverse impacts of incompatible development; and
j) to provide a proposed stormwater management plan that allows for phased development at the rate necessary to serve the needs of the City of Sarnia while maintaining the necessary stormwater quality and quantity control levels set out in the Stormwater Management Plan for Development Area 2.

8.2.3 Land Use Plan and Policies

Development Area 2 shall be developed as a residential community. The density of development should not exceed an overall density of 9.5 units per gross hectare (3.8 residential units per gross acre).

Development Area 2 shall be composed of a mixture of low- and medium-density residential uses, including single detached dwellings, with mixed medium-density residential development in both the northerly portion of the area north of Perch Creek and in the southwest quadrant of Development Area 2. This development area shall also contain a broad range of support facilities and services including schools, parks, open space, institutional, commercial and industrial facilities.

The land use designations for the Development Area 2 Secondary Plan are shown on **Schedule B.**

8.2.3.1 Residential

1. General Policies

The following general residential policies apply to Development Area 2:

a) A wide range of housing densities and types shall be encouraged to accommodate the range of income groups expected in Development Area 2. An appropriate mix of housing densities and types shall provide for single detached uses at densities ranging between 7.5 and 10 units per hectare (3.5 - 4.0 units per acre), and mixed residential uses at densities up to 17.5 units per hectare (7.0 units per acre). These residential development forms shall generally be reflected as follows:
   - Single Detached Residential Uses: 50% - 55%
   - Mixed Residential Uses: 45% - 50%

b) Gross residential density shall be measured in units per hectare and will include lot areas, roadways, parks, natural areas and floodplains, open space, schools, institutional uses, roads, and commercial areas. The overall gross residential density in Development Area 2 shall not exceed 9.5 units per hectare (3.8 units per acre).

c) Net residential density shall be measured in units per hectare and will include lot areas for residential dwellings and local streets. The net residential density in Development Area 2 should not exceed an average of approximately 9.5 units per hectare (3.8 units per acre) for single detached dwellings and 17.5 units per hectare (7.0 units per acre) for mixed-unit development. The overall average net residential density should not exceed an approximate density of 12.5 units per hectare (5 units per acre). In no case shall net residential density on any lot or block exceed 30 units per hectare (12.0 units per acre).

d) Mixed-unit residential development shall include a mixture of unit types such as single detached, semi-detached, duplexes, triplexes, townhouses, street townhouses and low-rise apartments.

e) All new residential development shall proceed on the basis of the provision of a full range of municipal services, including sanitary sewer, water, electrical, stormwater management and storm sewer services.

f) Where appropriate, more innovative housing types, zoning standards and subdivision designs shall be encouraged.

g) Energy conservation shall be encouraged in the design of plans of subdivision and the development of blocks of land or residential sites.
h) Development of vacant parcels of land shall be by plan of subdivision. Development by consents shall be discouraged except where consents are intended to facilitate the assembly of land for more comprehensive development by plan of subdivision.
i) Where new residential development is located adjacent to arterial and collector roads, special attention shall be given to the provision of adequate buffers and aesthetically pleasing design sensitive to road conditions.
j) Residential development shall not be permitted direct access to arterial roads.
k) Techniques such as building setbacks, visual screening, planting, fencing, and other similar forms of buffering shall be provided where appropriate to minimize the impact of commercial facilities, schools and other institutional facilities in residential areas.
l) Senior citizens' housing and similar special residential uses shall be encouraged to locate close to commercial and institutional facilities and open space areas.
m) The lands located at the southeast comer of Upper Canada Drive and the collector road extending east from there and described as Part of Block "B", Registered Plan 637, may be developed for mixed residential uses, local commercial uses (limited to banks, offices, recreational establishments, restaurants, personal service stores and retail stores), or any combination of the two, subject to the provisions of Sections 8.2.3.1 and 8.2.3.2 of this Plan.
n) The lands located on the east side of Upper Canada Drive, 91 metres from Heritage Park Drive and located north of a proposed local street, extending east from Upper Canada Drive and described as Part of Block "B", Registered Plan 637, may be developed for mixed residential uses, except apartments, and local commercial uses (limited to banks, offices, recreational establishments, restaurants, personal service stores and retail stores), or any combination of the two, subject to the provisions of Sections 8.2.3.1 and 8.2.3.2 of this Plan and the buildings and structures being limited to a maximum height of two storeys.

2. Affordable Housing

The following affordable housing policies apply to Development Area 2:

a) The review of residential development proposals for Development Area 2 shall be consistent with the *Provincial Policy Statement*, and in particular, the extent to which Development Area 2 can contribute to the supply of affordable residential lands.
b) In assessing development proposals, and in particular the mixture of housing forms proposed for the designated mixed residential areas, Council shall consider the housing needs (in terms of type and tenure) of low-, medium- and high-income groups.
c) The City shall encourage innovative housing designs when considering development proposals for affordable housing. Alternative zoning standards may be considered to permit development such as zero-lot-line residential development, provided that such development is subject to site plan control.
d) On average, at least 25% of the new residential units proposed for Development Area 2 shall be affordable units as defined by the *Provincial Policy Statement* and the bulletins periodically published in support of the Policy Statement. Any provincial revision to the 25% affordable housing requirement will not require an amendment to this Plan.

3. Residential Design Integration

The following residential design policies apply to Development Area 2:

a) Where areas to be used for multi-unit development are located adjacent to areas to be used for lower-density, single- and semi –detached development, detailed site planning shall provide for effective screening, increased setbacks and attention to the orientation of the buildings to minimize any potential compatibility problems such as loss of privacy or shadowing.
b) All residential development abutting arterial roads shall have reverse frontages, and residential development abutting arterial or collector road allowances shall be required to provide additional setbacks from the road allowance sufficient to reduce the effects of noise, glare and fumes. If traffic counts are sufficient, or are projected to be sufficient to warrant additional buffers, berms, walls and/or fences may be required.
c) Any proposal for low-rise apartment, row or cluster-type housing development shall meet the following requirements to the satisfaction of the City:
    i) space shall be set aside for play areas for children, located so that it is accessible to the building or units without the necessity of crossing a parking area or driveway, and visible to as many units as possible;
    ii) outdoor privacy areas shall be provided for the occupants of row or cluster housing by landscaping, berms, screening, or other suitable methods;
    i) variations in topography shall be retained or created through effective landscaping;
    ii) where a proposal is adjacent to the pedestrian walkway system, open space areas may be required to integrate into the walkway system;
    v) plans shall show the height, shape, mass, colour, texture and material proposed on the site and the relationship to adjacent sites; and
    vi) street furniture, including fighting fixtures, garbage and recycling receptacles, benches, and signs, shall be designed and provided by the developer for the subject area.

8.2.3.2 Commercial

1. General Policies

The following general commercial policies apply to Development Area 2:

a) The development of this Secondary Plan area shall provide for the inclusion of both neighbourhood and community commercial facilities to serve the needs of the existing and future resident population.
b) The City shall encourage the conversion of existing industrial and service industrial-type development located along either side of existing Upper Canada Drive to Neighbourhood Commercial or General Commercial uses to help satisfy the commercial needs of the development area. Any such uses shall be subject to the relevant policies of this Secondary Plan.

2. Local Commercial Uses

The following local commercial policies apply to Development Area 2:

a) The lands designated for commercial use at the intersection of the Wellington Street extension and the north/south arterial road and the intersection of the east/west collector road and Blackwell Sideroad should be developed for neighbourhood commercial uses.
b) The development of neighbourhood commercial uses shall be subject to detailed site planning and shall have particular regard to appropriate measures to integrate site design with the surrounding residential areas. Special attention shall be given to the

provision of landscaping, buffering and other measures to mitigate such potential impacts as excessive noise, glare, fumes, garbage or traffic movements.

3. General Commercial Uses

The following commercial use policies apply to Development Area 2:

a) The lands designated commercial on **Schedule B**, adjacent to Confederation Road, shall be used for General Commercial development.

b) In addition to the policies of Section 4.6.5 of the Official Plan, the following additional policies shall apply:

   i) the general commercial development shall be limited to the lands located along the north side of Confederation Street;

   ii) the general commercial node shall contain a range of retail and service commercial uses that serve the residential area and the travelling public in either freestanding structures or in clusters, or in shopping centres;

   iii) the list of permitted general commercial uses shall not be interpreted to include car dealerships, warehouse-style retail facilities, hotels or motels, department stores, or other large users of retail space;

   iv) approval of new commercial development shall be by site plan agreement with the City;

   v) the general commercial area shall provide adequate access and egress, landscaping, buffering, parking, loading spaces, and refuse/recycling disposal to minimize any potential impact on adjacent residential development;

   vi) general commercial developments shall be designed to be compatible with any surrounding or adjacent residential or anticipated residential development in respect of building design, height, landscaping and coverage; and

   vii) notwithstanding the provisions of Section 8.2.3.2(3)(iii), the lands municipally known as 1566 Confederation Street and described as Part Lot 15, Concession V, may be developed for a marine sales, storage (indoor, outdoor) and service establishment and a residential dwelling in association with the marine sales, storage and service establishment use subject to the provisions of Sections 8.2.3.2(3) and 8.2.3.2(4) of this Plan.

4. Design Integration

The following design policies apply to Development Area 2:

a) Wherever pedestrian walkways connect to or through a neighbourhood or community commercial area, the walkway shall be a continuous defined pedestrian space with suitable landscaping leading from the adjacent residential area to the centre of the commercial area.

b) Significant screening, landscaping and buffer strips shall be required where commercial buildings or their outdoor storage and parking areas abut properties designated for residential use.

c) Developments with large areas of parking shall be required to provide landscaped areas within the parking lots to reduce their visual impact.

d) The design and positioning of new buildings shall have regard for the impact of the proposed development on year-round sunlight conditions, on adjacent properties, and streets. In reviewing proposed developments, access to sunlight should be maximized by development adjacent to residential areas.

e) The design of new buildings should facilitate access and use by handicapped persons and senior citizens.

f) Commercial areas shall have a low-rise development form. The height restrictions shall be detailed in the implementing Zoning By-Law.

g) Access points to arterial and collector roads shall be limited to the minimum number necessary for the functioning of the commercial use, and shared access between properties shall be encouraged by the acquisition or granting of easements for rights-of-way.
h) In considering any development proposal in the local commercial or in the general commercial designation, the City will be satisfied that the proposal does not interfere with the achievement of the following objectives:
    i) the reduction of the number of vehicle accesses to the arterial or collector street;
    ii) the consolidation of off-street parking areas, where possible;
    iii) the improvement of traffic circulation; and
    iv) the enhancement of the architectural and landscaping design in the area.
i) The design of any facility and supporting infrastructure shall minimize impacts on the environment and the developer shall take all reasonable steps to mitigate impacts on or enhance the surrounding area.

8.2.3.3 Industrial

1. General Policies

The following general industrial policies apply to Development Area 2:

a) A range of industrial uses are proposed for a portion of the lands in Development Area 2 south of Confederation Street between Highway 40 and Blackwell Sideroad, north of the Canadian National Railways right-of way. This range of industrial uses includes a light, service industrial service commercial category along the south side of Confederation Street, light industrial uses between Confederation Street and the railway lands, and light industrial uses along the north side of the railway lands.
b) Within this range of industrial uses, the least compatible types of industrial use shall be located the greatest distance from adjacent residential areas. The most compatible uses shall be located along the south side of Confederation Street.
c) The City encourages the conversion of lands adjacent to Upper Canada Drive and identified as existing industrial on **Schedule B** to community commercial or neighbourhood commercial uses. These lands may continue to be used for non-noxious industrial purposes as set out in Section 4.7.3(1) of this Official Plan.
d) No outside storage shall be permitted in the Upper Canada Drive area.
e) Any uses proposed for that part of the development area south of Confederation Street and north of the C.N.R. mainline in part of Lots 14 and 15, Concession 4, shall have particular regard to the location of an abandoned landfill site located in the southeast quadrant of the intersection of Highway 40 and the C.N.R. mainline in part of Lot 15, Concession 4, and to the policy set forth in Section 6.3.4(1).
f) Where new development is proposed adjacent to existing or proposed industrial land uses, measures shall be taken to recognize and protect the integrity and continuing function of such existing or proposed industrial uses. Such matters as safety, security and fencing, buffering and design integration shall be included in these considerations.

2. Industrial-Service Commercial Uses

The following industrial–service commercial policies apply to Development Area 2:

a) The lands located along the south side of Confederation Street between Highway 40A and the Porter Creek drain are designated for industrial–service commercial uses. Lands so designated are intended for development by non-noxious industrial, service industrial and service commercial uses such as general manufacturing, warehousing,

research and development, wholesaling and light assembly, general office, financial and institutional uses, and uses identified in Section 4.6.5 of the Official Plan, with the exception of large-scale retail uses and residential uses.

b) No outside storage shall be permitted in the industrial–service commercial area.

3. Light Industrial Uses

The following light industrial use policies apply to Development Area 2:

a) The lands located between the industrial–service commercial lands along the south side of Confederation Street and the medium industrial lands located along the north side of the Canadian National Railways right-of way are designated for light industrial uses.

b) The policies of Section 4.7.3 shall apply to the lands designated as light industrial, except as set forth in this section.

c) The policies of Section 4.7.3(4) of the Official Plan shall apply with regard to open storage of goods and materials only to the extent that no storage will be permitted on those portions of industrial lands adjacent to Highway 40, Confederation Street or Blackwell Sideroad.

4. Medium Industrial Uses

The following medium industrial policies apply to Development Area 2:

a) The lands located along the north side of the Canadian National Railways right-of-way east of Highway 40 and west of the Porter Creek drain are designated for Medium Industrial uses. The primary permitted uses shall be for light industrial uses as set forth in Section 4.7.3 of this Plan together with public uses in accordance with the provisions of Section 6.3.5 of this Plan, and such uses as industrial and scientific research facilities, truck storage facilities and transportation terminals. Outside storage is permitted to locate in the rear yards of the lands adjacent to the railway right-of-way.

b) The City encourages the use of medium industrial lands for uses that would benefit from potential direct access to the railway lands and that would likely incorporate rail siding facilities.

8.2.3.4 Public Open Space

1. General Policies

The following general open space policies apply to Development Area 2:

a) The Secondary Plan for Development Area 2 provides for the reservation of a range of open spaces including natural areas, wooded areas, flood plain/drainage areas, natural watercourses, drainage channels and community and neighbourhood parks. It is intended that the provision of this range of open space be integrated with the development of all of the other proposed uses in the development area.

b) Not all lands in the development area will be required to reserve or dedicate an equal amount of each category of public open space land. Consequently, each owner of land in the development area shall share in a proportionate manner the costs of providing the required range of open space land.

2. Neighbourhood and Community Parks

The following neighbourhood and community park policies apply to Development Area 2:

a) Within each residential neighbourhood, a combination of Community and Neighbourhood recreational land shall be provided to meet the standard of

approximately 0.5 hectares of community parkland per 1,000 population and approximately 1.2 hectares of neighbourhood parkland per 1,000 population, and that either a community park, a neighbourhood park or related open space type use (such as a school area) be within a 500-metre safe walking distance of all sections of the development area. In satisfying this standard, recognition shall be given to the location of schools and integrated park/stormwater management facilities that are designed to satisfy a portion of the park and open space needs in the development area.

b) Recreational facilities provided within each community, neighbourhood or similar park like area may include:
   i) playgrounds with play equipment;
   ii) playing fields for soccer, football, baseball, softball, and track and field;
   iii) hard surfaced areas for basketball, volleyball, shuffleboard or tennis;
   iv) passive areas, landscaped open space or natural areas supplied with benches or picnic tables;
   v) sleigh and toboggan slopes (topography permitting);
   vi) bicycle paths; and
   vii) service buildings.

c) School sites within any residential neighbourhood shall be considered to be a neighbourhood or community recreation facility providing playgrounds and facilities for programs such as community schools or community centres. In the development area, although elementary schools are not proposed to be located adjacent to neighbourhood park areas, the co-operative development of facilities and programs shall be encouraged. The area of the school building plus parking shall not be considered as a part of either the 0.5 or 1.2 hectares (1.25 or 3.0 acres) per 1,000 population standard for community and neighbourhood parkland respectively.

d) Schematic plans shall be prepared in consultation with other appropriate public authorities, for those parts of Development Area 2 in which community and neighbourhood facilities are to be provided. Such plans shall show the location of the proposed facilities, their associated parking areas, driveways and public pedestrian walkways. The City of Sarnia Community Services Policy Area shall ensure that these recreation facilities are provided in accordance with such plans.

e) Adequate automobile parking areas shall be provided at park facilities designed for active recreational use. The circulation systems shall be designed to minimize conflicts between vehicular and pedestrian traffic.

