

# GREEN FACTOR CASE STUDY: THE BRUCE 14-26 BRUCE STREET KENSINGTON

AUGUST 2025



CITY OF MELBOURNE

## **Acknowledgement of Traditional Owners**

The City of Melbourne respectfully acknowledges the Traditional Owners of the land we govern, the Wurundjeri Woi-wurrung and Bunurong / Boon Wurrung peoples of the Kulin Nation and pays respect to their Elders past and present. We acknowledge and honour the unbroken spiritual, cultural and political connection they have maintained to this unique place for more than 2000 generations.

We accept the invitation in the Uluru Statement from the Heart and are committed to walking together to build a better future.

## Council Plan 2021-25

The Council Plan 2021-25 sets out our strategic direction and commitment to the community for the next four years. Based on six strategic objectives for our city, this is our detailed plan for our city's revitalisation and considers the needs of all people who access and experience the City of Melbourne municipality. For more information visit [melbourne.vic.gov.au/council-plan](https://www.melbourne.vic.gov.au/council-plan)<sup>1</sup>



### Climate and biodiversity emergency

Melbourne is a city setting the standard on climate action. Prioritising our environment and taking urgent action to reduce emissions and waste is key to protecting public health, strengthening the economy and creating a city that mitigates and adapts to climate change.

<sup>1</sup><https://www.melbourne.vic.gov.au/council-plan>

# CONTENTS

Introduction	4
Green Factor tool	4
Amendment C376: Sustainable Building Design	4
Access the Green Factor tool online	4
How to use this document	5
Guidance Note Green Factor tool	5
Case Study: 14-26 Bruce Street, Kensington	7
Project summary	7
Application details	8
About the site	8
Tips for your Green Factor application	9
Green infrastructure elements	13
Green Factor input summary	13
Summary of Green Factor inputs	14
Green infrastructure area: In ground (new)	16
Green infrastructure area: Green façade	18
Green infrastructure area: Planters (on structure)	20
Green infrastructure area: Green roof	22
Green Factor landscape package	24
Green Factor scorecard	25
Appendix 1: Example Town Planning Landscape Package Submission	26

August 2025

Cover Image: Aerial image of the north facing front façade and green roof of The Bruce.

Photo credit: David Hannah Photography.

## Acknowledgements:

Many people contributed to the development of this case study and the Green Factor tool. We are truly grateful and would like to thank all contributors including LOCI Design Collective and Nature Based Consulting for the case study, and HIP V. HYPE, Little Sketches, the University of Helsinki and the University of Melbourne for development of the Green Factor tool. 'The Bruce' developers, the Medley Property Group and project team including Carr Architecture, Figurehead and Evergreen.

## Disclaimer

This report is provided for information and it does not purport to be complete. While care has been taken to ensure the content in the report is accurate, we cannot guarantee it is without flaw of any kind. There may be errors and omissions or it may not be wholly appropriate for your particular purposes. In addition, the publication is a snapshot in time based on historic information which is liable to change. The City of Melbourne accepts no responsibility and disclaims all liability for any error, loss or other consequence which may arise from you relying on any information contained in this report.

# INTRODUCTION

## Green Factor tool

The Green Factor tool is a free online green infrastructure assessment tool developed by City of Melbourne. It is designed to help landscape architects, designers, planners and developers benchmark and improve greening outcomes for proposed developments. Green Factor supports City of Melbourne's ambitions to increase the quality and quantity of greening in the private realm. This forms part of our commitment to respond to the climate and biodiversity emergency.

The Green Factor tool offers a simple and iterative process that prompts users to consider green roofs, vertical greening, vegetation retention, rain gardens, canopy trees and biodiversity as part of their design response. City of Melbourne environmental strategies have been used to prioritise the types of greening that will provide the greatest benefit to the public and the environment. The scoring of Green Factor is underpinned by the latest research into the environmental and social benefits of green infrastructure.

Green Factor will help developments to deliver benefits in the following areas:

- urban heat island effect reduction
- biodiversity and habitat provision
- stormwater reduction
- social amenity such as recreation and mental wellbeing
- urban food production
- aesthetic values.

## Amendment C376: Sustainable Building Design

The Green Factor tool is part of a larger environmentally sustainable design planning scheme amendment that City of Melbourne is pursuing.

Amendment C376: Sustainable Building Design is a key action from City of Melbourne's Green Our City Strategic Action Plan. It's designed to help prioritise sustainable design and green infrastructure in new developments through planning controls in the form of a Design and Development Overlay (DDO).

Amendment C376: Sustainable Building Design states that a Green Factor score of 0.55 should be achieved for new developments and large additions to existing buildings above 1000sqm gross floor area for the purposes of:

- accommodation
- retail
- office
- education
- research and development
- places of assembly.

A Green Factor scorecard must be submitted as part of the landscape documentation for all relevant planning permit applications.

We have undertaken rigorous technical and feasibility assessments with building industry users to test the viability of these requirements in future developments.

The Green Factor tool complements other requirements to achieve ratings in existing, industry recognised Environmentally Sustainable Design (ESD) tools, which demonstrate how developments can achieve industry best practice targets.

**Access the Green Factor tool online at**  
[www.greenfactor.com.au](https://www.greenfactor.com.au)<sup>2</sup>

For more information contact  
[greeningmelbourne@melbourne.vic.gov.au](mailto:greeningmelbourne@melbourne.vic.gov.au)

<sup>2</sup><https://www.greenfactor.com.au>

## How to use this document

This document will take you through a Green Factor tool assessment process using the case study of 'The Bruce' as a case study of the first 'as built' Green Factor tool project. The project is located at 14-26 Bruce Street, Kensington in the Macaulay Urban Renewal Area.

This case study will help you understand what information is required to develop a high-quality Green Factor landscape package as part of your planning application.

## Guidance Note Green Factor tool

The Green Factor tool Guidance Note has been prepared by the City of Melbourne to explain how the Green Factor tool works.

The Guidance Note provides:

- An overview of green infrastructure and its key concepts.
- A detailed explanation of the Green Factor tool.
- An explanation of how the parameters, weightings and workings of the Green Factor tool scoring regime achieve a final Green Factor score.

The Guidance Note will support the use of the Green Factor tool in accordance with the Melbourne Planning Scheme.

