



Clair-Maltby Secondary Plan

Master Environmental Servicing
Plan and Secondary Plan

Terms of Reference



Clair-Maltby Terms of Reference

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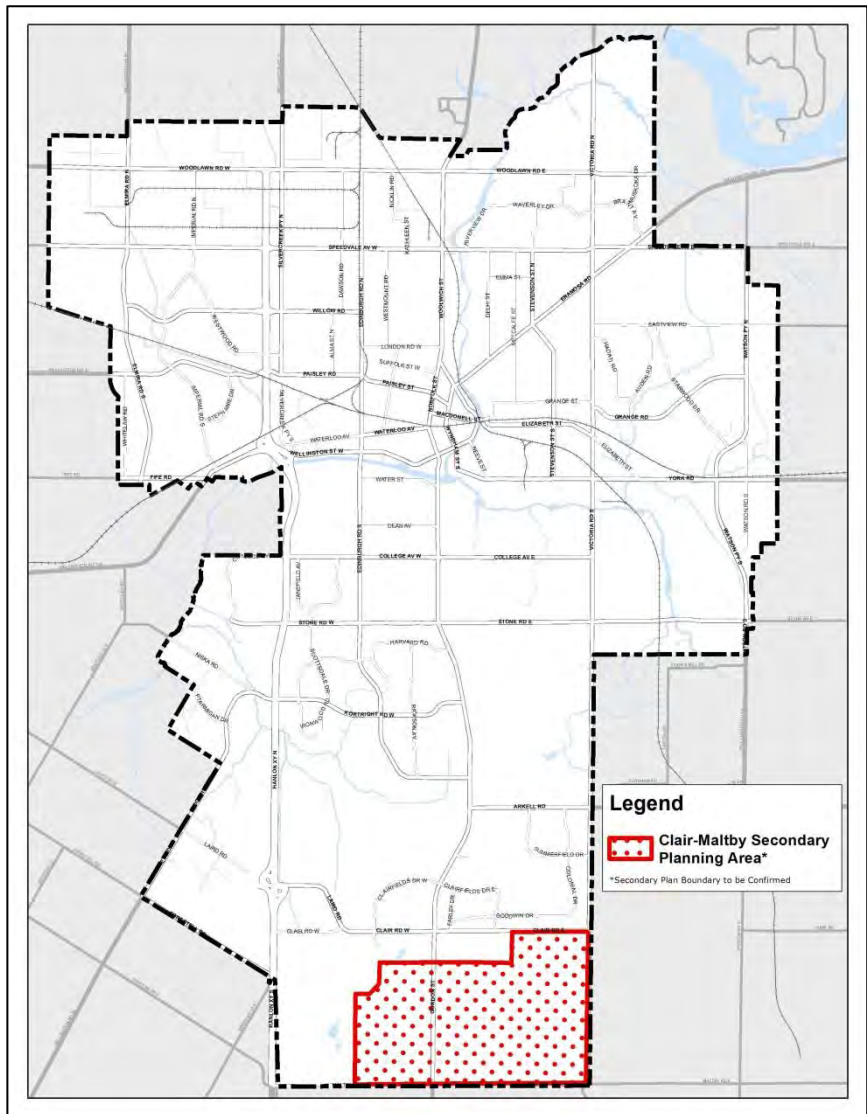
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Introduction

The City of Guelph is undertaking the Clair-Maltby Master Environmental Servicing Plan (MESP) and Secondary Plan Study in order to comprehensively plan the last unplanned greenfield area of the City. This area has been identified as requiring a secondary plan to: establish an appropriate range and mix of land use designations **that contribute towards achieving the City's overall vision of planning a complete and healthy community**; and to, undertake the necessary related studies to support future urban growth, including a comprehensive servicing strategy for the area.

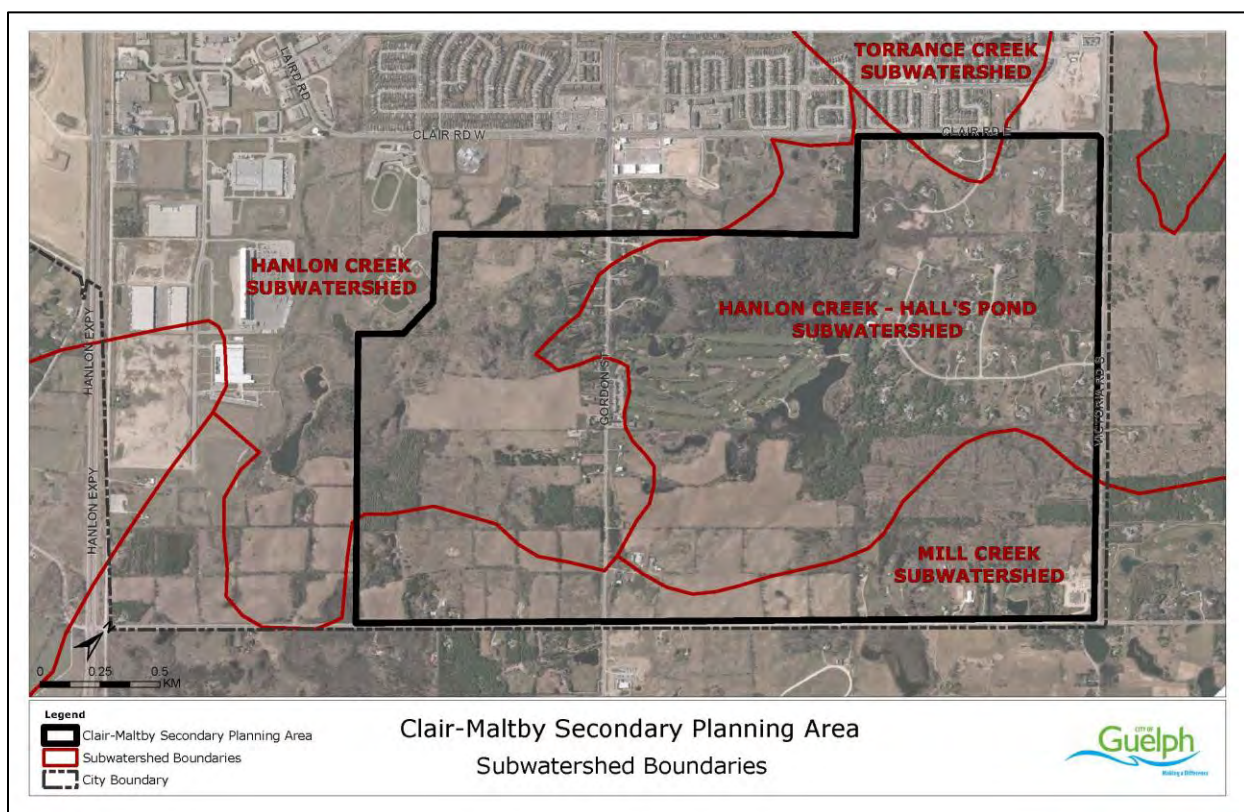
A MESP and Secondary Plan is the process that Council has approved to appropriately address the complexity of planning for development of this area. The MESP offers an integrated approach that coordinates the requirements of both the *Environmental Assessment Act* and the *Planning Act*. The integrated approach ensures that information collected from each study will inform other studies taking place. Multiple check points throughout the process will provide continuous feedback loops between studies. This approach examines the combined impacts of alternatives, leading to the development of options and better solutions.



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Background

The Clair-Maltby Secondary Plan area is located in the south of Guelph, bound by Clair Road to the north, Maltby Road to the south, Victoria Road to the east and the Southgate Business Park to the west. The area encompasses more than 500 hectares of land. Currently, the land is largely rural in nature and dominated by existing agricultural uses. The Rolling Hills Subdivision is located in the north-east **corner of the study area and consists of over 50 properties that are zoned 'Estate Residential' in the previous Township of Puslinch Zoning By-law.** The natural heritage system is a prominent feature of the area and includes: catchment areas for the Hanlon Creek, Mill Creek and Torrance Creek subwatersheds; a rolling and hummocky topography situated on the Paris Galt Moraine; the Halls Pond and Mill Creek Provincially Significant Wetland Complexes; important habitats for locally, provincially and federally significant species; significant woodland features; ecological linkages that span subwatershed boundaries; and important groundwater recharge functions.



The study area was annexed into the City of Guelph in 1993. Official Plan Amendment 2 (OPA 2), which incorporated the South Guelph Secondary Plan into the Official Plan, established land use designations for these lands south of Clair Road. The 'Reserve Lands' designation was established for lands intended for future

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urban development. The intent of the 'Reserve Lands' designation was to ensure a detailed community plan would occur prior to any future development and that adequate services would be provided to accommodate the proposed land uses prior to development.

Official Plan Amendment 48 (OPA 48), the comprehensive Official Plan update which is currently under appeal, maintains **the 'Reserve Lands' designation** for the lands within the Clair-Maltby study area until such time as a Secondary Plan is approved. As outlined in Section 9.10 of OPA 48, this designation recognizes that there may be servicing, access or other development related limitations for urban growth. These lands are intended to form part of the longer term urban land supply for the City.

The Clair-Maltby Secondary Plan will have regard for the vision, goals and objectives set out in the Official Plan for the entire City. The Secondary Plan will be guided by the growth management objectives of the Official Plan, outlined in Section 2.4.2. These objectives provide direction for a wide scope of the things to be studied and include:



- Building a compact, vibrant and complete community for current and future generations
- Planning the greenfield area to provide for a diverse mix of land uses at transit supportive densities
- Maintaining a healthy mix of residential and employment uses at approximately 57 jobs per 100 residents
- Maintaining a strong and competitive economy
- Supporting a multi-modal transportation network and efficient public transit system
- Planning for community infrastructure to support growth in a compact and efficient form
- Ensuring sustainable energy, water and wastewater services are available to support existing development and future growth
- Promoting protection and enhancement of the natural heritage system
- Supporting and protecting water, energy, air quality and cultural heritage resources, as well as innovative approaches to waste management
- Supporting transit, walking and cycling for everyday activities

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Further, a significant portion of the Secondary Plan area is within the **City's** designated '**greenfield area**' and therefore subject to policy 2.4.10.1 (2001 OP), which outlines a minimum density target of not less than 50 residents and jobs combined per hectare **for the City's entire 'greenfield area'**.

Other existing designations within the study area include: Corporate Business Park, Industrial, General Residential, Open Space, Significant Natural Area, and Natural Area. The appropriate mix of urban land use designations will be considered through the Secondary Plan.



Purpose/Objectives

The purpose of the Clair-Maltby Secondary Plan is to develop a land use plan for the study area which provides more detailed planning objectives and a policy framework to direct future growth in this area.

The Clair-Maltby Secondary Plan should generally address, but is not limited to:

- i. patterns of land use, land use designations and density, and associated population and employment densities
- ii. connectivity and integration in the secondary plan area and with existing developed or planned development areas of the City
- iii. urban design
- iv. natural heritage features and systems

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- v. cultural heritage and archaeological resources
- vi. transportation including transit, pedestrian and bicycle connections
- vii. servicing strategy
- viii. phasing of development
- ix. water resources including surface and groundwater, watershed and subwatershed studies and stormwater management plans
- x. provision of trails, parks, schools and community facilities
- xi. implementation of specific policies of this the Official Plan

The objective of the Clair-Maltby Secondary Plan is to develop a sustainable community that provides a range and mix of housing, commercial and employment opportunities within an urban village context while ensuring integration with the rest of the City. The study should:

- be a collaborative, design-driven process that will achieve a feasible plan that addresses technical issues
- be innovative
- be bold
- create a well-designed community that is comparable to leading communities both nationally and internationally
- emphasize community engagement/communications throughout the process



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Components of the Study

In order to appropriately address the complexity of planning for development in this area a MESP and Secondary Plan will be prepared.

Master Environmental Servicing Plan (MESP)

The MESP is to be carried out in accordance with the Master Plan requirements of the Municipal Engineers Association Class Environmental Assessment (EA) process (Section A.2.7 of the Class EA document). This process will include Phases 1 and 2 of the Class EA process to identify a series of related projects/studies necessary to support urban development of this area. In addition this study should be integrated with the Planning Act as outlined in Section A.2.9 of the Municipal Class EA process.

MESP's are long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. The MESP will establish the preferred method of servicing the Secondary Plan area.

Master planning provides a municipality with a broad framework through which the need and justification for specific projects can be established such that the environmental assessment requirements can be satisfied.

The MESP will establish the preferred method of servicing for the Study Area, including municipal sanitary sewers and storm drainage, water supply and distribution systems, stormwater management, site grading and road design at a preliminary engineering level of detail.



