

PART C – ENVIRONMENTAL AND GROUND WATER MANAGEMENT POLICIES

C1 APPLICABILITY

The policies contained in this Section are intended to be applied generally throughout the City and are also intended to complement the Natural Heritage policies articulated in Sections B3.2, B3.3, B3.4 and B3.5. However, where the policies of Section C and the policies elsewhere in this Plan conflict, the more restrictive policies shall prevail.

C2 RIVERS AND STREAMS

C2.1 FUNCTION OF RIVERS AND STREAMS

All of the natural rivers and streams in the City as shown on the Schedules to this Plan are considered to be environmentally significant since they:

- a) Constitute fish habitat;
- b) Function as corridors for migrating wildlife habitat movement and vegetation dispersal;
- c) Serve to maintain the quality and quantity of surface and ground water features; and,
- d) Assist in the improvement of air quality.

It is the intent of this Plan to protect all rivers and streams from incompatible development to minimize the impacts of such development on their function.

C2.1.1 Implementation

In order to protect fish habitat adjacent to rivers and streams, development and site alteration may be subject to Site Plan Control to identify and protect a natural vegetated buffer area of 30 metres for critical fish habitat and 15 metres for important or marginal fish habitat measured from the stable top of bank for features located outside of the *Specialty Crop* designation.

This Plan does not identify the location of critical, important or marginal fish habitat. As such, the determination of fish habitat type will be required in conjunction with a Planning Act application and will be established in consultation with the NPCA to determine the type or quality of the habitat. It is noted the lands adjacent to rivers and streams are a regulated area by the NPCA in accordance with O. Regulation 155/06.

Where otherwise permitted by the policies in Part B, a reduction in the setback from a river or stream shall not require an Amendment to this Plan but will require the preparation of an EIS pursuant to Section C6 of this Plan, in conjunction with either an Amendment to the Implementing Zoning By-law, a site plan agreement, a minor variance or a Development Permit subject to the comments and/or issuance of a permit under O. Reg. 155/06 by the Niagara Peninsula Conservation Authority as well as comments from the Region. Matters to be considered in reviewing an application to reduce the setback include:

- a) The nature and stability of the soils;
- b) The nature and stability of the vegetation and cover;
- c) The slope of the land;
- d) The nature of existing and proposed drainage patterns;
- e) The nature of the fish habitat and its potential to be impacted by development or site alteration; and,
- f) The scale of the proposed development.

Council or Committee shall be satisfied that the proposed development can be accommodated without there being a negative impact on the features and functions of the habitat feature. In instances where a permit has been obtained from the NPCA under the Ontario Regulation 155/06, this should substantially satisfy the above requirements. However, in no case shall the natural vegetated buffer from critical fish habitat be less than 15 metres.

The cultivation and maintenance of agricultural land will not be prohibited with the above-mentioned setbacks and will not be subject to the implementation policies contained in this Section to protect rivers and streams.

C3 CORRIDORS AND LINKAGES

Section A2.5 of this Plan recognized the importance of protecting individual features and components of the Natural Heritage System as well as maintaining and creating linkages and connectivity amongst natural heritage features. In large part, this need for connectivity will be fulfilled in the rural area if the Vision, Goals and Objectives and supporting policies of this Plan are achieved and/or implemented over the long term.

The City acknowledges that the Regional Official Plan has illustrated conceptual corridors and linkages on the Region's Core Natural Heritage Map. While these corridors are conceptual and the Region has indicated that a future study will be undertaken to further define corridors and linkages, the City will require proponents of new development that is subject to an EIS to assess corridor linkages, and if possible maintain or enhance such linkages.

C4 WATER RESOURCE MANAGEMENT

C4.1 PROTECTION OF THE RESOURCE

At the present time, many of the City's residents obtain water from private water supplies. In the urban areas however, residents obtain water from Regional water systems located at the Welland Canal and in St.Catharines. It is a policy of this Plan to protect, improve or restore the quality and quantity of all sources of water for future use by ensuring that development and site alteration does not cause negative impacts on water resources, including cross-jurisdictional and cross-watershed impacts.

