

County of Middlesex

OFFICIAL PLAN



middlesex
county

Consolidated Version
August 2006



MIDDLESEX COUNTY OFFICIAL PLAN

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SEPTEMBER 9, 1997**

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1.0 INTRODUCTION

1.1 CONTEXT

The County of Middlesex is located in the heart of southwestern Ontario and comprises an area of approximately 284,464 hectares. The County is a federation of 8 local municipalities.

The City of London which is the largest city in southwestern Ontario, is surrounded on the west, north and east by the County. Its location as well as the amount and type of economic activity that the City generates creates a significant impact on the County. The attractiveness of the County to many residents has resulted in development pressures in those municipalities surrounding the City of London. With this has come the challenges of protecting and retaining the natural environment, the agricultural community, the countryside image and the County's community spirit.

Agriculture is the predominant land use and economic mainstay in the County. Consequently, the protection of the farming community and agricultural land represent major thrusts in the policies of this Plan. Integral to the preservation of agricultural land is the protection of the natural environment. The natural environment consists of a number of features including wetlands, Areas of Natural and Scientific Interest, woodlots and stream corridors as well as underlying environmental functions. An ecosystem approach to planning will be used to achieve a balance between the economic and the natural environments.

The County will continue to evolve as changes to the agricultural industry takes place and development pressures increase. The challenge will be to protect the agricultural community, the natural environment and the character of the County while fostering economic growth.

1.2 COUNTY STRATEGY

The County of Middlesex has developed a County Strategic Plan. The Strategic Plan, which establishes a broad, long term vision for the County, includes specific objectives for land use planning and focuses on developing a strengthened role for planning at the County level. Through this strengthened role the County will be able to establish a balance between long-term growth and development and the conservation of key resources.

In short, the objectives for land use planning established in the Middlesex County Strategic Plan emphasize key components that will contribute to a healthy community including:

- the protection of the agricultural community;
- the management of growth; and
- a vibrant economy

Achieving the Strategic Plan objectives will require a balance between growth and the protection of the agriculture land base and natural environment features.

1.3 PURPOSE OF THE PLAN

The Middlesex County Official Plan (the Plan) is one tool to be used in working towards the long term vision for the County. The Plan directs and guides the County in land use policy and physical planning on a broad basis. The Plan is intended to:

- establish an upper tier policy framework that provides guidance to the local municipalities in the preparation of local Official Plans and Zoning By-laws; and
- set a framework for coordination and cooperation amongst the local municipalities and the County on planning and development issues that transcend municipal boundaries.

This Plan recognizes the planning powers and authorities vested in the local municipalities through the Planning Act and other legislation. The Middlesex County Official Plan does not address in any great detail those planning matters which can better be dealt with by the local municipalities. Local Official Plans complement the County Plan by providing more detailed strategies, policies and land use designations for planning and development at the local level. The County Plan will provide the framework for this more detailed planning by the local municipalities.

1.4 BASIS OF THE PLAN

This Plan has been prepared based on a compilation of technical background information and input from County Council, the Technical Advisory Committee, a Public Focus Group, local councils and the public.

The technical background information formed the basis for a Background Report dealing with:

- Natural Heritage
- Agriculture
- Aggregate Resources
- Municipal Services Systems
- Population and Employment
- Development Application Monitoring Paper
- Middlesex Natural Heritage Study
- Economic Development Paper
- Population Projection, 2001 - 2026
- Elgin / Middlesex Groundwater Study
- Response to Public Submissions Paper
- Technical Issues Paper
- Agricultural Consent Policy Review

- Information concerning the Provincial Planning Reform initiative
- Alternative and Renewable Energy Systems
- Targets for Affordable Housing Report
- Targets for Intensification and Redevelopment Report
- Changes as a Result of the new Provincial Policy Statement

The background information was subject to a comprehensive consultation program involving the public, the local municipalities, commenting Ministries and agencies and other stakeholders.

1.5 ORGANIZATION AND APPROACH

Sections 2 through 5 and Schedules A, B and C constitute the Middlesex County Official Plan.

The Plan is organized into five sections and appendices:

- **Section 1: Introduction**, contains the purpose of the Plan and the context, approach and basis in which it was prepared and does not form part of the Plan;
- **Section 2: Policy Framework**, describes the basis and long-term strategy for County policies. It is divided into three theme areas which are interrelated and must be read in total in order to understand the objectives of the County Strategy. The policies of this Section apply to the County as a whole;
- **Section 3: Detailed Land Use Policies**, provides detailed policies for each land use designation as shown on Schedule A;
- **Section 4: Implementation** describes the mechanisms to implement the policies of Sections 2 and 3;
- **Section 5: Interpretation** indicates how the policies and schedules are to be interpreted; and
- **Appendices**: provides the Glossary of Terms, and Population Projections.

1.6 PLANNING PERIOD

The designation of land and the population and employment projections are based on the 20-year period from 2006 to 2026. Actual population and employment increases will be monitored on an ongoing basis with the projected population being redefined in conjunction with the 5-year review of the Plan. The Plan identifies a policy framework to address issues beyond this period on the assumption that significant natural features including agricultural land, wetlands, and woodlots will continue to be maintained for future generations.

2.0 POLICY FRAMEWORK

2.1 INTRODUCTION

The Policy Framework is intended to provide policies which are applicable to all land use designations and which provide direction for the implementation of the Detailed Land Use Policies in Section 3.0 of this Plan. The Policy Framework will ensure that the various elements of the natural environment are identified and considered within their functional ecosystem context when land use changes and development decisions are considered. The policy framework should be considered in conjunction with the features identified on Schedules A and C.

The purpose of this Section of the Plan is to reinforce the value of integrating land use issues, including resource management, with ecosystems in order to develop an ecological approach to planning which will enable development to proceed within the County on an environmentally sustainable basis - so that the needs of today will not compromise the ability of future generations to meet their own needs.

An ecosystem means a system of plants, animals and micro-organisms together with non-living components of their environment, related ecological processes and humans. As a result of these systems, land use decisions made in one area will have impacts in other areas over time and space. For example, the removal of a forest at the headwaters of a stream will impact the stream and the creatures within it by increasing sedimentation (as a result of increased erosion as the trees anchoring the soils are removed); by changing the volume and pattern of stream flow (the hydrology) and perhaps its thermal regime; and by decreasing food sources (vegetative material): all of which may change the composition of the aquatic communities, including the fish component.

Many years of agricultural settlement, aggregate resource extraction, clearing of forests, recreational area development and urban development have introduced significant changes to the natural ecological systems of the County. The effects of development have contributed to degraded aquatic communities, flooding and erosion, deteriorating water quality, loss of forests and the draining of wetlands. Given the importance of functional inter-connections within and between ecosystems and the historic impacts of development, it is reasonable that a holistic approach to long-range land use planning be taken in developing the County Official Plan.

In taking a holistic approach it must be recognized that ecosystems do not respect municipal boundaries and hence management on an ecosystem basis necessarily requires coordination and cooperation amongst municipalities, both within the County and outside. For example, the Thames River has its headwaters in Oxford and Perth Counties and its mouth in Kent County. Consequently, the state of the Thames River in Middlesex County is dependent upon activities in Oxford and Perth Counties. Similarly, the state of the Thames River in Kent County is a result of activities in Middlesex County, as well as in Oxford and Perth. The intent of the County Plan is therefore to establish the policy framework in support of the necessary co-ordination of land use and planning activities, both within and outside the County.

The features identified on Schedules A and C are important parts of the ecosystem and need to be identified in order for the policy framework outline in this Plan to have meaning.

The features identified on Schedule A as part of the Natural Environment Areas designation preclude development and as such, have restrictive Official Plan policies associated with them. This designation includes wetlands, flood regulated watercourses and associated floodplains.

The features identified on Schedule C represent a range of ecosystem elements which have been consolidated from a number of existing sources. Information obtained from the Middlesex Natural Heritage Study (MNHS) 2003 was the primary source for the woodland mapping on Schedule C. The MNHS assessed the natural heritage of the County at a landscape level and identified all woodland areas that met one or more specific landscape criteria to be of County significance.

Schedule C features do not preclude development: however, there is an interest in protecting them from incompatible development. The Official Plan policies associated with Schedule C features encourage that the importance and ecological context of the feature be considered when land use changes and development decisions are considered.

2.2 RESOURCE MANAGEMENT

The County recognizes the importance of the protection, conservation and sustainable utilization of natural resources to the continuation of economic growth and development. An integrated approach to land use planning is intended to protect the quality of the natural environmental and conserve those natural resources necessary for future economic growth, on a sustainable basis. Environmental Resource Management themes underlay economic activity in the County and therefore are discussed first in the Policy Framework Section.

The general approach to Resource Management outlined in these policies is supported by the Schedules of this Plan and by more detailed policies and schedules in the Official Plans of the local municipalities.

2.2.1 Natural System

2.2.1.1 Introduction

The County's Natural System includes the following elements which, while listed separately for convenience, are inter-connected and functionally interdependent:

- Natural Hazards
 - steep slope hazards
 - unstable soils
 - fill regulated areas

- Natural Environment Areas
 - Floodplains
 - flood regulated watercourses
 - wetlands

- Natural Heritage Features
 - significant woodlands
 - wildlife habitat
 - endangered and threatened species habitat
 - aquatic ecosystems including fish habitat
 - river, stream, ravine and upland corridors
 - aggregate Resource Areas
 - petroleum Resource Pool Areas
 - areas of natural & scientific interest (ANSI's)

- Groundwater Features
 - groundwater recharge areas
 - groundwater discharge and headwater areas
 - well head protection areas

Areas of Natural and Scientific Interest (ANSI) are shown on Schedule C as symbols. Their names and general locations are as follows:

- Skunk's Misery Area is a core area forest in the south west part of the County and generally located in Lots 17 to 26 Ranges I and II and Concessions I and II in the former Township of Mosa which is now a part of the Municipality of Southwest Middlesex.

- Ausable River Area is a large forested and ravine area in the northwest part of the County generally located in the Broken Front Concession between County Roads 12 & 18 in the former Township of West Williams which is now a part of the Municipality of North Middlesex.

- Thames River Area is a river valley in the south part of the former Township of Ekfrid which is now a part of Municipality of Southwest Middlesex generally located in Lots 6 to 13, Range IV South and Range V South.

- Komoka Area is situated along the Thames River valley south of the settlement areas of Komoka and Kilworth, generally located in Lots 1, 2, A, AE and (OE), Concessions 1, 2 & 3 in the former Townships of Lobo and Delaware which are now a part of the Township of Middlesex Centre.

- Dorchester Swamp Area is a large Carolinian forest area in the south east part of the County in the former Township of North Dorchester which is now a part of the Municipality of Thames Centre, generally located in Lots 9 to 16, Concessions B and I (SRT).

The elements of the Natural System contribute to fish habitat and wildlife habitat functions of landscapes and watercourses.

The ecological connection of these elements is best illustrated by a watershed and it is at this level of analysis that the functional elements are best understood. Taken together, these elements form a "green system" across the County known as the Natural System. The maintenance of this System requires that the ecological functions and processes which created and now sustain it are also maintained and where necessary, rehabilitated or enhanced. The conditions necessary to sustain these functions and processes provide the context for the evaluation of land uses and development proposals and the formulation of specific land use controls.

The policy framework for the Natural System is based on:

- a) establishing a Natural system
- b) protection and sustainment of the Natural System by limiting and directing incompatible development and by controlling the impact of permitted development;
- c) integrating the Natural System with natural feature systems in other jurisdictions, specifically the natural heritage system identified in the City of London Official Plan; and
- d) partnerships with local municipalities, public and private agencies, interested property owners and the public.

2.2.1.2 General Policies

Identify, protect, maintain and encourage rehabilitation of the Natural System and coordinate with the City of London and neighbouring municipalities the planning and management of those elements of the Natural System which are shared with the County.

Local municipalities shall identify Provincial, County and locally significant elements of the Natural System in their official plans and secondary plans and develop policies to ensure their protection, maintenance and where necessary, rehabilitation.

Where the private landowner is not satisfied regarding the type and/or extent of specific elements of the Natural System on a property, a re-evaluation may be requested and the County will address the issue in consultation with the Province or Conservation Authority.

New development shall be directed away from the Natural System wherever possible.

Where elements of the Natural System are held in private ownership, there is no requirement that the lands shall be made available for public use nor is there any obligation on the part of the County or local municipality to purchase the identified lands.

The County shall promote rehabilitation of stream valleys, banks and steep slopes wherever possible, to reduce flooding and excessive soil erosion and to enhance water quality and thereby to improve aquatic and wildlife habitat.

The County supports the protection of existing woodlands and will continue to enforce the County Woodlands Conservation By-law No. 5738.

A "one-zone" concept for floodplain management will generally be used; however, other floodplain management options will be permitted.

Where more detailed shoreline, floodplain, hazard, slope or wetland mapping exists this mapping shall be used in the preparation of local official plans and zoning by-laws. Where new development is proposed and detailed mapping is not available, the proponent may be required to produce the necessary mapping.

Headwater areas, groundwater recharge areas, well head protection areas and aquifers will be protected as a means of protecting groundwater and surface water from degradation. When reviewing development applications, and preparing official plans and zoning by-laws, local municipalities shall utilize information and mapping found in the Middlesex-Elgin Groundwater Study, Final Report July 2004. Where mapping is not available, the County will cooperate with the Conservation Authorities, local municipalities and the Province to identify the areas and provide adequate protection.

The boundaries and extent of the specific elements of the natural system designated on Schedule A as Natural Environment Areas, and shown on Schedule C as Natural Heritage Features are approximate. Refinements to boundaries may occur through environmental evaluations such as a Development Assessment Report (DAR) in consultation with the Ministry of Natural Resources, the Conservation Authority having jurisdiction and the County. Changes to the boundaries as a result of more detailed analysis shall not require an amendment to the Plan.

Development applications within or adjacent to Natural Heritage Features shown on Schedule C shall require submission of a Development Assessment Report (DAR).

The DAR shall describe the ecological processes creating and maintaining the affected elements of the Natural System and indicate the potential impacts of the proposed development upon those processes.

Where the Development Assessment Report indicates that there will be a negative impact on the natural system or ecological processes that cannot be adequately mitigated, the development application shall not be approved.

If local municipalities require a Development Assessment Report or equivalent impact assessment document, as part of their approval process, the County will waive its requirement, provided the impact assessment submitted to the local municipality meets the County's requirements as set out below.

The Development Assessment Report shall be undertaken to a professional standard and approved by the County. The DAR shall address the following:

- a) Description of the development
- b) Description of Natural Features;
- c) Identification of Potential Impacts
- d) Identification and Recommendation of Mitigation Measures

The detailed content required for a Development Assessment Report is provided in 'A Guideline for Development Assessment Reports' available through the County of Middlesex and attached as Appendix C.

Approval of the Development Assessment Report shall rest with the County in consultation with the Conservation Authority having jurisdiction and the Province. Where the DAR or its equivalent is prepared as part of the local municipality approval process, the local municipality, is the approval authority and shall consult with the County, the Conservation Authority having jurisdiction and the Province.

2.2.1.3 Natural System Policies

The County's Natural System is organized into Natural Environment Areas, Natural Heritage Features, Groundwater Features and Natural Hazards as listed in Section 2.2.1.1.

Certain parts of the County's Natural System preclude development. They are designated as Natural Environment Areas on Schedule A and include:

- wetlands;
- floodplains; and
- flood regulated water courses.

Significant portions of Endangered Species Habitats also preclude development. These areas are not shown on Schedule A in order to protect the endangered species; however, the Province should be consulted regarding these habitats, as required.

The remaining Natural Heritage Features, Groundwater Features and Natural Hazards listed as elements of the Natural System in Section 2.2.1.1 do not preclude development; however, there is an interest on the part of the Province, Conservation Authorities and the County in protecting these Features and Hazards from incompatible land uses.

It should also be noted that all watercourses in the County have associated hazards and may be subject to land use restrictions as provided for in local Official Plans.

The County recognizes that most of the County's Natural System is held in private ownership. The intent of these policies is to provide for continued private use while encouraging landowners to continue to protect and manage these lands. Encouragement can be provided by demonstrating sound environmental management of public land and through the distribution of information regarding the function and management of such features.

Natural Heritage Features as shown on Schedule C constitute for the most part, significant woodlands. These woodlands are of County significance and are identified through the Middlesex Natural Heritage Study (MNHS) – a Natural Heritage Study to identify significant woodland patches in Middlesex County.

Schedule C is not a land use designation schedule and is included in the Plan as a means of raising the awareness of the importance of our natural environment.

The policies of this Plan seek to protect the County's entire Natural System and to maintain the ecological processes of this System that may be affected by development.

Limited development that can be demonstrated to have no negative impact on natural features or their ecological functions may be accommodated within or contiguous to these features; however, there are generally significant physical constraints to development in these areas which proponents should investigate prior to development.

This Plan does not place restrictions on the normal and traditional uses of significant woodlands. Forestry (silvicultural management), cutting of firewood for personal use, conservation and maple syrup collection are permitted uses.

Given that Schedule C is meant to consolidate existing information related to Natural Heritage Features and is not a land use designation schedule, the use of land within and contiguous to these Features shall proceed in accordance with the underlying land use designation as shown on Schedule A

2.2.2 Agriculture

2.2.2.1 Introduction

The County is committed to the protection of agriculture as both an industry and a way of life.

2.2.2.2 General Policies

Non-agriculture development shall be encouraged to locate in identified Settlement Areas.

Agriculture-related commercial and industrial uses shall only be permitted in the Agricultural Area where they are essential to the agriculture economy, require a location in close proximity to agriculture or cannot be located in identified Settlement Areas.

All new barns with a capacity for greater than 5 nutrient units and expansion of existing barns shall comply with the MDS II formula and the Nutrient Management Act.

Non-agriculture-related development in the Agricultural Area shall require an amendment to the Plan and must not:

- a) detract or adversely affect present and/or future agricultural operations;
- b) interfere with the viability of farm units; or
- c) detract from the character of the agricultural community.

The amendment to the Plan shall address:

- the need for additional land to be designated to accommodate the proposed use;
- reasonable alternative locations that avoid agricultural areas; and
- reasonable alternative locations with lower priority agricultural lands.

The County shall not support Official Plan Amendments to permit new non-agricultural uses (i.e.: residential, commercial or industrial) in proximity to the City of London municipal boundary.

Consents in the Agricultural Area shall only occur in conformity with the policies of Section 4.5.3.4.

2.2.3 Aggregate Resources

2.2.3.1 Introduction

The policies of this Plan recognize the need to balance competing priorities for the protection of aggregate resources for future extraction and the need to protect agricultural land, the Natural System and other sensitive land uses.

The County shall identify and protect existing pits, quarries and resource deposits in the context of other County land use planning policies.

The County, in conjunction with the Province shall ensure that as much of the mineral aggregate resources as is realistically possible is made available to supply the need, as close to market as possible; extraction is undertaken and completed in an orderly fashion; and, extraction does not have a permanent adverse impact on the Natural System or the agricultural land base. Operational impacts on residential and other sensitive land uses shall be minimized.

2.2.3.2 General Policies

Aggregate and non-aggregate resources shall be recognized and managed as non-renewable resources.

Areas of aggregate resource, as identified on Schedule C, shall be protected for extraction purposes.

