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SUSTAINABLE DEVELOPMENT THROUGH LEED® - IMPLEMENTATION STRATEGY

(Regional Council at its meeting on March 27, 2008 adopted this Clause by deferring the issue of transferring residual allocation credits for a further report in two months to the Planning and Economic Development Committee.)

The Planning and Economic Development Committee recommends the following:

1. The presentation by Shawn Nastke, Planner, Community Planning, be received; and

2. The recommendations contained in the following report dated February 22, 2008, from the Commissioner of Planning and Development Services, be adopted:

1. RECOMMENDATIONS

It is recommended that:

1. The Implementation Strategy outlined in this report be adopted by Council, in order to implement a 20% to 35% servicing allocation bonus for high density residential development that achieves the 'Sustainable Development Through LEED®' Program objectives adopted by Council June 21, 2007, including a minimum 'LEED®' Silver standard.

2. The 'Sustainable Development Through LEED®' Program be enhanced to provide a 40% servicing allocation bonus for developments that meet, at minimum, the Gold LEED® standard in addition to all other required Program objectives.

3. Applicants of the 'Sustainable Development Through LEED®' Program be required to enter into an agreement with York Region setting out the terms of the Program and the terms of any required Letter of Credit to the satisfaction of the Regional Solicitor.

4. The Regional Chair and Clerk are authorized to execute agreements, with the applicants, required to implement the Program.

5. Staff monitor the Program and make adjustments where appropriate in order to improve and streamline the process.

6. This report be circulated by the Regional Clerk to all local municipal Clerks and Planning Directors/Commissioners.

2. PURPOSE

The purpose of this report is as follows:

- To highlight the 'Sustainable Development Through LEED®' Implementation Strategy as directed by Council.
- To obtain Council authority to allow staff to enter into an agreement to make operational the Program and to require a letter of credit.
- To obtain Council authority to enhance the Program requirements.
- To advise Council of next steps.

3. BACKGROUND

In June 2007, Council adopted a resolution that directed staff to implement a program, in consultation with the Local Municipalities, to provide a 20% to 35% increase in water and sewer servicing allocation for high density residential developments meeting the following criteria:

i. Significant water conservation is achieved.
ii. Location is served by Viva rapid transit or other major YRT, GO and TTC operated or proposed transit routes.
iii. Site is within a Regional Centre or Regional Corridor, or Local Centre.
iv. Building meets Regional TOD guidelines including supporting an overall, long-term density target of 2.5 Floor Space Index.
v. Three stream waste reduction is incorporated into the building.
vi. A minimum LEED® Silver certification is achieved.

3.1 CONSULTATION WAS EXTENSIVE WITH ALL INTERESTED STAKEHOLDERS

Staff from all 9 Municipalities and Regional Departments

A Consultation Workshop was held in September 2007 with Local Municipal staff. Participation was exceptional and included staff from a cross section of disciplines including Building, Engineering, Water/Wastewater, Waste Management and Planning. A second round of consultations with Local Municipal staff was conducted in January 2008.

It is also noted that input from other Regional Departments including Corporate Services (Property Services) and Environmental Services (Water and Wastewater and Solid Waste Management) has been extensive.

Building Industry and Land Development Association (BILD)

Staff also conducted consultation meetings with members of the Building Industry and Land Development Association (BILD) in early February 2008. In general, the Program was very well received, and the industry also provided valuable input. The key issues raised related to the Letter of Credit (LC), possibly adding Development Charge Credits as an incentive, reducing application processing times, introducing a more graduated incentive system, and, allowing for the program to be applied retroactively.

The majority of these issues are addressed throughout the body of the report. With respect to applying the program retroactively, staff are of the opinion that allowing for buildings presently under construction or recently constructed to qualify for the program is appropriate. The development would still be subject to all of the same eligibility criteria and sustainability objectives.

In terms of Development Charge Credits, staff advised the Developers that Council did consider this strategy in June of 2007 and decided not to include it as part of the Program at this time.

This innovative program raised significant interest from both the development industry and the local municipalities which required substantial discussion regarding process to ensure it is successful and uses a streamlined process. It is the first of its kind to use servicing allocation as an incentive to build greener development.

Peer Review Consultant

York Region retained Enermodal Engineering Limited to Peer Review the Implementation Strategy. Enermodal, an engineering consulting firm from Kitchener, is one of the leading experts in the GTA respecting the LEED® Canada NC program and certification. Enermodal was asked to identify issues and potential impracticalities with the draft implementation strategy as well as provide a recommendation respecting the Letter of Credit.

4. ANALYSIS AND OPTIONS

Promoting sustainable buildings through LEED® provides a number of benefits including:

- Using key resources like energy, water, materials, and land much more efficiently.
- Creating healthier work, learning, and living environments.
- More natural light & cleaner air.
- Contributing to improved health, comfort and productivity.
- Long term cost savings.