The MESP recommendations will provide for the successful integration of existing natural systems with the proposed urban land uses, incorporating the outcomes of the Comprehensive Environmental Impact Study. It will also set out facility and infrastructure/servicing requirements and development standards to be used for development proposals.

The MESP will be conducted as a Schedule B project in accordance with the "Municipal Class Environmental Assessment" (Municipal Engineers Association, June 2000 as amended in 2007 and 2011) which is an approved process under the Ontario Environmental Assessment Act. The MESP will be required to satisfy at a

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minimum, Phases 1 and 2 of the Municipal Class EA planning and design process. The Class EA process includes public and review agency consultation, an evaluation of alternatives, an assessment of potential environmental effects of the proposed improvements, and identification of reasonable measures to mitigate any adverse impacts that may result.

Key features of a MESP include:

- Addressing the key principles of successful environmental planning
- Addressing at least the first two phases of the Municipal Class EA, as appropriate
- Allowing for an integrated process with other planning initiatives
- Providing a strategic level assessment of various options to better address overall system needs and potential impacts and mitigation
- Short and long-term infrastructure planning
- Taking a system wide approach to planning which relates infrastructure either geographically, or by function
- Recommending an infrastructure master plan which will be implemented through separate projects
- A description of specific projects (location, phased implementation plan, EA schedules and requirements)

Evaluation Criteria

As a key part of assessing water distribution, wastewater collection, stormwater management and mobility alternatives for both new and existing development, the MESP will identify a series of evaluation criteria by which to assess impacts to the social and natural environment, technical feasibility, and project costs. These criteria will include, but not be limited to, the following topics:



- Social Environment
 - Land Use
 - Construction Impacts
 - Cultural Heritage Resources
 - Archaeology
 - Quality of Life – Health and Safety
 - Aesthetics
 - Property Requirements/Impacts

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- Natural Environment
 - Water Quality – Surface Water and Groundwater
 - Groundwater Recharge/Discharge Areas, groundwater flow patterns
 - Aquatic Sediments
 - Source Water Protection
 - Natural Heritage System (NHS)
 - Areas of Natural and Scientific Interest (ANSIs)
- Technical
 - Level of Service
 - Meets regulatory requirements
 - Difficulty in construction
 - Reliability
 - Life cycle renewal
 - Operations & Maintenance
 - Utilities
- Cost
 - Capital costs
 - Annual operating and maintenance costs
 - Life cycle cost
 - Additional studies/assessments



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Secondary Plan

The purpose of the Secondary Plan is to develop a community vision, guiding principles, policies, and a land use plan for the Secondary Plan area. The Plan will identify community needs and requirements (i.e. provincial policy, official plan targets) for the Secondary Plan area.

The Secondary Plan will analyze and synthesize the findings of the technical studies in order to develop a comprehensive land use plan and accompanying statements and strategies for the Clair-Maltby Area that are in keeping with the direction provided by the **Official Plan and the City's Urban Design Action Plan**.

The Secondary Plan will guide and direct future development in terms of the expected location, range and mix of uses, appropriate heights and densities, urban design expectations and the location of public open spaces, parks, other community services and essential services (i.e. fire, police, EMS).

The goal of the Secondary Plan is to effectively and sensitively integrate the development of these lands with existing urban development while respecting and protecting the natural heritage system and cultural heritage resources.

Project Tasks

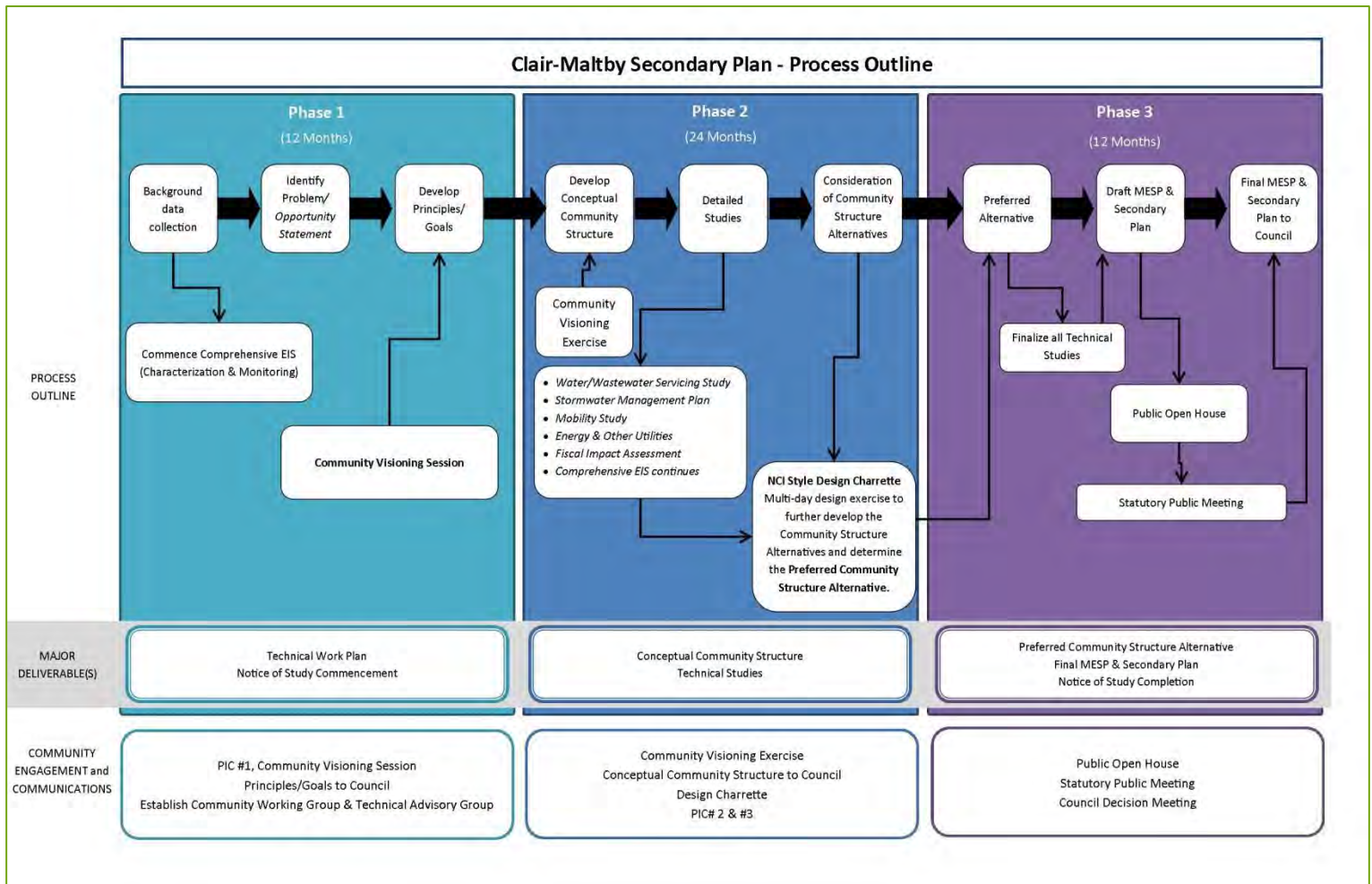
Below is a list of the components of the secondary plan study. Detailed terms of reference for each component of the study are provided in Tasks A-H.

- A. Comprehensive Environmental Impact Study
 - i. Natural Heritage
 - ii. Geology/Hydrogeology/Hydrology
 - iii. Existing Conditions Analysis
 - iv. Development Impact Assessment
 - v. Implementation and Monitoring Plans
- B. Water/Wastewater Servicing Study
- C. Stormwater Management
- D. Mobility Study
 - i. Transportation Network (on and off-road)
 - ii. Vehicular Traffic
 - iii. Public Transit
 - iv. Cyclist
 - v. Pedestrian
 - vi. Roads
 - vii. Trails
- E. Energy & Other Utilities
- F. Secondary Plan
 - i. Appropriate Range & Mix of Land Uses

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- ii. Population and employment targets
- iii. Appropriate Densities & Heights
- iv. Well Connected Public Open Spaces, Parks and Recreation Facilities
- v. Community Services
- vi. Cultural Heritage Resources & Archaeological Assessment
- vii. Urban design considerations
- G. Fiscal Impact Assessment
- H. Community Engagement & Communications

Study Process



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Project Phasing

Project Initiation Phase –

During the project initiation phase, the City formed a Technical Steering Committee, comprised of representatives from various City departments, the County of Wellington, the Township of Puslinch and Grand River Conservation Authority, and introduced the project to key stakeholders and the community at large in order to engage the public and gather information to assist in the development of the Terms of Reference. The initiation phase has resulted in this Terms of Reference. The Project Initiation Phase will conclude with awarding the consulting team contracts.

Phase 1 –

Phase 1 will commence the MESP and Secondary Plan study.

Background data will be collected for the study area, including environmental and servicing studies. MESP and Secondary Plan technical studies will take place throughout Phases 1, 2 and 3. Environmental monitoring, including 3 years of ground water monitoring, will be initiated as outlined in the comprehensive EIS as appropriate.

As part of Phase 1, the boundaries for the Secondary Plan area will be confirmed. The boundaries may be further refined from what is show on the map on page 2 to include additional undeveloped lands adjacent to the study area.

Public Information Centre (PIC) #1 will be held during Phase 1 and it will include, but not be limited to, introduction of the project, the problem/opportunity statement, outline the MESP and Secondary Plan process, and may present broad MESP alternative solutions.

A visioning session will take place involving community consultation (community stakeholders, landowners and technical experts) to establish principles and/or goals that will guide the development of the Conceptual Community Structure (preliminary concept plan) and policy directions for the secondary plan area. The principles will be presented to Council for endorsement.

A key component of Phase 1 is the establishment of two working groups, including a community working group and a technical advisory group. The scope and work of both groups will be guided by a committee terms of reference. Criteria for establishment and membership of these groups will be determined based on the City of Guelph Guiding Principles for Community Engagement, as well as community engagement recommendations and feedback collected during the project initiation phase.

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Key Components of Phase 1:

- Establish a consistent look for all project materials
- Develop Problem/Opportunity Statement
- Confirmation of the Secondary Plan boundary
- Establishment of Community Working Group
- Establishment of a Technical Advisory Group
- Commencement of environmental monitoring
- Public Information Centre #1
- Develop guiding principles/goals for the secondary plan through a visioning session

Major Deliverables of Phase 1:

- Finalized Technical Work Plans
- Principles for the Secondary Plan Study
- Notice of Study Commencement
- Council Report (prepared by staff)

Phase 2 –

Phase 2 is expected to be the longest phase, concluding with substantial completion of technical studies and memos. The length of this phase is determined by the required environmental monitoring, in particular the groundwater monitoring requirements.

A high level visioning session will take place involving community consultation (community stakeholders, landowners and technical experts) at the beginning of phase 2. The purpose of this visioning session is to establish the Conceptual Community Structure (preliminary concept plan for the area) informed by the principles/goals established in Phase 1 that will include: potential locations for land uses; potential road, transit, cycling, pedestrian and trail networks; servicing options and potential locations for vertical or other large infrastructure projects; a linked open space and park system; and major community facility requirements. This visioning session will use background information collected as its basis or starting point. The Conceptual Community Structure will be considered by Council for endorsement. After endorsement, the Conceptual Community Structure will inform other technical studies as they continue in Phase 2.

Community Structure and MESP Alternatives will be developed as information becomes available through concurrent studies.

Public Information Centre #2 will be held in the latter part of Phase 2 and it will include, but not be limited to, presenting preliminary findings from the technical studies, and presenting Community Structure and MESP Alternatives.

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A National Charrette Institute (NCI) style design charrette process will be undertaken to evaluate the Community Structure and MESP Alternatives.

The design charrette will be used to determine the preferred Community Structure

Alternative. An NCI style charrette includes multiple public sessions, compressed work sessions with technical experts and short feedback loops. This process has been chosen based on its holistic approach. It is an open process that involves all interested stakeholders and technical experts in a collaborative design process.

The Preferred Community Structure and MESP Alternative will be considered by Council for endorsement. The Preferred Alternative will also be presented at PIC #3.

A charrette is defined by NCI as:

“a multiple-day collaborative design and planning workshop held on-site and inclusive of all affected stakeholders.”

The Charrette Handbook, 2014

Key Components of Phase 2:

- Community Visioning Session to inform the development of the Conceptual Community Structure
- Conceptual Community Structure to Council for endorsement
- Develop Community Structure Alternatives
- Substantial completion of the technical studies
- Public Information Centre #2 to present Community Structure Alternatives
- Detailed NCI Style Design Charrette to select the preferred Community Structure and MESP Alternative
- Preferred Community Structure and MESP Alternative to Council for endorsement
- Public Information Centre #3

Major Deliverables of Phase 2:

- Conceptual Community Structure
- Technical Memos and Studies
- Community Structure and MESP Alternatives
- Council Reports (prepared by staff)

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Phase 3 –

Phase 3 will be the final phase of the study, moving from a preferred Community Structure and MESP Alternative to MESP and Secondary Plan documents being finalized.