**Access the Guidance Note Green Factor tool at [www.melbourne.vic.gov.au/green-factor-tool](http://www.melbourne.vic.gov.au/green-factor-tool)**

The screenshot shows the main page of the Green Factor Tool. On the left, the text reads "GREEN FACTOR TOOL" in large, bold, uppercase letters, followed by a horizontal line and the subtitle "a tool for measuring the green infrastructure credentials of your development". On the right, the City of Melbourne logo is displayed, featuring a stylized 'M' made of green and blue geometric shapes, with "CITY OF MELBOURNE" written below it. At the bottom, there are three navigation buttons: "About this tool", "Return to your assessment", and "Load an existing assessment". Below these buttons, a small line of text states: "The City of Melbourne is proudly supporting a voluntary trial use of the Green Factor Tool in the Merri-bek City Council, City of Yarra and City of Port Phillip." In the bottom right corner, it says "Version 1.3".



# CASE STUDY: THE BRUCE 14-26 BRUCE STREET, KENSINGTON

## Project summary

Location	14-26 Bruce Street, Kensington VIC 3031
Development type	Office building
Landscape design	LOCI Design Collective and Nature Based Consulting
Completion date	November 2023
Green Factor score	0.67



Street view of north elevation showing integration of green infrastructure into the building façade.

## Application details

### About the site

14-26 Bruce Street, Kensington is a contemporary seven storey office development with onsite car parking. The development features a *Tristanopsis luarina* 'Luscious' Watergum tree at the main entrance which is complimented by a series of planters on structure that appear in a rhythmic pattern up the façade of the building.

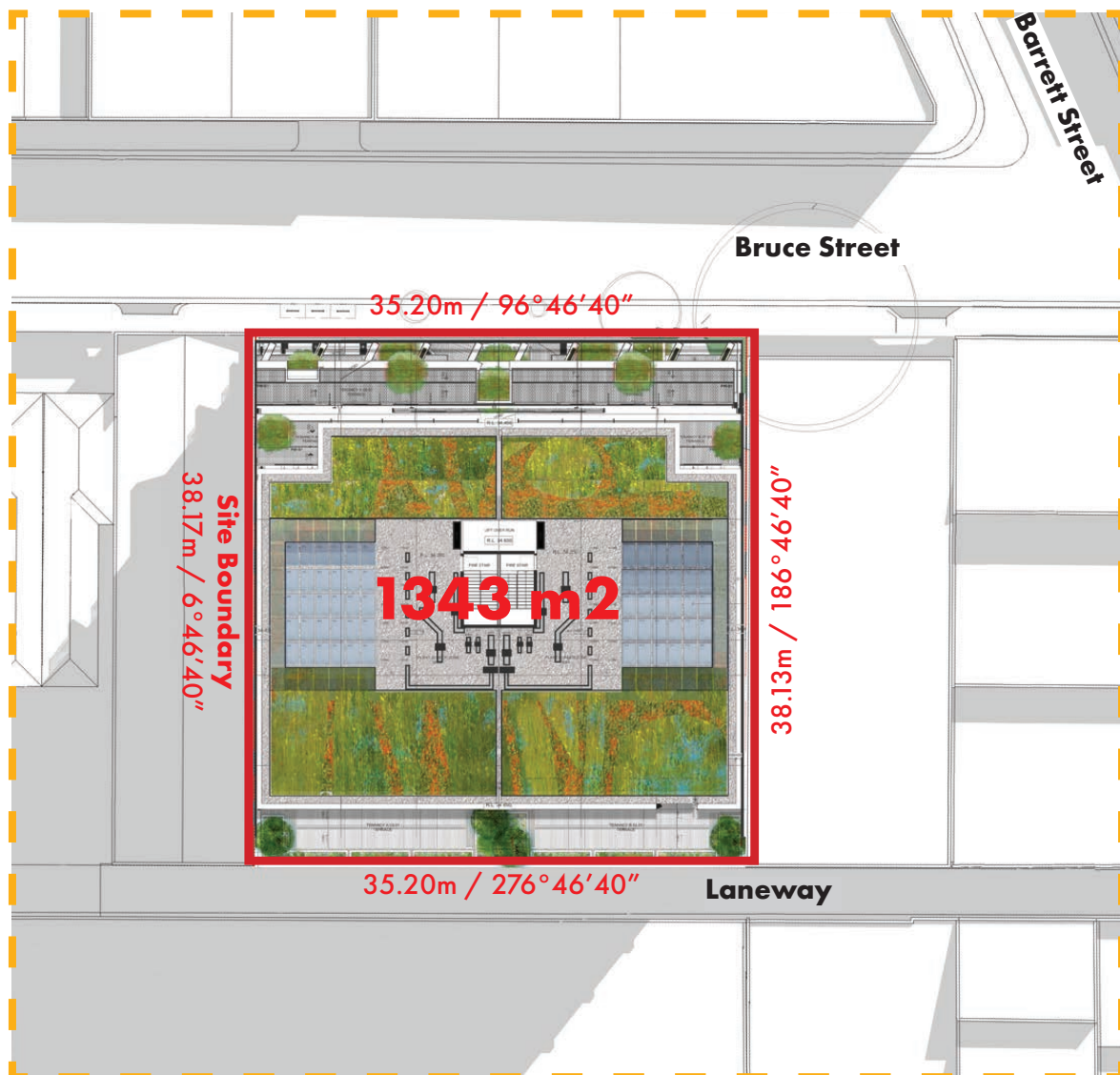
The landscape scheme is crowned with a biodiverse green roof which features two sections of roof top spanning

the width of the building located to the north and south of the development. This is split by building services and a solar photovoltaic array which demonstrates multiple sustainability principles can be designed to co-exist and function in an emerging urban environment.

For this case study example, we have adopted the site area provided on the certificate of title which is also the boundary for the planning application.

This project has a site area of 1343 square metres as shown in Figure 1. This site area will be used to calculate the Green Factor score.

Figure 1. 14-26 Bruce Street, Kensington project site boundary.  
Taken from Appendix 1: Example town planning landscape package submission.



