

## Inner Melbourne Action Plan

### Progress Report

#### Action 9.4 Green Demonstration Projects

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##### Purpose

1. To update the Committee on the progress of the Growing Green Guide for Melbourne project: a how-to guide for green roofs, walls and facades.

##### Background

2. This project is a partnership between the IMAP councils, the University of Melbourne and the Department of Sustainability and Environment (DSE).
3. The project is aligned with IMAP Action 9.4: Green Demonstration Projects.
4. Using a collaborative approach between government, commercial and research sectors, the project is developing green roof, wall and façade best practice guidelines and policy recommendations, that can be utilised by councils, building developers and planners across Victoria.
5. The project also includes initial work to scope out green roof, wall and façade demonstration sites; to provide councils with a foundation for seeking funding for future demonstration projects.
6. It is intended that future demonstration projects will showcase to the public what is involved in construction and maintenance of green roofs, walls and/or facades, and what benefits they provide. The sites will also be an opportunity to test the relevance and breadth of the Victorian Best Practice Guidelines being developed at present.
7. The steps to establish demonstration sites are shown in the box below.

##### Steps to establish green roof, wall and façade demonstration projects:

**Opportunities Assessment** - identify potential sites in each IMAP municipality for green roof, wall or façade demonstration projects.

**Feasibility Study** – test the feasibility of the sites selected in the opportunities assessment.

**Concept drawings and costing** – identify indicative costs and concept design for some of the sites that are assessed as feasible.

**Funding bids, business case development and project management** – *these are future steps, outside the scope of the GGGM project, and expected to be carried out within each of the four IMAP councils.*

##### Progress to date

8. The first three funding milestones of the project, required by DSE, have been met. These related to project establishment, employment of staff, development of an options paper and convening stakeholder groups and reference groups.
9. All project activities are currently on track. **A project gantt chart is attached** (updated from the version shown to the Committee in February 2012). The establishment of the **Guidelines Reference Group** took significantly longer than expected as the project team determined and refined who would be the best representatives of the many stakeholders. The group has now been established and has 15 members with a range of expertise. A very successful workshop was held and the group are now using a shared website to exchange information and advice. The delay in establishment of this group has not impacted on the total project timelines, or the milestone due dates.

10. The next milestone due, at the end of January 2013, is the Opportunities Assessment for demonstration sites. This is on track with all four council representatives having identified between three and ten sites initially and then refining to a top three sites per municipality.
11. The Project Control Group will shortly invite a number of consultants to quote on the cost of providing a Feasibility Study for the potential sites. This will provide the project team with more detailed information about the suitability of the sites identified in the opportunities assessment. **The draft brief for consultants is attached.** It is intended that the Feasibility Study will be carried out in early 2013. *Please note that it is important that consultants do not see the draft before the Request for Quote process opens, therefore this attachment must not be circulated.*
12. Based on the results of the feasibility study, the Project Control Group will select sites to progress through to the concept and costing stage, which is also likely to be carried out by a consultant, if budget is available. This will occur in mid 2013.
13. The number of sites that will be chosen for both the Feasibility Study and the Concept Drawings and Costings phases, will depend on the rates quoted by the consultants.
14. A budget of \$85,000 is available. Some internal resources may be used to augment this, if available at individual councils.

## Recommendations

15. That the IMAP Implementation Committee note the progress of the Growing Green Guide for Melbourne project and the intention to engage a consultant/s for elements of the project.

## **DRAFT Consultant's Brief – Growing Green Guide**

### **SERVICE SPECIFICATION: Feasibility study of demonstration sites - green roofs, walls and facades**

#### **Background**

The Growing Green Guide for Melbourne project is a partnership between the Cities of Melbourne, Port Phillip, Stonnington and Yarra through the Inner Melbourne Action Plan (IMAP), and the University of Melbourne. The four councils and the Department of Sustainability and Environment (Local Sustainability Accord) fund the project. The City of Melbourne is the lead agency for the project. A Project Control Group oversees the project progress and makes all key decisions.

One component of the project is to identify potential demonstration sites for the green roofs, walls and facades across the four municipalities. The councils have conducted an opportunity assessment and have identified a number of sites in each municipality which they consider to have potential as demonstration sites. The sites now need to be assessed in terms of how feasible these sites are in reality, as the opportunities assessment was simply a process of identifying sites that fit with Council priorities and interests, or known to Council as having owners interested in green roofs, walls or facades. Some of the sites will be undergoing a feasibility assessment using internal council resources; however there are not internal resources to undertake all these assessments, so a consultant is required to assess some of the sites.

