



REPORT TO PLANNING & DEVELOPMENT COMMITTEE

Report Number: PD 20-07

Date: June 4, 2007

From: Neil Carroll
Director, Planning & Development

Subject: Sustainable Neighbourhood Plan Project

- Working Draft of the Scorecard for Neighbourhood Sustainability
- Draft Sustainable Development Guidelines for Neighbourhoods
- Draft Sustainable Development Guidelines for Subdivisions / Sites / Buildings
- District Energy Pre-feasibility Report for Central Pickering
- File: D-1100-028

Recommendation:

1. That Report PD 20-07 of the Director, Planning & Development, regarding the Sustainable Neighbourhood Plan project, be received;
2. That the Consultants' Final Report on the Sustainable Neighbourhood Plan project, [distributed under separate cover and available on the City's website at cityofpickering.com], prepared by Dillon Consulting Limited, Joseph Bogdan & Associates and Halsall Associates Limited with FVB Energy Inc., dated May 2007, be received by Council and that:
 - a. the Draft Sustainable Development Guidelines contained as Appendices A and B to the Consultants' Final Report be:
 - i. used as input to the development of the sustainability performance measures and benchmarks required for Seaton;
 - ii. used as input to the sustainability components of the Pickering Official Plan Review; and
 - iii. released to other organizations for input to their research on sustainable development and the Leadership in Energy and Environmental Design – Neighbourhood Developments (LEED-ND) framework in Canada, including the Federation of Canadian Municipalities, Canada Green Building Council, and Canada Mortgage and Housing Corporation;
 - b. staff be authorized to continue participating in the professional and academic discussions regarding sustainability and LEED-ND; and
 - c. the District Energy Pre-feasibility Report for Central Pickering contained as Appendix D to the Consultants' Final Report, dated May 2007, be made available to all those interested, and used as input to the Energy Management Plan required as part of the Master Environmental Servicing Plan for Seaton; and

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3. That Council receive for information the Working Draft of the Scorecard for Neighbourhood Sustainability and request staff to report back with a Final Draft and a User's Guide later this year;
 4. That staff conduct a consultation workshop in the fall to obtain comments from stakeholders on the Draft Scorecard and User's Guide;
 5. That a copy of Report PD 20-07 of the Director, Planning & Development and the Consultants' Final Report be forwarded to the Federation of Canadian Municipalities, with appreciation for the funding assistance provided for this project; and
 6. Further, that a copy of Report PD 20-07 of the of the Director, Planning & Development and the Consultants' Final Report, be forwarded to others who assisted or expressed an interest in the City's work including the Canada Green Building Council, Canada Mortgage and Housing Corporation, Ministry of Municipal Affairs and Housing, Toronto and Region Conservation Authority, Region of Durham, City of Toronto, Town of East Gwillimbury, Town of Oakville, the Clean Air Partnership and the Chelsea Foundation.
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Executive Summary: Four important pieces of work have been completed through this last stage of the Sustainable Neighbourhood Plan project:

1. Working Draft of the Scorecard for Neighbourhood Sustainability;
2. Draft Sustainable Development Guidelines for Neighbourhood Plans;
3. Draft Sustainable Development Guidelines for Subdivisions / Sites / Buildings; and
4. District Energy Pre-feasibility Assessment for Central Pickering.

The Draft Sustainable Development Guidelines, completed by Dillon Consulting Limited, Joseph Bogdan Associates and Halsall Associates Limited provide an important contribution to the development of a Leadership in Energy and Environmental Design – Neighbourhood Developments (LEED-ND) based certification system for new neighbourhoods in the Ontario context (adapted from the draft American version). The Draft Guidelines are provided as Appendices A and B to the Consultants' Final Report, dated May 2007. The Consultants' Final Report is being distributed under separate cover and is available on the City's website at sustainablepickering.com.

The Draft Guidelines are based on significant research and have produced a valuable source of targets for sustainable development in Pickering. Accordingly, it is recommended that the Draft Sustainable Development Guidelines be used as input to the two key City projects: the performance measures and benchmarks required for Seaton; and the Pickering Official Plan Review.

It is also recommended that the Draft Guidelines be made available to those organizations researching sustainability and LEED-ND, and that staff be authorized to continue discussion with these agencies as part of the City's sustainable journey.

A Best Practices Review, which helped inform the Draft Guidelines, is contained as Appendix C to the Consultant's Final Report. This Appendix was previously released with Dillon's Interim Report on the Sustainable Neighbourhood Plan project (June 2006).

The LEED-ND system is structured to apply to new development, and is not easily adaptable to existing development. Consequently, staff identified the need to develop a system or "scorecard" to evaluate the sustainability levels of existing neighbourhoods. Although work is still underway on the specific measures to be used, a Working Draft of the Scorecard for Neighbourhood Sustainability is provided as Appendix I to Report PD 20-07. A Final Draft Scorecard and User's Guide will be brought back to Council later this year and will also be the subject of further consultation with stakeholders.

