



City of Woodstock

East Woodstock Secondary Plan and Design Study

Planning and Land Use Considerations

Our File: 9766 C

171 Victoria Street North
Kitchener, Ontario N2H 5C5

T: (519) 576.3650
F: (519) 576.0121

Ian F. MacNaughton
MA, FCIP, RPP

Bernard P. Hermesen
BES, MCIP, RPP

Paul R. Britton
BES, MCIP, RPP

W. Brent Clarkson
MA, MCIP, RPP

James D. Parkin
BES, MCIP, RPP

Carol M. Wiebe
BES

Kris Menzies
BES, MCIP, RPP

David A. McKay
BES, MCIP, RPP

Brian Zeman
BES, MCIP, RPP

Offices in:
• Kitchener • Vaughan
• London • Kingston
• Barrie

City, Town
and Rural Planning

Municipal Plans and Studies

Land Development

Urban Design /
Community Planning

Landscape Architecture

Natural Resource
and Aggregate Planning

Expert Evidence
and Mediation

Project Management

September 2006

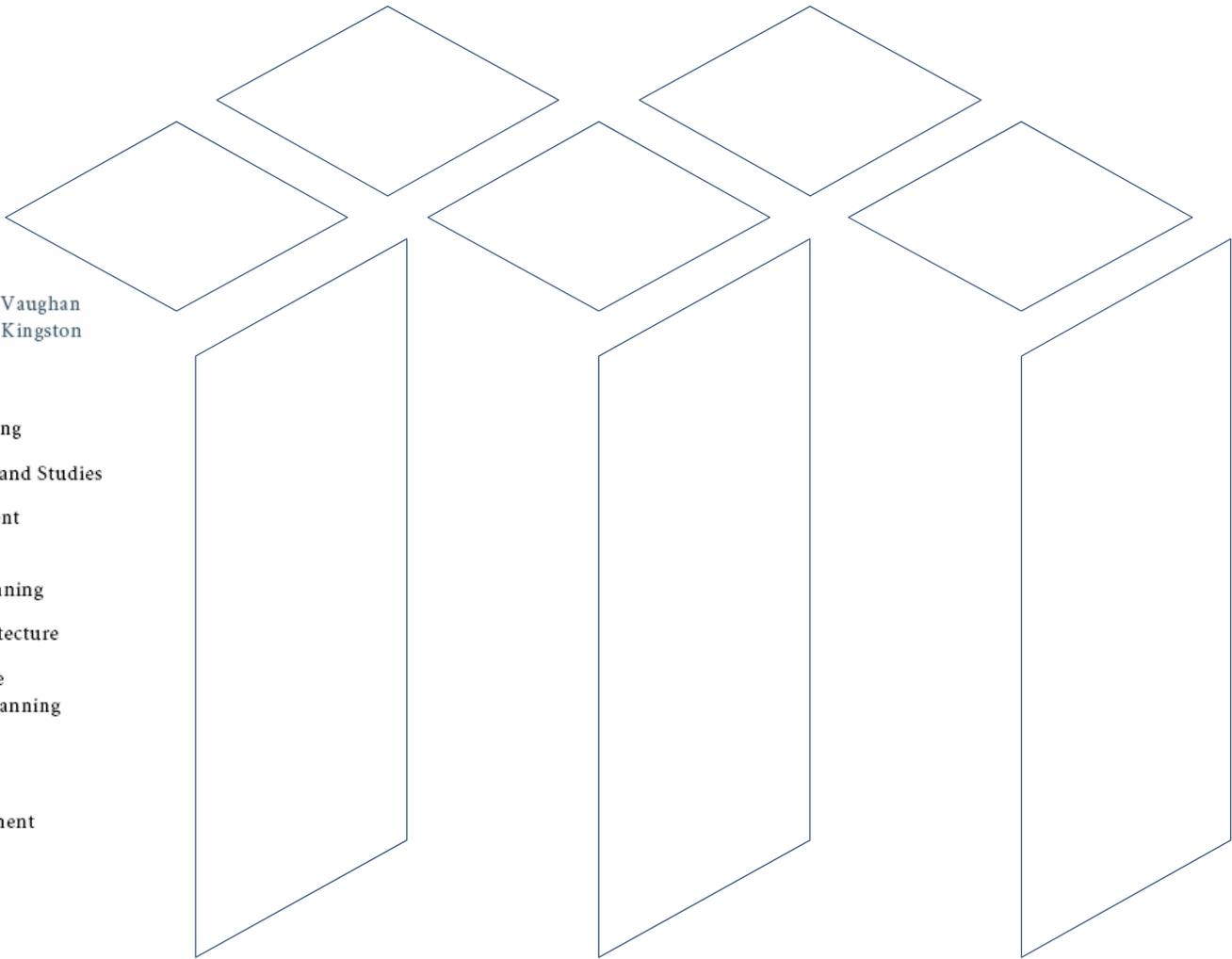


TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	EXISTING CONDITIONS AND SURROUNDING LAND USES	2
3.0	POLICY FRAMEWORK	3
3.1	County of Oxford Official Plan	3
3.2	Ministry of the Environment Guidelines	3
3.3	Existing Zoning	5
4.0	LAND USE CONCEPTS	6
4.1	Development Criteria	6
4.2	Environmental Considerations	6
4.3	Roads and Transportation Considerations	7
4.4	Design Concepts	7
4.5	Preferred Design Concept	8
4.5.1	Sub-Area One (West of County Road 4/North of Landsdowne:	8
4.5.2	Sub-Area Two (West of County Road 4/Between Landsdowne and Oxford County Road 35/Devonshire Avenue)	8
4.5.3	Sub-Area Three (West of County Road 4/Between Devonshire Avenue and Dundas Street)	9
4.5.4	Sub-Area Four (West of County Road 4/South of Dundas)	10
4.5.5	Sub-Area Five (East of County Road 4/ Between Township Road 3 and the Toyota Lands)	10
4.5.6	Sub-Area Six (East of Highway 401/ North of County Road 2)	10
4.5.7	Sub-Area Seven and Eight (West of Blandford Road/ North and South of Old Township Road 2)	11
5.0	SUMMARY	12

1.0 INTRODUCTION