3. Open Space Areas

The following open space policies apply to Development Area 2:

a) The protection and preservation of floodways, significant wooded areas, natural areas and natural wetland areas shall be encouraged in the development of Development Area 2.

b) The Perch Creek and Porter Creek watercourses are intended to be preserved as natural hazard and heritage corridors and integrated into the trail and path system to provide a series of pedestrian links throughout the development area.

c) The reservation of open space areas such as creeks, floodplains, stormwater management facilities, natural watercourses and drainage channels shall not constitute any part of the lands required for parkland dedication under the *Planning Act*, nor shall such lands be recognized as a consideration in respect of a calculation for any required cash payment in lieu of such a required parkland dedication.

d) Where appropriate, applications for draft plans of subdivision shall be accompanied by a report identifying the potential impact of the proposed development on

environmentally significant feature(s) and the methods by which such impacts can be mitigated in conjunction with the proposed development.

e) Where any development is proposed adjacent to either the Perch Creek or the Porter Creek, a minimum natural buffer strip of 15 metres (50 feet) from the top of the bank shall be provided between the limits of the proposed development and the creek.

4. Stormwater Retention Areas

The following stormwater retention area policies apply to Development Area 2:

a) A system of stormwater management facilities shall be provided and distributed throughout the development area to provide both quality and quantity control in the management of stormwater runoff.

b) These facilities shall be integrated into the system of public open spaces and designed to satisfy a portion of the park needs of the development area and complement the creation of functional and pleasing open space areas. To the extent practicable, stormwater management facilities shall comprise part of the park, trail and pathway system that will link different parts of the development area to one another and to the rest of the City.

c) A parklike design shall to the extent practicable be created within the area reserved for stormwater retention. The integration of recreational and parkland areas with stormwater management facilities shall be designed not to interfere with the operation or management of the stormwater management facility and to maximize recreational and parkland opportunities.

d) Lands surrounding the stormwater retention area shall be incorporated into an overall open space linkage system. Public safety shall be the first priority in the design of such recreational and parkland areas and in these respects, the design of the facility shall have regard to the issues of frequency, duration and depth of flooding.

e) Each owner of land in the development area shall share in a proportionate manner the costs of providing stormwater retention areas and related facilities.

f) The situating of stormwater management facilities within the floodplain is not permitted. Any proposal must be assessed based on refined floodlines/studies as described below in Section 5, Floodplain Areas.

5. Floodplain Areas

The following floodplain area policies apply to Development Area 2:

a) The regulatory flood standard that applies to the Perch Creek watershed is the 100-year flood frequency based event and the lands in Development Area 2 subject to flooding under the 100-year event conditions are generally delineated on the schedule of proposed land uses by a dotted line. With the exception of public or private uses appropriate for floodplain areas (e.g. parks, playgrounds, fences, lighting and similar facilities) and approved by the St. Clair Region Conservation Authority, no development shall be permitted on lands affected by the 100-year flood limit identified in Schedule B.

b) The limit of flooding predicted to occur as a result of the 100-year storm and shown on the schedule of proposed land uses has been regularized and smoothed for the purposes of showing the probable limits of proposed land uses. Where development is proposed adjacent to the predicted limit of flooding, detailed survey plans and drawings shall be required to delineate the floodline. Where the floodline has been smoothed or regularized, the 100-year floodline shall be determined to the satisfaction of the St. Clair Region Conservation Authority in accordance with regulations pertaining to fill, construction and alteration to waterways.

c) The predicted limits of flooding in the Perch Creek at Blackwell Sideroad have been regularized to provide for the development of lands adjacent to both the north and south sides of the creek. Notwithstanding this provision for development, the watershed review conducted in support of this Secondary Plan predicts a spillover of flood water from the Telfer Diversion into the Perch Creek as a consequence of the 25+-year storm event, and any development in this area of Development Area 2 shall incorporate provisions satisfactory to the St. Clair Region Conservation Authority for remedial works to manage this potential spillover and reduce to an acceptable level the associated hazard to lands in proximity to the spillway area.
d) If it is determined that adjustments are required to the limit of predicted flooding of the 100-year storm as a consequence of detailed survey work or as a consequence of the application of ”Development, Interference with Wetlands & Alterations to Shorelines and Watercourses”, minor modifications and adjustments to proposed land uses shall be permitted and no formal amendment to the Secondary Plan shall be required, provided the general intent of the Official Plan and Secondary Plan are maintained.

6. Trails, Pathways and Walkways

The following trail, pathway and walkway policies apply to Development Area 2:

a) The design of the development of the land uses proposed in Development Area 2 shall incorporate provisions for a linked open space system that may comprise a combination of parks, woodlots and natural areas, stormwater management facilities, floodplain/drainage areas, pedestrian walkways, trails and bicycle paths. The planning and implementation of this system shall generally be established through the design and approvals process of plans of subdivision.
b) The linked open space system to be provided in conjunction with the development of Development Area 2 is intended to provide safe pedestrian linkages between residential areas, schools, commercial areas, transit stops, super mailbox locations and other similar public facilities.
c) Special consideration shall be given to the provision of hard surfacing, lighting, landscaping and benches along linkages, trails and walking/bicycle paths, and provisions shall be made to ensure the safe pedestrian and bicycle crossing of all roads in Development Area 2.
d) Public walkways shall be provided through all residential blocks which would otherwise require long detours by pedestrians.
e) Sidewalks shall be provided along both sides of the Wellington Street extension, and along at least one side of all other arterials and collectors.

8.2.3.5 Institutional and Community Services

1. General Policies

The following general institutional policies apply to Development Area 2:

a) Institutional uses that may be located in Development Area 2 shall be encouraged to locate in proximity to arterial and/or collector roads.
b) Institutional uses in Development Area 2 shall be planned and designed in such a manner as to be compatible and integrated with adjacent land uses.

2. Schools

The following school policies apply to Development Area 2:

a) Two elementary schools sites have been designated in Development Area 2.

b) School areas shall be incorporated into the linkage system of trails, pathways and walkways. The linkage system shall be designed to facilitate the safe and convenient access to school lands.
c) School and related facilities shall contribute to the provision of recreational and cultural opportunities in conjunction with municipal facilities and parks.

3. Places of Worship

Lands have not been specifically designated in Development Area 2 for church and religious institution uses. All proposed sites shall be subject to the policies of the Official Plan.

4. Community and Social Services

The following community and social service policies apply to Development Area 2:

a) Should school facilities not be developed in Area 2, the development of a municipal facility for recreational and cultural facilities may be considered.
b) The City shall co-operate with the appropriate agencies to ensure that residents in Development Area 2 have access to a wide range of community and social services.
c) The City shall encourage shared use of community and school facilities.
d) All community facilities shall include special provisions for special needs individuals.
e) Daycare services shall be encouraged to locate in churches, schools, community facilities, shopping areas, places of employment or in separate buildings.
f) Social and community co-ordinating centres may be established in Development Area 2 when there is a need for such centres. The need for such centres, their location and the services provided shall be determined in conjunction with representatives of the public agencies working in the City.
g) Social and community co-ordinating centres may provide educational and developmental services such as public health, social welfare, home help for seniors and disabled persons, legal aid, information and counselling, community development, and recreation for preschool children and senior citizens.

8.2.3.6 Environmental and Design Considerations

1. General Policies

The following general environmental policies apply to Development Area 2:

a) In the planning and design of the range of land uses proposed for Development Area 2, regard shall be given to measures necessary to preserve, sustain and enhance existing natural features and integrate such features with the proposed land uses.
b) In Development Area 2, lands have a moderate to high potential as locations of archaeological sites. An archaeological assessment of these lands by a consultant archaeologist may be necessary as a condition of development. Any significant sites found in the development area will require proper mitigation (e.g., avoidance or excavation) as a condition of land alteration or development.

2. Environmental Protection

The following environmental protection policies apply to Development Area 2:

a) All necessary measures shall be taken to the extent feasible and practical to ensure the preservation and conservation of existing trees and woodlots.
b) The protection and preservation of adjacent significant woodlots shall be considered in the assessment of appropriate rezonings and applications for draft plan of subdivisions, and shall be accompanied by a report identifying the potential impact of

the proposed development on the significant feature(s) and the methods by which that impact may be mitigated.

c) Passive recreation and conservation uses will be permitted on lands adjacent to watercourses provided that the appropriate setbacks and buffers are maintained.

d) Energy conservation shall be considered and encouraged through the design of local and collector road networks to minimize trip lengths, and through street layouts, lot configurations, subdivision landscaping and dwelling designs that maximize passive solar gain during the winter months. These measures shall be encouraged while maintaining current subdivision design standards.

3. Design Considerations

The following design policies apply to Development Area 2:

a) Aesthetically pleasing streetscapes shall be encouraged through the careful use of architectural styles, varied setbacks, building materials, colours and landscaping.

b) Subdivision design shall be sensitive to the topography and natural landscape in the development area.

c) Residential development adjacent to arterial and collector roads shall be designed to be aesthetically pleasing and sensitive to road conditions.

d) Special care shall be taken to design, develop and maintain visually significant entrance features for Development Area 2 that do not create a visual obstruction.

e) Building and site design, setbacks, landscaping, screening and buffering techniques shall be applied to minimize potential conflicts between adjacent land uses including roads.

f) All services within Development Area 2 shall be provided City specifications.

g) The planting of trees in boulevards within the road allowances of all arterial, collector and local streets will be required.

h) The creation of areas that maintain and encourage wildlife is encouraged.

8.2.3.7 Transportation

1. General Policies

The following general transportation policies apply to Development Area 2:

a) All development shall have setbacks from rights-of-way adequate to provide for acceptable access, recognize the need for parking, provide for the installation of services and maintain standards for good visibility.

b) Arterial, collector and local roads in the development area shall, to the extent possible, be aligned, designed and constructed to preserve natural features and wooded areas and maximize the safe and efficient function of the right-of-way. In Development Area 2, arterial, collector and local rights-of-way shall generally be constructed to urban cross-section standards that include paved streets, curbs and gutters, grassed boulevards, streetlights, and sidewalks.

2. Highways

The following highway policies apply to Development Area 2:

a) No new direct access will be permitted to Highway Number 40. Access shall be provided by an internal road system and shall include extensions to Wellington Street and Upper Canada Drive.

b) All new multiple unit dwellings and commercial and institutional uses shall be located a minimum of 15 metres (50 feet) from a highway property line.

c) Lands close to Highway 40 may be constrained for development by noise, odour, vibration, particulates and other emissions. Where such a constraint is identified, developers shall be required to provide buffering measures necessary to comply with Provincial policies and guidelines as prescribed by the Ministry of Environment. Proponents of development applications near emission sources may be required to carry out an impact assessment.
d) To the extent possible, the Ministry of Transportation design and improvement of the Highway 40/Wellington Street extension intersection shall be co-ordinated with the design of the extension to Wellington Street to minimize disruption to adjacent lands.

3. Arterial Roads

The following arterial road policies apply to Development Area 2:

a) Arterial roads have been identified on **Map 4**. Direct access to the Wellington Street extension and the north/south arterial road connecting the Wellington Street extension to London Line shall generally be prohibited, with the exception of institutional uses, park areas, commercial areas and collector and local streets.
b) Where arterial roads intersect with arterial roads or with collector roads, the design of such intersections shall provide for possible future traffic signals.
c) The intersection of local roads with arterial roads shall be spaced to prevent interference with the safe and efficient operation of the roads system in accordance with standard engineering practice.
d) Plans of subdivision shall be reviewed to assess the suitability of local road and collector road intersection points.
e) Transit routes have not yet been defined. However, transit vehicles will likely operate on some of the arterial and collector roads in the development area. Provision shall be made to inform the future owners of lands abutting these roads that they may be part of future public transit routes.
f) Arterial roads may be offset to permit wider boulevards on one side of the road. The wider boulevard is intended to better accommodate pedestrian and bicycle paths.
g) On-street parking shall not be permitted on arterial roads.
h) To the extent possible, the design and construction of the extension to Wellington Street shall be co-ordinated with the Ministry of Transportation's design and improvement of the Highway 40/Wellington Street extension intersection to minimize disruption to adjacent lands.
i) The design and construction of the intersection of the Dow Chemical Canada Inc. accesses (to both the corporate centre and the recreation centre) and the Wellington Street extension shall be based on the recommendations of a traffic study that includes consultation and the provision for input from Dow Canada Inc., and shall be undertaken to determine appropriate intersection design improvements necessary to ensure safe access to each of these existing land uses.

4. Collector Roads

The following collector road policies apply to Development Area 2:

a) Collector roads have been designated on **Map 4**. The intersection of local roads with collector roads shall be spaced to prevent interference with the safe and efficient operation of the roads system in accordance with standard engineering practice.
b) Plans of subdivision shall be reviewed to assess the suitability of local road and collector road intersection points.
c) Transit routes have not yet been defined. However, transit vehicles will likely operate on the collector roads. Home buyers on these collector roads shall be advised that those roads may be public transit routes in the future.

d) The use of stop signs shall be carefully evaluated to reduce air pollution and energy consumption.
e) Collector roads may be offset to permit wider boulevards on one side of the road. The wider boulevard is intended to better accommodate pedestrian and bicycle paths.
f) On-street parking shall be permitted on collector roads, except where a conflict between vehicular and/or pedestrian traffic has either been identified or is predicted.

5. Local Roads

The following local road policies apply to Development Area 2:

a) Local roads are for residential access only. They shall be designed to discourage through traffic and minimize traffic volume.
b) On-street parking shall be permitted on local roads except where a conflict between vehicular and/or pedestrian traffic has either been identified or is predicted.

6. Parking

The required parking for any proposed uses is intended to be accommodated on-site rather than on-street. The design of parking areas shall incorporate measures to reduce the visual impact of such areas.

7. Transit

The following transit policies apply to Development Area 2:

a) The arterial and collector road system has been designed so that most residents will be within an acceptable walking distance of the public transit system. In plans of subdivision, local roads and pedestrian and bicycle paths shall be designed to minimize walking distances to potential transit routes.
b) Public transit shall be accommodated on arterial and collector roads.

8.2.3.8 Servicing

1. General Policies

a) Development Area 2 shall be developed on the basis of full municipal services including roads with curbs and gutters, sidewalks, piped potable water, sanitary sewers and pumping facilities, stormwater management facilities, storm drainage facilities, streetlights and electrical distribution systems and other utilities as would normally be required.
b) Development, proposed plans of subdivision or phases of such approved subdivisions in Development Area 2 shall not be approved until the City is satisfied that sufficient capacity for full municipal services is available.
c) The cost of providing full municipal services necessary to facilitate the development of lands within Area 2 shall generally be borne by the developers of the lands. Front-ending agreements or development charges as provided for by the *Development Charges Act*, or other appropriate measures shall be used to facilitate the recovery of oversizing costs borne by developers and to ensure a fair and equitable distribution of servicing costs among benefiting owners.
d) Under the provisions of the standard form of subdivision agreement used by the City, services once installed shall become the property of the City, notwithstanding any other requirement.
e) It shall be a policy of the City to provide for the fair and equitable distribution of costs to provide a full range of municipal services.

