

11-13 SPRING STREET FITZROY

ENVIRONMENTAL WIND ASSESSMENT

By
M. Eaddy

**ADVERTISED
PLAN**

**This copied document to be made available
for the sole purpose of enabling
its consideration and review as
part of a planning process under the
Planning and Environment Act 1987.
The document must not be used for any
purpose which may breach any
copyright**



Report 25148A-DE-EWA02

11-13 SPRING STREET FITZROY ENVIRONMENTAL WIND ASSESSMENT

MEL CONSULTANTS REPORT NO:

25148A-DE-EWA02

PREPARED FOR:

Antipodean Land Developments Pty Ltd
106 Kerr Street
Fitzroy VIC 3065

PREPARED BY:

MEL Consultants Pty Ltd
22 Cleeland Road
Oakleigh South VIC 3167

Contact: Vali Valibhoy

Ph: +61 430 352 259

Contact: M. Eaddy

Ph: +61 3 8516 9680

PREPARED BY:

M. Eaddy

M. Eaddy
Managing Director

Date: 18th May 2026

REVIEWED BY:

J. Kostas

J. Kostas
Director

Date: 18th May 2026

RELEASED BY:

M. Eaddy

M. Eaddy
RPEV
Managing Director

Date: 18th May 2026

REVISION HISTORY

Revision No:	Date Issued	Reason/Comment
0	10 th December 2025	Initial Issue
1	12 th December 2025	Revised Drawings
2	18 th May 2026	Revised Drawings

DISTRIBUTION

Copy No:
1

Copy	Location	Type
1	Antipodean Land Developments P/L	Electronic PDF
2	MEL Consultants – Report Library	Electronic PDF

NOTE: This is a controlled document within the document control system. If revised, it must be marked SUPERSEDED and returned to the MEL Consultants Pty Ltd contact.

CONTENTS

1.	Introduction	4
2.	The Development.....	5
3.	Wind Environment and Exposure	10
4.	Assessment Criteria	11
4.1	Recommended Comfort Criteria.....	12
5.	Wind Assessment.....	13
5.1	Argyle Street	13
5.2	Spring Street	13
5.3	Johnston Place	13
5.4	Balconies and Terraces.....	14
6.	Conclusions	15

1. INTRODUCTION

The proposed development at 11-13 Spring Street, Fitzroy, will be a 7 level (27.13m) apartment development in Fitzroy as highlighted in Figure 1.