MacNaughton Hermsen Britton Clarkson Planning Limited (MHBC Planning) was retained to complete the design and planning aspects of the East Woodstock Secondary Plan and Design Study. This section of the report summarizes the land use and planning components of the East Woodstock Secondary Plan and Design Study. A summary of MHBC's background research is provided, along with a detailed discussion describing the process leading to the preferred land use concept.

The study area is part of a larger area that was incorporated into the City of Woodstock from the Township of Blandford-Blenheim on September 1, 2005 via a municipal boundary adjustment. The East Woodstock Secondary Plan and Design Study provides a comprehensive development concept and servicing strategy for the entire area incorporated into the City of Woodstock, and plans for the various development opportunities that will result from the new Toyota manufacturing facility. The City's long-term intent is that the lands will be used for industrial and limited Service Commercial purposes.

The study area is immediately adjacent to the new Toyota Motor Manufacturing facility, but does not include the 405-hectare (1,000 acre) Toyota lands. The current use of the study area consists of agricultural operations, non-farm residential dwellings, rural industrial uses, and Service Commercial uses at the intersection of County Road 4 and Highway 2, commonly referred to as Bonds Corners. The northerly portion of the study area is comprised of a number of environmental features.

Specific design criteria addressing issues such as (but not limited to) coverage, height and local road patterns have been developed in the form of guidelines to ensure a high quality of design across the whole of the study area. The design guidelines will be applied to subsequent site and subdivision developments within the subject area. Suggested Urban Design Guidelines have been completed and are provided under separate cover.

The Secondary Planning and Design Study has been prepared in accordance with the requirements of the County of Oxford Official Plan polices, and is the first step in the planning approval process. Further justification and Official Plan amendments will be required as a pre-condition to any development in the area and to implement the Secondary Plan.