The preferred Community Structure and MESP Alternative will be chosen at the end of Phase 2 through the NCI Style Design Charrette. The preferred alternative will be refined and the technical studies will be completed at the beginning of Phase 3 after being endorsed by Council.

The Draft MESP and Secondary Plan will be prepared and released for public comment as well as presented at a Public Open House. Public comments on the draft documents will be considered in developing the final MESP and Secondary Plan. The revised MESP and Secondary Plan documents will be presented to Council at the Statutory Public Meeting.

The final MESP will be presented to Council for endorsement to file the Notice of Completion. The Secondary Plan will be presented to Council for adoption. The MESP and Secondary Plan will proceed to Council together in order to satisfy the requirements for an integrated MESP and Secondary Plan process.

City Staff will prepare the required Council Reports for the Public Meeting and the Council decision meeting.

Key Components of Phase 3:

- Finalize all studies
- Prepare Draft MESP and Secondary Plan
- Public Open House
- Revise/refine MESP and Secondary Plan
- Present MESP and Secondary Plan to Council at Statutory Public Meeting
- Council Decision Meeting
- File MESP for 30 day public review period
- Notice of Completion

Major Deliverables of Phase 3:

- Draft MESP and Secondary Plan
- Final MESP and Secondary Plan and implementing By-law
- Council Report (prepared by City staff)

Community Engagement & Communications

The Community Engagement and Communications plan will be developed by the Consultant Team to set out the community engagement and communications that

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will occur in each phase of the Study process. This will include the establishment of a Community Working Group and a Technical Advisory Group. Consultation with **Council Advisory Committee's will form part of the Plan.**

The Community Engagement Plan will incorporate the City's established Community Engagement Guiding Principles:

1. Inclusive
2. Early Involvement
3. Access to Decision Making
4. Coordinated Approach
5. Transparent and Accountable
6. Open and Timely Communication
7. Mutual Trust and Respect
8. Evaluation and Continuous Improvement

Deliverables

Deliverables will be provided in hard copy and digital formats throughout the study timeframe. Geospatial and tabular information should be received by the City in an **ESRI file format that is compatible with the City's current software products.**

This document outlines some of the major deliverables in each phase. Additional deliverables are identified in each of the attached Tasks.

The Consultant Team will be responsible for providing the identified deliverables to the satisfaction of the City of Guelph. All deliverables will become the property of the City of Guelph.

Timeline

The study will commence in early 2016 by retaining the consultant team. The following chart outlines the proposed approximate timelines:

Phase 1	12 months
Phase 2	24 months
Phase 3	12 months
Total	48 months

Project Management

The proposed structure of this study will involve a Project Team consisting of City staff and the selected consultant(s). **The Consultant's Project Manager will be responsible for management of the project and will liaise with the City and with the Consultant's team for the purpose of completing the scope of work.** The Project

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Team will lead the project and guide the tasks and functions of any other affected groups. The selected consultants will not only have the technical skills required but will be capable of strategically thinking through problems and opportunities to create innovative solutions.

Background Materials

GENERAL DOCUMENTS

- Provincial Policy Statement 2014 (PPS, 2014)
- The Growth Plan for the Greater Golden Horseshoe 2006 (Office Consolidation 2013) including any additional Amendments
- City of Guelph Official Plan (2001), September 2014 Consolidation, including any additional amendments
- City of Guelph Official Plan Amendment 48 – OP update (under appeal)
- South Guelph Secondary Plan, OPA 2
- South Gordon Community Plan (1999)
- County of Wellington Official Plan
- Prosperity 2020 (2010)
- Corporate Strategic Plan (2012-16)
- Urban Design Action Plan (2009)
- Clair-Maltby Secondary Plan: Project Initiation Staff Report (June 2, 2015)
- Facilities Accessibility Design Manual/AODA

SERVICING

- Water & Wastewater Master Plan (2008)
- Water Supply Master Plan Update (2014)
- Stormwater Management Master Plan (2012)
- Water Efficiency and Strategy Update (on-going)

TRANSPORTATION

- Guelph Transit Priority Project Final Report (on-going)
- Highway 6 (Hanlon Expressway Improvements) (2009)
- Guelph-Wellington Transportation Study (2005)
- Transit Growth Strategy and Plan (2012)
- Cycling Master Plan – Bicycle-Friendly Guelph (2012)
- Active Transportation Network Study (in progress)
- Guelph Trails Master Plan (2005 and its update in 2016)
- Wellington County Active Transportation Plan (2012)
- Gordon Street Wellington Road 46 Class Environmental Assessment (2000)
- Victoria Road (Clair Road to York Road) Class EA Study (2005)
- Various traffic impact studies for adjacent developments;
- Transportation Tomorrow Survey (ongoing)

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- City of Guelph Travel Demand Model
- City of Guelph Traffic Impact Guidelines (2015)

NATURAL ENVIRONMENT

- Torrance Creek Subwatershed Study (1997)
- Mill Creek Subwatershed Plan (1996)
- Hanlon Creek State of the Watershed (2004)
- Hanlon Creek Watershed Plan (1993)
- Natural Heritage Strategy – Phases 1 & 2 (2009)
- Review of the State of the Knowledge for the Waterloo and Paris/Galt Moraines (2009)
- Grand River Conservation Authority Water Management Plan (2014)
- Urban Forest Management Plan (September 2012)
- The Tier 2 water budget (2009)
- Guelph-Puslinch Groundwater Protection Study (Golder, 2006b)

FINANCE

- Development Charges Background Study (2014)

ENERGY

- Community Energy Plan (2007)

RECREATION

- Recreation, Parks & Culture Strategic Master Plan (2009 - DRAFT)

PLANNING

- Local Growth Management Strategy Background Documents (2006-2009)
 - Addendum Report – **Guelph's Local Growth Management Strategy Recommendations** (June 23, 2008)
 - Phase IV – **Implications Analysis of the City of Guelph's Local Growth Management Strategy** (2009)
- City of Guelph Employment Lands Strategy Phase 1 – (2008)
- City of Guelph Employment Lands Strategy Phase 2 FINAL (2010)

CITY-WIDE STUDIES THAT WILL INFORM THIS STUDY

The following studies are either underway or yet to be initiated. Certain studies need to be completed in order to inform elements of the Secondary Plan process. Others, although not required for the Clair-Maltby Secondary Plan process, may provide useful resources for the study and therefore may be relied upon. These other studies do not need to be completed in order to finalize the Clair-Maltby Secondary Plan process.

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Studies Required to be Completed to Inform Clair-Maltby Secondary Plan

- Update to the Commercial Policy Review (2016/2017)
- Update to the land budget and intensification study related to Growth Plan Amendment 2 Conformity exercise (2018)
- Update to the Employment Lands Strategy/Municipal Comprehensive Review of Employment lands (2017)

Additional Studies to Inform Clair-Maltby Secondary Plan

- Draft Development Engineering Guidelines (Development Guidelines & Standards) (2016/2017)
- Emergency Services- Strategic Deployment Study (2016/2017)
- Development Charges Background Study (2019)
- Approved Assessment Report Grand River Source Protection Area (August 16, 2012)
- Grand River Source Protection Plan (expected 2016)
- Affordable Housing Strategy (underway)

Timing of City-wide studies is presented in estimated time ranges.

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Terms of Reference for the Comprehensive Environmental Impact Study

Task A: Comprehensive Environmental Impact Study

Introduction

The natural heritage system represents one of the City's most valuable assets. The Comprehensive Environmental Impact Study (CEIS) will serve as a comprehensive and strategic document to address natural heritage and water resource protection, incorporating subwatershed planning elements, to inform environmental, land use and infrastructure decision making as part of a broader integrated development framework.

The CEIS is intended to fulfill the requirement for the preparation of an updated subwatershed study as identified within OPA 48, and therefore is scoped accordingly.

The CEIS will provide clear direction and establish recommendations that address the protection, maintenance and enhancement of the Natural Heritage System and surface water and groundwater systems. The secondary plan area is entirely located on the Paris Galt moraine. This moraine is a major recharge feature supporting Hanlon and Mill Creeks which are groundwater dependent systems. The outcomes of the CEIS will inform and influence the Secondary Plan.

Several technical studies will be informing the Clair-Maltby Secondary Plan. The CEIS will be undertaken concurrently with other technical studies and will address the background information requirements for the MESP (EA Process) as well as provide the foundation for the Secondary Plan. A coordinated and cohesive approach is to be taken with the technical studies, including multiple feedback loops through an integrated and iterative approach.

Purpose

The purpose of the CEIS is to develop and provide recommendations and **approaches supporting the City's Natural** Heritage System (OPA 42) and water resources to protect, maintain, and where possible, enhance the natural environment within the study area based upon the directions set out in OPA 42. The scope of the CEIS is intended to build on, not duplicate, work completed through OPA 42.

The CEIS will provide information and recommendations for the land use and environmental assessment decision-making processes and will assist in setting specific directions for the Secondary Planning Area. The CEIS will also need to consider and reflect the goals of existing subwatershed plans (i.e. Hanlon Creek and

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Mill Creek) and the policies of OPA 42, but will be more focused on the components of the subwatersheds that fall within the Study Area or are functionally connected.

Objectives

The CEIS will utilize a systems based approach at a landscape level that will ensure the diversity and connectivity of natural heritage features and areas, surface water features and groundwater features and their functions for the long-term. The objectives for the CEIS include:

- The protection of natural systems at a landscape level and the protection of ecological corridors between subwatersheds
- The protection of natural heritage features and areas, recognizing the important ecosystem services that benefit current and future generations
- **The protection and enhancement of the City's tree canopy cover and urban forest** while also providing for a range of habitat types to support local biodiversity
- The protection of significant portions of the Paris Galt Moraine and associated functions as characterized by areas identified as Significant Landform
- To recognise and address potential negative impacts that can result from urban development and identify opportunities to mitigate these impacts through community design, stewardship, monitoring and management strategies
- To ensure opportunities for the protection of trees within the urban forest are considered and incorporated

Phase 1

Defining CEIS Study Area – A Two Tiered Approach

The Study Area is primarily comprised of sub catchment areas for Hanlon Creek and Mill Creek subwatersheds, with a small additional area that supports Torrance Creek. Each of these sub catchment areas include additional lands outside of the Secondary Planning Area, including lands outside of the City in the Township of Puslinch to the south.

A two tiered study area approach is desirable in order to assess broader impacts at a subwatershed to sub catchment area scale, while also providing for a more in depth assessment in the areas where land use changes and associated infrastructure are being considered (see Table 1).

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Terms of Reference for the Comprehensive Environmental Impact Study

Table 1

Study Area Component	Description	Level of Study
Primary Study Area (PSA)	Primarily includes lands within the City’s boundaries that fall within the Secondary Plan Boundary or are immediately adjacent. This area is the primary focus area for the CEIS.	Will utilize primary and secondary sources of information, including detailed multi-season field studies. Will include focus on the protection of natural heritage features and areas in relation to potential land use changes and proposed infrastructure as well as broader impacts at a subwatershed level.
Secondary Study Area (SSA)	Focus on lands within the sub catchment areas of Hanlon Creek and Mill Creek that fall outside of the Secondary Planning Boundary. May also include small area of the Torrance Creek catchment area. These lands have either been previously planned for development (i.e. Hanlon Creek – Southgate Business Park) or are located outside of the City and are primarily rural in character, with no substantive alterations in land use anticipated in the near term.	Will be characterized primarily through a review of secondary source information to generally characterize the biophysical environment with respect to natural heritage. This is to be supplemented by reconnaissance level fieldwork and data collection in some areas, primarily associated with hydrological processes in order to provide a context for evaluation of potential impacts relative to the broader subwatershed level features and associated functions.

