TO: **COMMUNITY SERVICES COMMITTEE**

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DATE:

NOVEMBER 20, 2012

SUBJECT:

SUSTAINABLE DEVELOPMENT STRATEGY WORK PROGRAM

RECOMMENDED MOTION

- 1. That the following five principles of sustainable development, as defined in Appendix "A" of the Environmental Advisory Committee Report dated December 7, 2011, be incorporated into the Sustainable Development Strategy in accordance with the review and assessment outlined in the staff report with subject title 'Sustainable Development Strategy Work Program', received by Community Services Committee on November 20, 2012:
 - i) Sustainable Building Practices.
 - ii) Low Impact Development (LID) Practices for Stormwater and Land Development.
 - iii) Removal of Any Municipal Administrative/Regulatory Barriers to the Implementation of Sustainable Development Practices.
 - iv) Adaptation and Mitigation Strategies to Address the Impacts of Climate Change.
 - V) Monitoring and Maintenance Strategies to Evaluate the Performance of Sustainable Development Initiatives in Barrie.
- 2. That the recommendation by the Environmental Advisory Committee to require LEED Certification for all projects not be made mandatory.
- 3. That Community Services Committee endorse the proposed work program for the Sustainable Development Strategy outlined in this staff report.

PURPOSE & BACKGROUND

Report Overview

4. This report responds to Council Motion 12-G-018 directing staff to investigate the implementation of sustainable development principles, providing a brief outline for a forthcoming Sustainable Development Strategy to be investigated and prepared by Planning Services staff.

Council Direction

5. On February 13, 2012, Council adopted motion 12-G-018, directing the following:

"That the following recommendation from the Environmental Advisory Committee concerning Integrated Stormwater Management and Landscape Architecture Practises for Sustainable Developments be referred to staff in the Infrastructure, Development and Culture Division for review and a report back to the Community Services Committee:

'That the following six principles of sustainable development, as defined in Appendix "A" to the Environmental Advisory Committee Report dated December 7, 2011, which shall be applied to all development and redevelopment within the City of Barrie, be adopted:

- Sustainable Building Practices.
- 2. LEED Certification for All Projects.
- 3. Low Impact Development (LID) Practices for Stormwater and Land Development.
- 4. Removal of Any Municipal Administrative/Regulatory Barriers to the Implementation of Sustainable Development Practices.
- 5. Adaptation and Mitigation Strategies to Address the Impacts of Climate Change.
- 6. Monitoring and Maintenance Strategies to Evaluate the Performance of Sustainable Development Initiatives in Barrie'. (File: E00) (File: C05)"

Background

6. Planning Services staff have taken carriage of preparing a response to Council Motion 12-G-018 on behalf of the Infrastructure, Development and Culture Division through the development of the Sustainable Development Strategy. It is the intent of the Planning Services Department to consult and collaborate with other departments and divisions during the preparation and implementation of the Sustainable Development Strategy. Based upon the internal discussions which have occurred to date, municipal departments are already in the process of undertaking a variety of projects and policies that will fall within the City's Sustainable Development Strategy.

ANALYSIS

- 7. Staff have conducted a preliminary review of the six principles described in the Environmental Advisory Committee Report and offer the following comments and analysis:
 - a) Sustainable Building Practices

Sustainable building practices, sometimes also called 'green building' or 'green development' standards, are an initiative that many municipalities across Ontario are researching and implementing in order to encourage the incorporation of more sustainable components into new urban development.

Sustainable building practices include standards and techniques intended to achieve a variety of methods for improving sustainability, including increasing energy efficiency, the reduction of water usage, making use of recycled building materials where feasible, the installation of green roofs, the use of renewable energy components such as solar panels, and other such examples. A well known standard of sustainable building practices includes the LEED Guidelines, Energy Star, Green Globes, and Living Buildings.

Planning Services staff agree with the concept of developing a set of standards for sustainable building practices, and note that the development of such a set of standards will require collaboration with the Building Services and Engineering Departments.

A review of Sustainable Building Practises will be considered as part of the preparation of the Sustainable Development Strategy. This will in part include a review of the City of Barrie's Urban Design Guidelines to encourage and promote sustainable building and site design.

b) LEED Certification for All Projects

LEED (Leadership in Energy and Environmental Design) consists of a ranking system attributed to the level of performance a building or neighbourhood is able to achieve in terms of being energy efficient, environmentally sensitive, and featuring an overall higher degree of sustainability. Examples of proposed or existing LEED buildings within the City of Barrie include the Barrie Fire and Emergency Services Station No. 1, the Mountain Equipment Co-Op building, the planned IBM Canada Research and Development Centre, and the Collier Centre currently under construction.