2.0 EXISTING CONDITIONS AND SURROUNDING LAND USES

Figure 1 identifies the study area and the extent of the Toyota Lands in relation to the study area. This figure also identifies existing land uses, ownership, existing homes and development patterns found within the study area. The predominant land uses within the study area (outside of the Toyota Lands) include agricultural uses, rural residential, agriculturally related commercial uses, and commercial/industrial development on the south side of County Road 2.

Highway 401 bisects the study area from northeast to southwest. An existing interchange (currently being upgraded) is located at Highway 401 and Oxford County Road 2 (previously Highway 2). The interchange with the Oxford County Road 2 arterial is located at the south boundary of the study area. Oxford County Road 2 forms the south boundary of the study area and proceeding westerly becomes Dundas Street, the main street that crosses through downtown Woodstock.

The westerly portion of the study area includes Oxford County Road 4, a north-south arterial road that forms the westerly boundary of the Toyota site. At the south and west intersections of Oxford County Road 4 and County Road 2, is an area of mixed commercial/industrial and vacant land, which is, designated “Future Urban Area” in the County Official Plan. Further to the west are existing industrial uses in the City of Woodstock, as well as the designated limit of residential communities currently developing in the eastern portion of the City. The northwest portion of the study area includes lands owned by the Upper Thames Conservation Authority along the Pittock Reservoir. These lands are to the north of Landsdowne Avenue and are comprised of some woodland mixed with agricultural fields.

County Road 35 (Devonshire Avenue) bisects the study area from east to west, and provides a direct connection to the existing residential area in the City of Woodstock. This road terminates at County Road 4, opposite one of the main entrances into the Toyota site.

Wetlands and large tracts of natural areas comprise the northeast quadrant of the study area. The Van Sittant Woods Provincial Wildlife Area is also located in, and forms part of, this large natural area.

The southeast portion of the study area is triangular in configuration and is bounded by Highway 401 to the west, Blandford Road to the east, and County Road 2 to the south. Wetland and wooded areas as well as agricultural fields characterize this area. The Eastwood settlement area is also located in this portion of the study area at the intersection of County Road 2 and County Road 55.

3.0 POLICY FRAMEWORK

3.1 County of Oxford Official Plan

The study area, previously part of the Township of Blandford-Blenheim, has been annexed and is now shown as part of the City of Woodstock on Schedule “W-1” of the County of Oxford Official Plan (Figure 2 of this report). The County Plan designates the study area as Agricultural Reserve, Environmental Protection, Open Space, and Future Urban Growth. The Toyota Lands have recently been designated as Traditional Industrial.

Schedule “C-3” of the County of Oxford Official Plan (Figure 3 of this report) establishes the settlement strategy for Oxford County, and the study area is identified as a “Large Urban Centre”, which is considered a ‘settlement area’ as defined by the Provincial Policy Statement. However, much of this area remains designated as Agricultural Reserve on the Woodstock Land Use Plan.

In October 2005, the County of Oxford adopted Amendment No. 99 to the Official Plan, which redesignated the Toyota lands for industrial purposes. The proposed development of the Toyota lands represents a significant economic opportunity for both the County of Oxford and the Province of Ontario. Given the location of the Toyota facility and the existing industrial and residential development in the City of Woodstock, the study area represents a logical area for the expansion of the City’s employment land base.

For the most part, the Environmental Protection and Open Space areas are proposed to remain unchanged. The remaining portions of the study area are proposed as Business Park, Traditional Industrial, and/or Service Commercial. A small area of Residential, adjacent the Pittock Reservoir is also proposed. The proposed land uses for the study area are identified on the preferred concept (See Section 3 of this report).

The proposal to use the study area for industrial and Service Commercial purposes maintains the County’s strategic goal of economic competitiveness by ensuring that sufficient employment land is available to meet the needs of the County. The designation of the study area for employment purposes will improve the economic strength of the City of Woodstock by providing a broad range of employment opportunities and expanding the assessment base at a key strategic location in proximity to Highways 401 and 403.

