Appendix F

Factors for further study of potential expansion lands

The subsections below provide a preliminary list of factors for further study prior consideration of lands for inclusion into the urban boundary. Prior to undertaking study it will be necessary for the City to approve a terms of reference. This appendix should be read in conjunction the Growth Management Strategy Reports I and II and with the information presented in Documents 2 and 3 of this report which should be considered supplementary.

All studies would need to be prepared to the satisfaction of the City by a qualified person, consistent with applicable Provincial and City guidelines and professional standards.

Financial:

Central to the inclusion of new lands is the provision of infrastructure to service future development and the ability of the City and developers to fund this infrastructure. Therefore, further analysis of lands for urban expansion will require the preparation of a funding strategy or methodology. The underlying purpose of this strategy is to identify the method to be used to recover the infrastructure costs such as those defined as local or internal services (developer funded costs) versus area-specific and/or city-wide development charges versus tax/user rates. Additional information must be provided to identify the location and timing of various capital projects, together with the purpose and primary beneficiaries, both internal and external to the development. The strategy should outline financing policies and potential agreements for cost sharing such as front-ending and crediting agreements.

The funding methodology or strategy should address the following financial elements:

- provide overall funding strategy recommendations for consideration;
- population and employment forecast associated with this development;
- external capital infrastructure funding requirements;
- capital financing alternatives;
- potential impact on existing taxpayers over the planning horizon;
- the proposed timing of infrastructure projects,

Infrastructure and Environment:

In order to facilitate Staff's future evaluation of lands the following (minimum) information is necessary to assist Staff in their future recommendations to Council:

1) Existing Conditions Report

- Environmental constraints
- Natural hazard areas
- Geotechnical conditions
- Existing development / property in Special Study Area not in control of applicant
- Capacity of existing and planned water, wastewater, and stormwater systems to be relied upon by development of Special Study Area
- Capacity of existing and planned road and transit networks to be relied upon by development of Special Study Area

2) Conceptual Development Plan

- Identify development limits of short-term (to 2046) and long-term development
- Identify conceptual development plan for short term development area including a schedule summarizing areas and unit counts
- Prepare development phasing plans for short-term and long-term development

3) Preliminary Transportation Plan

- Identify conceptual road network
- Identify short-term and long-term transit network

4) Conceptual Servicing and Grading Plans

- Prepare conceptual grading plan and verify consistency with geotechnical conditions
- Prepare conceptual water, wastewater, and stormwater plans required for short-term and long-term development
- Document additional operational requirements anticipated during early development phases

5) Financial Plan

- Prepare Class D cost estimates for road and transit networks
- Prepare Class D cost estimates for major facilities, and off-site water and wastewater services, and off-site improvements to stormwater outlets
- Prepare estimate of duration and cost of additional annual operating requirements and funding source
- Identify the assumed source of funding of capital infrastructure requirements to support short-term and long-term development

Mobility and Transportation

Completion of a comprehensive transportation study to the satisfaction of the City that will address such steps and elements as:

Forecasting

- Establish the modal share targets for the development as per OP and TMP policy and targets.
- Forecast the multimodal travel generated by the development in accordance with accepted forecasting methodologies including use of the most recent TRANS trip generation manual.
- Develop transit and traffic forecasts for the study horizon year. The study area shall
 include the development area as well as all downstream corridors, infrastructure and
 community areas that will be impacted by development trips and traffic as identified in
 consultation with City Staff.

Network Impacts

- Asses the impact of development trips on the performance of the transportation network both within the development and within adjacent communities, including any downstream transit or road capacity deficiencies triggered or made worse by the new development.
- Identify any network modifications or other measures required to mitigate impacts on network performance (including improvements to the road, transit, and active transportation networks, as well as transit and TDM measures to encourage the shift to sustainable modes).
- Set out an implementation timeframe for each proposed modification or measure corresponding to the anticipated phasing of development.

Network Design and Community Planning Coordination

- Identify land use and mobility objectives for the community.
- Identify the network of arterial and collector streets, transit, and active transportation facilities within the community and its connections to the larger network beyond, in accordance with City policies, guidelines, and standards.
- Demonstrate how the development will achieve such Council policies and objectives as VKT reduction, GHG reduction, inclusiveness, complete streets, equity, accessibility, safety, and integration of 15-Minute Neighborhoods.

Timing & Costs

- Establish growth management criteria and gating policies for the development, including thresholds and timing for each phase with the understanding that each phase will require a separate Transportation Impact Assessment.
- Identify capital and operation costs including those items that may be eligible for funding through Development Charges (DC) and other funding mechanisms.
- Plans of subdivision shall not be approved until the required measures identified in the transportation study are in place or funding has been secured for their implementation through a Council-approved mechanism.

Natural Environment:

Consideration of a new community will require an integrated environmental assessment of the potential impacts on the natural heritage system and natural environment beyond the normal scope of an Environmental Impact Study or an Environmental Management Plan. The environmental assessment should be based on the same community concept and assumptions as the financial, infrastructure, and mobility assessments. The environmental assessment must:

- Identify a study area, including any necessary transportation and infrastructure corridors;
- Include a concept plan and project description, identifying the full anticipated build-out;
- Identify potential environmental effect pathways;
- Identify strategies and measures to eliminate and reduce negative environmental impacts using the Mitigation Hierarchy: avoidance > mitigation > compensation;
- Identify probable residual effects on the natural heritage system and natural environment;
- Identify potential environmental hazards and risks to public health.

The scope of the environmental assessment will be determined through the environment effect pathway analysis. It must include, but is not necessarily limited to:

- Impacts on the natural heritage system of core natural areas and natural linkages identified in (draft) Official Plan Schedule C9;
- Impacts on natural heritage features as defined in Section 4.8.1 (3) of the (draft) Official Plan;
- Gross and net impacts on wetland and forest cover, based upon realistic design and environmental assumptions;

- Identification and a preliminary assessment of impacts to watercourses, headwater features, and aquatic habitats, based upon realistic design and environmental assumptions;
- A preliminary assessment of direct and cumulative impacts on affected watersheds/subwatersheds, especially with respect to increased risks of downstream flooding, downstream changes to geomorphology, and quality of aquatic habitat;
- A preliminary assessment of groundwater impacts and an assessment of the project against any applicable Source Water Protection Plan.
- An assessment of direct and cumulative impacts on species at risk (species of special concern, threatened, and endangered species) at local and regional scales;
- As assessment of potential wildland fire risk and recommended mitigation measures;
- An assessment of potential exposure to animal disease vectors and the environmental impacts of potential mitigation measures (e.g. community pressure for nuisance mosquito or tick control).