Although staff highly encourage the development of LEED certified buildings, at this time it is not recommended that LEED certification be made compulsory for all new development projects within Barrie. Staff note that LEED is not enforceable under the Ontario Building Code or Planning Act, thus providing the municipality with no legislative authority to require its use.

The promotion of LEED certified buildings or equivalent will be explored as part of the Sustainable Development Strategy. The creation of a set of new sustainable urban design standards may include elements of LEED building and neighbourhood principles.

c) Low Impact Development (LID) Practices for Stormwater and Land Development

Low Impact Development (LID) refers to engineering and landscape design practices that make use of onsite natural environmental features to manage stormwater runoff, resulting in reduced negative impact on the health of natural watersheds and thus improved water quality, and is more accommodating to the hydrological changes resulting from climate change.

Currently, any development adjacent to a Lake Simcoe watershed area must be circulated to the Lake Simcoe Regional Conservation Authority (LSRCA), which must demonstrate attempts to incorporate LID for stormwater management practices. However, LID is not applicable solely to lands within the Lake Simcoe watershed, and can be utilized as an alternative to conventional stormwater management practices throughout the City.

Planning Services staff will rely upon any refinement to current LID practices in the City of Barrie to the Engineering Department, and will assist in implementing any necessary changes to the land development process from the planning standpoint in order to implement potential improvements.

d) Removal of Any Municipal Administrative/Regulatory Barriers to the Implementation of Sustainable Development Practices

Staff are committed to the continued improvement of sustainable development practices in the City of Barrie, evident in a number of already established and forthcoming projects and initiatives. Policies encouraging compact development, the efficient use of land, the reduction of energy use, and intensification can be found in Barrie's Official Plan, and additional policies further encouraging sustainable development will be recommended

through an upcoming Official Plan Amendment. Staff note that these ongoing and future initiatives will each form components as part of the Sustainable Development Strategy, and the Strategy will serve to link these initiatives together through a holistic and comprehensive approach.

A number of forthcoming projects will further expand the realm of sustainable development initiatives within the City, such as the Natural Heritage Strategy, the Affordable Housing Strategy, Urban Design Guidelines for the Intensification Areas, and Crime Prevention through Environmental Design Guidelines. In addition to these projects, staff will also examine current standards and practice to ensure there are no unnecessary barriers for the implementation of sustainable development. Staff also recognizes that further examples also exist among other City of Barrie departments, including the Source Water Protection Plan, the Active Transportation Master Plan, the Integrated Energy Mapping Strategy, and the Feed-In-Tariff Program.

The culmination of the projects and initiatives described above each work together, ensuring that administrative and regulatory barriers to the implementation of sustainable development practices continue to be assessed and removed.

e) Adaptation and Mitigation Strategies to Address the Impacts of Climate Change

With a growing concern for the effects of climate change on urban areas, many municipal governments have begun the implementation of adaptive and mitigative strategies to address potential negative impacts. Examples of strategies for addressing climate change range from adopting energy efficient building strategies, encouraging less automobile dependence and more public transit usage, promoting the use of alternative or renewable energy sources, and fostering higher density mixed-use neighbourhoods.

A review of adaptation and mitigation strategies to address climate change, some of which have occurred or are in the process of being developed, will be considered as part of the proposed Sustainable Development Strategy.

f) Monitoring and Maintenance Strategies to Evaluate the Performance of Sustainable Development Initiatives in Barrie

Staff recognize the importance of monitoring and evaluating the performance of programs and strategies intended to achieve sustainable development. The Sustainable Development Strategy will explore methods intended to review the progress and evaluate the performance of sustainable development initiatives in the years following the implementation of the proposed recommendations.

Monitoring strategies will focus on performance based outcomes. Examples of potential indicators may include:

- Progress indicators in adapting sustainable development policies or initiatives
- Increases in density within intensification areas
- Reduction of the City's overall greenhouse gas emissions
- Increases in energy and resource efficiency of buildings/neighbourhoods
- Decreased reliance on conventional fossil fuel energy sources

Staff note that new progress monitoring tools would need to be developed to allow for the evaluation of the City's performance in achieving various aspects of sustainable development, as well as to allow the periodic refinement of the Sustainable Development Strategy in order to adapt and respond to long-term changes.

Sustainable Development Strategy

- 8. The purpose of the Sustainable Development Strategy will be to investigate, make policy recommendations, and implement process and regulatory changes intended to encourage the development of sustainable and resilient communities across the City of Barrie.
- 9. The most commonly cited and widely recognized explanation of 'sustainable development' comes from the 1987 Brundtland Commission's definition: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". This concept originated out of recognition for the need to plan for growth and development while balancing the additional stress placed on both ecological and human systems. The concept has since evolved to include consideration for four critical dimensions of sustainability; ecology, economy, social, and culture (see Figure 1).