Some of these benefits can have a direct impact on the use and sustainability of Regional services including transit usage, water and wastewater conveyance and treatment, and solid waste management. All of these benefits promote healthy communities and are in keeping with the Regional Vision and policy framework for building strong communities.

This voluntary Program provides a strong incentive to developers to build greener, more sustainable buildings through both servicing allocation bonus and a clear implementation strategy that is intended to avoid lengthy processing times.

4.1 HIGHLIGHTS OF IMPLEMENTATION STRATEGY

Refinements based on consultation with Local Municipal Staff

Through consultation with the Local Municipalities, it is proposed that Local Corridors be added to the Program to ensure that potential high density projects located within these areas can also participate.

It is also proposed that the density target of a 2.5 Floor Space Index (the target within our Regional Centres and Corridors) be implemented through reliance on the density requirements of the High Density Residential policies in the applicable community/secondary plans. This modification recognizes that high density in Keswick means something different than high density in Markham Centre. We have also added a minimum height requirement of 5 stories to address situations where community plans may not contain minimum density requirements. Five stories has been selected as the minimum height to ensure we are dealing with higher density proposals: the target of this initiative.

How Developers qualify for the Program

The Program involves ‘Six Eligibility Criteria’ that must be met in order to participate. Once confirmed eligible, the applicant must commit to constructing a development that meets four separate ‘Sustainability Objectives’. The eligibility criteria and sustainability objectives evolved from the policies adopted by Council in June 2007 through the consultation with Local Municipalities, developers and expert advice.

The ‘Six Eligibility Criteria’ set out the initial qualifications as follows:

i. Located within a Regional Centre or Corridor or a Local Centre or Corridor.
ii. High Density Residential with a minimum height of 5 stories (can and is encouraged to be within a mixed use building).
iii. Permitted without the need for a major Local Official Plan amendment.
iv. A certain minimum amount of Servicing Allocation has already been assigned to the development (or there is a commitment in place to do so).
v. Within a Local Municipality that has advised they wish to participate in the Program.

vi. Project has been registered with the Canada Green Building Council under the LEED® Canada NC (Version 1) program and that a minimum level Silver Certification is proposed.

The Four Sustainability Objectives set out the key elements to be included in the development.

Objective 1 - Achievement of Significant Water Conservation

Applicants proposing a LEED® Silver development have the option of qualifying for servicing allocation credits equivalent to either 20% or 35% of the units within the proposed building. A third option, providing allocation credits equivalent to 40% of the units, has been added for buildings achieving LEED® Gold or Platinum. The water conservation requirements for each option align directly with the achievement of specific water efficiency credits under the LEED® Canada NC program.

<u>Option 1: 20% Credits</u>: To qualify for allocation credits equivalent to 20% of the units within the proposed building, the development shall achieve points for the following LEED® Water Efficiency (WE) Credits:

- Credit WE 1.1 - Reduce potable water use for outdoor watering purposes by 50%
- Credit WE 3.1 - Reduce indoor potable water use by 20% *(Note: Baseline numbers are provided within the LEED® Canada NC Reference Guide and are reflective of current Ontario Building Code requirements.)*

<u>Option 2: 35% Credits</u>: To qualify for allocation credits equivalent to 35% of the units within the proposed building, the development shall achieve points for the following LEED® WE Credits:

- Credit WE 1.2 - No potable water use for outdoor watering purposes or no irrigation
- Credit WE 3.2 - Reduce indoor potable water use by 30%

<u>Option 3: 40% Credits</u>: (Increased benefit to LEED® Gold and Platinum Developments)
There was discussion with the development industry surrounding the introduction of a more graduated bonusing system that would award different levels of allocation credits based on the level of LEED® Canada NC certification achieved. While staff are of the opinion that level Silver remain the minimum requirement, we are recommending that an increased allocation bonus be approved by Council for developments obtaining higher levels of LEED® Certification (Gold, Platinum).

More specifically, an increased allocation bonus of 40% is recommended for developments that achieve the Gold standard or higher plus all of the requirements for the 35% bonus. With monitoring of the first few projects, a further increase may be possible to recognize those developments achieving even higher standards.

In order to help ensure the achievement of water conservation targets, the Sustainable Development Through LEED® Program will require the use of ENERGY STAR qualified washing machines and dishwashers and the installation of separate water metres for individual units along with separate billing requirements. Other items commonly implemented to achieve water conservation are low flow plumbing fixtures and dual flush toilets.

Objective 2 - Conformity with the Region's Transit-Oriented Development (TOD) Guidelines

The Region's Transit Oriented Development (TOD) Guidelines outline key components of building and site design that further encourage transit usage. Conformity with the TOD guidelines will ensure that the proposed development is designed in manner that makes accessibility to transit easy and convenient.