#### **Definitions**

- Façade greening – climbing plants grown directly on a building wall, or adjacent to a wall on a trellising system or some other supporting structure.
- Green wall – plants growing in a modular system erected on building walls.
- Green roof – a roof system of various layers that creates an environment suitable for plant growth, without damaging the fabric of a building. Green roofs generally provide multiple benefits, from aesthetics to biodiversity to energy savings and stormwater management.

#### **Purpose**

To provide a report on the feasibility of a number of sites for green roof, wall and/or façade development, across the Cities of Melbourne, Stonnington, Port Phillip and Yarra. (Note: Some of the sites may not yet be built, in which case plans will be made available to the consultant for the purpose of the study).

#### **Project deliverables**

The key deliverables of this project are to:

1. Refine criteria for assessing sites for suitability to future development of green roofs, walls or facades. –Broad criteria are provided below.
2. Present the refined criteria to the Growing Green Guide Project Control Group for endorsement.
3. Conduct site assessments in the four municipalities, to determine which sites are feasible for green roofs, walls or facades. Identify benefits and drawbacks of each site which is assessed as feasible.
4. Produce a written report, including photographs, with key findings on the feasibility assessment; including comment on each of the criteria.
5. Present the draft written report to the Growing Green Guide Project Control Group, and make any reasonable modifications to the report suggested by the Group.

Broad criteria for determining the feasibility of sites:

- Roof and building construction materials and load bearing capacity (structural capacity information is essential in all roof and green wall sites)
- Shading / sunlight availability (aspect)
- Wind considerations
- Height of building
- Access to site for cranes and other machinery
- Public accessibility potential (lift, visible in the public realm)
- Access for maintenance
- Size of useable roof or wall area
- Available water collection and storage opportunities
- Available space for plants to be grown from ground level up the sides of the building (for façade opportunities)
- Opportunities for more than one type of roof, wall or façade. What type of roof, intensive or extensive?
- Access to utilities (water, electricity)
- Existing use of building e.g. commercial, residential
- Existing energy use of building (to determine whether heating and cooling requirements will be reduced)
- Existing conditions e.g. flat or sloped roof, plant equipment requirements, insulation (R value) etc
- Likelihood that a demonstration site would face hurdles in terms of planning and building permit requirements/restrictions, heritage issues and impact on street accessibility (potentially triggering a problem with disability access).
- Any existing noise concerns (e.g. plant equipment)
- Safety considerations (parapet height/railing requirements)
- Stormwater discharge point of building

**Services to be provided:**

The consultant is required to:

1. Address the deliverables as stated
2. Liaise with the project manager, Gail Hall, to determine the work program, required consultation and reporting timelines
3. Liaise with the four Council representatives to undertake site assessments and/or view building plans
4. Provide proposed assessment criteria for discussion with the Project Control Group on [REDACTED]
5. Provide a draft report for discussion with the Project Control Group on [REDACTED]
6. Provide a final report in electronic Word and PDF formats by [REDACTED].

**Limit of services**

The consultant is not required to undertake the following tasks:

1. Detailed assessment of microclimate and soils
2. Building owner, tenant or community consultations

### Work program, quoting and methodology

The consultant is required to provide a work plan and methodology as a part of the initial quotation process. The consultant must also identify a cost to undertake an assessment per site. The project team will determine how many sites will be assessed (it is unlikely to be more than 12 sites) once the successful tenderer has been identified.

### Key Stakeholders

The Project Control Group governs the Growing Green Guide project and consists of a single representative from each of the 6 project partners – Cities of Melbourne, Port Phillip, Stonnington and Yarra, University of Melbourne, and the Department of Sustainability and Environment. The key contacts will be the 4 council representatives.

The consultant may need to engage with the entire Growing Green Guide project team, consisting of the Project Control Group, along with a representative of the Inner Melbourne Action Plan, the Growing Green Guide research officer and the Growing Green Guide project officer.

### Council Assistance

The four inner Melbourne councils will provide advice and assistance throughout the project and will ensure their availability. Any issues identified in the course of the project will be resolved in consultation with the project manager, Gail Hall.

### Timeline

The timeline for the project is as below and subject to negotiation:

Key Task	Due Date
Submission closing date	
Work program negotiated and agreed with the City of Melbourne project manager	
Consultant presents assessment criteria to Project Control Group	
Consultant presents draft report to Project Control Group	
Final report	



## Gantt Chart: Growing Green Guide for Melbourne, November 2012.