2. Potable Water Supply System

The following water supply policies apply to Development Area 2:

a) The design and construction of the water supply and distribution system shall be adequate to provide a reasonable and desirable level of service to all areas either currently developed or proposed for development or redevelopment. New development and/or redevelopment shall be permitted only where the water supply and distribution system is adequate to service such development and/or redevelopment.

b) Improvements as necessary shall be required to the water supply and distribution system to provide sufficient volume, storage capacity and water pressure in the distribution system to provide an adequate level of protection in the event of fires or other emergencies.

3. Sanitary Sewer System

The following sanitary sewer policies apply to Development Area 2:

a) As a consequence of the re-designation of a large portion of Corporation Park from light industrial uses to residential uses, a limited amount of sewage capacity is available for use on an interim basis to facilitate the development of a portion of Development Area 2. It is estimated that the surplus capacity available to the development area will be sufficient to serve an approximate population equivalent of between 3,400 and 3,500 persons, or approximately 1,150 households. These estimated equivalent capacities do not take into account other proposed land uses such as commercial uses, industrial uses, or school uses.

b) As part of the first phase of development in Development Area 2, a sanitary sewer feasibility study shall be prepared (by the developer) to identify how best to use existing identified available sewage capacity, and how to provide in the long term for the sanitary sewer flows from Development Area 2 to be connected to pumping station(s) and forcemain(s) that are predicted to outlet to the South Huron Trunk Sewer upstream from the Residential Pumping Station. For the purpose of this study, O.P.A. #7 - Secondary Plan Sanitary Sewer Capacity Study prepared by the City of Sarnia Development Engineering Section of the Works Policy Department, to the extent permitted, shall be deemed to satisfy Phase I and II of the Class Environment Assessment for Municipal Water and Wastewater Projects as published by the Municipal Engineers Association, June 1993.

c) As part of the first phase of development in Development Area 2, a sanitary sewer monitoring system shall be installed (by the developer) and provisions shall be made to monitor the flow of effluent from the development area through the Sherwood Village sanitary sewer system to ensure that the capacity available to the development area is not exceeded.

d) When flow monitoring indicates that 80% of the available interim capacity has been used by development in Development Area 2, the City shall consider the provision of sanitary sewer facilities to provide long-term capacity for the development area. Until such facilities have been constructed, additional development shall be prohibited.

e) When it has been determined that the provision of additional or alternate capacity is warranted, the City shall attempt to obtain the required approvals and construct additional or alternative facilities to provide long-term capacity for Development Area 2.

f) An appropriate level of sanitary sewage collection and treatment facilities shall be provided to serve both the existing and proposed development areas. New development or redevelopment shall be permitted only where the sewage collection and treatment facilities are adequate to service such development

g) All new development occurring by registered plan of subdivision or consent shall be serviced by the municipal sewage collection and treatment system and the developer shall be responsible for the installation of such works subject to the approval of the City and the Ministry of Environment.
h) The situating of stormwater management facilities within the floodplain shall not be permitted. Any proposal will need to be assessed based on refined floodlines/studies as described in Section 5.

4. Stormwater Management System

The following stormwater management policies apply to Development Area 2:

a) The development of Development Area 2 provides for the integration of a stormwater management system to manage both the quality and quantity of stormwater predicted to be discharged from the development to the area's stormwater outlets. Both the Perch Creek and the Porter Creek, being natural drainage channels, constitute the outlet for the system of detention ponds distributed throughout the development area.
b) The system of quality and quantity control ponds are distributed throughout the area on the basis of sub-tributary areas and in such a manner as to facilitate the phased construction of stormwater management with the Perch Creek and the Porter Creek which are to be maintained as natural channels as part of the planned system. Where development is proposed, provision shall be made for the management of the predicted volume of storm runoff from the applicable sub-tributary area.
c) Before approving any Secondary Plan amendment, Zoning By-law Amendment or Development Proposal or entering into a subdivision or site plan agreement, the City shall ensure that the proposal has been reviewed to determine the degree to which the proposal conforms to the plan for stormwater management. In reviewing the proposal, the City may set out additional specific requirements on a case-by-case basis and may prescribe appropriate measures for the provision of components of the stormwater management system. It is intended that the system of stormwater quality and quantity ponds be owned and maintained by the City of Sarnia.
d) The City shall not approve any development if it would have a significant adverse impact on quantity and quality of stormwater and flooding, erosion, sedimentation or pollution, both during and after construction.
e) Each development in the development area shall include a detailed stormwater management plan, prepared by a professional engineer, that provides details of the overall stormwater system and shows through acceptable calculation or modelling techniques that the proposed facility will provide an appropriate level of control.
f) Detailed design of the stormwater management facilities shall be in accordance with the Provincial stormwater management planning and design manual, City design standards, and shall consider the most recent "Best Management Practices" available at the time of development.
g) Appropriate buffer strips, plantings or other restrictive features shall be provided at all proposed stormwater management facilities to discourage, as necessary, public use so as to maintain the operational and structural integrity of the facility and the safety of the public.
h) Construction and maintenance of stormwater management facilities shall be in accordance with the Provincial and City standards, and to the satisfaction of the City. A warranty period will be established in the form of an agreement between the developer and the City, and during this period the City may require the developer to modify the constructed stormwater management facility to ensure its operation at the design level of control.

5. Storm Sewer System

The following storm sewer policies apply to Development Area 2:

a) The design and construction of the storm sewer system shall be adequate to provide a reasonable and desirable level of service to all areas either currently developed or proposed for development or redevelopment. New development and/or redevelopment shall be permitted only where the storm sewer system is adequate to service such development and/or redevelopment.
b) The design of the storm sewer system shall be integrated with the design of the stormwater management system.
c) The storm sewer system shall be constructed in accordance with the standards of both the City and the Ministry of Environment.

6. Utilities

All wiring for local electricity distribution, streetlighting, telephone and cable television facilities shall to the greatest extent possible be located underground.

8.2.3.9 Phasing and Staging of Development

The following phasing policies apply to Development Area 2:

a) Final approval for the development of any parcel of land within Development Area 2 shall not be granted until stormwater management, sanitary sewer, piped water facilities and utilities necessary to serve the subject lands are available.
b) Where capacity constraints have been identified, development may be restricted to proceed on a phased basis and the City may require that the approval of each phase be conditioned upon a detailed engineering review of the then available capacity.
c) Where it is determined that over-sizing of services is required, front-end agreements, development charges or a combination of the two may be applied to ensure the fair and equitable distribution and recovery of costs.
d) Front-ending agreements and development charges may be employed to ensure the fair and equitable distribution and recovery of costs associated with such facilities as parkland, flood plain/drainage areas, stormwater management facilities and the location of schools.
e) No development shall be approved until an agreement is entered into by the developer and the City for contributions to cover the installation costs of services such as sewers, watermains, streets, sidewalks and the costs of planning and engineering services.
f) All stormwater management facilities required for a tributary area shall be in place and operational before any development within that tributary area may proceed. This may require that the first developer within a tributary area negotiate front-ending agreement(s) with the City and/or other landowners to facilitate the construction of stormwater management facility.
g) The approval of development applications in Development Area 2 shall be governed by the following principles:
    i) the avoidance of scattered development;
    ii) the planned, logical, sequential development of neighbourhood areas;
    iii) the provision of schools and parks and the logical, sequential development of an open space system;
    iv) the logical and sequential construction of arterial and collector roads and access to arterial roads;

v) the logical and sequential construction of sanitary sewers, pump stations, and watermain extensions;
vi) the completion of approvals for a stormwater management facility for the subject tributary area and provisions for the facility to be constructed before any construction within that tributary area;
vii) the adequacy of proposed storm drainage systems; and
viii) the minimization of public front-end financing.

h) The phasing and staging of development in the development area shall have regard to the location of any active intensive livestock operations and shall maintain as great a separation distance as possible between development and the operation for as long as practicable. In addition to the maintenance of separation distances, regard shall be given to the creation of interim buffer zones or other innovative measures to alleviate the adverse impacts of incompatible development.

8.2.3.10 Implementation

The following implementation policies apply to Development Area 2:

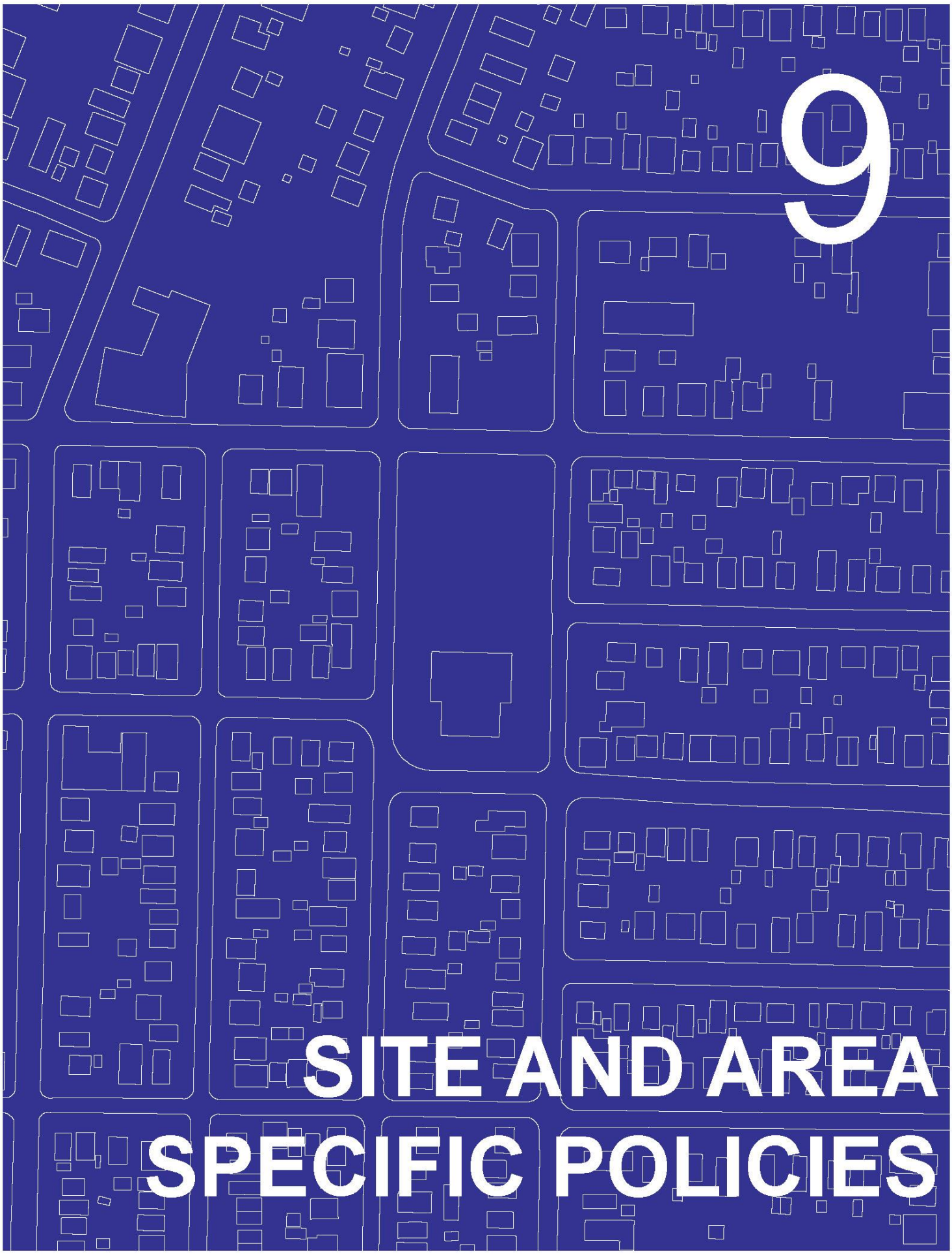
a) An amendment or a series of amendments to the Zoning By-law will form the basis for the implementation of the land use policies of this Secondary Plan. Where appropriate, the City may employ a Holding “H” Zone to effect the proper staging and phasing of development.
b) The design of commercial, institutional, industrial and residential buildings and facilities (except single detached and semi-detached dwellings) including position on the lot, lot coverage, parking layout, loading facilities, control and orientation of outdoor lighting, signs, poles, posts, noise attenuation, stormwater management and all other external features shall be subject to site plan control to ensure orderly and aesthetically pleasing development.
c) Development shall be permitted to proceed only when adequate municipal water, storm and sanitary sewer services, including both waste collection and waste treatment works, are provided; when streets, educational facilities, parks and recreational facilities are determined by the City to be adequate; and when such other works, facilities and services as the City shall require of the developer, are provided.
d) Open space and parklands shall be acquired by any of the following means:
    i) the provisions of the *Planning Act*;
    ii) the dedication of 5% of the land in a development or a cash-in-lieu payment (or a combination of the two) for parkland with respect to all lands proposed for development, except commercial and industrial development;
    iii) the expenditure of funds allocated in the City budget or designated from reserve accounts; donations, gifts, or bequests from individuals or corporations, funds allocated by any authority having jurisdiction; and
    iv) where a development or redevelopment is proposed on a property, part of which is designated as floodplain/drainage areas or stormwater management facility, then such areas shall not constitute part of the parkland dedication required under the *Planning Act*. The City shall encourage the reservation of such areas for public open space in addition to the dedication required by The *Planning Act*.
e) The cost of physical services associated with new development, including sanitary sewers, watermains, stormwater management facilities, storm sewers, streetlighting, electrical distribution on, roads, sidewalks, and curb and gutter shall generally be borne by the developer or benefiting landowner.

f) The City may co-operate in any cost-sharing program, whereby the portions of costs of certain public facilities serving the development area or the City at large which may be initially chargeable to private development will be shared and recovered among the benefiting parties.
g) The City shall review and may revise the provisions of this Secondary Plan from time to time.

8.2.3.11 Interpretation and Effect

The following interpretation policies apply to Development Area 2:

a) The boundaries between the land use designations shown on **Schedule B** are approximate, except where they coincide with perimeter roads, or any other clearly defined physical feature. Adjustments to features, proposed land uses or figures shall not require any amendment to this Secondary Plan provided the general intent of the policies is maintained.
b) The location of roads shown on **Schedule B** are approximate and adjustments shall not require any amendment to this Secondary Plan provided the general intent of the policies is maintained.
c) The provisions of the Official Plan regarding the interpretation of the Official Plan, as amended from time to time, shall apply to this Secondary Plan.



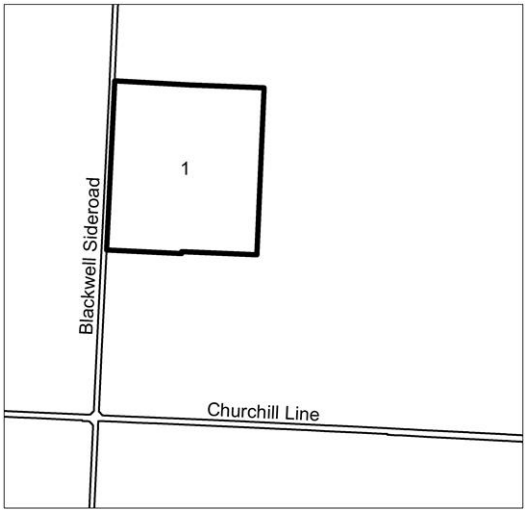
9

SITE AND AREA SPECIFIC POLICIES

9 SITE- AND AREA-SPECIFIC POLICIES

Certain sites and areas in the City require policies that vary from one or more provisions of this Plan. These policies generally reflect unique historic conditions for approval that must be recognized for specific development sites, or provide a further layer of policy direction for an area. In most cases, the site and area specific policies provide direction on land use. The Plan policies apply to these lands except where the site and area specific policies vary from the Plan.