Consideration of the expansion of existing extractive operations and of new aggregate extraction areas shall include an evaluation of the impact on area residents and on the Natural System including ground and surface waters.

All licensed aggregate resource extraction operations and known significant deposits shall be identified and protected from incompatible uses through local official plans.

In areas of significant aggregate resources, uses which do not preclude future resource extraction may be permitted in accordance with the underlying land use designation. All uses which would preclude resource extraction shall be discouraged until such time as the resource has been substantially depleted.

Where supporting documentation is provided that demonstrates that the aggregate resource is of secondary quality and extraction is neither practical nor economically feasible, the subject lands may be used for a land use other than agriculture provided such land use conforms with the local official plan.

Extraction and processing operations shall be located in such a way to minimize the impact on the natural and social environments.

All pit and quarry operations shall be subject to a program of progressive rehabilitation as specified in the Aggregate Resources Act, regulations under this Act and in the license for the property.

Aggregate extraction is only permitted in the Agricultural Area if site rehabilitation is carried out and substantially the same acreage and soil capability for agriculture will occur after extraction and rehabilitation is complete except in the following instances:

- a) where extraction occurs below the water table,
- b) where the lands do not constitute Prime Agricultural Land,
- c) where there is an approved, underlying land use designation which permits uses other than agriculture in a local official plan.

Wayside pits and quarries and temporary asphalt plants shall be permitted throughout the County except in Settlement Areas and in Natural Environment Areas, as shown on Schedule A, and only as permitted in local official plans.

2.2.3.3 *New Pits and Quarries*

Prior to making a decision on an amendment to a local official plan or zoning by-law to permit a new extractive use, or to allow the expansion of an existing extractive use, the local municipality shall consult with the County, the Conservation Authority and the Province to ensure that the effects on any Natural System Elements are properly considered. Consultation may include studies related to ground and surface water impacts, noise and dust impacts and other matters that may affect the natural environment and adjacent residents.

Local municipalities shall include policies in their official plans to address the impact of new pits and quarries. Such policies shall address:

- visual impact;
- proximity to residential uses;
- impact on Natural System Elements; and
- site rehabilitation.

In considering applications to permit new pits and quarries, local municipalities shall be satisfied that the following are addressed:

- a) the impact on adjacent land uses and residents;
- b) the impact on the natural environment;
- c) the capabilities of the subject land for agriculture and other land uses;
- d) the impact on the road network;
- e) the impact on any existing or potential municipal water supply resource areas;
- f) the manner in which the operation will be carried out;
- g) the nature of rehabilitation work that is proposed; and
- h) any other matters deemed necessary by the local municipality or the County.

2.2.3.4 *Site Plan Requirements*

It is the policy of this Plan that an application for a permit to operate a sand or gravel pit or quarry shall be accompanied by a Site Development Plan(s) to be submitted to the County, the local municipality and the Ministry of Natural Resources. The Site Development Plan(s) shall deal with those matters specified by the Province.

2.2.4 Petroleum Resources**2.2.4.1 Introduction**

Throughout Middlesex County there is a potential for the exploration, discovery and production of petroleum deposits. A number of areas of petroleum production also currently exist.

While activities associated with petroleum resources rarely involve Planning Act controls, the policies of this Plan address the issue of new development encroaching on known deposits and existing producing well areas.

2.2.4.2 Setback Provisions

New development shall be setback 75 m from existing wells; this setback being equivalent to the setback required under the Oil, Gas and Salt Resources Act for new wells from existing development. Lesser setbacks for development may be considered upon consultation with the Province.

Where development is proposed adjacent to or above pools or deposits, the Province shall be consulted regarding measures to allow possible future access for resource production purposes.

2.2.4.3 Locational Criteria

Petroleum exploration and production under the Oil, Gas and Salt Resources Act is a permitted activity anywhere within the County, except in Settlement Areas.

Should the policies of Section 3.4 regarding development within natural environment areas affect potential petroleum activities the Province shall be consulted regarding mechanisms to evaluate the value of competing resources and ensure that if drilling occurs there is minimal policy conflict.

2.2.4.4 Rehabilitation Requirements

Well and well-site clean up and rehabilitation is required under the Oil, Gas and Salt Resources Act. The Province shall be consulted should existing or future land use designations and zoning patterns conflict with required well and well-site rehabilitation measures.

2.2.5 Cultural Heritage & Archaeology

This Plan supports the conservation of the County's archaeological cultural and built heritage resources. Development and site alteration on or adjacent to lands containing archaeological resources and/or significant built heritage resources shall maintain the heritage integrity of the site.

2.2.4.5 Hazard Policies

Development on, abutting or adjacent to lands affected by former mineral resource operations will be permitted only if rehabilitation measures to address and mitigate known hazards are underway or have been completed.

Contaminated sites discovered during the planning or implementing of a development proposal will be restored as necessary prior to any activity associated with a development proposal continuing.

2.2.5 Cultural Heritage & Archaeology

This Plan supports the conservation of the County's archaeological cultural and built heritage resources. Development and site alteration on or adjacent to lands containing archaeological resources and/or significant built heritage resources shall maintain the heritage integrity of the site.

2.3 GROWTH MANAGEMENT

2.3.1 Introduction

Growth Management is the second theme area of the Official Plan Policy Framework. It recognizes that the County will experience population and employment growth and redistribution over the planning period. This growth is important to the residents and to the future of the County and its constituent municipalities. Growth must be managed to minimize adverse impacts on the Natural System and agriculture and be phased to coincide with the availability of appropriate types and levels of services.

The Growth Management policy framework recognizes the need to provide for some growth in each local municipality. However, Settlement Areas have been established in keeping with the Resource Management and Physical Services and Utilities policies established in Sections 2.2 and 2.4. These priorities are essential for the long-term protection of the Natural System and agricultural land and the logical provision of services.

The Growth Management Hierarchy outlined in Section 2.3.2 is designed to provide opportunities for environmentally responsible growth which avoids conflicts with natural heritage features and hazards and the agricultural community. The Hierarchy also attempts to provide a degree of lifestyle choice to the residents of Middlesex County. Consequently, different levels of growth are anticipated in different areas of the County.

Urban development is the focus for future population growth. The County shall direct the majority of growth to designated settlement areas, in accordance with the Growth Management Hierarchy. In agricultural areas, development by consent will be limited and shall only take place in accordance with the consent policies set out in Section 4.5.3.

In order to provide guidance in the implementation of the Growth Management policy framework, the following Growth Management Hierarchy has been established. The hierarchy builds on the framework of existing towns, villages, and hamlet communities. It is intended to promote healthy, diverse communities where County residents can live, work and enjoy recreational opportunities. In addition, the Hierarchy recognizes that growth will require investment in infrastructure. Every attempt should be made to make efficient use of existing infrastructure while creating and/or protecting opportunities for future infrastructure needs, as established in the Comprehensive Water Servicing Study prepared by Dillon Consultants, 1996, and Settlement Capability Reports completed in support of establishing the extent of Settlement Areas in local Official Plans. Whenever possible future development should proceed based on the provision of full municipal services. In all cases the amount, location and timing of development shall be dictated by the nature and availability of services necessary to support that development.

2.3.2 Growth Management Hierarchy

The Growth Management Hierarchy shall consist of the following types of Settlement Areas:

- Urban Areas
- Community Areas
- Hamlets in Agricultural Areas

Establishment of a Settlement Area shall be in accordance with the following criteria:

- a) **Urban Areas** shall demonstrate the potential to accommodate future growth through population projections and must either have full municipal services or demonstrate the potential to provide full municipal services, through a master servicing component of settlement capability report and/or completion of an Environmental Assessment (EA), pursuant to the Environmental Assessment Act.
- b) **Community Areas** shall demonstrate the potential to accommodate future growth through population projections, must currently serve a community function and must demonstrate the potential to provide a level of service necessary to support future growth through a master servicing component of a Settlement Capability Report and/or completion of an Environmental Assessment (EA) pursuant to the Environmental Assessment Act.
- c) **Hamlets in Agricultural Areas**, in the context of the Growth Management Hierarchy shall include existing locally designated hamlets not identified as Urban Areas or Community Areas. It is assumed that municipal services will not be provided in these areas and therefore future growth shall be commensurate with that level of service.

It is the goal of this Plan that future development within settlement areas proceed on the basis of full municipal services. Other methods of servicing (partial services) may be permitted on an interim basis where proper justification is provided.

Advancement within the Growth Management Hierarchy of this Plan, in keeping with the criteria established above, shall not require an amendment to this Plan unless such advancement is deemed to alter the County Growth Management Strategy.

2.3.3 Forecasting Growth

In order to establish a basis for designating sufficient land area for future growth, determining housing needs, determining future transportation requirements, and establishing priorities for municipal infrastructure in the County, population projections have been prepared for the planning period. These projections are intended to be used by the County and local municipalities as a guideline for managing growth and will be monitored throughout the planning period. It is not the intention of this plan that the population projections presented in Appendix B be incorporated into local Official Plans; however, when local Official Plans are updated or when applications which propose significant additional growth are considered, the projections presented in Appendix B should be used as a guideline for future growth and development.

The population projection, shown in 5 year increments, for the County is 71,502 (2006), 75,399 (2011), 78,558 (2016), 81,791 (2021) and 88,896 (2026). Detailed projections for the County and for each local municipality are included in Appendix B.

Changes to the population projections will not require an amendment to the Plan.

Given that the projections are influenced by many factors external to the County, prudence should be exercised when assessing specific development proposals in the context of these projections.

It is the intention of this Plan to ensure that adequate lands be available to accommodate the projected growth but that over commitments that would waste land and resources be avoided. Effective phasing of growth will be required to make the best use of existing infrastructure as well as ensure the logical extension of services in the future.

In 2005, it was determined that sufficient vacant land for residential and commercial development was designated in local official plans to accommodate the anticipated growth in the County over the planning period. Further, based on anticipated growth patterns, the existing designated land was located in the appropriate Settlement Areas. However, unanticipated circumstances may result in alterations to the expected growth patterns during the planning period thus requiring the designation of additional land for development. It is the intention of this Plan to use the population projections presented in Appendix B as a guide to the County's future growth and development. If over the planning period, a local municipality can not absorb the population projections outlined, nothing in this Plan shall restrict other municipalities from accommodating that growth, provided the appropriate services can be provided.

2.3.4 Economic Development

Economic development is an important component of the County's Growth Management policy framework. Many long-term goals and objectives depend on economic activity and the opportunity for residents to live and work in the County.

Agriculture has been an economic mainstay in the County for many years and will continue to evolve as changes to the agricultural industry take place. In this time of change it is important that the County develop diversity in its economic base. The policies of this Plan are intended to protect the agriculture community while fostering new economic development opportunities. Through the policies of this plan the County will;

- a) monitor the supply of employment land to ensure that a sufficient supply is available throughout the County and particularly in those municipalities with access to provincial highways and major arterial roads;
- b) cooperate with local municipalities, the business community and other agencies to ensure that employment centres are served by modern infrastructure systems including road, rail, and telecommunications networks;
- c) encourage local municipalities to provide a balanced mix of housing to ensure a sufficient labour force and reduce the need for commuting;
- d) encourage local municipalities to promote a high standard of urban design to create healthy communities which attract investment;
- e) support local municipalities to promote economic development opportunities adjacent to Provincial 400 series highways where justified through an amendment to the local official plan; and,
- f) support the retention of educational, health, cultural and religious facilities to ensure that the County's communities are provided with those opportunities that facilitate growth and well-being. Such facilities provide a vital role in small communities and add economic vitality and a sense of place where quality of life is considered a major attraction for growth and development.

2.3.5 General Policies

The policies of this Plan are intended to promote communities that are diverse and have a sense of place. Lifestyle choice, economic vitality and protection of the natural environment are important components of the Growth Management policies.

Lands which are currently designated for development in local official plans are anticipated to be adequate to meet the growth projections for the planning period. New lot creation in Agricultural Areas will only be permitted in accordance with Section 4.5.3.

The policies are structured to ensure that the local municipalities have adequate opportunity to plan for growth while recognizing the need to: protect agricultural land and natural resources; prevent land use conflicts; and provide services commensurate with the level of growth anticipated.

Growth shall be directed to the Settlement Areas conceptually identified on Schedule A.

Local municipalities shall define the limits of Settlement Areas in their official plans. Where a Settlement Area is not an incorporated municipality the limit of the Settlement Area shall be the urban development boundary established in the local Plan.

Local municipalities shall develop Growth Management Strategies and Settlement Capability Studies as parts of their official plans to rationalize the type, amount, location and timing of growth and development and to establish the basis for the provision of the services and the necessary infrastructure.

Prior to the expansion of the limits of an existing Settlement Area, the local municipality shall prepare a Comprehensive Review including, the appropriate background information necessary to justify the expansion. The background information should address:

- (a) population and employment projections;
- (b) the need for expansion relative to land availability in other areas of the municipality;
- (c) intensification and redevelopment capabilities;
- (d) impact on the Natural System, aggregate, mineral and petroleum resources, and agriculture;
- (e) availability of servicing;
- (f) whether the lands are specialty crop areas; and
- (g) alternative locations that avoid prime agricultural lands and alternative locations on lower priority agricultural lands in prime agricultural areas.

Local municipalities, through their official plans or secondary plans, shall prepare detailed policies to guide redevelopment of areas in transition or land that is under utilized.

2.3.6 Settlement Capability Study

A Settlement Capability Study shall be prepared as part of a Comprehensive Review in support of the expansion of existing Settlement Areas. Expansion is deemed to be development beyond the Settlement Area boundary, established in the local official plan, as of the date of passing of this Plan. The Settlement Capability Study shall be completed to the satisfaction of the County in consultation with the Province and shall include the following:

- a) an analysis of the hydrology and hydrogeology of the area to determine the capability of surface and groundwater resources to provide sufficient quantity and quality of water supply on a sustainable basis;
- b) an assessment of the impact of future development on existing groundwater quantity and quality and on existing sources of drinking water, including municipal, communal and private wells;
- c) an assessment of the long-term sustainability of the soil, hydrologic and hydrogeologic conditions to accept sewage effluent;
- d) an identification of any existing restrictions to future development;
- e) an assessment of surface drainage;
- f) an assessment of the impact of new growth on the Natural System;
- g) an assessment of traffic and transportation services and needs; and
- h) an assessment of the existing servicing systems and their condition.

2.3.7 Housing Policies

It is the policy of the County to encourage a wide variety of housing by type, size and tenure to meet projected demographic and market requirements of current and future residents of the County. These policies may be elaborated upon within local municipal official plans.

The County supports:

- a) intensification and redevelopment, primarily within Settlement Areas, and in other areas where an appropriate level of physical services is or will be available in the immediately foreseeable future and subject to the policies of Section 2.3.6. In this regard, the County will require that 15 percent of all development occur by way of intensification and redevelopment;
- b) the provision of alternative forms of housing for special needs groups, where possible;

- c) the maintenance and improvement of the existing housing stock. This shall be encouraged through local maintenance and occupancy standards by-laws;
- d) the utilization of available programs and/or funding, if any, from applicable levels of government for assisted housing for households, including those with special needs, as well as programs to rehabilitate older residential areas; and
- e) housing accessible to lower and moderate income households. In this regard the County will require that 20 percent of all housing be affordable. In the case of ownership housing the least expensive is considered to be housing for which the purchase price is at least 10 percent below the average purchase price of a resale unit in the regional market area. This 'benchmark' purchase price figure for 2005 is \$195,845 in the Middlesex regional market area. This 'benchmark' figure will change over time as a result of fluctuating mortgage costs, utility rates, and the vagaries of the housing market over which the County has no control. The County will; however, monitor the 'benchmark' on an annual basis.

In addition, the following policies shall apply:

- Councils of the local municipalities are encouraged to keep a housing inventory outlining the mix of housing by both type and tenure to reinforce the County housing policies.
- In the preparation of local official plans, Councils of local municipalities shall include policies and designations to implement the policies of this Plan, and the following:
 - i) appropriate criteria for intensification and redevelopment including site plan provisions, locational and land use compatibility criteria;
 - ii) policies to permit the conversion of larger single detached dwellings into multiple units;
 - iii) policies to preserve, improve, rehabilitate or redevelop older residential areas; and
 - iv) policies which permit, subject to appropriate criteria and conditions, apartments in houses.

2.3.7.1 Adequate Supply of Land and Lots

It is the goal of the County that at least a 3 year supply of draft approved and registered plans of subdivision lots be maintained, based on the consumption rates of the local municipalities. The County shall, in conjunction with the review of the County Official Plan, review the supply of vacant lots identified for residential development in draft approved and registered plans of subdivision and infill lots.

Every local municipality shall provide to the County, at least every five years, a summary of the supply of vacant land designated for future residential development to allow the County to ensure that at least a ten year supply of land designated for future residential development is maintained, based on the most recent population projections.

The County will, in co-operation with the local municipalities, monitor the consumption rates of residential lands and residential growth.

2.3.7.2 *Number, Range and Mix of Housing Units*

Based on an overall permanent population increase of 17,394 people to the year 2026 and a projected average of 2.65 persons per unit, a total of approximately 6,560 additional residential units will be required throughout the County to house the increased population.

The mix of unit types and tenure shall be established by the local municipalities through their official plans. In the interim the following policies shall guide County Council and local Councils.

Local municipalities shall include policies in local official plans that will encourage a range of housing types, housing densities and housing options to meet the needs of their share of current and future County residents.

County Council encourages innovative housing and subdivision design and servicing standards as a means of reducing housing costs.

The County will permit prefabricated or portable manufactured housing units which meet the Ontario Building Code and/or Canadian Standards Association (CSA) Standards subject to policies of this Plan and the local official plan.

Local municipalities are encouraged to develop affordable housing targets that are generally consistent with the County's target which provides the opportunity for housing accessible to lower and moderate income households.

2.3.7.3 *Intensification and Redevelopment*

The County and local municipalities shall support opportunities to increase the supply of housing through intensification and redevelopment in appropriate locations, taking into account municipal services, transportation and environmental considerations. Housing intensification and redevelopment shall include, but not be limited to:

- a) the conversion of single detached dwellings, in appropriate locations, into multiple residential units;
- b) the creation of new residential units on vacant or underdeveloped lands through infilling in Settlement Areas;
- c) the creation of residential units above compatible commercial uses;

- d) accessory apartments; and
- e) boarding and lodging houses.

County Council shall encourage residential intensification and redevelopment in areas designated for residential use which comply with the following criteria:

- the physical potential of the existing building stock or sites can accommodate the identified forms of residential intensification;
- the existing or planned physical services can support new households in the area; and
- physical compatibility with the existing built form;

Local official plans shall consider site specific characteristics for neighbourhood compatibility in order to address matters related to the physical character of redevelopment projects. Such matters as building height, lot coverage and parking, should be addressed in local official plans to guide the approval of zoning, site plans, and/or minor variances which occur as a result of intensification and redevelopment projects.

2.3.7.4 Implementation

The County shall, within its legislative authority:

- support increased residential densities, adequate land supply and residential intensification and redevelopment; and
- support new and innovative planning and servicing standards.

2.3.8 Settlement Areas

The local municipality shall have the primary responsibility for detailed planning policy within the Settlement Areas, and those locally designated hamlets which form part of the Agricultural Area, as shown on Schedule A.