Objective 3 –Incorporation of a Three Stream Waste Management System

Three stream waste management has been highly effective in achieving higher diversion rates for ground related housing. It is important to also achieve high waste diversion rates in high density residential developments. The Program involves detailed requirements regarding source separation, storage and collection and resident education.

Objective 4 - Obtain Certification (minimum level Silver or Gold) under the 'Leadership in Energy and Environmental Design' (LEED®) Canada NC (Version 1) program

LEED® Canada NC is a 'comprehensive' Green Building Rating System offered through the Canada Green Building Council. It sets minimum standards that buildings must meet in order to be considered GREEN. It views the development from a variety of perspectives including site location and design, water efficiency, construction materials used, waste diversion, energy conservation and ozone protection; and indoor air quality. Points are also awarded for Innovation in Design. The minimum requirement for level Silver is consistent with the minimum standard that York Region has imposed for its new facilities.

It was suggested through consultation that buildings with similar components to LEED® certified buildings should qualify as well. However, using the LEED® Canada NC program provides objective third party verification that the green objectives (especially in terms of water savings) are met without requiring extensive technical review by additional expert resources. The LEED® Canada NC program is also the most recognized and accepted rating system in Canada. The number of LEED® registered and certified projects are testimony to its market recognition and presence.

The following table summarizes the various bonus levels including the new Gold standard.

Table 1
Servicing Allocation Credits Summary

Servicing Allocation Credits	Water Conservation: Reduction in Potable Water	Transit Oriented High Density Development	Three Stream Waste	Minimum LEED® Certification Level
20%	50% outdoor reduction 20% indoor reduction	Yes	Yes	Silver
35%	100% outdoor reduction 30% indoor reduction	Yes	Yes	Silver
40%	100% outdoor reduction 30%+ indoor reduction	Yes	Yes	Gold

Streamlined Application and Approval Process

The Program application and approval process is displayed on a flow chart appended as Attachment 1. Staff in consultation with Local Municipal partners and the development industry have attempted to streamline the process to minimize additional administrative requirements for all parties involved. Staff heard that time savings was an important incentive to developers along with the servicing allocation itself. A clear intention of this program is that applications will be streamlined and processed as quickly as possible. Standard conditions have been developed to be implemented through site plan and condominium approval to ensure ease of implementation.

Transfer of residual Allocation Credits

The potential exists for applicants to qualify for allocation credits in excess of what they may require for a specific development. It is recognized that in these situations some Local Municipalities may want to permit the transfer of residual credits to other sites. The developer generating the credits will need to work with the Local Municipality to determine where they can be used. Policies should be contained within the Local Servicing Protocol outlining principles for transfers. Notwithstanding, any recipient site must be within the same Local Municipality and also qualify for the Program.

Monitoring

The Program also includes a 5 year monitoring period of the developments with respect to water conservation and waste diversion. This will help us to determine the effectiveness of the Program.

4.2 PROGRAM AGREEMENT AND LETTER OF CREDIT TO ENSURE IMPLEMENTATION

Confirmation that the Sustainability Objectives (i.e., LEED® Certification) have been met occurs post building construction/occupancy and therefore after the allocation credits have been awarded. In this regard, the applicant will be required to enter into a separate Agreement with the Region committing to meet all Program Objectives. The Agreement will require the posting of a Letter of Credit by the applicant prior to condominium registration if there are any remaining Program Objectives to be met including LEED® Silver Certification.

Both the site plan and the building permit drawings are required to include all of the necessary components needed to achieve LEED® Certification and other Program objectives. To help ensure that this occurs, all drawings must be accompanied by a signed letter from the applicant's LEED® Accredited Professional confirming that they are in conformity with the Program requirements. Staff will work closely with the applicant to ensure conformity.

Letter of Credit to be set at $6,400 per Servicing Allocation Credit Granted

Letters of Credit required under the Program are to be posted in the amount of $6,400 per Servicing Allocation Credit awarded with an upper limit of $500,000. For instance, if a developer qualifies for allocation credits equivalent to 20% of the units within a 100 unit building the LC requirement would be $128,000 (20 credits/units x $6,400).

The amount of the LC is based on $8 per square foot using an average unit size of 800 square feet. Our Peer Review Consultant has advised that the incremental cost of building a LEED® building is $8 to $12 per sq. ft over and above the cost of a conventional building and suggested that this incremental cost could be used to set the amount of the LC.