1. Blackwell Side Road Landfill



It shall be the policy of this Plan that the landfill be closed in accordance with an approved closure plan and that these lands remain a closed landfill and not be permitted to develop for another use for a period of 25 years beginning on October 24, 1999 without the approval of the Minister of Environment

The landfill shall be closed in accordance with an approved site closure plan. A site closure plan shall include, but shall not necessarily be limited to the following matters:

a) fencing, security and access control;
b) final contours, cover and vegetation;
c) post-closure after-use;
d) site plan and site plan agreement amendments which the County of Lambton, after consulting with the City, may regard as being necessary or desirable in relation to the post-closure after-use;
e) long-term maintenance and operation of surface water, groundwater, landfill gas and leachate monitoring; and
f) updated contingency plans to mitigate unacceptable environmental impacts.

The leachate treatment plan shall continue to be operated in accordance with the *Environmental Protection Act* and the *Ontario Water Resource Act* and the regulations under those *Acts.*

Any time after the 25 years have lapsed (October 24, 2024), but before any other use is permitted, an application must be made to the Ministry of Environment to amend the Certificate of Approval. No development shall take place on or within the lands used for landfilling until:

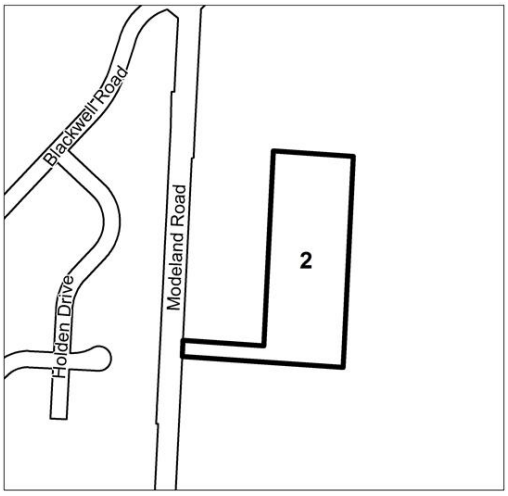
a) an evaluation of the presence and impact of any adverse environmental effects, and risks to health and safety is completed;
b) the Certificate of Approval is amended; and
c) any necessary remedial measures are undertaken to the satisfaction of the City of Sarnia and the Ministry of Environment.

The after-uses most appropriate for this site include low intensity uses such as public parkland and conservation areas that will support wildlife.

Any development within 500 metres of the site boundary shall be subject to consultation with the Ministry of Environment before any Zoning By-law amendment or building permit is adopted or granted for such lands. The Ministry of Environment may require that a study be undertaken by the applicant to determine whether methane gas and/or leachate migration may potentially cause any adverse environmental effect or cause a risk to health or safety. If it is found that a potential adverse effect or risk does exist, development may be restricted.

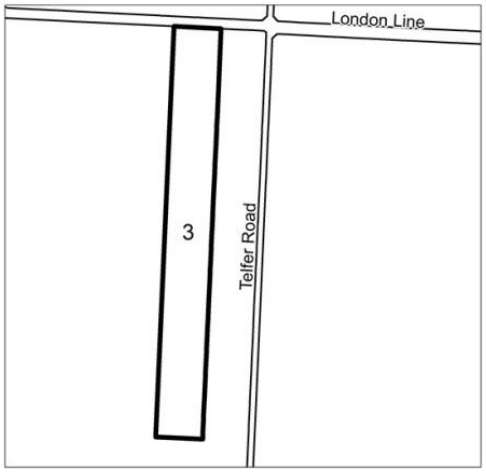
2. 1622 Modeland Road

Two single-detached dwellings on one lot are permitted.



3. 2053 London Line

An existing church and accessory uses are permitted.



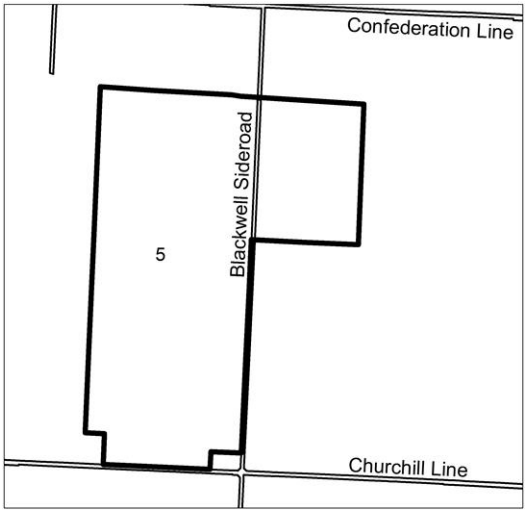
4. Jackson and Telfer Road

No buildings or structures are permitted on Parts 3, 4, 5 and 6, Plan 25R8317.



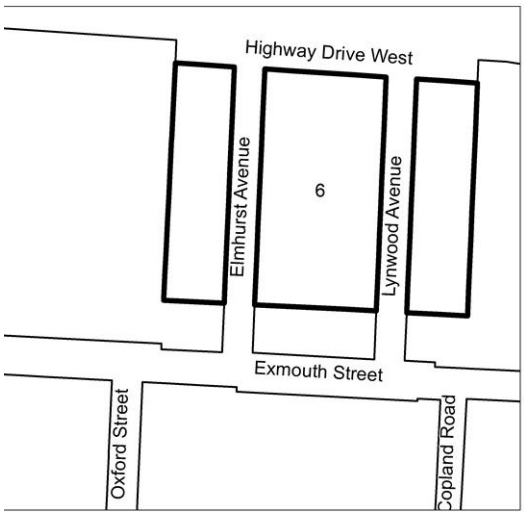
5. Blackwell Sideroad/Churchill Line

A solar electric power generation facility, including all associated buildings and structures, is permitted.



6. Elmhurst Avenue/Lynwood Avenue/Highway Drive West Area

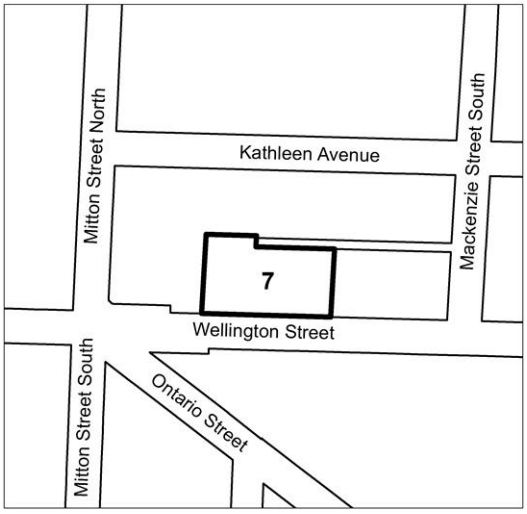
The lands designated *urban residential* north of Exmouth Street between Northgate Plaza, the Trillium Park apartment complex, and Highway Drive shall be restricted to low-density residential uses such as single detached dwellings and converted dwellings containing no more than two dwelling units.



7. 358, 360, 362, 366 and 370 Wellington Street

A multiple unit dwelling is permitted:

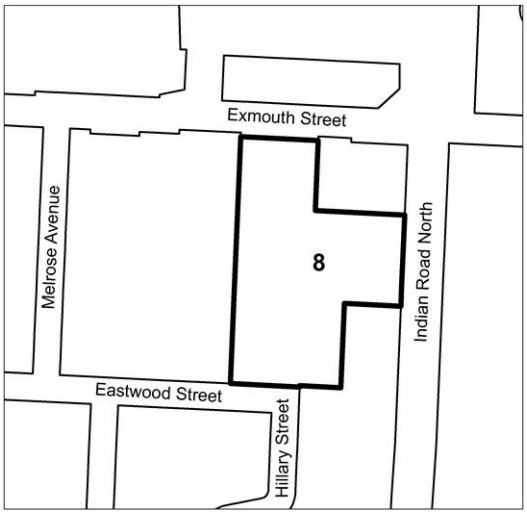
a) to a maximum of 26 dwelling units; and
b) to a maximum height of 10 metres.



8. 889 Exmouth Street

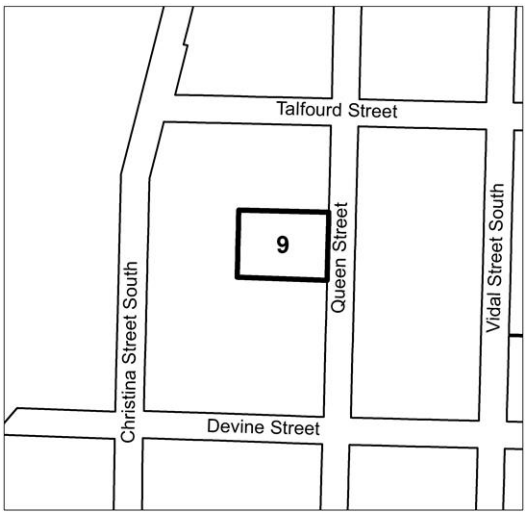
Commercial uses are permitted provided:

a) there is no vehicular access to the site from Eastwood or Hillary Streets; and
b) a minimum landscaped buffer strip of 12 metres shall be provided along the south property line.



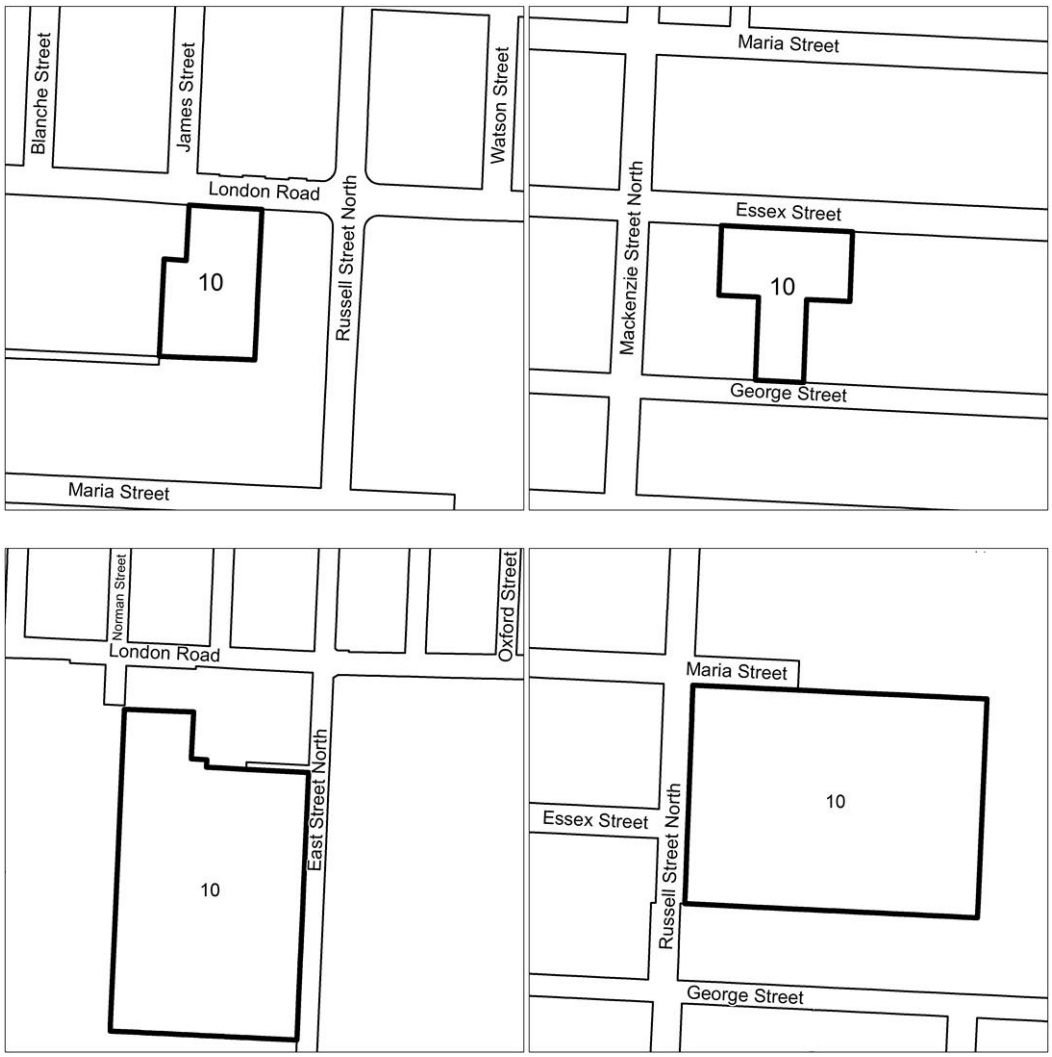
9. 199 Queen Street

Office uses are permitted provided there are no adverse effects on surrounding established uses.



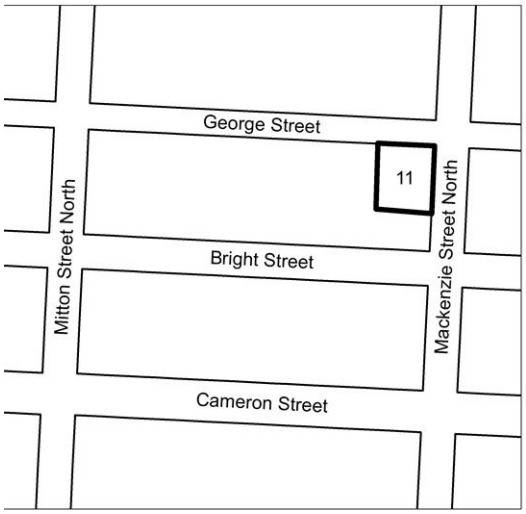
10. 245 Essex Street; 391 London Road; Former St. Patrick's Secondary School Lands (281 East Street); Hanna Memorial Public School (369 Russell Street North)

Parking area(s) on these sites may be leased to the Hospital for staff parking.



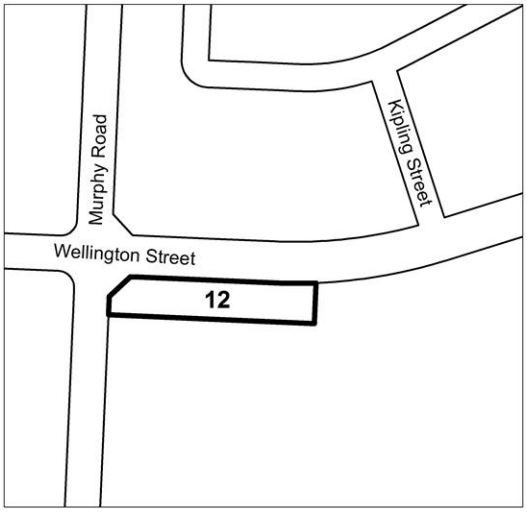
11. 373 George Street

An ambulance parking and dispatching facility is permitted.



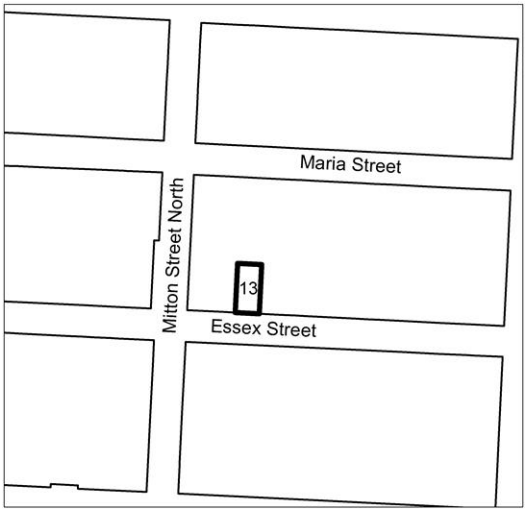
12. 1121 Wellington Street

Minor institutional uses are permitted within the existing building, including facilities for the drop-off and indoor recycling and storage of clothing, and non-offensive non-noxious household items. The outdoor storage of goods, materials or equipment, and retail activities are not permitted.