In an effort to protect, improve or restore surface and ground water features, objectives of this Plan include:

- a) Managing the use of water resources in a sustainable manner that ensures their continued availability to future generations;
- b) Working with the Region, Conservation Authority and the Province to prepare watershed and subwatershed plans to assist in the proper management of water as a key resource and to such plans as a foundation for considering the cumulative impacts of development;
- c) Protecting existing surface and ground water quality from degradation and to improve and restore water quality where degraded;
- d) Minimizing potential negative impacts, including cross-jurisdictional impacts and cross-watershed impacts;
- e) Identifying water resource systems, which are necessary for the ecological and hydrogeological integrity of the watershed;
- f) Maintaining linkages and related function amongst water features;
- g) Establishing and implementing necessary restrictions on development and site alteration to protect water features;
- h) Planning for efficient and sustainable use of water resources;
- i) Incorporating source protection objectives into the land use planning process to ensure that the sources of water are not compromised in the future as a result of land use decisions;
- j) Encouraging the establishment of water conservation measures as a way to meet water supply needs in the same manner that alternatives to create new supplies are investigated; and,
- k) Educating the public on the value of protecting the resource and how they can contribute to its protection.

C4.2 IMPACT ASSESSMENT

Major applications for site alteration or development outside of the Thorold urban areas may need to be supported by a Hydrogeological or Hydrological Report.

The purpose of the report is to investigate the impacts of the proposed development on water quality and quantity and provide recommendations on:

- a) How to maintain or enhance the quality and quantity of the water resource;
- b) How to minimize or eliminate the effect of the proposed use on the ground water recharge function;
- c) How to minimize or eliminate the effect of the proposed use on the quality and quantity of drinking water in adjacent private and municipal wells;

- d) How to maintain or enhance sensitive ground water recharge/discharge areas, aquifers and headwater areas;
- e) Whether it is required to monitor water budgets for ground water aquifers and surface water features; and;
- f) How to ensure that the quality of the watercourses affected by the development are maintained; and,
- g) How to control or manage the risk of flooding or erosion.

C4.3 SOURCE WATER PROTECTION

C4.3.1 Intake Protection Zones (IPZ)

Intake protection zones in the City which are susceptible to the risk of contamination or adverse impact due to runoff, sedimentation and hydrologic dynamics have been identified by the Niagara Peninsula Conservation Authority and are shown on Schedule C to this Official Plan.

The DeCew Falls Intake Protection Zone (IPZ) is identified on Schedule C to this Plan as a Level 1 IPZ. An IPZ represents a contiguous area of land and water immediately surrounding a surface water intake that is susceptible to contamination due to minimum travel times and/or response times to address potential contamination. The DeCew Falls Water Treatment Plant has 3 intakes, and therefore has three Primary Intake Protection Zones. The following policies shall apply to land use and monitoring of land use within this identified area:

- a) The placement of untreated septage to land is considered a significant drinking water threat in the DeCew Falls Intake Protection Zone 1. New waste disposal sites for the application of untreated septage to land shall not be permitted within the DeCew Falls Intake Protection Zone 1;
- b) The discharge from new stormwater management facilities is considered a significant drinking water threat where the storm sewer drainage area is at least 100 ha in size with the predominant land use being commercial or industrial. New stormwater management facilities, which meet these criteria, are not permitted within the DeCew Falls Intake Protection Zone 1. New industrial or commercial land uses which meet the 100 ha storm sewer drainage criteria are not permitted within the DeCew Falls Intake Protection Zone 1. For the purposes of this policy, new industrial or commercial land uses include industrial or commercial uses which are not currently designated as such in this Official Plan;
- c) The discharge from wastewater treatment plants or combined sewer overflows, or discharge of industrial effluent is considered a significant drinking water threat as defined under the applicable circumstances as outlined by the Ministry of the Environment and Climate Change in Table 22 and Table 48 in Appendix C of the Assessment Report (2013). New combined sewers, wastewater treatment facilities, and industrial effluent systems which meet these criteria are not permitted within the DeCew Falls Intake Protection Zone 1;

- d) Any planning or building permit application for a land use other than residential in the DeCew Falls Intake Protection Zone 1 may require a Section 59 Notice from the Region's Risk Management Official. The requirements of the notice will be determined through the application screening process.
- e) By February 1st of each year, the City of Thorold shall report to the Source Protection Authority on the steps it has taken in the previous calendar year to implement the significant drinking water threat policies.

C4.3.2 Highly Vulnerable Aquifer

A highly vulnerable aquifer is a subsurface, geologic formation that is or could be a source of drinking water and which could be easily impacted by pollutants. Where development and/or site alteration requires a planning approval, the City, in consultation with the NPCA may require the undertaking of a technical study to assess the risk of negative impact on highly vulnerable aquifers. The scope of such a study will be determined through pre-consultation with the City and NPCA and recommendations from such a study that are related to design or land use will be implemented through zoning or site plan control.