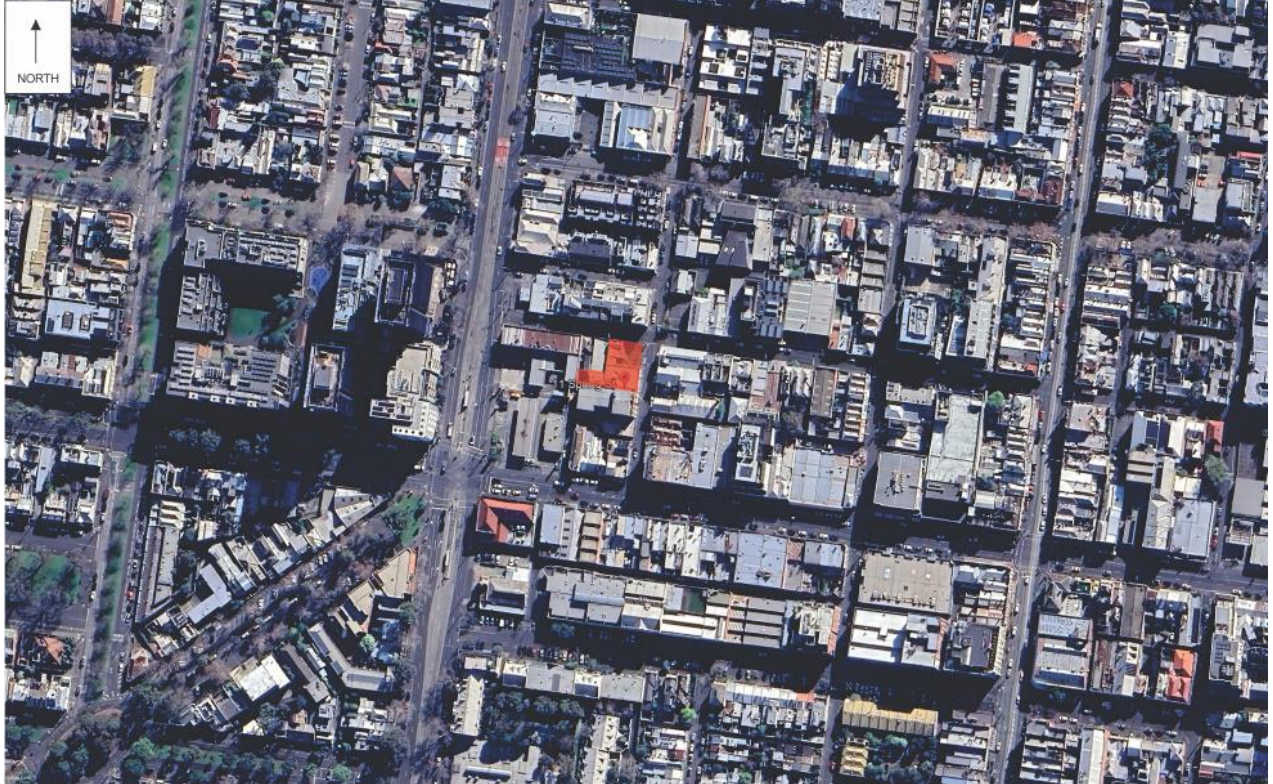


Figure 1: Location of the proposed (highlighted in red) [Google]

This assessment was commissioned by Antipodean Land Developments and is based on a review of drawings prepared by Edition Office listed in Appendix A and only considers current existing surrounds and under construction buildings (i.e. no proposed future buildings). This desktop environmental wind assessment is based on MEL Consultants knowledge of wind flow around buildings and structures from undertaking numerous wind tunnel model studies, no specific wind tunnel study has been undertaken for this assessment.

2. THE DEVELOPMENT

The proposed development will be an apartment building on a corner site with frontages to Argyle and Spring Streets. The ground floor (Figure 2) has the main pedestrian entrance recessed into the middle of the Spring Street face and maintenance access from Johnston Place at the southwest corner of the site. The ground level facade is setback at the northeast corner and the area facing Argyle Street is communal open space. There are also seats along the footpath around the northeast corner on the outside of the planters.

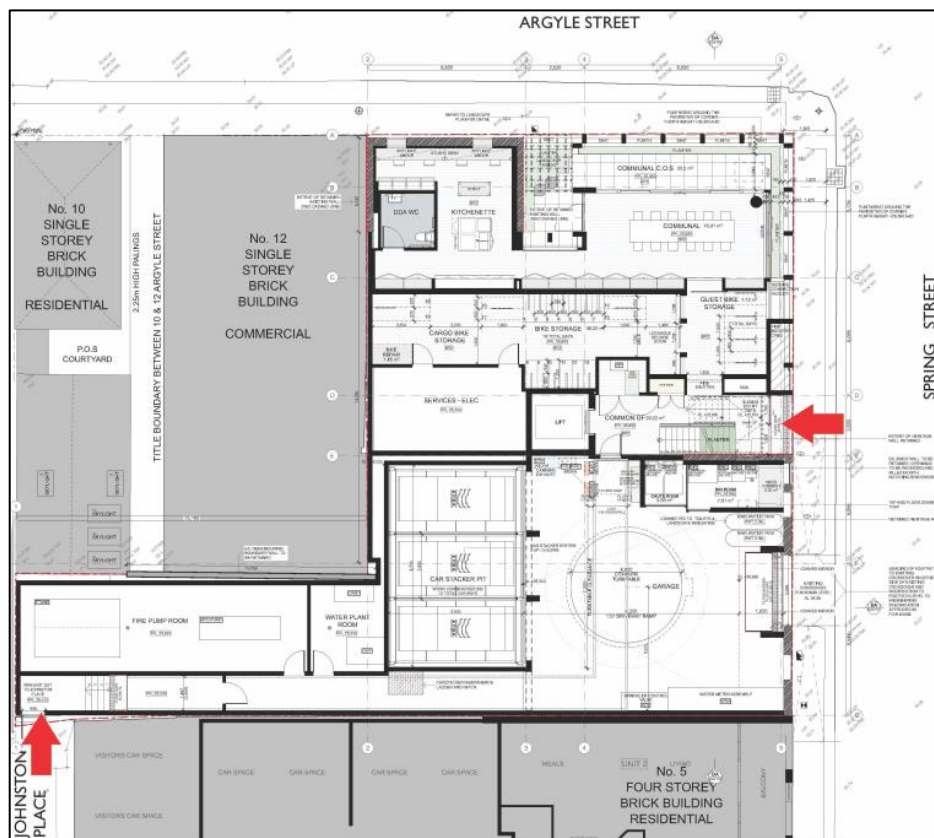


Figure 2: Ground Floor Plan (entrances highlighted by red arrows)

The built form of the First Floor is located on the east side of the site as shown in Figure 3. The narrow extension of the site to the west is utilised as a terrace for the adjacent apartment. There are also two balconies on the north face of the level, with one set behind the heritage facade. The second floor increases the setback of the middle of the north face and this is used as a balcony for the adjacent apartment. There is also a setback of the southwest corner of the floor for a large terrace as shown in Figure 4.