Background Review of Existing Information

The consultant shall review available background information and prepare a background report on the Primary and Secondary Study Areas for the purposes of providing a summary of the existing conditions, identifying gaps and deficiencies in the existing information and characterize the area based on the information available. This shall include, but not be limited to, the following:

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Terms of Reference for the Comprehensive Environmental Impact Study

- Assemble and review available background resources including, but not limited to: subwatershed data/information from previous subwatershed studies, complete a collection of information/monitoring from adjacent developments and supporting information from landowners in the Primary Study Area (where available) – see pages 13 & 14 for complete list of background documents
- Identify data deficiencies and then prioritize to inform the technical work plan proposal for the Primary and Secondary Study Areas. This will include:
 - Characterization and assessment of known and potential Significant Wildlife Habitat, Habitats for Endangered and Threatened Species and Habitats for (locally) Significant Species
 - Review of Ecological Linkages and Wildlife Crossings and their functions
 - Review and analysis of hydrological features, sensitive groundwater features and groundwater-dependent ecosystems
 - Analysis of known terrestrial features (wetlands, woodlands) and aquatic features (fish habitat)
 - Analysis of Significant Landform and its attributes and functions
- Identify the relevant and applicable policies and legislative requirements in relation to the Primary and Secondary Study Areas

Based on the review of the background information, prepare a Background Report which identifies data/information gaps and deficiencies, provides an overall characterization of the area based on existing information and recommends steps to be included in the Technical Work Plan to address the identified gaps and deficiencies.

Key Tasks

- Confirm boundaries for the Primary and Secondary Study Areas for the CEIS
- Review of the relevant background documents
- Collection of other existing sources of information, including from landowners in the Primary Study Area (where available) and review information
- Prepare a Background Report that summarizes available information in relation to the Natural Heritage and Water Resource Systems within the Primary and Secondary Study Areas, establishes known existing conditions and includes recommendations to address information gaps as part of the Technical Work Plan

Deliverables

- Background Report

Clair-Maltby Terms of Reference

Terms of Reference for the Comprehensive Environmental Impact Study

- Map of Primary and Secondary Study Areas

Phase 1 and 2

Technical Work Plan & Field Studies

The Technical Work Plan will outline the field programs and analyses necessary to address the data/information gaps and deficiencies identified through the background review. The Technical Work Plan will describe the approach and method to further characterize the Study Areas. The draft Technical Work Plan will be submitted to the project team, Grand River Conservation Authority (GRCA), the **City's Environmental Advisory Committee (EAC) and River Systems Advisory Committee (RSAC)** for review and approval. Once approved, the Consultant Team will implement the Technical Work Plan. The Technical Work Plan will also address the following relative to the Primary and/or Secondary Study Area as applicable:

Natural Heritage (Primary Study Area)

- Refinement of existing ELC classification information
- Three-season botanical surveys
- Refinement of natural heritage features and areas including wetland boundaries (in consultation with GRCA) and Complexes (in consultation with MNRF)
- Water quality sampling for wetlands as a baseline to contribute to water modelling and characterization of ground water influence in relation to wetland communities
- Analysis of Natural Hazards including potential for hazardous forest types, in accordance with guidance from MNRF
- Completion of field surveys in relation to identified information gaps as it pertains to known and potential Significant Wildlife Habitats and Habitats for Endangered and Threatened Species, including:
 - Amphibian breeding and movement surveys (anurans and salamanders)
 - Breeding bird surveys (open country, shrub/early successional, and area sensitive species)
 - Other bird surveys (marsh breeding, colonial nesting, waterfowl stopover/staging, crepuscular surveys, woodland raptor nesting, etc.)
 - Winter wildlife surveys (raptors)
 - Habitat analysis for deer wintering and deer movement studies (in consultation with MNRF)
 - Reptile surveys (snake hibernacula, turtle overwintering, turtle nesting, etc.)

Clair-Maltby Terms of Reference

Terms of Reference for the Comprehensive Environmental Impact Study

- Terrestrial Crayfish
- Special Concern Species and declining guilds/ rare species habitats and,
- Identification of groundwater seeps and springs (in relation to Significant Wildlife Habitat)
- Assess presence of Significant Wildlife Habitat (defined by MNR)
- Assess presence of Endangered and Threatened Species and their Habitats while ensuring that sensitive information is managed and incorporated appropriately
- Assess presence of habitats for significant species
- Establish long term terrestrial and wetland and woodland monitoring plots to contribute to baseline characterization
- Identify and establish where multiyear monitoring should continue to improve baseline data through the Secondary Plan process

Geology/Hydrogeology/Hydrology (Primary and Secondary Study Area)

- Develop a surface water monitoring and water quality sampling to establish or update baseline water quality and quantity conditions. This will also include a wetland water level monitoring program.
- Identify and characterize important hydrological and groundwater-dependent features and establish surface water level, flow and temperature monitoring stations
- Based on gaps in information, develop a multi-year groundwater monitoring program, to characterize the subsurface geology and to establish baseline conditions using multi-level monitoring well nests for groundwater level, water quality and temperature monitoring
- Conduct single well hydraulic response tests on the new monitoring wells to estimate hydraulic conductivity values of the subsurface geology
- Develop an integrated surface water - groundwater flow model with an emphasis on shallow groundwater flow regimes on a catchment area basis (for the Primary and Secondary Study areas), to be used for predictive analysis for future development
- Identification of groundwater seeps and springs (in relation to hydrology/hydrogeology)
- Complete supplemental studies/analysis to refine and update sub watershed catchment boundaries
- Establish precipitation (i.e. rain gauge) monitoring stations within the Primary Study area, and Secondary Study Area (as deemed necessary)

Clair-Maltby Terms of Reference

Terms of Reference for the Comprehensive Environmental Impact Study

- Conduct stream baseflow measurements (as deemed necessary for the Secondary Study Area, as there are no streams within the Primary Study Area) utilizing a spot flow program and existing information
- In support of the preparation of a water budget complete an analysis to determine general area conditions as it pertains to infiltration rates of surficial soils

Key Tasks

- Development and approval of Technical Work Plan
- Commencement of field studies
- Development of an integrated surface water – ground water flow model

Deliverables

- Technical Work Plan
- Spatial information including mapping, sampling/monitoring locations and related data collection from field studies. Geospatial and tabular information should be received by the City in an ESRI file format that is compatible with **the City's current software** products.

Phase 2

Conceptual Community Structure Analysis

Utilizing the information from Phase 1, along with any available field data/ emerging information, complete an initial analysis and provide general information and recommendations for the Primary and Secondary Study Areas to feed into the Community Visioning Exercise.

Phase 1 and 2 Technical Report

Following completion of the Technical Work Plan, the consultant shall prepare a Phase 1 and 2 Technical Report. The report will include the Conceptual Community Structure Analysis, along with a summary of the relevant results from the Community Visioning Exercise and will be submitted to the City for review and approval, along with input from the applicable agencies and Council appointed Committees. This report will also include the following:

Characterizing Existing Conditions

- Characterize and refine the Natural Heritage System within the Primary Study Area
- Confirm landscape level systems and linkages located within the Primary Study Area and identify/describe those that provide important connections between the Primary and Secondary Study Areas

Clair-Maltby Terms of Reference

Terms of Reference for the Comprehensive Environmental Impact Study

- **Building on the City's Natural Heritage System mapping, identify and evaluate surface water and groundwater features and functions, including the identification of linkages between and among natural heritage, surface water and groundwater features and areas for the Primary Study Area and Secondary Study Area (as needed)**
- Characterize the hydrological and hydrogeological systems
- Review available information as it pertains to Significant Landform features included within the Natural Heritage System
- Analyze previous subwatershed studies and, to the extent possible, verify changes in the subwatersheds within the Primary and Secondary Study Areas based on the existing conditions
- Identify opportunities for enhancement and restoration of the Natural Heritage System, surface water features, ground water features and linkages among systems
- Produce a water budget for the primary and secondary study areas and for specific natural heritage features and areas. Characterize the hydrology, hydro periods and hydrogeology for specific natural heritage features
- Utilizing flow model information, establish local surface infiltration and groundwater recharge targets to sustain base flow in surface water and groundwater dependent features and to quantify the sensitivity of groundwater resources in relation to the various land use alternatives
- Identify stormwater management best management practices
- Recommend stormwater management criteria based on existing environmental conditions (legal outlet, water quality, water quantity, infiltration targets, water budget, feature based water budgets
- Identify overland flow route for regulatory storm event, or alternative approach

Evaluating Preliminary Community Structure and MESP Alternatives

- Complete analysis of potential, direct, indirect impacts to natural resources based on the development scenarios (Community Structure and MESP Alternatives) including cumulative impacts and residual effects
- Address potential requirements for or impacts on features as they relate to natural hazards
- **Confirm that alternatives satisfy the City's Natural Heritage System and Water Resource policies (primary study area) and meet other regulatory obligations (primary and secondary study area)**

Clair-Maltby Terms of Reference

Terms of Reference for the Comprehensive Environmental Impact Study

- Utilizing the integrated surface water - groundwater flow model project proposed conditions for various Community Structure and MESP Alternatives and integrate into the analysis of impacts
- Analyze, evaluate opportunities for a trail system as identified in the Mobility Study and identify potential negative impacts and mitigation measures for a trail system including connections to the active transportation network within and adjacent to the natural heritage system within the Primary Study Area
- The Consultant shall, using the information collected from Phases 1 and 2 and based on the Community Structure Plan, Community Structure Alternatives, and information from other ongoing technical studies, assist in determining preferred alternatives to be evaluated through the charrette process (as described in the Secondary Plan TOR)

Key Tasks

- Provide an analysis and recommendations for the Community Structure and MESP Alternatives
- Completion of Technical Work Plan (including field studies)
- Preparation and completion of the Phase 1 and 2 Technical Report

Deliverables

- Conceptual Community Structure Analysis
- Community Structure and MESP Alternatives Preliminary Analysis
- Phase 1 and 2 Study Investigation Technical Report
- Spatial information including mapping, sampling/monitoring locations and related data collection from field studies. Geospatial and tabular information should be received by the City in an ESRI file format that is compatible with **the City's current software products**

Phase 3

Comprehensive EIS Report

The CEIS Report will include the reports produced as part of Phases 1 and 2 and provide a detailed assessment and analysis of the preferred alternative(s), including but not limited to:

Secondary Plan

- Demonstrate the protection of the quality, quantity, distribution and direction of flow of existing surface water and groundwater resources as part of the preferred alternative(s)
- Demonstrate that the preferred alternative is consistent with the PPS, 2014, conforms with **the City's Official Plan policies and is able to satisfy any other**

Clair-Maltby Terms of Reference

Terms of Reference for the Comprehensive Environmental Impact Study

provincial or federal legislation in relation to the natural heritage system, surface water and groundwater features

- Finalize a proposed conditions water balance analysis for natural heritage features based on preferred development concept
- Provide for a preferred transportation network and address all potential negative impacts and provide recommendations for mitigation
- Provide for a preferred servicing systems and address all potential negative impacts and provide recommendations for mitigation
- Provide a preferred comprehensive stormwater management strategy and address all potential negative impacts and provide recommendations for mitigation, including addressing potential impacts and the management of sodium chloride (salt)
- Utilizing the preferred trail concept plan, identify potential negative impacts within and adjacent to the natural heritage system within the Primary Study Area and connecting to existing and planned systems on lands adjacent to the study area. Further, include opportunities for trails to be located with other infrastructure where proposed. Where trails are considered within the Natural Heritage System, also provide recommendations to ensure compatibility and sufficient space.
- Develop recommendations regarding landscape level systems, linkages and their functions located within the Primary Study Area and those that provide important connections between the Primary and Secondary Study Areas
- Develop recommendations regarding how to characterize and address adjacent land requirements and potential negative impacts as it pertains to Significant Landform features
- Provide recommendations regarding the protection of natural heritage features and areas within the Primary Study Area
- Identify and recommend opportunities for enhancement and restoration of the natural heritage system
- **Building on the City's Urban Forest Management Plan, develop recommendations regarding the protection and enhancement of the City's** urban forest resources, including the identification of plantable spaces within the Primary Study Area, while also providing opportunities for meadow communities and pollinator habitats
- Develop revisions to the GRCA regulated area mapping (in consultation with GRCA) and in accordance with requirements for the Grand River **Conservation Authority's regulated area mapping of Ontario Regulation 150/06** made under the Conservation Authorities Act
- Develop recommendations as they pertain to addressing natural hazards

Clair-Maltby Terms of Reference

Terms of Reference for the Comprehensive Environmental Impact Study

Implementation and Monitoring Plans

- Develop a monitoring and adaptive management strategy to ensure long-term sustainability of the natural heritage system in the Primary Study Area and natural heritage features and areas, surface water features and ground water features within the Primary and Secondary Study Area (as appropriate)
- Prepare an implementation plan with time frames to guide future development in the Secondary Plan Area. Recommendations are to include addressing the development of a funding strategy, partners and responsible agencies, in order to implement monitoring plans

The CEIS will be submitted to the City for review and approval, along with input from the applicable agencies and Council appointed Committees.