13. 174 Essex Street

The parking area may be used to provide parking for the adjacent medical centre/clinic at 168 Essex Street.

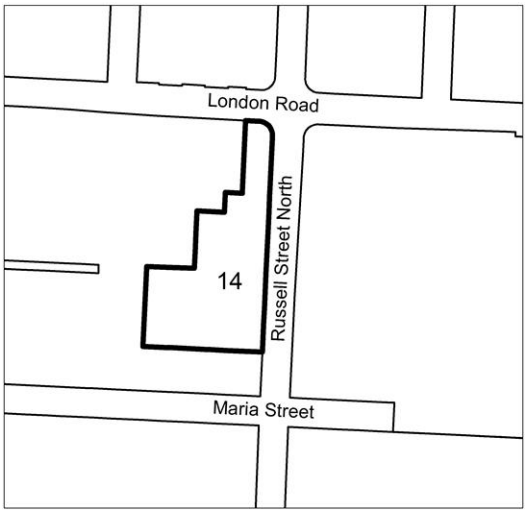


14. Lands located west of Russell Street, South of London Road

The lands may be developed for a staff parking lot in support of the Bluewater Health Centre subject to the following conditions:

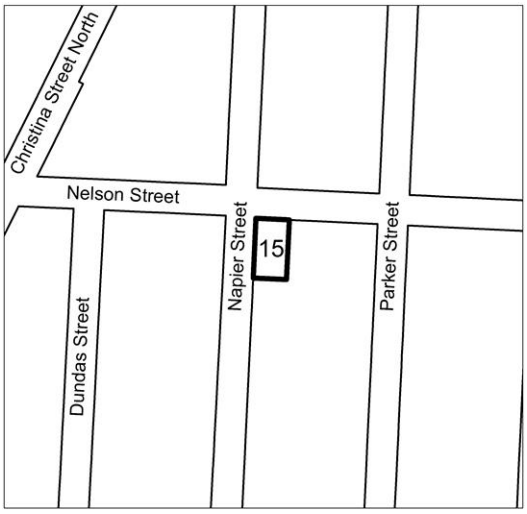
a) the design, operation and maintenance of the parking lot shall take into account its location within a stable residential area and be in keeping with the characteristics of the neighbourhood and surrounding area and not cause adverse impacts on the surrounding area; adequate buffering, landscaping and screening shall be provided to protect adjacent residential uses; and

b) matters of compatibility and design and related protections shall be implemented through a site plan agreement that will ensure that a landscaped buffer/screening strip of a minimum of 6 metres in width will be provided along the south and west sides of the parking lot adjacent to those properties fronting on Maria Street and include privacy fencing. The 0.3 metres (1 foot) reserve to be deeded to the City around the proposed parking lot, adjacent to other uses, may occupy a part of the landscaped buffer/screening stip. This 6-metre landscaped buffer/screening strip is to be required in the implementing zoning by-law. The site plan agreement will require directional and controlled lighting to provide adequate safety and minimize the impact on the adjacent residential areas. The agreement will ensure that the site plan is appropriately developed and maintained. The site plan agreement shall have public input before being approved by the City of Sarnia.



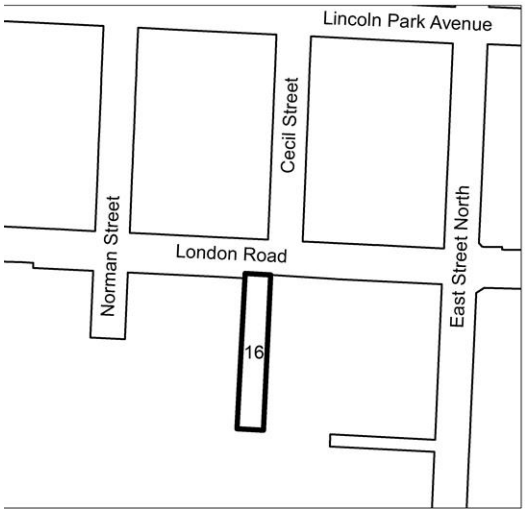
15. 251 Nelson Street

A medical centre/clinic with a maximum of 2 chiropractors is permitted.



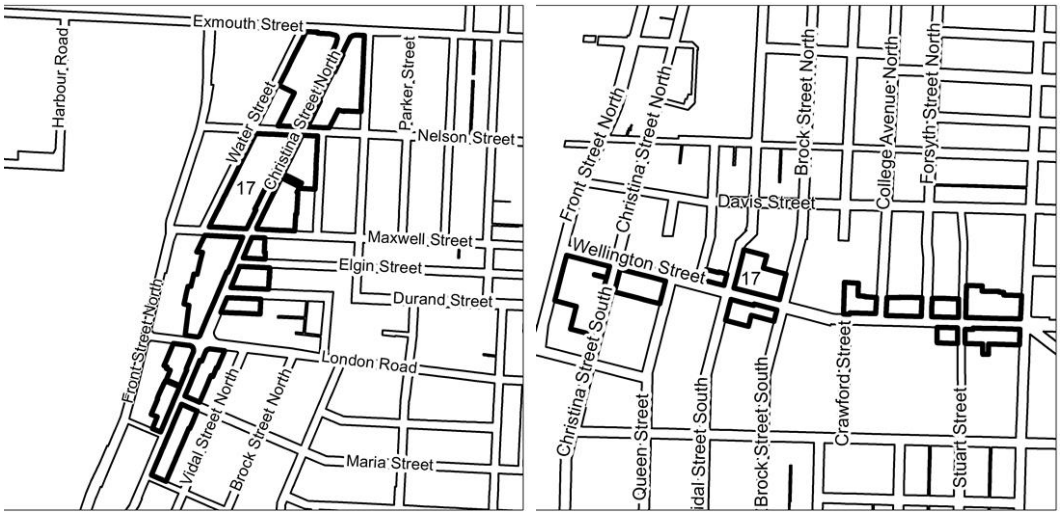
16. 495 London Road

The property may be used to provide parking for the adjacent medical centre/clinic at 481 London Road.



17. Lands within the *Mixed Use* designation along Christina Street North and Wellington Street

In support of the retention of older buildings and unique historical characteristics, buildings within this area should be retained and appropriately developed for mixed-use, office commercial, small scale retail, and service commercial uses. The design of new structures should complement existing development in terms of its scale and character to preserve the unique characteristics of these areas.



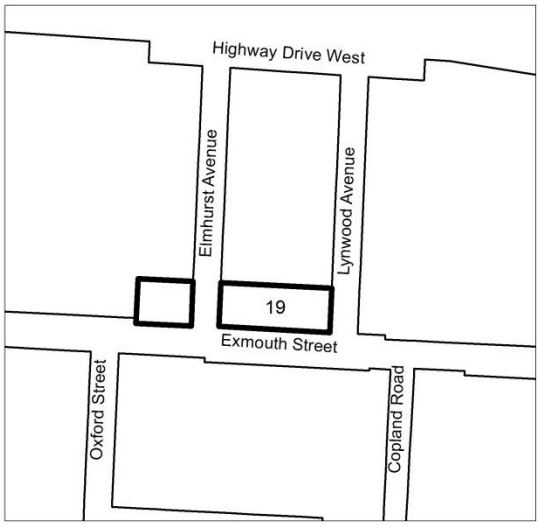
18. 1508 Blackwell Road

An agricultural nursery use is permitted.



19. Lands within the Commercial Centre designation along the north side of Exmouth Street between the Northgate Plaza and Lynwood Avenue

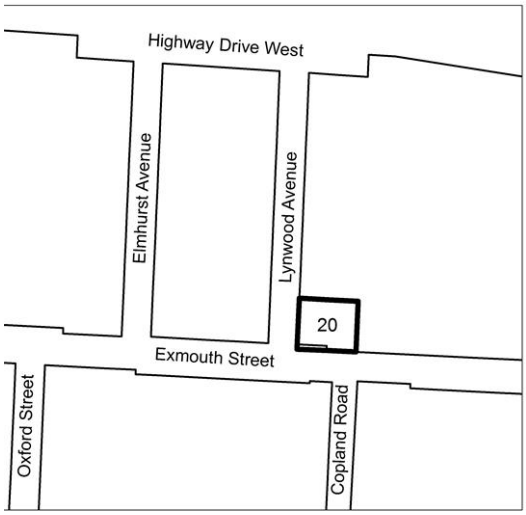
This area would be most appropriately developed for retail commercial and general office uses. Other secondary uses such as a parkette, daycare centre, or minor institution may also be permitted.



20. 790 & 794 Exmouth Street

Any expansion or redevelopment on these sites shall occur only through the consolidation of the two parcels, under the following conditions:

a) the existing commercial access provided to Lynwood Avenue shall be closed and access provided to Exmouth Street only; and
b) a minimum 3-metre landscape/screening buffer shall be provided along the north property line.



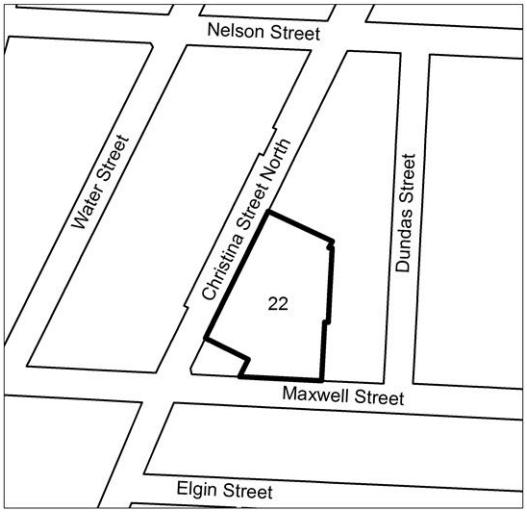
21. 266 Gibson Street

A Contractor's Yard or Shop Class A are permitted uses provided that the use is non-offensive and does not have an adverse effect on surrounding established uses.



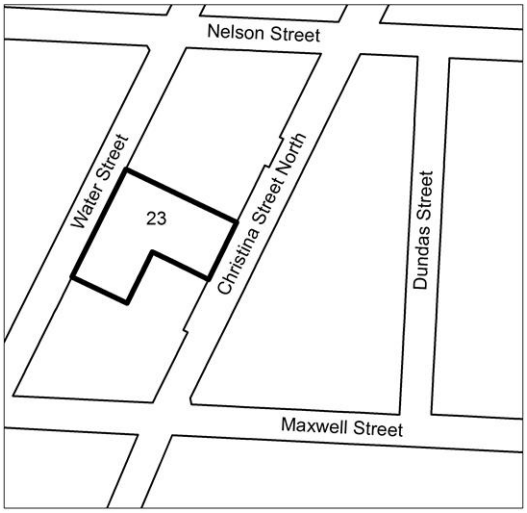
22. 460-464 Christina Street North

An apparel design and production centre is permitted. The use is defined to mean a multi-faceted business use comprising the following components: an office, a product design studio, a retail establishment, a production facility, and a warehouse and shipping facility, which as its principal purpose is the design, production and sale of clothing, costumes and accessories, toys and educational resources.



23. 475 Christina Street North

A hospice accommodating a maximum of 15 beds is permitted.

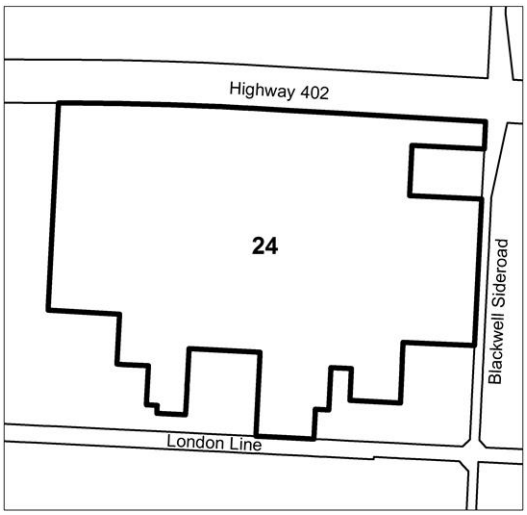


24. 1730 London Line

A private horse park is permitted which may include a gaming facility, and active or passive recreational activities such as harness racing, equestrian training and demonstration, horse farming and related buildings, structures or facilities which may include, but are not limited to, a grandstand, barns, track and infield, pond or lake, restaurant, lounge and auditorium.

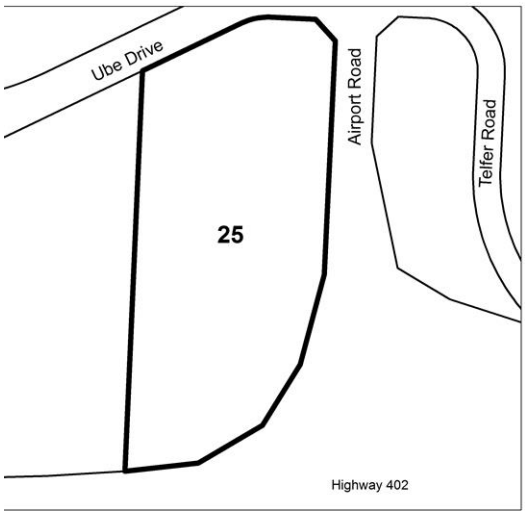
Prior to the approval of any major rezoning or site plan approval for the lands, the submission of a context plan satisfactory to the City and all owners and ownership interests within the site- and area-specific policy area is required. The context plan will show streets and blocks to be created and the allocation of uses and density and will be processed as a plan of subdivision or by an alternative procedure acceptable to the City.

Development will require a new public network of streets that divide the lands into a more urban pattern of streets and blocks, providing a framework for reorganizing and intensifying existing uses and accommodating new uses and forms of development.



25. Northwest intersection of 402 and Airport Road

Permitted uses include the servicing, cleaning and maintenance of trucks, as well as a truck transport terminal.



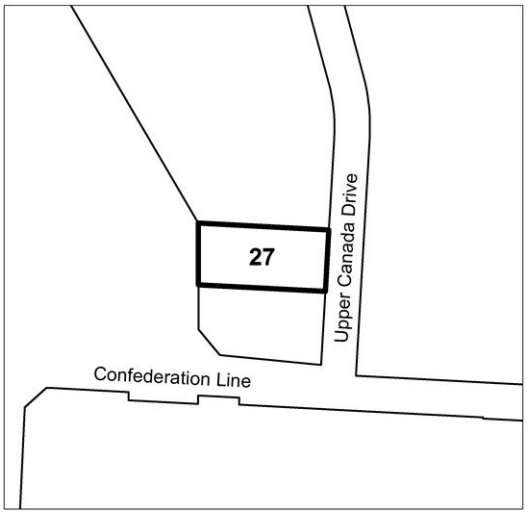
26. 1080 Modeland Road; 229 Wellington Street

A medical centre/clinic use is permitted.



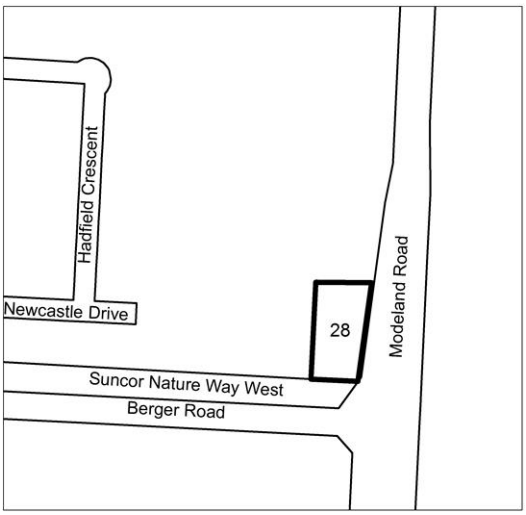
27. 805 Upper Canada Drive

An enclosed outdoor storage compound is permitted in the rear yard with a maximum area of 84 square metres.