In order to minimize risks, the following uses shall be prohibited on lands which are located within an area confirmed by the NPCA as a highly vulnerable aquifer:

- a) generation and storage of hazardous waste or liquid industrial waste;
- b) new waste disposal sites and facilities, organic soil conditioning sites, and soil storage and disposal sites;
- c) underground and above-ground storage tanks that are not equipped with an approved secondary containment device; and,
- d) storage of a contaminant listed in Schedule 3 (Severely Toxic Contaminants) to Regulation 347 of the Revised Regulations of Ontario, 1990 or its successor.

C5 STORMWATER MANAGEMENT

All commercial, industrial, institutional and urban residential development proposals, including intensification and redevelopment proposals shall be supported by a Stormwater Management (SWM) report. The content and scope of the SWM report shall be determined when the development is proposed.

The SWM Report shall be prepared by a qualified professional to the satisfaction of the City, the Niagara Peninsula Conservation Authority, the Region of Niagara and the appropriate agencies and be prepared in accordance with the following documents:

- a) Ministry of the Environment and Climate Change Stormwater Management Practices Planning and Design Manual (2003);
- b) NPCA Stormwater Management Policies (2010), as amended, or its successor, including the Low Impact Development (LID) approach to stormwater management;

- c) Greater Golden Horseshoe Conservation Authorities Erosion and Sediment Control Guidelines for Urban Construction (2006) as amended, or its successor;
- d) Niagara Peninsula Source Protection Plan (SPP) Policy # DC-2; and,
- e) Section 1.6.6.7 of the Provincial Policy Statement (2014).

In preparing a Stormwater Management Report, the primary intent of the report is to:

- a) Provide recommendations on a stormwater quantity system which ensures that post-development run-off rates will not be greater than the pre-development run-off rates;
- b) Document the possible impacts of development on watershed flow regimes including their interconnection with ground water features;
- c) Provide recommendations on how to maintain pre-development water quality and improve run-off where appropriate;
- d) Document the means by which stormwater volume control will be provided; and,
- e) Determine and describe the necessary measures required to be undertaken during construction to mitigate the potential negative impact of development.

All stormwater management facilities in a Plan of Subdivision shall be placed in an appropriate Open Space or Environmental Protection Zone in the Implementing Zoning By-law to reflect the potential for these lands to be flooded and to ensure that their intended use is recognized. Stormwater facilities for condominium developments and other large single uses may be privately owned and maintained. Agreements with the City may be required as a condition of approval, to provide for their continued maintenance. Where stormwater is proposed to be directed to Marlatt's Pond in conjunction with a development application, such outlets shall be subject to the review and comment by the City, Niagara Region, NPCA, MECP, and Ontario Power Generation.

Note: As modified by the City of Thorold, September 1, 2020 through OPA 10, By-law No. 118-2020

The City acknowledges the presence of contaminants in the sediments in the lake bed of Marlatt's Pond and Lake Gibson, which are addressed in greater detail in the Natural Recovery Overlay policies in Section B3.7 of this Plan.

C6 REQUIREMENTS FOR AN ENVIRONMENTAL IMPACT STUDY

Where the policies of this Plan require that an Environmental Impact Study (EIS) be prepared, such an EIS shall be prepared in accordance with the requirements of this section.

C6.1 PURPOSE OF AN EIS

The purpose of an EIS is to:

- a) Collect and evaluate all the appropriate information in order to have a complete understanding of the boundaries, attributes, connectivity and functions of relevant environmental feature(s); and,

- b) Make an informed decision as to whether or not a proposed use will have a negative impact on natural features and ecological functions.

Any EIS required by this Plan must be prepared in accordance with the Environmental Impact Study Guidelines (EIS Guidelines) adopted by Regional Niagara. The EIS should give consideration to the relevant aspects and inter-relationships of various components of the Natural Heritage System on and off the site. In addition, the EIS must address how the proposed development will protect, maintain or restore the critical natural features and ecological functions of the Natural Heritage System.

Any EIS prepared as a requirement of this Plan shall be subject to the review and approval of the appropriate approval authority, in accordance with policy C6.3 of this Plan.

