



January 16, 2008

Plan Input and Review Policies and Protocols

Table of Contents

1	INTRODUCTION.....	1-1
1.1	The Planning Act	1-5
1.2	The Provincial Policy Statement (PPS)	1-6
1.3	The Conservation Authorities Act	1-7
2	OVERVIEW	2-1
2.1	Goals and Objectives	2-1
2.2	Development Applications	2-3
2.3	Property Clearances	2-6
2.4	Environmental Impact Study (EIS)	2-7
2.5	Pre-Consultation	2-7
3	PLAN INPUT AND REVIEW POLICIES	3-1
3.1	General Policies	3-1
3.2	Flooding Hazard Policies	3-3
3.3	Erosion Hazard Policies	3-4
3.4	Wetland Policies	3-6
3.5	Woodland Policies	3-6
3.6	Valleyland Policies	3-6
3.7	Policies for Wildlife Habitat	3-7
3.8	Policies for Areas of Natural & Scientific Interest	3-7
3.9	Policies for Aquatic Ecosystems and Fish Habitat	3-8
3.10	Groundwater Policies	3-8
4	STORMWATER MANAGEMENT GUIDELINES.....	4-1
4.1	General Principles	4-1
4.2	Stormwater Management (SWM) Policies	4-2
4.3	Best Management Practices (BMP)	4-3
4.4	Land Use Controls	4-7
4.5	Design Guidelines for Development	4-8
4.6	Sedimentation and Erosion Control Measures	4-9
5	DEVELOPMENT REVIEW PROCEDURES.....	5-1
5.1	Plan Review Process	5-1
5.2	Official Plan and Amendments	5-4
5.3	Zoning By-Laws and Amendments	5-5
5.4	Minor Variances	5-6
5.5	Consents (Severances)	5-7
5.6	Draft Plans of Subdivision	5-8
5.7	Draft Plans of Condominium	5-10
5.8	Site Plan Approvals	5-10
5.9	Property Clearances	5-10
5.10	Appeals to the Ontario Municipal Board (OMB)	5-11

The Kettle Creek Conservation Authority administers a comprehensive hazard land and environmentally sensitive areas management program which consists of several integrated components. In conjunction with the 1988 Memorandum of Agreement with the Aylmer District of the Ministry of Natural Resources, they firmly establish the Authority as the lead agency in hazard land and sensitive areas management within the Kettle Creek watershed.

The components include:

- a) **Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation 181/06 (O.Reg.97/04):** The legal mechanism by which lands within hazardous lands, wetlands, shorelines and areas susceptible to flooding or erosion and associated allowances are regulated.
- b) **Regulation Limit Mapping:** Hazardous lands, wetlands, shorelines and areas susceptible to flooding, and associated allowances, within watersheds in the area of jurisdiction of the Authority are delineated by the Regulation Limit.
- c) **Municipal Plan review:** The review of planning documents and similar proposals in order to promote proper land uses relative to mitigation of impacts.
- d) **Flood Warning/Contingency Planning:** A system which provide warning of impending flood events and identifies the responsibilities of various agencies during a flood.
- e) **Information/Education Programs:** The promotion of floodplain management principles to a variety of audiences in order to develop public understanding and acceptance of the Authority's Water and Related Land Management Program. This also includes increasing public awareness for the location of hazardous areas defined by Floodplain Mapping projects.

These components may be considered as "non-structural" parts of a hazard land and environmentally sensitive areas management program. Although it is possible to utilize structural means (ie. flood control dams) to alleviate potential flood damages, new development can be most economically protected through effective hazard land and sensitive areas management practices.

The **Memorandum of Agreement** with the Aylmer District of the Ministry of Natural Resources was signed on November 14th, 1988. The Agreement conferred certain obligations and responsibilities to the KCCA, including:

1. *The Kettle Creek Conservation Authority (KCCA) is the lead commenting agency on plan input and review matters relating to the following:*
 - a) *lands susceptible to flooding along watercourses and the Lake Erie Shoreline in the Kettle Creek watershed.*
 - b) *lands susceptible to erosion on unstable slopes, banks of watercourses and the Lake Erie Shoreline*
 - c) *lands with inherent instability and other unsatisfactory conditions which are prone to shifting, slumping or sinking which is a function of soil type, condition and/or moisture content.*
2. *The KCCA will comment on the hazard aspects and natural values of Class 1-7 wetlands.*
3. *The KCCA will comment on other water and land related management issues as appropriate.*
4. *The Aylmer District of the MNR will comment on Plan Input and review matters related to fish, wildlife, forestry, minerals, petroleum, Crown land, wetlands and areas of natural and scientific interest.*
5. *Along with the responsibility noted in #1 above, the KCCA will be consistent with Provincial policies and directives and will safeguard the provincial interests in watershed and shoreline management.*
6. *Both agencies make a commitment to co-operate in the delivery of the provinces programs including public education and information.*
7. *Both agencies agree to discuss interrelated planning matters concerning Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulations and the Lakes and Rivers Improvement Act and Public Lands Act, Beach Protection Act, Beds of Navigable Waters Act and Public Lands Act, with respect to providing the best response to the public."*

It should be emphasized that hazard lands and sensitive areas management programs are undertaken in cooperation with watershed municipalities and as such have the responsibility to identify, with the assistance of the Conservation Authority, hazard land and sensitive areas in their planning documents. By doing so, they can help ensure safe and appropriate land uses.

There exists a number of other provincial acts and related regulations which deal with the use of, and activities associated with, water resources. Notable among these are the Lakes and Rivers Improvement Act and the Public Lands Act administered by the Ministry of Natural Resources; the Ontario Water Resources Act and the Environmental Protection Act administered by the Ministry of the Environment; the Drainage Act administered by the Ministry of Agriculture Food; and the Navigable Waters Protection Act administered by the Federal Government.

Regulations made under the Conservation Authorities Act do not supersede the regulations made under various other acts or any other regulations. As such, approvals granted for activities regulated by the Authority do not preclude compliance with any other applicable regulation. The Policies within this manual focuses on the following two main tools:

The Planning Act – Largely through an advisory role that reflects related provincial and KCCA policies, the Authority provides planning and technical advice to municipalities to assist them with fulfilling their responsibilities under the Planning Act.

The Conservation Authorities Act – Under Section 28, the Authority regulates development and site alteration within its regulatory jurisdiction.

The guidance provided in this document for the implementation of the Planning Act and the Conservation Authorities Act is applicable to all other Acts and statements that the KCCA may be asked to comment on.

The following are a list of examples of other applicable provincial Acts and legislations, and KCCA policies:

- Municipal Act;
- Environmental Assessment Act;
- Clean Water Act;
- Environmental Protection Act;
- Species At Risk Act;
- Drainage Act;
- Ontario Water Resources Act;
- Lakes and Rivers Improvement Act;
- Public Lands Act;
- Aggregate Resources Act;
- Freedom of Information and Protection of Privacy Act; and
- Other legislation that may apply.

KCCA policies:

- Administrative Regulations;
- Policies and Procedures for the Administration of Section 28 Regulation;
- Section 29 Regulation;
- Flood Warning and Forecasting Policies;
- Spills Protocol Policy;
- Policies and Procedures for Environmental Impact Studies (EIS);
- Occupational Health and Safety Policies and Procedures;
- Freedom of Information & Protections of Individual Privacy Policy; and
- Other portions of policies that may apply.

1.1 The Planning Act

The Planning Act provides municipal governments, Conservation Authorities and other agencies with a broad, province-wide framework to promote the orderly development of land. It guides land use planning decisions in Ontario as well as local policy formulation that is consistent with provincial requirement. Section 3 of the Planning Act enables the Province to develop and implement detailed policies for those matters considered to be of provincial interest. Such policies are outlined within the Provincial Policy Statement (PPS).

Section 3(5) and 3(6) of the Planning Act states the following:

- (5) A decision of the council of a municipality, a local board, a planning board, a minister of the Crown and a ministry, board, commission or agency of the government, including the Municipal Board, in respect of the exercise of any authority that affects a planning matter,*
- (a) shall be consistent with the policy statements issued under subsection (1) that are in effect on the date of the decision; and*
 - (b) shall conform with the provincial plans that are in effect on that date, or shall not conflict with them, as the case may be. 2006, c. 23, s. 5.*
- (6) Comments, submissions or advice affecting a planning matter that are provided by the council of a municipality, a local board, a planning board, a minister or ministry, board, commission or agency of the government,*
- (a) shall be consistent with the policy statements issued under subsection (1) that are in effect on the date the comments, submissions or advice are provided; and*
 - (b) shall conform with the provincial plans that are in effect on that date, or shall not conflict with them, as the case may be. 2006, c. 23, s. 5.*

Municipalities circulate Planning Act applications to the Kettle Creek Conservation Authority, as a local board, for review in accordance with circulation procedures established under the Planning Act.

1.2 The Provincial Policy Statement (PPS)

The PPS provides direction on matters of provincial interest related to land use planning and development; including Natural Heritage (section 2.1) and Natural Hazard policies (section 3.1). As a key part of Ontario's policy-led planning system, the PPS sets the policy foundation for regulating the development and use of land. It also supports the provincial goal to enhance the quality of life for citizens of Ontario.

The PPS provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural environment. The PPS supports improved land use planning and management, which contributes to a more effective and efficient land use planning system.

The policies of the PPS may be complemented by provincial plans or by locally-generated policies regarding matters of municipal interest. Provincial plans and municipal official plans provide framework for comprehensive, integrated and long-term planning that supports and integrates the principles of strong communities, a clean and healthy environment and economic growth, for the long term.

In 1997 the Province of Ontario released the PPS replacing the previous 1988 Flood Plain Planning Policy Statement made under the planning act. The new PPS is issued under the authority of Section 3 of the Planning Act and came into effect on March 1, 2005. It applies to all applications, matters or proceedings commenced on or after March 1, 2005.

In respect of the exercise of any authority that affects a planning matter, Section 3 of the Planning Act requires that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act.

The PPS is more than a set of individual policies. It is intended to be read in its entirety and the relevant policies are to be applied to each situation. A decision-maker should read all of the relevant policies as if they are specifically cross-referenced with each other. While specific policies sometimes refer to other policies for ease of use, these cross-references do not take away the need to read the PPS as a whole.