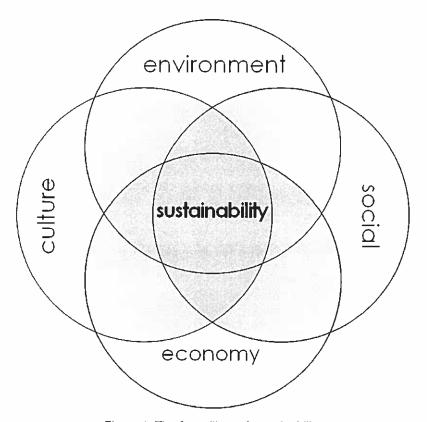


Figure 1: The four pillars of sustainability

- 10. Sustainable development necessitates that each of these dimensions are addressed through a holistic, comprehensive, and balanced approach. Actions to protect the environment should not be at the cost of continued economic, social, or cultural development, but rather solutions need to be realized that are able to balance all components respectively.
- Municipalities are increasingly becoming concerned with the sustainability of their communities as public concern continues to grow over the present and future challenges of climate change, changes in our economic systems, changing demographics, continued migration and population growth, pressures on the natural ecological system, rising oil and energy costs, and increases in severe weather events. Sustainability in the context of cities refers to the capacity to endure these challenges and disturbances, while ensuring that the current and future functioning of the City is not jeopardized.

12. The objective of the Sustainable Development Strategy will be to investigate policies intended to address the aforementioned urban sustainability challenges. This will in part be accomplished through changes to existing policies such as the Official Plan and Zoning By-law, as well as policies, standards, and procedures on a corporate basis. It is also expected that the Sustainable Development Strategy will lead to subsequent projects and studies involving actions intended to address specific issues or achieve certain goals that are achievable at a municipal level.

Steering Committee

- 13. An interdepartmental Sustainable Development Steering Committee is proposed to be created consisting of staff from various City of Barrie departments in order to ensure that a comprehensive and interdisciplinary approach is taken during the creation of the Sustainable Development Strategy.
- 14. It is expected that recommendations contained within the Sustainable Development Strategy will include changes to certain standards and procedures right across the Infrastructure, Development & Culture division, and likely throughout other City of Barrie departments. The implementation of certain actions will require collaboration between Planning, Engineering, Building, Culture, Corporate Asset Management, Economic Development, and Environmental Services staff. The Steering Committee will thus ensure that the Sustainable Development Strategy recognizes each of the dimensions of sustainability, including ecology, economy, social, and culture.
- 15. A number of projects demonstrating the principles of sustainable development are already being undertaken by City of Barrie staff throughout various departments. It will be the intention of the Steering Committee to ensure that these projects are recognized and supported as part of the Sustainable Development Strategy, and to coordinate cross departmental policy development and implementation.

Project Phasing and Key Milestones

- 16. Phase One: Project Launch and Draft Strategy Completion
 - i) Initial research and background study

Staff will conduct a preliminary review and background study in order to create a foundation for the Sustainable Development Strategy. Case studies of other municipalities who have adopted various strategies intended to address local sustainability challenges will serve as a 'best practices' guide. Existing policies and legislation will be reviewed to assess current efforts to achieve urban sustainability.

ii) Steering Committee meeting #1

This initial Steering Committee meeting will serve to inform all participants about the intention of the Sustainable Development Strategy. Participants will be asked to consider projects within their own department that align with the principles of sustainable development, and to submit a list summarizing these projects. Participants will also be asked to make themselves available from time to time to provide comment during the development of the draft Strategy.

iii) Completion of the draft Sustainable Development Strategy and draft Official Plan Amendment

A draft strategy will be produced resulting from the investigation, research, and policy development by Planning Services. This initial draft strategy will be shared with the public and will serve as a starting point of discussion during the public consultation phases. Based on recommendations made in the Sustainable Development Strategy, a

draft Official Plan Amendment will also be produced proposing changes to the Official Plan intended to further encourage sustainable land development.

iv) Steering Committee meeting #2

The second scheduled Steering Committee meeting will focus on the review and comment of the draft Sustainable Development Strategy. Participants will be provided with a copy of the draft Strategy prior to the meeting, and will be asked to offer comments during the Committee meeting. Further meetings with select participants may be scheduled in order to address specific issues or concerns within the Strategy.

- 17. Phase Two: Public consultation and engagement
 - i) Scheduling of a public consultation with stakeholders in the development community and members of the general public

Public consultation will commence in the form of stakeholder meetings, public open houses, surveys, and/or visioning charrette exercises. These sessions will be utilized in order to obtain feedback on the draft Strategy, as well as to develop a common vision statement. An open house session will be scheduled in consideration of the associated Official Plan Amendment.

ii) Steering Committee meeting #3

The third scheduled Steering Committee meeting will involve a review and consideration of the feedback received during the public consultation sessions. During this meeting, discussions will focus on how the draft Strategy can be revised or improved in order to better reflect the opinions and concerns of the public.