Lastly, an investigation of district energy was undertaken for Central Pickering. The results are summarized in the report entitled District Energy Pre-feasibility Report for Central Pickering, dated January 2007, and found as Appendix D to the Consultants' Final Report on the Sustainable Neighbourhood Plan, dated May 2007. The investigation concluded that a Seaton-wide district energy system was not likely feasible. However, higher density and mixed-use areas may support a district energy system.

Financial Implications: With receipt of the work from Dillon et al, the City will be able to request the remaining contribution from the Federation of Canadian Municipalities (FCM) Green Municipal Enabling Fund (GMEF), which covered 50% of the study cost. The remaining contribution is \$61,250.

Selected consulting assistance is anticipated for the consultation/workshop sessions, completing the Draft Scorecard and User's Guide, professional writing and editorial assistance in preparing articles promoting and explaining the City's work, and for staff training. The approved 2007 Planning & Development budget has two line items related to the Sustainable Neighbourhood Plan project: a line item for "Prof/Tech Assistance for Implementing the Sustainable Development Guidelines" in the amount of \$25,000 as well as "Prof/Tech Assistance with Sustainability/LEED expertise for general department support" in the amount of \$25,000 (Consultative and Professional Account 2611.2392.0000).

Sustainability Implications: The sustainable neighbourhood plan project is directly related to the Sustainable Pickering objective of "responsible development". The draft sustainable development guidelines, which address different scales of development (neighbourhoods and subdivisions / sites / buildings), is a new resource for further evaluation of a LEED-ND based certification system, as well as potential targets for new development in Pickering (both South Pickering infill and redevelopment, and Seaton). The District Energy Pre-feasibility Study for Central Pickering provides background information for subsequent implementation plans (such as an integrated energy management plan as part of the master environmental servicing plan for Seaton).

The Neighbourhood Scorecard and User's Guide under development will be a new resource to allow evaluation of the level of sustainability in existing neighbourhoods and monitor changes over time.

Background:

1.0 Pickering is on a sustainable journey.

Several City initiatives came together in the last two years resulting in the initiation of a City-wide sustainability program called Sustainable Pickering. The City recognizes sustainability as a journey, not a one time effort.

In 2005, under Council's Benchmarking for Sustainability Committee, a local perspective on sustainability was established, based on integrating the three lenses representing ecological, social and economic views. Through community consultation, the City then developed a conceptual framework for Sustainable Pickering with five objectives:

1. Healthy environment;
2. Healthy society;
3. Healthy economy;
4. Responsible development;
5. Responsible consumption.

The Sustainable Neighbourhood Plan project is directly related to the fourth objective - responsible development.

2.0 The purpose of the Sustainable Neighbourhood Plan (SNP) project changed since its inception from demonstrating why sustainable development should be done, to what sustainable neighbourhood development is.

The SNP project has evolved over the last 2-3 years. Originally, the project was to prepare a neighbourhood plan for the first phase of development under the City's Growth Management Study (2003). When the Provincial Seaton planning process took over, the SNP project was refocused on demonstrating why sustainable development should be done. At this point, the City applied for and received a grant under the Federation of Canadian Municipalities Green Municipal Enabling Fund (2005). However, as work progressed and consultation was undertaken in early 2006, the mindset of the broader community had changed so substantially that there was no longer a need to convince stakeholders why sustainable development should be done, but rather, there was a need to show stakeholders what constitutes sustainable development.

Furthermore, with Pickering Council's continuing leadership in the area of sustainable development, policies were included in the Provincial Central Pickering Development Plan (May 2006) requiring the preparation of performance measures and benchmarks for sustainability, that are to be incorporated in the neighbourhood plans for Seaton. The neighbourhood planning process is anticipated to commence in 2007.

3.0 The City of Pickering Sustainable Development Guidelines are the first draft of a certification system for new neighbourhoods, adapted for the Ontario context, from the draft American Leadership in Energy and Environmental Design – Neighbourhood Developments (LEED-ND) rating system.

In September 2005, the US Green Building Council released the draft Leadership in Energy and Environmental Design – Neighbourhood Developments (LEED-ND) rating system. This system was identified as a potential model for Pickering's sustainable development guidelines.

The LEED-ND certification system is based on achieving required design elements, and a number of optional design elements for which points are assigned. Point ranges are assigned different certification levels: certified; silver; gold; and platinum. LEED certification systems have been used in the US and Canada, particularly for the construction of individual buildings. The Canadian Green Building Council is also looking at developing a LEED-ND system for Canada, but to-date, nothing is available.

Dillon et al prepared two guidelines to reflect the different scales of development. Guideline #1 addresses the neighbourhood scale of development, and identifies required elements of sustainable design to be met plus optional elements that provide points. A rating system is also identified. Guideline #2 addresses the subdivision / rezoning / site / building scale. Similarly, it identifies required and optional elements, and the point system.