Urban Areas and Community Areas shall be the focus for future growth including residential, commercial and industrial development. These areas are characterized by a range of land uses and have full services or where warranted, partial services, as described in Section 2.3.2. Designated Hamlets in Agricultural Areas may accommodate a limited amount of the anticipated County growth and development.

2.3.8.1 Urban Areas

Urban Areas either provide or demonstrate a strong potential to provide full municipal services. Urban Areas have the highest concentration and intensity of land uses in the County. Urban Areas are the focus for future growth and are expected to accommodate a significant portion of the projected growth over the planning period.

New development, other than infilling, shall be fully serviced by municipal or communal water and sewage disposal systems.

Where there is substantial vacant land between the built-up area and the Urban Area boundary, the local municipality shall ensure that development proceeds in a logical, phased manner.

Proposals to expand the boundary of an Urban Area as included in the local Official Plan shall require a comprehensive review and may require an amendment to the County Plan if such expansion is deemed to alter the County's Growth Management Strategy.

2.3.8.2 Community Areas

Community Areas are intended to serve the surrounding Agricultural Areas as well as provide an alternative to city or Urban Area living. Community Areas serve a community function but provide a more limited range of land uses and activities than in Urban Areas. The concentration and intensity of development is intended to be lower than in Urban Areas.

While Community Areas are intended to accommodate a portion of the County's future growth, certain Community Areas may experience more or less growth because of servicing, environmental and/or economic circumstances.

New development in Community Areas is intended to take place on municipal or communal services; however, in areas where new development is proposed and municipal or communal services are not currently available or will not be available in the immediate future, development may proceed on other than full municipal services, on an interim basis, where provided for in a master servicing strategy component of a Settlement Capability Study or Environmental Assessment pursuant to the Environmental Assessment Act. Such development should not preclude the efficient use of land should full services become available in the future and all servicing studies shall consider all servicing options.

In considering development applications in Community Areas, the local municipality shall ensure that the character of the Community Area and cultural heritage resources of the area is protected.

Infilling, rounding out or minor extensions of existing development in Community Areas may be permitted; however, significant outward expansion of the boundary of the Community Area, through plans of subdivision, shall require a comprehensive review to the local official plan.

2.3.8.3 *Hamlets in Agricultural Areas*

Within the Agricultural Area there are existing designated hamlets that are not Urban or Community Areas. These hamlets may have the potential to accommodate some future development.

Infilling, rounding out and minor extensions of these existing hamlets may be permitted subject to the provision of the appropriate types and levels of servicing. A Settlement Capability Study may be required depending on the scale of development proposed. New lots shall generally be created through the consent process.

2.3.9 *Agricultural Area Policies*

Agriculture is the cornerstone of the County's economy and culture. A significant portion of the County's land base is farmed and the diversity of agricultural products is amongst the best in Ontario. Urbanization has however, created conflicts in the agricultural area and continues to encroach on prime agricultural land.

The policies of this Plan are intended to affirm that agriculture is a predominant activity in the County. Non-agricultural activities will be closely scrutinized and directed to Settlement Areas unless the activity is agriculturally related and a location in proximity to agriculture is necessary.

The Agricultural Area comprises all lands not designated Settlement Area, or Natural Environment Area.

The primary use of land in the Agricultural Area shall be agriculture, farm-related industrial and commercial uses in accordance with Section 3.3.5 and accessory uses.

Agriculture-related uses shall be directed to Settlement Areas except where they are essential to the functioning of agriculture, require a location in close proximity to agriculture or would cause conflicts in Settlement Areas.

Consents shall be, in accordance with the policies of Section 4.5.3.4.

Temporary residential units for farm help are permitted if grouped with the existing farm buildings. Consents will not be permitted for farm help lots.

Fragmentation of farm holdings is discouraged.

2.3.10 Natural Heritage Features

Natural Heritage Features are shown on Schedule C and identify lands that have natural environment functions and significance which should be considered when development proposals are reviewed. The Natural Heritage Features shown on Schedule C have been consolidated from existing information sources.

When an application for development within a Natural Heritage Feature, or within the adjacent lands of the elements as identified in Table 1 is being considered by Council, the appropriate Conservation Authority and the Province shall be consulted. The applicant will be required to submit a suitable Development Assessment Report in accordance with the policies of Section 2.2.1.2. The report shall address protection of the Natural System and show how existing and potential hazards shall be accommodated in a manner consistent with accepted engineering techniques and resource management practices and applicable provincial policies.

Table 1: Areas Subject to Development Assessment Report (DAR)

Natural System Element	Development adjacent to Natural System Element	Development within Natural System Element
Wetlands and adjacent lands. Adjacent lands are those within 120 metres of an individual wetland area or land connecting individual wetlands within a wetland complex	DAR required within 120 m	Not Permitted
Significant habitat of endangered or threatened species	DAR required within 100 m	Not Permitted
Floodplains and flood prone areas mapped and/or regulated by a Conservation Authority	DAR required within 50 m	Not Permitted
Significant Woodlands and ANSI's as identified on Schedule 'C'	DAR required within 50 m	DAR Required
Significant Wildlife Habitat	DAR required within 50 m	DAR Required
Significant Valley Lands	DAR required within 50 m	DAR Required
Fish Habitat	DAR required within 30 m	Not Permitted

The expansion of farming operations, and non-farm uses and clearing of forested lands, site regrading and drainage schemes will be discouraged where, in the opinion of the agencies having jurisdiction, ground and surface water resources, including groundwater recharge and storage areas would be seriously altered or diminished.

Where new development is proposed on a site part of which is identified as a Natural Heritage Feature in the Plan, then such Feature shall not necessarily be acceptable as part of the dedication for park purposes required under the Planning Act. Where an open water course is dedicated to the municipality adequate space shall be provided for maintenance operations.

2.3.11 Natural Hazards

No buildings or structures, nor the placing or removal of fill of any kind whether originating on the site or elsewhere, nor grading shall be permitted in an area subject to the Conservation Authorities Fill, Construction and Alteration to Waterways Regulations, except where such buildings, structures or fill are intended for flood or erosion control or maintenance and management of the natural environment, recreational purposes or non-residential accessory farm buildings such as a sugar shack; and are approved by the County and the Conservation Authority. Remedial works required to stabilize slopes adjacent to river and stream systems will require written approval from the Conservation Authority having jurisdiction.

2.4 PHYSICAL SERVICE & UTILITIES

2.4.1 Introduction

Physical Services and Utilities is the third theme area of the Official Plan Policy Framework. These policies include the supply and distribution of water, the collection and disposal of sewage, the disposal of solid waste, electric power transmission lines and transportation networks. While the County only has authority over County Roads, it recognizes the importance of the other facilities and systems to serve daily activity and future growth and development.

The policy framework for physical services and utilities focuses on ensuring that the necessary physical services and facilities are available throughout the County, in order to accommodate future growth and development, while ensuring that the provision of such services and utilities is in keeping with the policies of Resource Management and Growth Management found in Sections 2.2 and 2.3.

2.4.2 Transportation Network

2.4.2.1 *Transportation Hierarchy*

The transportation network within the County includes a system of roads, highways and railways that are owned and operated by the Federal Government, the Province, the County, local municipalities, the public and private agencies. Schedule "B" shows the County Transportation Network.

The County Road system provides inter-municipal service moving people and goods throughout the County. There is a need to plan the transportation network and specifically the County Road system in order to protect rights-of-way for future improvements and to recognize that there is a strong relationship between transportation and urban form.

Classification of Roads

All roads within the County can be classified as follows:

- provincial freeways and highways;
- county roads; and
- local roads

a) Provincial Highways

Provincial Highways 401 & 402 are limited access freeways that traverse Middlesex County. They provide for the needs of high volume traffic and link the major market areas between the United States, Southern Ontario and Quebec.

Provincial Highways 4, 7, and 23, generally serve as arterial roads. Therefore, direct private access to such highways should be avoided. Any access to such highways will require the approval of the Province.

b) County Roads

County roads generally function as arterial or collector roads and direct private access is controlled through By-law #5783 for the County of Middlesex. The County road system provides for the efficient movement of traffic between provincial freeways and highways and local roads. The County shall discourage development which would inhibit traffic movement along the County road system. The cumulative impact of individual private accesses to the County Road system compromises the underlying function of this transportation network.

The nature of road traffic along County roads can have an impact on adjacent land uses. The volumes, speeds and types of traffic can be a nuisance especially in residential areas. On County arterial roads, where speeds and volumes are higher, mitigating measures that attenuate noise and vibration factors shall be utilized. For high volume arterial roads, access shall be strictly controlled and where such roads abut residential areas, reverse frontage (back lotting) is encouraged. Agricultural, industrial, commercial and open space land uses are considered to be appropriate land uses adjacent to arterial County roads.

c) Local Roads

Local roads move traffic from arterial and collector roads to abutting properties. Local roads are generally under the authority of local municipalities. Transportation policies should be included in local official plans to protect the integrity of the local municipality's transportation network. Based on the volumes, types, and nature of the traffic, municipal roads may be classified as arterial, collector or local roads in the local official plan.

2.4.2.2 General Policies

The County shall:

- a) Minimize conflict between local and non-local traffic by defining a hierarchy of roads within the County. This hierarchy shall support the Growth Management policies established in Section 2.3;
- b) Allocate resources to ensure the transportation system meets the needs of the road users and growth policies of the County;
- c) Encourage integration of transportation facilities provided by local municipalities, adjacent municipalities and the Province;
- d) Review road corridors, in consultation with local municipalities and the Province, to determine if a change in classification is necessary. Transfer of road jurisdiction to the County shall not require an amendment to the Plan;
- e) Encourage safe, convenient and visually appealing pedestrian facilities in Settlement Areas;
- f) Limit direct access to County Roads where access is available by a local road;
- g) Ensure that development proposals that are likely to generate significant traffic are accompanied by a transportation study addressing the potential impact on the transportation network and surrounding land uses;
- h) Encourage the conversion of abandoned railway rights-of-way back to private ownership or to other appropriate public uses;
- i) Ensure where possible, compatible land uses adjacent to railway corridors and rail terminal facilities. New development may be required to provide appropriate safety measures such as setbacks, intervening berms, security fencing and noise and vibration studies satisfactory to the local municipality and in consultation with the railway company; and

- j) Address the matter of cross boundary traffic with the City of London, adjacent Counties and municipalities by establishing a planned network of roads which considers and coordinates the road hierarchy across municipal boundaries.

2.4.2.3 County Roads Right-of-Way Widths

The following County Road minimum rights-of-way widths shall apply:

- a) Arterial roads 36-metre right-of-way width
- b) Collector roads 30-metre right-of-way width
- c) Arterial roads constructed to an urban standard within Settlement Areas 30-metre right-of-way width
- d) Collector roads constructed to an urban standard within Settlement Areas 26-metre right-of-way width

Where road right-of-way widths are less than those described above, the County may require, as a condition of consent, the dedication of lands for road widening purposes. In addition, road widening may be required as a condition of development pursuant to Section 41 of the Planning Act and Section 4.5.2 of this Plan. Right-of-way widths as described above are the largest widenings that may be obtained as a condition of development. Where County roads rights-of-way are less than those described, widenings may be taken equally from both sides of the road as measured from the centre line of the original road allowance. Where topographical features or other situations necessitate a larger widening on one side, no more than 50% of the required widening shall be required through site plan control.

2.4.2.4 County Road Setbacks

Generally, the following minimum setbacks shall apply where a building or structure is to be erected on a lot adjacent to a County road:

- a) arterial roads 38 metres from the centre line
- b) collector roads 33 metres from the centre line
- c) arterial and collector road located within urban, community and hamlets in agricultural areas setback requirement stipulated in the local zoning by-law
- d) open storage on a lot which abuts or fronts on a County road setback shall be equal to the main building setback on the lot stipulated in the local zoning by-law

2.4.2.5 Access to County Roads

Access to any County road shall require the approval of the County Roads Department and will be subject to By-law #5783 of the County of Middlesex for access permits. The location of access driveways should not create a traffic hazard due to concealment by a curve, grade or other visual obstructions. Access driveways should be limited in number and designed to minimize the danger to vehicular and pedestrian traffic in the vicinity.

In order to maintain an effective and efficient transportation network, access to county roads will be strictly enforced. In this regard, any new development proposed adjacent to a county road will require the approval of the County Roads Department.

2.4.3 Communication and Transmission Infrastructure

The location of communication and transmission infrastructure can have a significant impact on the Natural System as well as the built environment. It is important that these facilities be designed and located to minimize negative impacts wherever possible.

2.4.3.1 General Policies

The County shall:

- a) Cooperate with local municipalities, the business community and other agencies to establish high quality electronic communication networks including fibre optics, and telecommunications;
- b) Ensure all communication corridors and transmission facilities are constructed, either above ground or underground to minimize the physical, visual and social impacts on the community and natural environment;
- c) Ensure, where possible, shared rights-of-way and/or existing transportation and utility corridors shall be used in order to reduce impacts on the community and natural environment;
- d) Ensure facilities are located to avoid the Natural System, where possible, and minimize the impact on Agricultural Areas. Where facilities must be located in these areas, consideration shall be given to the environmental implications associated with the development;
- e) Ensure that in Settlement Areas facilities are located underground or constructed with aesthetically pleasing towers;
- f) Encourage construction of facilities to be timed to minimize crop losses;
- g) Ensure the crossing of County Roads or road rights-of-way are approved by the County;

- h) Be assured that the necessary facilities will be provided in a timely fashion prior to approval of any development. The cost of extending services will be the responsibility of the developer;
- i) Ensure any odour, noise or emission from a facility or associated building or structure is mitigated to acceptable levels;
- j) Ensure soil removal in trench construction shall be carried out so that soil strata are replaced in their former order; and
- k) Ensure surplus soils derived from trench excavation and construction debris shall be disposed of so as not to adversely impact the natural environment and in a manner acceptable to the landowner and the local municipality.

2.4.4 Waste Management

The County shall develop and maintain a long term waste management strategy. The waste management strategy will promote waste diversion (reduce, reuse, recycle) as well as other alternatives as part of an integrated waste management system.

2.4.4.1 General Policies

The County shall:

- a) Participate in the London/Middlesex Waste Management Plan initiatives and ensure that a full range of waste management options are addressed;
- b) Require new waste disposal facilities to proceed by way of an amendment to the local official plan;
- c) Require development proposals generally within 500 metres of either an active or closed landfill site to be accompanied by a study prepared by the proponent which evaluates the presence and impact of environmental contaminants including methane gas, leachate in soils and groundwater. The study shall address any mitigation measures which may be required;
- d) Require all local Official Plans to identify all known closed, abandoned and active waste disposal sites and provide policies for development in proximity to such sites; and
- e) Cooperate with all levels of government and other agencies to promote public awareness of waste issues and innovative ways of reducing waste.

2.4.5 Sanitary Sewers and Water

The County of Middlesex does not fund or maintain sanitary sewer or water systems in the County. The County does however, promote efficient and environmentally responsible development which is supportable on the basis of appropriate types and levels of water supply and sewage disposal. The County encourages new development to proceed on the basis of full municipal services. Where partial municipal services are considered the supporting studies shall address all servicing options.

2.4.5.1 General Policies

The County shall:

- a) Encourage development on municipal water and sanitary sewer systems. Where local municipalities do not provide or demonstrate a strong potential to provide full municipal water and sewage treatment facilities, development other than infilling will require a Settlement Capability Study as outlined in Section 2.3.6;
- b) Encourage local municipalities with water and sanitary sewage systems to monitor treatment capacities and operational effectiveness and to provide such information to the County at least every five years;
- c) Encourage improvement of existing systems and the installation of new systems in Settlement Areas throughout the County, where technically and financially feasible;
- d) Cooperate with local municipalities, the Province and other public and/or private partners to negotiate innovative arrangements for the provision of water and sanitary sewage systems in the County;
- e) Require site specific development proposals to be accompanied by an evaluation of servicing options within the Settlement Areas. The evaluation shall address the County's preferred servicing hierarchy:
 - i) extension from existing municipal system
 - ii) extension from existing communal system
 - iii) new municipal or communal system
 - iv) individual septic systems and private wells
- f) Evaluate local municipality needs for assistance with respect to the provision of water and sanitary sewage systems in accordance with the Growth Management framework established in Section 2.3;

- g) Encourage the proper maintenance of private sewage treatment systems in the County in order to protect and improve ground and surface water quality and avoid system malfunctions and failures;
- h) Encourage the correction of failed systems;
- i) Encourage and promote the use of technological and other system improvements which may help achieve reduced volumes and/or improved quality of effluent; and
- j) Encourage local municipalities to implement suitable and economically viable methods of reducing urban storm water runoff and to improve its quality in the furtherance of the Resource Management policies of this Plan.

2.4.6 Alternative & Renewable Energy Systems

The County shall encourage the development of alternative and renewable energy systems, as a source of energy for the economic and environmental benefit of Middlesex County and the Province of Ontario. These systems significantly reduce the amount of harmful emissions to the environment when compared to conventional energy systems. The County encourages the use of wind, water, biomass, methane, solar and geothermal energy.

2.4.6.1 Wind Energy Generation Systems

The County supports the development of Wind Energy Generation Systems (WEGS) due to its increasing recognition as a viable alternative energy source. These policies are intended to accommodate such systems at both small and commercial scales.

Small Wind Energy Generation Systems (SWEGS) generally produce electricity only for the on-site domestic consumption of the property owner. The establishment of a SWEGS is generally considered to be an accessory use to the principle use of the property and therefore may be permitted, subject to the provisions of the municipal zoning by-law.

Commercial Wind Energy Generation Systems (CWEGS) are a more intensive land use and usually comprise more than one generating unit. CWEGS are intended to be connected to the provincial electrical transmission grid. The establishment of a CWEGS will not require an amendment to this Plan. The establishment of a CWEGS may require an amendment to the local official plan.

As it relates to the establishment of CWEGS, the County shall:

- a) Support the use of Site Plan Control for the location of road access, parking, accessory buildings, vegetative buffers, location of external facilities, storm water management / drainage and any other identified impact mitigation measures.

- b) Require that the CWEGS shall be designed, built, operated and maintained by firms or individuals qualified to undertake the work.
- c) Require that proponents of proposed CWEGS within 10 km of an airport reference point obtain written approval from Transport Canada.
- d) Encourage CWEGS to locate on large parcels of lower capability agricultural land and be positioned to minimize disruption to normal farm practices.
- e) Encourage CWEGS to locate in areas with limited residential and institutional development on-site or nearby in order to provide sufficient area for setbacks from sensitive land uses. The site shall be separated from settlement areas, in order to reduce the potential safety, noise and visual impacts.
- f) Require that appropriate studies be undertaken by qualified professionals for the development of CWEGS, wherein the proponent shall undertake one or more of the following:
 - A noise impact study to determine setbacks from CWEGS so that noise levels will not exceed the Ministry of the Environment noise standards for sensitive land uses;
 - Where airports or telecommunication systems exist in proximity to the proposed CWEGS, a study to ensure the siting and operation of the turbines will not impact on the operation or safety of these land uses;
 - A visual impact study to determine the impact and mitigation measures required for the shadow or reflection of light coming from any part of the wind turbine on surrounding sensitive land uses; and
 - Where development occurs in or adjacent to any element of the County's Natural System, a Development Assessment Report (DAR) to determine the potential impact on the natural feature and the study shall identify measures to mitigate the impact as required.