Figure 3: First Floor Plan



Figure 4: Second Floor Plan

The floor plans of the third to sixth floors are the same and the typical layout (Third Floor) is shown in Figure 5. The balcony at the northeast corner is the same as the lower levels and there is an east facing balcony at the southeast corner of the typical floor. The seventh floor southern setback is increased and utilised for a terrace as shown in Figure 6. The private balcony for the apartment is in the same northeast corner position as the floor below.

The north and east elevations are presented in Figures 7 and 8, respectively show the setbacks of the building with height. The elevations also indicate the balcony and terrace balustrades will be porous vertical elements but no balustrade height is indicated.



Figure 5: Third Floor Plan (Third to Sixth Floors)

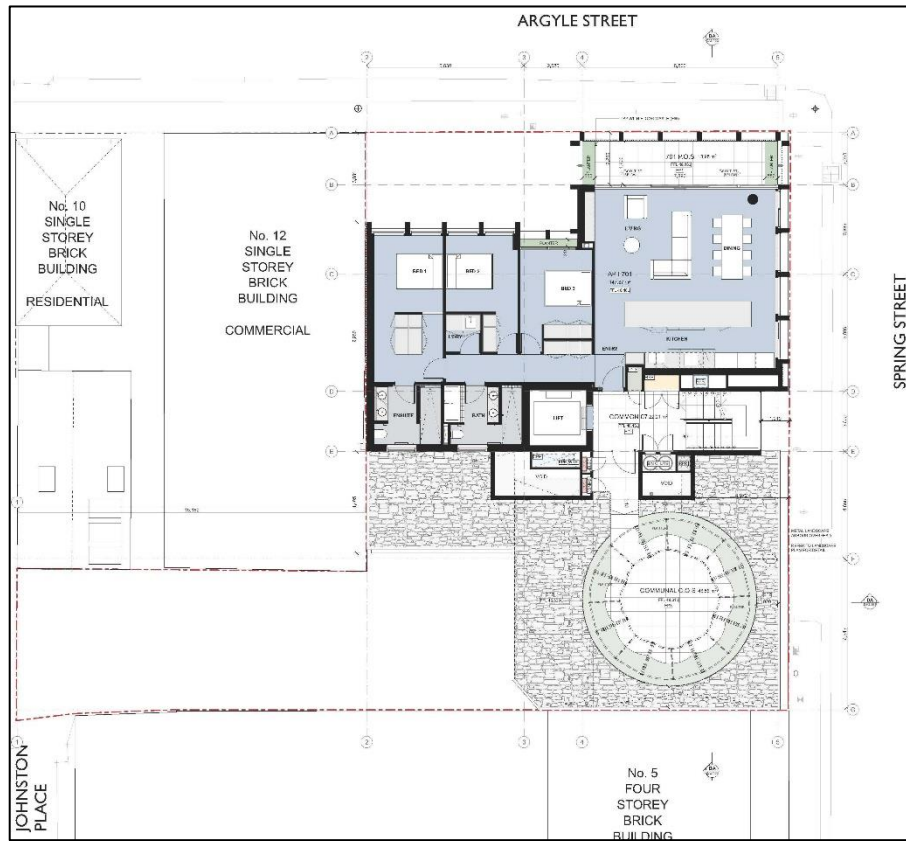


Figure 6: Seventh Floor Plan

Report 25148A-DE-EWA02

3. WIND ENVIRONMENT AND EXPOSURE

The strongest and most frequent winds in the Melbourne Region come from the north and west sectors with secondary strong winds coming from the south sector; east sector winds are relatively light and infrequent.

The proposed development is surrounded by typical low-rise (approximately 1 – 4 storeys) buildings to the north, east, and south, which means the upper levels of the development would have direct exposure to wind. There are multi-level towers on the west side of Nicholson Street that would provide shielding for the west wind directions.

The topography of the area is relatively flat and would not influence the wind conditions around the development.

