



CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date: April 3, 2007
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TO: Vancouver City Council

FROM: Director of Planning, in consultation with the Co-Director of Development Services, the Chief Building Official, and Director of Legal Services.

SUBJECT: Green Roofs

RECOMMENDATION

THAT Council endorse that the Director of Planning or Development Permit Board will not require the provision of a green roof on a residential building that would prevent the development applicant from obtaining home warranty insurance under the provincial *Homeowner Protection Act*, but continue to pursue City objectives of environmental sustainability (including LEED certified standard or LEED equivalencies), urban design goals, and urban agriculture through alternative proposals from applicants.

GENERAL MANAGER'S COMMENTS

The General Manager of Community Services recommends approval of the foregoing.

CITY MANAGER'S COMMENTS

The City Manager recommends approval of the foregoing.

COUNCIL POLICY

South East False Creek Green Building Strategy, approved by Council in July 2004.

PURPOSE

The purpose of this report is to inform City Council about recent communications and discussions with the Homeowner Protection Office (HPO) about green roofs; and seek Council's endorsement of the way in which the Director of Planning and Development Permit

Board propose to take this new information into account when working with applicants who have included green roofs in their rezoning and development proposals.

SUMMARY

While rooftop landscaping has a long history on development projects in Vancouver, more recently there has been a focus on (and newer technologies for) “green roofs” as a tool to achieve environmental sustainability objectives. Residential developments in the South East False Creek Official Development Plan area (“SEFC ODP Area”) and some other areas of the City have included green roofs in rezonings and development applications.

The HPO and new home warranty providers have recently raised issues related to the newer types of green roofs on residential development. At the present time, warranties are not likely to be provided in many cases. It appears that it will take some time for the concerns of the HPO and warranty providers to be resolved.

To issue a building permit the City must receive clearance from the HPO indicating that the project has a warranty in accordance with the *Homeowner Protection Act*. A number of development applications that have included green roofs have been approved in principle, but the applicants may not be able to obtain warranties on all or portions of their green roofs. In order to not frustrate development that is ready to go ahead, the Director of Planning, or the Development Permit Board, propose to exercise the flexibility allowed with respect to rezoning and development approval conditions relating to the provision of green roofs to permit alternative or revised designs, which still meet the objectives for environmental sustainability (including LEED certified standard or LEED equivalencies), urban design and urban agriculture.

BACKGROUND

For many years the City has approved development projects which include planting on roof levels. Generally this landscaping has been responding to guidelines calling for provision of shared open space for residents; for improving the visual overlook for residents of the project or neighbouring projects; and in some cases for providing gardening opportunities for residents (“urban agriculture”).

In the past few years, the idea of “green roofs” has gained currency as a way to achieve environmental sustainability objectives as well. These include assisting in managing the flow of storm water and/or improving its quality; providing planting that acts as habitat for birds and insects, and traps particulates; and reducing the urban “heat island”. Since some of these items are included in the LEED scoring system, green roofs are often included in projects to earn LEED points.

Generally speaking, the term “green roofs” covers two types of rooftop landscaping, noting that the dividing line between the two is not completely distinct.

- “intensive green roof” is the more traditional type of roof landscape. It has significant growing medium depths, and/or planters, containing the planting material. It is usually accessible for residents’ use.
- “extensive green roof” refers to more recent designs or technology where a thin layer of growing medium and low- or no-maintenance plants takes the role of a conventional roof surface. Generally these roofs are not accessible for use.

DISCUSSION

1. Concerns of the Homeowner Protection Office and Warranty Providers

Under the *Homeowner Protection Act* a person must not build, offer for sale or sell a new home unless the new home is covered by home warranty insurance. Warranty insurance is provided by one of the four insurers authorized to do so. The decision whether to provide home warranty insurance to a particular builder or project is made by the insurer. The City may not issue a building permit for a project until we have received clearance from the HPO that the project has a warranty in accordance with Provincial regulations.

In January 2007 the HPO wrote to the Mayor and Council of Vancouver (as well as other municipalities) regarding their concerns with green roofs on residential buildings.

The HPO's letter to the City noted a number of concerns:

- The willingness of the private insurers to cover green roofs is limited, and (at that time) two of the four had indicated they will not provide coverage;
- Beyond the warranty issue, strata owners and strata councils may not have the understanding and capability to assume the responsibility for long term maintenance of the green roofs;
- There is limited experience in the local climate with green roofs installed on residential projects; and
- There is a need to resolve the issues related to green roofs (standards for installation and maintenance, availability of skills, etc.) to avoid a systemic failure of the roof components of residential buildings similar to the "leaky condo" experience.

After hearing from the HPO, staff began investigating the matter, including contacting the insurers and the HPO. On March 9, staff hosted an information meeting with representatives of the two largest insurers, HPO, representatives of Millenium (developer for the Olympic Village) and Polygon Homes (developer of a project in the SEFC private lands).