2.4.7 Groundwater Management and Protection

Groundwater is a major source of water for domestic, industrial, commercial and agricultural uses in Middlesex County and it is imperative that this resource be protected in order to ensure a sustainable and safe supply to those residents and businesses that rely on it.

The Counties of Middlesex and Elgin commissioned a Groundwater Study through funding provided by the Ministry of the Environment (Middlesex-Elgin Groundwater Study, Final Report July 2004) in order to assess groundwater conditions and recommend management and protection practices to maintain the quality and quantity of the groundwater resource. The primary goal of this study was to examine groundwater resources as a local and regional level, and to identify potential risks to these resources. The Study delineated well-head protection areas for municipal wells, mapping of groundwater recharge and discharge areas, and identification of sensitive groundwater areas.

The following general policies will provide guidance with respect to the protection and management of groundwater resources. The Middlesex-Elgin Groundwater Study should be cited in local official plans as a reference document that is applicable to this region. Local municipalities shall address the following in their official plans and zoning by-laws:

- (a) promotion of water conservation practices, including the efficient and sustainable use of water resources,
- (b) encourage stormwater management practices that minimize stormwater volumes and contaminant loads,
- (c) implementation of restrictions on development and site alteration to protect all municipal drinking water supplies and sensitive groundwater features

3.0 DETAILED LAND USE POLICIES

3.1 INTRODUCTION

The detailed policies of this Plan apply to the lands designated on Schedule A. These policies shall be read and interpreted in conjunction with the Policy Framework established in Section 2, the policies of Sections 4 and 5 and Schedules A and C.

The detailed land use policies provide specific direction for growth and development within the County. Additional policy direction is provided through the local official plans.

The specific land use designations established through the policies of this Section include:

- Settlement Areas;
- Agricultural Areas; and
- Natural Environment Areas.

Any development on lands identified on Schedule A of this Plan must conform to the policies associated with the particular land use designation.

3.2 SETTLEMENT AREAS

3.2.1 Introduction

The Growth Management policies of this Plan, presented in Section 2.3, direct a significant portion of the County's future growth to Settlement Areas in order to:

- protect Agricultural Areas;
- protect the Natural System; and
- promote efficient use of water and sewage services.

The Settlement Area designation is comprised of two policy sections: Urban Areas, Community Areas. The criteria for establishment of Urban and Community Areas and the policy framework for these Areas are set out in Section 2.3. Detailed land use Policies related to Hamlets can be found in Section 3.3, Agricultural Areas.

3.2.2 Development Policies

New development in Settlement Areas is encouraged to proceed by Plan of Subdivision. Development by consent will be considered only in accordance with Section 4.5.3.

A Settlement Capability Study, as outlined in Section 2.3.6, shall be prepared in support of any new development in a Settlement Area which does not provide full municipal water and sanitary sewer systems.

County Council recognizes that many Settlement Areas are surrounded by the Agricultural Areas designation. Infilling, rounding-out or minor extensions of existing development in Settlement Areas may be permitted provided that there is no major expansion of the outer limits of existing development as identified in the local Official Plan and subject to:

- a) the new development being serviced in accordance with accepted standards; and
- b) the development complying with the Minimum Distance Separation Formulae.

A Settlement Capability Study, as outlined in Section 2.3.6, is not required for these infilling, rounding-out or minor extensions.

Settlement Areas shall develop in a manner that is phased, compact and does not result in a strip pattern of development.

Every effort shall be made to preserve the historic character of Settlement Areas by requiring new development to complement the positive elements of the existing built-form.

Development shall minimize negative affects on the Natural System or sites of historical, geological or archaeological significance.

3.2.3 Local Official Plans

To achieve some consistency of approach, the County encourages local municipalities to include general development policies in their local official plan dealing with the following issues:

- a) the Settlement Area share of the total future overall County growth projection;
- b) residential, including low, medium and high density residential uses, affordable housing, special needs housing, infilling and intensification;
- c) current land supply;
- d) commercial, including downtown commercial, highway commercial, shopping centre commercial (where appropriate), neighbourhood commercial and other commercial uses, as necessary;
- e) industrial, including a broad range of industrial uses;
- f) institutional, including health, cultural and educational facilities, public recreation facilities, government offices, public utilities and related uses and activities;
- g) the natural and built environment;
- h) community improvement;

- i) municipal services;
- j) transportation;
- k) economic development; and
- l) other issues unique to the Settlement Area.

Local official plans shall contain, as a minimum, implementation policies dealing with the following issues:

- Amendments to the local Official Plan;
- Comprehensive Zoning By-laws and amendments;
- Minor variances;
- Non-conforming and non-complying uses;
- Plans of Subdivision;
- Site Plan Control;
- Consents;
- Property maintenance and occupancy standards;
- Public consultation;
- Servicing and phasing;
- Relationship to the County Official Plan; and
- Other by-laws pursuant to the Planning Act.

Secondary plans may be prepared as part of the local official plan to provide greater detail regarding land uses and specific development policies unique to each Settlement Area.

3.2.4 Urban Areas

3.2.4.1 Permitted Uses

The local official plans shall provide detailed land use policies for the uses permitted in Urban Areas. These uses shall include:

- a) A variety of housing types;
- b) Commercial uses;
- c) Industrial uses;
- d) Community Facilities;

- e) Natural System elements;
- f) Recreation and Open Space, including active and passive recreation activities; and
- g) Other specific land use designations necessary to reflect the unique needs and character of each Urban Area.

New livestock operations shall not be permitted in Urban Areas. No expansion of existing livestock operations shall be permitted beyond the existing requirements of the Minimum Distance Separation Formula II.

3.2.5 Community Areas

3.2.5.1 Permitted Uses

- a) A variety of housing types;
- b) Commercial uses primarily serving the day-to-day needs of the residents of the community;
- c) Dry industrial uses;
- d) Community facilities;
- e) Recreation and Open Space, including active and passive recreation activities; and
- f) Other specific land use designations necessary to reflect the unique needs and character of the Community Area;
- g) Natural System elements

New livestock operations shall not be permitted in Community Areas. No expansion of existing livestock operations shall be permitted beyond the existing requirements of the Minimum Distance Separation Formula II.

3.3 AGRICULTURAL AREAS

3.3.1 Introduction

The purpose of the Agricultural Areas designation is to protect and strengthen the agricultural community, a major economic component within the County, while recognizing the potential for a limited amount of development in existing locally designated hamlets. The Agricultural Areas policies protect agricultural lands from the intrusion of land uses that are not compatible with agricultural operations. These incompatible uses are most frequently identified as non-farm related residential dwellings on small lots. As a result, this Plan contains policies that limit the creation of new lots in Agricultural Areas.

The Growth Management Policies of this Plan support the protection of agricultural land by encouraging most of the projected population growth to locate in Settlement Areas.

The Agricultural Areas designation includes all land not otherwise designated as Settlement Areas or Natural Environment Areas.

3.3.2 General Policies

It is the policy of County Council that the Agricultural Area in Middlesex County shall be preserved and strengthened with the goal of sustaining the agricultural industry that is so vital to the Middlesex economy.

In the Agricultural Areas, farm parcels shall remain sufficiently large to ensure flexibility and the economic viability of the farm operation. The creation of parcels of land for agriculture of less than 40 hectares shall generally not be permitted.

Notwithstanding the policies of this Plan that permit consents in the Agricultural Area on a limited basis, in no instance shall an original township lot be divided into more than two parcels of land. For the purposes of this section, any township lot that has been severed for the purposes of a school site or church site prior to 1995, a road widening or minor lot line adjustments shall be deemed to be an original township lot.

Existing separate and distinct parcels of land of insufficient size to be a viable farm unit will be encouraged to consolidate with abutting farm units. Development of these lots must conform to the Minimum Distance Separation Formula.

3.3.3 Permitted Uses

Agricultural Areas shall generally permit the following use:

- a) agricultural and related uses;
- b) up to two farm residences provided the second farm residence is a temporary residential unit;
- c) forestry uses;
- d) mineral aggregate and petroleum extraction;
- e) conservation;
- f) public and private open space and recreation facilities;
- g) home occupation;
- h) occasional agricultural demonstration events such as a plowing match;

- i) retail stands for the sale of agricultural products produced on the farm unit upon which the retail stand is located;
- j) bed and breakfast establishments; and
- k) farm related commercial and industrial uses in accordance with Section 3.3.5.

New estate residential development is prohibited in the Agricultural Area.

3.3.4 Hamlets in Agricultural Areas

Where an approved local official plan permits development in designated hamlets, such development may proceed. No further land shall be designated for development except by way of a comprehensive review.

In approving the local official plan amendment, the County shall consider the need for such expansion in the context of the projected population growth for the local municipality and the County as a whole and other matters deemed important by the County.

Infilling, rounding out in depth or minor extensions of existing development may be permitted provided that there is no further outward expansion of the limits of existing development, subject to the following:

- a) the new development is serviced in accordance with Section 2.4.5 and accepted servicing standards; and
- b) the development complies with the Minimum Distance Separation Formula.

3.3.5 Farm Related Commercial and Industrial Uses

Commercial and industrial development directly related to, and supportive of, agricultural operations, including feed mills, farm implement dealers, grain drying, abattoirs, kennels, stables and veterinary clinics may be permitted providing the following policies are considered:

- a) the commercial or industrial operation cannot reasonably be located in a Settlement Area and must be located in proximity to farming activities;
- b) such uses shall be located to conform with the Minimum Distance Separation Formula;
- c) an amendment to the Zoning By-law is approved;
- d) the commercial or industrial use shall not require large volumes of water nor generate large volumes of effluent and shall be serviced with appropriate water supply and sewage treatment facilities;

- e) commercial and industrial uses shall be located and designed to minimize potential adverse impacts upon adjacent residential or other sensitive uses by buffering measures such as landscaping, berming and building setback and layout;
- f) the location of commercial and industrial uses must provide for a minimum sight distances from the access points in either direction along a County or local road; and
- g) the site plan policies of local official plan.

3.3.6 Home Industries

Home industry uses, which comprise a gainful occupation conducted in whole or in part in an accessory building (shed or farm building) by a member of that family and up to three non-family members, shall be permitted. In order to ensure that the scale of the home industry is clearly accessory to the residential or farm use, on lots less than 1.0 ha in size, the gross floor area of the home industry shall not exceed the gross floor area of the residential unit. Home Industries shall have no negative impact on the Natural System.

Outside storage associated with a home industry shall be limited in scale and be screened from view from surrounding roads.

3.3.7 Mineral Aggregate Extraction

In the Agricultural Areas, mineral aggregate extraction is a permitted use in accordance with the provincial Agricultural Land Policies and Section 2.2.3 of this Plan.

Local Official Plans should designate areas of significant aggregate resource potential.

3.3.8 Livestock Capability

In areas designated for residential or other non-agricultural uses, the local official plan shall establish restrictions upon the establishment of new intensive livestock operations or the expansion of existing livestock operations in accordance with the Minimum Distance Separation Formula. These restrictions will be used to ensure compatibility of intensive agricultural and non-agricultural uses.

3.4 NATURAL ENVIRONMENT AREAS

3.4.1 Introduction

The County of Middlesex is characterized by a rich diversity of environmental attributes including wetlands, Areas of Natural and Scientific Interest (ANSI's), significant woodlands, river systems, and fish and wildlife habitats. In order to protect, maintain, and where necessary rehabilitate, natural features for existing and future residents of the County, the Natural Environment Areas policies address the appropriateness of development and restrict development to locations which do not adversely affect the sustainability of these features and ecosystems.

In addition to contributing to the ecosystem processes, some Natural System elements are considered to be Natural Hazards and pose a risk to life or property if the land is developed. These lands include floodplains, areas of steep slope and erosion-prone slopes. This Plan contains policies to restrict development in or near these hazard lands.

The Natural Environment Areas designation includes Wetlands, flood regulated watercourses and associated floodplains and significant portions of Habitats of Threatened and Endangered Species.

3.4.2 Permitted Uses

Permitted Uses in the Natural Environment Areas designation shall be restricted to:

- a) existing uses, including limited expansion where such expansion will have no overall negative impact upon the Natural System;
- b) agriculture;
- c) conservation;
- d) forestry;
- e) wildlife areas;
- f) passive recreation;
- g) public parks, and
- h) horticulture.

Buildings and structures are generally not permitted. Only those uses which do not detract from the primary function of the Natural System for preservation and conservation of the natural environment will be permitted.

3.4.3 General Policies

It is the policy of this Plan to discourage any form of development in Natural Environment Areas designation that would detract from the wise management and stewardship of the Natural System or would cause a risk of property damage or create a potential for loss of life. The following policies shall therefore apply. In the absence of engineered flood line mapping, an Official Plan Amendment will not be required for minor adjustments to Natural Environment Areas boundaries, providing the abutting land use designation remains unchanged.

It is expected that areas designated as Natural Environment Areas will generally remain as such over the long term. Lands designated Natural Environment Areas may be considered for other uses based upon an amendment to this Plan, the local official plan and zoning by-law.

The Natural Environment Areas designation shall not be construed as implying that such land is free and open to the general public or will be purchased by the municipality or other public agency.

The boundaries of the areas designated as Natural Environment Areas on Schedule A are not precise and are accepted as being flexible, to some extent. The limits of the Natural Environment Areas on the ground should be determined through consultation with the appropriate Conservation Authority, the Province, the local municipality and the landowner.

For new development proposed within 50 metres of a flood regulated watercourse and within 120 m of wetland components of the Natural Environment Area boundary, the applicant may be required to submit a DAR in accordance with the policies of Section 2.2.1.2. It is the policy of County Council to consider waiving the requirement for the preparation of a DAR upon recommendation of the appropriate Conservation Authority and/or the Province if the proposal is of such a minor nature or site conditions are such to indicate that the preparation of a DAR would serve no useful purpose for the protection of any Natural System element.

Detailed hazard land mapping is available for much of the County, through the Conservation Authorities; however in the absence of more detailed hazard land or environmentally significant area mapping, the boundaries of the Natural Environment Areas, as shown on Schedule A to this Plan, will be used as guides for the preparation of local official plans and Zoning By-laws, which will implement the policies of this Plan.

The local Official Plan and Zoning by-law shall reflect the Natural Environment Areas designation as shown on Schedule A. The Zoning by-law category shall prohibit all buildings, structures and uses except those permitted in Section 3.4.2 of this Plan.

3.4.4 Wetlands Development Policies

3.4.4.1 Wetlands

- a) Development shall not be permitted within a wetland.
- b) A Wetland Area is a single continuous wetland which may be composed of one or more wetland types.
- c) Adjacent lands are those lands within 120 metres of an individual wetland area or is land connecting individual wetlands within a wetland complex.
- d) Development may be permitted on lands adjacent to wetlands if it does not result in any of the following:
 - i) a loss of wetland function;
 - ii) subsequent demand for future development which will negatively impact on existing wetland functions;

- iii) conflict with existing site specific wetland management practices; and
- iv) loss of contiguous wetland areas.

A development proposal on lands adjacent to a wetland will be subject to a Development Assessment Report (DAR), prepared in accordance with Section 2.2.1.2 and should be carried out by the proponent. The DAR shall be subject to review and comment by the Province, the Conservation Authority and other public authorities having jurisdiction.

- Development proposals may be considered on adjacent lands without amendment to this Plan, in accordance with the abutting land use designation. If a DAR is required in accordance with Section 2.2.1.2 it should indicate how sub-section (d) above, has been met.
- It is the policy of County Council that wetlands shall be designated in local Official Plans and that policies be included to preclude new development within Wetlands.

4.0 IMPLEMENTATION

4.1 GENERAL

The Official Plan shall be implemented by means of the powers conferred on Council by the Planning Act, the Municipal Act and such other statutes as may be applicable. In particular, this Plan shall be implemented by local municipal official plans and zoning by-laws.

The Plan recognizes that the implementation of any policy herein requires that County Council have the legal jurisdiction to do so. Specifically, this Plan is not intended to in any way infringe, nor is it to be interpreted as in any way infringing, on the statutory rights, powers or prerogatives of any other legal jurisdiction except as the County has the legal authority to do so. In addition, all public works shall be in conformity with this Plan. Further, nothing in this Plan shall be interpreted as precluding the continuation of any use legally established prior to Council adoption of the Plan.

The County Official Plan establishes a framework to guide the County's future growth and development. It is the intent of County Council that the County Official Plan provide general guidelines for the preparation and implementation of detailed planning documents by the local municipalities. The level of detail in the County Official Plan is intended to ensure the achievement of the County strategy outlined in the County Strategic Plan and Section 1.2 of this document.

4.2 AMENDMENTS TO THE COUNTY PLAN & MONITORING

This Plan has been prepared to accommodate all growth (agricultural, residential, commercial and industrial) anticipated over the next 20 years. In addition, this Plan reflects and implements the long term strategy established by the County through the County Strategic Plan. Amendments to the Plan should only be required for significant departures from this strategy.

When submitting an application to amend the County Official Plan, the applicant shall provide supporting documentation, to the satisfaction of County Council, which adequately addresses the following:

- a) the intent or purpose of the Plan is not radically altered;
- b) the benefit to the County including, but not limited to, social and financial benefits;
- c) the impact of the proposal on the Natural System;
- d) the adequacy of the County transportation network to accommodate the proposed amendment;
- e) the extent to which the public has been consulted regarding the proposed amendment

This Official Plan is based on a set of assumptions, forecasts, values and objectives which relate to future conditions. To ensure the continued relevance of the Official Plan in view of changing demographic, economic, technological, social and environmental conditions, it is important that the Plan incorporate mechanisms to monitor change, to review its policies and, if warranted, to make amendments.

Monitoring involves recording and appraising the significance of events, trends and decisions in relation to the policies of the Official Plan. The purpose of monitoring is to evaluate the effectiveness and relevance of the Plan. In order to effectively monitor the policies of this Plan, County Council shall:

- a) institute a program for on-going monitoring of factors such as population and household forecasts, land use and development trends, economic conditions, the supply, demand and availability of land for development and employment purposes, the adequacy of municipal services, land costs and the state of the natural environment.

Associated with the foregoing, County Council will prepare the following reports, in conjunction with the 5 year review of this Plan:

- a) A review of the range of housing forms relative to household income distributions for residents of the County;
- b) A review of the supply of land available for housing and employment purposes;
- c) Updated population, household and employment forecasts to coincide with information provided by Statistics Canada;
- d) The uncommitted reserve capacity of the sewage and water facilities in the County and a review of water and sewage infrastructure capacity relative to expected growth; and
- e) A review of the time frames associated with the processing of development applications relative to established targets.

As a priority, County Council shall establish baseline parameters to measure the quality of the natural environment and will evaluate, every five years, the state of the natural environment relative to the established baseline.

County Council, following the adoption of this Plan, shall determine the need to revise the Official Plan in whole or in part in consultation with the public at intervals of not more than every five years. In determining the need to revise the Official Plan, County Council will require the preparation of a report which summarizes the types of planning applications received and the outcome of the monitoring process relative to the effectiveness and relevance of the policies of this Plan.

4.3 LOCAL OFFICIAL PLANS

It is the intent of the County, and a requirement of the Planning Act that local official plans shall conform to the County Plan and be one of the primary means of implementing the policies herein.