4. ASSESSMENT CRITERIA

The City of Yarra Planning Scheme defines the following wind safety and comfort criteria for apartment development in Clause 58.04-4 Standard D17. These criteria are defined as follows:

Unsafe wind conditions mean the hourly maximum 3 second gust which exceeds 20 metres/second from any wind direction considering at least 16 wind directions with the corresponding probability of exceedance percentage.

Comfortable wind conditions A 'mean wind speed' from all wind directions combined with a probability of exceedance less than 20% of the time, equal to or less than:

- 3 metres/second for sitting areas
- 4 metres/second for standing areas
- 5 metres/second for walking areas

Mean wind speed means the maximum of:

- Hourly mean wind speed, or
- Gust equivalent mean wind speed (3 second gust wind speed divided by 1.85)

Trees and landscaping should not be used to mitigate wind impacts. This does not apply to sitting areas, where trees and landscaping may be used to supplement fixed wind mitigation elements.

Wind mitigation elements, such as awnings and screens should be located within the site boundary, unless consistent with existing urban context or preferred future development of the area.

The above criteria are pass/fail criteria as they only assess the summation of probabilities of exceedance across all wind directions to determine whether a location passes or fails the threshold criterion i.e. the criteria assess the average wind conditions.

4.1 Recommended Comfort Criteria

The following wind criteria are suggested for the surrounding streetscapes:

- | | |
|----------------------------|-----------------------------|
| - Pedestrian transit areas | Walking Comfort Criterion |
| - Building entrances | Standing Comfort Criterion |
| - Private Terraces | Standing Comfort Criterion* |

* The wind conditions on terraces have been recommended to satisfy the standing comfort criterion as these spaces could be considered elective when external wind conditions would be perceived as acceptable for the desired activity. This comfort criterion is the expectation of the City of Yarra

The activation of the public realm external to the site would depend on the existing wind conditions in the streetscapes that are often beyond the control of the proposed development. For cases where the existing wind conditions in the public realm external to the site are on or above the walking criterion, then the proposed development should not have any adverse wind effects in these areas.

All locations must satisfy the pedestrian safety criterion.

5. WIND ASSESSMENT

5.1 Argyle Street

The north face of the proposed development would be exposed to the prevailing northerly wind directions and would downwash wind flow into Argyle Street, which would flow around the northeast corner into Spring Street. The wind conditions along Argyle Street would increase compared to the existing conditions and be expected to achieve the walking comfort criterion.

The communal open space located along the Argyle Street frontage is in an undercroft and wind conditions would be expected to vary along the space. In the central recessed area of the space the wind conditions would be expected to achieve the sitting comfort criterion. The wind conditions would increase to standing and walking comfort in the middle of the building face and near the northeast corner, respectively.

5.2 Spring Street

The wind conditions along Spring Street would be influenced by the wind flow deflected around the northeast corner for the northerly wind directions rather than downwash caused by the east sector wind directions. As discussed in Section 3, the east sector wind directions are relatively light and infrequent and they would not be expected to cause any significant downwash into Spring Street. Based on this scenario, the general wind conditions along Spring Street would be expected to achieve the walking comfort criterion.

The main pedestrian entrance is recessed in the middle of the east face and wind conditions in front of the entrance would be expected to achieve the standing comfort criterion.

5.3 Johnston Place

The wind conditions along Johnston Place would be expected to be similar to the existing wind conditions, which are expected to be the standing comfort criterion. The reason for this assessment is the built form around the end of Johnston Place is not significantly

changing since the main built form of the proposed development is located on the east side of the site.

5.4 Balconies and Terraces

Typically, private balconies that are set into the middle of building faces or open to single aspect have better wind conditions compared to balconies near or around the corners (i.e. open to two aspects) of the building. The wind conditions on most of the balconies would be expected achieve the standing comfort criterion since they are only open to one aspect. The northeast balcony has planters with dense landscaping (1.5m high) at each end that would be expected mitigate the wind speed up around the building corners and wind conditions on the balcony would be expected to satisfy the standing comfort criterion.

The terrace on the west side of the first floor would be expected to have wind conditions achieving the standing comfort criterion.

The wind conditions on the terrace at the southwest corner of the second floor would be expected to have wind conditions achieving the standing comfort criterion.

The terrace on the south side of the seventh floor would be shielded from the north winds by the built form of the proposed development. The space is surrounded by a landscaped zone that includes a porous screen and wind conditions with the space would be expected to achieve the standing comfort criterion.