Key Tasks

- Refinement of the Preferred Community Structure and MESP Alternative(s)
- Development of recommendations, implementation and monitoring plans
- Preparation and approval of the CEIS

Deliverables

- CEIS document
- Spatial information including mapping and associated natural heritage system refinements

During this phase, the directions of the comprehensive EIS report will be refined by the consultant to a Secondary Plan document that can be incorporated into the **City's Official Plan, having regard for any outstanding appeals or other ongoing studies**. The Official Plan Amendment process will proceed in accordance with the requirements of the Planning Act.

Through the preparation of the Secondary Plan document, incorporate the recommendations and requirements from the CEIS as applicable. Where this can also incorporate steps or additional tools as identified in the implementation plan these should also be included, as appropriate.

Clair-Maltby Terms of Reference

Terms of Reference for the Water/Wastewater Servicing Study

Task B: Water/Wastewater Servicing Study

Introduction/Purpose

The Water and Wastewater Servicing Plan is intended to provide long-term servicing strategies by evaluating various servicing alternatives and determining the preferred alternative to support planned growth for the Clair-Maltby Secondary Plan area through the EA process. This task should be undertaken with consideration for integration with the Planning Act as outlined in Section A.2.9 of the Municipal Class EA process.

Several technical studies will be informing the Clair-Maltby Secondary Plan. The Water/Wastewater Servicing Study will be undertaken concurrently with other technical studies. A coordinated and cohesive approach is to be taken with the technical studies, including multiple feedback loops through an integrated and iterative approach.

Regulations & Guidelines

The Master Servicing Plan for water and wastewater servicing will give consideration to the engineering principles, design standards and policies of the City. Development will be required to meet the design standards of the Ministry of Natural Resources and Forestry (MNRF), Ministry of Environment & Climate Change (MOECC), and the Grand River Conservation Authority (GRCA) including the Grand River Source Protection Plan.

Phase 1 - Water/Wastewater Servicing Expectations

The following tasks will be undertaken through the MESP Class EA process as **described in the project introduction. It should be noted that the following "Phases"** refer to the project phases as previously described which are different than the phases associated with the Municipal Engineers Association Class Environmental Assessment (MEA Class EA) Process. The requirements of the Class EA process must be satisfied.

Key Tasks

The goal of the water and wastewater servicing study is to plan for the provisions of municipal services for the development of the Clair Maltby Secondary Plan Area in a timely, systematic, and cost-effective manner while minimizing environmental impacts.

Clair-Maltby Terms of Reference

Terms of Reference for the Water/Wastewater Servicing Study

The servicing recommendations will be informed and guided by the Comprehensive Environmental Impact Study recommendations in order to ensure a compatible integration of natural systems, servicing solutions and urban land uses.

Existing Infrastructure and Network Description/Inventory

The following information shall be obtained, compiled and illustrated in a technical memorandum. Through both a review of existing information sources and field assessments/investigations, present information relevant to the Study Area where applicable including, but not limited to, the following:

- Easements and rights-of-way
- Natural Heritage and Water Resource Systems
- Natural Hazards
- Geographic Information System (GIS) infrastructure data (i.e. sewers, watermains, storm sewers, roads, etc.)
- Existing underground and above ground utilities
- As-built drawings
- Archaeological and Cultural heritage resources
- Areas of known and potential contamination
- Planning and servicing considerations
- Park and Recreational areas

Deliverables

- Background Technical Memorandum

Phase 2 - Water/Wastewater Servicing Expectations

Future Land Use and Servicing Implications/Analysis

The review and evaluation of a proposed land use program including servicing implications shall include:

General

- Consideration of the full range of reasonable alternative development assumptions and the development of sanitary collection system and water distribution alternatives (linear and vertical infrastructure)
- Identification and evaluation of the relevant capacity limitations of existing water and wastewater infrastructure
- Consideration of compliance to the servicing requirements such as population **growth as set out in City's official plan and the Growth Plan for the Greater Golden Horseshoe** (office consolidation 2013), as well as the existing City Water and Wastewater Servicing Master Plan

Clair-Maltby Terms of Reference

Terms of Reference for the Water/Wastewater Servicing Study

- Update/Expand existing City Water (InfoWater) and Wastewater (InfoSWM) models to reflect various servicing alternative strategies

Water Distribution System

- Review the existing state of development within the Pressure District and identify the system constraints and opportunities
- Determine system dependency on existing infrastructure outside the Study Area

Sanitary Sewer System

- Provide a preliminary assessment of the existing City sanitary sewer system to determine potential additional service capacity in the system, by applying observed sewage generation data from other similar sewersheds, as well as City design standards, to a hydraulic capacity analysis of the system
- Prepare input parameters for computer model analysis (input parameters include: population density, area, sewer diameter, sewer length, sewer invert, sewer slope, sewage flow variables, etc.)

Proposed Infrastructure Analysis/Recommendations/Implications

The consultant shall identify and evaluate potential infrastructure servicing options and recommend solutions with respect to:

- Sustainability
- Alternative additional facility requirements (descriptions, maps, sizes, etc.)
- Advantages and Disadvantages (including environmental concerns and capital cost and operating cost differences)
- Property requirements and associated cost implications
- Pumping station and force main requirements
- Complete functional design and cost implications
- The recommendation of a solution to service the proposed land use program including the rationale for its selection

Deliverables

- Alternatives Analysis and associated documentation
- Updated Water and Wastewater models

Phase 3 - Water/Wastewater Servicing Expectations

Upon completion of the evaluation of the various servicing alternatives, the consultant shall:

Clair-Maltby Terms of Reference

Terms of Reference for the Water/Wastewater Servicing Study

General

- Analyze and recommend water supply and distribution systems requirements to service the pressure zone
- Review and analyze the capacity of the existing downstream sanitary collection system
- Identify size and location of the sanitary trunk sewers required to service the newly developing area
- Identify the nature and extent of site grading required to minimize disruption to existing landform and landscape recognizing natural areas to be protected and site servicing requirements
- Identify implementation considerations including development phasing and costs implications
- Identify all lands on which infrastructure or servicing is being proposed

Water Distribution System

The study will be required to:

- Analyze and recommend water supply and distribution systems including:
 - External watermain system
 - Internal watermain system
 - Watermain system demand
 - Implementation and staging
- Establish trunk watermain locations and sizing for the Study Area
- Identify additional water infrastructure to service the Study Area
- Provide a Watermain System Plan and Analysis to demonstrate that existing and proposed infrastructure will provide adequate supply and residual pressures for all system demand conditions

Sanitary Sewer System

The study will be required to:

- Complete conceptual design of external sanitary sewer system capital improvements and costs necessary to accommodate population growth planned within the Study Area (i.e. stations and trunk sewers)
- Prepare a conceptual sanitary servicing plan for the Study Area to indicate preliminary sizing and depths

Deliverables

- Preferred Water and Wastewater Servicing Plan & MESP Project File Report

Clair-Maltby Terms of Reference

Terms of Reference for the Stormwater Management Plan

Task C: Stormwater Management Plan

Introduction/Purpose

The main goal of the Stormwater Management Plan as part of the MESP is to develop a long-term plan for the safe and effective management of stormwater runoff while maintaining, and where possible improving, the ecosystem health and **ecological sustainability of the City's Water Resources**. **The Plan will integrate flood control, erosion control, groundwater and surface water quality and quantity, natural environment, thermal mitigation and Water Balance/Infiltration targets.**

Several technical studies will be informing the Clair-Maltby Secondary Plan. The Stormwater Management Plan will be undertaken concurrently with other technical studies. A coordinated and cohesive approach is to be taken with the technical studies, including multiple feedback loops through an integrated and iterative approach.

The objectives of the Stormwater Management Plan include but are not limited to:

Water Quantity

- Preserve the natural hydrologic process to protect, restore and replenish surface water and groundwater resources
- Minimize risk to public health and safety as well as property damage due to flooding
- Establish water quantity criteria and targets

Water Quality

- Improve sediment, surface water and groundwater quality
- Minimize pollutant loadings to groundwater and surface water
- Establish water quality criteria and targets

Natural Environment

- Protect, enhance and restore natural features and functions such as wetlands, riparian and ecological corridors
- Protecting downstream warm water and coldwater fisheries where appropriate, i.e. thermal mitigation measures

Water Balance/Infiltration

- To establish a groundwater infiltration strategy that maximizes infiltration of clean water without impacts to adjacent servicing infrastructure
- Maintain pre development recharge rates under post development conditions to the extent possible

Clair-Maltby Terms of Reference

Terms of Reference for the Stormwater Management Plan

- To protect the most significant groundwater recharge areas in order to protect and enhance the municipal water supply
- To minimize chloride infiltration into the groundwater system
- Establish water balance criteria and targets

The consultant shall liaise with the City, the GRCA, the MNRF and the MOECC concerning existing stormwater quality and quantity conditions in order to prepare an approved stormwater management strategy for the study area. Stormwater management will have regard for the Comprehensive Environmental Impact Study recommendations in order to ensure a compatible integration of natural systems with urban land uses.

Consideration shall be given to the engineering design criteria and standards of the City, the GRCA, the MNRF and the MOECC.

The following tasks will be undertaken through the MESP Class EA process as described in the project introduction however it should be noted that the following **“Phases” refer to the project phases** as previously described which are different than the Phases associated with the Municipal Engineers Association Class Environmental Assessment (MEA Class EA) Process. The requirements of the Class EA process must be satisfied. This task should be undertaken with consideration for integration with the Planning Act as outlined in Section A.2.9 of the Municipal Class EA process.

Key Tasks

Phase 1 – Stormwater Management Plan Expectations

- Identify existing and proposed storm drainage characteristics, including natural heritage features where applicable
- Identify existing stormwater management measures presently in use in the study area
- Include consideration of the existing functionality of the moraine attributes including closed depressions and kettles
- Outline existing and proposed hydrology, hydraulics and floodlines (if applicable)
- Identify locations of any existing or proposed culverts, watercourse crossings, natural feature crossings, or watercourse alterations (if applicable)
- Determine the size of required openings for the proposed culverts or bridges in accordance with City, GRCA and provincial requirements

Clair-Maltby Terms of Reference

Terms of Reference for the Stormwater Management Plan

- Develop stormwater management criteria to ensure development does not have an impact on water quantity, water quality and water balance in accordance with City, GRCA and provincial standards
- Develop stormwater management criteria (erosion control criteria) to ensure development does not cause or worsen erosion. A continuous erosion analysis may be required which includes continuous hydrologic modeling of pre and post development conditions and stormwater flows to assess critical flow magnitudes and durations

Deliverables

- Background Report including design criteria development

Phase 2 – Stormwater Management Plan Expectations

- Create a stormwater system model for the area using hydrologic and hydraulic modelling software (to be approved by City). This City currently uses MIDUSS and PCSWMM with respect to stormwater management/drainage modelling
- Develop a management strategy for dealing with stormwater runoff, and demonstrate how City, GRCA, and Provincial standards with respect to stormwater quality and quantity, erosion control, and water balance are being met through the proposed stormwater system. The stormwater management strategy must also **identify that a “treatment train” approach** (i.e. lot level, conveyance, end of pipe) is to be utilized
- Provide simulation of surface run-off estimates for the subsequent management and design of the capacity of surface drainage systems
- Provide a water balance and infiltration analysis (existing and proposed conditions), and develop stormwater management criteria (water balance requirements) demonstrating that the pre-development infiltration and run-off rates is maintained, where possible, or potentially enhanced under post development conditions. This includes water balance required to maintain individual natural features (streams, wetlands and woodlands) within the natural heritage system
- Identify opportunities for, and an analysis of stormwater management alternatives, including low impact development, green roofs, water capture and reuse, and an integrated treatment approach to minimize stormwater runoff and to maximize infiltration
- Assess future precipitation trends due to climate change impacts and conduct a sensitivity analysis to determine resiliency of proposed infrastructure