The proposal is consistent with the strategic initiative of the City of Woodstock by ensuring that a sufficient supply of unconstrained and appropriately located industrial and commercial land is available to meet the short and long-term needs of businesses.

3.2 Ministry of the Environment Guidelines

A factor in determining future land uses for the study area is the impact that Toyota will have on surrounding lands. The Ministry of Environment has guidelines related to land use compatibility. Guideline D-6 ‘Compatibility between Industrial Facilities and Sensitive Land Uses’ outlines policies relating to compatibility between industrial facilities and sensitive land uses. The objective of this Guideline is to prevent or minimize the

encroachment of sensitive land uses upon industrial land use and vice versa, and to minimize possible adverse effects on sensitive land use resulting from industrial operations.

Guideline D-6 provides policies for Class I, II and III Industrial facilities. The Ministry of the Environment defines these Industrial facilities as follows;

Class I Industrial Facility: A place of business for a small scale, self-contained plant or building which produces/stores a product which is contained in a package and has low probability of fugitive emissions. Examples of a Class I facility include packing and crafting services.

Class II Industrial Facility: A place of business for a medium scale processing and manufacturing with outdoor storage of wastes or materials (i.e. it has an open process) and/or having periodic outputs of minor annoyance. Examples of Class II facility include dry cleaning services and feed packing plants.

Class III Industrial Facility: A place of business for large scale manufacturing or processing, characterized by: large physical size, outside storage of raw and finished products, large production volumes and continuous movement of products and employees during daily shift operations. Examples of a Class III facility include manufacturing of resins and metal manufacturing.

Given the scale, traffic generation, potential shift operations and the amount of outdoor vehicle storage, the Toyota manufacturing facility would be considered a Class III Industrial Facility. In order to minimize adverse impacts, the D-6 guideline establishes *potential influence areas* and the *minimum separation distances* for all industrial facility classes. The guidelines define a 'potential influence area' as an,

“area(s) at or below grade, associated with a facility where adverse effects are expected to occur. These areas act as potential constraint for sensitive land use, or conversely on the establishment of a facility, unless evidence is provided that adverse effects are not a problem, or can be satisfactorily mitigated to the level of trivial impact.”

'Separation Distance' is defined as,

“The linear measurement between a facility property/properties and a sensitive land use/uses. The distance should be adequate to minimize or prevent the adverse effects of one land use upon the other, so that at most there would only be a trivial impact.”

The potential influence area and minimum separation distance for Class III facilities are 1000 metres and 300 metres, respectively. Figure 4 identifies the potential influence area and the minimum separation distance for the Toyota lands based on the Class III requirements. The potential influence area for Toyota extends westerly to the areas currently designated as 'Residential'.

Given the nature of the Toyota facility, and the potential associated impacts, it is appropriate to consider the lands immediately surrounding the Toyota lands for industrial, commercial and Business Park uses. Further, the

preferred concept should include a land use transition westerly from the Toyota site. The land uses would transition from Traditional Industrial, to Business Park (without outside storage) as one gets close to the designated Residential areas. In addition, the existing cluster of residences at Devonshire and County Road 4 are proposed to be designated Service Commercial, in order to provide for improved land use compatibility (adjacent to Toyota) over the longer term.

3.3 Existing Zoning

Under the current Zoning (Township of Blandford-Blenheim By-law 1360-2002 and Township of Norwich By-law 19-84), the study area is zoned as Agriculture, Environmental, Environmental Protection, Commercial, Industrial and Residential (Figure 5). The Toyota Lands are zoned Industrial in accordance with the Minister's Zoning Order (467/05).