1.3 The Conservation Authorities Act

Section 28 of the Conservation Authorities Act empowers an authority to make regulations applicable in the area under its jurisdiction:

1. Restricting and regulating the use of water in or from rivers, streams, inland lakes, ponds, wetlands and natural or artificially constructed depressions in rivers or streams;
2. Prohibiting, regulating or requiring the permission of the authority for straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland;
3. Prohibiting, regulating or requiring permission of the authority for development if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development;
4. Providing for the appointment of officers to enforce any regulation made under this section;
5. Providing for the appointment of persons to act as officers with all of the powers and duties

The following objectives provide the basis for the decision making process for implementing the Authority's regulation and permit process:

- Prevent loss of life,
- Minimize property damage and social disruption
- Reduce public and private expenditure for emergency operation, evacuation and restoration,
- Minimize the hazards and unnecessary development of riverine flood plains and flood and erosion susceptible shoreline areas which in future years may require expensive protection measures,
- Regulate works and development which, singularly or collectively, may reduce riverine channel capacities to pass flood flows resulting in increased flood levels, and creating potential danger to upstream and downstream landowners,
- Control filling and/or drainage of natural storage areas such as wetlands and valleylands,
- Encourage the conservation of land through the control of construction and placement of fill on existing or potentially unstable valley slopes or shoreline bluffs,
- Reduce soil erosion and sedimentation from development activity,
- Control pollution or other degradation of existing and potential groundwater aquifer(s) and aquifer recharge areas, created by fill activities: and
- Control water pollution, sedimentation and potential nuisances due to floating objects and debris.

2 Overview

2.1 Goals and Objectives

Municipalities are empowered to make most decisions under the Planning Act. The main function of the KCCA's Plan Input and Review program is to provide planning advice and technical review services to assist municipalities with fulfilling their responsibilities under the Planning Act when they are reviewing and commenting on development and site alteration proposals. In providing its comments on Planning Act applications, the Authority considers the requirements of the Planning Act, the Provincial Policy Statement (PPS) and the requirements of other legislation and the KCCA specific policies.

The goal of the Kettle Creek Conservation Authority (KCCA) was established at the onset of the watershed planning process. It has been established to provide a broad direction to Authority programs. The goal of the KCCA is:

"To establish and embark in programs which will promote and enhance the conservation, restoration, development and management of natural resources other than gas, oil, coal and minerals (ie. water, soil, forests, fish and wildlife) within the jurisdiction of the Kettle Creek Conservation Authority for the benefit of those people who reside in, or visit the watershed."

One resource of achieving this goal, especially those of water and land management, is by providing input, at the earliest stage possible, on plans proposed by municipal governments, other planning agencies, developers and individuals.

KCCA's Plan Input and Review program works to ensure that development within the watershed does not adversely affect the natural integrity of our riverine, valleyland, shoreline and other significant resources. In addition, it works to protect new development against the adverse impacts of natural hazards, such as flooding and erosion often associated with these natural systems.

Natural hazard planning involves planning for risks associated with naturally occurring processes. These risks include the potential for loss of life, property damage, social disruption as well as environmental impacts. Natural hazard planning recognizes that there is always a risk associated with natural hazard processes and establishes an appropriate level of risk for society to be exposed to. The minimum standards for acceptable levels of risk of the general public are set by the Province.

Planning for natural heritage resources involves making decisions for the plant and animal communities that are found on the landscape. All natural heritage planning is based on the underlying principle that biodiversity which includes both the number of species and the generic diversity within species is the key indicator of ecosystem health. In terms of land use management for natural heritage, decisions are often based on maintaining and enhancing the biodiversity of vegetative habitat so that it can support a diversity of animal populations. Natural heritage resources include wetlands, woodlands, threatened and endangered species (and their habitat), Wildlife (and their habitat) and fish (and their habitat).

The objectives of the KCCA's Plan Input and Review program are as follows:

1. To minimize the potential for loss of life, property damage and social disruption and to create a safer and healthier environment for everyone who lives in the Kettle Creek watershed;
2. To reduce the need for public and private expenditures for emergency operations, evacuation, and restoration of properties which may be impacted by flooding and erosion;
3. To increase public awareness about the potential risks to development as a result of the physical conditions associated with hazardous areas;
4. To use an ecosystem planning approach for identifying the environmental implications of development applications in order to maintain, protect, preserve and enhance natural heritage resources and natural resources;
5. To screen development applications and proposals to identify where a Provincial or watershed interest may be impacted;
6. To protect natural heritage features and systems from the potentially negative impacts of development and site alteration.
7. To maintain, restore and enhance the bio-diversity, ecological function and connectivity of natural heritage features and systems in the watershed.
8. To specify conditions of approval which satisfy the above noted objectives;
9. To advise and inform potential applicants (and/or their consultants) to consult with KCCA staff prior to submitting their development proposals in order to identify potential concerns that could result in delays to the planning process, as well as for the need to prepare and submit technical reports and supporting information required to undertake the review and approval of applications:
10. To continue to liaison with other agencies, county and municipal governments and departments, consultants, developers and watershed residents to ensure continued co-operation in achieving effective management of our natural resources.

Through the Authority's Plan Input and Plan Review program, many of these objectives are achieved by ensuring that appropriate development control mechanisms are applied to lands which may have limitations to development due to their inherent environmental characteristics.

2.2 Development Applications:

The Kettle Creek Conservation Authority (KCCA) continually conducts its programs with the hope of doing so in harmony with other levels of government and government agencies. This is especially true of the Authority's relationship with its member municipalities. Member municipalities circulate Planning Act applications to the KCCA for review in accordance with circulation procedures established under the Planning Act. The Authority provides comments on Planning Act applications which address provincial interests as well as those of the Authority on natural hazard, natural heritage, natural resource, and servicing related matters.

Planning Act applications include:

- Official Plan
- Zoning By-Law
- Minor Variance
- Consent (severance)
- Plan of Subdivision
- Plan of Condominium
- Site Plan

2.2.1 Official Plan (S. 16-27 Planning Act)

An Official Plan is a document adopted by a municipal council and approved by the Ministry of Municipal Affairs and Housing (MMAH). The Official Plan contains goals, objectives and policies established primarily to manage and direct physical change and the effects on the social, economic and natural environment of the municipality.

Section 17(15) of the Planning Act states that in the course of the preparation of a plan, the municipal council shall ensure:

- (a) the appropriate approval authority is consulted on the preparation of the plan and given an opportunity to review all supporting information and material and any other prescribed information and material, even if the plan is exempt from approval;
- (b) the prescribed public bodies are consulted on the preparation of the plan and given an opportunity to review all supporting information and material and any other prescribed information and material;
- (c) adequate information and material, including a copy of the current proposed plan, is made available to the public, in the prescribed manner, if any; and
- (d) at least one public meeting is held for the purpose of giving the public an opportunity to make representations in respect of the current proposed plan.

Under Section 26(3) the municipal council shall consult with the approval authority and with the prescribed public bodies with respect to revisions that may be required to the Official Plan.

2.2.2 Zoning By-Law *(S.34 Planning Act)*

The zoning by-law is a precise document, used by Council to implement the policies of the official plan and regulate the use of land. Zoning by-laws must conform to the policies of the official plan, in order for the plan to be properly implemented. The zoning by-law controls what land uses are permitted and the required standards (setbacks, parking, etc.). Zoning by-laws can directly compliment the Authority's regulations by incorporating prohibitions or provisions for development and site alteration within areas of concern.

The Conservation Authority receives circulation from the affected municipality of public meetings and open houses affecting zoning by-law amendments and updates (S.34(13)). However, the municipality is not required under the Planning Act to circulate for review and comment unless the municipal council determines that the Authority has an interest in the proposed by-law (S.34(15)). Further, the municipality is required to provide written notice of the passing of the by-law to the prescribed public bodies, which includes the Conservation Authority (S.34(18)).

In most cases our member municipalities circulate the Conservation Authority with all by-law amendments and updates for review and comment. The Authority may request that the municipality impose conditions on the permitted use of land or the erection, location or use of a building or structure to support the by-law amendment (S.34(16)).

2.2.3 Minor Variance *(S.44,45 Planning Act)*

A minor variance is generally a minor exception to the requirements of a zoning by-law as it applies to a specific property. Where a municipality has appointed a Committee of Adjustment, they deal with minor variance applications that specifically relate to:

- a) Minor variances to certain types of by-laws;
- b) Minor variances to non-conforming uses; and
- c) Minor variances to permit specific uses where a by-law defines them in general terms.

The review of minor variance applications circulated by municipalities is a good method by which Authority staff can monitor such development activities as minor additions and accessory buildings proposed within KCCA's Regulation Limit.

Under the provisions of the Planning Act, the Committee of Adjustment must circulate notice of the hearing of an application to agencies which the Committee determines should receive notice. Thus the Authority may not always receive notice of the hearing of a minor variance application. The Committee can grant a minor variance subject to terms and conditions the Committee considers advisable (S.45(9)). Through this provision, the Authority can request conditions. There is no requirement for the Committee of Adjustment to circulate notice of the granting of a minor variance to the Authority unless a written request for such notice is filed.

Most member municipalities Committees of Adjustment routinely circulate the Authority notice of minor variance hearings. If the Authority objects to a minor variance, an appeal must be filed to the OMB within 30 days of the making of the decision.

2.2.4 Consent (Severance) (S.53 Planning Act)

A consent, or severance, is the authorized separation of a piece of land to form two or more adjoining properties. If several severances are intended on the same property, the severance granting authority may decide that a plan of subdivision is necessary. The Authority should advise the severance granting authority that a subdivision of five lots or more should be appropriately dealt with as a plan of subdivision, if the Authority concerns can be more adequately addressed with the greater level of control offered through the draft plan process.

Severance approval is generally delegated to a committee such as the Committee of Adjustment or Land Division Committee. A request for written comments is made to the Conservation Authority, if the approval authority determines the KCCA should receive notice. Most consent authorities do circulate the Authority with consent applications. A written notice of the decision of the consent authority is required to be circulated to Conservation Authority only if comment from Authority was provided in review of the application. If the Authority objects to the consent, an appeal must be filed to the OMB within 30 days of the decision.

2.2.5 Plan of Subdivision (S.50 Planning Act)

When the division of land involves the creation of 5 or more parcels, a plan of subdivision is generally required. This plan must be submitted to the Ministry of Municipal Affairs and Housing (MMAH) or delegate for approval. Within our watershed, the City of St.Thomas has the delegated approval for subdivision applications within the City's municipal limits and the County of Middlesex has delegated approvals for subdivision applications within the County's upper tier jurisdiction. All subdivision applications within the remaining lands of our watershed, County of Elgin, receive final approval from MMAH. A Plan of subdivision is submitted as a draft and must, under the Planning Act, show certain types of information regarding the proposed development.