It is recognized, however, that some time may elapse between the adoption of the Plan and the modification of the local official plans to ensure conformity. The modifications may be part of the statutory review process, as defined under the Planning Act. In the event of a conflict between the provisions of a local official plan and the provisions of this Plan in the interim period, the provisions of this Plan shall prevail to the extent of that conflict.

Nothing in this Plan shall prevent the local municipalities from adopting more restrictive policies or standards than those outlined in this Plan. In addition, it is not the intention of this Plan to prevent the development of areas designated for non-agricultural development in local Official Plans, as of the date of passing of this Plan.

4.4 LOCAL ZONING BY-LAWS

When this Plan or any part thereof takes effect, every local zoning by-law shall be amended by the local municipalities to conform with this Plan pursuant to the Planning Act.

The Amendments to the zoning by-laws should occur after the local official plan has been amended to conform to this Plan.

Notwithstanding the above, this Plan is not intended to prevent the continuation, expansion, or enlargement of uses which do not conform to the designations and provisions of this Plan. At their sole discretion, Councils of the local municipalities may zone to permit the continuation, expansion or enlargement of legally existing uses, or variations to similar uses, provided that such uses:

- a) have no adverse effect on present uses of surrounding lands or the implementation of the provisions of this Plan;
- b) have regard for the MDS Formula as amended from time to time, if applicable; and
- c) are subject to any conditions that may be contained in a local official plan.

4.5 DEVELOPMENT APPLICATIONS**4.5.1 Plan of Subdivision**

County Council shall approve only those plans of subdivision or condominium which comply with the provisions of this Plan and the applicable local official plan.

Under conditions of approval attached to plans of subdivision or condominium pursuant to the Planning Act:

- a) County Council shall require that the applicant(s) enter into appropriate agreements with the County or local municipality which may be registered against the title of the subject lands and which shall include such matters as services, financial requirements, County road facilities, dedication of land for public uses, exclusive of parks and other requirements to implement the provisions of this Plan; and
- b) the Council of the local municipality may require that the applicant(s) enter into appropriate agreements which shall be registered against the title of the subject lands, and may include such matters as, but not limited to, financial requirements, local roads, drainage, grading and landscaping, sidewalks and dedication of land for public uses and other requirements to implement the provision of this Plan and the local official plan.

4.5.2 Site Plan Control

County Council shall encourage the use of site plan control provisions of the Planning Act, to implement the policies and provisions of this Plan and the local official plans, and to coordinate and enhance the physical development of the local municipality.

Provisions for site plan control shall be detailed in the local official plans.

4.5.3 Consent

4.5.3.1 Introduction

The approval of consents to sever land in Middlesex County shall be in conformity with the relevant policies contained in this Plan, policies contained in local official plans, and the provisions of the Planning Act. Under no circumstances shall consents be granted for approval that are contrary to the policies of this Plan or the local official plan.

A plan of subdivision under the Planning Act is generally required when any of the following occur:

- more than 3 lots (two severed and one retained) from a land holding are being created unless the local official plan contains policies regarding the number of lots required for a plan of subdivision.
- lots created require a new road for the provision of access.
- the provision or extension of municipal servicing (water and/or sewers, including communal servicing) is required; or
- other matters that may arise during the review of the development proposed.

A plan of subdivision may not be required under the following circumstance:

- infilling of up to 4 lots having frontage on a public road in areas serviced municipally by water and sanitary sewer systems.

The division of land by consent shall be in compliance with the provisions of any site plan, subdivision or any other development agreement registered against the title of the land holding. Consents shall not be permitted from a plan of subdivision that is under review.

In order to protect and maintain the viability of agriculture within Middlesex County, protect the natural environment and protect the investment made by the County and local municipalities in existing infrastructure and services, a consistent, impartial and understandable system of assessing development applications within the County has been created.

An application for consent is considered based on the underlying land use designation and the associated consent policies are applied accordingly. When reviewing applications for consent, County Council, local Councils and the Committees of Adjustment will apply the appropriate set of policies.

Policies for each of the categories are intended to address the common elements of land division in the County. Local official plans may contain more detailed or restrictive severance policies and encompass a greater number of land division considerations reflecting local circumstances. Therefore, severance applications will be reviewed on the basis of the policies contained herein, as well as the more detailed policies of local official plans.

In certain circumstances consents for building purposes will not be permitted because of the potential for serious risk to life, health or property, or because the safety and efficiency of transportation systems could be jeopardized.

Consents for building purposes will not be permitted where:

- a) the division of land is located within a Natural Heritage Feature or Natural Hazard and a suitable building site cannot be found through the Development Assessment Report in Section 2.2.1.2;
- b) the division of land is located in a floodplain and an appropriate building site cannot be provided or access to the building site is subject to flooding or erosion based on comments from the Conservation Authority. Exceptions are consents for uses which by their nature must be located within a floodplain. Such uses include flood and erosion control works and passive non-structural uses;
- c) the division of land is located on significant mineral aggregate or mineral deposits, as identified by the Province;
- d) Provincial transportation objectives, standards and policies for safety and access cannot be maintained;

- e) County Roads entrance and building setback policies cannot be maintained on a County Road; or
- f) The created and retained parcels cannot be provided with a adequate level of service.

Easements, consents for lot additions/adjustments and severances for land assembly which facilitate subsequent development by plan of subdivision are not necessarily subject to the following policies and shall be evaluated based on site specific considerations established in local official plans provided such policies maintain the minimum standards set out in this Plan.

4.5.3.2 General Policies

The policies of this section shall apply to all consent applications. The severed and retained lots, when proposed to be used for residential, commercial or industrial uses, shall front on an existing road allowance which is opened and maintained on a year round basis and is constructed to a standard of construction adequate to provide for the additional traffic generated by the proposed use.

The creation of the lot or lots shall not create or substantially worsen traffic, access or servicing problems (failing septic systems). The consent shall only be granted if in conformity with the land use designations and policies of this plan and the local official plan.

The severed and retained lots shall be of adequate size for the intended use, having regard for the topography of the land, the siting of proposed buildings and services and points of access.

On the granting of a consent, conditions may be imposed on the severed and retained parcels.

Compliance with the Minimum Distance Separation Formula shall be maintained.

4.5.3.3 Settlement Areas

The following policies apply to lands designated Settlement Areas on Schedule A and those areas designated Agricultural Areas on Schedule A which are designated as hamlets in the local Official Plan, as of the date of passing of this Plan.

First consideration for the division of land in Settlement Areas shall be given to development by Plan of Subdivision. When the scale of development does not require a Plan of Subdivision a consent to sever will be considered provided:

- a) the application represents infilling in a built-up area and the proposed lots are compatible with the lot area, frontage and density pattern of the surrounding area; and

- b) the application represents orderly and efficient use of land, and its approval would not hinder future development of the retained land.

Consents shall conform to the intent of this Plan and the land use designations and zoning provisions of the local municipality and in accordance with the Planning Act.

Where municipal services do not exist and where a Settlement Capability Study has established an overall growth management strategy which permits private services, regard shall be had to the suitability of the soil conditions and surface and groundwater conditions to provide for an adequate potable water supply, and to adequately support sub-surface sewage treatment to the standards of the approving agency having jurisdiction.

4.5.3.4 Agricultural Area

These policies apply to lands designated Agricultural Areas on Schedule A. Where a property is designated Agricultural Areas but is within a designated hamlet in a local Official Plan, the policies of Section 4.5.3.3 apply.

Non-farm related uses in the Agricultural Areas can potentially impair the effectiveness of agricultural operations. In addition, there can be a greater possibility of negative environmental impacts from scattered residential, commercial and industrial development.

In order to protect the Agricultural Area for agricultural uses, the following policies shall apply:

- a) Consent to sever a residence surplus to a farming operation as a result of farm consolidation may be permitted, provided the residence was built prior to January 1, 1999 and provided that new residential dwellings are prohibited on any vacant remnant parcel of farmland created by the severance;
- b) consents involving minor boundary adjustments shall be considered provided that non-viable farm parcels are not created and agricultural activities are not adversely affected;
- c) consents for new farm lots shall generally not be considered where the result is the creation of a farm lot less than a typical township lot of about 40 hectares. Consents for the creation of new farm lots shall be considered where both the size of the lands being severed and the lands being retained are appropriate to:
 - 1. the type of agriculture being engaged in or proposed to be engaged in; and
 - 2. the type of agricultural activity and farm lot size common in the area.

In general, farm lot size shall be sufficiently large to create large contiguous farming blocks and to maintain flexibility to adapt to future changes in agriculture and to avoid the unwarranted fragmentation of farmland. A minimum farm lot size shall be established in the Zoning By-laws of the local municipalities;

- d) consents for agriculture-related commercial and industrial uses shall be considered when the commercial or industrial use, due to its nature, must be located in close proximity to the agricultural operations which it serves;
- e) consents will not be considered on land located within 300 metres of an active sand, gravel or quarry operation or open pit mining operation;
- f) the creation of a lot for farm retirement purposes shall not be permitted; and
- g) Consents for residential infilling purposes shall not be permitted.

4.5.3.5 Natural Environment Area

These policies apply to land designated Natural Environment Areas on Schedule A.

Consents to create new lots which are, in whole or in part, within the Natural Environment Area designation, other than for public authority acquisitions, shall only be considered where the resulting lots are at least 40 ha in area. Any new lots created by consent for a public authority need not front on, or have access to, a public road allowance provided such lot is part of a wetland or woodland or similar passive use program which has been approved by the County.

4.6 PUBLIC PARTICIPATION

County Council and local municipal Councils shall actively encourage public participation by seeking the opinions and the advice of individuals and community and stakeholder groups in the on-going task of implementing, monitoring and reviewing this Plan. County Council and the local municipal Councils shall ensure that the public is adequately notified and consulted, consistent with the following events:

- during the course of determining the need to review the Official Plan; and
- during the course of preparing and considering planning policies, studies and strategies associated with:
 - i) official plan amendments and review processes;
 - ii) the development of zoning by-laws;
 - iii) issue based studies;
 - iv) secondary plans and area studies;
 - v) Community Improvement Plans;
 - vi) urban design, streetscaping and downtown revitalization plans and guidelines; and

- vii) other matters deemed appropriate.

The measures utilized to facilitate public participation will be consistent with the scope and nature of the planning matter being addressed. Measures to facilitate public participation may include:

- a) formal and informal public meetings;
- b) public notices, advertising;
- c) workshops, open houses and displays;
- d) delegations at County Council and/or local municipal Councils or Committees of Council;
- e) the use of advertising and information releases;
- f) the establishment of advisory committees; and
- g) consultation with community, neighbourhood or special interest organizations.

County Council or the local municipal Councils may require that public meetings held for the purposes of soliciting public input relative to major planning initiatives be advertised in newspapers having general circulation in the municipality prior to the scheduled meeting. Notice may also be delivered by first class mail to persons deemed to have interest in the matter, including agencies, land owners, business owners and residents and to other persons who have requested notice of the meeting in accordance with the provisions of the Planning Act.

Where the planning matter to be considered consists of site specific matters, County Council or the local municipal Council will ensure that as a minimum, notice delivered by first class mail is provided to the following:

- every owner of the land within the affected site and/or area to which the proposal applies as shown on the last revised assessment roll
- every owner of land within the distance prescribed by the regulations of the Planning Act or other applicable statute, external to the area to which the proposal applies, as shown on the last revised assessment roll; and
- every person and agency that has given written request for such notice.

County Council and the local municipal Councils shall consider all written and verbal submissions concerning a planning matter when making decisions and/or recommendations. An analysis of the written submissions and verbal presentations at public meetings may be prepared and submitted to County Council and the local municipal Councils as part of any planning report prepared.

Prior to making decisions relating to planning matters, County Council and the local municipal Councils will encourage appropriate steps to be taken to resolve conflicting issues associated with the proposal. Where conflicting issues remain unresolved, these issues and the measures taken to respond to these issues shall be identified as part of any planning report prepared.

4.7 DEVELOPMENT CHARGES

The County may, from time to time, pass Development Charges By-laws in accordance with the Development Charges Act.

5.0 INTERPRETATION

5.1 GENERAL

Sections 2-5 and Schedules A, B and C, excluding the glossary of terms, constitute the Plan. Unless otherwise specified, deviation from the Plan's provisions is not permitted without an amendment to this Plan.

All policies and schedules of the Plan must be considered together to determine conformity. Schedules are to be considered in conjunction with corresponding text. The boundaries of the land use designations on the schedules are intended to show general use areas and may be subject to minor variation without an amendment to this Plan. The precise delineation of Settlement Areas is found in the local municipal Official Plans.

The County Official Plan recognizes existing and approved land uses. If there is a discrepancy between the schedules and the text, the text takes precedence. Minor changes to road alignments do not require an amendment to the Plan. The lists of permitted uses are intended to represent the general nature and type of activities and are not meant to be all inclusive.

APPENDIX A

GLOSSARY OF TERMS

ACTIVE GRAVEL OR QUARRY OPERATION:

means licensed sites within the County of Middlesex, existing extraction areas within the undersigned part of the County and sites under Aggregate Permit on Crown Land in the County.

ADJACENT LANDS:

means those lands, contiguous to a specific Natural System element, where it is likely that development or site alteration would have a negative impact on that element. The extent of the adjacent lands may be recommended by the Province or based on municipal approaches which achieve the same objectives.

ADVERSE EFFECTS:

mean one or more of:

- 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 plant and 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 persons;
- 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 normal conduct of business.

AFFORDABLE:

- a) means in the case of ownership housing, the least expensive of:
 - housing for which the purchase price results in annual accommodation costs which do not exceed 30 percent of gross annual household income for low and moderate income households; or
 - housing for which the purchase price is at least 10 percent below the average purchase price of a resale unit in the regional market area;
- b) means in the case of rental housing, the least expensive of:
 - a unit for which the rent does not exceed 30 percent of gross annual household income for low and moderate income households; or
 - a unit for which the rent is at or below the average market rent of a unit in the regional market area.

AGRICULTURAL USES:

means the growing of crops, including nursery and horticultural crops; raising of livestock and other animals for food, or fur, including poultry and fish; aquaculture; agro-forestry; maple syrup production; and associated on-farm buildings and structures.

AGRICULTURE-RELATED USES:

means those farm related commercial and farm-related industrial uses that are small scale and directly related to the farm operation and are required in close proximity to the farm operation.

AREAS OF NATURAL AND SCIENTIFIC INTEREST (ANSI):

mean 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.

BUILT-UP AREAS:

mean areas where development is concentrated. It includes existing development, as well as vacant registered and draft approved lots.

COMPREHENSIVE REVIEW:

means an official plan review which is initiated by a planning authority, or an official plan amendment which is initiated or adopted by a planning authority, which:

1. is based on a review of population and growth projections and which reflect projections and allocations by upper-tier municipalities and provincial plans, where applicable; considers alternative directions for growth; and determines how best to accommodate this growth while protecting provincial interests;
2. utilizes opportunities to accommodate projected growth through intensification and redevelopment;
3. confirms that the lands to be developed do not comprise specialty crop areas;
4. is integrated with planning for infrastructure and public service facilities; and
5. considers cross-jurisdictional issues.

CONSENT:

means a legal permission, generally given by a local Committee of Adjustment, to create new parcels of land.

COMMERCIAL WIND ENERGY GENERATION SYSTEM (CWEGS):

means one or more wind energy generation systems that singly or collectively produces more than a total of 40 kilowatts based on nameplate rating capacity.

CONSERVATION AUTHORITY:

means the Ausable-Bayfield, St. Clair Region, Upper Thames River, Kettle Creek and Lower Thames Valley Conservation Authorities.

CORRIDORS:

mean the naturally vegetated or potentially re-vegetated areas that link or border natural areas and provide ecological functions such as habitat, passage, hydrological flow, connection or buffering from adjacent impacts. They can occur across or along uplands, lowlands or slopes. Ravine, valley, river and stream corridors are further defined as landform depressions, usually with water flowing through or standing in them for some period of the year. Ravine and valley corridors may be defined locally by considerations such as their natural features or functions, minimum setbacks from the crest of slope, top of ravine or valley bank or top of projected stable slope.

CUMULATIVE IMPACT:

means the combined effects or potential effects of one or more development activities in a specified area over a particular time period. The effects may occur simultaneously, sequentially or in an interactive manner.

DEPOSITS OF MINERAL AGGREGATE:

means an area of identified mineral aggregates that has a sufficient quantity and quality to warrant present or future extraction.

DEPOSITS OF PETROLEUM RESOURCES:

means oil, gas, or brine resources which have been identified through exploration and verified by preliminary drilling or other forms of investigation and may include sites of former operations where resources are still present.

DEVELOPMENT:

means the creation of a new lot, a change in land use, or the construction of buildings and structures, requiring approval under the Planning Act; but does not include activities that create or maintain infrastructure authorized under an environmental assessment process; or works subject to the Drainage Act.

DEVELOPMENT ASSESSMENT REPORT (DAR):

means a study prepared in accordance with established procedures, (see Section 2.2.1.2) to identify and assess the impacts of development on a specified feature or system.

ECOLOGICAL FEATURES:

means 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.

ECOSYSTEM:

means systems of plants, animals and micro-organisms, together with the non-living components of their environment, related ecological processes and humans.

ENDANGERED SPECIES:

means a species that is listed or categorized as an “Endangered Species” on the Ontario Ministry of Natural Resources’ official species at risk list, as updated and amended from time to time.

ENVIRONMENTAL ASSESSMENT PROCESS:

means a process for authorization of an undertaking under legislation such as the Environmental Assessment Act, and Ontario Energy Board Act.

ENVIRONMENTALLY SIGNIFICANT AREAS (ESA)

mean land or water areas that contain distinctive or unusual features, perform a key ecological function and/or provide habitat for significant plant and/or animal species.

EQUIVALENT POPULATION:

means a figure expressing the capacities of water and sewer services, in terms of residential population.

EROSION HAZARDS:

means the loss of land, due to human or natural processes, that poses a threat to life and property. The erosion hazard limit is determined using the 100 year erosion rate (the average annual rate of recession extended over a hundred year time span), an allowance for slope stability and an erosion allowance.

ESTATE RESIDENTIAL DEVELOPMENT:

means residential development on large lots (0.3 ha or greater) outside of established urbanized areas.

FARM LANDS:

mean only those lands which are evaluated as having a potential for farming due either to their containing Prime Agricultural Soils, or to their accommodating, or having accommodated, well-established farm uses.

FARM OPERATION:

means the composite of all parcels operated as a farm.

FARM VACATIONS:

mean a commercial operation where people pay to stay and/or work on an active farm in order to experience rural living.

FARMER:

means a person who owns and/or operates a farm in Middlesex County.

FILL LINE:

means a line intended to generally identify hazard lands such as steep slopes, areas susceptible to flooding and areas of unstable or organic soils. Fill lines are defined using the approved fill line mapping criteria established by the Conservation Authority having jurisdiction. Lands contained within registered fill lines are subject to the fill regulations of the Conservation Authority.