Deliverables

- Alternatives Analysis and associated documentation

Clair-Maltby Terms of Reference

Terms of Reference for the Stormwater Management Plan

- Stormwater model(s) for study area

Phase 3 – Stormwater Management Plan Expectations

- Identify the proposed measures that comprise the stormwater management system, including the locations and design of stormwater management facilities, stormwater outlets, locations of major and minor flow routes, and location and type of other stormwater measures or practices such as source controls
- Provide conceptual stormwater management pond designs, including assessments of storage volumes and required size of stormwater pond blocks along with potential hydrogeological constraints for short term pond construction and long term operation. The proposed design, size and grading of the SWM facilities must also consider the recommendations of the Mobility Plan, where trails are proposed within the SWM blocks. Consideration of trails as part of the SWM Plan will ensure that pond block sizes are properly identified to the extent possible
- Consideration for location of Stormwater Management facilities in relation to surrounding land uses and Urban Design policies
- Provide erosion control criteria to support a preferred stormwater management approach incorporating recommendations from the CEIS
- Provide site grading requirements for the proposed Stormwater Management Plan, taking into consideration where trails are proposed within the stormwater management blocks
- Development of the stormwater management system must give consideration to how development will be phased within the Study Area, and provide interim stormwater management solutions where appropriate to ensure that environmental objectives are being met at each stage of development
- Identify sediment and erosion control measures to be employed for managing the impacts of construction activities during and following construction, in accordance with the City, GRCA and provincial standards;
- Provide recommendations on land use alternatives with respect to implementation and staging programs for stormwater management techniques and facilities
- Provide preferred approach to manage surface water and groundwater within the Study Area, based upon the above standards. The strategy shall include the size, location and function of recommended design measures, the identification of major and minor system designs, storm outlet locations, and site grading requirements. The technical assessment is to include event-based hydrologic simulations for quantity control and continuous simulation

Clair-Maltby Terms of Reference

Terms of Reference for the Stormwater Management Plan

for erosion control (if required), based on City, GRCA and provincial standards and guidelines

- Subsequent to the establishment of a preferred management strategy, a realistic implementation plan that addresses such concerns as cost sharing, facility maintenance, and protection/enhancement/rehabilitation programs. Cost sharing procedures to be implemented shall be fully documented
- Establish a system wide/landscape based monitoring program for the long term assessment of the environmental impacts of development within the applicable subwatershed catchment areas and the success of the management strategy in mitigating those impacts
- The technical assessment should provide monthly or seasonal, as well as event-based, simulations of existing and proposed water balance within wetlands and other areas, where appropriate

Deliverables

- Preferred Stormwater Management Plan & MESP Project File Report

Clair-Maltby Terms of Reference

Terms of Reference for the Mobility Study

Task D: Mobility Study

Introduction/Purpose

The Clair-Maltby Secondary Plan envisages a complete and healthy community through a compact urban form with a mix of land uses. An integrated transportation/mobility network will be planned and designed in support of this concept in an effort to promote active modes of transportation and effectively manage vehicular traffic. To achieve these goals and objectives, the consultant will be required to assess the multimodal transportation needs and identify improvements to accommodate the planned growth.

Several technical studies will be informing the Clair-Maltby Secondary Plan. The Mobility Study will be undertaken concurrently with other technical studies. A coordinated and cohesive approach is to be taken with the technical studies, including multiple feedback loops through an integrated and iterative approach to ensure that information collected from each study informs the other technical studies.

Study Process

The following tasks will be undertaken through the MESP Class EA process as **described in the project introduction. It should be noted that the following “Phases”** refer to the project phases as previously described which are different than the phases associated with the Municipal Engineers Association Class Environmental Assessment (MEA Class EA) Process. The requirements of the Class EA must be satisfied. This task should be undertaken with consideration for integration with the Planning Act as outlined in Section A.2.9 of the Municipal Class EA process.

Phase 1 of the Secondary Plan Study - Mobility Study

In Phase 1 a community visioning exercise will be held to establish principles and/or goals that will guide the development of concept plans and policy directions for the secondary plan area. Principles and/or goals related to: potential road, transit and trail networks, modal split, etc. may be established which will guide and/inform the mobility technical studies.

Key Tasks

1. Review existing policies, relevant studies and reports including but not limited to the following documents:
 - a. City of Guelph Official Plan (2014 Consolidation)
 - b. Official Plan Amendment 48 (OPA 48)
 - c. Guelph-Wellington Transportation Study (2005)
 - d. Transit Growth Strategy and Plan (2012)
 - e. Cycling Master Plan – Bicycle-Friendly Guelph (2012)

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Terms of Reference for the Mobility Study

- f. Active Transportation Network Study (in progress)
 - g. Guelph Trails Master Plan (2005 and its update in 2016)
 - h. Wellington County Active Transportation Plan (2012)
 - i. South Gordon Community Plan (1999)
 - j. Gordon Street Wellington Road 46 Class Environmental Assessment (2000)
 - k. Victoria Road (Clair Road to York Road) Class EA Study (2005)
 - l. Various traffic impact studies for adjacent developments
2. Evaluate the background planning data including residential and employment projections and distributions throughout the Secondary Plan area. This data will become the basis for road and other mobility network planning.

Deliverables

- Background Report

Phase 2 of the Secondary Plan Study - Mobility Study

At the beginning of Phase 2 of the Secondary Plan Study, a community visioning exercise will be held to develop a Conceptual Community Structure. This Conceptual Community Structure will address potential road, transit and trail networks, informing the mobility technical studies. The Mobility Study is intended to commence during Phase 2 of the Secondary Plan Study and will take direction from the established Conceptual Community Structure.

Commencement and substantial completion of the Mobility Study will occur in Phase 2 of the Secondary Plan Study.

Phase 2 of the Secondary Plan study will end with the evaluation of the Community Structure Alternatives and select a Preferred Alternative through a National Charrette Institute style design charrette process. The Preferred Community Structure and MESP Alternative will inform the final stages of the Mobility Study.

Key Tasks

1. The *Transportation Network Planning Study* shall include the following undertakings:
 - a. **Existing Road Network:** Technical review of the existing road network and its planned upgrades. The Secondary Plan area is generally surrounded by an external arterial road network that is comprised of Clair Road to the north, Victoria Road to the east, and Maltby Road to the south. Gordon Street connects the eastern and western portions of the Secondary Plan and it functions as a major north-south corridor not only

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Terms of Reference for the Mobility Study

for motorists but also for pedestrians, cyclists and transit users. Review and recommend modifications and improvements to the existing roads to accommodate the anticipated build-out of the Secondary Plan area.

- b. **Proposed Road Network:** Identify natural and environmental barriers and physical constraints, explore alternative solutions and recommend an optimal internal roadway network that has minimum adverse impacts. The internal road network must have sufficient capacity to accommodate the planned growth in a manner that favors the active modes of transportation through a grid street network if appropriate. Provide general recommendations with respect to road profiles and grading program for new major roads.
- c. **Intersections:** Identify major intersection locations and consider roundabouts if appropriate. Include consideration for opportunities to incorporate transit priority measures in keeping with the Transit Priority Project Final Report (currently in draft).
- d. **Main Street:** Incorporate the main street concept as derived from the Conceptual Community Structure, into the roadway system and identify the locations that will receive special treatments for a main street. Consult with staff to identify sight line triangles at major intersections including impacts to desired concepts/setbacks and right-of-way designs.
- e. **Network Concept Plan & Connectivity:** Prepare concept plans to illustrate connectivity with internal and external road networks, transit routes/stations, pedestrian walkways, trails and cycling infrastructure. Special considerations and treatments will be given to the school zone areas, wildlife crossing passages, and locations where a high level of pedestrian/cyclist activity and traffic activity are anticipated. This will consider:
 - i. Both on and off road active transportation connections are created throughout the Secondary Plan and to/from its adjacent neighbourhoods and community services (e.g. future south end recreation centre lands) with linkages to the city wide transport network. Routes should provide safe and direct connections to major destinations and transit services on mixed-use corridors and off road routes. Identify the deficiency and opportunity for roadway connectivity for all modes (pedestrians, cyclists, transit users and motorists) within the Secondary Plan, in its boundary areas and the rest of the City. Special attention will be paid to the interface between the Secondary Plan area and the surrounding

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Terms of Reference for the Mobility Study

neighborhoods including those under the jurisdiction of Township of Puslinch/County of Wellington while respecting the natural heritage system, including:

- o Provisions for end of trip facilities should be made to encourage the uptake of active transportation modes
 - o Special consideration should be made for the movements of active transport users at roadway crossings and route junctions
 - o Provide specific recommendations for road designs in school zones and areas where high pedestrian and traffic activity is anticipated and where mid-block pedestrian crossings are considered
 - o Off-road trails must be designed to meet the AODA and FADM standards. Considerations must be given to where they are located and associated grades
 - o Off-road trails need to be assessed and supported through the CEIS
 - o Multi-use trails systems should be considered. Consult with staff to identify strategies for providing systems separate from vehicles but within the right-of-way
- ii. Recreational trails shall be included in the Secondary Plan and depicted in a trail concept plan. The trails need to be planned as a well-connected off-road system that supports both pedestrians and cyclists and provides connections to the on-road active transportation networks. The location and layout of trails shall have regard for:
- o Appropriate sized buffers where trails will be located adjacent to Natural Heritage Features
 - o Appropriate sized storm water management facilities, with appropriate side slopes where trails will be accommodated
 - o Opportunities for trails to integrate into the active transportation network
2. Conduct a *Traffic Impact Study (TIS)* that involves the four-step planning process including trip generation, distribution, mode choice and assignment.
- a) **Study Scope and Assumptions:** The study scope and assumptions will be determined in consultation with City staff. The City reserves the right to require a broad TIS area and multiple study horizons as it may be deemed necessary to assess many aspects of the transportation system.

Clair-Maltby Terms of Reference

Terms of Reference for the Mobility Study

Details surrounding the approaches for undertaking a Traffic Impact Study are outlined in the City's "Traffic Impact Study Guidelines."

- i. In particular, the consultant is required to assemble available transportation data and fill in any data gaps, particularly those relating to existing travel patterns, roadway capacities and geometrics.
 - ii. The consultant is also required to identify strategies to address traffic infiltration concerns resulting from planned growth.
 - b) **Modeling:** Coordinate with City staff to perform a sub-area traffic analysis to simulate existing and future vehicular trip patterns in the TIS study area.
 - i. **Trip Generation:** Trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual will be used for all types of land uses. Adjustments to reduce the ITE trip rates are acceptable to account for pass-by trips, synergy trips and TDM strategies etc.
 - ii. **Trip Distribution:** Trip distribution patterns will generally follow the City's Travel Demand Model and the Transportation Tomorrow Survey (TTS) data. The consultant is responsible for extracting the sub-area network from City's Travel Demand Model. The consultant must have access to the software VISUM and have adequate experience of operating the software. Alternative network and land use scenarios will be prepared and tested by the consultant.
 - iii. **Mode Choice:** Mode choice must be reflective of TDM strategies and the features of a pedestrian/cyclist-oriented and transit-supportive compact community.
 - c) **Assignment:** Based on the trip assignment results, recommend road improvements such as road widening to increase capacity, identifying signalized intersections and the associated key trigger developments, and improving intersection operation by adding turning lanes etc.
3. Consult with City TDM staff and Parks and Recreation staff to identify strategies for active transport users including pedestrians, cyclists and other methods of human power transportation.
- a) Ensure the community is planned to achieve convenient access to major destinations (i.e. recreation centres, commercial areas, etc.) via multi-modal transportation facilities

Clair-Maltby Terms of Reference

Terms of Reference for the Mobility Study

- b) Identify initiatives to reduce the number of vehicular trips and promote active transportation through the built form in the Secondary Plan
4. Consult with Guelph Transit staff to identify optimum transit routing in the Secondary Plan area.
 - a) Consider provision of a transit terminal or using streets to turn around buses near the intersection of Gordon Street and Maltby Road. Other key conceptual transit stops should also be identified
 - b) Determine major transit route or transit spine in keeping with the Transit Priority Plan Final Report (currently draft)
 - c) Provide transit facilities and routes to reflect a maximum walking distance to a transit-stop of 400 metres or to the satisfaction of City Transit
 - d) Arterial roads are considered preferable over collector roads for transit routes due to less noise impact
5. Propose an implementation phasing strategy for short, intermediate and long term scenarios.
6. A noise study is required to accompany the Traffic Impact Study. The study should be conducted based on a review of projected traffic volumes and it should identify any mitigation measures that are deemed to be necessary.
7. Outline general policies for on-street and off-street parking arrangements.

Deliverables

- Traffic Impact Study
- Community Visioning Exercise- Conceptual Community Structure
- Draft alternative mobility network concepts
- Drawings with typical road cross-sections under different roadway classifications with consideration for Alternative Development Standards
- Evaluate best practices and recommend design and construction standards for roadway elements within right-of-ways, including:
 - Travel lane and turning lane width
 - Pedestrian walkway treatment
 - Cycling facility
 - Transit terminal and facility
 - Boulevard planning including incorporation of street trees
 - Sight line triangles
 - On-street and off-street parking arrangement
 - Traffic calming measures if applicable

Clair-Maltby Terms of Reference

Terms of Reference for the Mobility Study

- Trail concept plan
- Consider separated active transportation infrastructure where appropriate

Phase 3 of the Secondary Plan Study - Mobility Study

During Phase 3 of the Secondary Plan Study, the mobility study will be finalized based on the Preferred Community Structure Alternative. Secondary Plan policies and the MESP will be drafted and considered by Council.

Key Tasks

1. Completion of the technical studies based on the preferred Community Structure Alternative
2. In order to finalize the Mobility Study, the Preferred Community Structure Alternative may be further reviewed and refined to ensure that sufficient detail is developed for the Secondary Plan. This should include consideration of, but is not limited to the following:
 - Outline policies and phasing programs for off-street parking arrangements for the preferred land use plan
 - Transit facilities:
 - Provide transit facilities and routes to reflect a maximum walking distance to a transit stop of 400 metres or to the satisfaction of City Transit
 - Arterial roads are considered preferable over collector roads for transit routes due to less noise impact
 - Bus stops should be placed with a minimum spacing of 250 metres, an average spacing of 400 metres, and a maximum spacing of 500 metres. Stop spacing to major destinations and seniors homes can be less (300 metres)
 - Desirability to locate a bus stop in proximity to high-density residential
 - Bus stops should be located in front of a park or commercial areas

Deliverables

- Completion of technical studies
- Final Mobility Network Planning Study
- Final Traffic Impact Study
- Final Noise Study

Clair-Maltby Terms of Reference

Terms of Reference for the Energy and Other Utilities Study

Task E: Energy and Other Utilities Study

Purpose

The Clair-Maltby Secondary Plan will strive to promote a compact urban form and develop an energy efficient pattern and mix of land uses. The Community Energy Initiative is Guelph's commitment to use and manage energy more efficiently than we have in the past. The initiative will also attract quality investment to the city as sustainable energy supply is and will continue to be a key ingredient in the long-term competitiveness and prosperity of cities. Throughout the Secondary Plan Study a key consideration should be to promote a reduction in energy consumption and encourage a reduction in greenhouse gas emissions.

Several technical studies will be informing the Clair-Maltby Secondary Plan. The CEIS will be undertaken concurrently with other technical studies. A coordinated and cohesive approach is to be taken with the technical studies, including multiple feedback loops through an integrated and iterative approach to ensure that information collected from each study informs the other technical studies.

Study Process

Phase 1- Community Energy and Other Utilities Expectations

In Phase 1 a Community Visioning Session will be held to develop principles/goals for the Secondary Plan Study.

Key Tasks

1. Review existing policies, relevant studies and reports including but not limited to the following documents:
 - a. Community Energy Plan (2007)
 - b. City of Guelph Official Plan (2001), September 2014 Consolidation
 - c. City of Guelph Official Plan Amendment 48 – OP update (under appeal)

2. A “carbon-neutral” target that exceeds the City’s Community Energy Plan targets should be considered. Direction with respect to how to achieve it should be incorporated into the final Energy and Other Utilities Study. Both gains in energy efficiency in built form and by sourcing additional needs from renewable energy sources (i.e. wind, solar, biomass energy, etc.) should be explored

Clair-Maltby Terms of Reference

Terms of Reference for the Energy and Other Utilities Study

Deliverables

- Background Report

Phase 2- Community Energy and Other Utilities Expectations

At the beginning of Phase 2 of the Secondary Plan Study, a community visioning exercise will be held to develop a Conceptual Community Structure. The following key tasks will be studied as part of the Conceptual Community Structure to develop alternatives.

Throughout phase 2, Community Structure Alternatives will be developed which are based on the original Conceptual Community Structure and the interim findings from the ongoing technical studies.

At the end of Phase 2, an NCI Style Design Charrette will be held to determine which Community Structure Alternative is the Preferred Alternative.

Key Tasks

1. Consideration for district energy - configuring design to enable micro-grids of integrated energy services (heat and electricity)
2. Develop both design and implementation tools that will enable energy efficiency in the built environment that can exceed building code requirements
3. Design infrastructure options that improve the energy efficiency of transportation systems
4. Provide direction with respect to innovative techniques to accommodate private utilities

Deliverables

- Draft alternative Community Energy concepts
- Guidelines for alternative or innovative techniques to accommodate private utilities

Phase 3- Community Energy and Other Utilities Expectations

The Preferred Community Structure Alternative will be endorsed by Council and will then inform the final stages of the Energy and Other Utilities Study.

Key Tasks

1. Determine potential for integrated generation resources – solar photovoltaic and fuel-flexible combined heat and power resources

Clair-Maltby Terms of Reference

Terms of Reference for the Energy and Other Utilities Study

2. Determine how private utilities can be accommodated into the final Land Use Concept Plan while meeting the goals, objectives and urban design directions that are developed for the Secondary Plan area

Deliverables

- Final Energy and Other Utilities Study

Clair-Maltby Terms of Reference

Terms of Reference for the Secondary Plan Study

Task F: Secondary Plan

Introduction

The Secondary Plan will be a comprehensive document that will consolidate the vision, detailed planning rationale and planning principles that are developed through this process to create an integrated development framework that highlights the role of the public realm elements, land use structure, general built form parameters, potential key development sites and servicing requirements intended to support the appropriate development of this area.

The Secondary Plan will provide clear direction through objectives, land use designations and policy directions that address the intended character, permitted uses, density, height, urban design form and function of this area.

Purpose

The purpose of the Secondary Plan is to develop a community vision, guiding principles, policies and a land use plan for the Secondary Plan area.

The Secondary Plan will be developed to a sufficient level of detail to guide and direct future development in terms of the expected location, range and mix of uses, appropriate heights and densities, urban design expectations and the location of public open spaces, parks and other community services while respecting and protecting the Natural Heritage System and existing cultural heritage resources.

The goal of the Secondary Plan is to create a sustainable community that provides a range and mix of housing, commercial and employment opportunities within an urban village context while ensuring integration with the rest of the City. The growth management objectives and 'greenfield area' density targets should be achieved.

Objectives

The Secondary Plan will analyze and synthesize the findings of the Comprehensive Environmental Impact Study, servicing studies, Mobility Study, Energy and Other Utilities Study and Fiscal Impact Assessment in order to develop a comprehensive land use plan for the Clair-Maltby Area in keeping with the direction provided by the Official Plan, Phase 3 of the Official Plan update (OPA 48, subject to appeal) and the Urban Design Action Plan. The objectives of the Clair-Maltby Secondary Plan include:

- To identify a vision, principles and goals for the community

Clair-Maltby Terms of Reference

Terms of Reference for the Secondary Plan Study

- To determine the appropriate population and employment targets and mix for the secondary plan area based on:
 - residential and employment targets for greenfield areas
 - current and anticipated changes to local demographics
 - consideration for market trends
 - research related to consumer preferences may be considered, where applicable
- To design the community with a compact urban form at an appropriate scale that is pedestrian oriented and incorporates parks, open spaces, trails and recreation facilities
- To ensure the maintenance and enhancement, where possible, of Natural Heritage and Water Resource Systems identified in the comprehensive environmental impact study
- To ensure the appropriate preservation of all cultural heritage resources within the study area
- **To be consistent with Provincial Policy and the City's Official Plan**

Study Process

Phase 1 of the Secondary Plan Study - Expectations

Phase 1 will commence both the MESP and Secondary Plan components of the Clair-Maltby study. Review of the background documents and other background research will occur during this phase.

PIC #1 will be held during Phase 1 and it will include, but not be limited to, introduction of the project, the problem/opportunity statement, outline the MESP and Secondary Plan process, and consult on broad MESP alternative solutions.

A visioning session will take place involving community consultation (community stakeholders, landowners and technical experts) to establish principles and/or targets that will guide the development of concept plans and policy directions for the secondary plan area. The principles will be presented to Council for endorsement.

Key Tasks

During this phase of the Clair-Maltby Secondary Plan study, the following key tasks are to be completed:

- Review of the relevant background documents
- Preparation of a Background Report that includes a synthesis of background research collected during the first phase of the project, including a brief history of the area and a review of the relevant background documents. This

Clair-Maltby Terms of Reference

Terms of Reference for the Secondary Plan Study

background report will provide the basis for the community visioning exercise and the creation of the Conceptual Community Structure

- Prepare and host Public Information Centre #1
- Community visioning session to develop principles and/or goals for the Secondary Plan Area
- Principles/goals to Council for endorsement
- Preparation for the Phase 2 community visioning exercise (to occur at the beginning of Phase 2 of the Study)
- Confirm and map the known cultural heritage resources within the study area, in consultation with Heritage Guelph (i.e. built heritage resources and cultural heritage landscapes)

Deliverables

- Background Report
- Presentation and other materials for the Community Visioning Session to develop principles/targets
- Principles/targets for the secondary plan area
- Map of known cultural heritage resources
- Council Report (prepared by staff)

Phase 2 of the Secondary Plan Study –Expectations

At the beginning of Phase 2 of the Secondary Plan Study, a community visioning exercise will be held to engage City staff and members of the Technical Steering Committee; members of the local Clair-Maltby community; members of the broader Guelph community; the Community Working Group; the Technical Advisory Group; and any other interested stakeholders in visioning sessions to develop a Conceptual Community Structure (preliminary concept plan) for the Secondary Plan area.

The Conceptual Community Structure will address: potential land use categories (i.e. low density greenfield residential, medium and high density residential, neighbourhood commercial centre, open space, corporate business park and park, etc.) and locations for those land uses; potential road, transit and trail networks; servicing options and potential locations for vertical or other large infrastructure projects (i.e. water tower); an open space system, and major community facility requirements and potential locations (schools, libraries, parks, recreation facilities, etc.). The Conceptual Community Structure will be guided by the principles and/or goals developed during Phase 1 of the Secondary Plan Study. The Conceptual Community Structure and the established principles/goals will provide direction to the Study and form the basis for future Secondary Plan policies for the area.

Clair-Maltby Terms of Reference

Terms of Reference for the Secondary Plan Study

The Conceptual Community Structure is to be presented to Council for endorsement prior to proceeding with the commencement and completion of other technical studies.

Other technical studies (i.e. Mobility Study, servicing studies, etc.) that are intended to commence during Phase 2 of the Secondary Plan Study will take direction from the established principles/goals and the Conceptual Community Structure.

Throughout the remainder of Phase 2 as technical information is available from the ongoing studies, the Conceptual Community Structure will be refined or revised into various alternatives – **'Community Structure Alternatives'**.

PIC #2 will be held to consult on Community Structure and MESP Alternatives.

At the end of Phase 2, a National Charrette Institute (NCI) style charrette will be held to present the Community Structure and MESP Alternatives and then select a Preferred Community Structure and MESP Alternative which the final MESP and Secondary Plan will be based on after the Preferred Alternative is endorsed by Council.

An NCI charrette is a collaborative design and planning workshop that occurs over four to seven days. The goal of the charrette is to produce a preferred plan and the process is an intense exercise that uses a holistic approach resulting in a feasible solution. In this instance, the solution is the preferred Land Use Plan. The charrette is an open process that includes all interested parties as well as a multidisciplinary charrette team comprised of the technical experts that were involved in the studies. The **multi-day charrette contains 'feedback loops'**. A feedback loop occurs when a design is proposed, reviewed, changed and re-presented for further review.

During the charrette, the team will host three public sessions. The first session will present the Community Structure Alternatives that were developed throughout Phase 2 of the Study. The second session will be used to present the preferred Community Structure Alternative. The third session will be to present a further developed and feasible version of the preferred Community Structure Alternative.

The preferred Community Structure and MESP Alternative that is developed/refined during the charrette will be presented to Council for endorsement and will also be presented at PIC#3.

Clair-Maltby Terms of Reference

Terms of Reference for the Secondary Plan Study

Key Tasks

During Phase 2 of the Clair-Maltby Secondary Plan study, the key tasks to be completed for the Secondary Plan include:

- Prepare for and host a community visioning exercise, which may occur in several sessions with different stakeholder groups, to inform the development of the Conceptual Community Structure
- Prepare the Conceptual Community Structure based on the feedback and key messages heard during the community visioning exercise.
- Present the Conceptual Community Structure to Council for endorsement
- Begin to develop Community Structure Alternatives based on the Conceptual Community Structure, the Phase 1 Background Report, the Phase 1 Cultural Heritage Resources map, as well as interim feedback and findings available from the ongoing technical studies. The Community Structure and MESP Alternatives will be presented to the public at PIC #2 and evaluated during the NCI style charrette
- Prepare for and host the NCI style Charrette to select the preferred Community Structure Alternative
- The preferred Community Structure and MESP Alternative will be presented to Council for consideration and endorsement.
- The preferred Community Structure and MESP Alternative will be presented at PIC#3 at the end of this Phase

Deliverables

- Conceptual Community Structure
- Community Structure Alternatives
- Preferred Community Structure Alternative
- Heritage Resources Review & Strategy
- Council Reports (prepared by staff)

Phase 3 of the Secondary Plan Study –Expectations

The preferred Community Structure Alternative that was selected at the end of Phase 2 will be used to prepare the draft Secondary Plan.