C6.2 CONTENTS OF AN EIS

The EIS shall include a description of:

- a) The proposed undertaking;
- b) Any requirements specified in a Secondary Plan, if applicable;
- c) Any requirements specified through pre-consultation with the Niagara Peninsula Conservation Authority, if applicable; and,
- d) A description of the natural features and ecological functions of the area potentially affected directly and indirectly by the undertaking, and an assessment of their sensitivity to development;
- e) A description and evaluation of hydrogeological features and functions;
- f) Any lands that support environmental attributes and/or functions that may qualify the lands for designation within the *Environmental Protection* designations;
- g) The site and its position and role in the broader landscape;
- h) The direct and indirect effects to the ecosystem that might be caused by the undertaking with consideration for cumulative impacts caused by an undertaking;
- i) Any environmental hazards (i.e. slope stability, flooding contaminants) that need to be addressed as part of the design and how they will be addressed;
- j) Any monitoring that may be required to ensure that mitigating measures are achieving the intended goals;
- k) How the proposed use affects the possibility of linking core natural heritage areas of the Natural Heritage System by natural corridors that may or may not be identified on the Schedules to this Plan;
- l) How the proposed use affects key natural heritage features and key hydrologic features;

- m) Recommendations identifying how the adverse effects will be avoided or minimized over the construction period and the life of the undertaking and how natural heritage features and functions will be enhanced where appropriate/applicable. Within the Greenbelt Natural Heritage System, recommendations shall also establish the limits of buffers and setbacks adjacent to key natural heritage features and key hydrological features; and,
- n) Insight and recommendations with respect to the significance of the cumulative net environmental impacts expected over the long term after measures recommended in (k) have been implemented.

The required scope and/or content of an EIS may be modified, through pre- consultation with the City, Region, Niagara Peninsula Conservation Authority, and/or Niagara Escarpment Commission, where the environmental impacts of a development application are thought to be limited, or if other environmental studies fulfilling some or all requirements of an EIS have been accepted by the City and Region.

C6.3 AGENCIES RESPONSIBLE FOR REVIEW AND APPROVAL

In accordance with the Regional Official Plan, as amended from time to time, the review and approval of any EIS prepared to fulfil a requirement of this Official Plan shall be undertaken by the City, in consultation with the Region and the NPCA for lands located within any Urban Area Designation. For lands outside of the Urban Area Designations, the Region shall be the approval authority, in consultation with the City and the NPCA. Where an EIS involves the assessment of lands regulated by the Conservation Authority under Ontario Regulation 155/06, the City and Region will consult with the NPCA as part of the review and approval of the EIS.

C7 SOLID WASTE DISPOSAL AREAS

There are no open waste disposal sites and 3 closed waste disposal sites in the City as shown on the Schedules to the Plan. The development of new uses or new or enlarged buildings or structures within an assessment area 500 metres (1,640 square feet) from the fill area of a closed site, may be permitted provided an assessment is completed to determine:

- a) The impact of any potential methane gas migration;
- b) Whether the proposed use will be adversely affected by presence of the closed the waste disposal site, which may include future mining or remediation efforts;
- c) That geo-technical conditions are safe and do not pose a threat or risk;
- d) Whether the proposed use will be adversely affected by ground and surface water contamination by leachate migrating from the waste disposal site; and,
- e) The impact of the proposed use on leachate migration from the landfill site.

The assessment is intended to address these matters and other items outlined in the Province's Guideline D-4, April 1994, or its successor as required to ensure that the proposed land uses are compatible in nature and do not adversely impact upon each other.

The studies required to support a development application within the assessment area shall be based on the type and/or scale of the development proposed or the studies may be waived as appropriate. The nature of the required studies and their scope shall be determined by the City in consultation with the Region of Niagara at the time the development is proposed.

All lands within the assessment area shall be subject to a Holding Provision in the Implementing Zoning By-law. The lifting of a Holding Provision permitting the development of any new use or new or enlarged buildings or structures within the assessment area shall not occur until Council is satisfied that all of the studies required by the City and Region have been completed.

In cases where an Amendment to the Official Plan and/or Zoning By-law is required to permit a proposed use, appropriate studies dealing with the matters set out above shall be submitted for Councils' consideration.

An amendment to this Plan will be required for a new waste disposal site.

It is a policy of Council to encourage the reduction, reuse and recycling of solid waste to ensure that the amount of waste required to be stored in landfills is minimized.

C8 GAS WELLS

Schedule D to this Plan identifies the location of 3 gas wells in the City. The status of these wells has been categorized by Provincial authorities as “abandoned” or “unknown”.

Petroleum resources shall be protected for long-term use. The City supports the subsurface storage and retrieval of gas or other hydrocarbons, subject to Provincial regulations, but only if they do not adversely affect current legal land uses, or development and natural heritage policies articulated in this Plan.