FILL, CONSTRUCTION AND ALTERATION TO WATERWAYS REGULATION:

means a regulation passed pursuant to Section 28 of the Conservation Authorities Act, R.S.O. 1990 or its successors, whereby a Conservation Authority may, among other matters, regulate:

- a) the straightening, changing, diverting, or interfering in any way with the existing channel of a river, creek, stream or watercourse;
- b) the construction of any building or structure in or on a pond or swamp or in any area subject to flooding; and
- c) the placing or dumping of fill of any kind in any defined part of the area over which the Conservation Authority has jurisdiction in which, in the opinion of the Conservation Authority, the control of flooding or pollution or the conservation of land may be affected.

FISH:

means fish, shellfish, crustaceans and marine animals at all stages of their life cycles.

FLOODING HAZARDS:

means the inundation, under the conditions specified below, of areas adjacent to a shoreline or a river or stream system and not ordinarily covered by water.

- a) Along the shorelines of the Great Lakes - St. Lawrence River System and large inland lakes, the flooding hazard limit is based on the 100 year flood level plus an allowance for wave uprush and other water related hazards.
- b) Along river and stream systems, the flooding hazard limit is the greater of:
 1. the flood resulting from the rainfall actually experienced during a major storm such as the Hurricane Hazel storm (1954) or the Timmins storm (1961), transposed over a specific watershed and combined with the local conditions, where evidence suggests that the storm event could have potentially occurred over watersheds in the general area;
 2. the one hundred year flood; or
 3. a flood which is greater than 1) or 2) which was actually experienced in a particular watershed or portion thereof as a result of ice jams and which has been approved as the standard for that specific area by the Minister of Natural Resources;

except where the use of the one hundred year flood or actually experienced event as the standard for a specific watershed has been approved by the Minister of Natural Resources (where the past history of flooding supports the lowering of the standard).

FLOOD FRINGE:

means the outer portion of the flood plain between the floodway and the flooding hazard limit. Depths and velocities of flooding are generally less severe in the flood fringe than those experienced in the floodway. The flood fringe is the area where development and site alteration may be permitted, subject to appropriate floodproofing to the flooding hazard elevation or another flooding hazard standard approved by the Ministry of Natural Resources.

FLOOD PLAIN:

means the area, usually low lands, adjoining a watercourse, which has been or may be subject to flooding hazards.

FUNCTIONS:

mean, in regard to natural features and functions, 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.

FUNCTIONS, ATTRIBUTES AND LINKAGES:

Functions: mean the physical processes or actions in the landscape related to the movement and interaction of ground and surface water. The provision of vegetated terrestrial habitat and aquatic habitat as support for fauna.

Attributes: mean environmental characteristics of value which may include: individual species and populations of rare or uncommon flora and fauna; regionally important habitat areas upon which large populations of fauna depend; areas of seasonal concentration; unusual aquatic and terrestrial habitat (such as old forest); as well as sensitive habitat and species (such as cold water habitat and dependent fish species)

Linkages: mean linkages which describe the way in which components of the ecosystem are connected. These linkages may be aquatic such as stream, corridors or connections between groundwater and surface water, or they may be land-based such as wildlife corridors offered by a series of woodlots a short distance away.

GROUNDWATER:

means sub-surface water, or water stored in the pores, cracks and crevices in the ground below the water table.

GROUNDWATER RECHARGE AREA:

means an area in which there is significant addition of water by natural processes to groundwater.

HAZARDOUS LANDS:

means property or lands that could be unsafe for development due to naturally occurring processes. Along the shorelines of the Great Lakes - St. Lawrence River System, this means the land, including that covered by water, between the international boundary, where applicable and the furthest landward limit of the flooding, erosion or dynamic beach hazard limits. Along the shorelines of large inland lakes, this means the land, including that covered by water, between a defined offshore distance or depth and the furthest landward limit of the flooding, erosion or dynamic beach hazard limits. Along river and stream systems, this means the land, including that covered by water, to the organic soils or unstable bedrock (karst topography).

HEAD-WATER:

means the source area of a stream.

HOME OCCUPATION:

means a commercial or industrial use which is carried out on the same lot as a residential or farm use but which is not the main use of property. The home occupation shall be located, in case of a residential property, in the house and in the case of a farm, may include buildings other than the house.

HYDROLOGY:

the study of surface water.

HYDROGEOLOGY:

the study of ground water.

INDIVIDUAL ON-SITE SYSTEMS:

mean individual autonomous water supply and sewage disposal, systems that are owned, operated and managed by the owner of the property upon which the system is located and which do not serve more than five residential units/lots.

INFRASTRUCTURE:

means physical structures that form the foundation for development. Infrastructure includes: sewage and water systems, septage treatment systems, waste management systems, electric power generation and transmission, communications/telecommunications, transit and transportation corridors and facilities, oil and gas pipelines and associated facilities.

INSTITUTIONAL USES:

mean those uses, associated with hospitals, nursing homes, pre-school, school nurseries, day care and schools, where there is a threat to the safe evacuation of the sick, the elderly, the physically challenged or the young during an emergency as a result of flooding, failure of floodproofing measures or protection works, or erosion.

INTENSIFICATION:

means intensification of a property, site or area at a higher density than currently exists through:

- a) redevelopment, including the reuse of brownfield sites;
- b) the development of vacant and/or underutilized lots within previously developed areas;
- c) infill development;
- d) the conversion or expansion of existing industrial, commercial and institutional buildings for residential use; and
- e) the conversion or expansion of existing residential buildings to create new residential units or accommodation, including accessory apartments, secondary suites and rooming houses.

LEGALLY EXISTING PITS AND QUARRIES:

mean: a) lands under licence or permit, other than wayside pits and quarries, issued in accordance with the Aggregate Resources Act, or successors thereto; and b) for lands not under licence or permit, established pits and quarries that are not in contravention of municipal zoning by-laws and including adjacent land under agreement with or owned by the operator, to permit continuation of the operation.

MINERAL AGGREGATE:

means gravel, sand, clay, earth, shale, stone, limestone, dolostone, sandstone, marble, granite, rock or other material prescribed under the Aggregate Resources Act suitable for construction, industrial, manufacturing and maintenance purposes but does not include metallic ores, asbestos, graphite, kyanite, mica, nepheline syenite, salt, talc, wollastonite, mine tailings or other material prescribed under the Mining Act.

MINIMUM DISTANCE SEPARATION FORMULAE:

means formulae developed by the Province to separate uses so as to reduce incompatibility concerns about odour from livestock facilities.

NATURAL HERITAGE FEATURES AND AREAS:

means features and areas, such as significant wetlands, fish habitat, significant woodlands south and east of the Canadian Shield, significant valleylands south and east of the Canadian Shield, significant portions of the habitat of endangered and threatened species, significant wildlife habitat, and significant areas of natural and scientific interest, which are important for their environmental and social values as a legacy of the natural landscapes of an area.

NATURAL SYSTEM:

means all existing Natural Features, Hazards, Areas and Functions in the County's geographical boundary.

NEGATIVE IMPACTS:

means:

- a) in regard to fish habitat, the harmful alteration, disruption or destruction of fish habitat, except where it has been authorized under the Fisheries Act using the guiding principle of no net loss of productive capacity.
- b) in regard to other Natural System elements, the loss of the natural features or ecological functions for which an area is identified.

NORMAL FARM PRACTICES:

means a practice, as defined in the Farming and Food Production Protection Act, 1998, that is conducted in a manner consistent with proper and acceptable customs and standards as established and followed by similar agricultural operations under similar circumstances; or makes use of innovative technology in a manner consistent with proper advanced farm management practices. Normal farm practices shall be consistent with the Nutrient Management Act, 2002 and regulations made under that Act.

ONE HUNDRED YEAR EROSION LIMITS:

mean (for lands adjacent to ravines, river valleys and streams) the approved standards involving the combined influence of stable slope, 100 times the average annual recession rate, and an erosion allowance to define the erosion limits for regulatory purposes.

ONE HUNDRED YEAR FLOOD:

means that flood, based on an analysis of precipitation, snow melt, or a combination thereof, having a return period of 100 years on average, or having a 1% chance of occurring or being exceeded in any given year.

ONE ZONE CONCEPT:

means the approach whereby the entire flood plain, as defined by the regulatory flood, is treated as one unit, and all development is prohibited or restricted.

PARTIAL SERVICES:

mean connection to one communal service or full municipal service where the other connection will be to an individual on-site system.

PETROLEUM RESOURCE OPERATIONS:

means oil, gas and brine wells, and associated facilities, oil field brine disposal wells and associated facilities, and facilities for the underground storage of natural gas and other hydrocarbons.

PETROLEUM RESOURCES:

means oil, gas, and brine resources which have been identified through exploration and verified by preliminary drilling or other forms of investigation. This may include sites of former operations where resources are still present or former sites that may be converted to underground storage for natural gas or other hydrocarbons.

POTENTIAL MINERAL AND PETROLEUM RESOURCES:

mean areas favourable to the discovery of deposits of mineral or petroleum resources due to favourable geology, the presence of known deposits or other technical evidence.

PRIME AGRICULTURAL AREA:

means areas where prime agricultural lands predominate. This includes: areas of prime agricultural lands and associated Canada Land Inventory Class 4-7 soils; and additional areas where there is a local concentration of farms which exhibit characteristics of ongoing agriculture. Prime agricultural areas may be identified by the Ontario Ministry of Agriculture and Food using evaluation procedures established by the Province as amended from time to time, or may also be identified through an alternative agricultural land evaluation system approved by the Province.

PRIME AGRICULTURAL LAND:

means land that includes specialty crop lands and/or Canada Land Inventory Classes 1, 2 and 3 agricultural soils, in this order of priority for protection.

PUBLIC LANDS:

mean lands owned by a public body, but does not include crown lands or "public lands" as defined in the Public Lands Act.

REDEVELOPMENT:

means the creation of new units, uses or lots on previously developed land in existing settlements, including brownfield sites.

REGULATORY FLOOD: (for riverine flood plains)

means the flood standard of the respective Conservation Authority which is used to define flood plain limits for regulatory purposes as follows:

- a) Ausable-Bayfield Conservation Authority - Hurricane Hazel Storm Event
- b) St. Clair Region Conservation Authority - Hurricane Hazel Storm Event
- c) Upper Thames River Conservation Authority - 1:250 Year Storm Event
- d) Lower Thames Valley Conservation Authority - 1:250 Year Storm Event
- e) Kettle Creek Conservation Authority - Hurricane Hazel Storm Event

The one hundred year flood is the minimum acceptable regulatory flood standard. For those watersheds with a regulatory flood standard greater than the minimum acceptable, the Province may change the standard, in accordance with established procedures. The lowering of the existing regulatory flood standard will not be considered where the past history of flooding reveals that a higher level is more appropriate. Where flooding is experienced in excess of the existing regulatory flood standard, the Minister of Natural Resources may require the regulatory flood standard to be modified to reflect the observed flood event.

REHABILITATE:

means, after extraction, to treat land so that the use or condition of the land is restored to its former use or condition, or is changed to another use or condition in accordance with applicable legislation. With respect to degraded natural environments, means a combination of appropriate and acceptable structural and non-structural works which are intended to reduce damages, plus an allowance to address slope and unstable slope related conditions.

RESIDENCE SURPLUS TO A FARMING OPERATION:

means a farm residence that is rendered surplus as a result of farm consolidation (the acquisition of additional farm parcels to be operated as one farm operation).

SETTLEMENT AREA:

means urban areas and rural settlement areas within municipalities (such as cities, towns, villages and hamlets) that are:

- a. built up areas where development is concentrated and which have a mix of land uses; and
- b. lands which have been designated in the Official Plan for development over the long term planning horizon. In cases where land in designated growth areas is not available, the settlement area may be no larger than the area where development is concentrated.

SETTLEMENT CAPABILITY STUDY:

means a comprehensive study of a community to identify the suitability of the area to safely accommodate future growth and development in the absence of full municipal services, and to establish a technical foundation on which to base a secondary plan and evaluate applications for development. The study must address the servicing hierarchy set out in this Plan by assessing the feasibility of full or communal services and, if proven to be unfeasible, assessing the feasibility of proceeding on private services. The recommendations must be approved by the Ministry of the Environment.

SEWAGE AND WATER SYSTEMS:

- a) Full municipal sewage and water services:
 - mean piped sewage and water services that are connected to a centralized water and waste water treatment facility.
- b) Public communal services:
 - mean sewage works and sewage systems, and water works that provide for the distribution, collection or treatment of sewage or water but which:
 - i) are not connected to full municipal sewage and water services;

- ii) are for the common use of more than five residential units/lots; and
- iii) are owned, operated and managed by either:
 - the municipality; or
 - another public body; or
 - a condominium corporation or single owner which has entered into an agreement with the municipality or public body, pursuant to of the Planning Act, providing for municipal/public body assumption of the communal services in the event of default by the owner.

SIGNIFICANT:

means:

- a) in regard to areas of natural and scientific interest, an area identified as provincially significant by the Ministry of Natural Resources using evaluation procedures established by the province, as amended from time to time.
- b) in regard to the habitat of endangered species and threatened species, means the habitat, as approved by the Ontario Ministry of Natural Resources, that is necessary for the maintenance, survival, and/or the recovery of naturally occurring or reintroduced populations of endangered species or threatened species, and where those areas of occurrence are occupied or habitually occupied by the species during all or any part(s) of its life cycle.
- c) in regard to woodlands, those wooded areas identified as being significant in the Middlesex Natural Heritage Study (MNHS) in that they meet one or more landscape criteria.
- d) in regard to other features and areas in policy 2.1 of the PPS, ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of the County's Natural System. Criteria for determining significance may be recommended by the Province, but municipal approaches that achieve the same objective may also be used.

SMALL WIND ENERGY GENERATION SYSTEM (SWEGS):

means any combination of wind energy generation systems that produce less than a total of 40 kilowatts based on nameplate rating capacity.

SLOPE STABILITY:

is achieved when all forces acting on a slope are in equilibrium. This would include natural forces within a slope caused by soil, water and climatic influences, and surface erosion forces caused by toe erosion and overland water flow. Human activities through the imposition of surcharge loading, management of vegetation, drainage and other surface wearing activities also influence slope stability.

SPECIALTY CROP LAND:

means areas where specialty crops such as tender fruits (peaches, grapes, cherries, plums), other fruit crops, vegetable crops, greenhouse crops, and crops from agriculturally developed organic soil lands are predominantly grown, usually resulting from:

- a) soils that have suitability to produce specialty crops, or lands that are subject to special climatic conditions, or a combination of both; and/or
- b) a combination of farmers skilled in the production of specialty crops, and of capital investment in related facilities and services to produce, store or process specialty crops.

SUSTAINABLE:

means activities that meet present needs without compromising the ability of future generations to meet their own needs.

TEMPORARY RESIDENTIAL UNIT:

means a dwelling erected in such a way as to allow for its removal at a later date without leaving a foundation or other permanent services and/or facilities.

TWO ZONE CONCEPT:

means the approach whereby certain areas of the flood plain are considered to be less hazardous than others such that development, potentially could safely occur. The flood fringe defines that portion of the flood plain where development may be permitted, subject to appropriate floodproofing. The floodway defines that portion of the flood plain wherein development is prohibited or restricted.

URBAN STANDARD:

Means County Roads constructed with hot mix asphalt, concrete curbs and gutters, and with underground storm water collection systems.

WASTE MANAGEMENT SYSTEM:

means 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.

WAYSIDE PIT OR WAYSIDE QUARRY:

means a temporary pit or quarry opened and used by or for a public authority solely for the purpose of a particular project or contract of road construction and not located on the road right-of-way.

WETLANDS:

mean lands that are seasonally or permanently covered by shallow water as well as lands where the water table is close to or at the surface. In either case the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic or water tolerant plants. The four major types of wetlands are swamps, marshes, bogs and fens. Periodically soaked or wetlands being used for agricultural purposes which no longer exhibit wetland characteristics are not considered to be wetlands for the purpose of this definition.

WETLAND FUNCTIONS:

mean the biological, physical, and socio-economic interactions that occur in an environment because of the properties of the wetlands that are present, including, but not limited to:

- a) ground water recharge and discharge;

- b) flood damage reduction;
- c) shoreline stabilization;
- d) sediment trapping;
- e) nutrient retention and removal;
- f) food chain support;
- g) habitat for fish and wildlife; and
- h) attendant social and economic benefits.

WILDLIFE HABITAT:

means areas where plants, animals and other organisms live, and find adequate amounts of food, water, shelter and space needed 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 which are important to migratory or non-migratory species.

WOODLANDS:

means treed areas that provide environmental and economic benefits such as erosion prevention, water retention, provision of habitat, recreation and the sustainable harvest of woodland products. Woodlands include treed areas, woodlots or forested areas and vary in their level of significance.

WIND ENERGY GENERATION SYSTEM (WEGS):

means any device such as a wind charger, windmill, or wind turbine that converts wind energy to electrical energy, including those facilities, equipment, machinery, and other devices necessary to the proper operation and maintenance of a wind energy conversion system, including access to roads, collector and feeder lines, and substations.