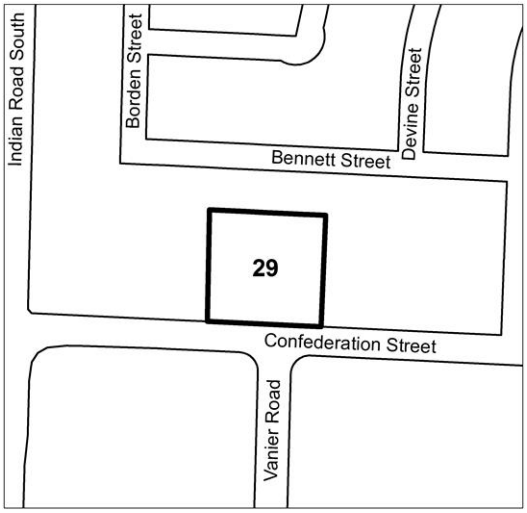
28. 1525-1545 Modeland Road

Commercial uses are permitted to a maximum of 0.64 hectares (1.58 acres) and access is permitted to the commercial site off Modeland Road in accordance with the requirements of the City's Engineering Department, the County of Lambton, and the Ministry of Transportation.



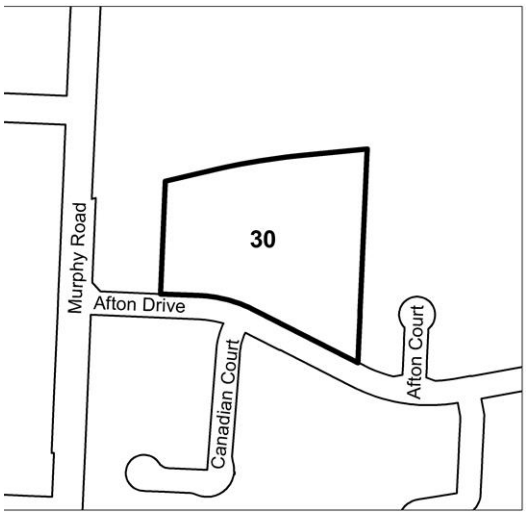
29. 940 Confederation Street

An emergency shelter and a transitional housing facility are permitted.



30. 1100, 1148, 1150 Afton Drive

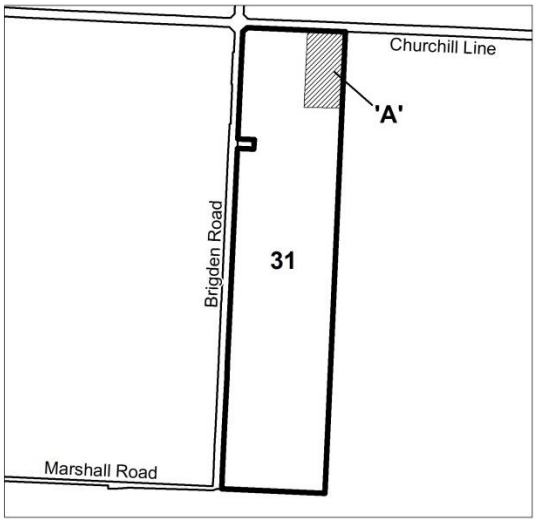
One new apartment building, in addition to the two existing apartment buildings, are permitted on the subject lands provided all three buildings shall have a total maximum combined density of 121 residential units per hectare.



31. 2475 Churchill Line

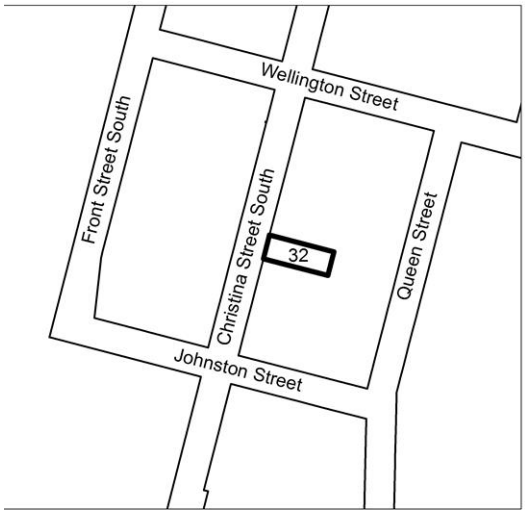
Salt resource exploration and extraction are permitted. An associated brine processing storage and distribution facility is permitted on the area identified as ‘A’.

After salt resource extraction and other related activities have ceased, the lands shall be rehabilitated for agricultural uses.



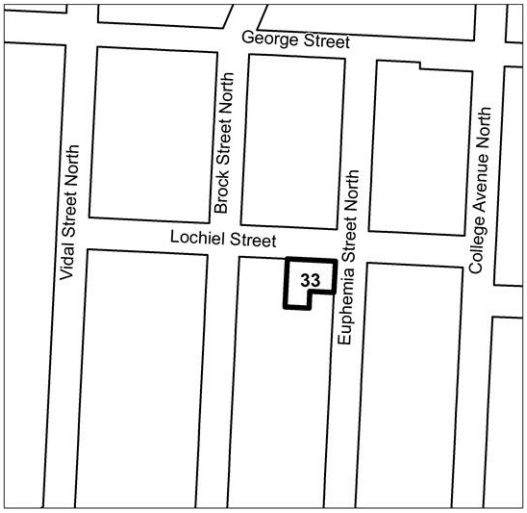
32. 168 Christina Street South

Local commercial uses to a maximum gross floor area of 103 square metres are permitted.



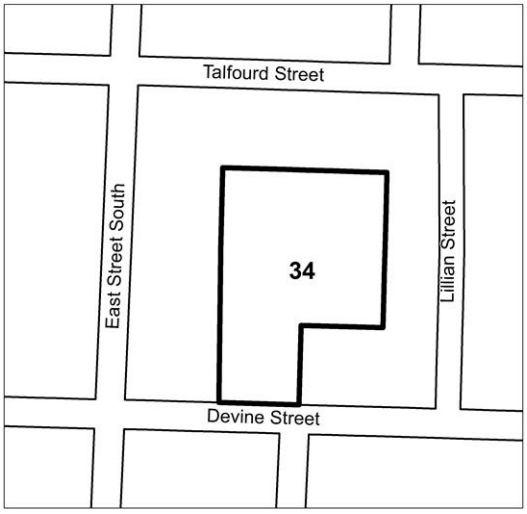
33. 233-237 Lochiel Street

A general office use to a maximum gross floor area of 228 square metres is permitted.



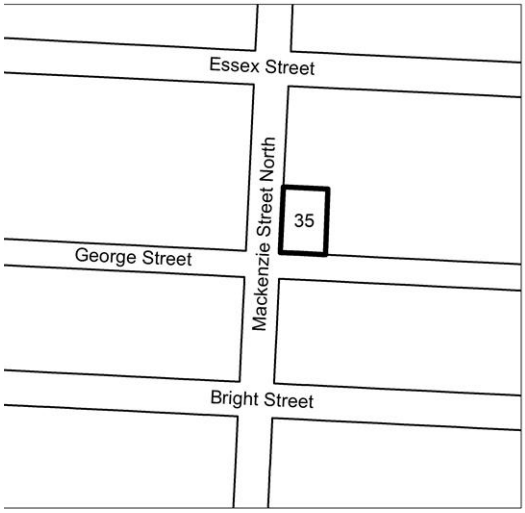
34. 720 Devine Street

A mini-storage warehouse and accessory office use are permitted.



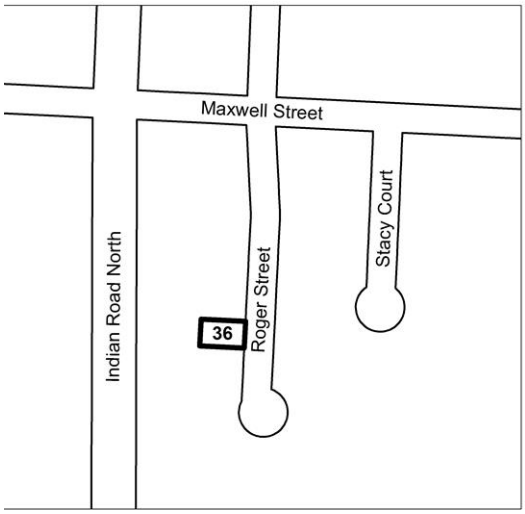
35. 206 Mackenzie Street

A medical office with 1 physician to a maximum floor area of 112 square metres is permitted.



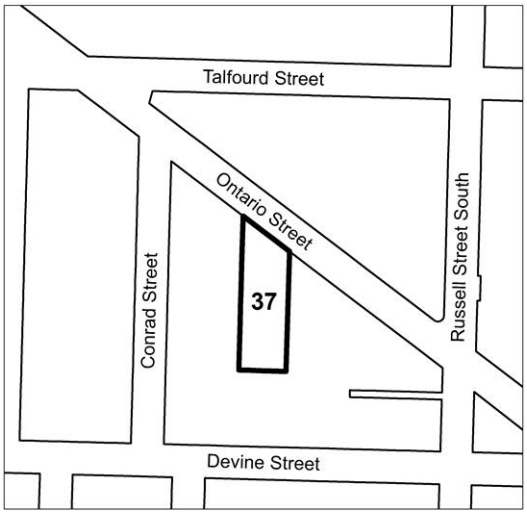
36. 629-631 Roger Street

The parking area may be used to provide parking for the adjacent multiple-unit dwellings at 626 and 646 Indian Road North.



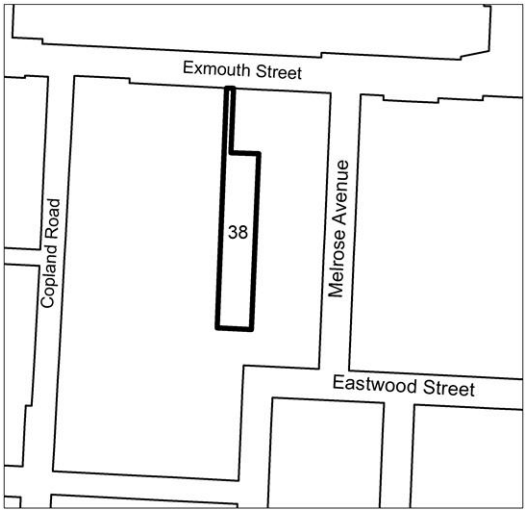
37. 237-239 Ontario Street

Offices, orthopaedic supply stores and personal service shops are permitted uses.



38. 829 Exmouth Street

The site may be used as a parking area to provide parking for a church at 837-841 Exmouth Street.



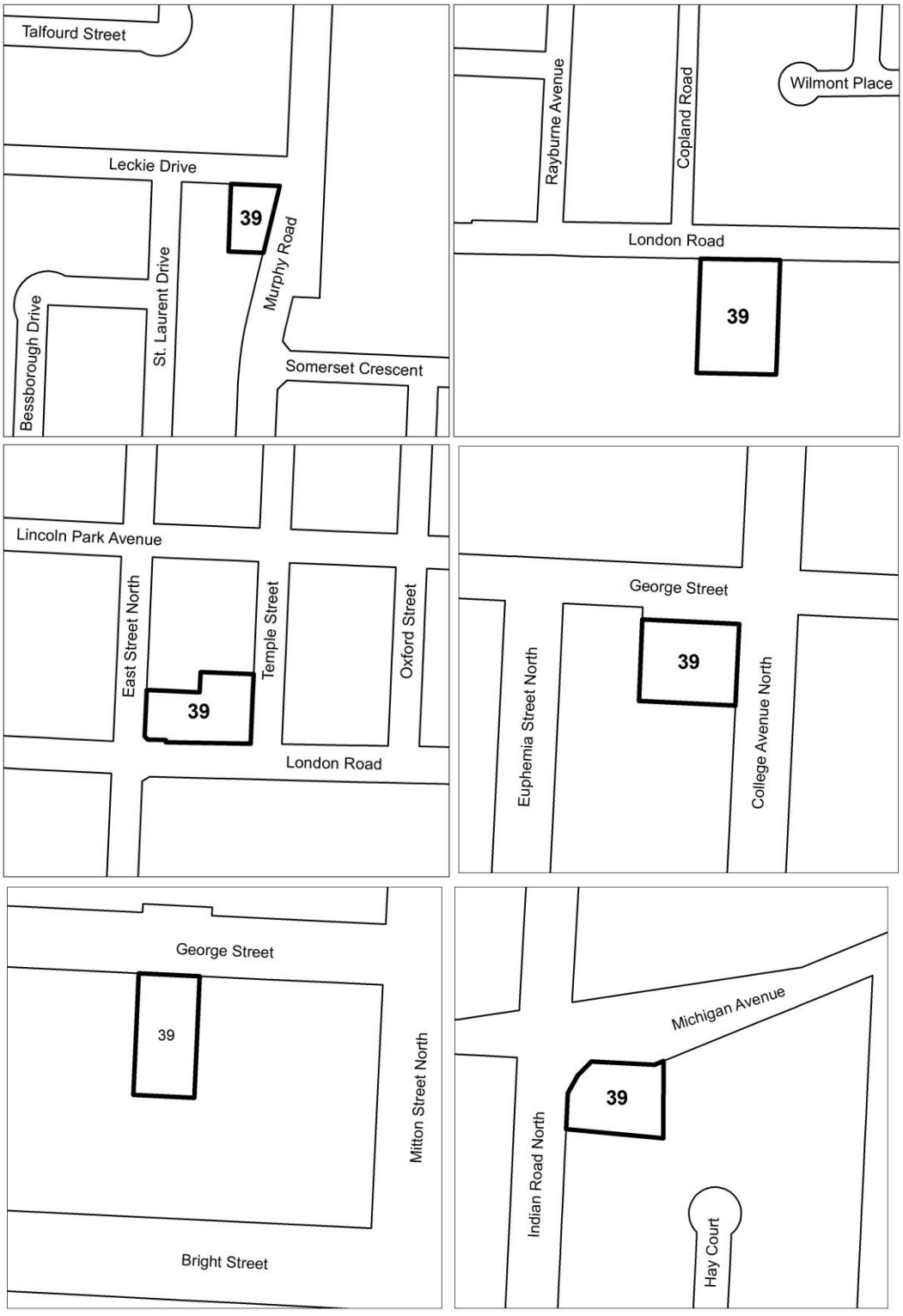
39. Medical Centre/Clinics in *Stable Residential Areas*

1171, 1173, 1177, 1179, 1181 Pontiac Drive; 177 Russell Street North; 285 Murphy Road; 811 London Road; 700, 704, 714 London Road; 305 George Street; 239 George Street; 929 Michigan Avenue;

Small-scale general offices and medical centre/clinic uses are permitted provided:

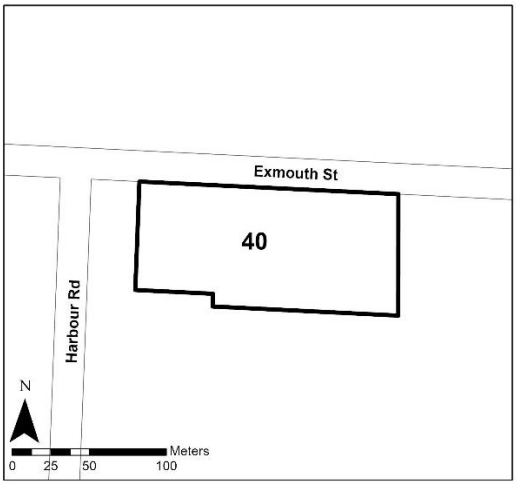
a) any building design maintains the scale and density of existing land uses;
b) adequate buffering and transition is provided to protect surrounding lower density development; and
c) provision is made for adequate off-street parking to serve any proposed use.