This work has led us to a number of key findings.

- One of the major insurers (covering 51% of multifamily development) is not providing warranties for the newer forms of green roof mainly the "extensive" green roofs; another insurer (35 - 40%) is still reviewing the matter. The latter insurer is providing home warranty insurance to Millennium and is therefore evaluating the green roof proposals for the Olympic Village. The insurers' concerns are related to the unknown level of risk, coupled with the magnitude of their possible financial exposure given how many homes they insure. (Home warranty insurers have no latitude to raise the rates or deductibles on home warranties to cover higher risk because of Provincial legislation.)
- Discussion among the various parties (HPO, insurers, building envelope experts, designers, developers) has just begun. The HPO proposes to engage in a process with industry partners to pursue resolution of the issues. They will start with a conference on May 29. They then propose to establish a task group that will eventually make recommendations to their Board. They don't see themselves as having a mandate for coming up with a technological solution, but rather to act as a clearing house for the exchange of information.

- No one is willing to estimate a timeline on resolution of the issues, but City staff's most optimistic guess is 6 months: it may well take longer.
- All parties want to get to a place where green roofs are possible, but none want a repeat of the "leaky condo" situation.

Given this new information about uncertainty of warranties for green roofs, the Director of Planning or Development Permit Board will need to exercise flexibility if development is to proceed in a timely manner.

2. Status of City of Vancouver Green Roof Policy

As mentioned in Background, landscaping has long been an element included on roofs of various types of buildings, including residential projects. However, the City's interest in green roofs to achieve environmental sustainability has evolved mainly as part of work on SEFC.

In parallel with the development of the SEFC Official Development Plan, staff wrote the SEFC Green Building Strategy (GBS). The GBS was adopted by Council in July 2004, and accompanied (but did not form part of) the ODP at its adoption in March 2005. The GBS adopted by Council did not mandate green roofs. The ODP mentions green roofs as a means to achieve certain objectives, but likewise does not mandate them.

The CD-1 By-laws for the nine rezonings in the SEFC ODP Area that have been approved at Public Hearing do not require green roofs. However, certain conditions applicable to each of these rezonings refer to the provision of green roofs on 50% of the roof area, among other aspects. It is important to note that the rezoning conditions applicable to green roofs only require that the Director of Planning, or Development Permit Board, consider these conditions in reviewing the subsequent development applications for the project.

Beyond the SEFC ODP Area, green roofs have recently been included by developers and approved by the City in approximately 5 development applications and 4 rezonings for residential projects in other areas of the City.

3. City Response to HPO and Warranty Provider Concerns

In light of the issues raised by the HPO and the warranty providers, and the time that will likely be required to resolve them, the City needs to be flexible to allow the issuance of building permits, should applicants not be able to obtain warranties on their proposed green roofs. This report is to advise that in these situations, the Director of Planning or Development Permit Board will be considering alternative design proposals.

In reviewing revised proposals (and new applications) the Director of Planning or Development Permit Board will still be expecting proponents to offer solutions that:

- Meet LEED certified standard or LEED equivalencies, as the case may be: Silver equivalencies in the case of private developments in the SEFC ODP Area; and Gold certified standard in the case of the Olympic Village project (and Platinum for the Community Centre). This should be possible because in most cases proposals have accumulated more than the needed points, and/or because they can earn points through substitute measures.
- Continue to address non-environmental objectives (e.g. aesthetics, liveability, useability of open space on roof tops, urban agriculture) through offering the provision

of appropriate landscaping as appropriate and as insurable, e.g. through the inclusion of more traditional forms of planting or planters.

In some cases proponents have indicated an interest in deleting uninsurable portions of green roofs from their applications at this time, but to return to the City to reinstate these prior to the building's completion, should the warranty issue be resolved. This type of proposal will be entertained, as well.

The Director of Planning or Development Permit Board will deal with applications on a case-by-case basis. For applicants proposing to revise a development application already approved in principle where a warranty insurer has denied coverage, the Director will need to understand the warranty provider's concerns about different parts of the proposal. In the case of rezonings or DEs in process, or future applications, the Director may request applicants to consult with their insurers to obtain a reading on what types of rooftop landscaping could be included in the proposal.

4. Other Actions

City staff will be participating in the HPO's proposed conference on May 29, and will remain involved in whatever role is appropriate and feasible during the discussion of these matters.

FINANCIAL IMPLICATIONS

There are no financial implications for the City.

CONCLUSION

By exercising the flexibility allowed with respect to rezoning and development approval conditions applicable to green roofs, the City will allow developments to proceed in a timely manner, while still ensuring that overall objectives for environmental sustainability, urban design and urban agriculture are met.

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