Section 50 of the Planning Act empowers the Minister to impose conditions to the approval of a plan of subdivision as in his opinion are reasonable. The Authority, once circulated a draft plan for comment, may request Conditions of Draft Approval if it is felt that Authority concerns can be adequately addressed in this matter. The Authority has two alternatives. The first is to request that any concerns, reflected in the draft approval conditions, be met before final approval of the plan. The other is to request that our concerns be met by inclusion in a subdivision agreement to be enforced by the municipality. The choice whether or not Draft Approval Conditions must be met before final approval or by inclusion in the subdivision agreement is primarily based upon local conditions. If, in the past, the municipality has shown reluctance to enforce KCCA conditions within a subdivision agreement then it may be more appropriate to retain some level of control and request that the Draft Approval Conditions be cleared only when specifically met, rather than simply including them in the subdivision agreement.

2.2.6 Plan of Condominium *(S.50 Planning Act)*

Condominiums are a form of subdivision in which title to a unit, such as an individual apartment in a high-rise building, is held by an individual, along with a share of the rest of the property which is common to all of the owners. The process for condominium plan approval is essentially the same as that of plans of subdivision. Condominiums may involve an entirely new development or an existing rental property which is converted to condominium ownership. They can apply to any type of residential building, as well as commercial and industrial areas.

2.2.7 Site Plan *(S.41 Planning Act)*

A Municipality may designate an area in the official plan as a site plan control area; with the site plan control being established as a requirement by by-law (some council will designate the entire municipality as a site plan control area). The Planning Act (S.40(4)) enables the municipality to require the owner of the land to enter into a development agreement to ensure their requirements are met. Many of our member municipalities either do not have site plan controls in place or they deal with KCCA concerns on the site plan at the zoning by-law stage. In other cases, a permit is required under the Authority's Section 28 Regulation, at which time the site plan is reviewed.

2.3 Property Clearances

The Authority periodically receives written inquiries from solicitors, real estate agents and the general public for confirmation of whether a particular property is affected by regulations pursuant to Section 28 of the Conservation Authorities Act. This information sharing process is important in developing a pro-active approach to land use planning and resource management for the Authority. The KCCA views such inquiries as an opportunity to educate landowners about the natural hazard and natural heritage features on an individual property. In addition, it provides an indication of the potential limitations for development to a landowner or prospective home-buyer.

Since there is generally not any specific development proposal associated with property clearance letters. Comments are generally limited to the fact that the property is either affected or not affected by KCCA's Section 28 Regulation, or other relevant information on the possible environmental hazards present.

2.4 Environmental Impact Study (EIS)

Development or site alteration proposed within a natural heritage feature considered to be significant or within the adjacent lands needs to be supported by an Environmental Impact Study (EIS). The Technical Guidelines prepared by the Province recommends a minimum of fifty (50) metres for determination of the adjacent lands.

Provincial policy generally states that development and site alteration shall not be permitted within significant natural heritage features or within adjacent lands to such features unless it has been evaluated and demonstrated that there will be no negative impact on the natural features or their ecological functions.

The natural heritage features protected under the Provincial Policy Statement (PPS) are as follows:

- Significant wetlands;
- Significant woodlands;
- Significant valleylands;
- Significant wildlife habitat; and
- Significant areas of natural and scientific interest.

The determination of the significance of a natural heritage feature within the Kettle Creek watershed will rely on following the guidelines of the Natural Heritage Reference Manual prepared by the Ontario Ministry of Natural Resources (MNR) for the administration of the PPS. However, wetlands must be evaluated and designated as provincially significant by MNR staff using evaluation procedures established by the Province.

Pre-consultation with the Authority and the affected municipality on the requirements of the EIS is strongly encouraged. The requirements of an EIS process are outlined within KCCA's Environmental Impact Study Policies and Procedures manual.

2.5 Pre-consultation

Applicants are encouraged to meet with Authority staff prior to submitting their development applications and proposals so that any issues and concerns can be identified early in the process. At such time, staff can advise applicants whether the Authority can even support the proposed development. There may be site conditions and factors that simply will not allow any development to occur.

Through the pre-consultation process staff can also advise on the need for technical studies and supporting information that may be required with their development proposal and on the requirement to obtain a Permit under the KCCA's Section 28 Regulation.

3 Plan Input and Review Policies

The Kettle Creek Conservation Authority's (KCCA) Plan Input and Review program draws from the resource management programs of the Authority in formulating responses to development applications. The resource management policies of the KCCA have developed over time in response to the need to ensure that development is environmentally sustainable and incorporates integrated resource management principles.

The following policies are designed to assist KCCA staff with providing input on comprehensive planning documents and review of Planning Act applications.

3.1 General Policies

1. New development and site alteration generally will be directed away from hazard lands.
2. Lands affected by the Authority's Section 28 Regulation (Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Ontario Regulation 181/06 (O.Reg.97/04)), the following activities shall not occur without the issuance of Permit by the KCCA:

Conservation Authorities Act, Sec.28 (1):

- (b) Straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland.
 - (c) Development if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development;
3. Further to policy #2 above, the definition of "development" as defined in Section 28(25) of the Conservation Authorities Act means:
 - (a) The construction, reconstruction, erection or placing of a building or structure of any kind,
 - (b) Any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure;
 - (c) Site grading, or
 - (d) The temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.

4. Development will not be permitted to locate in hazard lands where the use is:
 - a. An institutional use 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, persons with disabilities or the young during emergency as a result of flooding, failure of flood-proofing measures or protection works;
 - b. An essential emergency service such as that provided by fire, police and ambulance stations and electrical substations, which would be impaired during an emergency as a result of flooding, the failure of flood-proofing measures or protection works; and
 - c. Uses associated with the disposal, manufacture, treatment or storage of hazardous substances.
5. The natural resources of the subject area should be inventoried to ensure that no unnecessary biophysical disturbances occur.
6. Consideration should be given to the compatibility of the proposed project to adjacent up and downstream land uses.
7. Projects proposed for land adjacent to or in Authority owned property are to be critically reviewed to ensure that the achievement of Authority goals are not hindered.
8. Where applicable, public access to open space, recreation areas, lakeshores and other conservation areas should be promoted.
9. The preferred approach to shoreline management for the KCCA will be the preventative approach. Capital works for protection will only be considered for existing development and only after the proponent has prepared an impact statement in support of the proposal that is satisfactory to the KCCA.
10. The Authority will discourage fragmentation of hazard lands through lot creation. However, it is recognized that it is not practical to avoid fragmentation in all cases.
11. All development and site alteration will be assessed with regard for the potential impacts on natural hazard, natural heritage and natural resource systems. The assessments must be undertaken through the completion of technical studies prepared by qualified professionals. The cost of such assessment will be borne by the developer/applicant.
12. The Authority will work with watershed municipalities to identify the need for comprehensive studies on priority issues. Comprehensive studies based on logical management boundaries are required to support large scale urban expansions.
13. If necessary, other plan review agencies, such as the MNR or planning staff of the affected member municipality, should be contacted to discuss the proposed development and coordinate an appropriate response.

3.2 Flooding Hazard Policies

1. The Authority shall apply the One Zone Floodplain Management approach to municipalities within the Kettle Creek watershed until such time as they may successfully apply for Two Zone Management status in accordance with the criteria set out in Section 4.3 (9) of KCCA's Policies and Procedures for Administration of Section 28 Regulations.
2. The former Village of Port Stanley within the Municipality of Central Elgin has met the criteria referred to in policy 3.2.1 (1) above and the Two Zone Floodplain Management approach is applied.
3. Any part of a development proposal which requires work within the flood plain will be required to obtain a permit under KCCA's Section 28 Regulation. Septic tile beds will not be endorsed within the floodplain.
4. Uses which may be established in the floodplain, subject to satisfying KCCA Permit requirements, are identified in Sections 4.4 and 4.5 of KCCA's Policies and Procedures for the Administration of Section 28 Regulations.
5. For new development, requirements for safe ingress/egress for vehicular and pedestrian access (at or above the Regulatory Flood Elevation) must be met.
6. For existing uses and structures within the regulatory flood plain, the Authority will encourage improvements to access and flood-proofing.
7. For areas which apply the Two Zone Floodplain Management approach, development and site alteration is permitted in flood fringe areas subject to satisfying the Authority's flood-proofing requirements. These requirements are implemented through the Section 28 Permit process.
8. New development located in areas susceptible to lakeshore flooding during the 100 year storm event (within the limit of the 1:100 year flood uprush), must be flood-proofed to the flood uprush level. Flood-proofing plans must be designed by an engineer. KCCA staff will consult with the recommendations and requirements of KCCA's Shoreline Management Plan, Beach Management Study and the requirements implemented through the Section 28 Permit process for providing a response on lakeshore development proposals.
9. The Authority will endeavor to promote applicants of a development proposal to create lot lines that do not extend beyond the floodway.
10. For lands which are applied the One Zone Floodplain Management approach, the entire floodplain is considered the floodway.
11. Where a development proposal which contains flood plain lands, the Authority shall recommend that those lands be dedicated to public ownership or designated within municipal zoning to reflect restrictive uses to the satisfaction of KCCA.
12. Where the flood plain of a watercourse has not been determined, the Authority will require that the applicant/developer carry out the necessary calculations/studies in accordance with the flood plain mapping criteria of the Ontario Ministry of Natural Resources (MNR).