The developers indicated that as they will be paying a significant premium per square foot to achieve the Program criteria, an additional requirement for a substantial LC and for that LC to be posted upfront is onerous and could serve as a disincentive to participating in the Program. While staff have not eliminated the requirement for an LC, the stipulations as initially presented to the developers have been revised. Staff are of the opinion that taking the LC later in the process and only if there are still Objectives to be met as well as introducing a cap, serves to address the key concerns raised by the BILD members.

Timeframe for releasing the Letter of Credit

The Program provides the applicant 12 months from the date of registration of the condominium, to satisfy all of the Sustainability Objectives (i.e., obtain LEED® Certification). Based on consultation with Enermodal, 12 months from condominium registration is more than ample time to achieve LEED® Certification.

Letters of Credit to fund educational/promotional programs relating to Water Conservation and Solid Waste Diversion/Recycling if Program Objectives are not met

If all criteria are not fully met to the satisfaction of York Region and the Local Municipality within the required 12 months from Condominium Registration, it is proposed that the full value of the letter of credit be forfeited and placed in a Reserve Fund. Staff will report to Committee and Council on this matter separately if it arises and deal with the specific creation of the Fund at that time.

Rental Buildings would also qualify under the Program

While it is anticipated that most applications will involve condominium developments, it is important to note that rental buildings would also qualify under the Program. In the situation of a privately proposed rental building, Program implementation would be adjusted to rely more heavily on the Site Plan Approval/Agreement and the separate Program Agreement. The Letter of Credit would also need to be posted prior to occupancy.

4.3 IMPROVED STANDARDS TO ACHIEVE GREENER BUILDINGS REGION WIDE

This voluntary program is the beginning of achieving more sustainable development across the Region. The Program serves to move the Region toward a higher standard of development so that the greener aspects of this Program become standard practice.

While three stream waste management is currently part of this Program, it should be explored for all multi-storey residential buildings across the Region. Higher water efficiency for both indoor and outdoor use should also be promoted throughout the Region with potable water primarily used for indoor purposes.

4.4 NEXT STEPS

Interest was expressed through the Local Municipal Consultation process regarding the expansion of the Program to include medium density and ground related housing. While this high density residential Program will be the focus of 2008, staff will begin to explore potential opportunities and strategies to expand the program to include other forms of residential development. Part of this research will involve consultation with the Town of

Newmarket regarding design details for the eco-homes to be constructed in the new Stickwood-Walker subdivision and a possible monitoring program to look at water conservation performance.

4.5 RELATIONSHIP TO VISION 2026

The program aligns with Vision 2026’s promotion of conservation, ensuring clean water and air, creating well-designed and liveable communities, taking a strategic approach to growth management and balancing growth with the environment.

The Program also serves to implement one of the Action items in our new Sustainability Strategy. *Theme Area IV – Sustainable Natural Environment* includes a directive regarding the creation of a comprehensive green building strategy in consultation with the Local Municipalities that would incorporate Energy Star® and/or LEED® standards.

5. FINANCIAL IMPLICATIONS

This initiative has the potential to facilitate increased unit yields on individual projects over an above what could be achieved outside of the Program. This would result in the generation of additional Development Charges and Taxes and also serve to increase Transit Ridership.

While there is the potential for Letters of Credit to be forfeited, it is hoped that each applicant will successfully meet the full requirements of the Program resulting in the release of all Letters of Credit.

6. LOCAL MUNICIPAL IMPACT

This program is voluntary both for the developer as well as the Local Municipalities. Given the interest generated, we anticipate that most Local Municipalities, especially those in the south, will choose to employ this Program as a tool to help implement the community plan visions for key centres and corridors.

7. CONCLUSION

‘Sustainable Development Through LEED®’, a green building incentive program, will serve to help implement York Region’s new Sustainability Strategy and enhance our triple bottom line: Sustainable Environment, Healthy Communities, and Economic Vitality. It also serves to demonstrate to the broader development and building industry new ways of design and building residential high rise that is both marketable and cost effective over the long term.

The ‘Sustainable Development Through LEED®’ initiative is an innovative Program that represents the first of its kind in Ontario. With no template to follow, careful effort was taken to ensure that the Program is easily implementable, practical and flexible and works across all 9 distinct municipalities. Implementation is also ensured by embedding the Program requirements at the key process points of site plan, building permit and condominium.

The success of the Program is based upon a co-operative partnership between the Region, Local Municipalities and development industry. It is important to continually evaluate the Program and the implementation details, especially with the first few applications, to ensure the Program is successful and creates a true incentive to build more sustainable development creating a better living environment and reducing green house gas emissions.

Uptake of the Program is anticipated to be strong with three developers ready to submit applications. This will allow for the Program to be tested early and for results to be delivered immediately.

For more information on this report, please contact Shawn Nastke, Planner, Community Planning at Ext. 1518, or Heather Konefat, Director of Community Planning at Ext. 1502.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is included with this report.)