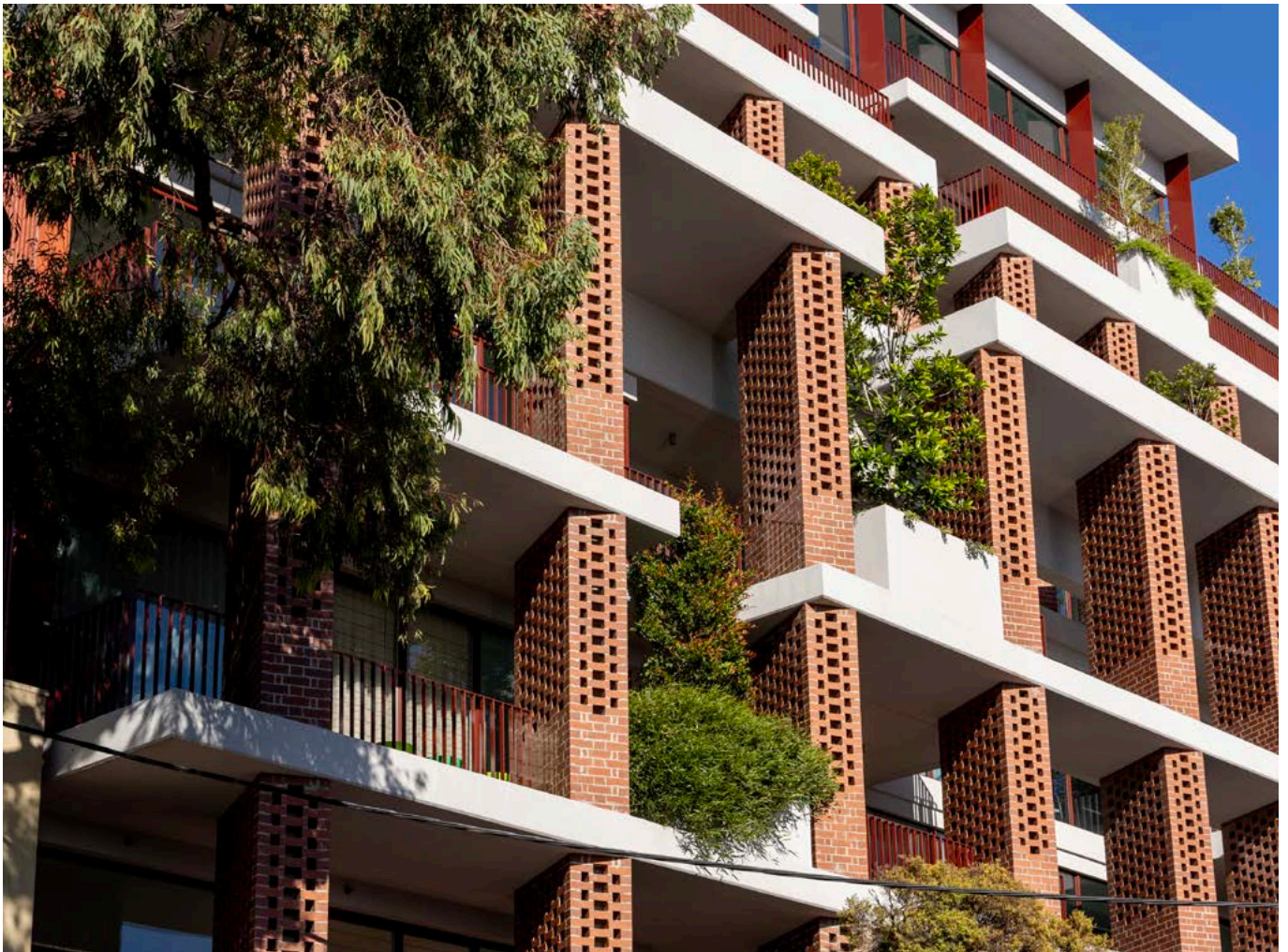
### Tips for your Green Factor application:

- The Green Factor tool requires you to provide details about your project site area, location and boundaries, as well as basic specifications of the green infrastructure elements including soil area and plant type, quantities and coverage.
- Keep in mind that the Green Factor tool can be used at different stages of your project.

**1. Early concept design:** If you're early in your planning and design process, use the Green Factor tool as part of an iterative process throughout the design phase. Try different inputs to explore how it is possible to increase the quantity (area of greening) and quality (type of green infrastructure inputs) of greening in your project to achieve a high Green Factor score.

**2. Final stages of design:** If you're close to lodging your planning application, we recommend having a comprehensive landscape package on hand when using the tool. To achieve a higher Green Factor score, you will likely be focusing on improving the quality of greening (type of green infrastructure inputs) as opposed to making significant changes to the total area of greening within the project site area.

- For typical statutory planning applications, the site area is defined by the certificate of title and associated site boundaries.
- All proposed greening must be located within the site boundary and be external to the building envelope.



Streetview of north elevation showing green infrastructure between expressed columns.





The biodiverse green roof strengthens the building's connection to its surrounds including the Moonee Ponds Creek corridor.

## Green infrastructure elements

Your project's proposed green infrastructure elements are assigned an 'area' for input into the Green Factor tool. The green infrastructure areas relevant to this project are in ground (new), green façade, planters (on structure), and green roof and as described in Table 1.





## Green Factor input summary

Figure 2 provides a summary of the green roof inputs submitted for the 'The Bruce' project as part of the Green Factor assessment.

The specified green infrastructure elements used here are reflective of the level of detail needed for a Green Factor submission at planning application stage. This includes basic specifications of soil area, plant category, type and coverage, and tree quantities for each area.

Explore the illustrations (Figure 3, Figure 4, Figure 5 and Figure 6) to understand how the green infrastructure elements have been incorporated into the project's landscape design from a Green Factor perspective.

Table 1. Green infrastructure areas relevant for 14-26 Bruce Street, Kensington.

GREEN INFRASTRUCTURE AREA		DESCRIPTION
In ground (new)		Proposed green infrastructure growing directly in the ground in either existing or introduced soil of at least 500mm depth.
Green façade		A green façade is created by growing climbing plants up and across the façade of a building, either from plants grown in garden beds at its base, or by container planting installed at different levels across the building. Climbing plants can attach directly to the surface of a building or they can be supported on a structure independent of the building.
Planters (on structure)		Planters are on-structure containers consisting of a raised edge with or without a solid base. They can be used at ground level, on balconies or podiums or on roofs. They are different from green roofs and can support small and medium trees with the right soil volume.
Green roof		A green roof is a vegetated landscape built up from a series of layers that are installed on a roof surface. They can be installed layer by layer on the roof ('loose laid') or as modular, pre-prepared layers in trays.