The City will consult with the Province:

- a) When new non-petroleum developments are proposed within 300 metres of an existing well site as identified on Schedule B2 to this Plan; and,
- b) Where assistance is needed in the rehabilitation or closure of well sites, specifically where non-producing wells represent a public health hazard.

Where applicable, the City and/or Region will require that improperly non-producing wells that are known or discovered on the lands during development to be properly plugged, capped or otherwise made safe in accordance with Provincial requirements as a condition of a Planning Act approval or as a pre-consultation requirement.

The City supports the use of technology, such as directional drilling for the exploration and production of subsurface resources from a well site that is located on lands adjacent to a natural heritage area as identified on Schedule B to this Plan. New wells and associated works are prohibited from causing any surface or subsurface ecological disturbance to the natural heritage system identified on Schedule B to this Plan and proponents shall be required to address applicable policies in this Plan where exploration and associated works are proposed within natural features or within the adjacent lands of such features.

C9 LAND USE COMPATIBILITY

It is recognized that some uses may be sensitive to the odour, noise, vibration or other emissions associated with highways, and various type of industries. It is a policy of this Plan that incompatible land

uses be separated or otherwise buffered from each other. Where a proposed development is located adjacent to a potentially incompatible land use, an assessment of the compatibility of the proposal may be required by Council undertaken in accordance with the D-Series guidelines and criteria established by the Ministry of the Environment and Climate Change.

Such a study shall be prepared to the satisfaction of Council and the appropriate agencies and shall include recommendations on how the impacts can be mitigated. The approval of development proposals shall be based upon the achievement of adequate distances and the recommendations of the required studies.

The Implementing Zoning By-law may utilize a Holding Provision on certain properties where incompatible land uses are located in proximity to each other to ensure that the intent of this Section is met before development occurs.

C10 CONTAMINATED SITES

C10.1 BROWNFIELD SITES

Brownfield sites are generally former industrial lands which are suspected or known to be contaminated. If the site of a proposed use is known or suspected to be contaminated, Council shall require the proponent to demonstrate that the site has been assessed and if necessary, remediated in accordance with the requirements of O. Reg. 153/04 as amended. The proponent shall have a Record of Site Condition prepared by a qualified professional and placed on the Brownfields Environmental Site Registry prior to the issuance of any final approval for the site's development.

Council may place lands which are known to be contaminated in a Holding (H) Zone to restrict development until clearance is provided in the form of a Record of Site Condition.

C10.2 GREYFIELD SITES

Greyfield sites refer to vacant and/or underutilized commercial lands in a state of decline. The redevelopment of greyfields sites may also require the proponent to undertake the completion of a Record of Site Condition depending on the nature of the former use and the redevelopment proposal. Council may establish incentives for redevelopment of greyfield sites through the preparation of a community improvement plan.

C11 VALLEYLANDS

C11.1 PURPOSE

The purpose of establishing valleyland policies is to implement the "Policies, Procedures and Guidelines for the Administration of Ontario Regulation 155/06" prepared by the Niagara Peninsula Conservation Authority relating to valleylands, and the provisions of the Provincial Policy Statement (2014) relating to valleylands and hazardous lands.

C11.2 PERMITTED USES

Permitted uses within valleylands as defined by the NPCA shall be restricted to agricultural uses and those uses required for public works, utilities and other projects taken on by Crown Corporations as well as for unusual circumstances, subject to the approval of the NPCA and the municipality.

C11.3 GENERAL POLICIES

C11.3.1 Policies for New Development, Site Alteration, and Lot Creation

No new development, site alteration or lot creation shall be permitted in areas located within valleylands except for projects necessary for bank stabilization or erosion control purposes or to facilitate the uses permitted in accordance with Section C11.2. Where valleylands are confirmed by the NPCA, such lands are encouraged to be maintained in a natural state with no disturbances to existing vegetation.

Where permitted, all new development, site alteration and lot creation shall ensure that overland drainage is directed away from valley slopes and that proper construction measures are taken to protect valley vegetation in accordance with NPCA requirements.

C11.3.2 Policies for New Development, Site Alteration, and Lot Creation on Adjacent Lands

No new development, site alteration or lot creation shall be permitted within 7.5 metres of lands confirmed as being valleylands by the NPCA except to facilitate the permitted uses outlined in Section C11.2.