Talfourd Street
Leckie Drive
39
Murphy Road
St. Laurent Drive
Bessborough Drive
Somerset Crescent
Rayburne Avenue
Copland Road
Wilmont Place
London Road
39
Lincoln Park Avenue
East Street North
Temple Street
Oxford Street
39
London Road
George Street
39
Euphemia Street North
College Avenue North
George Street
39
Mitton Street North
Bright Street
Michigan Avenue
39
Indian Road North
Hay Court

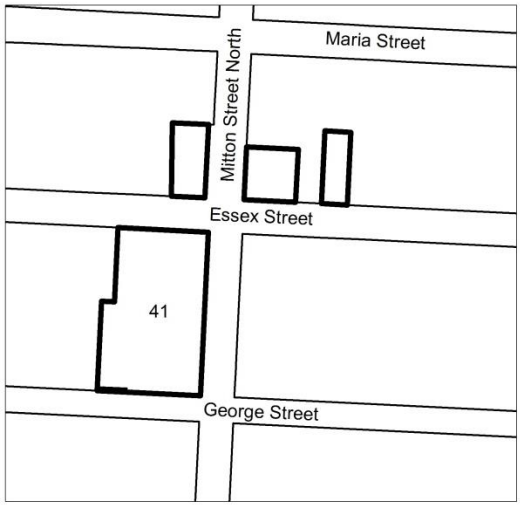
40. Sarnia Humane Society Lands

An animal shelter and humane learning centre are permitted uses.



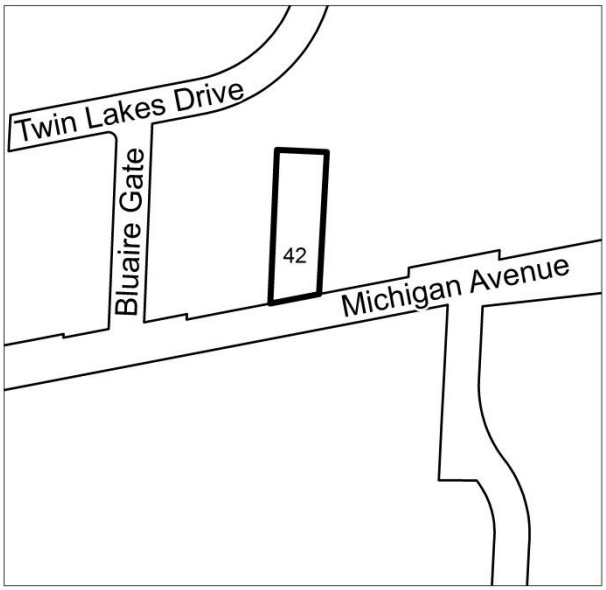
41. Lands along Mitton Street North, North of George Street

Uses within these areas are limited to general offices, medical centres/clinics and urban residential uses.



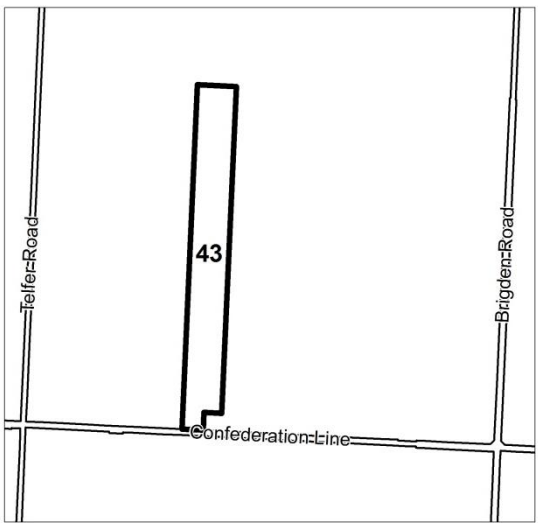
42. 1258 Michigan Avenue

A sleep disorder clinic use and accessory home care vendor sales are permitted in an existing building.

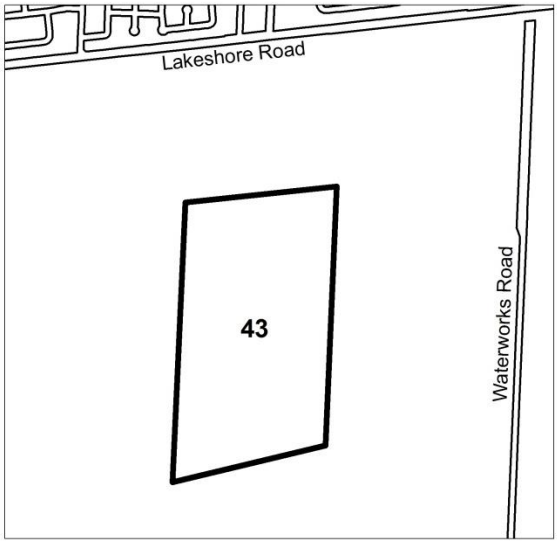


43. 2218 Confederation Line; 2212 London Line; 2587 Lakeshore Road

An existing golf course and associated secondary active and passive recreational uses are permitted.



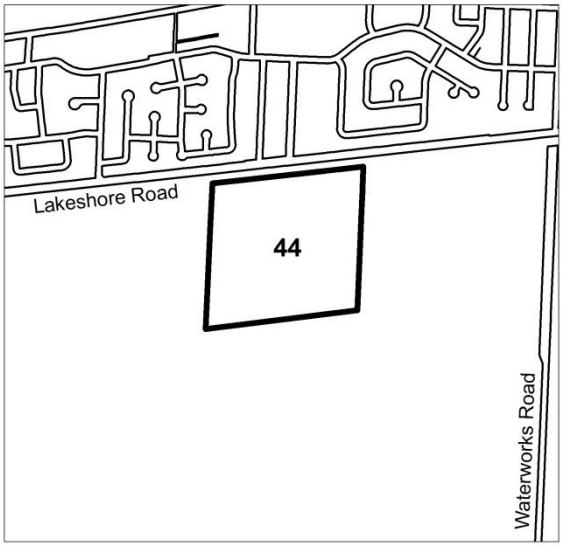




44. 2587 Lakeshore Road

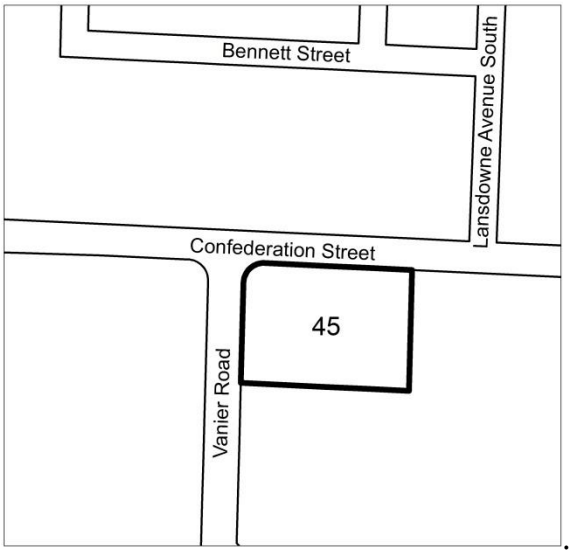
Secondary uses to *urban residential* uses, including any ancillary buildings or structures, may include:

a) putting greens;
b) driving ranges;
c) private parks; and
d) ancillary retail commercial, restaurants, commercial recreation uses and parking facilities provided that such uses do not conflict with the community's residential component.



45. 1115 Confederation Street

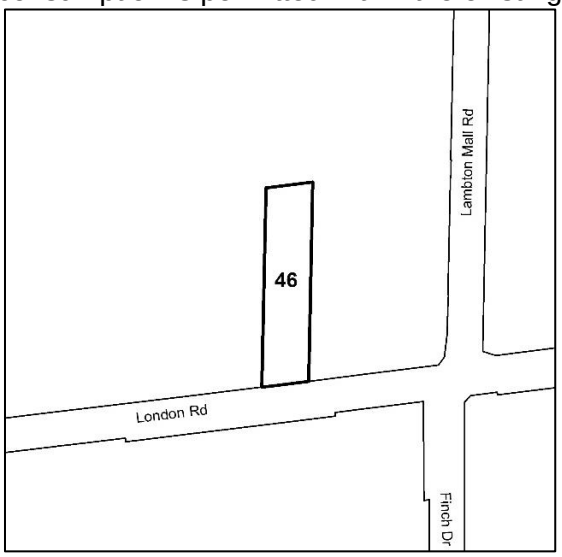
Retail uses are permitted.



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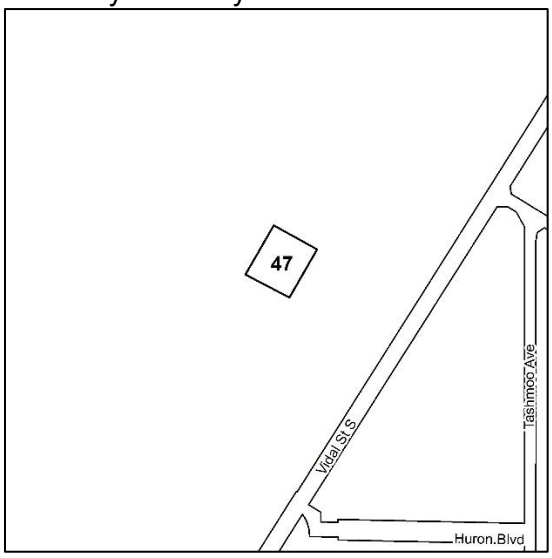
46. 1326 London Road

Small scale manufacturing of craft beer produced for both off-site distribution and for on-site retail sale and consumption is permitted within the existing building.



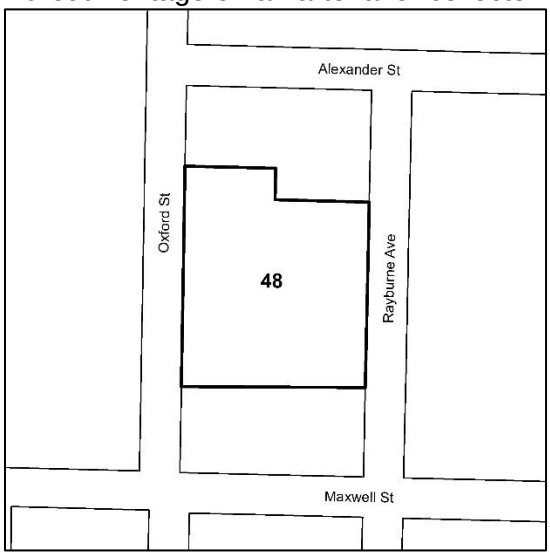
47. 1265 Vidal Street South

This site is not required to have frontage on a public road and shall not be required to connect to the City's sanitary sewer system.



48. 696 Oxford Street

A retirement home without frontage on an arterial or collector road is permitted.



49. 220 Mitton Street & 327 George Street

Crisis care facilities, long term care facilities, retirement homes, nursing homes and apartment buildings are also permitted.

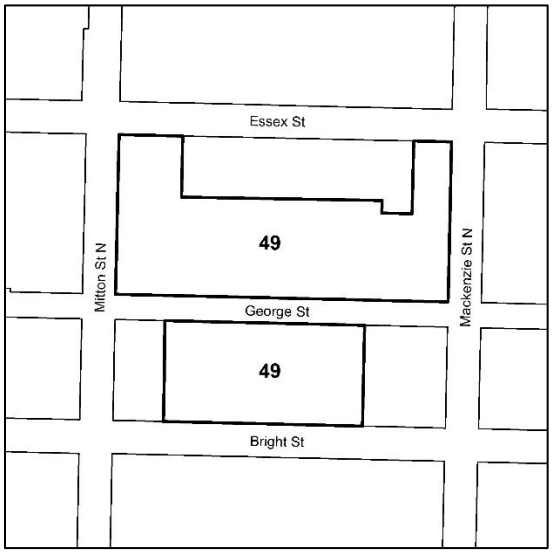
Commercial, restaurant, retail and personal service establishment uses be limited to the following maximum net floor areas:

a) Maximum commercial net floor area of 6,000m^2
b) Maximum net floor area of 372m^2 for restaurant land use north of George Street, and 186m^2 for restaurant land use south of George Street.
c) Maximum net floor area of 930m^2 for retail land uses north of George Street, and 465m^2 for retail land uses south of George Street.
d) Maximum net floor area of 930m^2 for personal service establishment land uses north of George Street, and 465m^2 for personal service establishment land uses south of George Street.

Residential and Institutional land uses, including apartment buildings, long-term care facilities, nursing homes, retirement homes and residential care facilities may be permitted on the subject lands, provided that:

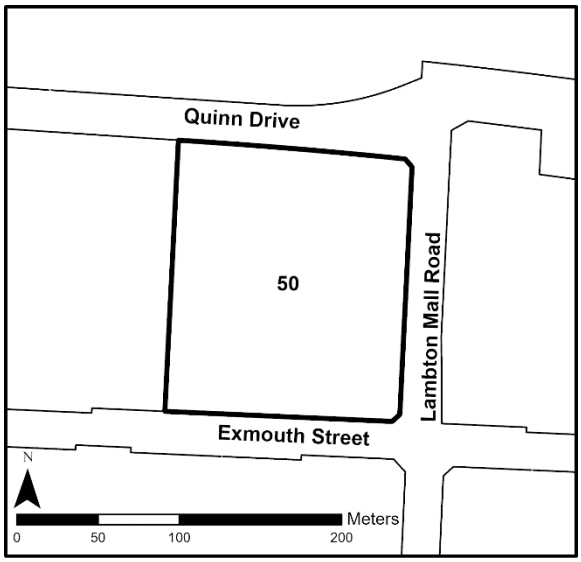
a) That an Environmental Site Assessment is completed to the satisfaction of the Director of Planning and Building.
b) That a site servicing report is completed to the satisfaction of the Director of Engineering, that demonstrates that City water and sewer infrastructure is available to service the proposed intensification of the site.

Any commercial buildings shall frame the Mitton Street North, George Street or Mackenzie Street North frontages and be setback and screened from adjacent residential properties on Essex Street and Bright Street.



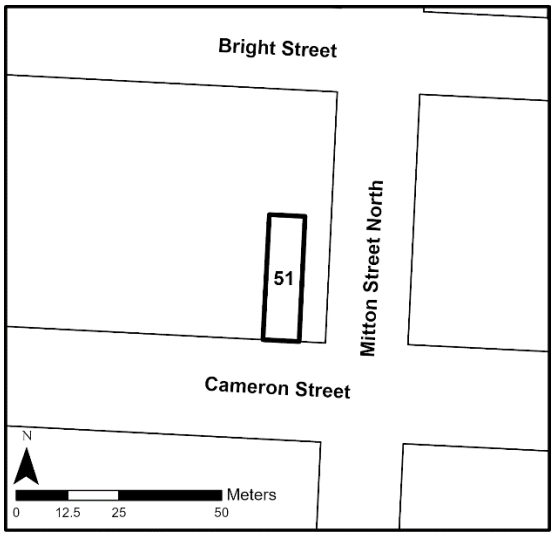
50. 1330 Exmouth Street

The existing building at the rear of the site known municipally as 1330 Exmouth Street may be used for the small-scale manufacturing of craft beer (craft brewery) produced for both off-site distribution and for on-site retail sale and consumption.