6. CONCLUSIONS

We have assessed the likely environmental wind conditions for the proposed development at 11-13 Spring Street, Fitzroy, based on the drawings by Edition Office listed in Appendix A.

The general wind conditions in the surrounding streetscapes have been assessed as satisfying the walking comfort criterion.

The wind conditions on the ground level private open space have been assessed as sitting, standing, and walking comfort depending on the proximity to the northeast corner of the development.

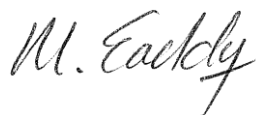
The wind conditions outside the main entrance on Spring Street have been assessed as achieving the standing comfort criterion.

The wind conditions on the private balconies have been assessed as achieving the standing comfort criterion.

The wind conditions on the first and second floor terraces have been assessed as achieving the standing comfort criterion.

The wind conditions on the seventh floor terrace have been assessed as achieving the standing comfort criterion.

There would be expected to be no exceedances of the pedestrian safety criterion.



M. Eaddy
MEL Consultants Pty Ltd
18th May 2026

Appendix A – Drawing Register

Drawing #	Rev	Date	Title
DA000	A	13/05/2026	Cover Page
DA0.101	A	13/05/2026	Development Schedule
DA0.102	A	13/05/2026	Demolition Page
DA0.103	A	13/05/2026	Demolition Elevations
DA0.104	A	13/05/2026	Demolition Elevations
DA1.100	A	13/05/2026	Basement Plan
DA1.101	A	13/05/2026	Ground Floor Plan
DA1.102	A	13/05/2026	First Floor Plan
DA1.103	A	13/05/2026	Second Floor Plan
DA1.104	A	13/05/2026	Third Floor Plan
DA1.105	A	13/05/2026	Fourth Floor Plan
DA1.106	A	13/05/2026	Fifth Floor Plan
DA1.107	A	13/05/2026	Sixth Floor Plan
DA1.108	A	13/05/2026	Seventh Floor Plan
DA1.109	A	13/05/2026	Roof Plan
DA2.100	A	13/05/2026	East Elevation
DA2.101	A	13/05/2026	North Elevation
DA2.102	A	13/05/2026	South Elevation
DA2.103	A	13/05/2026	West Elevation
DA2.104	A	13/05/2026	Exterior Finishes Schedule
DA3.100	A	13/05/2026	Section 1
DA3.101	A	13/05/2026	Section 2
DA3.102	A	13/05/2026	Car Stacker & Entry Sections
DA4.100	A	13/05/2026	9AM Shadow 22.09
DA4.101	A	13/05/2026	10AM Shadow 22.09
DA4.102	A	13/05/2026	11AM Shadow 22.09
DA4.103	A	13/05/2026	12PM Shadow 22.09
DA4.104	A	13/05/2026	1PM Shadow 22.09
DA4.105	A	13/05/2026	2PM Shadow 22.09
DA4.106	A	13/05/2026	3PM Shadow 22.09
DA4.107	A	13/05/2026	Shadow Analysis - 5 Spring Street Lightwell
DA4.108	A	13/05/2026	Shadow Analysis - 5 Spring Street Lightwell Section
DA5.100	A	13/05/2026	BADS Compliance Schedule
DA5.101	A	13/05/2026	Apartment Type 1
DA5.102	A	13/05/2026	Apartment Type 2
DA5.103	A	13/05/2026	Apartment Type 3
DA5.104	A	13/05/2026	Apartment Type 4
DA5.105	A	13/05/2026	Apartment Type 5
DA5.106	A	13/05/2026	Apartment Type 6

DA5.107	A	13/05/2026	Communal Open Space
DA5.108	A	13/05/2026	Terrace Solar Access
DA5.109	A	13/05/2026	Terrace Solar Access
DA5.110	A	13/05/2026	Terrace Solar Access
DA5.111	A	13/05/2026	Terrace Solar Access
DA5.112	A	13/05/2026	Overlooking Shelf Details
DA5.113	A	13/05/2026	Heritage Elevations
DA5.114	A	13/05/2026	Heritage Elevations
DA5.115	A	13/05/2026	Solar Access – Ground Floor Communal
DA5.116	A	13/05/2026	Solar Access – Ground Floor Communal
DA5.117	A	13/05/2026	Solar Access – Ground Floor Communal
DA5.118	A	13/05/2026	Solar Access – Ground Floor Communal
DA5.119	A	13/05/2026	Apartment Entry Elevation

Notes: