

TABLE OF CONTENTS

1.0	GENERAL	1
1.1	Introduction.....	1
1.2	Purpose of this Request for Proposal	1
1.3	Goals and Objectives	2
2.0	BACKGROUND	3
2.1	The Significance of the Airport Employment Growth District	3
2.2	Planning Context.....	4
	2.2.1 Forecasted Employment Growth	4
	2.2.2 Accommodating Growth.....	5
2.3	Growth Related Integrated Development Strategy	5
2.4	Ontario Municipal Board Decision.....	6
2.5	Official Plan	7
3.0	GENERAL SCOPE OF SERVICES	7
3.1	Land Use	7
	3.1.1 Scope of Work – Phase 2	7
	3.1.2 Specific Key Study Outputs for Phase 2.....	8
	3.1.3 Document Review	11
3.2	Transportation.....	12
	3.2.1 Scope of Work - Phase 2.....	12
	3.2.2 Specific Key Study Output – Phase 2.....	14
	3.2.3 Transportation Master Plan Document Review	16
3.3	Stormwater Management and Subwatershed Planning.....	16
	3.3.1 Scope of Work – Phase 2	17
	3.3.2 Specific Key Study Output – Phase 2.....	19
	3.3.3 Stormwater Management and Subwatershed Planning Document Review.....	20
3.4	Water and Wastewater Servicing.....	21
	Scope of Work – Water and Wastewater Servicing.....	21
	3.4.1 – Scope of Work - Phase 2	21
	3.4.2 Specific Key Study Outputs – Phase 2 -	22
	3.4.3 Water and Wastewater Document Review	23
4.0	ADDITIONAL REQUIREMENTS COMMON TO ALL MASTER PLANS AND SECONDARY PLAN (Phase 2).....	23
4.1	Evaluate Land Use Options and Associated Infrastructure	23
4.2	Identify Land Use Option and Supporting Infrastructure	23
4.3	Environmental Issues	24
5.0	PHASE 2 – NOTICE OF COMPLETION FOR CLASS EA AND NOTICE OF ADOPTION OF THE SECONDARY PLANS AS AN OPA AND ZONING BY- LAW REGULATIONS	24
6.0	FACILITATION.....	25

7.0	CONSULTATION.....	25
7.1	Community Liaison Committee (CLC):	26
7.2	Public Information Centres (PIC's) :	26
	7.2.1 Public Information Centre #2 (PIC #1 occurred in Phase 1)	26
	7.2.2 Public Information Centre #3.....	27
7.3	Special Committee of the Whole Meetings:	27
7.4.	Design Charrette	27
7.5	Meetings with Key Stakeholders	28
7.6	First Nations Consultation	28
7.7	City Web Site.....	28
7.8	Project Newsletter.....	29
8.0	MASTER PLAN AND SECONDARY PLANNING COORDINATION.....	29
9.0	FINAL REPORT RECOMMENDATIONS/IMPLEMENTATION PLAN	29
9.1	Reporting Requirements	29
9.2	Study Schedule.....	30
9.3	Software Requirements.....	30
10.0	STUDY ADMINISTRATION	30
	Airport Employment Growth District.....	6

APPENDICES

Appendix A – Work Plan

Appendix B – Study Area Map

Appendix C – Executive Summaries

TERMS OF REFERENCE

1.0 GENERAL

1.1 Introduction

The John C. Munro Hamilton International Airport (HIA) is an important economic engine for the City of Hamilton. With the North American Free Trade Agreement (NAFTA), Free Trade Area of the Americas (FTAA), European Community and evolving Asia/Pacific Community, the Airport will be part of our future for employment and assessment growth as well as distribution development. The growth of other industry sectors in Hamilton is dependent on ready access to the airport and the servicing of lands for future development in the surrounding area. Refer to Appendix B for a map of the Airport Employment Growth District (AEGD).

Phase 1 of the project was completed in June 2008. Phase 1 included the documentation of existing conditions, confirmed the land use requirements, and examined the infrastructure, economic and financial requirements to proceed with the project. The Phase 1 Study concluded that proceeding with the AEGD was feasible and justified. Executive Summaries for the Land Use and Infrastructure reports for Phase 1 are included in Appendix C.

1.2 Purpose of this Request for Proposal

The City of Hamilton retained the services of a consulting team lead by Dillon Consulting Limited to prepare Phase 1 of a Secondary Plan and Financing Strategy/Phasing Plan as well as a Transportation Master Plan, a Sub-watershed Study and Master Drainage Plan and a Water/Wastewater Master Plan for the Airport Employment Growth District. The City is providing this Terms of Reference for Phase 2 of the Study to the consultant team in order for them to prepare a workplan as the basis for negotiation to complete Phase 2.

The Secondary Plan will be completed in accordance with all relevant requirements of the Planning Act. The Transportation Master Plan, Water/Wastewater Master Plan and the Subwatershed Study and Master Drainage Plan will be completed in accordance with the Municipal Engineer's Association Municipal Class Environmental Assessment (Class E.A.) process (June 2000), including satisfaction of Phases 1 and 2 requirements for all identified projects. In addition, an Eco-Industrial Business Park Study and an Airport Economic Analysis will be completed to support the Secondary Plan for the Airport Employment Growth District.

Continuation of the facilitation program is required as part of Phase 2 of this study in order to assist with project communication to the public and the Community Liaison Committee (previously established). The details of these initiatives, as well as

deliverables are described below.

1.3 Goals and Objectives

The goals of the Secondary Plan and Master Plans are to:

- Establish a policy framework to support the land-use designations and implementation strategy;
- Identify appropriate land use designations for the lands;
- Identify an internal transportation network, including roads, transit, bike lanes and pedestrian walkways taking into consideration the City's overall Transportation Master Plan;
- Provide a comprehensive stormwater management/drainage plan for the lands, in accordance with the City's Stormwater Master Plan;
- Provide eco-industrial solutions to both public and private site infrastructure;
- Provide a comprehensive water and wastewater servicing strategy (including infrastructure location and sizing), in accordance with the City's Integrated Water and Wastewater Master Plan for the Lake Based Systems.

The objectives of the Secondary Plan and Master Plans are to:

- Meet Provincial legislation and regulations i.e. Places to Grow, Provincial Policy Statement, Bill 51;
- Prepare background reports, Part A and Part B OPA (OPA Justification and Principles and OPA/Secondary Plan), draft Zoning regulations, Urban Design and Eco-Industrial Design Guidelines, a revised Airport Economic Impact Analysis, a Transportation Master Plan, a Water/Wastewater Master Plan and a Subwatershed Study and Master Drainage Plan;
- Prepare a development phasing plan for the Airport Employment Growth District, identifying the optimum sequencing and timing of development;
- Provide a comprehensive water and wastewater servicing strategy in accordance with the City's Integrated Water and Wastewater Master Plan;
- Prepare an implementation plan which includes a financing plan for the infrastructure;
- Apply the following environmental assessment planning principles:
 - ⇒ Consultation with potentially affected parties including, but not limited to, the general public, community and industry groups (i.e. Hamilton Cycling Committee, Southern Ontario Gateway Council), Provincial and Federal agencies, Conservation Authorities, First Nations, and meetings with a Community Liaison Committee;
 - ⇒ Identification and consideration of all reasonable and feasible servicing alternatives;
 - ⇒ Identification and consideration of the effects of each servicing alternative on all aspects of the environment;

- ⇒ Consideration of eco-industrial principles and solutions in defining and evaluating options and in project design;
- ⇒ Systematic evaluation of the alternatives in terms of their advantages and disadvantages to determine their net environmental (natural, social and economic) impacts including the consideration of appropriate mitigating measures;
- ⇒ Satisfaction of Phases 1 and 2 of the Municipal Class EA;
- ⇒ Identification of other Environmental Assessment requirements, e.g. Canadian Environmental Assessment Act relevant to the AEGD study; and
- ⇒ Provision of clear and complete documentation of the study processes to provide a traceable decision making process.

2.0 BACKGROUND

2.1 The Significance of the Airport Employment Growth District

Airport master-planned communities are emerging around airports. Services include, but are not limited to, airport, major highways, rail, port connections, mass transit service, airport industrial development, and commercial/spin-off development. Airport lands offer Internet access, sanitary, water, natural gas, electrical, phone and cable services. Airports are targeting time-sensitive companies for distribution such as computer hardware/software, electronics, telecommunications equipment, apparel, automotive components, industrial equipment and healthcare/biotechnology products.

Airport master-planned communities are retaining and expanding business while investing millions to ensure that their communities benefit from this economic engine's results. Increased employment and non-residential assessment growth has been identified by City of Hamilton Council as a strategic priority and the inclusion of employment lands in the City's Growth Related Integrated Development Strategy (GRIDS) facilitates this objective. To create a balanced community, in which opportunities are provided within the community for residents to work, Hamilton will require significant employment growth to balance the projected population growth. Population growth must be more deliberately linked to employment growth to create the type of community envisioned in Vision 2020, that being a City that supports a population that maintains "our environmental integrity together with our social quality and economic prosperity". In this regard, the *Places to Grow Plan* notes that where a municipality proposes an urban boundary expansion then, amongst other criteria, "the proposed expansion provides a balance between population and employment growth (target ratio of 2:1)".

2.2 Planning Context

Both the City of Hamilton and the Province of Ontario have identified the John C. Munro Hamilton International Airport as an economic development priority:

- Places to Grow identified the Airport as Hamilton's top economic priority by stating growth should "take advantage of the economic opportunities provided by the airport."
- The Hamilton Airport Gateway Opportunities Study stated "a strong industrial base in the vicinity of the airport will support and solidify its function as an important part of Southern Ontario's transportation infrastructure."
- The Provincial draft terms of reference for the Niagara to GTA Corridor state, "John C. Munro Hamilton International Airport is a future economic growth centre and major development area in the region."

In order for us to realize the full economic development potential of the employment lands surrounding the HIA it will be necessary to expand the urban boundary for employment purposes. The Phase 1 component of this project concluded that after reviewing the background and existing condition information that proceeding with the AEGD was feasible and justified.

2.2.1 Forecasted Employment Growth

Since 1986, employment levels have fluctuated in the 190,000-205,000 range while population growth has continued at a far more rapid rate. As a result, the amount of out-commuting from Hamilton to other employment locations has accelerated.

To create a balanced community, in which opportunities are provided within the community for residents to work, Hamilton will require significant employment growth to balance the projected population growth.

The forecasted employment growth to 2031 for the City of Hamilton is more extensive than historic trends but nonetheless provides targets the City must address. Broken down by category, the forecasted employment growth is as follows:

Major Office: 11,000 new jobs
Population Related: 31,000 new jobs
Employment Land: 59,000 new jobs

The Official Plan directs new office employment to the Downtown and the Downtown Secondary Plan and Zoning By-law 05-200 presently allow for new office development in the downtown core.

Population related employment growth is driven by local needs in new neighbourhoods. As new neighbourhoods are planned and developed, these needs will be addressed.

Employment Land must be planned for and opportunities for industrial development must be created - the Airport Employment Growth District will help create these opportunities.

The Provincial growth forecasts recognize the importance of industrial-type development. As noted in the Hemson report prepared for the Province as part of the work in developing the Places to Grow Plan:

"The basic industrial orientation of the GGH economic region, centered on the GTA-H, also does not appear to be significantly changing. The largest category of employment in the GTA-H remains manufacturing, followed by trade. The GTA-H is in fact one of the most heavily industrialized metropolitan economies in North America."

2.2.2 Accommodating Growth

Based on the Hemson forecasts, total employment on employment lands in the City of Hamilton will increase by approximately 59,000 jobs in the 2001-31 time period.

Based on the GTA-H standard of 37 workers/ha (15 workers/acre), approximately 1,270 ha (3,100 acres) of employment lands are required to accommodate projected growth.

2.3 Growth Related Integrated Development Strategy

As previously noted, total employment in Hamilton is projected to increase by 101,000 jobs and as part of GRIDS, Council directed that based on the results of the "*Hamilton Airport Gateway Opportunities Study*" (HAGOS) and the "*Providing Employment Lands in Hamilton - Financial Options*" report, to support long-term airport operations and to stimulate economic development in and around the airport/airport IBP, between 830 - 1,295 ha (2,050 - 3,200 acres) of land are required to be evaluated for employment related uses.

On May 18, 2006, City Council endorsed GRIDS (Growth Related Integrated Development Strategy) which identified the preferred "Nodes and Corridors" scenario for future growth to the Year 2031. Included in the preferred growth scenario was the AEGD which addresses the City's need for employment lands to the Year 2031.

The GRIDS process included the development of master plans for water/wastewater, transportation and stormwater. The Integrated Water and Wastewater Master Plan for the Lake Based Systems identifies "the water and wastewater servicing strategy for the lake based systems to address existing servicing commitments, water quality issues in Hamilton Harbour and to support growth for the next 30 years". It also provided the preferred water and wastewater servicing strategies for the AEGD area. The Hamilton Transportation Master Plan developed policies and strategies for the City's transportation network (including roads, transit, cycling and pedestrian facilities, and connections to the port, rail facilities and the Airport) for the next 30 years. One of the central

recommendations of the Transportation Master Plan is the “need to improve transportation access to existing and future employment lands in order to support existing businesses and attract new ones”. The Stormwater Master Plan was completed to “identify, enhance and mitigate the adverse impacts of development on water quality, erosion, flooding and aquatic and terrestrial environment” and to “identify a Preferred Stormwater Strategy for the next thirty years”. Alternative Management Strategies were selected for each watershed within the City “based on existing and proposed land uses, existing environmental conditions and issues within the watershed, Remedial Action Plan requirements, and the ability of each Alternative Strategy to meet the study objectives”.

The work to be completed as part of the Secondary Planning and associated infrastructure Master Plans for the AEGD will build on the City-wide Master Plans to identify external infrastructure needed to support the development of the Airport Employment Growth District and local infrastructure requirements within the study area.

2.4 Ontario Municipal Board Decision

The Ontario Municipal Board (OMB) issued a decision on September 25, 2006 with respect to the Airport Employment Growth District. The decision of the OMB was to allow Official Plan Amendments to the Regional Municipality of Hamilton-Wentworth, Town of Ancaster and the Township of Glanbrook Official Plans to identify a Special Policy Area in which to consider an Airport Employment Growth District centered on the John C. Munro International Airport. The amendment is to recognize, protect and capitalize on the long-term economic importance of the Airport and its unique role as a catalyst for airport related and other employment uses. The effect of the Amendment is two-fold:

- To protect John C. Munro International Airport’s 24 hour operation by restricting incompatible and noise sensitive land uses from encroachment into Airport noise sensitive areas; and,
- To provide for the development of a future employment land growth centre.

Further study is required to demonstrate such matters as the amount of land required for the Airport Employment Growth District, the nature of the proposed employment uses, the infrastructure (particularly storm, sewage, water and transportation) needed to service the lands, provisions required to maintain the key functions of the airport, including the minimization of land use conflicts related to existing/planned airport operations, and the cost and method of financing the employment district.

This further study is to be undertaken in consultation with the Ministry of Municipal Affairs and Housing (MMAH), Ministry of Public Infrastructure Renewal (MPIR) and Hamiltonians for Progressive Development (HPD) along with other interested stakeholders. The City has created and invited HPD, Tradeport International Corporation and Swisscan Properties Inc. along with other stakeholders, Six Nations Council representatives and City Councilors to participate in a Community Liaison Committee.

2.5 Official Plan

The justification of the need of employment lands will be undertaken through amendments to the Regional Municipality of Hamilton-Wentworth, Town of Ancaster and the Township of Glanbrook Official Plans. Therefore, this Request for Proposals (RFP) will focus on the development of a Secondary Plan for the Airport Employment Growth District and it is not a requirement of this RFP to justify the need for employment lands.

3.0 GENERAL SCOPE OF SERVICES

The Secondary Plan shall conform to the requirements of the Planning Act. The Master Plans will satisfy Phases 1 and 2 of the Municipal Class Environmental Assessment process, by following Master Plan Approach #2 in Master Plans, of the Municipal Engineers Association Municipal Class Environmental Assessment document (June 2000). The project will develop a comprehensive secondary plan and system servicing plan for the Airport Employment Growth District.

Through this project, other applicable environmental assessment requirements, such as Canadian Environmental Assessment Act (CEAA) requirements, other Class Environmental Assessments (Class EA) requirements (e.g. Ontario Realty Corp. Class EA), etc. will be addressed.

As previously stated, Phase 1 of the project has been completed and Executive Summaries for the Land Use and Infrastructure reports from Phase 1 are included in Appendix C.

3.1 Land Use

The Airport Employment Growth District has been the subject of planning and transportation studies over the past number of years. Recently, there has been increased investment from both the public and private sector throughout the Airport Employment Growth District. Examples of public initiatives include property acquisitions required for Hamilton International Airport to expand its air-side cargo handling as well as the lengthening of one of the runways. The Province recently constructed the new Highway #6 from Highway #403 to Airport Road to provide direct highway access to the airport lands. On the private sector side, Orlick Industries is moving forward with their industrial subdivision plans along Upper James Street (formerly Highway #6).

3.1.1 Scope of Work – Phase 2

1. Part A OPA - Prepare Part A of the OPA building on the work completed to date to document the planning justification for the AEGD, document the analysis defining the urban boundary expansion area, meet Provincial policy requirements and establish the planning principles as the starting point for the OPA.

2. Part B OPA - Based on the scoping document prepared for Phase 1, Phase 2 requires the refinement, analysis and development of a preferred land use concept, including the development of urban design and landscaping concept.
3. The creation of a development financing, phasing plan and a general marketing strategy.
4. Coordination of the study with the concurrent transportation, servicing and stormwater management studies.
5. Additional studies, including the refinement of the natural environment, cultural heritage and archaeological assessments.
6. Recommendations for appropriate zoning regulations surrounding the airport and within the study area.
7. Development of a sustainability framework, including Industrial Park Urban Design Guidelines and a Sustainability Rating System.
8. Review and provide recommendations with respect future actions required to address issues surrounding sensitive land uses including agricultural within the study area.