# Summary of Green Factor inputs

SPECIFIED GREEN INFRASTRUCTURE ELEMENTS					
<b>In ground (new)</b>			<b>Green Facade</b>		
Medium tree (canopy width 6m - 10m)	Native	1 pcs	Climbers	Native	94 sqm
Small shrub (< 1.5m height)	Native	6 sqm			
Ground cover	Native	5 sqm			
Soil or substrate (over 500mm depth)	Soil	11 sqm			
<b>Planters (on structure)</b>			<b>Green Roof</b>		
Small shrub (< 1.5m height)	Indigenous	3 sqm	Small shrub (< 1.5m height)	Indigenous	64 sqm
Small tree (canopy width < 6m)	Native	14 pcs	Ground cover	Indigenous	128 sqm
Large shrub (> 1.5m height)	Native	14 sqm	Ground cover	Native	126 sqm
Small shrub (< 1.5m height)	Native	21 sqm	Small shrub (< 1.5m height)	Exotic	16 sqm
Ground cover	Native	41 sqm	Ground cover	Exotic	64 sqm
Large shrub (> 1.5m height)	Exotic	14 sqm	Soil or substrate (200 - 500mm depth)	Soil	80 sqm
Small shrub (< 1.5m height)	Exotic	7 sqm	Soil or substrate (under 200mm depth)	Soil	320 sqm
Ground cover	Exotic	3 sqm			
Soil or substrate (over 500mm depth)	Soil	76 sqm			

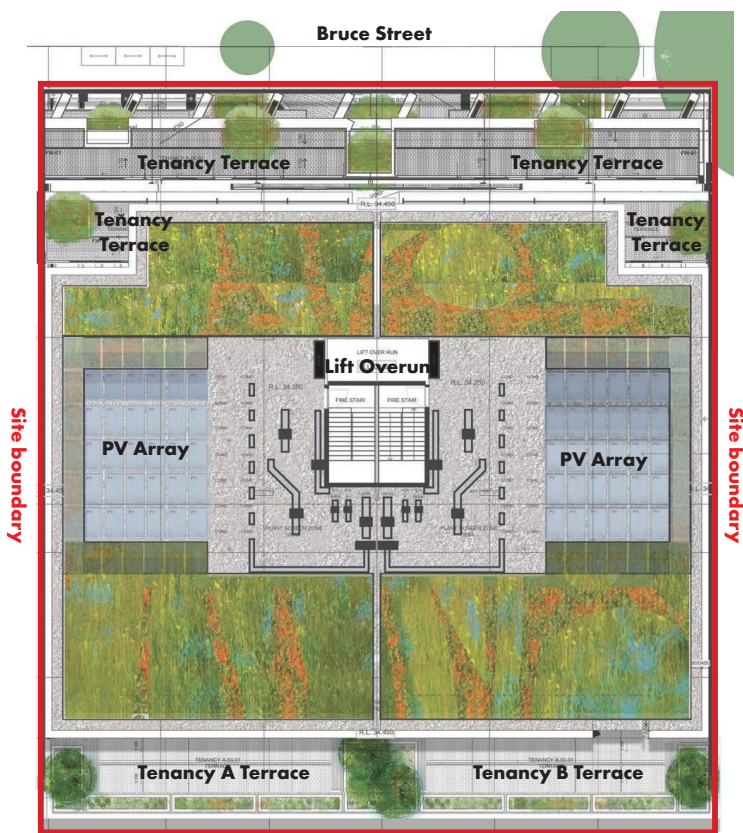


Figure 2. Summary of all greening elements and inputs into the Green Factor tool for 'The Bruce', which features green infrastructure areas of in ground (new), green facade, planters (on structure) and a green roof.

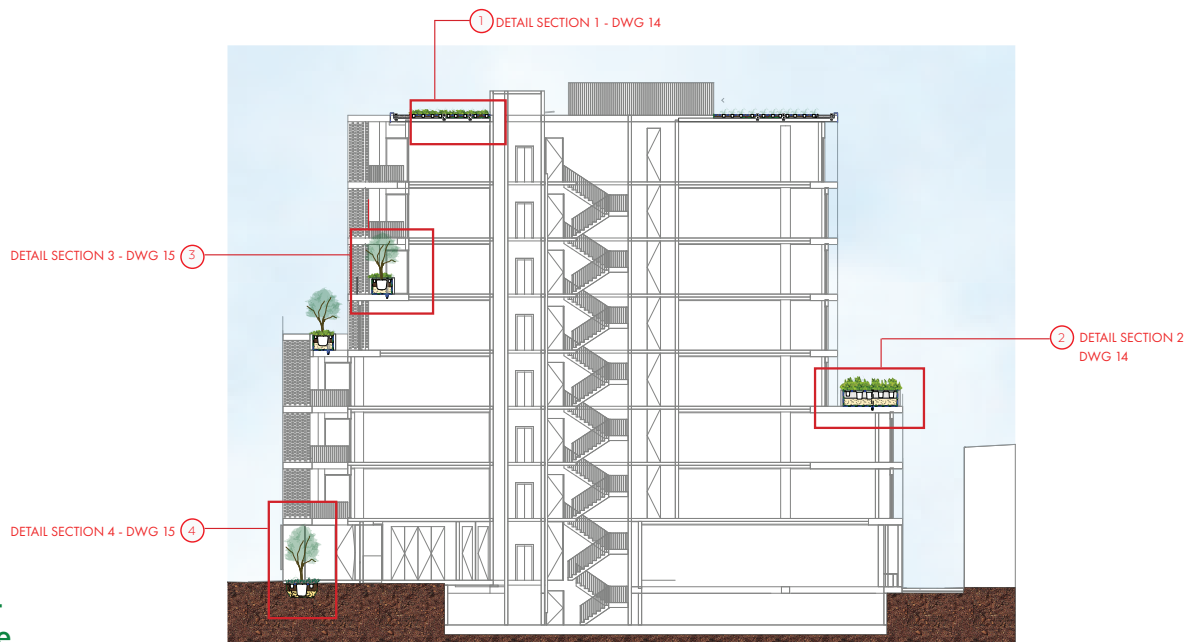
**North Elevation -  
not to scale**

**Legend**

- 1. *Tristaniopsis laurina* 'luscious'
- 2. *Acmena smithii* 'Red head'
- 3. *Eleocarpus reticulatus*



**Section A -  
not to scale**



## Green infrastructure area: In ground (new)



### In ground (new)

This area features a tree, ground cover and small shrubs dispersed at ground floor to the north (entry) and to the south rear car park entries