3.3 Erosion Hazard Policies

1. Development shall generally be directed to areas outside of erosion hazards and/or dynamic beach hazards.
2. Development and site alteration shall not be permitted within the Regulatory Dynamic Beach Zone. The Regulatory Dynamic Beach Zone is sixty (60) metres inland from the 100 year flood level, consisting of forty (40) metres of the active beach zone and an allowance of twenty (20) metres for foredune formation, as identified within the Port Stanley Beach Management Plan.
3. No new development is permitted along the shoreline bluffs within the 1:100 year erosion setback allowance as identified and delineated within the KCCA Shoreline Management Plan.
4. Development along the Lake Erie shoreline within its jurisdiction, the KCCA will consult with the Shoreline Management Plan to determine the specific policy and alternative management criteria particular to the subject property. As a general rule, the following setback criteria will apply:
 - a. In High Bluff Shoreline Areas, a new development setback of 100 times the estimated annual recession rate plus a stable slope allowance of 3.5 times the bluff height, measured from the toe of the bluff, should be established. Land uses within this setback should be restricted to agriculture and passive recreation, or any other as may be approved by the municipality and the KCCA.
 - b. In Low Bluff Areas (Orchard Beach, Port Stanley), a setback of 30 metres plus a stable slope allowance of 3.5 times the bluff height, measured from the toe of the bluff, should be established.
 - c. In the Sandy Beach Areas of Port Stanley, a 100 Year Wave Uprush Limit has been defined as 176.8 metres GSC. No New development should be allowed until the proponent has supplied evidence satisfactory to the Authority and the municipality that the flooding and bank instability problems have been overcome. Dry passive flood-proofing will be the preferred technique.
5. Development on significant slopes (greater than 30%) may be allowed where they meet the following criteria:
 - a. Where the building or addition is constructed as per recommendations of a qualified geotechnical engineer following a detailed geotechnical study ensuring the stability of the structure;
 - b. On or near a slope which appears stable (no sign of erosion, slumping, leaning trees, and fill or groundwater seepage) provided that its foundation is established below the 3:1 plane of the slope.
 - c. Near a slope that exhibits signs of instability, provided that it is set back a horizontal distance from the toe of the slope equal to or greater than the distance of three (3) times the height of the slope;
 - d. The development undertaken does not create adverse affects to adjacent properties; and
 - e. There are not adverse environmental impacts

6. Where development and site alteration is proposed adjacent to ravines and steep slopes, the Authority may require that the limit of the erosion hazard and any required setbacks be determined as part of a professionally based assessment prepared by a qualified professional.
7. The establishment of the limit of the hazard land and safe setbacks should be based on the pre-existing natural state of the slope, and not through re-grading or the use of structures or devices to stabilize the slope.
8. Consideration of an appropriate setback for development should include a minimum of four (4) accumulative components:
 - a. *Toe Erosion Allowance*: or the setback that ensures safety of the toe of the slope adjacent to the river or stream erodes and weakens the bank, increasing the risk of slumping. (average annual recession rate)
 - b. *Stable Slope Allowance*: or the setback that ensures safety if the slumping or slope failure occur. The stable slope allowance is determined by using a horizontal allowance equivalent to three (3) times the height of the slope (3:1) or through a valid study prepared by a qualified geotechnical engineer.
 - c. *Meander Belt Allowance*: or the setback that keeps development from being affected by river and stream meanders. The meander belt allowance is defined as twenty (20) times the bankfull channel width of the reach and centred on the meander belt axis.
 - d. *Erosion Access Allowance*: or the setback needed to ensure there's big enough safety zone for people and vehicles to enter and exit an area during an emergency, such as a slope failure or flooding. The minimum erosion allowance for river and stream systems suggested by the Province is six (6) metres.
9. Development on the face of steep slopes shall be discouraged, and may only be considered where the proponent provides adequate geotechnical engineering evidence in support of such proposal to the satisfaction of the KCCA.
10. The minimum structural setback from steep slopes is six (6) metres. A lesser setback will only be considered if the proponent provides adequate geotechnical engineering evidence outlining the rationale behind the lesser setback.
11. The Authority will encourage a minimum setback of six (6) metres for the limit of development (rear lot line) from a ravine or steep slope. A lesser setback may be permitted only if the Authority and the affected municipality determine such setback is excessive due to the characteristics of the feature and that the proponent provides adequate evidence prepared by a qualified professional using accepted scientific, geotechnical and engineering principles.
12. Non-structural solutions to proposed development along steep slopes will be preferred to structural ones.
13. Subject to Section 28 Permit requirements, erosion and sediment control structures and other associated structures may be permitted within erosion hazards.
14. Site specific surveys may be required to be undertaken by an Ontario Land Surveyor to adequately assess the slope sections and inclination.

15. Any structural bank stability works will require supporting geotechnical reports/certification to gain final Authority permission and must be undertaken before any development proceeds for which the bank stabilization was required.

3.4 Wetland Policies

1. New development and site alteration is not permitted in Provincially Significant Wetlands or other wetlands. Some restricted uses may be permitted provided that they are supported by an Environmental Impact Study (EIS) or an Environmental Assessment (EA).
2. Development and site alteration may be permitted within the area of interference of a wetland provided that there is no impact on the hydrological function of the wetland and no potential hazard impact on the development. The potential for development and site alteration within the area of interference of a wetland shall be determined through the completion of a professionally based assessment prepared by a qualified professional to the satisfaction of the KCCA.
3. Wetlands will not be accepted as direct stormwater outlets without detailed analysis of water quantity and quality impacts. Under no circumstances will wetlands be acceptable locations for use as stormwater detention facilities.

3.5 Woodland Policies

1. Development and site alteration within woodlands shall be discouraged.
2. Development and site alteration is not permitted in woodlands considered to be significant or the adjacent lands (within 50 metres), unless an Environmental Impact Study (EIS) has been completed, to the satisfaction of the KCCA, which demonstrates that there will be no negative impact on the feature and its ecological function.
3. The Authority will encourage municipalities to include woodlands in parkland and other open space dedications and to use other measures to secure the long term protection of woodlands.

3.6 Valleyland Policies

1. The Authority will strive to maintain all existing valleylands in their natural state by prohibiting and/or minimizing development and site alteration within these areas.
2. New development and site alteration is not permitted in valleylands considered to be significant.
3. New development and site alteration is not permitted on adjacent lands to valleylands (within 50 metres) unless an Environmental Impact Study (EIS) has been completed, to the satisfaction of the KCCA, which demonstrates that there will be no negative impact on the feature and its ecological function.
4. Increased fragmentation of ownership, through lot creation, within natural valleylands is discouraged.

3.7 Policies for Wildlife Habitat

(Policies for the Habitat of Endangered Species, Threatened Species, Species of Special Concern, Locally Rare Species and Conservation Priority Species)

1. Development and site alteration is not permitted in the habitat of endangered and threatened species.
2. Development and site alteration may only be permitted in habitats where the presence of species of special concern or locally rare species is known when an Environmental Impact Study (EIS), completed by a qualified professional to the satisfaction of the KCCA, demonstrates that the habitat can be avoided or the impacts of the development on the habitat can be mitigated.
3. Development and site alteration on lands adjacent to (within 50 metres) the habitat of endangered species, threatened species, species of special concern or locally rare species unless an EIS has been completed to the satisfaction of the KCCA, which demonstrates that there will be no negative impact on the feature and its ecological function. The size of the adjacent lands may be increased based on the significance and/or the needs of the species.
4. The Authority encourages the protection and enhancement of protected species habitat and wildlife movement corridors.

3.8 Policies for Areas of Natural and Scientific Interest (Life Science)

1. Areas of Natural and Scientific Interest (Life Science) will be protected over the long term.
2. Development and site alteration is not permitted in Areas of Natural and Scientific Interest (Life Science) unless an Environmental Impact Study (EIS), completed by a qualified professional to the satisfaction of the KCCA, demonstrates that there will be no negative impact on the natural feature and its ecological function.
3. Development and site alteration is not permitted on adjacent lands (within 50 metres) to Areas of Natural and Scientific Interest unless an Environmental Impact Study (EIS), completed by a qualified professional to the satisfaction of the KCCA, demonstrates that there will be no negative impact on the natural feature and its ecological function.

3.9 Policies for Aquatic Ecosystems and Fish Habitat

1. Development and site alteration is not permitted in fish habitat except in accordance with provincial and federal requirements and where the habitat to provide for the life requirements of aquatic systems will not be reduced.
2. When reviewing development applications which are likely to result in a harmful, alteration, destruction or disruption (HADD) to fish habitat, the proposal will be referred to the Federal Department of Fisheries and Oceans (DFO) as specified within the Authority's Level II Agreement with DFO.
3. The rehabilitation or restoration of aquatic ecosystems including habitat, rehabilitation and fish recruitment is encouraged.
4. The conversion of open surface watercourses and open drains to closed sub-surface drains is discouraged.

3.10 Groundwater Policies

The following policies on groundwater are general in nature and are intended to be used in the interim until a Source Water Protection Plan is developed. It is anticipated that the Source Water Protection Plan will provide updated information on groundwater processes, threats and strategies for protection. The following policies will be reviewed and updated once the source water protection planning process is completed.

1. Where comprehensive groundwater studies have been undertaken, protection of identified groundwater wellhead protection areas, areas that contribute to recharge (recharge zones), areas of groundwater susceptibility and discharge areas will be encouraged.
2. Development and site alteration will be limited in or near sensitive groundwater features in order to protect, improve and restore these features and their ecological hydrologic functions.
3. The decommissioning of abandoned wells to protect groundwater sources and to ensure public safety in accordance with Ministry of the Environment standards is encouraged.

4 Stormwater Management Guidelines

4.1 General Principles

The introduction of stormwater management concepts has brought with it the view of the dual component urban drainage system. Although both the major and minor drainage system always existed, their separate peculiarities were not distinguished. The major system comprises the natural streams and floodplains, man-made channels and low lying arterials which convey runoff from infrequent storm events. In contrast, the minor system comprises catchbasins, street gutters, storm sewers and low flow channels which accommodate the more frequent storm events.

4.1.1 The Minor System

Generally, the minor system is composed of those things which accommodate runoff from storm events for which they are designed. The design range for minor systems is generally between the 1:2 year to the 1:10 year events. Properly designed and maintained, it collects and conveys regularly recurring runoff from sidewalks, rooftops, parking lots, etc. thereby reducing inconvenience to pedestrians and motorists.

One of the principle reasons for controlling flows in the minor system is the environmental impact minor system outflows have in terms of erosion, sedimentation and pollutant discharge. Where water quality or environmental constraints have been identified, the minor system flows should be controlled as fully as possible. Consequently, minor system flows should be designed to control to predevelopment conditions, all discharges up to and including the 1:2 year storm as a minimum. This would include the great majority of small, frequent summer storms. It should be stressed that the preparation of a Master Drainage Plan or Subwatershed Study may determine a more desirable level of control and that the Authority endorses control to the most beneficial

4.1.2 The Major System

The major system is the key to good urban drainage design. It constitutes those runoff routes which transfer the infrequent events such as the 1:25 year flood, 1:100 year flood or the Regional Flood. Besides drainage channels, the streets also act as a component of the major system as they transport runoff in excess of the storm sewer capacity.