3.1.2 Specific Key Study Outputs for Phase 2

1. Background Reports – Enhancing the understanding of the AEGD in order to set the policy framework for development.
 - Further refinement of the Opportunities and Constraints maps from Phase 1 – Refinement based on discussion with the provincial agencies. Confirm land supply calculations.
 - Land Use Planning – Visioning of the AEGD and creation of development principles. Development of overall growth options and gateway refinement. Creation of an evaluation framework. The consulting team will have an internal team workshop in order to enhance the understanding of the AEGD and to develop growth options in conjunction to the scenarios for servicing.
 - Urban design, eco-industrial and ecological design for the employment lands – The consultant will create urban design modeling and ecological design examples for the preferred land use concept, to help in the visualization and conceptualization of the AEGD development.
 - Terrestrial Natural Environment – Based on phase 1 recommendations more analysis need to be completed in order to gain a greater understanding of the significant terrestrial natural environment by completing detailed work on the following items: Species at risk (Federally, Provincially or Regionally); large woodlots/forests (Greater than 4 hectares); Large wetlands (Greater than 2 hectares); and old forests (Greater than 100 years old). Similarly, additional studies will look at areas such as woodlots under 4 hectares and non-evaluated wetlands under 2 hectares.
 - Aquatic Natural Environment – Detailed delineation of areas recommended for future study in Phase 1 study. Field work in order to refine characterization of aquatic features.
 - The terrestrial and aquatic natural heritage information and detailed field work undertaken in Phase 2 will be incorporated into the overall plan to identify where Environmental Impact Studies are to be required in the future

development; to assist in setting the policy framework for development; to provide more detailed delineation of the areas recommended in the Phase 1 report; and, to assist in the preparation of the Terms of Reference for site development

- Agricultural Assessment – Analysis of the pros and cons of keeping the agricultural uses within the AEGD. Refinement of Phase 1 analysis in order to recommend which areas should be removed from agricultural production and which areas should be left for development.

2. OPA Part A – Planning Justification

- Prepare a planning report documenting the overall planning justification for the AEGD including the urban boundary expansion area, residential land supply, employment needs and context with respect to Provincial policy and direction.

3. Revised Economic Impact Analysis and Lands Needs Analysis

- Update the previous Airport Economic Impact Study (2002) and undertake a land needs analysis for the airport to meet the goals and objectives of the 2004 Airport Master Plan.

4. OPA Part B - Secondary Plan

In addition to traditional Secondary Plan policy, the Secondary Plan for the Airport Employment Growth District must contain policy direction relating to:

- The amount of land, types of use and locations to be dedicated to employment uses that require air-side access so that general employment type uses do not locate within this area.
- There are residential areas within and on the periphery of the Airport Employment Growth District. The majority of the area is used for agricultural and rural residential purposes. The land use relationship between Employment land uses and the residential and agricultural uses as well as effects and appropriate buffering from Airport development/Employment uses must be addressed in this study along with recommendations for protecting, buffering or removing such sensitive land uses.

5. Zoning By-law Recommendations

- The Zoning By-laws for the area are the former Town of Ancaster Zoning By-law as well as the former Township of Glanbrook Zoning By-law.
- Zoning recommendations to the City's Zoning By-law Reform Section so that they may be incorporated into the new City of Hamilton Zoning By-law that is being developed.
- Similar to the policy requirement above, provide zoning recommendations to regulate types of use to be dedicated to employment uses that require air-side access so that general employment type uses do not locate within this area.

- The Zoning By-law recommendations must contain Eco-Industrial Park regulations as they affect both public and private lands. i.e. reductions in impervious surfaces, provision of uses such as day-care and banks etc.
6. Eco-Industrial Business Park Initiative
- Undertake an analysis and assess the range of Eco-Industrial Development strategies that exist and propose ways in which they can be implemented.
 - Develop a Sustainable Design Framework with recommendations on the applicability of eco-industrial sustainable design practices in the AEGD. In addition, propose a rating system to help the City in the evaluation of site specific proposals. Complete a cost-benefit analysis for recommended solutions. Provide recommendations for reducing water and energy consumption and sustainable wastewater and stormwater management. In addition, provide recommendations of incentives for green design and for reduction of carbon footprint.
7. Industrial Park Design Guidelines
- The study area contains a full range of uses, both public and private. Industrial Park Urban Design Guidelines will be required as part of the study to address issues such as, but not limited to location, design and character of new or renovated buildings, fences and walls, signage etc. The guidelines will be prepared according to the eco-industrial park standards.
 - The Design Guidelines must also include Industrial Park Guidelines for Municipal Infrastructure such as the inclusion of alternative methods of transportation (walking, cycling) in the streetscape, landscaping of streets, creation of public spaces where appropriate, swale stormwater management, district energy, gateways, signage and quality of design etc.
8. Financing Strategy and Development Phasing Plan
- A key component of the study will involve the development of an appropriate financing strategy to service the district, i.e. development charges, Public-Private Partnerships.
 - Recognizing that this is a long term plan, development phasing is required. The consultant must identify areas to be service in the short, medium and long term.
9. Marketing Strategy
- Business and Marketing Opportunities – Develop strategies for a Business Park that can be marketable, viable and attractive for investment.
 - Recommend a broad marketing strategy including initiatives to attract signature employment, a real estate approach, strategic land parcel acquisitions and the City’s role on driving the AEGD development.

10. An Archaeological/Cultural Heritage Assessment for the AEGD

- A refinement of areas identified as archaeological, historic, natural heritage, environmental significance. As part of this, identify amendments required to Official Plans.
- Prepare a discussion paper based on the Phase 1 to identify cultural heritage resources for future study within the City of Hamilton AEGD lands. Map all resources.
- Complete a survey and detailed historical research of selected significant built and cultural heritage landscape resources. Prepare site inventory forms. This work will set the framework for future assessments to be required by the City for specific site development applications.
- Include Cultural Heritage Resource policies within the Secondary Plan
- Prepare a Terms of Reference for Stage 2 Archeological Assessments to be completed as part of the site development application process, in order to comply with Provincial and City's requirements.
- Include Archaeological Resource policies within the Secondary Plan
- An archaeological inventory, including potential impacts and mitigation requirements to meet the Municipal Class Environmental Assessment requirements for the Master Servicing Plans.

3.1.3 Document Review

This information is available as background information.

- Green Belt Plan
- Places to Grow
- GRIDS
- City of Hamilton Economic Development Strategy
- Hamilton Airport Gateways Opportunities Study
- Hamilton Airport Master Plan 2004
- Airport Industrial Business Park Secondary Plan (not adopted as an OPA)
- Official Plans – Former H-W Region, Town of Ancaster, Township of Glanbrook
- City of Hamilton Zoning By-law 05-200 and Rural Official Plan
- Zoning By-laws – Former Town of Ancaster, Township of Glanbrook
- LEAR Study and associated mapping.

3.2 Transportation

As a part of this Project, the Consultant team will be responsible for the preparation of the Airport Employment Growth District Transportation Master Plan. The Transportation Master Plan will include a review and evaluation of the existing transportation system in the study area to determine overall transportation needs over the next 30 years and a “full build-out” scenario.

The study will be to develop an Airport Employment Growth District Transportation Master Plan and will include goods movement, traffic, transit, parking, bicycle and pedestrian movement strategies to be implemented in conjunction with the Land Use - Secondary Plan study. The Airport Employment Growth District Transportation Master Plan must be in sync with the City-Wide Transportation Master Plan.

This Project is to develop a comprehensive Transportation Master Plan for the Airport Employment Growth District. The work will include:

3.2.1 Scope of Work - Phase 2

1. Coordination of the study with the concurrent land use, servicing and stormwater management studies.
2. On-site traffic data collection studies, if the need is warranted based on the work completed in Phase 1.
3. Further refinement of opportunities and issues related to the proposed Niagara to GTA Corridor that may impact the AEGD area, including recommendations for policies (if required) to be included in the Secondary Plan.
4. Further refinement of opportunities and issues related to any potential new or direct connections between the Port and Airport, including recommendations for policies and land use designations to be included in the Secondary Plan.
5. Further refinement of opportunities and issues, including more specific corridor locations, for a potential link between the AEGD and the Red Hill Valley Parkway., and provincial highway system.
6. A study of existing and future projected traffic volumes in the study area. This will include transportation modeling using the City of Hamilton EMME/2 base transportation network. These traffic projections will consider all the various growth scenarios, development/redevelopment opportunities in the immediate study area. This traffic projection review will be done at 5-year increments, up to and including the Year 2031 and a “full build-out” scenario.

7. A review of the road network which will include existing and future traffic volumes, traffic level of service at key intersections, perform micro-traffic simulation, as required, truck traffic, vehicle speeds, roadway classification and cross section and the general function of the roadways, etc. This must also include a review of opportunities for improvements in the study area.
8. A more detailed review of the existing transit service and other alternative forms of transit service, including identification of required improvements to routes and/or facilities required to better service the study area. This will include coordination of the study with the Hamilton Rapid Transit project.
9. An assessment of the potential for establishment of a rail transportation route that links the port area with the AEGD for the purposes of transporting goods and materials.
10. A review of the bicycle network and the identification of any problems, concerns or deficiencies, either within the study area or with connections to areas outside the study area, including identification of required improvements to the bicycle network to serve the AEGD.
11. A review of the current pedestrian network, identification of areas of key demand and identification of required improvements to serve the AEGD.
12. A review of current and designated road allowances, either open, open ended, not opened or not traveled, to determine their future use, right-of-way designation and/or construction requirements. A review of the existing truck route network; in conjunction with the Truck Master Plan that is currently underway in order to examine connections to existing truck routes and major goods movements routes including the provincial highway system and other major road networks such as Lincoln Alexander Expressway and Red Hill Valley Parkway.
13. The identification of further Travel Demand Management opportunities within the AEGD.
14. Reviews of specific streets where traffic-calming techniques are warranted and can be constructed.
15. The identification of site-specific transportation issues which can be dealt with on an individual basis and secondly, identify the transportation issues that are “corridor”-related.
16. An implementation plan, including financing requirements, for all identified works.

3.2.2 *Specific Key Study Output – Phase 2*

The key study output from Phase 2 will be the development of an AEGD Transportation Master Plan that includes:

1. Coordination of the study with the concurrent land use, servicing and stormwater management studies.
2. On-site traffic studies, if the need is warranted, based on the work completed in Phase 1.
3. Further refinement of opportunities and issues related to the proposed Niagara to GTA Corridor that may impact the AEGD area, including recommendations for policies (if required) to be included in the Secondary Plan, and fulfillment of Phases 1 and 2 of Municipal Class EA.
4. Further refinement of opportunities and issues related to any potential new or direct connections between the Port and Airport, including recommendations for policies and land use designations to be included in the Secondary Plan, and fulfillment of Phases 1 and 2 of Municipal Class EA.
5. Further refinement of opportunities and issues, including more specific corridor locations, for a potential link between the AEGD and the Red Hill Valley Parkway and provincial highway system.
6. A study of existing and future projected traffic volumes in the study area. This will include transportation modeling using the City of Hamilton EMME/2 base transportation network. These traffic projections will consider all the various growth scenarios, development/redevelopment opportunities in the immediate study area. This traffic projection review must be done at 5-year increments, up to and including the Year 2031 and a “full build-out” scenario.
7. A review of the road network which will include existing and future traffic volumes, traffic level of service at key intersections, perform micro-traffic simulation, as required, truck traffic, vehicle collision history, vehicle speeds, roadway classification and cross section and the general function of the roadways, etc. This must also include a review of opportunities for improvements in the study area.
8. A review of the existing road classifications and arterial network, identifying changes that may be required, in order that the long range transportation system and road allowance requirements can be incorporated into the Secondary Plan Policies in the Official Plan for the City of Hamilton (former Town of Ancaster and Township of Glanbrook Official Plans).

9. Identification of any required new local, arterial and/or collector roads. This is to include the identification of corridors, priorities, time frames, costs and funding sources
10. A more detailed review of the existing transit service, proposed transit service extensions, and other alternative forms of transit service, including identification of required improvements to routes and/or facilities required to better service the study area. This is to include the identification of priorities, time frames, costs, funding sources and provision for integrated strategy for public transit system within the Airport Employment Growth District.
11. A review of the bicycle network and the identification of any problems, concerns or deficiencies, either within the study area or with connections to areas outside the study area, including identification of required improvements to the bicycle network to serve the AEGD. This is to include the identification of corridors, priorities, time frames, costs and funding sources.
12. A review of the current pedestrian network, identification of areas of key demand and identification of required improvements to serve the AEGD. This is to include the identification of priorities, time frames, costs and funding sources. A review of the existing truck route network; examination of connections to existing truck routes and major goods movements routes including the provincial highway system and other major road networks such as Lincoln Alexander Expressway and Red Hill Valley Parkway
13. A review of current and designated road allowances, either open, open ended, not opened or not traveled, to determine their future use, right-of-way designation and/or construction requirements.
14. A review of feasibility and potential costs for establishing a rail connection between the port and the AEGD.
15. Accommodation of travel demand at an acceptable level of service and development of operational improvements
16. Reviews of specific streets where traffic-calming techniques are warranted and can be constructed.
17. The identification of site-specific transportation issues which can be dealt with on an individual basis and secondly, identify the transportation issues that are “corridor”-related.
18. Fulfillment of Phases 1 and 2 of the Class Environmental Assessment Process for all relevant projects (including the potential Airport to Red Hill Valley link), including all documentation required to satisfy the requirements for Schedule B

projects and identification of all Schedule C projects for which Phases 3 and 4 will need to be completed.

19. Development of an Implementation Plan, including financing requirements, for all identified works.

The recommendations of the study shall also comply with the transportation policies developed during Phase 2 of the City-wide Transportation Master Plan (adopted by Council in November 2004) and the findings of Phase 3 of the Hamilton Transportation Master Plan, as applicable. As such, the Consultant in charge of the Class EA will be provided with the relevant documents at the beginning of the study.

3.2.3 Transportation Master Plan Document Review

The following studies are relevant to this study:

- City-Wide Transportation Master Plan and Policy Papers
- Growth Related Integrated Development Strategy (GRIDS)
- Official Plans – Regional Municipality of Hamilton-Wentworth, Town of Ancaster, Township of Glanbrook, City of Hamilton
- Vision 2020
- Places to Grow
- The Greenbelt Act
- Shifting Gears, A New Cycling Plan for Hamilton Wentworth (1999) and the “Cycling Master Plan (fall 2008)”
- Previous Transit Studies and recommendations
- Regional Transportation Review (1996)
- Goods Movement Study
- Relevant documentation regarding the proposed Niagara to GTA Corridor

The City Wide Truck study is to commence in September 2008. The consulting team for the AEGD study will be responsible to report on documents relating to this study. These two projects may run concurrent to one another.

3.3 Stormwater Management and Subwatershed Planning

The AEGD is a unique area in that it is at the headwaters of a number of watercourses and the lands within the study area boundaries are under the jurisdictions of 3 different Conservation Authorities. The management of stormwater will play an important role in developing the ultimate servicing plan for the AEGD and must consider external effects outside the AEGD. The study is to provide detailed information regarding the existing watercourses and related ecosystems, requirements for management of stormwater and of natural areas, as well as storm drainage opportunities and constraints.

This project is to develop a comprehensive Subwatershed Study and Master Drainage Plan for the Airport Employment Growth District. The work will include:

3.3.1 Scope of Work – Phase 2

1. Coordination of the study with the concurrent land use, servicing and transportation studies
2. Continued documentation review.
3. Completion of required studies identified in Phase 1 related to:
 - stormwater management
 - natural areas inventories
 - soils and erosion studies
 - water quality monitoring (surface and groundwater)
 - flow monitoring and water budget analysis
 - designation of floodplain limits, watercourses to be protected, drainage features to be maintained
 - direct and indirect fish habitat
 - aquatic or terrestrial habitat.
4. Detailed analysis of the existing storm drainage infrastructure in the study area, including sewers, stormwater management facilities and roadside ditches. This task shall include a review of the storm drainage system to identify any areas that are at or above capacity based on existing land use, as well as any changes in storm flows that will result from any proposed land use changes. The majority of the study area is not currently serviced with storm sewers.
5. Continued consultation with the Conservation Authorities (Hamilton, Niagara, Grand River) to determine their requirements, regulations and restrictions for stormwater management and storm drainage in the Airport Employment Growth District.
6. A stormwater management assessment based on consultation with appropriate City and Conservation Authority staff regarding proposed land uses and redevelopment and infill opportunities and constraints identified in this study.

This assessment shall include the following:

- Descriptions of existing and ultimate development conditions (based on the proposed Land Use Plan) including land uses, drainage areas and percent impervious.
- Development of stormwater management strategies based on the Alternative Management Strategies developed as part of the Stormwater Master Plan.
- Descriptions of the existing watercourses and of each existing and proposed sewer outlet.