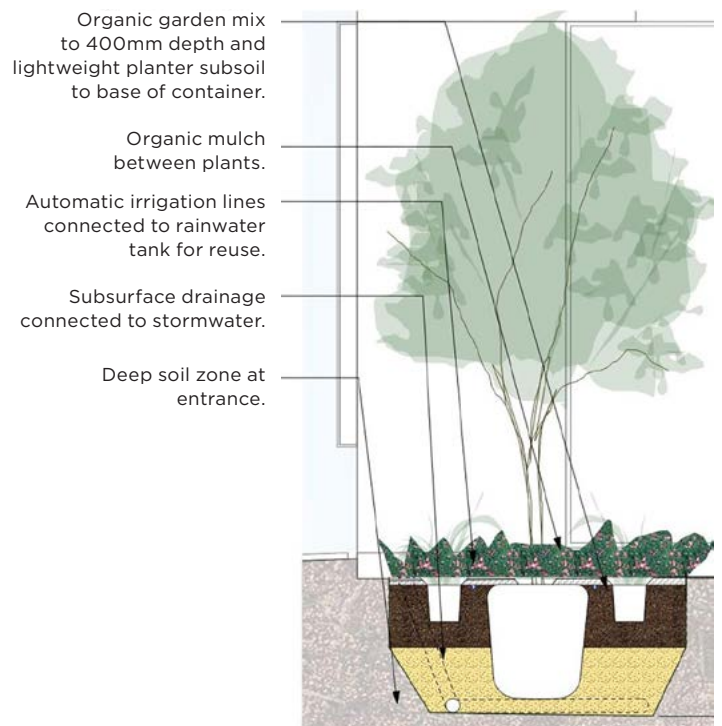
Across the ground floor vegetation covers 18 square metres.

### SPECIFIED GREEN INFRASTRUCTURE ELEMENTS

#### In ground (new)

Medium tree (canopy width 6m - 10m)	Native	1 pcs
Small shrub (<1.5m height)	Native	6 sqm
Ground cover	Native	5 sqm
Soil or substrate (over 500mm depth)	Soil	11 sqm

By allowing a recessed building entrance at the street front the opportunity for greening exists and the *Tristaniopsis laurina* 'Luscious' medium sized, native tree becomes the focal point and is provided with adequate growing area up through a double height void. The Green Factor tool rewards in ground canopy trees over other forms of greening as the opportunity to improve soil conditions and cool their surrounding area is significant. The planted area surrounding the tree includes ground cover and small shrubs all of which are visible by building occupants and passers by.

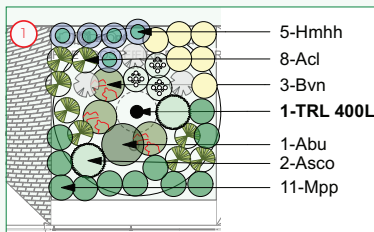


Northern entrance section

Figure 3. Illustration of how the green infrastructure elements for 'In ground (new)' have been incorporated into the project's landscape design from a Green Factor perspective.

**Tristaniopsis laurina  
'Luscious'**

GF input: 1pc /  
Medium tree / Native



**Ground cover**

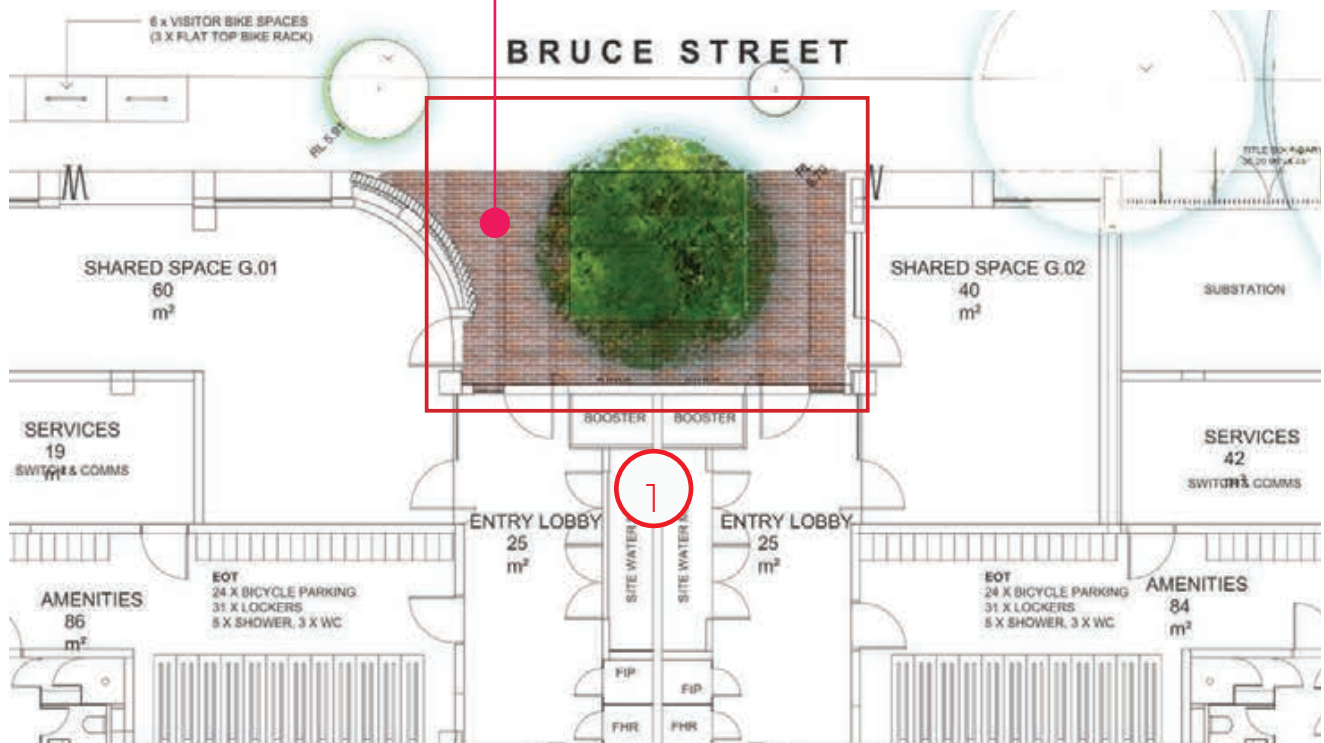
GF input:  
Ground cover /  
Indigenous / 3.1sqm  
Ground cover / Native /  
2.8 sqm

**Small shrubs**

Small shrub / Indigenous  
/ 2.4 sqm  
Small shrubs / Native /  
2.7 sqm

**Soil area for tree, ground  
cover and small shrubs**

GF input: Soil cover over  
500mm depth / 11 sqm



Ground Floor Plan - Northern entrance

## Green infrastructure area: Green façade



### Green façade

The landscape design features cascading plants growing from the planters that fill areas within the building's façade.

The cascading plants have been input as 'climbers' that provide 94 square metres of vertical coverage.