4.2 Stormwater Management (SWM) Policies

The Authority endorses the following levels of stormwater control for the major and minor systems:

1. The major system shall be designed to accommodate the greater of the Regional or 1:100 year post development flood. This is possible for developing areas, but the Authority recognizes that it may not be possible for existing development. In such cases storm runoff systems must be reviewed on an individual basis and appropriate solutions developed.
2. The minor system should be designed to prevent surface ponding to an appropriate level of convenience. The level of convenience should be chosen based upon the use of the roadway and adjacent property. This criterion should provide protection for storms in the range of 1:2 years to 1:10 years.
3. The KCCA endorses the control of discharges to pre-development levels. Specifically, the minor system should be designed to control post development flows to pre-development levels for all events up to a minimum of the 1:2 year event. The Master Drainage Plan or Subwatershed Study should be carried out to establish more desirable levels of control, and peak flows from areas of new development should be controlled where development constraints have been established through a Master Drainage Plan or Subwatershed Study.
4. The KCCA recognizes that the preparation of a master Drainage Plan or Subwatershed Study cannot take place instantaneously and this may delay plans for development. Similarly, it would not be economically feasible to prepare a Master Drainage Plan or Subwatershed Study for extremely small subdivisions. Under these circumstances and to ensure conservative selection of control levels the Authority suggests the following:
 - a. Where a plan of subdivision is being prepared or does exist and no Master Drainage Plan or Subwatershed Study exists, then sound stormwater management techniques should include the preparation or an erosion/sediment control plan as a condition of draft plan approvals.
 - b. Where development is proposed and no Master Drainage Plan or Subwatershed Study exists, the minor system should be designed to control to pre-development levels all flows up to and including the 1:2 year storm, as a minimum.
 - c. Where development is proposed and no Master Drainage Plan or Subwatershed Study exists, the major drainage system should be designed to control to pre-development levels, all peak flows up to and including the 1:100 year flood.
 - d. If a proponent wishes to pass post-development peak flows that are greater than the corresponding pre-development peak flows, then he must prove that the increase would have no adverse affect either upstream or downstream.
 - e. The developer should submit a plan detailing what safeguards are to be taken to reduce erosion during the construction phase.

5. The Authority generally does not support:
 - a. On-line SWM ponds designed to enhance water quality;
 - b. The use of natural wetlands for SWM;
 - c. SWM facilities within natural hazards; and
 - d. SWM facilities within significant natural heritage features.

6. Sediment and erosion control measures are to be used on all construction sites to limit the effects of the proposed development on the surrounding natural environment and receiving drainage network.

4.3 Best Management Practices (BMP)

4.3.1 General

Best Management Practices, or BMP's, are generally described as the remedial measures that are considered for the control of stormwater quality and quantity. The following section outlines examples of BMP's and discusses each briefly in terms of applicability, site integration potential and land use compatibility. BMP's can include both structural (or facility) techniques and non-structural (planning) BMP's. Structural BMP's include extended detention and wet ponds, infiltration systems, artificial wetlands and various vegetative practices. Non-structural BMP's include land use planning, setbacks and buffer strips, and good housekeeping practices.

4.3.2 Surface Storage BMP's

The basic mechanism in the reduction of post development peak flows is stormwater development storage. Storage permits runoff to be held back and released at controlled rates after the peak flow period. Storage can be incorporated into the major/minor system in several ways. It can be distributed over the many small source control facilities on roofs, parking lots, and small landscaped depressions or it can be centralized in large scale retention/detention areas.

4.3.2.1 Dry Ponds

Retention and detention facilities serve to detain upstream stormwater runoff near the source, in order to release it to the drainage system at controlled rates. These utilities can be designed to contain runoff from any frequency event including the 1:100 year and Regional storm. The difference in retention and detention facilities is their mode of operation. Detention ponds (dry ponds) are normally dry or flow through and serve only to control peak discharge and minimize adverse effects due to flooding (often referred to as "peak shaving"). Retention ponds (wet ponds) on the other hand maintain a continuous volume of water for aesthetic or recreational purposes.

Since detention times are relatively short (4 to 8 hours), dry ponds offer very little opportunity for water quality enhancement through the settlement of suspended solids. These facilities can serve as either on-line or off-line storage devices in both the major and minor system. Detention facilities may also occur in underground flow routes and take form of large underground storage tanks or so-called "super pipes".

4.3.2.2 Extended Detention Dry Ponds

Dry extended detention ponds are similar to dry ponds, but use extended detention times of 24 to 36 hours in order to achieve higher levels of settling. It is generally found that the higher the suspended solids removal, the greater the amount of pollutant removal. This is because toxicants such as phenols and creosols, hydrocarbons such as oil and grease and trace metals have a strong affinity for sediment and tend to settle out with sediment. Detention periods of 24 hours or more can result in as much as 90% removal of particulate pollutants.

Unlike dry ponds, which rely upon peak shaving, extended detention dry ponds control the release of runoff volume as well which enables the control of both the magnitude and frequency of erosive velocities transmitted to the downstream channel. Therefore, these facilities are ideally suited for both stormwater quantity and quality control.

4.3.2.3 Wet Ponds

Wet ponds use a permanent pool to achieve higher removal rates of organic nutrients. They have little potential for controlling water quantity since the storage area is limited by the fact that it is already ponded. When reviewing any proposed wet pond, consideration must be given to the contributing base flows into the pond that would be required to maintain it. Maintenance costs for dredging of accumulated sediments, controlling algae blooms and other associated costs must also be considered.

4.3.2.4 Naturalized Wet Extended Detention Pond (Artificial Wetland)

Artificial wetlands provide very efficient particulate pollutant removal and offer additional enhancement capabilities for both nutrient uptake and soluble pollutant removal. These enhanced pollutant removal capabilities are tied to the biological interactions and aquatic vegetation in the wetland. Artificial wetlands are only marginally useful for the control of stormwater quantity, with their capability of being limited to control of only the most frequent, low intensity events.

The use of artificially created wetlands offers other benefits and is a true multi-quality enhancement, landscaping, wildlife and aquatic habitat and education/recreational opportunities. Some maintenance and the availability of minimum base flows into the wetland are essential considerations with this type of BMP.

4.3.3 Infiltration BMP's

Best Management Practices utilizing infiltration can be very effective for water quality enhancement, groundwater recharge to attenuate base flows, and some control of quantity for the more frequent, less intensive storm events. Infiltration techniques include infiltration trenches and basins, seepage trenches and porous pavements. They are generally designed to trap fine sediments and are used in conjunction with grass buffers that trap the coarser sediments.

Infiltration BMP's can only be used in areas where soil conditions permit. Course, free draining soils are required as sands and fine gravels. If soils are of high clay content with fine grained texture, infiltration practices would be ineffective and are not recommended.

4.3.4 Vegetative BMP's

4.3.4.1 Grassed Channels

Natural and grassed channels, besides being less expensive than concrete lined channels, will reduce velocity and erosive action of stormwater while improving infiltration and water quality and can be used in place of concrete gutter in some residential and industrial areas. In addition, grassed channels combine well with landscaped and greenbelt areas. They provide marginal control of stormwater quantity for only the smaller, more frequent storm events. Some maintenance is required. Tile drains placed parallel to the centerline help prevent standing water.

4.3.4.2 Filter Strips

Filter strips are similar to grassed channels but are designed to convey overland sheet flows. They must be designed such that runoff is evenly distributed across the filter strip. They have little to no capability to control stormwater quantity and low to moderate capability to remove soluble pollutants. They do accomplish some pollutant removal through filtration, deposition of particulate matter and nutrient uptake. Filter strips are ineffective under saturated or frozen ground conditions and are highly dependant upon slope length, grade and soil permeability.

4.3.5 Special Purpose BMP's

4.3.5.1 Parking Lot Storage

In many industrial and commercial areas where extensive pavement occurs, water can be detained in properly designed parking lot depressions and regulated as inflow into the storm sewer systems. This particular method requires careful attention to proper grading while catchbasin and outlet control must be selected and located to release ponded water under maximum head.

Oil and grit separators, also known as water quality inlets, are generally designed to remove sediment and hydrocarbon loadings from parking lot runoff before they are conveyed to the storm sewer system. Due to the small size, they have limited pollutant removal capability and only moderate removal of coarse sediment, debris and oil/grease can be expected. They are most suited to sites of less than half a hectare in size and are often used in gas stations and fuel depots or as a pretreatment facility for a wet pond or artificial wetland.

4.3.5.2 Rooftop Storage

Ponding of water on flat roofed buildings can reduce design peaks by storing rainfall and releasing this volume after main flow peaks.

4.3.5.3 Rainwater Leaders

In residential localities, roof rainwater leaders connected directly to storm sewer networks can significantly increase sewer flow rates. Therefore, roof leaders should be directed to lawns or grassed areas via splash pads or downspout extensions. Care must be taken to ensure that the lot grading directs water away from building foundations and towards swales and roadways.

4.3.5.4 Catchbasin Modifications

Standard catchbasins are constructed as a sump system with an elevated discharge lead in order to permit the capture of very coarse sediments and debris from storm water prior to its discharge into the storm sewer network. Catchbasins modified with a goss trap (perforated PVC pipe wrapped in filter cloth) may provide additional suspended solid removal. Catchbasins will not filter out fine grained sediments or soluble pollutants, whether fitted with goss traps or not. However, additional suspended solids removal due to catchbasin modifications would be beneficial when used with other BMP's such as extended detention or wet ponds.

All catchbasins should be designed and spaced such that the hydraulic capacity of the minor design storm is not exceeded. Inlet controls are alternative methods of control. This ensures that flows which occur during events greater than the minor system capacity will flow down the streets without sewer surcharge. This methodology recognizes that if the major system were adequately designed and if sewer surcharges are limited by inlet control, pipe savings would result from the dual concept.

4.3.5.5 Storm Sewers

All storm sewers and manholes should be designed to accommodate the design frequency selected for the minor system network. The design of the network should utilize runoff coefficients which reflect land uses on the development and the control of flow by upstream storage sources or stormwater management schemes.

4.3.5.6 Streets and Gutters

During minor system flows and major system floods the street may act as a conveyance path for runoff. The depths of flooding permitted on the streets while acting as part of the minor system should be selected to suit each particular municipality.

4.3.5.7 Groundwater and Backflow Control

For new developments, basements should be protected from flooding or groundwater buildup by foundation drains or setting basement elevations sufficiently high enough above storm sewers and hydraulic grade lines.