- 18. Phase Three: Revised Draft Sustainable Development Strategy
 - i) Completion of the Sustainable Development Strategy

A revised Sustainable Development Strategy draft will be completed, incorporating feedback obtained during the public consultation sessions. The revised draft will be brought forth to City Council following its completion. The draft will also be accompanied by a revised Official Plan Amendment.

ii) Steering Committee meeting #4

The final planned Steering Committee meeting will review the completed Sustainable Development Strategy. Discussions will involve future implementation action items, and any next steps that need to be addressed by the Committee.

Green Municipal Fund

- 19. The Federation of Canadian Municipalities (FCM) has been endowed by the Government of Canada with \$550 million to create and administer the Green Municipal Fund (GMF), with the intention of providing financial support in the form of grants and loans for municipal initiatives directed at achieving sustainable development.
- 20. Some examples of programs that are eligible for funding under the GMF include:
 - Brownfield Community Improvement Plans (CIP) for land remediation
 - Greenhouse gas emissions reduction plans
 - Sustainable neighbourhood action plans (intended to be community specific, such as Secondary Plans)

- Feasibility studies and field tests for specific municipal environmental projects
- Capital projects intended to address specific environmental objectives relating to brownfields, energy, transportation, waste, or water
- 21. In order to be eligible for GMF funding, municipalities must first demonstrate their commitment to achieving sustainable development through a municipal community sustainability plan or strategy. This sustainability plan or strategy is a prerequisite for municipalities applying for any type of GMF funding.
- 22. The creation of the Sustainable Development Strategy would satisfy this requirement and further the City of Barrie's eligibility for financial support under the GMF program. The FCM has adopted the use of a competitive process when deciding which municipal initiatives to fund. While the creation of the Sustainable Development Strategy does not guarantee GMF funding, it would increase the City of Barrie's eligibility and potential of being approved by the FCM for any future GMF applications.
- 23. GMF financial support could be utilized for projects currently in development within the City of Barrie, such as the proposed Brownfield Community Improvement Plan. The Sustainable Development Strategy is also expected to recommend additional future projects that may be eligible for GMF funding, including a greenhouse gas emission reduction plan or sustainable neighbourhood secondary plans.

Sustainable Development Official Plan Amendment

- 24. An Official Plan Amendment (OPA) will be prepared following completion of the draft Sustainable Development Strategy. The OPA is expected to reframe the Official Plan under the principles of sustainability, and will provide a foundational framework and implementation tool for the strategies recommended within the Sustainable Development Strategy.
- 25. The OPA will provide policy direction for sustainable development within the City of Barrie, however it is not expected to be the sole implementation tool for realizing the recommendations of the Sustainable Development Strategy. Examples of other means for implementing sustainable development include through the Zoning By-law, urban design guidelines, and site plan control.
- Section 17 of the Planning Act requires that any amendment to a municipal Official Plan must undergo a public meeting. Accordingly, a public open house will be scheduled at such time that the draft Sustainable Development Strategy and accompanying proposed OPA has been completed.

ENVIRONMENTAL MATTERS

27. There are no specific environmental matters directly related to the recommendation. However, if the proposal for the creation of the Sustainable Development Strategy is supported, the intent of the Strategy is to include policies that will further enhance the protection of the environment.

ALTERNATIVES

28. There is one alternative available for consideration by Community Services Committee:

Alternative #1

Community Services Committee could select not to support the proposal for Planning Services staff to commence with the preparation of the Sustainable Development Strategy.

This alternative is not recommended as it will not further the goals of achieving sustainable development and building practices within the City of Barrie. It will also detract from achieving Council's Strategic Plan goal to 'Manage Growth and Protect the Environment'.

FINANCIAL

29. The costs involved with the Sustainable Development Strategy include the allocation of staff time dedicated towards the completion of this project, which has already been accommodated for as part of the 2012 Work Plan. It is expected that the 2013 Work Plan will similarly accommodate for staff time involved in the preparation of this project. No additional direct costs are being proposed at this time.

LINKAGE TO COUNCIL STRATEGIC PRIORITIES

- 30. The recommendations included in this staff report support the following goal identified in the 2010-2014 City Council Strategic Plan:
 - Manage Growth and Protect the Environment
- 31. Sustainable development is not specifically mentioned within the 2010-2014 City Council Strategic Plan. However, achieving sustainable development is expected to further the goals of the Strategic Plan through encouraging balanced growth, long lasting community benefits, and the protection of the environment.