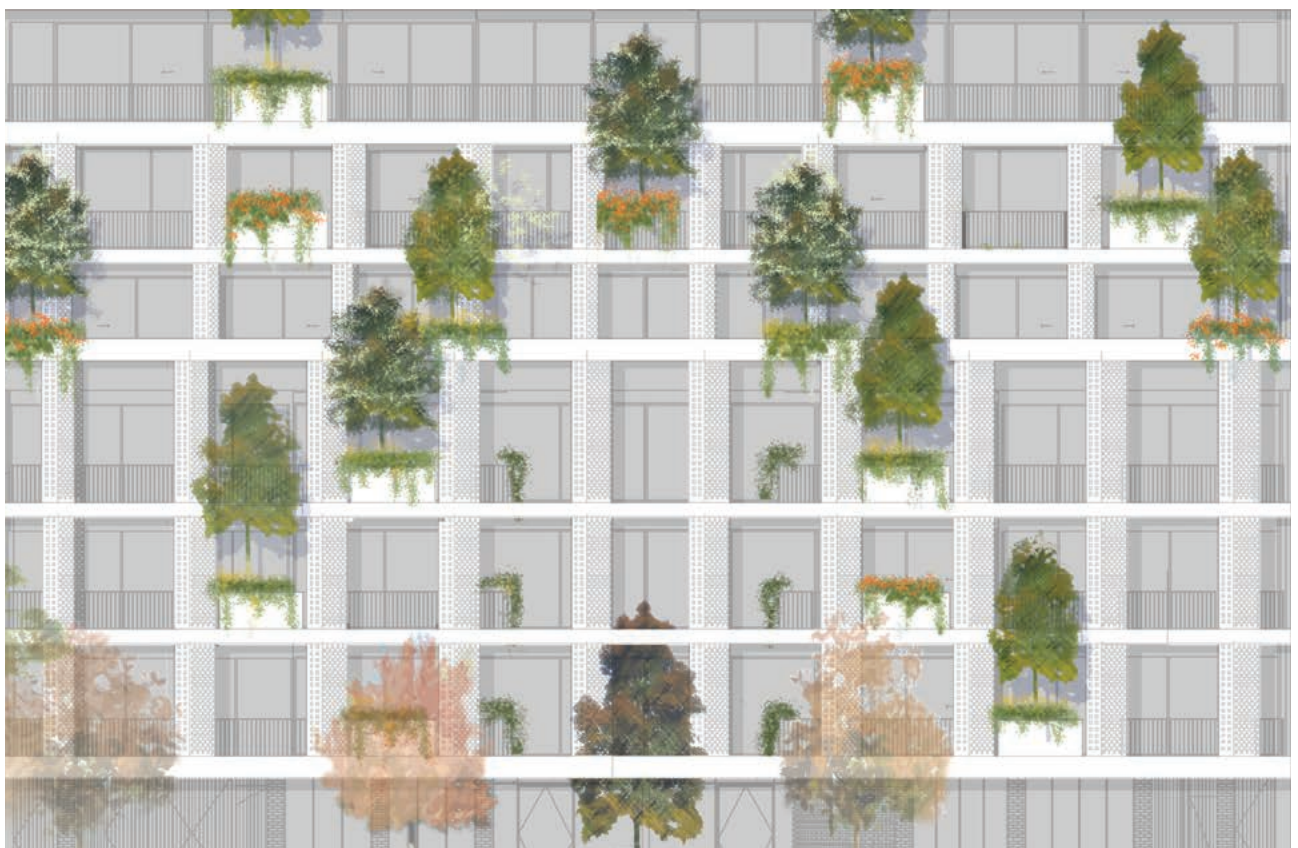
### SPECIFIED GREEN INFRASTRUCTURE ELEMENTS

#### Green Façade

Climbers

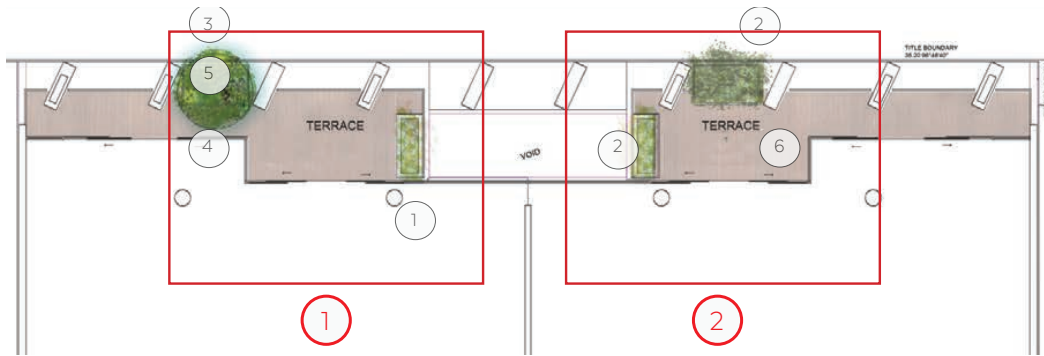
Native

94 sqm

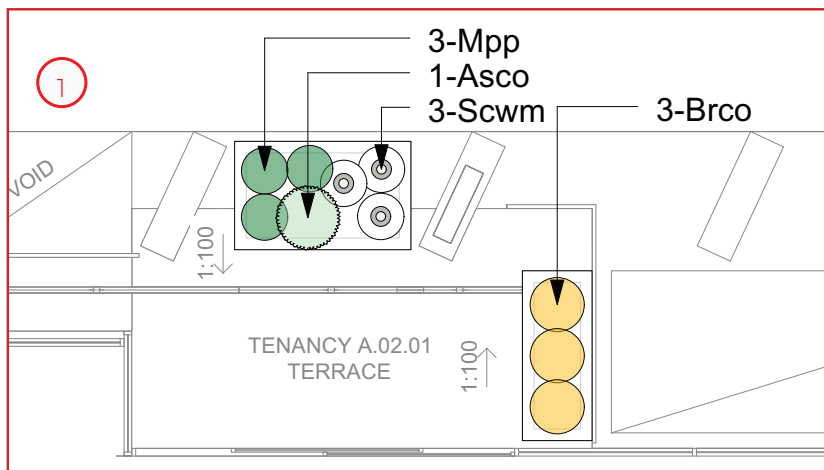


### Detail of North Elevation

Figure 4. Illustration of how the green infrastructure elements for a 'Green Façade' have been incorporated into the project's landscape design from a Green Factor perspective.