The Guidelines are provided as Appendices A and B to the Consultants' Final Report [distributed under separate cover, and also available on the City's website at sustainablepickering.com].

4.0 Some significant challenges were identified in working with a LEED-ND based certification system.

In reviewing the draft Guidelines, staff identified a number of concerns with continuing forward with a LEED-ND based system that were not evident at the outset. Staff's observations on the advantages and disadvantages of the system are summarized below.

4.1 Advantages

- “LEED” has some brand-name recognition.
- LEED certification for buildings has some degree of familiarity in both the US and Canadian market.
- LEED-ND is a voluntary certification system.
- A certification system provides market differentiation and promotion for both the development industry and municipalities.
- A national rating system provides comparison across the country.

4.2 Disadvantages

- LEED-ND in the US is not well tested (it is just now in a pilot phase).
- Unless mandated by policy or resolution of Council, certification is voluntary.
- Certification process takes time, effort and some expense.
- Certification is a one-time process that applies only to new development (i.e., it cannot be used for existing neighbourhoods, or to assess changes).
- The sophisticated planning and development system in Ontario, and in particular in the Greater Toronto Area (GTA) results in many of the “optional” elements in the draft US framework becoming “required” elements in the GTA context.
- A significant number of required elements duplicate existing policy documents, and thus may result in only a moderate improvement in the quality of neighbourhood development over current requirements.
- With the significant number of required elements (39 of 50 in Guideline #1, and 47 of 90 in Guideline #2), there are fewer optional items (and thereby less flexibility) from which to achieve points.
- The system is inflexible since failure to achieve one of the many required items means that certification cannot proceed.

The disadvantages of the LEED-ND based certification system only became evident in reviewing the Draft Guidelines. Staff has some concerns that adopting a LEED-ND based certification system may not be the best course of action for the City. However, a number of other agencies are researching sustainability and LEED-ND, and the Draft Guidelines would provide valuable input to their initiatives. By making the Draft Guidelines available to these organizations, and authorizing staff to continue discussions with them, there will be opportunities for continuing exchange of ideas.

For Pickering, the identification of draft sustainable development targets and the fundamental research upon which they are based, can be extracted from the Draft Guidelines. The information will provide valuable input to two City initiatives: the Seaton neighbourhood planning process; and Pickering Official Plan Review. For Seaton, sustainability performance measures and benchmarks are required. For the Official Plan Review, the sustainability components of the Plan need strengthening.

5.0 A “Neighbourhood Sustainability Scorecard” and “User’s Guide” for existing neighbourhoods are also under development as a complement to the draft sustainable development guidelines.

Staff is also working on a Scorecard for Neighbourhood Sustainability that would address sustainability levels in existing neighbourhoods, whereas the Draft Sustainable Development Guidelines address greenfield neighbourhoods. Much of Pickering’s new development will occur as redevelopment and infill in existing neighbourhoods. Thus, the ability to evaluate the sustainability level within an existing neighbourhood, and track changes in sustainability levels over time, is essential.

A Working Draft of the Scorecard is attached as Appendix 1. Staff has identified six attributes of neighbourhood development that contribute to its level of sustainability. The attributes are:

- Complete & Connected;
- Land-Efficient & Transit-Friendly;
- Safe & Comfortable;
- Adaptable & Resilient;
- Energy-& Resource - Efficient; and
- Green & Healthy.

Staff has identified the key characteristics that influence each of the main attributes. The intent is that a score be calculated for each of the main attributes, which can then be tallied to give a “neighbourhood sustainability score”. Although the Scorecard draws in part on the Draft Guidelines, the specific approach to measuring the characteristics and assigning the score is still under development as a User’s Guide. Staff will report back to Council with a draft later this year.

6.0 District Energy was also investigated for its opportunity to contribute to a more sustainable Seaton.

Another part of the SNP project was an investigation of district energy for Seaton. A District Energy Pre-feasibility Report for Central Pickering was prepared by FVB Energy Inc. and is contained as Appendix D to the Consultants’ Final Report. The Report concluded there were some opportunities for district energy, in selected neighbourhoods with proportionately greater amounts of higher density residential and mixed uses.

The Employment Areas were reviewed for district energy opportunities. The Report assumed a development build-out similar to the Whites Road / Granite Court Business Park in South Pickering. On this basis, the report concludes that the business case for district energy to serve the Employment Areas is somewhat limited.

It is recommended that the District Energy Pre-feasibility Report be made available to all those interested, and as input to the Energy Management Plan required as part of the Master Environmental Servicing Plan for Seaton.

Appendix:

Appendix I: Working Draft of the Scorecard for Neighbourhood Sustainability

Prepared By:

Approved / Endorsed By:

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Attachments

Copy: Chief Administrative Officer
Director, Corporate Services & Treasurer
Director, Operations & Emergency Services

**Recommended for the consideration of
Pickering City Council**

Thomas J. Quinn, RDMR., CMM III
Chief Administrative Officer