In order to draft the Secondary Plan, the preferred Community Structure Alternative may be further reviewed and refined to ensure that sufficient detail is developed. This should include, but is not limited to:

- Ensuring it meets the objectives set out in the Urban Design Action Plan for New Communities

Clair-Maltby Terms of Reference

Terms of Reference for the Secondary Plan Study

- Reviewing and making recommendations with respect to how to create urban buildings (where appropriate) in areas with topographic features based on the final land use plan
- Providing recommendations for urban design guidelines and/or policies specific to the Secondary Plan area
- Creating appropriate street cross sections, incorporating street trees, based on the final land use plan
- Evaluating the plan against the requirements of the Grand River Source Protection Plan and any potential emerging policies (i.e. quantity)
- Ensuring that publicly accessible open spaces and facility locations will be able to comply with the most current accessibility standards for outdoor spaces
- The amount of parkland anticipated will allow for parkland dedication requirements to be met and will maintain a minimum City-wide average rate in keeping with the most up to date City requirement (minimum 1.5 ha neighbourhood park/1000 population, Draft Recreation Parks & Culture Strategic Plan identifies a rate of 3.3 Ha parkland/1000 population)
- Park sizes and locations are appropriate (i.e. have adequate frontage for surveillance and safety, 80% of the park site is tableland, minimum size is appropriate, etc.)
- At a high level, identifying and mapping potential heritage character areas, potential cultural heritage landscapes and/or potential heritage conservation districts within the secondary plan area (in consultation with Heritage Guelph)
- Providing design principles for heritage character areas and built form standards for built heritage resources and significant cultural heritage landscapes
- Mapping areas that have been cleared of concern for archaeological resources
- Community energy plan opportunities

The draft MESP and Secondary Plan will be further refined, if necessary, to finalize the Secondary Plan document that can be **incorporated into the City's Official Plan**, having regard for any outstanding appeals or other ongoing studies. The Official Plan Amendment process will proceed in accordance with the requirements of the Planning Act.

Staff will prepare any Corporate Reports required to bring the Draft and Final Secondary Plan to Council for their consideration.

Clair-Maltby Terms of Reference

Terms of Reference for the Secondary Plan Study

Key Tasks

During Phase 3 of the Clair-Maltby Secondary Plan study, the key tasks to be completed for the Secondary Plan include:

- Review and refine the preferred Community Structure Alternative to prepare the draft Secondary Plan and Official Plan Amendment (OPA)
- Prepare for and host a Public Open House for the Draft Secondary Plan/OPA
- Attend the Statutory Public Meeting to present or assist with presenting the Draft Secondary Plan/OPA to Council
- Finalize the Secondary Plan/OPA
- If required, attend the Council Decision meeting at which the Staff recommendation report and Final Secondary Plan/OPA and MESP will be considered
- Upon adoption of the Secondary Plan/OPA, implementing By-law to be enacted and notice requirements of the Planning Act are to be satisfied.
- Upon approval of the MESP, 30 day review period of the MESP to satisfy the EA requirements.
- The Notice of Completion for the MESP is to be issued in accordance with the EA requirements.

Deliverables

- Draft Secondary Plan and MESP
- Public Open House
- Statutory Public Meeting
- Final Secondary Plan and MESP
- Implementing By-law for Secondary Plan
- Notice of Approval for the Secondary Plan
- Notice of Completion for the MESP

Clair-Maltby Terms of Reference

Terms of Reference for the Fiscal Impact Assessment

Task G: Fiscal Impact Assessment

Purpose

The purpose of the Fiscal Impact Assessment for the Clair-Maltby Secondary Plan is to determine the optimal mix of residential/non-residential development and servicing alternatives that maximizes the fiscal sustainability of the new community while minimizing fiscal impacts on existing City of Guelph tax payers, ensures quality of life for residents, promotes economic and business development, as well as the protection of environmental features in accordance with the Natural Heritage Strategy.

The Fiscal Impact Assessment will consider the affordability and practicality of the secondary plan.

Study Process

Phase 1- Fiscal Impact Assessment Expectations

During Phase 1 of the Secondary Plan Study, a community visioning session will be held to develop principles/goals for the secondary plan study. A goal or principle related to the fiscal feasibility of any secondary plan should be considered.

Key Tasks

1. Review existing policies, relevant studies and reports including but not limited to the following documents:
 - a) Development Charges Background Study (2014).
2. The Fiscal Impact Study should correspond with the 2019 DC Background Update.

Deliverables

- Background Report

Phase 2- Fiscal Impact Assessment Expectations

At the beginning of Phase 2 of the Secondary Plan Study, a community visioning exercise will be held to develop a Conceptual Community Structure. The established Conceptual Community Structure will provide a base to start the Fiscal Impact Assessment.

Throughout phase 2, Community Structure Alternatives will be developed which are based on the original Conceptual Community Structure and the interim findings from the ongoing technical studies.

Clair-Maltby Terms of Reference

Terms of Reference for the Fiscal Impact Assessment

At the end of Phase 2, an NCI Style Design Charrette will be held to determine which Community Structure Alternative is the Preferred Alternative.

Key Tasks

The Fiscal Impact Assessment will commence during Phase 2 and be finalized in Phase 3.

1. Carry out a fiscal model based on detailed infrastructure costs and existing levels of service that can subsequently be used by City staff to consider the implications on DC impacts, tax impacts, funding shortfalls etc., of changes in growth, servicing and other assumptions.

Considerations to be built into the fiscal model:

- To what extent will the development charges to be paid by the development of Clair-Maltby cover the capital cost of providing services to the development? What impact will there be on the development charge rate and DC reserve funds?
- What are the DC reserve fund cash flow requirements with respect to the facilities and infrastructure required by Clair-Maltby and do they introduce the need for front-end financing by the landowners, or debt financing by the City?
- Will the taxes to be paid by the development of Clair-Maltby cover the expected incremental increase in operating costs (both facility-related and general per capita-related), as well as capital costs not covered by development charges (benefit to existing deduction, 10% statutory deduction and City DC exemptions) that are expected to be produced by the Clair-Maltby development? (Note that under coverage can be expected to result in upward pressure on tax rates and/or a shortage of capital spending from the current budget)
- Realistic cost estimation of identified capital program and long-term life-cycle cost analyses of servicing alternatives including asset management, operational, energy use, phasing, capital works prioritization and cash flow analysis

Deliverables

- Draft alternative fiscal impact concepts that can measure and evaluate community structure alternatives

Phase 3- Fiscal Impact Assessment Expectations

The Preferred Community Structure and MESP Alternative will inform the final stages of the Fiscal Impact Assessment, which will be completed in Phase 3.

Clair-Maltby Terms of Reference

Terms of Reference for the Fiscal Impact Assessment

Key Tasks

1. Establish the anticipated long range fiscal impact of the Clair-Maltby Secondary Plan on the City of Guelph with respect to its operating and capital budget. This is to ensure that the development can be serviced and implemented in a fiscally responsible manner with consideration for such financial matters as tax rate increases, use of debt-related funding, timing of capital requirements and which does not result in a reduction in service below acceptable levels.
2. Identify the economic implications of the development on the City with respect to matters such as City employment, residential and industrial/commercial assessment ratios.

Deliverables

- Fiscal Impact Assessment

Clair-Maltby Terms of Reference

Terms of Reference for Community Engagement & Communications

Task H: Community Engagement & Communications

Introduction

Community engagement and communication will be crucial to the success of the Clair-Maltby Secondary Plan study.

It is expected that community engagement and communications activities will be **completed in collaboration with the City's** Communications and Community Engagement teams, as well as in accordance with the **City's Community Engagement Framework**, Corporate Identity Guidelines and House Style Guidelines.

Consultant Responsibilities

The responsibility of implementing the required tactics of the community engagement approach will be shared by the Consultant Team and the designated Communications Officer and Community Engagement Coordinator, under the lead **of the City's overall Project Manager. A clear division of responsibilities will** be identified once the Community Engagement and Communications Plan is finalized during Phase 1 of the Secondary Plan study.

1. Lead and maintain contact with key internal City departments throughout the course of the study through the Technical Steering Committee (TSC). The TSC includes representatives from most City Departments, the Grand River Conservation Authority, the County of Wellington and the Township of Puslinch.
2. Lead and maintain contact with the landowners/stakeholders committees (Technical Advisory Group and Community Working Group) through the course of the study, including meetings at key points in the process.
3. Assist with the preparation of all required public notifications and prepare all presentation drawings and materials for all public meetings. All paid advertising and promotional communications will need to be approved by Corporate Communications before implementation. The City will post the prepared notifications in the local newspaper and City website at its own cost.
4. Hold Public Information Centres (PIC) in accordance with the Class EA Process and **Planning Act** requirements, as well as facilitate a National Charrette Institute (NCI) style Design Charrette to seek feedback and input from the public on the project objective, proposed evaluation criteria and the preferred design alternative.

Clair-Maltby Terms of Reference

Terms of Reference for Community Engagement & Communications

5. Provide technical content and assistance for any print and broadcast **media material in collaboration with the City's Corporate Communications Department.**
6. Create Terms of Reference for the Technical Advisory Group and the Community Working Group and promote opportunities to participate in these groups. Select the group members.

Study Process

Communications & Engagement Activities for the Clair-Maltby Secondary Plan and MESP Study
Phase 1
Proposed Communications & Engagement Activities
Community Engagement and Communications Plan <ul style="list-style-type: none">• Develop a Community Engagement and Communications Plan in consultation with staff to identify and outline a framework and schedule for community engagement. The City of Guelph Corporate Communications department will assist in the development of the communications approach in support of the Clair-Maltby Secondary Plan, working closely with the consultant team and the staff project team. The communications component of the Community Engagement and Communications Plan will identify the communications goal, objectives, stakeholders, strategic approach, key messages, and tactics.
Convene Community Working Group (CWG) and Technical Advisory Group (TAG) <ul style="list-style-type: none">• Create Terms of Reference for the CWG and TAG, promote opportunity to participate in Clair-Maltby Secondary Plan Study CWG and TAG and select the CWG and TAG members• Convene Working groups to review Secondary Plan Study timeline and schedule of meetings between the groups and project team
Commencement of Study <ul style="list-style-type: none">• Draft contents for study commencement notice, including all technical studies to be undertaken• Promote Study Commencement notice and send invitations to visioning sessions

Clair-Maltby Terms of Reference

Terms of Reference for Community Engagement & Communications

PIC #1 <ul style="list-style-type: none">• Create all background information and presentation materials• Promote PIC• Facilitate PIC and record stakeholder input
Visioning Session <ul style="list-style-type: none">• Plan Visioning Sessions• Prepare all materials• Facilitate visioning sessions, record and analyze stakeholder feedback
Phase 2 of the Secondary Plan Study
Proposed Communications & Engagement Activities
Visioning Exercise <ul style="list-style-type: none">• Plan Visioning Exercise• Prepare all materials• Facilitate visioning sessions, record and analyze stakeholder feedback
Tasks/Studies (Comprehensive Environmental Impact Study, servicing studies, Mobility Study, Energy and Other Utilities Study, Secondary Plan, Financial Impact Assessment): <ul style="list-style-type: none">• Create all background information materials for community workshops to present information and collect stakeholder input on each of the above technical study groups• Promote technical study workshops and stakeholder workshops• Facilitate community workshops to inform the technical studies as necessary, record and analyze stakeholder feedback
PIC #2 <ul style="list-style-type: none">• Create all background information and presentation materials• Promote PIC• Facilitate PIC and record stakeholder input
NCI Style Design Charrette <ul style="list-style-type: none">• Plan multi-day National Charrette Institute style charrette• Prepare all materials for the charrette• Promote the charrette• Facilitate the charrette, record and analyze stakeholder input
PIC #3 <ul style="list-style-type: none">• Create all background information and presentation• Promote PIC• Facilitate PIC and record stakeholder input

Clair-Maltby Terms of Reference

Terms of Reference for Community Engagement & Communications

Phase 3 of the Secondary Plan Study

Proposed Communications & Engagement Activities

Public Open House

- Create all background information and presentation materials
- Promote Open House
- Facilitate Open House and record stakeholder input

Statutory Public Meeting for Official Plan Amendment

- Prepare for and present (or assist with presenting) the Secondary Plan and MESP to Council at the Statutory Public Meeting
- Promote statutory public meeting

Council Decision Meeting

- Prepare for and present (or assist with presenting) the final Secondary Plan and MESP to Council
- Promote the decision meeting