Foundation drains may cause problems if they are not carefully connected to storm sewers. In poorly designed networks, local runoff in excess of design rates may create surcharge pressures which can be transmitted back through foundation drains to the underside of basement floors. To provide a margin of safety against this problem, basement floor levels should be constructed with floor elevations above possible surcharge levels. Other possible alternatives are underground "soak pits", sump pump systems and third pipe arrangements.

4.4 Land Use Controls

Land use controls are the most effective means of protecting environmentally sensitive areas from the potential adverse impacts of development. Municipalities should be encouraged to include policies with their official plans and zoning by-laws to require setbacks, buffers and stormwater management practices. Such policies should include a statement of municipal policy objectives relating to stormwater management and establishing requirements for the completion of a Master Drainage Plan or Subwatershed Study. Official Plans could incorporate appropriate designations for floodplain lands, redevelopment areas and requirements for the drainage design, erosion control and construction practices.

The natural valleylands and ravines that comprise a large part of the major system are important natural features of the Kettle Creek watershed. They provide habitat for aquatic and terrestrial wildlife, as well as recreational and educational opportunities for local residents. They also provide a constraint to safe development given the high potential for flooding, erosion and slope instability. These constraints should be recognized within Official Plans and encroachment by development into these areas should be restricted or prohibited. Setbacks or buffer zones are the most effective means of preventing such encroachment and can be incorporated within the zoning by-law for new developments.

4.5 Design Guidelines for Development

The following guidelines are provided as recommendations that could be incorporated into any new development plans:

1. New development must prepare site specific stormwater management reports in accordance with the policies stated in Section 4.2. As a minimum, the reports should include the following:
 - a. The proposed drainage scheme for the development (the stormwater management plan);
 - b. The Best Management Practices (BMP's) that will be incorporated into the system;
 - c. The proposed methods for minimizing erosion and sedimentation during construction; and
 - d. The compatibility of the proposed works with the Master Drainage Plan or Subwatershed Study, if one exists.
2. Exploratory geotechnical investigations could be undertaken for development proposals to determine conclusively if BMP's such as infiltration measures will work. Boreholes and/or test pits could be used to confirm the suitability of the native soils or identify site areas where infiltration techniques are possible.
3. All storm sewers should be sized in accordance with design standards that do not take into account any flow attenuation achieved by on site measures (such as rooftop storage).
4. An adequate major system flow route must be provided. Attention must be given to proper grading or roadways and the incorporation of easements where necessary to ensure a safe and continuous flow route to a safe outlet.
5. In order to minimize the potential for flooding, erosion and environmental problems, every attempt should be made to preserve the existing drainage patterns.
6. Every effort should be made to minimize storm outlets into valleylands, in order to minimize the potential for erosion of these sensitive areas. All outlets should be designed to minimize outlet velocities and provide erosion protection measures such as energy dissipaters.

4.6 Sedimentation and Erosion Control Measures

Sedimentation and erosion control do not in themselves form part of the stormwater system, however its importance is mentioned since any major development has associated with it large scale earth moving and topsoil removal. Studies have shown that representative erosion rates on urban construction sites are as much as four hundred (400) times that of undisturbed sites. Precautions such as sediment traps, seeding topsoil stockpiles, isolated stripping practices, vegetation screens and filter cloths in runoff routes help prevent large scale sediment loss. All subdivision proposals should include an erosion and sediment control plan as a part of the approval process.

Provisions for erosion and sediment control must be identified at the planning stage, and implemented first in the site development process prior to initiating construction. Once implemented, sediment controls must be cleaned, checked and maintained in place, for all phases of the construction. Erosion and sediment controls which should be considered for implementation include the following:

1. Housekeeping Practices: Housekeeping practices are one of the least costly means of controlling sediment and erosion, yet are also the ones most commonly ignored by development proponents. They include such activities as:
 - a. Locating stockpiles away from watercourses and stabilizing them against erosion;
 - b. Phasing of construction and confining work within defined perimeters;
 - c. Restricting site access of designated location(s); and
 - d. Cleaning of vehicles and equipment to remove and prevent sediment from being carried off site.
2. Construction Scheduling: Proper construction scheduling will help to ensure planned and orderly development of the site while limiting the potential for erosion and sedimentation. This would include such things as timing work to occur during portions of the year that are not too dry or too wet, and constructing the major stormwater facilities such as extended detention ponds first so that they may be used during the development period to control sediment.
3. Temporary Sediment Basins: These large temporary basins use controlled storm water release structures to achieve greater efficiencies in trapping pollutants. Strategic placement of the basins, in conjunction with improvements to the natural drainage system, will allow for the interception of the largest possible amount of runoff from the disturbed areas. Also, sediment basins offer the advantage of being adaptable as a part of the permanent stormwater management system. As a general guideline, sediment basins should be sized based on a storage volume of 125 cubic metres.

4. Temporary Sediment Traps: Also called silt traps, they are small, temporary ponding areas for sediment laden storm water. They are generally applicable to areas where less than 2 hectares is draining through them. Sediment traps should be sized with an initial storage volume of 125 cubic metres per hectare of drainage area. They are formed by constructing an earthen embankment with a gravel outlet across a drainage swale. They are temporary measures only, designed to remove coarse sediments, and do not normally adapt as a part of the permanent stormwater management system.

5. Seeding and Mulching: The promotion of vegetative growth is a standard technique for reducing the erosion of soils and after the construction period. However, the use of seeding and mulches is only effective during the growing season, therefore an important aspect of erosion control is construction scheduling so that exposed areas can be seeded and not left exposed during the winter months. Re-vegetation on sloped surfaces may require additional measures such as mulch or straw matting, hydro seeding or seed drilling to prevent loss of seed due to surface runoff.

6. Silt Fences: Silt fences are temporary sediment barriers formed by stretching filter fabric across a wire fence and staking it into the ground for support. The filtering efficiency depends upon the type of filter fabric used. They are best used below disturbed areas where erosion could occur in the form of sheet or rill erosion.

7. Check Dams: Check dams are small, temporary dams constructed of stone or rock, wood or logs, or most commonly, straw bales. They are used to reduce the velocity of concentrated storm water flows and are placed in surface drainage routes and ditches. Check dams are used to control erosion through reducing velocities and have some limited benefit in containing some coarse sediment.

8. Storm Drain Inlet Protection: Also referred to as catchbasin controls, they consist of an excavated ponding area or sediment filter around the storm sewer inlets. The purpose is to filter out sediment from the stormwater, prior to its release into the system. Inlet protection requires routine inspection and maintenance, especially during construction periods when disturbance to the area is greatest.

9. Vibration Pads: Vibration pads are semi-permanent devices constructed of reinforced concrete, coarse stone or rip-rap. The pads are a minimum of 0.15 metres thick and 15 metres in length. The pads promote the removal of mud from construction vehicle tires and trap sediment on site. Vibration pads should be constructed at each access point to the development site.

5 Development Review Procedures

5.1 Plan Review Process

Once that a municipal plan input and review item is received by the KCCA for comment, certain procedures are undertaken, depending upon the type of development application. This process of providing comment involves bilateral discussions with both the applicant and the municipality to communicate the requirements of KCCA's regulations and policies. Additional discussions may ensue with other agencies such as the Ministries of Natural Resources and Municipal Affairs and Housing and Environment to ensure a certain integration of understanding of the issues. Correspondence is copied to the municipality, the applicant and other review agencies as necessary, to communicate KCCA requirements and/or recommendations.

5.1.1 Plan Review Resources

When reviewing a plan the following resource materials should be reviewed to accurately locate the subject property and identify any Authority concerns:

- a) Regulation Limit Mapping;
- b) KCCA GIS mapping;
- c) MNR Land Based Interest Maps;
- d) Topographical Maps;
- e) Aerial Photographs;
- f) Municipal Web-based GIS system;
- g) Official Plans and Zoning By-Laws; and
- h) Other Studies (ie. Shoreline Management Plan).

If the plan under review appears to conform to the Authorities policies and mandate, then the notice may be stamped or a form letter sent to the decision making agency. The date of review is noted in the plan review records and on the plan. If it appears that the Authority may have concerns with the proposal, then a field inspection should be undertaken and a letter outlining the specific concerns of the Authority sent to the decision making agency. Specifically, the content of KCCA comment on planning related matters is not public record until the public meeting is held by the municipality following the procedures outlined within the Planning Act.

5.1.2 Field Inspection and Response

Should the initial review indicate that any of the Authority's programs could be affected by the proposed development; a site inspection of the subject property should be undertaken. The plan review criteria are again examined in the field, with emphasis on the area of concern. If it is determined that the proposed plan is acceptable, the Authority corresponds accordingly.

If the field inspection reveals that the Authority does have a concern, then one of two courses of action may be taken:

1. When the concerns are relatively minor and may be addressed through minor revisions, a letter outlining the concerns of the Authority is sent to the decision making agency, along with the suggested conditions under which development should proceed. The letter should be made in the form of a non objection subject to imposed conditions. In some cases, the Authority may suggest that the decision making agency defer its decision until such time as the Authority and applicant meet to discuss the Authority's concerns and come to an agreement on a resolution.
2. Where a major concern is determined, or the area adjoins Authority property, the plan should be discussed with the General Manager/Secretary Treasurer and a site visit undertaken, if required.
 - a. If concerns of staff can be resolved with the applicant and/or affected municipality, the application proceeds according to KCCA comments.
 - b. If concerns of staff can not be resolved with the applicant and/or affected municipality, the matter is brought to the attention of the Authority Board.

The Authority Board may delegate "Power to Act" to the Executive Committee, as required. Discussions should be held with the applicant and other agencies involved prior to launching an objection, in an effort to ameliorate the situation.

Where the Authority has a concern with a plan, a request should be made for notification of the decision made by the approvals agency. The request should be included with the comments forwarded. If conditions of approval suggested by the Authority are included as approval requirements by the decision making agency, then the Authority staff will carry out the necessary follow up actions.

If the concerns expressed by the Authority are not addressed by the decision making agency, then staff should seek direction from the General Manager and the Authority Board, as appropriate, to begin the process of appealing the decision of the agency to the OMB or other appropriate review board. Procedures for appealing a decision to the OMB are outlined within Section 5.10 of this document.

5.1.3 Response Deadlines

The majority of planning documents circulated to this Authority for review will note a date by which all comments and/or conditions are requested to be received by in order to be considered by the decision making agency.