- Review of any relevant Source Water protection work currently underway.
- Summaries of the requirements for stormwater management outlined in municipal, provincial and federal guidelines
- Summaries of the requirements for stormwater management outlined in previous reports and studies and from consultation with the each of the relevant Conservation Authorities
- An investigation of the existing natural features, fisheries and aquatic habitat within the study area.
- Description of level of stormwater quality control required
- Description of existing and planned end-of-pipe facilities (type, capacity, surface area, location, ownership, etc.) and of existing and planned lot level or conveyance controls.
- Identification of preliminary locations for centralized stormwater management facilities.
- Identification of the potential and effectiveness of a suite of source, conveyance and end-of-pipe Best Management Practices to meet regulatory requirements, consistent with current conservation authority/municipal directives
- Preliminary stream enhancement plans showing features to be protected, features to be relocated and enhanced, and features to be incorporated into urban infrastructure
- Updated floodplain mapping for all drainage features consistent with conservation authority policies
- Delineate the limits of the conservation authorities' Regulations regarding interference with wetlands and drainage features
- A mitigation and compensation plan to address federal Fisheries Act requirements
- The final stormwater management plan needs to complement the Natural Heritage Strategy developed as part of the Land Use Plan
- Preliminary stormwater management facility designs, including cost estimates for land, construction, landscaping and maintenance.
- Identification of staging requirements for storm infrastructure, including lot level, conveyance and end-of-pipe works.
- Conduct a surface water study of all tributaries draining HIA lands over the course of 12 months including an assessment of:
 - Water quality at 8 sampling stations for a minimum of 8 sampling events;
 - Water quantity discharged from HIA lands; and,
 - A detailed water balance using local meteorological and hydrological monitoring data.
- Conduct a detailed hydrological study to ensure the hydraulic capacity of local conveyance infrastructure as well as receiving water hydraulic capacity and erosion prone zones. This study shall extend downstream of HIA lands to include areas where the creeks narrow to ensure that this additional water will not cause flooding or excess erosion/property damage to off-site properties.

- Conduct an assimilative capacity study of receiving water bodies to assess potential for discharge mixing zone(s) in which water quality is impaired below criteria in the Provincial Water Quality Objectives.
- Conduct a benthic invertebrate monitoring program in local receiving water bodies.

3.3.2 *Specific Key Study Output – Phase 2*

The key output from this stage will be a Subwatershed Study and Master Drainage Plan for the Airport Employment Growth District that:

1. Builds on the Scoping Document developed in Phase 1
2. Identifies and addresses any watershed or stormwater management issues related to the watercourses under the jurisdiction of the Niagara Peninsula Conservation Authority that impact the AEGD area or lands or watercourses downstream of the AEGD.
3. Identifies and addresses any watershed or stormwater management issues related to the watercourses under the jurisdiction of the Grand River Conservation Authority that impact the AEGD area or lands or watercourses downstream of the AEGD.
4. Identifies and addresses any watershed or stormwater management issues related to the watercourses under the jurisdiction of the Hamilton Conservation Authority that impact the AEGD area or lands or watercourses downstream of the AEGD.
5. An analysis of the alternative solutions for providing stormwater management facilities to this area. For each alternative, the analysis is to include a detailed description of the advantages and disadvantages of each option as well as an engineer's estimate to complete the required works.
6. Includes a Sub-Watershed Plan to the satisfaction of the affected Conservation Authorities including a complete inventory of all water and related resources (terrestrial and aquatic) to develop priorities and policies on which a comprehensive stormwater management plan may be based.
7. Selects the preferred method of providing stormwater management facilities to the Airport Employment Growth District based on the completed analysis and cost estimates and in consultation with appropriate City and Conservation Authority staff.

8. Fulfills Phases 1 and 2 of the Class Environmental Assessment Process for all relevant projects, including all documentation required to satisfy the requirements for Schedule B projects and identification of all Schedule C projects for which Phases 3 and 4 will need to be completed.
9. Includes an implementation and financing plan for the infrastructure.

The recommendations of the study shall also comply with the City of Hamilton Storm Drainage Policy and the findings of City-wide Stormwater Master Plan, as applicable. As such, the Consultant in charge of the Class EA will be provided with the relevant documents at the beginning of the study.

3.3.3 Stormwater Management and Subwatershed Planning Document Review

The following documents relate to this study:

- City-wide Stormwater Master Plan
- Growth Related Integrated Development Strategy (GRIDS)
- Official Plan – Regional Municipality of Hamilton-Wentworth, Town of Ancaster, Township of Glanbrook
- Official Plan – City of Hamilton
- City of Hamilton Storm Drainage Policy

City of Hamilton Criteria and Guidelines for Stormwater Infrastructure Design

- Vision 2020
- Places to Grow
- The Greenbelt Act
- Remedial Action Plans for Hamilton Harbour and the Welland River
- The Grand Strategy
- Twenty Mile Creek Watershed Study
- Niagara Water Quality Protection Strategy
- Spencer Creek Watershed Study
- “Hamilton Airport Servicing Study”, December 2001 revision, S. Llewellyn & Associates Limited
- “Master Stormwater Management Plan – Mount Hope Urban Settlement Area”, 1995 revision, Kenneth Youngs Engineering Inc.
- “Red Hill Creek Sanitary Interceptor Capacity Review”, April 1999, Planning & Engineering Initiatives Limited,
- “Hamilton International Airport Master Servicing Plan”, May 1999, Tradeport International Corporation
- “Highway 6 (New) Highway to Caledonia Bypass, Storm Drainage Study”, September 1995, McCormick Rankin
- Review Under the Environmental Assessment Act, Highway 6 (New) Highway to Caledonia Bypass), December 1990, Ministry of Transportation.

3.4 Water and Wastewater Servicing

Scope of Work – Water and Wastewater Servicing

This Project is to develop comprehensive Water and Wastewater Servicing Master Plan for the Airport Employment Growth District. The work will include:

3.4.1 – Scope of Work - Phase 2

The Scope of Work will include the following tasks:

1. Coordination of the study with the concurrent land use, transportation and stormwater management studies
2. Determination of expected water demand and wastewater generation from the Airport Employment Growth District. Ensure water services meet maximum day and maximum hour conditions as well as meet the fire flows for the proposed land use as specified in the Fire Underwriters Guidelines, 1999. This exercise should also coordinate water demand and wastewater generation from the Hamilton International Airport (Tradeport).
3. Iterative development of high level servicing requirements and impacts for various growth phasing alternatives to support selection of the preferred phasing program. This will include and not be limited to review of the existing infrastructure on Upper James as well as existing service areas in Ancaster west of Hwy 403.
4. Review of current status of the City of Hamilton's capital program and implementation plan. Identification of current timing of key infrastructure to support the AEGD servicing should be undertaken.
5. Develop and evaluate water and wastewater servicing alternatives under the Class EA process. Consideration to evaluation criteria including Triple Bottom Line should be undertaken. The servicing alternatives should cover external and internal infrastructure requirements.
6. Determination of external water and wastewater servicing requirements to support the development of the Airport Employment Growth District. Reference to the City's Water/Wastewater Master Plan, and determination of timing and phasing of new external infrastructure as well as opportunities to utilize existing infrastructure and impacts/upgrades to provide servicing are required. Note: the City developed hydraulic models of the trunk sewer system (in MOUSE) and water system (in WaterCAD). These will be made available to the consultant team for use on this assignment.
7. A plan for local servicing including sizing of local services, phasing, identification of triggers for upgrades, and cost implications.
8. Confirmation and identification of the proposed location for the new airport sewage pumping station as per the City's master plan and identification of opportunities for combining/decommissioning existing pumping sewage stations in the Mount Hope Area.

9. A review of the area serviced by the existing sewage pumping stations on Upper James including the English Church sewage pumping station and a review the opportunity to redirect the flow or decommission the facility.
10. Further refinement of the work completed in Phase 1 with respect to the existing overstrength agreement between the City of Hamilton and Hamilton International Airport (Tradeport), including identification of constraints and opportunities that the current agreement has on the proposed servicing for the Airport Employment Growth District (AEGD).
11. Complete and overall financial analysis of the preferred servicing solutions. This analysis should identify internal servicing costs and external/common servicing costs typically carried under the City's Development Charges. The financial analysis should provide an evaluation and comparison to the current capital program and provide high level comment on the impact to Development Charges.
12. Undertake City of Hamilton staff workshops to review the servicing strategies at key evaluation milestones throughout Phase 2.

3.4.2 Specific Key Study Outputs – Phase 2 -

1. Identification of servicing requirements, alignments, sites for key facilities, staging, priorities, time frames, costs and funding sources for any proposed or upgraded infrastructure
2. Identification of the timing or triggers for upgrades to existing or new infrastructure
3. Preparation of a Water/Wastewater Master Plan for the AEGD.
4. Fulfillment of Phases 1 and 2 of the Class Environmental Assessment Process for all new/upgraded infrastructure, including all documentation required to satisfy the requirements for Schedule B projects and identification of all Schedule C projects for which Phases 3 and 4 will need to be completed.
5. Preparation of an implementation plan which includes timing and a financing plan for the infrastructure.
6. **Provision to the City of all supporting calculations, modelling files, assumptions and data used to develop the servicing strategy such that it may utilized for implementation following this study.**

3.4.3 *Water and Wastewater Document Review*

Relevant documents are listed in Sections 3.1.3 and 3.3.3 of these Terms of Reference.

4.0 ADDITIONAL REQUIREMENTS COMMON TO ALL MASTER PLANS AND SECONDARY PLAN (PHASE 2)

4.1 Evaluate Land Use Options and Associated Infrastructure

The consultant shall systematically evaluate the advantages and disadvantages of each alternative solution, to determine net environmental impacts. Environmental conditions can be used to develop criteria for evaluating the options.