4.0 LAND USE CONCEPTS

4.1 Development Criteria

The detailed list of requirements found in the 'Terms of Reference for the 'Design Study for New Eastern Woodstock Lands' identified specific criteria for the development of the land use concepts. These criteria provided the framework to create the land use and design concept for the study area. These criteria are as follows;

1. A variety of commercial and industrial types will be accommodated within the area.
2. Service Commercial Lands at appropriate locations (periphery of the area); Service Commercial and light industrial near existing and planned areas of residential development to act as buffers/screening, etc.
3. Land uses in proximity to residentially designated lands at the eastern edge of the pre-September 2005 boundary of the City (north and south of Devonshire Avenue) shall be considered with a view to the appropriate transition of uses from residential to industrial. Consideration may be given to amending the easterly portions of the existing Northeast Woodstock Community Planning Area secondary plan design to achieve this transition.
4. Proposed land use shall integrate and protect the environmentally significant land and existing natural features identified. Boundaries of wetlands in the area where development may reasonably be expected to proceed (i.e. outside of the Provincially Significant Wetland areas) should be confirmed.
5. Lands located along main arterial routes (Hwy 401) shall typically be used in accordance with the Business Park designation. Design standards in these areas should be to a higher standard than areas designated for more general industrial use.
6. Traditional Industrial designation policies for remaining lands shall be in accordance with County Plan policies, design criteria and zoning provisions.
7. Uses that serve the industrial area, as opposed to the broader public, should be placed in locations that will most efficiently serve the developing industrial area (i.e. along arterials and in clusters/nodes).

4.2 Environmental Considerations

Before generating concepts for the Study Area it was first necessary to determine the potential development areas. The County of Oxford Official Plan identifies a large portion of the study area as Environmental Protection and/or Open Space. To determine which areas within the study area were not appropriate for development for environmental reasons, environmental constraint mapping was created.

Earth Tech identified areas of high, medium-high, medium-low and low natural heritage constraints. Any areas identified as high or medium-high constraint were removed from the potential development area. Provincially Significant Wetlands and other ecological features deemed significant were removed from the potential developable area. Based on this environmental constraint information eight (8) potential developable areas were identified (see Figure 6), having an area of approximately 500 hectares (1,235 acres).

4.3 Roads and Transportation Considerations

The existing and planned transportation network within and around the study area was considered. Proposed access locations to the Toyota lands and related road improvements were also accounted for in the design of the land use concept. The study area is well-served by the existing arterial and collector road system. Three arterial roads (County Road 4, County Road 35 and County Road 2) and two main collector roads (Landsdowne Avenue and Blandford Road) currently exist within the study area. These roads will serve to facilitate movement within and through the study area.

The planned collector road network also contemplates the future extension of roads from existing residential areas to the west. Nellis Street and Springbank Avenue, will function as collectors, and allow the study area to integrate with Woodstock's urban area.

Chandaria Way, which is a proposed north-south collector road just west of the study area, was closely examined for potential alignment options through the new employment lands. Another consideration was the proposed rail spur line leading into the north portion of the Toyota site. The location of this line influenced the design of the area in its immediate surroundings.

Figure 7 of this report identifies the potential road hierarchy for the study area as well as other features of the transportation network.

4.4 Design Concepts

In the early stages of the East Woodstock Secondary Plan and Design Study, several design concepts for the study area were considered. These concepts were constantly re-worked to further consider the environmental constraints, traffic requirements and servicing opportunities. Two preliminary concepts were presented at a Public Meeting/Open House held on May 17, 2006. These concepts, included herein as Figures 8 and 9, provided a general idea of the types of land uses appropriate for the study area. The consideration of the interface with the proposed residential area immediately west of the study area was one of the major considerations of this study. As such, three options for the interface between residential and Business Park uses (Figure 10 of this report) were contemplated and presented at the Public Meeting.

In the months following the first Public Meeting, these concepts were further refined to reflect feedback from County and City staff as well as the numerous suggestions made by the public. This refined concept was

presented at the second Public Meeting/Open House, held on August 2, 2006. The comments made by City and County staff, as well as the comments and requests voiced by the public, were further reviewed. Additional requests that reflected sound land use planning were incorporated into the preferred concept. The resulting concept is shown in Figure 11 of this report. A summary of the design rationale is provided in the following section.

4.5 Preferred Design Concept

The following describes the design rationale of the preferred concept. The sub-area numbers correspond with the developable area numbers found on Figure 6.