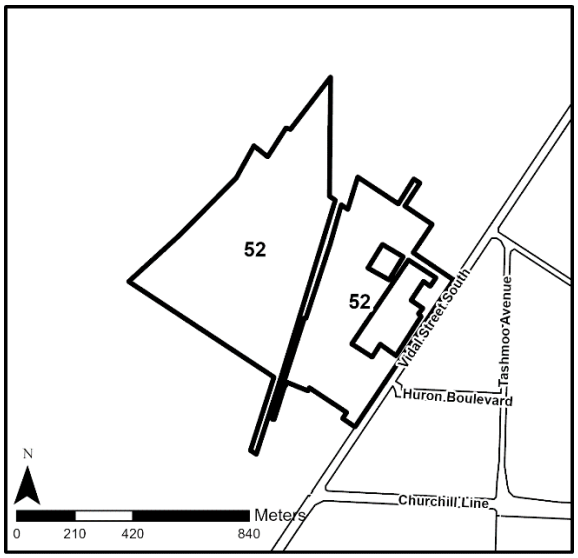
51. 146 Cameron Street

May permit a converted single detached dwelling containing a maximum of 3 dwelling units.



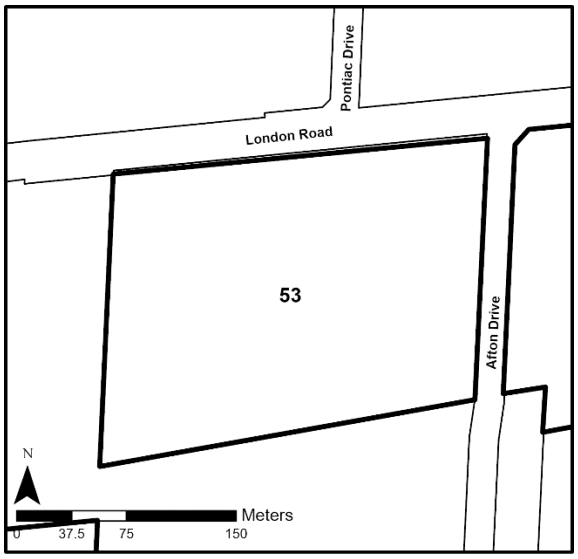
52. 1265 Vidal Street South

An industrial subdivision located within the property municipally known as 1265 Vidal Street is not required to have frontage on a public road and shall not be required to connect to the City's sanitary sewer system.



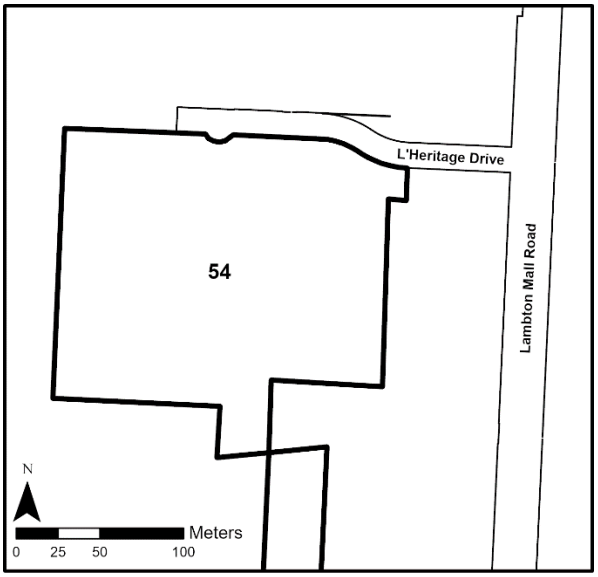
53. 1249 London Road

Notwithstanding policy 4.6.3.3, the land at the south-east section of the property municipally known as 1249 London Road, may be developed for a residential apartment high-rise with a minimum 93 sq. m. (1,000 sq. ft.) commercial space on the ground floor.



54. Southwest End of L'Heritage Drive

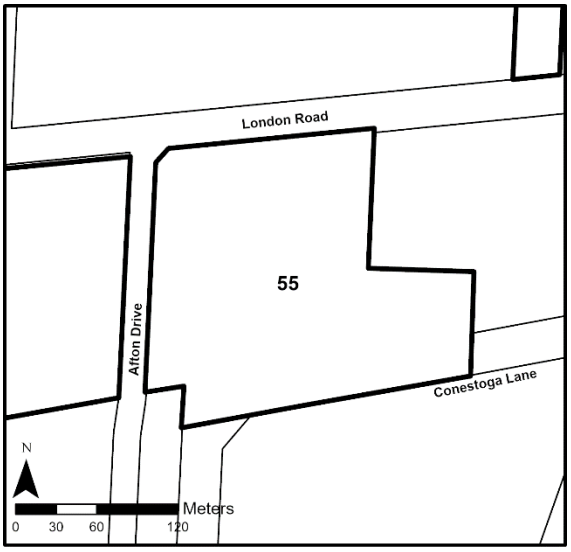
Townhouse dwellings are permitted in accordance with "Schedule A" attached.



55. 1279 – 1283 London Road

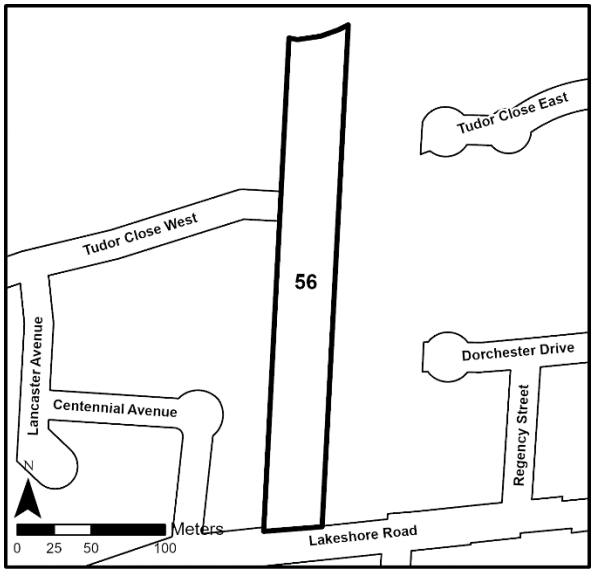
1) Notwithstanding policy 4.6.3.3, the land at the south-east side of London Road and Afton Drive, municipally known as 1279 - 1283 London Road, may be developed for three (3) 30.5m high nine-storey buildings, with an 853.0 sq. m commercial space on the ground floor of one of the buildings; and,

2) Notwithstanding policy 4.3.2, the land at the south-east side of London Road and Afton Drive, municipally known as 1279 - 1283 London Road, surface level parking is permitted in Natural Hazard Area, in accordance with "Schedule A" attached.



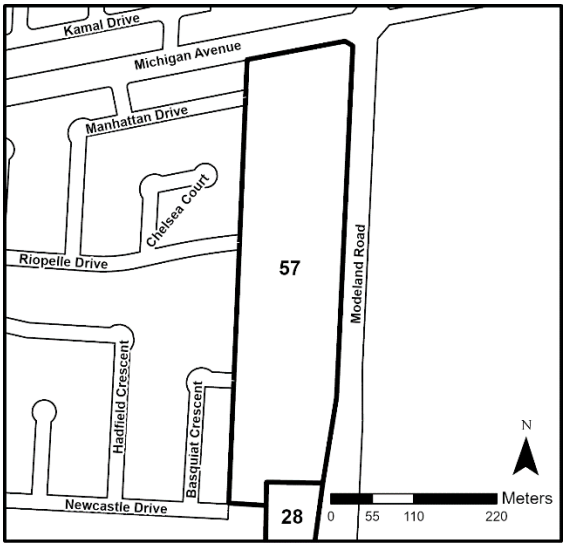
56. 834 Lakeshore Road

Notwithstanding policy 4.3.3.10 land division may be permitted to allow a maximum of four (4) residential dwelling lots and natural area uses on lands municipally known as 834 Lakeshore Road. Residential and natural area uses shall be zoned in the implementing Zoning By-law in accordance with "Schedule A" attached.



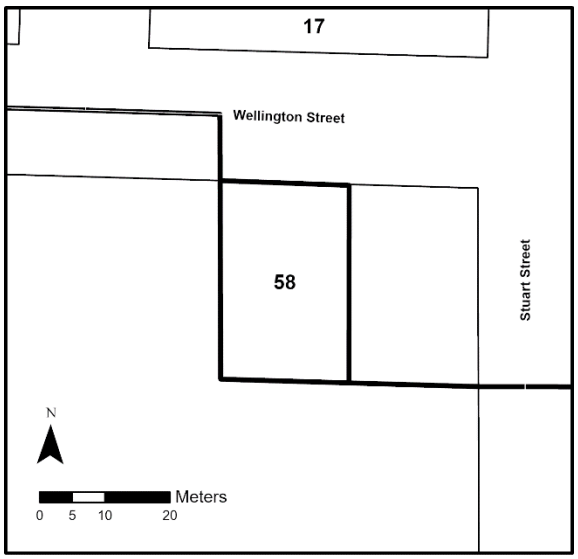
57. West side of Modeland Road, between Michigan Avenue and Berger Road

Notwithstanding policy 8.7.2.3 contained in the Secondary Plan Area 7 section of the City's Official Plan, the permitted density or the subject lands is increased from 4.5 UPA (units per acre) to 4.95 UPA in accordance with "Schedule A" attached.



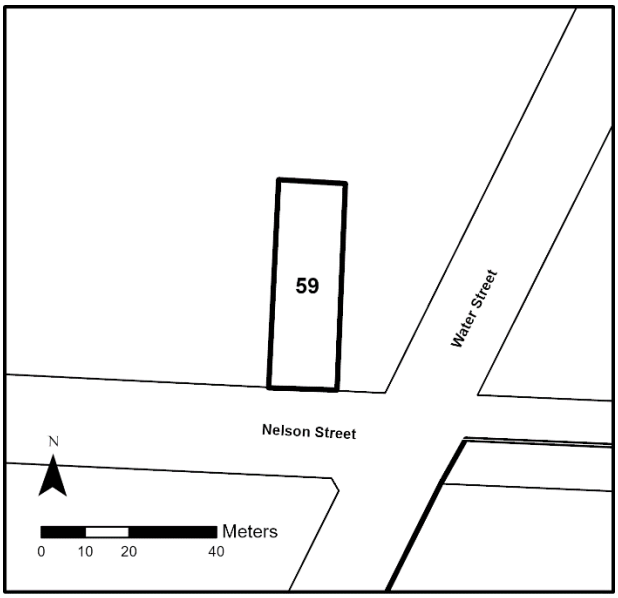
58. 291 Wellington Street

Notwithstanding policy 4.6.4.3, the land at the south side of Wellington Street, west of Stuart Street and municipally known as 291 Wellington Street, is permitted to have a duplex (2-unit) dwelling, with one unit on the whole of ground floor and a second dwelling unit on the upper floor.



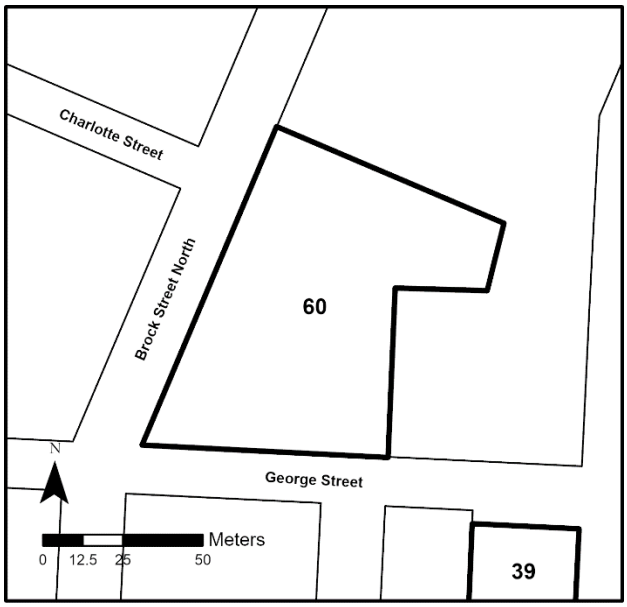
59. 174 Nelson Street

Notwithstanding policy 4.6.4.3, the land at the north side of Nelson Street, west of Water Street and municipally known as 174 Nelson Street, is permitted to have a duplex (2-unit) dwelling.



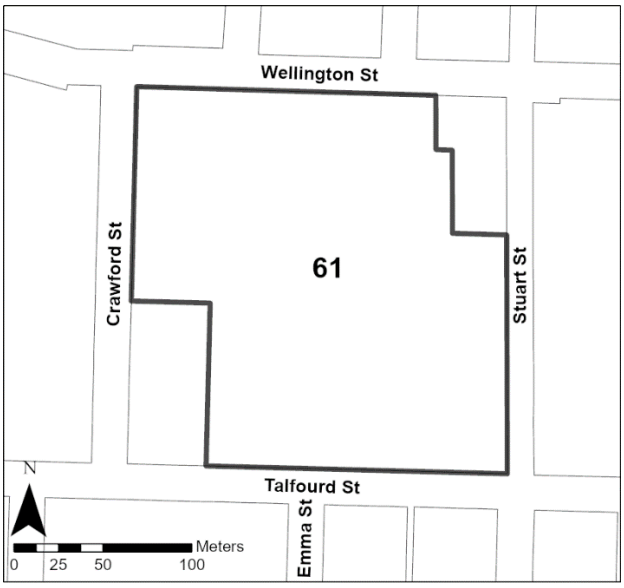
60. 220 George Street

The existing former United Church Building know municipally as 220 George Street may be used for those uses permitted in the "Apartment Residential" designation, in addition to a performance theatre.



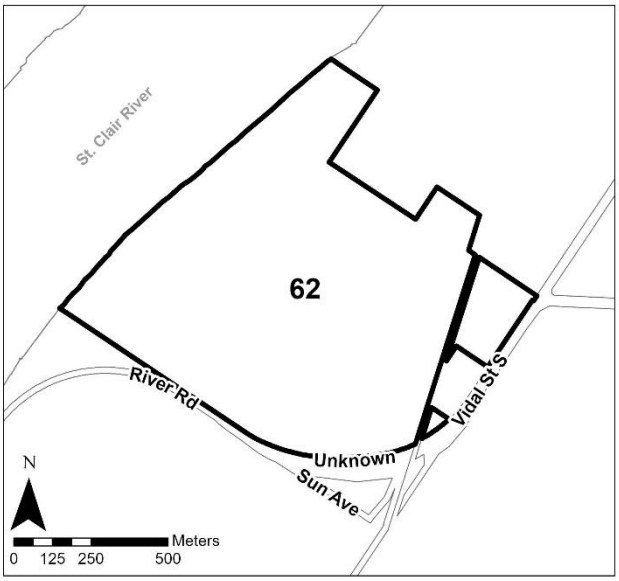
61. 275 Wellington Street

The existing former SCITS building known municipally as 275 Wellington Street may be used for those uses permitted in the "Apartment Residential" Designation, in addition to small-scale retail, service and office uses on-site in accordance with subsection 4.4.2.9 b) to e) inclusive on the former SCITS lands.



62. 1475 Vidal Street South

New industrial developments on blocks located within the property municipally known as 1475 Vidal Street South are not required to have frontage on a public road and may provide interim servicing solutions, pending the installation of proposed private distribution systems, in accordance with applicable legislations and approvals from the required agencies.



63. 1550 Confederation Line

In addition to the commercial uses permitted in the 'Mixed-Use' designation, the site may also be used for a "Contractor's Yard" with open storage. Open storage areas shall be accessory to a permitted use and be located in the rear yard only and shall be screened from the street and adjacent residential uses.

Any future building used for a "Contractor's Yard" on the property shall be commercial in appearance from Confederation Line and include office/commercial uses at the front of the building, as well as a front entrance and south facing windows.