The tasks to be completed by the consultant team during the assessment and evaluation of the alternative solutions shall include but not be limited to the following:

- Develop evaluation criteria and analyze the key drivers for the development of the AEGD
- Develop Problem/Opportunity statements for the Master Servicing Plans
- Develop an environmental constraints map showing features that may determine the technical and environmental feasibility of an alternative solution (scale 1:10,000);
- Collection and analysis of the public's comments;
- Develop a list of primary and secondary criteria for consideration during the initial generation of and screening out of alternative solutions;
- Develop a list of evaluation factors for the alternative solutions;
- Assess the anticipated net environmental effects of each alternative solution;
- Undertake the assessment and evaluation of alternative solutions and document in a form suitable for public display and for inclusion in the project documentation;
- Review previous decisions for each alternative solution Schedule (i.e. Schedule A, B or C).

This process may require a number of iterations before the preferred option and is identified. Assessment and evaluation of alternative solutions may need to be repeated.

4.2 Identify Land Use Option and Supporting Infrastructure

- Prepare land use designation/development options based on an understanding of the existing environment and the need to solve specific issues or optimize opportunities.
- Prepare a physical description of areas where various alternative solutions are to be implemented.
- Complete an integrated urban design modeling and ecological design exercise in order to help on the evaluation of options.

- Complete a general inventory of the natural, social and economic environments to be considered when assessing and evaluating the alternative solutions in the study area.
- At this point, the consultant will be required to review the previously identified Schedule A alternative solutions; if any solution is likely to have significant environmental impacts then the City may conclude that the solution be designated as a Schedule B or C undertaking.
- Identify the impacts of natural, social and economic environments on each alternative identified.

4.3 Environmental Issues

The assessment of environmental effects considers all relevant aspects of the natural, social, economic and cultural environments, in accordance with standard practice. Information on the environment in the City of Hamilton is available from a variety of sources. The Consultants understanding of the project and the study area should be reflected in the work plan for the environmental work. The following studies shall be completed as mentioned in section 3.1.4 – Background Reports:

- Natural Heritage System (Terrestrial)
- Natural Heritage System (Aquatic)
- Agricultural Assessment
- Built/Cultural Heritage
- Archaeological Assessment.

5.0 PHASE 2 – NOTICE OF COMPLETION FOR CLASS EA AND NOTICE OF ADOPTION OF THE SECONDARY PLANS AS AN OPA AND ZONING BY-LAW REGULATIONS

A presentation to Committee of the Whole must be completed and endorsement from Council must be received prior to issue any notices of completion or adoption. An Official Plan Amendment (OPA) Notice of Adoption to meet the Planning Act and Notices of Completion to meet the Municipal Class EA requirements will be placed in the newspaper.

The Class EA process includes a minimum 30 day public review period during which the City will attempt to negotiate a resolution to any major concerns raised regarding the Class EA projects. If the issues remain unresolved, there is the opportunity to request the Minister of the Environment, by order, to require the City to comply with Part II of the Environmental Assessment Act before proceeding with the Schedule “B” projects. Schedule “A” projects and are not subject to Part II orders. Schedule “C” projects will proceed to Phases 3 and 4 of the Municipal Class EA.

6.0 FACILITATION

As noted, this RFP includes the requirement for an independent professional facilitator as a member of the consultant's team, to facilitate the question and answer period following presentations at Public Information Centres, as well as meetings with the Community Liaison Committee and the public. It is the facilitator's responsibility to draft meeting agendas (to be finalized based on discussions with the City's senior project managers), to distribute agendas, take minutes of CLC meetings, distribute draft copies and revise as required.

7.0 CONSULTATION

In addition to the requirements outlined in Section 4.0, the Consultant team will also be required to attend one-on-one meetings, stakeholder meetings, First Nations, Public Information Centres, as well as public meetings. There should be provision for approximately 30 such meetings.

Public consultation will, at a minimum, fulfill the requirements of the Planning Act and Municipal Class EA document. The City's process for this study will exceed the minimum requirements set out by either the Ministry of Municipal Affairs and Housing and the Ministry of the Environment.

Assist with the preparation of draft newspaper notices at:

- study commencement; and
- completion of the Master Plans and Secondary Plan.

The City will be responsible for publishing the notices in the newspaper and undertaking further distribution, as they see fit.

Public consultation shall be encouraged through several initiatives:

- Community Liaison Committee
- Public Information Centres/Public Meetings
- Design Charrette
- Stakeholder Meetings (including meetings with key agencies including the Conservation Authorities)
- First Nations Consultation
- City Web Site
- Community/Council Newsletters.

Consultation plans are to meet or exceed the requirements set out in both the Planning Act and the Municipal Class EA document, and includes First Nations consultation.

7.1 Community Liaison Committee (CLC):

The purpose of the CLC is to provide a forum for in-depth discussion of project issues with a representative group of interested stakeholders. The CLC will help to identify contentious issues and assess the possible reaction of the public.

Select members of the consultant team shall attend CLC meetings and prepare presentation materials. The CLC shall meet monthly (evening meetings) during Phase 2 of the process to provide input to the study team. The independent professional facilitator will facilitate the meetings.

7.2 Public Information Centres (PIC's) :

Public Information Centres are held to disseminate study information to the interested public using an informal process. They allow for one-on-one discussions between members of the Project Team and members of the public.

A minimum of two PIC's are envisioned for this project, however the number of PIC's required will be reviewed throughout the course of the study. PIC's will generally run from 6:30 p.m. to 9 p.m. with a presentation at 7 p.m. followed by questions and answers. The Consultant team will be responsible for preparing and assisting the City's Senior Project Managers in delivering a presentation at the PIC, as well as preparing draft display materials that the Consultant team, in consultation with the City's Senior Project Managers, deem appropriate. These materials must be prepared and delivered to the City's Senior Project Manager at least 10 Business Days prior to the PIC.

The City shall prepare notices for all PIC's and will be responsible for advertising in local newspapers, and distribution of notices to individuals and groups on the study mailing list.

7.2.1 Public Information Centre #2 (PIC #1 occurred in Phase 1)

The following information is to be presented at Public Information Centre #2:

- Details regarding study processes (Planning Act and Class EA requirements)
- Information collected to date, including identified opportunities and constraints
- Alternative solutions and evaluation criteria
- Problem/opportunity statements for the Master Servicing Plans
- Presentation of alternative solutions for infrastructure (transportation, water/wastewater, stormwater) and land use
- Evaluation criteria to be used in evaluating each alternative solution
- Opportunities for public input
- Next steps.

7.2.2 *Public Information Centre #3*

Public Information Centre #3 is to fulfill Phase 2 requirements for public consultation under the Municipal Class EA. The following information is to be presented at Public Information Centre #3:

- Details regarding study processes (Planning Act and Class EA requirements)
- Problem/opportunity statements
- Information collected to date, including identified opportunities and constraints
- Presentation of the alternative solutions for infrastructure (transportation, water/wastewater, stormwater) and land use
- Presentation of the evaluation (including evaluation criteria) of alternative solutions for infrastructure (transportation, water/wastewater, stormwater) and land use
- Presentation of the preferred alternatives for infrastructure (transportation, water/wastewater, stormwater)
- Presentation of the preferred Secondary Plan and Zoning By-law regulations
- Presentation of the Class EA schedule (A, B, or C) for the preferred infrastructure
- Identification of any projects for which further study is required (i.e. Phases 3 and 4 of the Class EA)
- Presentation of the Industrial Park Design Guidelines, and the Financing and Phasing Plan
- Opportunities for public input
- Next steps.

7.3 **Special Committee of the Whole Meetings:**

Presentations will be made by a City representative(s) of this project at special Committee of the Whole meetings to provide an update during the Secondary Planning and Master Plan process, at major decision points and at the completion of the process. Endorsement of the Secondary Plan will be required prior to filing the plan for the 30-day appeal period.

7.4. **Design Charrette**

The consulting team will conduct a design charrette with key stakeholders, including landowners, community representatives, interest groups, Hamilton Airport representatives, City staff and agencies with interest on the AEGD development. The design charrette's main objectives will be to create a vision for the AEGD, to explore design and development principles and to identify the preferred growth option.

7.5 Meetings with Key Stakeholders

The consulting team will attend one-on-one meetings with key stakeholders, including landowners, neighbouring resident/community groups, Hamilton Airport representatives, Conservation Authorities, agencies with interest on the AEGD. The purpose of the meetings will be to gather feedback from the different stakeholder groups and to include their input in the development of the Secondary Plan and Master Plans recommendations.

7.6 First Nations Consultation

The study area does not appear to fall within the boundaries of any current First Nations land claim. It does fall, however, within the bounds of the 1701 Nanfan Treaty, which demarcated hunting territory of the Five Nations. By virtue of the Nanfan Treaty (1701), Six Nations should be consulted regarding any Constitutional rights they may have within the subject area and should be consulted on that basis. The consulting team will collaborate with the relevant First Nation(s) about any impacts that the project may pose. This will include:

- Provide comments on a notification letter (i.e., ensure appropriate introduction to project, map of area, introduce the First Nation dialogue process for the project, advise that we will be making contact in order to solicit comments and input concerning potential First Nations concerns with regard to the project);
- Follow-up on the notification and meet with the appropriate representative of each First Nation group in order to solicit their comments and input;
- Document and confirm all responses in writing through a follow-up note to the First Nations groups;
- Distribute the summary document prepared on Phase 1 to each of the First Nation groups involved in the consultation process;
- Follow-up and meet with each First Nation to obtain feedback with respect to the mitigation strategies outlined for any identified archaeological resources identified in Stage 1; and,
- Document and confirm all responses in writing through a follow-up note to the First Nations groups.

7.7 City Web Site

A Project web site will be developed and maintained by City staff. The consultant team will provide input to the web site as required. This input shall include background information, presentation materials from PICs and draft/final reports. Adobe Acrobat (.PDF) format will be used for posting on the web site. PDF files for posting on the City's website shall be 1 MB or smaller in size. The consultant will assist with the preparation of the "frequently asked questions" page and shall respond to messages sent to the Project Team.

7.8 Project Newsletter

A Project Newsletter will be prepared at key points and distributed to individuals and groups on the Study Mailing List. The newsletter is to summarize the project status, as well as all items listed as items to be presented at each PIC. The consultant team will be required to provide information in order to produce this mailing.

8.0 MASTER PLAN AND SECONDARY PLANNING COORDINATION

The City is completing the public consultation portion of the Class EA in a coordinated fashion with the Secondary Planning Process. In order to coordinate the works with the various City departments, the consultant team and their leads for the various disciplines will be expected to prepare for and attend 8 coordination meetings.

9.0 FINAL REPORT RECOMMENDATIONS/IMPLEMENTATION PLAN

The final reports must receive Council endorsement prior to being placed in public record for a minimum 30-day review period. The Secondary Plan component is subject to the Planning Act and therefore may be appealed to the Ontario Municipal Board.

9.1 Reporting Requirements

The Consultant team shall prepare presentations/agendas/minutes for review, approval and distribution by the City's Senior Project Managers for the duration of this Project.

An outline will be prepared and discussed with the Technical Steering Committee in advance of the preparation of the draft master plan. Interim deliverables such as technical memos, and presentations/agendas/minutes for all meetings, as appropriate, shall be incorporated into the document. All reports/studies shall have an executive summary intended for a general audience.

The draft and final reports will be submitted in hard copy and electronic formats (MS Word and PDF for posting on the web). Forty five (45) bound copies of the draft report and fifty (50) copies of the final report will be submitted to the City following approval. An unbound original of both the draft and final reports must also be submitted. Include digital copies of all models.

9.2 Study Schedule

The consultant team shall allow a minimum of 3 weeks for the review of draft documents and 4 weeks for the review and acceptance of final documents.

Milestone	Date
Award of Contract – Phase 2	October 2008
Second Public Information Centre	January 2009
Submission of Draft Phase 2 Reports	September 2009
Submission of Final Phase 2 Reports	October 2009
Project Completion (Phases 1 and 2)	October 2009

9.3 Software Requirements

The consultant team shall utilize WaterCAD for analysis of the water distribution network and MOUSE for analysis of the wastewater and stormwater collection system. Any other software packages the consultant team intends to utilize during this assignment must be specified in their Proposal. The consultant Team must own the appropriate software licenses for the programs. The City of Hamilton will supply its existing modeling data files. Any changes that the consultant team makes to the modeling data files during this assignment must be documented, including the reasons for the changes.

The City's standard CAD program is Bentley Microstation, Version "J". Mapping must be compatible with this system and incorporated into the City's GIS. The standard GIS are Intergraph Geomedia and Geomedia Pro.

The City's other principal software is Microsoft Office, including MS Project, Excel, Access, Word and Outlook. Written reports must be in Microsoft Word format as well as Adobe Acrobat (.pdf) format. The project schedule must be produced in MS Project 2000 format.

Please note: Synchro version 7.0 shall be used for intersection analysis.

10.0 STUDY ADMINISTRATION

The study will be administered jointly with Planning and Economic Development Department staff and Public Works Department staff. Other City staff will participate on the Technical Steering Committee, as required.

The consultant team will allow for regular meetings with the City's Senior Project Managers and the Technical Steering Committee at City offices. The consultant team will be responsible for preparing the agendas and minutes and any other materials required for these meetings.

As previously noted, the consultant team shall prepare biweekly status reports without fees for the City's Senior Project Manager, as well as monthly status reports including expenditures, to be included with monthly invoices.

APPENDIX A

Work Plan

APPENDIX A

Sample Person-Hours Matrix without Fees

	Jane Company/Role	Tom Company/Role	Dick Company/Role	Harry Company/Role	Drafting	Total
Task 1	10	2	5	3	10	17
Task 2	15	4	6	6	15	25
Task 3	20	6	9	9	2	35
Task 4	25	8	7	5	3	40
Task 5	30	10	15	4	4	55
Task 6	35	12	2	7	8	49
Totals	135	42	44	34	42	221

APPENDIX B

Study Area Map

APPENDIX C

Executive Summaries

APPENDIX C

Airport Employment Growth District Phase 1 – Land Use Report – June 2008

Executive Summary

The City of Hamilton and the Province of Ontario recognize the importance of the John C. Munro Hamilton International Airport (HIA) as an important economic driving force for the City of Hamilton. The Hamilton Airport Employment Growth District (AEGD) falls within a Special Policy Area identified in the Amendments to the Regional Municipality of Hamilton-Wentworth, Town of Ancaster and Township of Glanbrook Official Plans. Those amendments identified that further studies are required related to land use and infrastructure.

This report represents the summation of Phase 1 of the Hamilton Airport Employment Growth District Secondary Plan, Land Use Report. The key findings of this Report are summarized below.

Key Findings Table	
Discipline	Key Findings and Recommendations
Natural Heritage System - Terrestrial	<ul style="list-style-type: none"> • The Study Area Contains a Significant Terrestrial Natural Heritage System to be Protected and Enhanced: <ul style="list-style-type: none"> ○ 434 ha (1072 acres) of Significant Natural Heritage Core Area both within and outside the Greenbelt Natural Heritage System. ○ The Greenbelt Natural Heritage System extends in a north/south finger beyond the Core Areas. ○ In all areas of the Greenbelt Natural Heritage System, significant policy restrictions are in place both in the Greenbelt Plan and the Rural OP including requirements for an EIS for adjacent land. ○ Approximately 6.5% forest cover in the study area. ○ 20 patches that are at least 4 ha with the largest being 27 ha. The majority of these will be protected as part of the Core Areas. ○ Consideration should be given to identifying, preserving and enhancing wildlife linkages as well as final confirmation of the core natural heritage features in the study area. • Significant Natural Heritage System can Provide a Parkway Setting
Natural Heritage System - Aquatic	<ul style="list-style-type: none"> • The Area Contains Some Sensitive Aquatic Features: <ul style="list-style-type: none"> ○ The study area is part of the headwaters of four watersheds. ○ The drainage features appear to be intermittent. However, there are several features that may provide seasonal fish habitat.

Key Findings Table

Discipline	Key Findings and Recommendations
	<ul style="list-style-type: none"> ○ A range of warmwater fish species are likely typically present. ○ At this time, only cool and warm water streams have been identified as aquatic constraints that are likely to preclude development. ○ Other features may be allowed to be altered in terms of their location, although they still may be maintained as natural features. ● All Drainage Features are Sensitive to Water Quality and Sediment Impacts <ul style="list-style-type: none"> ○ Enhanced or level 1 stormwater treatment from a water quality/fish habitat perspective is required for all tributaries. ○ Both the Welland and Twenty Mile Creeks in the study area and immediately downstream are nutrient rich, moderately contaminated by bacteria and have elevated chloride levels. ○ Airport and agricultural operations contribute to the elevated levels.
Agricultural Resources	<ul style="list-style-type: none"> ● Synergies could be created between Agricultural activities and Industries within the AEGD: <ul style="list-style-type: none"> ○ Rural Hamilton OP designations: “Agriculture” (west and southwest of Hwy 6) and “Rural” (east of Hwy 6 around the airport). ○ The predominant type of agricultural usage is “Miscellaneous Specialty” ○ The most common farm combination is a farm operation with a residence and farm outbuildings. ○ More analysis is required to determine which lands should be removed from agricultural production and which should be left for the long term. ○ Agricultural uses could be compatible with the AEGD; the local farms could provide food supplies for Airport operations and for Hotel/Food/Beverage businesses.
Built/Cultural Heritage Resources	<ul style="list-style-type: none"> ● The AEGD Study Area is Rich in Cultural Heritage: <ul style="list-style-type: none"> ○ The study area is rich in buildings, structures and cultural heritage landscapes of varying degrees of heritage interest and value. ○ Further historical research and on-site observation is needed in order to undertake an evaluation of the heritage merit of those built heritage resources and cultural heritage landscaped that are not already included in Hamilton’s Heritage Volumes.
Stage 1 Archaeological Assessment	<ul style="list-style-type: none"> ● There is Potential for Archaeological Sites Over Much of the Study Area: <ul style="list-style-type: none"> ○ 104 sites have been registered within the study area or fifty metres of its boundaries. ○ Stage 2 archaeological assessment should be conducted in advance of any development in order to identify and mitigate archaeological resources. ○ If needed, further assessment should also be conducted prior to impact on any previously registered archaeological sites.
Market Potential for Employment Lands	<ul style="list-style-type: none"> ● Hamilton has Significant Regional and Local Growth Potential: <ul style="list-style-type: none"> ○ The GGH is one of the fastest growing City/Region’s in North America. ○ Hamilton is strategically located in the west GTA. ○ Access to major 400 series highways, proximity to major regional transportation infrastructure, access to the U.S border, access to major post secondary education facilities.