The following outlines the timing period, according to the *Planning Act*, in which an approval agency is required to make a decision by for the following types of development applications:

<u>Plan:</u>	<u>Review Period:</u>
Official Plans & Amendments*	Specified by Council (S.17(21))
Zoning By-laws & Amendments**	120 days (S.34(11))
Minor Variances ***	30 days (S.45(14))
Consents***	90 days (S.53(14))
Plans of Subdivision (Condo) ****	180 days (S.51(34))

The following outlines the timing period, according to the *Drainage Act*, in which an approval agency is required to make a decision by for the following applications:

Municipal Drains**	40 Days
Drainage Petition**	30 Days

* Requires provincial approval (MMAH)

** Requires Municipal Approval only

*** Requires Municipal approval only through delegated committee (ie. Committee of Adjustment)

**** Requires approval by the delegated approval agency by the following jurisdiction:

- London/Middlesex – County of Middlesex Planning & Economic Development Department
- City of St. Thomas – City of St. Thomas Planning Department
- County of Elgin – Ministry of Municipal Affairs and Housing (MMAH)

The Authority staff will make every effort possible to provide a response by the date noted on the notification of the application circulated to the Authority which has been established by the decision making agency. However, there may be times when Authority staff may request an extension for providing comment to properly assess the development with relation to the Authority's review criteria. The Authority will provide a written request to the decision making agency for an extension of the response deadline. However, response from the Authority must be provided within the timing period established according to the Planning Act to be considered as part of the approval agency's review.

5.2 Official Plans and Amendments

When an Official Plan document is being prepared for a municipality, KCCA staff are generally afforded the opportunity to supply information and comment on plan formulation with the municipality and its planning staff or consultants. In all Official Plan reviews however, the following should be done:

1. Ensure that, in accordance with the Provincial Policy Statement (PPS), natural hazard and natural heritage associated lands are shown generally and/or described in the Official Plan and that policies are incorporated which address new development and redevelopment consistent with the PPS (Section 2.1 and 3.1).
2. Check that one of the defined approaches outlined in the provincial policy implementation guidelines is followed and that it is appropriate for the municipality (flexible hazard approach, development constraint approach, one-zone approach, two-zone approach, or special policy area (SPA) approach);
3. Ensure that the KCCA is identified as a regulatory agency for areas specified in the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation 181/06 under Ontario Regulation 97/04, made pursuant to Section 28 of the Conservation Authorities Act.
4. Ensure that any hazard or resource problems in the municipality are identified and the studies and/or remedial measures required prior to development approvals are outlined for KCCA and municipal review and approval (ie. master drainage plans, geotechnical studies for unstable slopes, sediment and erosion control measures) and;
5. Section 17(23) of the Planning Act states that notification of adoption of an Official Plan will only be sent out to those who have submitted a written request. As a matter of course, written requests for notification of adoption should be included in the Authority's review letter.

The same principles apply to review of Official Plan Amendments (OPA's), however, OPA's are generally site specific and so comments should be made accordingly. OPA's often precede or compliment zoning by-law amendments or draft plans of subdivision and consideration should be given to the Authority's potential review of these documents.

5.3 Zoning By-Laws and Amendments

When a comprehensive zoning by-law is being prepared for a municipality, KCCA staff are afforded the opportunity to comment on by-law formulation with the municipality and its planning staff or consultants. However, in all zoning by-law reviews, the following guidelines should be followed:

1. Check that all lands within the municipality which are within KCCA's Regulation Limit are appropriately zoned in a category which recognizes any development constraints due to flood susceptibility or other physical constraints (steep slopes, wetlands, etc..) – this is especially important to ensure on lands that are already developed, so that it is known what can and cannot be done on the site;
2. Ensure that zoning on specific properties complements that on the Official Plan document – if the Official Plan prohibits development (ie. flood plain designation) but the zoning by-law is permissive (ie. Residential zone), the landowner can apply for a building permit under the permissive zoning, which could potentially put the Authority and the municipality at odds;
3. Check that one of the defined approaches outlined in the implementation guidelines is followed and that it is appropriate for the municipality, be it urban or rural;
4. Ensure that the KCCA is identified in the general provisions as a regulatory agency for areas specified within the Regulation Limit of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation 181/06 under Ontario Regulation 97/04. (Made pursuant to Section 28 of the Conservation Authorities Act, R.S.O. 1980);
5. According to Section 34 (16) of the Planning Act, the municipality may impose conditions on the permitted use of land or the erection, location or use of a building or structure to the support the by-law amendment. The Authority may request specific conditions for the municipality to impose to satisfy concerns of the Authority that can be satisfied through imposed conditions; and
6. Under Ontario Regulation 404/83 of the Planning Act, the municipality must notify the Conservation Authority within 15 days of the passing of a zoning by-law, thus no written request is necessary as is with Official Plans.

The same principles apply to the review of zoning by-law amendments, however, zoning by-law amendments are generally site specific and comments should be appropriate. This is an opportunity to develop site specific provisions in the zoning by-law which will ensure development will comply with the Authority's requirements – especially with respect to flood plain lands.

There is also an opportunity to use a holding by-law if the site is affected by slopes which require slope stability studies to determine setback from top of slope (holding by-law must only be used where principle of development is established, and studies are required only to determine limits of development, not whether or not development is possible).

5.4 Minor Variances

The KCCA is sent notice of applications for minor variances by most municipalities within the watershed as a part of the agency circulation process. Three categories of response are made:

- i. No objection
 - ii. No objection with conditions; or
 - iii. Objection
- i. *No Objection*: the minor variance should be reviewed with respects to its appropriateness in relation to the KCCA's flood plain and hazard land concerns. If the variance is not in an area of concern to the Authority, a "no objection" response is made.
 - ii. *No Objections with Conditions*: if the variance is within an area of concern to the Authority, but it is perceived that the proposal could proceed with proper mitigating measures (ie. floodproofing), the response could be a request that the granting of the variance be conditional upon a permit being granted by the Authority under the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation 181/06 under Ontario Regulation 97/04. If the property on which the variance is proposed is affected by Authority's Regulation Limit, the Committee of Adjustment should be asked to impose a condition which requires the Authority's acknowledgement agreement to be registered on title, to the Authority's satisfaction. Often a minor variance is to recognize an existing setback encroachment prior to sale of a property; by having the agreement registered on title, the prospective purchasers will be made aware of the Authority's jurisdiction on the subject parcel. There is no specific time limit in the Planning Act for the applicant to meet any conditions placed on a variance.
 - iii. *Objection*: if the variance is for an addition or expansion of a use which is clearly contrary to the Authority's and the Province's natural hazards management principles, and/or a permit from the Conservation Authority would not likely be granted, the Committee of Adjustment should be advised not to grant the variance. If the variance is granted contrary to the Authority's request, an objection to the proposed variance may be lodged, which will be heard by the Ontario Municipal Board*. Notification of the decision of the Committee of Adjustment is only sent to those who have submitted a written request. If the Authority's response is anything but a "no objection", a written request for notification should be included in the response letter.

** As appeals to the OMB are generally restricted by time, an Administrative Appeal should be lodged, which then gives staff the opportunity to develop full reasons for the objection and to seek support/concurrence from the Full Authority or Executive Committee.*

5.5 Consents (Severances)

Consent applications are reviewed considering the appropriateness of creating a new lot, easement, right-of-way or lot addition with respect to the hazards or resource significance of the land. Four categories of response are made:

- i. No objection;
 - ii. Insufficient resource information;
 - iii. No objection with conditions; and
 - iv. Objection
- i. *No Objection*: if the entire parcel is not within KCCA's Regulation Limit;
 - ii. *Insufficient Resource Information*: where there is insufficient resource information regarding the physical characteristics of the land for which a consent application is made, the Authority may ask the municipality to defer making a decision until appropriate studies are requested by the Authority are carried out either by Authority staff or the applicant.
 - iii. *No Objection with Conditions*: where a lot to be created is partially within the Regulation Limit, the KCCA will notify approving authority and owner/agent that a portion of the parcel is subject to the regulations. A map may be provided showing, where possible, property limits, lots to be retained and severed, the Regulation Limit. The approval authority and the owner/agent will be made aware that, if the property owner should want to develop within the Regulation Limit, subsequent approval of the severance, an application must be made to the KCCA for permit under KCCA's Section 28 Regulation. The Authority may also request the following conditions, where appropriate:
 - a. An acknowledgement agreement be registered on title of all lots affected by KCCA's Regulation Limit, by the owner, prior to sale and certification of any documents.
 - b. All development (including construction, grading and/or filling) must be located outside any hazardous areas (ie. in cases of wetlands, steep slopes, flood plain) – a site plan to show this must be reviewed by the KCCA to meet this condition;
 - c. If development is proposed within a building envelope which is questionable for the proposed use, the KCCA review of the site and/or grading plan – the applicant must be required to show exact location and dimension of all proposed structures and existing and proposed grades.
- The time limit for the applicant to meet any conditions imposed on consent is one year, after which time the consent is lapsed (Planning Act, S.52 (41)).
- iv. *Objection*: if the lot to be created is entirely within the Regulation Limit, or partially within the Regulation Limit but with an insufficient building envelope (including house, setbacks and septic system), the KCCA may request that the approving authority not grant the consent as submitted. The Authority will indicate to the municipality any possible revisions to the application that would enable the Authority to withdraw its objections. (ie. adjustments in lot lines and configuration).

5.6 Draft Plans of Subdivision

Draft plans of subdivision are reviewed with respect to the considerations outlined in the beginning of these guidelines. Stormwater management (quantity and quality) is one requirement which is especially pertinent to subdivision review. In reviewing plans, Authority staff must have adequate information with respect to the inherent environmental hazards and significant resources on site. If the Authority does not have adequate information, the developer may be required to provide it (ie. flood plain determination, geotechnical stable slope assessment, environmental impact study). The requirements of the Authority are requested to be incorporated into the Conditions of Draft Approval. When the concerns of the Authority have been met, the conditions can be cleared. Also, it should be requested that the Subdivision Agreement between the municipality and the developer contain provisions for the completion of the work in accordance with the approved plans, reports, permits, and requirements as requested as Conditions of Approval.