APPENDIX B

POPULATION PROJECTIONS

**County of Middlesex Population Projections
2001 to 2026, High Scenario, County**

Age	2006	2006	2006	2011	2011	2011	2016	2016	2016	2021	2021	2021	2026	2026	2026
	Female	Male	Total												
0-4	1,963	2,090	4,053	1,920	2,044	3,963	1,792	1,908	3,700	1,619	1,723	3,342	1,918	2,041	3,959
5-9	2,648	2,724	5,371	2,634	2,688	5,322	2,445	2,482	4,927	2,234	2,279	4,514	2,510	2,495	5,006
10-14	2,823	3,089	5,912	2,491	2,704	5,195	3,075	3,224	6,299	2,781	3,096	5,878	2,802	2,972	5,775
15-19	2,619	2,942	5,561	2,578	2,933	5,511	2,559	2,859	5,418	2,770	2,997	5,766	2,858	3,288	6,147
20-24	2,185	2,361	4,545	2,048	2,340	4,388	2,388	2,762	5,151	2,121	2,367	4,488	2,601	2,833	5,434
25-29	1,417	1,483	2,899	1,931	1,948	3,880	1,846	2,081	3,927	2,175	2,414	4,589	1,998	2,180	4,177
30-34	1,782	1,499	3,281	2,192	1,854	4,046	2,374	2,011	4,385	2,932	2,466	5,398	2,858	2,557	5,415
35-39	2,442	2,185	4,627	2,276	2,054	4,330	2,901	2,423	5,325	3,355	3,089	6,444	4,209	3,510	7,719
40-44	2,926	2,902	5,828	2,347	2,266	4,613	2,484	2,311	4,795	2,616	2,376	4,992	3,697	3,530	7,227
45-49	2,961	2,970	5,931	2,876	2,906	5,781	2,403	2,374	4,777	2,404	2,278	4,682	2,756	2,690	5,446
50-54	2,525	2,659	5,183	2,983	2,907	5,890	2,902	2,927	5,829	2,432	2,335	4,766	2,509	2,317	4,826
55-59	2,310	2,308	4,619	2,434	2,553	4,987	2,937	2,848	5,785	2,840	2,820	5,659	2,388	2,352	4,740
60-64	1,773	1,841	3,613	2,274	2,263	4,537	2,382	2,501	4,883	2,929	2,840	5,769	2,809	2,779	5,588
65-69	1,424	1,361	2,785	1,799	1,666	3,465	2,267	2,113	4,380	2,506	2,296	4,803	2,946	2,658	5,605
70-74	1,172	1,098	2,270	1,342	1,235	2,576	1,699	1,488	3,187	2,162	1,940	4,102	2,407	2,098	4,505
75-79	909	862	1,772	1,007	893	1,900	1,121	1,021	2,141	1,455	1,276	2,731	1,870	1,603	3,474
80-84	747	495	1,241	790	629	1,419	774	652	1,426	983	817	1,801	1,166	985	2,150
85+	1,101	909	2,009	1,827	1,771	3,598	1,236	988	2,223	1,297	770	2,068	706	1,000	1,705
Total	35,725	35,777	71,502	37,748	37,652	75,399	39,583	38,974	78,558	41,611	40,180	81,791	45,008	43,889	88,896

**County of Middlesex Population Projections
2001 to 2026, High Scenario, Adelaide Metcalfe**

	2006	2006	2006	2011	2011	2011	2016	2016	2016	2021	2021	2021	2026	2026	2026
Age	Female	Male	Total												
0-4	102	108	210	98	105	203	94	100	193	83	89	172	195	207	402
5-9	129	125	254	130	133	264	120	107	227	111	113	224	147	115	262
10-14	150	134	284	125	122	247	153	146	299	142	129	271	142	125	266
15-19	129	133	263	124	112	236	121	117	238	123	123	246	114	113	227
20-24	113	103	216	101	97	197	112	98	211	102	95	197	97	87	184
25-29	69	68	137	108	92	200	93	86	179	109	91	199	130	90	220
30-34	88	74	162	97	83	179	123	91	213	130	95	225	176	135	310
35-39	111	112	223	113	108	221	128	111	240	171	149	321	210	149	359
40-44	134	128	262	123	92	215	133	107	240	138	81	218	134	82	216
45-49	141	115	256	112	130	243	120	92	212	107	109	217	114	107	221
50-54	108	116	224	151	108	258	116	128	243	131	88	219	136	86	222
55-59	92	103	194	110	116	226	153	105	258	120	127	247	113	139	252
60-64	76	78	154	75	120	195	99	127	225	131	131	262	123	123	246
65-69	41	72	113	76	57	133	69	111	179	99	99	198	85	93	178
70-74	45	55	100	31	71	101	63	52	115	56	108	164	50	96	146
75-79	31	40	71	48	43	91	28	61	89	67	44	111	99	30	129
80-84	45	18	63	55	28	82	54	30	84	59	45	104	101	51	152
85+	90	52	142	119	87	207	90	56	146	91	54	145	75	69	144
Total	1,694	1,635	3,329	1,794	1,703	3,497	1,869	1,724	3,593	1,969	1,769	3,739	2,241	1,897	4,138

**County of Middlesex Population Projections
2001 to 2026, High Scenario, Lucan Biddulph**

	2006	2006	2006	2011	2011	2011	2016	2016	2016	2021	2021	2021	2026	2026	2026
Age	Female	Male	Total												
0-4	137	146	283	134	143	277	125	133	257	109	116	225	116	123	239
5-9	170	165	335	169	172	341	153	139	292	137	140	278	145	128	273
10-14	163	185	348	139	143	282	173	172	345	141	141	282	142	140	282
15-19	166	160	326	152	165	317	136	137	273	163	159	322	139	138	276
20-24	141	138	279	123	127	249	138	152	290	112	117	229	153	150	303
25-29	121	111	233	147	123	270	117	113	230	140	138	278	107	108	215
30-34	159	116	274	207	151	358	199	138	336	226	156	382	206	158	364
35-39	190	165	355	161	145	306	243	184	427	219	189	409	274	209	483
40-44	170	164	334	161	143	304	157	144	301	199	150	349	216	188	404
45-49	155	180	335	147	145	292	151	137	288	142	132	275	189	144	333
50-54	141	147	288	153	164	318	140	138	278	149	129	278	137	127	263
55-59	128	135	263	128	151	280	144	160	304	131	139	270	142	126	268
60-64	96	117	213	124	116	240	120	139	259	139	143	282	123	131	254
65-69	68	67	134	91	103	194	114	103	217	114	127	241	129	132	261
70-74	61	46	107	62	54	116	80	86	166	104	87	191	101	110	211
75-79	43	38	81	59	39	98	53	40	94	77	74	151	90	72	161
80-84	47	29	76	32	31	63	43	29	72	41	37	77	56	58	114
85+	51	47	98	98	95	194	60	48	107	66	26	92	65	50	115
Total	2,207	2,155	4,362	2,288	2,212	4,500	2,344	2,194	4,538	2,408	2,203	4,611	2,529	2,292	4,821

**County of Middlesex Population Projections
2001 to 2026, High Scenario, Middlesex Centre**

	2006	2006	2006	2011	2011	2011	2016	2016	2016	2021	2021	2021	2026	2026	2026
Age	Female	Male	Total	Female	Male	Total									
0-4	407	434	841	416	443	859	414	441	855	391	417	808	473	503	976
5-9	584	625	1,209	604	616	1,221	588	616	1,204	568	580	1,148	677	699	1,375
10-14	642	716	1,359	625	639	1,265	767	833	1,601	738	873	1,611	785	868	1,653
15-19	543	633	1,176	606	661	1,267	687	696	1,383	728	730	1,457	820	948	1,769
20-24	436	517	954	389	501	890	554	625	1,179	524	568	1,091	684	695	1,378
25-29	233	289	522	350	393	744	326	430	756	480	518	998	470	512	981
30-34	302	274	576	369	382	752	409	400	809	507	515	1,022	592	530	1,122
35-39	552	491	1,044	596	503	1,100	669	623	1,291	950	874	1,824	1,087	963	2,051
40-44	669	664	1,333	542	575	1,117	697	647	1,343	574	672	1,245	1,145	1,148	2,293
45-49	650	683	1,332	638	643	1,281	572	624	1,196	660	603	1,263	649	795	1,443
50-54	590	625	1,214	673	668	1,341	663	656	1,319	598	607	1,204	701	628	1,330
55-59	546	545	1,091	542	600	1,142	653	657	1,310	611	629	1,240	581	597	1,178
60-64	422	465	888	557	581	1,138	536	622	1,158	672	720	1,392	606	660	1,266
65-69	329	321	651	436	402	838	558	546	1,103	568	543	1,111	685	684	1,369
70-74	241	254	495	277	278	555	385	351	736	476	485	961	506	488	994
75-79	196	194	390	221	205	426	231	226	457	352	302	654	398	416	814
80-84	168	114	281	186	143	329	182	149	332	229	182	411	304	226	530
85+	217	176	393	333	366	699	302	212	514	382	180	562	201	215	416
Total	7,727	8,022	15,749	8,362	8,601	16,963	9,193	9,354	18,546	10,006	9,997	20,003	11,364	11,575	22,939

**County of Middlesex Population Projections
2001 to 2026, High Scenario, Newbury**

Age	2006	2006	2006	2011	2011	2011	2016	2016	2016	2021	2021	2021	2026	2026	2026
	Female	Male	Total												
0-4	11	12	23	10	11	21	9	9	18	7	8	15	8	8	16
5-9	12	10	22	10	10	21	9	7	17	8	8	15	8	6	14
10-14	10	16	26	15	13	27	10	13	23	10	15	25	8	10	18
15-19	24	23	47	7	12	19	14	12	26	8	9	17	9	14	24
20-24	7	12	18	18	18	37	6	11	17	12	10	22	8	8	16
25-29	9	7	16	7	9	17	18	17	34	6	9	15	11	10	21
30-34	14	8	22	17	6	24	17	7	24	37	14	51	14	8	22
35-39	14	4	18	8	8	17	17	6	23	6	8	15	36	13	50
40-44	20	20	40	14	5	19	8	8	16	17	6	23	6	8	15
45-49	18	10	28	16	19	35	14	5	19	7	8	15	16	6	23
50-54	14	17	32	19	5	24	16	18	34	14	3	17	7	7	14
55-59	15	2	16	15	13	28	19	3	22	16	14	31	14	3	16
60-64	11	9	19	26	12	38	25	18	43	39	15	54	26	19	45
65-69	18	10	28	12	5	17	41	12	53	47	13	60	61	16	77
70-74	21	1	22	37	3	40	40	2	42	80	6	86	103	10	113
75-79	7	1	7	6	3	9	30	2	32	8	4	12	65	4	69
80-84	3	4	7	6	0	6	3	3	5	22	2	25	3	3	6
85+	7	5	11	10	9	19	9	6	14	11	6	17	1	1	1
Total	233	170	403	254	163	417	302	158	460	355	159	514	400	152	552

**County of Middlesex Population Projections
2001 to 2026, High Scenario, North Middlesex**

	2006	2006	2006	2011	2011	2011	2016	2016	2016	2021	2021	2021	2026	2026	2026
Age	Female	Male	Total												
0-4	202	215	417	192	204	396	167	178	344	145	154	299	153	163	315
5-9	278	285	563	266	272	538	238	241	479	201	205	405	211	212	423
10-14	269	318	587	196	254	450	266	296	561	189	250	439	200	230	431
15-19	286	302	587	262	303	565	193	256	449	260	276	536	187	253	440
20-24	230	272	501	210	234	444	242	283	525	158	215	372	247	262	508
25-29	127	136	263	193	198	391	183	196	380	208	227	436	139	190	329
30-34	173	147	320	231	184	415	252	195	447	329	229	557	271	226	497
35-39	233	204	437	166	188	355	256	220	476	244	269	514	368	287	655
40-44	293	299	592	217	194	411	165	195	359	228	198	425	242	281	523
45-49	284	290	574	324	286	610	228	192	420	190	184	374	253	195	448
50-54	252	235	487	266	285	551	320	282	603	213	189	403	188	181	370
55-59	236	239	475	241	220	461	257	275	532	310	268	578	207	184	391
60-64	173	185	357	224	231	455	228	210	439	246	268	514	296	260	555
65-69	120	138	257	157	162	319	204	214	418	210	191	401	226	250	476
70-74	95	90	185	111	116	227	137	138	275	189	185	374	186	168	354
75-79	80	69	150	82	73	155	90	92	182	121	118	239	155	158	313
80-84	80	45	124	72	54	126	63	52	115	82	77	159	94	89	183
85+	162	110	271	236	193	429	159	105	264	159	72	231	85	74	159
Total	3,571	3,577	7,148	3,647	3,652	7,299	3,649	3,619	7,268	3,681	3,576	7,256	3,708	3,662	7,370

**County of Middlesex Population Projections
2001 to 2026, High Scenario, Southwest Middlesex**

	2006	2006	2006	2011	2011	2011	2016	2016	2016	2021	2021	2021	2026	2026	2026
Age	Female	Male	Total												
0-4	165	175	340	153	163	315	132	141	273	114	122	236	116	123	239
5-9	205	212	417	190	193	383	166	164	330	142	145	286	145	130	276
10-14	228	216	444	203	181	384	212	195	407	196	164	360	165	146	312
15-19	230	247	477	201	208	409	200	179	379	184	189	373	194	163	358
20-24	192	211	402	179	202	380	183	196	379	169	156	325	172	181	352
25-29	129	143	272	168	170	338	162	181	343	167	167	334	158	143	300
30-34	148	130	278	161	155	316	173	162	335	189	185	374	174	163	337
35-39	189	183	373	194	157	351	201	169	371	248	200	448	246	205	451
40-44	251	254	505	169	174	343	197	156	353	167	154	321	253	199	452
45-49	261	266	527	235	248	482	164	172	336	185	153	339	162	152	315
50-54	228	225	453	257	262	519	230	244	474	163	170	333	181	151	333
55-59	198	213	411	214	219	432	247	255	502	218	238	456	156	166	323
60-64	155	181	336	193	195	388	202	206	408	240	239	478	208	229	437
65-69	136	103	239	162	169	331	190	182	371	214	196	409	237	225	462
70-74	123	114	236	125	89	215	147	149	296	173	161	334	195	175	370
75-79	99	91	191	98	89	187	100	69	169	122	126	248	141	136	277
80-84	78	46	124	87	60	147	74	66	139	88	55	143	91	94	186
85+	127	94	220	213	184	396	132	96	228	119	69	188	21	84	106
Total	3,142	3,104	6,246	3,201	3,117	6,319	3,111	2,982	6,094	3,097	2,888	5,985	3,017	2,869	5,885

**County of Middlesex Population Projections
2001 to 2026, High Scenario, Strathroy Caradoc**

	2006	2006	2006	2011	2011	2011	2016	2016	2016	2021	2021	2021	2026	2026	2026
Age	Female	Male	Total												
0-4	598	636	1,234	579	616	1,195	521	555	1,076	454	483	938	476	507	983
5-9	763	778	1,541	751	766	1,517	675	712	1,388	589	601	1,190	616	656	1,272
10-14	755	825	1,580	625	669	1,294	803	787	1,590	676	652	1,328	647	624	1,271
15-19	715	827	1,542	710	885	1,594	621	720	1,340	743	866	1,609	674	708	1,381
20-24	643	653	1,295	628	686	1,314	680	853	1,533	568	607	1,174	720	844	1,564
25-29	500	477	977	641	639	1,279	609	657	1,266	673	825	1,498	553	586	1,140
30-34	619	558	1,177	674	585	1,260	767	711	1,478	881	831	1,712	835	915	1,751
35-39	702	640	1,342	601	591	1,192	721	647	1,368	736	762	1,498	951	943	1,895
40-44	783	824	1,607	703	647	1,351	622	619	1,241	716	644	1,361	776	821	1,596
45-49	844	774	1,618	803	836	1,639	720	663	1,383	641	624	1,265	751	676	1,426
50-54	667	714	1,381	817	793	1,610	794	853	1,647	693	689	1,382	634	653	1,287
55-59	594	578	1,172	661	661	1,322	802	770	1,572	789	799	1,587	681	674	1,355
60-64	493	442	935	622	558	1,180	678	634	1,312	864	747	1,611	809	773	1,582
65-69	450	375	825	553	433	985	680	533	1,212	800	620	1,420	971	716	1,687
70-74	381	325	706	443	368	811	568	408	976	688	519	1,207	857	585	1,442
75-79	316	274	591	324	273	597	382	320	702	471	355	826	598	458	1,055
80-84	221	167	388	244	203	447	237	206	442	299	254	553	346	275	621
85+	322	295	616	573	573	1,146	339	318	658	318	236	554	156	301	456
Total	10,365	10,164	20,529	10,951	10,781	21,732	11,218	10,965	22,183	11,597	11,115	22,713	12,051	11,714	23,764

**County of Middlesex Population Projections
2001 to 2026, High Scenario, Thames Centre**

	2006	2006	2006	2011	2011	2011	2016	2016	2016	2021	2021	2021	2026	2026	2026
Age	Female	Male	Total												
0-4	341	363	704	338	359	697	331	352	683	315	335	649	382	406	788
5-9	508	523	1,031	514	524	1,037	495	496	991	479	488	967	561	550	1,111
10-14	606	678	1,284	564	682	1,246	691	782	1,473	690	872	1,562	713	828	1,542
15-19	526	616	1,142	517	587	1,104	588	742	1,330	561	644	1,205	721	951	1,673
20-24	424	455	880	401	476	877	473	545	1,018	478	599	1,077	523	606	1,129
25-29	229	250	479	318	324	642	338	401	740	392	438	830	430	541	970
30-34	279	193	472	437	307	743	434	308	742	633	443	1,076	589	423	1,012
35-39	450	386	836	436	353	789	667	462	1,129	780	636	1,416	1,036	740	1,776
40-44	607	548	1,155	417	434	851	506	434	940	578	471	1,050	924	803	1,727
45-49	608	653	1,261	600	598	1,199	433	489	922	471	464	935	623	614	1,237
50-54	524	580	1,104	646	623	1,269	623	608	1,231	471	459	930	524	483	1,007
55-59	502	494	996	523	573	1,095	662	623	1,285	645	606	1,251	494	463	957
60-64	347	365	711	454	449	903	494	545	1,039	600	576	1,177	616	585	1,202
65-69	263	275	538	313	335	648	413	413	826	455	508	962	553	541	1,094
70-74	205	213	417	255	256	512	280	301	581	396	389	785	408	466	874
75-79	138	155	292	169	168	337	206	211	416	238	253	490	324	330	654
80-84	105	72	177	108	111	219	119	118	237	164	166	330	170	189	358
85+	126	131	257	244	264	507	146	147	293	153	126	279	102	207	309
Total	6,786	6,950	13,736	7,251	7,422	14,673	7,898	7,979	15,877	8,497	8,473	16,970	9,693	9,726	19,419

APPENDIX C

A GUIDELINE FOR DEVELOPMENT ASSESSMENT REPORTS

AUGUST 2007

Introduction

This guideline is written for landowners and developers to assist in the review and approval of development applications and/or site alterations that may affect the Natural System shown or described in the County of Middlesex Official Plan.

A Provincial Policy Statement was issued by the Province of Ontario in March 2005 that provides policy direction on matters of provincial interest related to land use planning and development including the Natural Environment. The Planning Act requires that municipal decisions affecting planning matters “*shall be consistent with*” policy statements issued under the Act. As a result, the County of Middlesex Official Plan sets out a policy framework that encourages the protection of the County’s Natural System which comprises the following elements:

- Natural Hazards
 - steep slope hazards
 - unstable soils
 - fill regulated areas
- Natural Environment Areas
 - floodplains
 - flood regulated watercourses
 - wetlands
- Natural Heritage Features
 - significant woodlands
 - wildlife habitat
 - habitat of endangered and threatened species
 - aquatic ecosystems including fish habitat
 - river, stream, ravine and upland corridors
 - significant valley lands
 - aggregate Resource Areas
 - petroleum Resource Pool Areas
 - areas of natural & scientific interest (ANSI's)
- Groundwater Features
 - groundwater recharge areas
 - groundwater discharge and headwater areas
 - well head protection areas

Development shall not be permitted on lands designated as ‘Natural Environment Areas’ on Schedule “A” of the County Official Plan which are:

- Wetlands
- Flood regulated water courses and associated flood plains
- Thedford Marsh Floodplain
- Significant portions of the habitat of threatened and endangered species

The habitat of endangered and threatened species is not shown on the Official Plan maps due to the sensitivity of publishing such information. This information is available from the Ministry of Natural Resources, at the request of the landowner.

Development Assessment Reports

Before starting a Development Assessment Report, a work plan will be prepared to the satisfaction of the County, in consultation with the relevant agencies. Depending on the extent of the proposed development and the potential for impact on natural features, the County may approve a work plan for a Development Assessment Report that is reduced in scope and content; referred to as a 'scoped' Development Assessment Report.

A Development Assessment Report shall be required to show that development will have no negative impact on the natural features or on their ecological functions. The public, particularly adjacent property owners, may be notified of the preparation of a Development Assessment Report and given the opportunity to comment.

A Development Assessment Report is required for development applications adjacent to lands designated as 'Natural Environment Areas' on Schedule 'A' of the County Official Plan

A Development Assessment Report may be required for development on or adjacent to lands delineated as 'Natural Heritage Features' on Schedule 'C' of the County Official Plan

A Development Assessment Report may be required for development applications on or adjacent to Natural Heritage Features which are described but not mapped in the County Official Plan. These features may include significant woodlands; groundwater recharge areas; river, stream ravine and upland corridors, significant valley lands and the habitat of endangered and threatened species

If a local municipality requires a Development Assessment Report or equivalent impact assessment document, as part of their approval process, the County will waive its requirement for a Development Assessment Report, provided the local impact assessment meets the requirements of this Guideline. It is also noted that additional Natural Heritage Features may be shown in local municipal official plans.