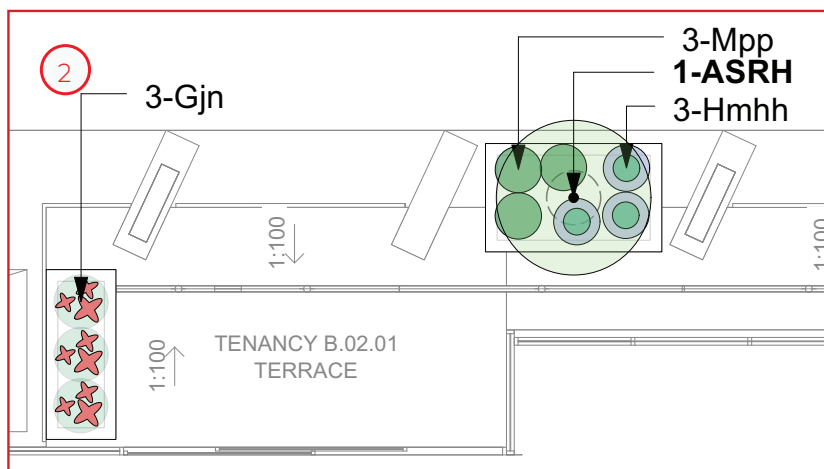


Floor Plan Level 01



Planting Plan Detail 01

**Green façade  
for level 01**  
GF input:  
Climbers /  
native /  
13sqm



Planting Plan Detail 02

## Green infrastructure area: **Planters (on structure)**



### Planters (on structure)

This area features a total of 33 raised planters supporting various small trees, shrubs and ground cover plants.

The planters cover a total area of 76 square metres and feature mainly across the north façade of the building with some located on the terrace to the south elevation.

### SPECIFIED GREEN INFRASTRUCTURE ELEMENTS

#### Planters (on structure)

Small shrub (< 1.5m height)	Indigenous	3 sqm
Small tree (canopy width < 6m)	Native	14 pcs
Large shrub (> 1.5m height)	Native	14 sqm
Small shrub (< 1.5m height)	Native	21 sqm
Ground cover	Native	41 sqm
Large shrub (> 1.5m height)	Exotic	14 sqm
Small shrub (< 1.5m height)	Exotic	7 sqm
Ground cover	Exotic	3 sqm
Soil or substrate (over 500mm depth)	Soil	76 sqm

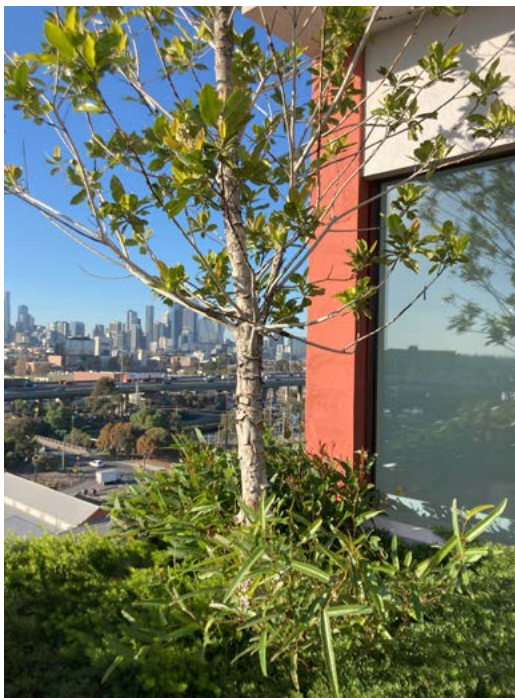
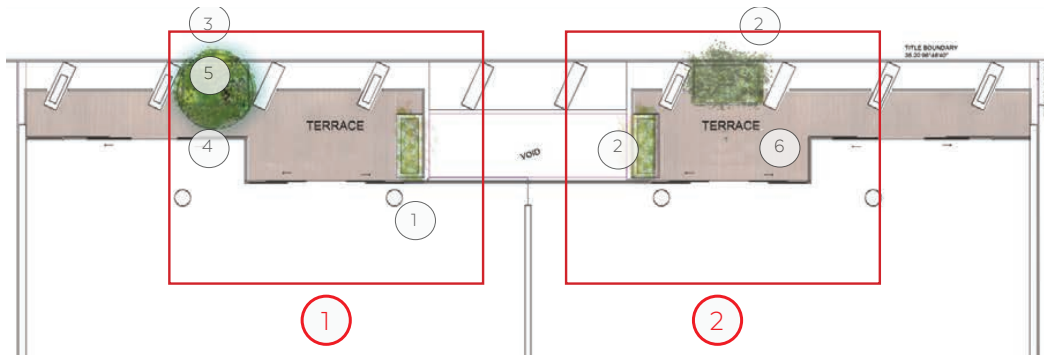
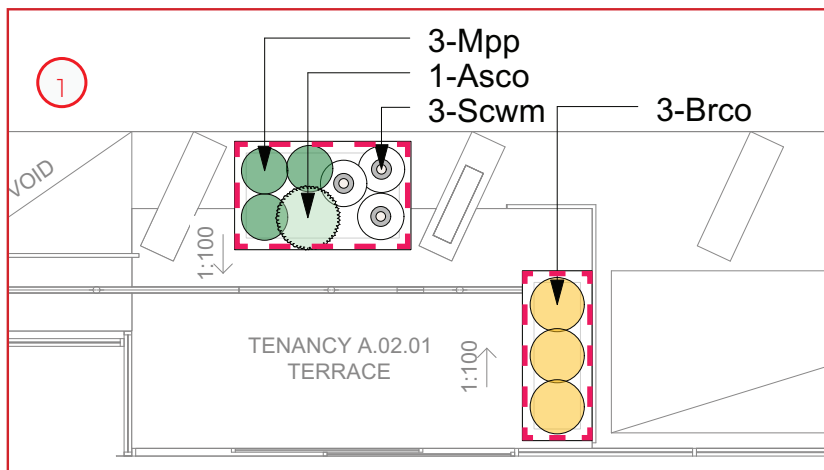


Figure 5. Illustration of how the green infrastructure elements for 'Planters (on structure)' have been incorporated into the project's landscape design from a Green Factor perspective.



