

Design Guidelines for ‘Greening’ Surface Parking Lots

Date:	November 1, 2007
To:	Planning and Growth Management Committee
From:	Chief Planner and Executive Director, City Planning
Wards:	all
Reference Number:	PG070075

SUMMARY

This report seeks Council approval to release the draft Design Guidelines for ‘Greening’ Surface Parking Lots (Attachment No.1) for stakeholder consultation. Council is also requested to grant interim authority, during the consultation period, for City staff to test and apply the draft Guidelines in the review and approval of new developments.

The Design Guidelines for ‘Greening’ Surface Parking Lots implement the Built Environment and Natural Environment policies of the City’s Official Plan (Chapters 3.1 and 3.4). The Guidelines also provide design options and strategies to implement many environmental performance targets of the Toronto Green Development Standard.

Typically, surface parking lot design focuses on accommodating vehicle movements, maximizing the number of parking spaces and ensuring ease of maintenance and servicing. Although these functional aspects are important, if applied alone, the urban design and environmental outcomes are often undesirable. Areas of concern include poor quality landscaping, unattractive streetscapes, minimum regard for pedestrian circulation, safety and comfort, excessive stormwater run-off, and an increase in the urban heat island effect.

‘Greening’ the surface parking lot involves planting trees, providing good quality soil and generous landscaped areas, enhancing pedestrian and cycling infrastructure, managing stormwater on-site, reducing the urban heat island effect, and using sustainable materials and technologies.

The Design Guidelines for ‘Greening’ Surface Parking Lots provide specific strategies and measures which developers, designers and reviewers of surface parking lots can apply to help meet Official Plan policies and environmental performance targets of the Toronto Green Development Standard.

RECOMMENDATIONS

City Planning recommends that:

1. City Council authorize the release of the draft Design Guidelines for ‘Greening’ Surface Parking Lots (Attachment No. 1) for consultation with stakeholders, including development industry representatives, affected Divisions, Agencies, Boards and Commissions of the City of Toronto, and other interested parties;
2. During the consultation period, City Council authorize City Planning staff to apply and test the draft Guidelines in the review and approval of new developments containing surface parking and in the design and development of surface parking lots owned and/or operated by the City of Toronto or any Agency, Board or Commission of the City of Toronto; and
3. The Chief Planner and Executive Director, City Planning, report back to the Planning and Growth Management Committee at the conclusion of the consultation period if modifications to the Guidelines are required.

Financial Impact

There is no financial impact resulting from the recommendations of this report.

DECISION HISTORY

In November 2002, City Council adopted the Toronto Official Plan and in July 2007, the Ontario Municipal Board approved the Plan in full with modifications. The Official Plan includes policies related to the City’s public realm, built-form and environmental protection. These policies provide the strategic framework within which the design of surface parking lots is to be evaluated and is the basis on which the draft Guidelines presented in this report have been formulated.

In July 2006, City Council adopted in principle the Toronto Green Development Standard (see Clause 1 of Report No. 6 of the Policy and Finance Committee: Making a Sustainable City Happen, The Toronto Green Development Standard 2006 <http://www.toronto.ca/legdocs/2006/agendas/council/cc060725/pof6rpt/cl001.pdf>). The Green Development Standard provides minimum thresholds to promote environmentally sustainable site and building design. The Standard includes several environmental performance targets that are relevant to the design of surface parking lots.

ISSUE BACKGROUND

Typically, surface parking lot design focuses on accommodating vehicle movements, maximizing the number of parking spaces and ensuring ease of maintenance and servicing. Although these functional aspects are important, if applied alone, the urban design and environmental outcomes are often undesirable. Areas of concern include poor quality landscaping, unattractive streetscapes, minimum regard for pedestrian circulation,

safety and comfort, excessive stormwater run-off, and an increase in the urban heat island effect.

To address the urban design and environmental challenges resulting from conventional surface parking lot design, an inter-divisional City staff working group was established. The working group, led by City Planning, included representation from Parks, Forestry and Recreation, Toronto Water and Transportation Services.

The working group collaborated on ‘greening’ objectives for surface parking lots and developed the draft Design Guidelines for ‘Greening’ Surface Parking Lots (Attachment No. 1). The Guidelines represent the culmination of the working group’s collaborative efforts and are intended to assist with the implementation of approved Official Plan policies and several performance targets in the Toronto Green Development Standard.

The working group concluded that the effective ‘greening’ of surface parking lots requires planting trees, providing good quality soil and generous landscaped areas, enhancing pedestrian and cycling infrastructure, managing stormwater on-site, reducing the urban heat island effect, and using sustainable materials and technologies.

COMMENTS

Purpose of the Guidelines

The Design Guidelines for ‘Greening’ Surface Parking Lots implement aspects of the City’s built environment and natural environment policies as most notably expressed in Chapters 3.1 and 3.4 of the Official Plan. These chapters include policies related to improving the public realm, enhancing pedestrian safety and comfort, increasing tree canopy and shade, enhancing the quality of landscaping, encouraging on-site stormwater management, and promoting the use of sustainable materials and technologies. (Specific Official Plan policies relevant to the design of surface parking lots are summarized in Attachment No.1 - Design Guidelines for ‘Greening’ Surface Parking Lots: Appendix A).