The following table summarizes the distances from a Natural System Element where a Development Assessment Report is required.

Natural System Element	Development adjacent to Natural System Element	Development within Natural System Element
Wetlands and adjacent lands. Adjacent lands are those within 120 metres of an individual wetland area or land connecting individual wetlands within a wetland complex	DAR required within 120 m	Not Permitted
Significant habitat of endangered or threatened species	DAR required within 100 m	Not Permitted
Floodplains and flood prone areas mapped and/or regulated by a Conservation Authority	DAR required within 50 m	Permitted in Some Circumstances
Significant Woodlands and ANSI's as identified on Schedule 'C'	DAR required within 50 m	DAR Required
Significant Wildlife Habitat	DAR required within 50 m	DAR Required
Significant Valley Lands	DAR required within 50 m	DAR Required
Fish Habitat	DAR required within 30 m	Not Permitted

The County may require the proponent to consider features beyond the distances outlined in the above table to ensure the relevant context for the assessment of potential impacts.

Refinements to the boundaries of the Natural System Elements must be submitted to the County of Middlesex in digital form and must be approved by the appropriate agency or authority.

Content of Development Assessment Report

The County requires the Development Assessment Report to be completed to a professional standard, in consultation with the relevant public agencies. The detailed content required for Development Assessment Reports is outlined below.

(i) Description of the Development

A Development Assessment Report shall include a concise summary of the nature and extent of the proposed development, including:

- a detailed location map to scale showing proposed lot lines, building envelopes(s), laneways, servicing and the extent of any proposed vegetation removal

- a description of the surrounding land uses and the natural features located on adjacent properties
- the extent of the overall development of the site i.e., other phases
- a list of any relevant reports that have been completed for the site
- any changes to grade
- a description of the alternative plans that could reduce or eliminate impacts

(ii) Description of Natural Features

A Development Assessment Report shall include a description of the existing natural environment that will be affected including:

- a description of how the natural system elements relate to the broader natural heritage landscape as identified in the 'Middlesex Natural Heritage Study'
- a three season inventory to determine the location and distribution of any significant or rare plant or animal species (a scoped Development Assessment Report may not require this)
- a characterisation of the hydrology and hydrogeology of the site
- the boundaries of existing natural system elements
- description and identification of topography and soils of the area required for the determination of appropriate site service, including water table depth, soil percolation rate and soil structure
- a description of the impact of the development on any Natural System Element beyond the property boundary

(iii) Identification of Potential Impacts

The Development Assessment Report shall include the potential environmental effects that may occur as a result of the following:

- removal of vegetation and the effects this could have on all native species with particular emphasis on significant plant and animal species
- the proposed destruction or alteration of significant wildlife habitats
- the effect of altered hydrology and hydrogeology resulting from grading, installation of services, and increased imperviousness, on the natural element including implications for erosion and sedimentation
- encroachment as a result of development including landscaping, invasive garden plants, domestic animals, etc

(iv) **Identification and Recommendation of Mitigation Measures**

The Development Assessment Report shall describe alternative methods and measures to avoid and mitigate negative environmental impacts on the Natural System Element and its ecological functions as follows:

- identify and recommend measures necessary to protect and maintain the identified ecological functions of the natural system
- identify and recommend measures for the preservation of significant vegetation communities, special habitats and specimen trees on the site
- identify and recommend erosion and sedimentation control measures
- recommendations for replanting vegetation so that there is a minimal loss of vegetation cover
- recommendations for improving the diversity of natural system elements in the area and the natural connections between them
- recommend options for ongoing rehabilitation, protection, management and enhancement of the Natural System Element

(v) **Demonstration of Consistency**

The author of the Development Assessment Report shall provide an opinion as to the development's consistency with the Provincial Policy Statement.

More Information is available from:

The County of Middlesex (519) 434-7321
Planning & Economic Development
399 Ridout Street North
London, ON N6A 2P1

Upper Thames River Conservation Authority (519) 451-2800
Hydrology and Regulatory Services Coordinator
1424 Clarke Road
London, ON N5V 5B9

Ausable Bayfield Conservation Authority (519) 235-2610
Supervisor of Water and Planning
RR 3; 711108 Morrison Line
Exeter, ON N0M 1S5

St. Clair Region Conservation Authority (519) 245-3710
Director of Planning
205 Mill Pond Crescent
Strathroy, ON N7G 3P9

Kettle Creek Conservation Authority (519) 631-1270
Manager
RR 8
St. Thomas, ON N5P 1Y6

Lower Thames Valley Conservation Authority (519) 354-7310
Resource Technician
100 Thames Street
Chatham, ON N7M 2Y8

The Ministry of Natural Resources (519) 773-4750
District Planner
Aylmer District Office
353 Talbot Street West
Aylmer, ON N5H 2S8

NOTE : Additional contact information is available from the
County's web site at www.county.middlesex.on.ca

COUNTY OF MIDDLESEX
OFFICIAL PLAN

SCHEDULE A
LAND USE

Notations:

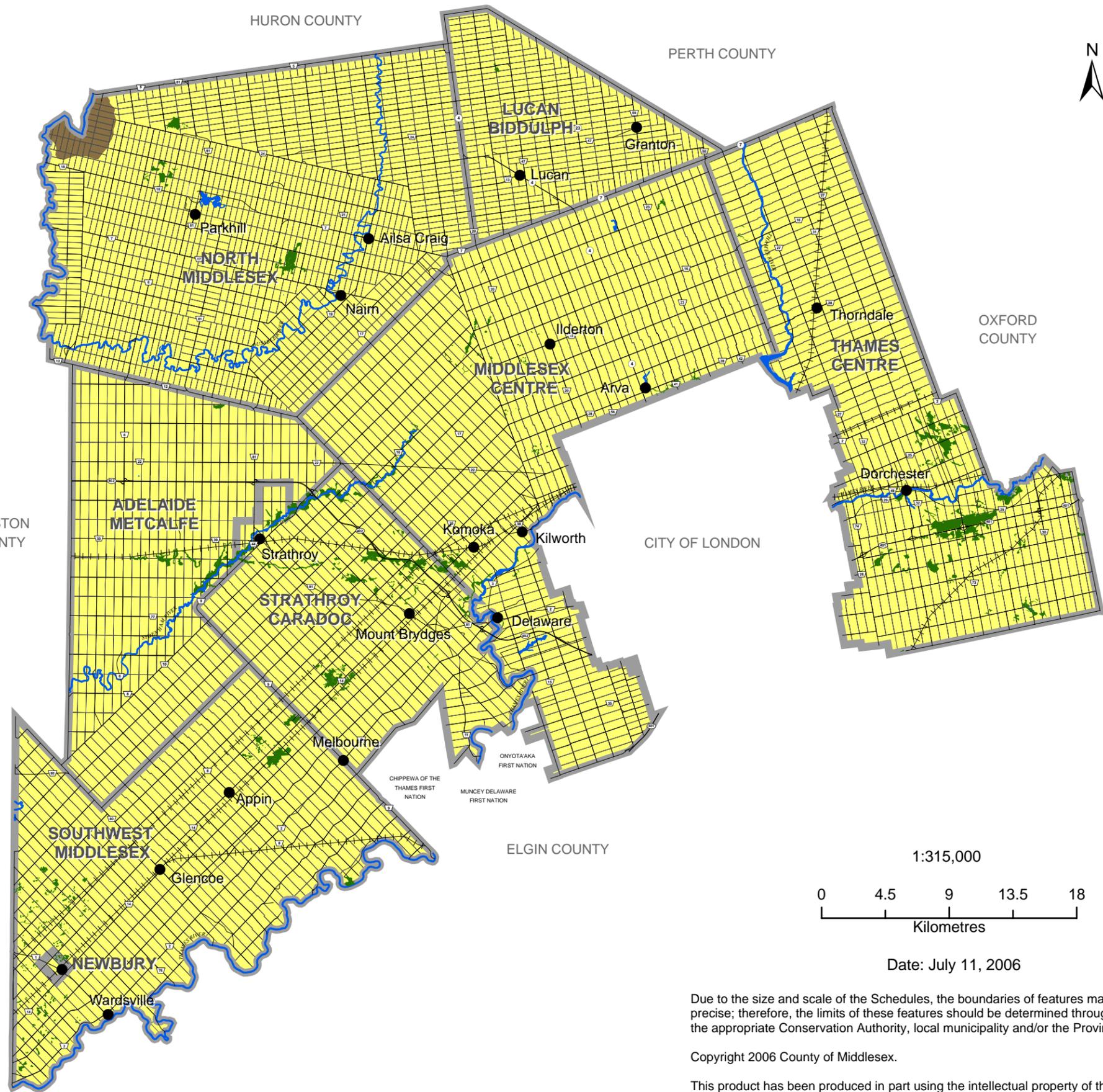
Areas designated as Natural Environment Areas preclude development.

Schedule A should be read in conjunction with Schedules B and C and the text of the Official Plan.

The Flood Regulated Watercourses and Associated Floodplain of the Ausable River, Thames River and Sydenham River are shown conceptually on Schedule A; however, all watercourses in the County have associated hazards and may be subject to land use restrictions as provided for in local Official Plans.

Schedule A
Land Use

-  Agricultural Areas
-  Settlement Areas (Urban and Community)
- Natural Environment Areas
 -  Wetlands
 -  Flood Regulated Watercourse and Associated Floodplain
 -  Thedford Marsh Floodplain



Due to the size and scale of the Schedules, the boundaries of features may not appear to be precise; therefore, the limits of these features should be determined through consultation with the appropriate Conservation Authority, local municipality and/or the Province.

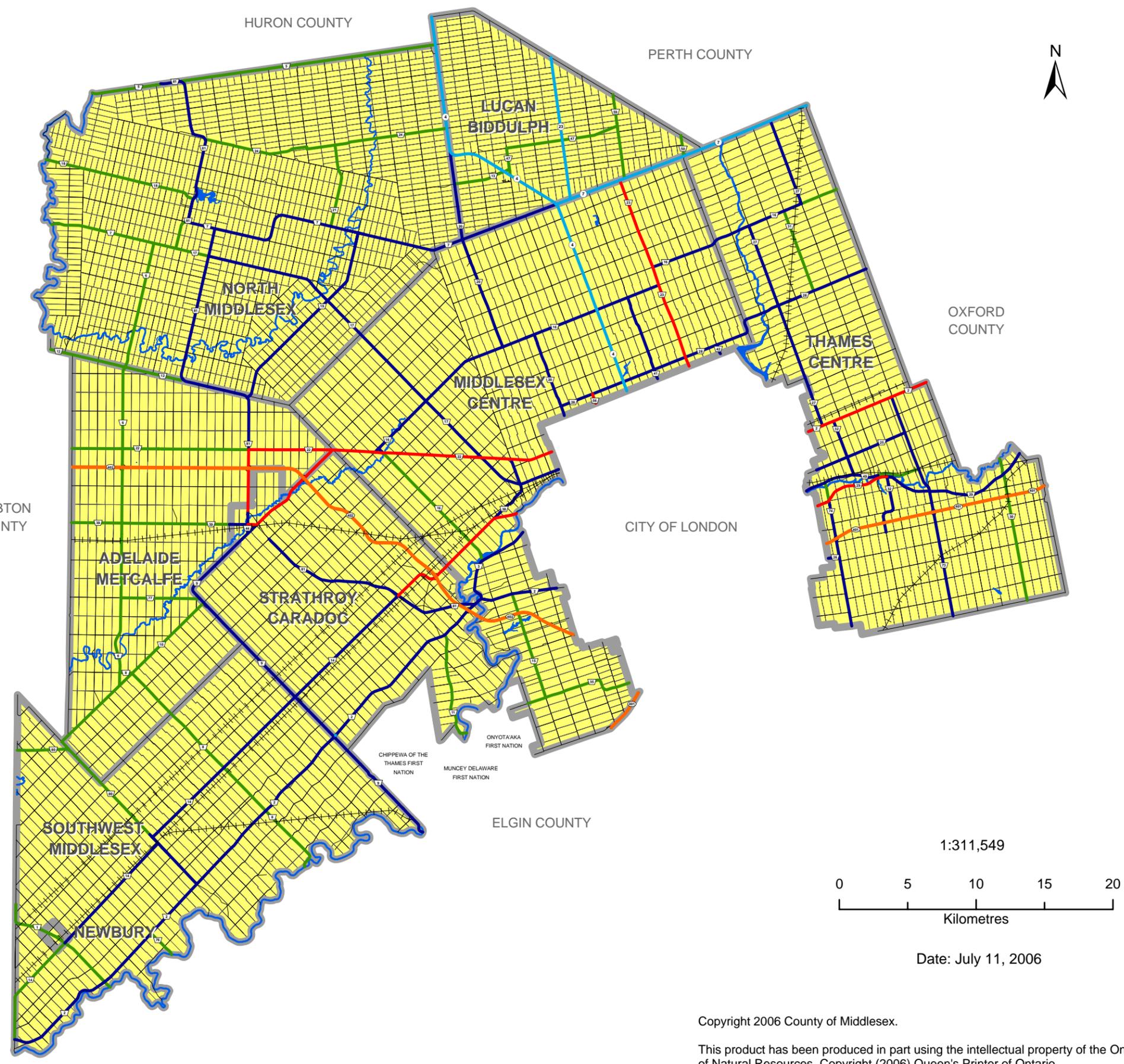
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COUNTY OF MIDDLESEX
OFFICIAL PLAN
**SCHEDULE B
TRANSPORTATION**

Notations:
Schedule B should be read in conjunction with Schedules A and C and the text of the Official Plan.

- Schedule B
Transportation**
-  Provincial 400 Series Highways
 -  Provincial Highways
 -  Four Lane Arterial Roads - County
 -  Arterial Roads - County
 -  Collector Roads - County
 -  Rail Roads



CHATTHAM
- KENT

COUNTY OF MIDDLESEX
OFFICIAL PLAN
**SCHEDULE C
NATURAL HERITAGE FEATURES**

Notations:

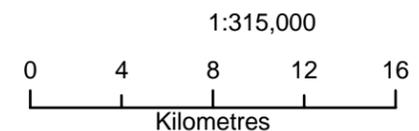
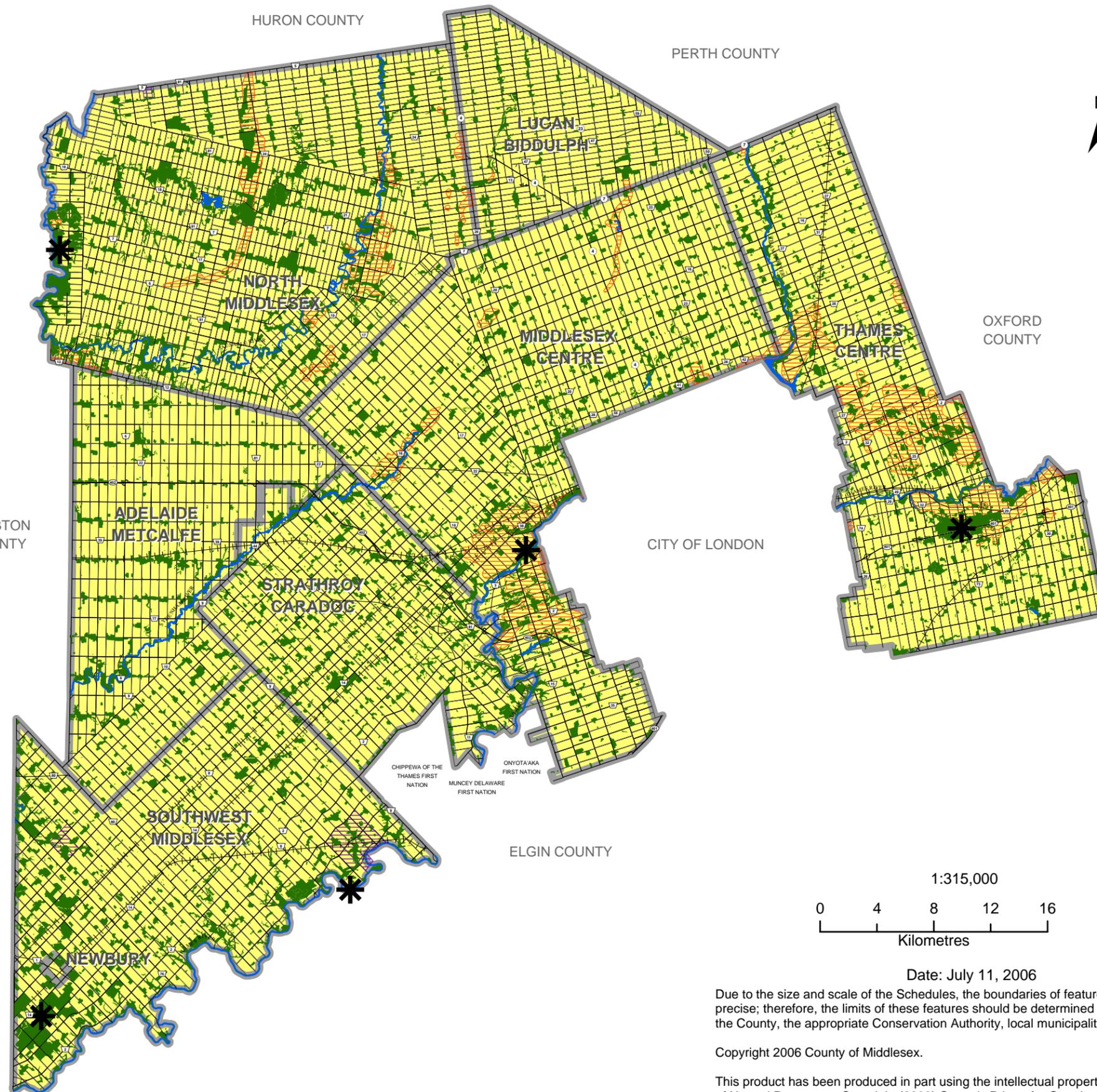
Schedule C should be read in conjunction with Schedules A and B and the text of the Official Plan.

The features shown on Schedule C represent a range of ecosystem elements which have been consolidated from a number of existing sources, the primary source being the Middlesex Natural Heritage Study (2003). Schedule C features do not preclude development; however, there is an interest in protecting them from incompatible development. These features have been shown on Schedule C as a means of reinforcing the policies outlined in the text which encourage their protection. The importance of these features shall be considered when land use changes and development decisions are proposed in, or adjacent to, these features.

Although there appears to be an absence of Aggregate Resource Areas in the Municipalities of Adelaide Metcalfe, Strathroy-Caradoc, Southwest Middlesex and Newbury; this is only as a result of incomplete aggregate mapping for the County. The Province should be consulted for more detailed information regarding the location of aggregate resources in these areas.

Schedule C
Natural Heritage Features

-  Aggregate Resource Areas
-  Petroleum Resource Pool Areas
-  Significant Woodlands
-  Areas of Natural and Scientific Interest (ANSI)



Date: July 11, 2006

Due to the size and scale of the Schedules, the boundaries of features may not appear to be precise; therefore, the limits of these features should be determined through consultation with the County, the appropriate Conservation Authority, local municipality and/or the Province.

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