The technical types, but not limited to, of information to be requested to the satisfaction of the KCCA include the following:

- a) Detailed flood plain mapping for the site, including determination of the Regulatory Storm Flood Line and the 1:100 Year Storm Flood Line where the municipality and the Authority have the two-zone system in place;
- b) A floodproofing report including means of preventing surface water or storm systems backwater from impacting development;
- c) Accurate geodetic mapping of the site to display topography in relation to the subdivision plan;
- d) A geotechnical study for development which is adjacent to ravines or steep slopes in order to determine a suitable lot line, building, or other structure (roads, parking lot) setback or appropriate remedial measures (revetment works);
- e) A stormwater management (SWM) plan as per the Authority's SWM policies, showing the location, extent, design, volume of flow and upstream/downstream impacts – a Master Drainage Plan or Subwatershed Study may be required, depending upon the extent of the drainage area being developed;
- f) A sediment and erosion control plan showing methods by which erosion will be minimized and silt maintained on site throughout all phases of grading and construction – this requirement will only be made in areas where drainage is not directed to municipal sewers, in which case this is a municipal concern from the standpoint of storm sewer maintenance;
- g) A grading and filling plan showing existing and proposed grades;
- h) A hydrogeological study, with mitigating measures for development proposed adjacent to areas of hydrological importance;
- i) An Environmental Impact Study (EIS) for development in or near significant natural heritage areas; and
- j) Detailed site plans for lots abutting or within the Regulation Limit.

In reviewing an actual draft plan of subdivision, staff will provide comments to the municipality and/or delegated approval agency which relate to:

1. The completeness and accuracy of the information submitted with respect to natural resource, heritage and/or hazard areas.
2. Any proposed encroachment of development and/or placement of fill in areas of environmental hazards;
3. Appropriateness of lot configurations and proposed land use and the availability of suitable building envelopes;
4. The recommended planning approach for any official plan/zoning by-law amendments for the development; and
5. Proximity of the proposed development to Authority owned lands and any special requirements.

The plan will not be recommended for draft approval if portions of the draft plan contravene Authority and/or provincial policy (ie. development in flood plain, major watercourse alteration, development in wetlands, lots along steep slopes). Staff should initiate discussions with the developer to resolve how the draft plan might be revised to remove these objections, or what further studies should be undertaken to show how an identified issue can be overcome. In some cases, a red-line revision to the plan is adequate (ie. moving of lot lines to correspond to flood lines or geotechnical recommendations).

Once the above matters have been considered, the following types of conditions for draft approval may be requested:

- The subdivider submit appropriate technical reports and plans, to the satisfaction of the KCCA, as necessary;
- The subdivider apply for and receive approval for a KCCA Permit under our Section 28 Regulation;
- Open space requirements are provided for through zoning or land dedication, where appropriate;
- Acknowledgement agreements be registered on title of lots which extend into natural hazards.
- The subdivider be required to carry out any special requirements which may be requested as a result of the proximity of the proposed subdivision to Authority owned lands; and
- The Subdivision Agreement between the owner and the municipality contain provisions for the completion of the works in accordance with the approved plans, reports, permits, and requirements requested as conditions for approval (this is an essential requirement in ensuring that the proposed works and actions are carried out – other than KCCA's Section 28 Permit, the Authority has very little control over whether work is carried out after final approval is given.)

5.7 Draft Plans of Condominium

Generally, but not always, draft plans of condominium deal with existing structures. If the structure is in an area of concern to the Authority, it should have been reviewed at the zoning by-law/official plan amendment and/or site plan approval stage. It is very difficult to implement any physical requirements at the draft plan of condominium stage, as the structure is generally built, or at a minimum, building approvals have been granted. Generally, Authority concerns should be met at an earlier stage of approval process.

Where building approvals have not been granted and the Authority has the opportunity to comment, the procedure follows the same general format as that of a plan of subdivision.

5.8 Site Plan Approvals

Site plans are reviewed with respect to similar considerations as outlined for draft plans of subdivision, only the considerations are specific for a particular lot or site. Stormwater management (quality and quantity) is one requirement which is especially pertinent to site plan review. Authority staff must have adequate information with respect to the inherent environmental hazards and significant resources on site, and the developer must provide this information if the Authority does not have it. The requirements of the Authority are requested to be incorporated into the development agreement. When the conditions of the Authority have been met, they can be cleared with the Building Division of the municipality. The technical types of information and the conditions requested can be identical to that which can be requested for a draft plan of subdivision.

5.9 Property Clearances

Property clearance requests do not fall into the same category as other plan input and review documents because there is no legislation governing their existence. They are forwarded to the Authority at the initiative of a lawyer or agent, generally representing the grantee in a real estate transaction. The KCCA considers these letters as a plan input and review related item because it is sometimes the first opportunity to make contact with a potential proponent of development and make him/her aware of the Authority's policies, the existence of regulations and any potential environmental concerns that the Authority may wish to make known to the developer.

The general procedure for processing property clearance requests is to start by cross referencing the property on the Authority's Regulation Limit mapping. If there is not enough information included with the request to accurately locate the property, it is up to the requesting agency to provide a survey or site plan to the Authority's satisfaction to assist in the locating process.

If the property is located partially or wholly within the Regulation Limit, Authority staff should respond to the request by informing the inquiring agency of the existence of the regulations in the area and the various criteria under which a permit would be required, as appropriate.

Since there is generally not any specific development proposal associated with the clearance letters, comments are generally limited to the fact that the property is either affected or not affected by the regulation, or other information on the possible environmental hazards present.

If the property is not located in an area of concern to the Authority, then a standard form letter can be sent to the inquiring agency informing them accordingly. A fee is charged for each property clearance request processed to help recover some of the costs associated thereof. If the inquiry agency does not include a cheque to cover the fee, an invoice must also be sent.

5.10 Appeals to the Ontario Municipal Board (OMB)

A number of Provincial Statutes contain appeal mechanisms, each unique to its own statute. For example, the Conservation Authorities Act contains a mechanism by which an applicant who has been refused a Section 28 Permit can appeal the decision of the Authority Board to the Mining and Lands Commissioner.

In the case of development applications under the Planning Act, appeals are generally made to the Ontario Municipal Board (OMB). The OMB is established pursuant to the Ontario Municipal Board Act. The OMB provides a public forum for resolving disagreements. Members are appointed by the Ontario government to mediate and/or resolve these disputes under a variety of legislation.

The OMB is an independent adjudicative tribunal subject to the rules of natural justice and the requirements of the Statutory Powers Procedures Act.

The OMB hears appeals and applications on land use planning issues. It provides a forum to hear appeals on these matters and then renders a decision based on the evidence provided at a hearing and the relevant law. Appeals to the OMB are generally submitted when a person, public body or corporation, disagrees with a decision from the municipal level.

The OMB decision is based on the merit of the application as presented at the hearing by the parties. Members must weigh the evidence from all parties and arrive at a decision that is based on good planning principles. Members of the Board are mindful of the decision-making authority of elected councils and will overturn those decisions only if the evidence is sufficiently compelling. Due to the nature of the process, it is understandable that the various parties, as well as the public, may view decisions in different lights.

Arising out of the Authority's Plan Input and Review responsibilities, there may be an occasion when a planning issue goes before the OMB. This can include circumstances in which:

- a. The KCCA appeals an agency's decision or requests that a planning matter be referred to the OMB;
- b. The KCCA makes recommendations that cause another party to appeal or request that a planning matter be referred to the OMB; and/or
- c. KCCA staff are requested or subpoenaed to provide testimony as expert witnesses at an OMB hearing.

The second and third circumstances are those in which the Authority staff will play more of a reactionary role. The first circumstance listed can be considered the more proactive, or the situation in which the Authority instigates the appeal process.

Appeals to the OMB are generally not the first step in the approval process. For many processes, the first step involves the Municipal planning department.

According to specific legislation, some appeals to the OMB are submitted to municipalities and approval authorities then forwarded to the Board. Other appeals must be submitted to the OMB directly from the person filing the appeal.

The following are the planning related applications in which an appeal is to be filed with the municipality or approval authority:

- Minor Variance;
- Consent;
- Zoning by-law/amendment;
- Interim control by-law;
- Official plan or official plan amendment; and
- Plan of subdivision.

The following are the applications in which an appeal is to be filed directly with the OMB:

- Zoning by-law amendment: holding symbol;
- Site plan; and
- Demolition permit.

In the event, KCCA staff responsible for the Plan Input and Review program recommends an appeal against a decision on a land use planning matter, the following procedures shall apply:

1. Major issues which cannot otherwise be resolved with the proponent, approval agency or the Ministry of Municipal Affairs and Housing (MMAH) may be recommended for OMB consideration.
2. Prior to initiating any referral to the OMB, or any appeal of an approval agency's decision, KCCA staff shall obtain the approval of the Full Authority. If the appeal deadline precludes waiting for Full Authority approval, then approval from the General Manager/Secretary Treasurer must be obtained. Concurrence of the Full Authority must then be obtained as soon as possible thereafter.

3. If approval to proceed is obtained, a letter is prepared detailing the following:
 - Identification of subject matter by name and approval agency file number;
 - Clear identification of which section of the Planning Act the referral or appeal is being requested under;
 - Clear identification of what specifically is being objected to, including any maps, tables, reports, etc.;
 - Clear rationale for the referral request or appeal based upon KCCA policies, Provincial Policy, program objectives and/or conformity with legislation administered by the KCCA;
 - Indicate who in the Authority should receive further correspondence on the issue;
 - The referral request or appeal should state that it is being made on the behalf of the Kettle Creek Conservation Authority (KCCA) and must be signed by the General Manager/Secretary Treasurer, or direction received from the General Manager/Secretary Treasurer.
 - Must be accompanied by a completed Planning Act Appeal Form available from the Ontario Municipal Board website; and
 - Any required documents as requested on the appeal form must be included along with the filing fee, paid by certified cheque or money order only. For OMB fees, refer to the OMB Fee Schedule posted on the Ontario Municipal Board website.

Ontario Municipal Board website: <http://www.omb.gov.on.ca/index.html>
4. A copy of the letter of appeal or request for referral and completed Appeal Form should be sent to the Authority's solicitor. Staff should then proceed with preparing information, evidence, etc. for the hearing. The waiting time for OMB hearings is generally six (6) months to one (1) year.

The decision of the Board has the same force and effect as if it were the decision of the Minister of Municipal Affairs and Housing or the Council of the municipality or any of their delegated authorities. The decision is final unless it pertains to a matter of provincial interest or is appealed to the Divisional Court (only on a case of an error in judicial proceeding).