In areas where the instability of the valleyland slope has been identified by the municipality or the NPCA or where a field investigation reveals evidence of:

- Outward tilting of trees;
- Tow erosion at the base of the slope;
- Slumping, gullyng or other visibly evident Erosion process;
- The addition of Fill Material;
- Containing an easily eroding soil type; or,
- Where the angle of the slope is steeper than 3(H):1(V).

Proponents proposing development on adjacent lands shall undertake a geotechnical investigation. This investigation shall be undertaken by a qualified geotechnical engineer and shall be prepared to the satisfaction of the NPCA and the City. Where a geotechnical investigation has determined that greater setbacks are required, the proponent shall adhere to the greater requirements.

All new development, site alteration or lot creation on lands adjacent to confirmed valleylands shall demonstrate to the satisfaction of the City and the NPCA that no negative impacts on the valleylands will result from the adjacent development.

New development, site alteration or lot creation on lands adjacent to confirmed valleyland shall ensure that overland drainage is directed away from valley slopes and that proper construction measures are taken to protect valley vegetation in accordance with NPCA requirements.

Where a Plan of Subdivision has been submitted for lands adjacent to confirmed valleylands, the City may require the proponent to protect the valleylands in perpetuity as part of the approvals process including the dedication of valley lands to the City or other appropriate public agency.

C11.3.3 Policies for Existing Development on Adjacent Lands

Where existing structures are located within 15.0 metres of confirmed valleylands and a 7.5 metre publicly owned access is not provided adjacent to the valleyland, the following policies shall apply:

- a) The replacement or addition to existing building(s) or structure(s) may be permitted provided that such addition or replacement does not result in further encroachment into the confirmed valleyland. The submission of a geotechnical assessment by the proponent may be required prior to permitting any development or redevelopment on adjacent lands. In cases where the building or structure can be reasonably located outside the setback the applicant will be encouraged to do so.
- b) In cases where existing structures or private roads exist within a confirmed valleyland, reconstruction or alteration may be permitted provided that best efforts are taken to relocate the existing structure outside of the confirmed valleyland, a geotechnical assessment is completed and submitted in accordance with NPCA requirements and that no adverse environmental impacts to existing natural features and functions of the valleylands are shown to result.
- c) The replacement or addition to existing buildings and structures will be encouraged to direct overland drainage away from valley slopes wherever possible. All replacement or addition to existing buildings or structures shall ensure that proper construction measures are taken to protect valley vegetation in accordance with NPCA requirements.

C11.3.4 Policies for Existing Lots on Adjacent Lands

Where existing lots are located adjacent to lands located within a confirmed valleyland, a minimum 7.5 metre setback shall be maintained. A reduction of this setback may be permitted in cases of unusual circumstances where an existing lot of record contains insufficient depth to accommodate the required setbacks and where a geotechnical investigation reveals that some infringement within the setback area, together with appropriate mitigative measures, can be accommodated on-site while maintaining bank stability and will result in no adverse long-term environmental impacts. All reductions in setbacks shall be subject to NPCA requirements for valleylands.

C11.4 IMPLEMENTATION

Valleylands have not yet been mapped in the City of Thorold. When mapping is available, it will be added to this Plan through an amendment process. Lands which are confirmed by the NPCA as being valleylands will be placed in a Hazard Land Overlay Zone which restricts land use in accordance with the policies of this Plan.

C12 NATURAL HAZARDS

Natural hazards pose risks to life and property. Hazardous lands include property or lands that could be unsafe for development due to naturally occurring hazards which may include unstable soils or unstable bedrock.

C12.1 POLICIES FOR NEW DEVELOPMENT AND SITE ALTERATION

On hazardous sites, development and site alteration will not be permitted unless a geotechnical study, prepared and signed by a qualified engineer, has demonstrated to the satisfaction of the Niagara Peninsula Conservation Authority, that applicable policies can be met. On hazardous lands and hazardous sites, the following uses shall not be permitted:

- a) Institutional uses associated with hospitals, nursing homes, pre-school, school nurseries, day care or schools;
- b) Essential emergency services such as those provided by fire, police and ambulance stations and electrical substations; and,
- c) Uses associated with the disposal, manufacture, treatment or storage of hazardous substances.

Where, under this Plan, development and site alteration may be permitted on portions of hazardous lands or sites, then the Niagara Peninsula Conservation Authority must be satisfied that the effects and risk to public safety are minor and can be managed or mitigated so that:

- d) Development and site alteration will be in accordance with provincial flood proofing standards, protection works standards and access standards;
- e) Vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies;
- f) New on-site or off-site hazards will not be created, or existing ones aggravated; and
- g) No adverse environmental impacts will result.