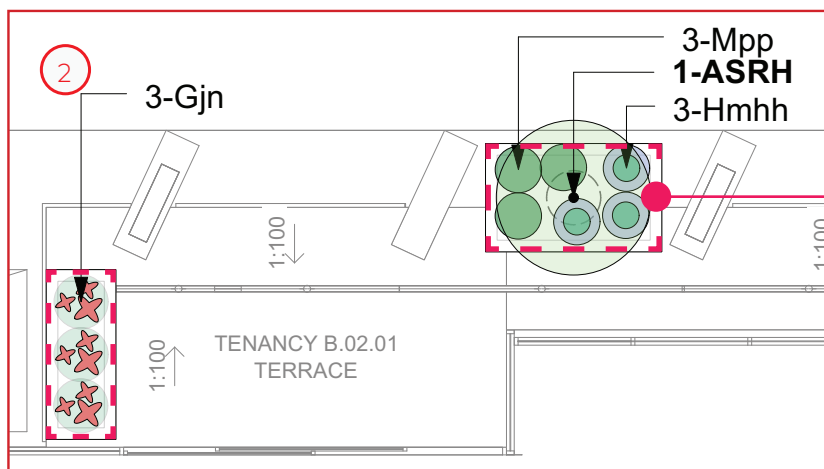
Floor Plan Level 01



Planting Plan Detail 01

**Planters  
(on structure)  
for level 01**

GF input:  
Ground cover /  
indigenous /  
5.1sqm  
Ground cover /  
native / 0.8sqm  
Small shrubs /  
indigenous /  
1.1sqm  
Soil area for  
planter(s) /  
7sqm



Planting Plan Detail 02

**Soil area for  
individual planter**

GF input: Soil cover  
200-500mm depth /  
4.3 sqm

## Green infrastructure area: Green roof



### Green roof

The landscape design features 287.1 square metres of green roof area covered with lawn and predominantly indigenous shrubs and ground cover plants.

### SPECIFIED GREEN INFRASTRUCTURE ELEMENTS

#### Green Roof

Small shrub (< 1.5m height)	Indigenous	64 sqm
Ground cover	Indigenous	128 sqm
Ground cover	Native	126 sqm
Small shrub (< 1.5m height)	Exotic	16 sqm
Ground cover	Exotic	64 sqm
Soil or substrate (200 - 500mm depth)	Soil	80 sqm
Soil or substrate (under 200mm depth)	Soil	320 sqm



## PLANTING PLAN & GREEN FACTOR TOOL TABLE - ROOFTOP

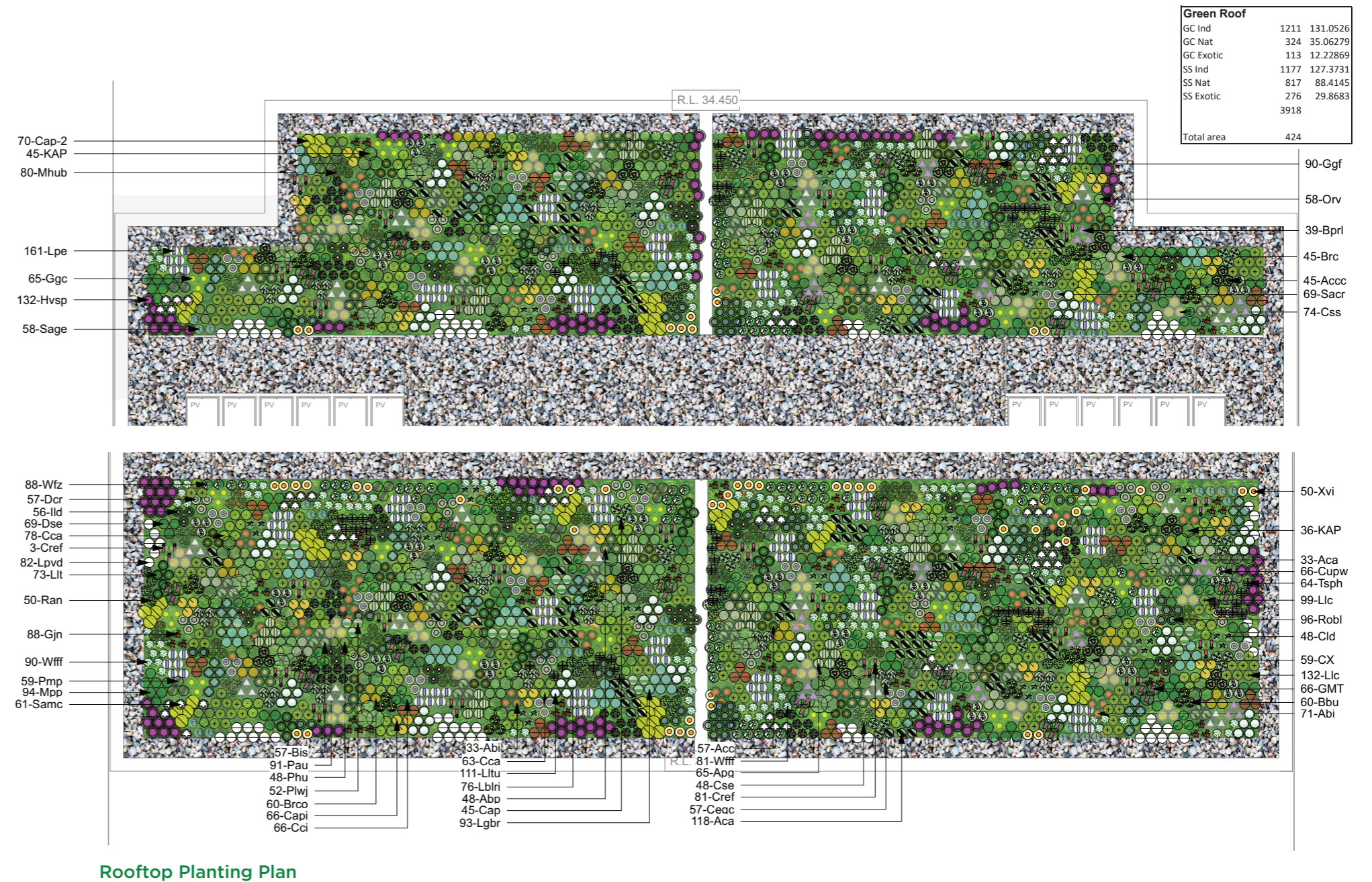


Figure 6. Illustration of how the green infrastructure elements for 'Green Roof' have been incorporated into the project's landscape design from a Green Factor perspective.

### Green Factor landscape package

See Appendix 1 for the example town planning landscape package submission 14-26 Bruce Street, Kensington as part of a Green Factor tool assessment.

This package provides an example of a satisfactory landscape package submission.

Given that this project has been completed, we have also included detailed as-built planting plans and lists in Appendix 1 to support this case study. The level of detail that you submit at planning application stage may not be as comprehensive and complete.



## Green Factor scorecard

14-26 Bruce Street, Kensington achieved a Green Factor score of 0.67. This exceeds the requirement to achieve a Green Factor score of 0.55.