The Guidelines also provide design options and strategies for implementing many of the environmental performance targets of the Toronto Green Development Standard (GDS). The GDS provides minimum thresholds to promote environmentally sustainable site and building design in the City. Relevant sections of the GDS are referenced within the Design Guidelines for ‘Greening’ Surface Parking Lots through the use of the following symbols:



Air quality (including urban heat island effect)



Energy efficiency and green house gas emissions



Water quality and efficiency



Solid waste reduction



Urban ecology

How and Where the Guidelines Apply





The Design Guidelines for ‘Greening’ Surface Parking Lots will apply to the design, review and approval of all new developments containing surface parking.

The Guidelines have city-wide applicability and will normally apply to the evaluation of design alternatives in rezoning, official plan amendment and site plan applications. The Guidelines will also apply to the development of surface parking lots owned and/or operated by the City of Toronto or any Agency, Board or Commission of the City of Toronto.

The Guidelines are intended to be read together with the Official Plan, applicable Zoning By-laws and Secondary Plans, the Toronto Green Development Standard (GDS), and other applicable City standards, policies and guidelines. Compliance with the GDS is currently voluntary for the private sector and mandatory for the City of Toronto or any Agency, Board or Commission of the City of Toronto.

Design Guideline Summary

The following table provides a brief summary of the design guidelines contained in Attachment No. 1 - Design Guidelines for ‘Greening’ Surface Parking Lots: Section 4.0.

Sub-Section	Toronto Green Development Standard Links	Key Topics Covered by the Guidelines
4.1 Location and Layout		- site organization, site grading, lighting, location of other elements (e.g. bicycle parking, shopping carts, public art)
4.2 Vehicle Access and Circulation	n/a	- street access, internal driveways and drive aisles
4.3 Pedestrian Access and Circulation		- pedestrian routes, shade, accessibility
4.4 Landscaping		- planting requirements, streetscape, screening, perimeter planting, internal planting, shade, surfaces, permeable paving
4.5 Stormwater Management		- water balance, bio-retention, snow storage

The key principles of the Guidelines are illustrated in a number of typical, conceptual site plan diagrams presented in Section 5.0. A Planting Guide that includes minimum plant material and soil quality standards along with a recommended planting list of native species (intended to promote local ecology) is presented in Appendix B of the Guidelines.

Staff Training and Consultation

On June 4, 2007, City Planning hosted a half-day learning session entitled “Greening Surface Parking Lots”. Over ninety (90) staff attended the session, including representatives from City Planning, Parks, Forestry and Recreation, Facilities and Real Estate, Toronto Water, Toronto Building, Technical Services, Development Engineering, the Toronto Parking Authority, and the Waterfront Secretariat. The session featured a keynote address by Councillor Gord Perks and presentations from four industry professionals who specialize in researching and implementing “green” designs and technologies in surface parking lots. Many of the concepts presented at this learning session are found within the attached guidelines.

Upon release of the draft Design Guidelines for ‘Greening’ Surface Parking Lots, members of the working group will initiate a program of training sessions for staff in Community Planning and other affected Divisions, Agencies, Boards and Commissions within the City of Toronto. The focus of the training sessions will be to familiarize City staff with the Guidelines, provide direction as to how they should be applied and to respond to any questions or concerns that may arise during the consultation period.

The current draft of the Design Guidelines for ‘Greening’ Surface Parking Lots is the result of consultation and collaboration with an inter-divisional City staff working group. As previously noted, the working group, led by City Planning, included representatives from Parks, Forestry and Recreation, Toronto Water and Transportation Services.

Following Council approval of the recommendations in this report, the Chief Planner and Executive Director, City Planning, together with other appropriate City Divisions, will initiate a stakeholder consultation process with industry representatives, affected Divisions, Agencies, Boards and Commissions of the City of Toronto, and other interested parties. The Chief Planner and Executive Director, City Planning, will report back to the Planning and Growth Management Committee at the conclusion of the consultation period if modifications to the Guidelines are required.

Conclusions

The effective ‘greening’ of surface parking lots provides an opportunity to enhance both the design quality and environmental responsibility of new developments in the City of Toronto. The city-wide use of the Design Guidelines for ‘Greening’ Surface Parking Lots will assist developers, designers and reviewers of surface parking lots with the implementation of Official Plan policies and the achievement of environmental performance targets established by the Toronto Green Development Standard.

The attached draft Design Guidelines for ‘Greening’ Surface Parking Lots represents the conclusion of an inter-divisional working group’s efforts to address the urban design and environmental challenges associated with conventional surface parking lot design.

Following Council approval, the Chief Planner and Executive Director, City Planning, together with other appropriate City Divisions, will initiate a stakeholder consultation process to finalize the strategies and criteria set out in the Guidelines.

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SIGNATURE

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ATTACHMENTS

Attachment No. 1: Design Guidelines for 'Greening' Surface Parking Lots
http://www.toronto.ca/planning/urbdesign/greening_parking_lots.htm

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