4.5.1 Sub-Area One (West of County Road 4/North of Landsdowne):

Designate the developable areas north of Landsdowne as Business Park and Residential.

The western-most portion of this area is proposed as Residential. This parcel is close to the existing residential west of the study area. The close proximity to open space and the Pittock Reservoir makes this parcel desirable for residential use. It is also located beyond the 1000 metre influence area measured from the Toyota site.

The Business Park designation just west of County Road 4 is appropriate considering the advantage of truck access to this arterial road. The developable portion of this area is defined by the floodplain related to Pittock Reservoir.

Locate a quantity and quality Stormwater Management facility in the southeast corner of this area.

Earth Tech has determined that the southeast corner of this sub-area is a suitable location for a stormwater management facility, which would serve not only this sub-area but also a larger area.

4.5.2 Sub-Area Two (West of County Road 4/Between Landsdowne and Oxford County Road 35/Devonshire Avenue):

Re-align Chandaria Way easterly into the Business Park.

This option received positive feedback from the public. The re-alignment of Chandaria Way would ensure that the Business Park uses back onto the existing residential areas, creating greater opportunities for buffering. This alignment would also separate industrial traffic from the residential areas to the west.

Designate the northeast portion of Area Two (the area just south of Landsdowne Avenue and just west of County Road 4) as Business Park.

The Business Park designation is appropriate considering the close proximity of the floodplain/open space area. This provides an extension of the proposed Business Park designation north of Landsdowne Avenue. The eastern-most part of the proposed Business Park designation is a response to a request made after the August 2 Public Meeting. The western-most proposed Business Park designation provides for a transition between residential and industrial areas.

Extend Springbank Avenue.

The extension of Springbank Avenue provides an east/west connection to the industrial area from the residential area, as well as an important access off of County Road 4. Trucks will be discouraged from using this road west of Chandaria Way. The proposed alignment is intended to avoid the open space and steep slopes associated with the Lampman-Lock Drain. The proposed intersection at County Road 4 also maximizes sight lines.

Designate the area northwest of the County Road 4/ County Road 35 intersection as Traditional Industrial.

This reflects the County and City's desire for Industrial land use within the study area. This also meets the design principle of locating 'Traditional Industrial' in close proximity to Toyota.

4.5.3 Sub-Area Three (West of County Road 4/Between Devonshire Avenue and Dundas Street):

Extend the minor collector road pattern to avoid environmental features.

The proposed Nellis Street extension avoids the woodlot located west of County Road 4, and is therefore preferred for environmental reasons. Earth Tech's environmental work confirmed that a roadway through this woodlot should be avoided.

Designate the existing cluster of residences at Devonshire Avenue and County Road 4, as Service Commercial.

This Service Commercial designation is well located at the intersection of two arterials and across from an entrance into the Toyota site. It also provides for an alternative land use that will be more compatible land use over time, in a location that will be surrounded by industrial uses.

Extend the Service Commercial designation onto City purchased lands.

The City of Woodstock recently acquired lands located on Part of Lots 13 and 14, Concession One. The majority of this parcel will be designated as Traditional Industrial and Business Park. However, the northeast portion of this property is proposed for Service Commercial. This provides the option of accessing the Service Commercial block from the internal street rather than from Devonshire Avenue.

4.5.4 Sub-Area Four (West of County Road 4/South of Dundas):

Designate a portion of this area as Service Commercial and a portion as industrial.

The southern portion of this area is proposed to be industrial given its setback and reduced visibility from the arterials. The northern portion of this area is proposed as Service Commercial. The increased frontage and depth of the Service Commercial designation responds to a number of requests made during the August 2 Public Meeting.

Consider an internal road through sub-area four.

A proposed internal road intersects with County Road 2 where there is a break in the central boulevard. This road would provide access to potential future industrial lots at the rear of this area.

4.5.5 Sub-Area Five (East of County Road 4/ Between Township Road 3 and the Toyota Lands):

Consider these lands for Traditional Industrial use and align roads in recognition of the proposed rail spur line.