Key Findings Table

Discipline	Key Findings and Recommendations
	<ul style="list-style-type: none"> ○ Hamilton's share of future GGH population and employment growth is anticipated to increase significantly in comparison to historical trends. ○ Future population and employment growth rates for many areas of the GGH are anticipated to continue experiencing high growth levels over the long-term. ● AEGD is Needed to Provide Employment Growth and Employment Lands: <ul style="list-style-type: none"> ○ Employment lands requirement, beyond the currently designated supply, of 907 net Ha (2,241 net acres) by 2031 have been identified for future expansion areas within the City of Hamilton. ○ City's existing designated employment lands are expected to approach build out during the post 2018 period. ○ The following key employment growth sectors have been identified: <ul style="list-style-type: none"> ▪ Advanced Manufacturing; ▪ Wholesale Trade; ▪ Transportation and Warehousing; ▪ Professional, Scientific and Technical Services; and ▪ Accommodation and Food Services. ○ The AEGD is anticipated to be largely built out by 2031.
Employment Land Policy Review	<ul style="list-style-type: none"> ● The Study Area Lands Represent a Feasible Area for Employment Uses ● Business Park Uses Largely Compatible with Existing and Planned Uses: <ul style="list-style-type: none"> ○ The airport lands, new Highway 6, Highway 403 and the existing Airport Business Park provided key infrastructure and strategic land uses upon which to develop a larger business park and create land use options. ○ The large pocket of rural designated lands to the east north of the new Highway 6 also provides an opportunity to concentrate employment lands in that location as one option. ● Constraints that need to be considered: <ul style="list-style-type: none"> ○ Existing pockets of residential particularly to the north and west of the airport ○ The Greenbelt Plan finger along Highway 6 ○ The urban residential lands bordering the study area lands to the north, north-east and south-east. Appropriate transitional land uses or buffering may need to be considered.
Locational Attributes and Market Trends	<ul style="list-style-type: none"> ● Hamilton Has Competitive Regional Location Attributes: <ul style="list-style-type: none"> ○ Hamilton scores relatively high with respect to regional location attributes (i.e. highway access/exposure, proximity to major regional transportation infrastructure, etc.) ○ Of the eight industrial business parks surveyed within the surrounding market area, the AEGD ranked third, tied with the Town of Milton and the Town of Caledon. ● Hamilton Faces Some Challenges with Respect to Regional/Local Economic Indicators: <ul style="list-style-type: none"> ○ The AEGD scored relatively well with respect to industrial land prices, existing live/work ratios, industrial development charges and average

Key Findings Table	
Discipline	Key Findings and Recommendations
	<p>housing prices.</p> <ul style="list-style-type: none"> ○ AEGD scored relatively low with respect to comparative population and employment growth rates, existing employment activity rate, current industrial tax rates, and average household income. ○ Hamilton ranked sixth out of the seven municipalities. ● Hamilton is Well Positioned to Capture a Significant Share of Long Term Regional Economic Growth: <ul style="list-style-type: none"> ○ Overall, Hamilton appears to be well positioned to capture a significant share of the long-term regional economic growth potential identified for the GGH. ○ One of the most important considerations, relates to ensuring that an ample supply of suitable vacant serviced (and serviceable) employment land is available for purchase and absorption.
Eco-industrial Park Best Practices and Standards.	<ul style="list-style-type: none"> ● There Are Opportunities to Explore Eco-Industrial Innovations: <ul style="list-style-type: none"> ○ Eco-industrial principles being applied in practice in Canada and the USA. ○ Eco-industrial innovation is more often advanced through design guidelines than zoning bylaws. ○ Customization: There are few standards that are common to all eco-industrial projects. ○ It is generally the guidelines that set the stage for eco-industrial activity. ○ Customized design guidelines are required to ensure the requisite higher standards of design, development and performance. ○ Many options for implementation: Most guidelines provide a mix of both required and optional guidelines. ○ Creating eco-industrial guidelines require addressing the particular limits and complexities of the land use planning regime. ○ Eco-industrial activity requires the concerted implementation of a suite of tools.

Regarding First Nations Heritage and Treaty Rights review, the key findings and recommendations are as follows:

- Complex Aboriginal history in Southern Ontario.
- Constitutional duty to consult with the relevant First Nation(s) about any impacts that the project may pose.
- Preliminary identification of those First Nations that may have an interest in the study area.
- The study area does not appear to fall within the boundaries of any current First Nations land claim. It does fall, however, within the bounds of the 1701 Nanfan Treaty, which demarcated hunting territory of the Five Nations.

- By virtue of the Nanfan Treaty (1701), Six Nations should be consulted regarding any Constitutional rights they may have within the subject area and should be consulted on that basis.
- Should any First Nations archaeological resource be identified in the course of future, more extensive archaeological assessment of the study area, meaningful consultation with those First Nations groups who have an active interest in these resources and their treatment should be conducted during subsequent phases of the project.

Overall, based on the Land Uses analysis, it was concluded that development of the AEGD is feasible and justified and there is flexibility to achieve employment objectives while protecting natural and cultural heritage resources with the available land base for the AEGD. After the constraints have been deducted, over 1,200 Ha of Net Developable Area is available within the Hamilton AEGD.

**Airport Employment Growth District
Phase 1 – Infrastructure Report – June 2008**

Executive Summary

The John C. Munro Hamilton International Airport (HIA) and the Airport Employment Growth District (AEGD) are important economic driving forces for the City of Hamilton. Phase 1 of the AEGD Infrastructure Report was undertaken to provide a comprehensive understanding of opportunities and constraints that will affect the overall developable area and servicing of the study area. This initial Phase 1 work also identifies issues of importance for Phase 2 of the Study.

The Infrastructure Report is composed of Transportation, Water/Wastewater and Stormwater Master Plans Phase 1 reports. This report was produced in coordination with the Land Use Report, prepared for the planning component of the project.

The key findings of this Report are summarized below.

Key Findings Table	
Discipline	Key Findings and Recommendations
Transportation	<ul style="list-style-type: none"> • Multi-modal transportation considerations will need to be assessed in Phase 2, specifically the connections to the AEGD from railway (CN/CP) and CP intermodal as well as to the port activities to take advantage of its multi-modal facilities • Travel Demand Management opportunities within the AEGD (i.e. employee shuttle services, integrated parking facilities, transit terminal) need to be examined • Higher order and local transit service needs to be a focus • Cycling, trails and pedestrian facility enhancements are important features • The potential need for increased capacity on major arterials/highways to the AEGD including upgrades/modifications to both the internal AEGD and external road network needs further study • Network connectivity to the Lincoln Alexander Parkway (LINC) and Red Hill Valley Parkway (RHVP) to provide alternative access to the MTO highway network is a constraint • Network connectivity to the North Glanbrook Industrial Business Park is also a constraint • Potential future linkages to and implications due to the Niagara to GTA corridor being planned by MTO must be considered.

Key Findings Table	
Discipline	Key Findings and Recommendations
Stormwater	<ul style="list-style-type: none"> • AEGD contains the headwaters of four streams (Welland River, Twenty Mile Creek, Big Creek, Sulphur Creek) which are under the jurisdiction of three different Conservation Authorities (Niagara Peninsula, Grand River and Hamilton) • Majority of headwater drainage features are intermittent, a number of them are considered cold, cool or warmwater fisheries. • Most drainage features currently exhibit moderate water quality with elevated levels of nutrients, bacteria and suspended sediments • Stormwater management facilities will need to provide an enhanced level of treatment to protect water quality and fish habitat • Stream protection and enhancement measures will be needed to protect fish habitat as development proceeds • Due to the relatively flat topography in the study area, storm water management will need to focus on at-source, on-site controls.
Water	<ul style="list-style-type: none"> • Continue to provide water supply from the Woodward Ave. Water Treatment Plant • Augment the pumping and feedermain capacity for supply up the escarpment • Provide new feedermain and distribution network for the AEGD • Provide additional storage for the AEGD • The type of land use can create a significant range in water demand.
Wastewater	<ul style="list-style-type: none"> • Focus additional wastewater treatment capacity at the Woodward Ave. Wastewater Treatment Plant • Provide collection system and plant upgrades to address wet weather flow capacity constraints and meet F-5-5 and Hamilton Harbour Remedial Action Plan targets • Provide new trunk sewer infrastructure on Centennial Parkway to support servicing the mountain growth areas • Convey flows from the Airport Employment Growth District easterly to the Centennial trunk sewer • The type of land use can create a significant range in wastewater flows • Wastewater flows from the airport are a key consideration.

Overall, based on the Infrastructure analysis, it was concluded that servicing of the AEGD is feasible and practical.