The proposed land use would locate 'Traditional Industrial' in close proximity to Toyota. The road pattern avoids crossings of the proposed spur line. The spur line location has been clarified and is incorporated in the preferred concept.

Locate a SWM facility in the southwest portion of this area.

Earth Tech has determined that the southwest corner of this sub-area is the suitable location for a stormwater management facility, which would provide storm water for not only this sub-area but also a larger area.

Consider the use of a "P-Loop" road pattern.

Paradigm Transportation Solutions Limited provided input into the suggested local road pattern in the preferred concept. The "P-loop" design limits the number of intersections along Township Road 3 and provides appropriate spacing from the Landsdowne and County Road 4 intersection.

4.5.6 Sub-Area Six (East of Highway 401/ North of County Road 2):

The Official Plan Amendment does not contemplate re-designating these lands at this time. However, the preferred concept illustrates a potential layout should additional employment land be needed in the future.

Consider these lands for a mix of Business Park, Service Commercial and Traditional Industrial Use.

The Business Park designation in the western portion of sub-area six is logical given its visibility from Highway 401. Service Commercial is proposed along County Road 2 near the 401 interchange. The remainder of sub-area 6 is intended for Traditional Industrial.

Avoid access and traffic along Old Township Road 2.

The proposed road network in this sub-area avoids the use of Township Road 2, which also allows for a stronger link between the Environmental Protection Areas to the north and south of same.

Locate the SWM facility further north along Blandford Road, as opposed to the intersection of Blandford Road and County Road 2.

Earth Tech has determined that this portion of the sub-area is the suitable location for a stormwater management facility. The relocation of this facility also addresses a request made after the first Public Meeting.

4.5.7 Sub-Area Seven and Eight (West of Blandford Road/ North and South of Old Township Road 2):

Again, the Official Plan Amendment does not contemplate re-designating these lands at this time. However, should additional employment land be needed in the future, this area could be further considered.

Consider sub-areas 7 and 8 as Traditional Industrial. Consider the use of a cul-de-sac in sub-area seven. Use the land use and road pattern proposed in Option 2

The proposed cul-de-sac is shorter than previous concepts and has been used to avoid road extensions through environmental areas.

5.0 SUMMARY

The Preferred Land Use/ Road Plan Concept and Industrial Design Guidelines have been prepared to meet the development criteria outlined in the Terms of Reference (summarized in Section 4.1 of this report). In summary:

1. The County of Oxford Official Plan designates the study area as a 'Large Urban Centre'.
2. The proposal to redesignate the study area for industrial and Service Commercial purposes maintains the County's strategic goal of economic competitiveness by ensuring that sufficient employment land is available to meet the County's long term needs at an excellent industrial location.
3. Given the nature of the Toyota Facility, and the potential associated impacts, it is appropriate to consider the lands immediately surrounding Toyota for industrial, Service Commercial and Business Park uses.
4. Provincially Significant Wetlands and other ecological features deemed significant are to be preserved.
5. The existing and proposed transportation network within and around the study area was considered in the design of the preferred concept.
6. Servicing considerations (sanitary, water and storm services) were integrated into the design of the preferred concept.
7. The preferred concept is the result of a number of key design principles summarized as follows;
 - The Service Commercial designation has been used in three main areas. This land use has been directed to high visibility arterial intersections.
 - The Business Park designation has been used as a transitional land use to separate industrial uses from sensitive uses such as residential areas.
 - Business Park uses are also proposed along highly visible and prominent locations such as Highway 401.
 - The Traditional Industrial designation is contemplated for lands in close proximity to Toyota.
 - A small isolated portion of the study area is proposed for residential use given its close proximity to the proposed residential areas west of the study area, its proximity to Pittock Reservoir, and its location beyond the Toyota influence area.
 - The development concept builds onto the existing road network, servicing infrastructure, and land use patterns of the existing built-up areas to ensure that the study area can be physically and functionally integrated into the City of Woodstock settlement area.

8. Input from technical agencies and the public resulted in numerous adjustments that are reflected in the preferred concept.