

THE POINT

ORAKEI, AUCKLAND

PEDESTRIAN WIND STUDY

RWDI # 2512057

16 October 2025

SUBMITTED TO

Generus Living

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Parnell, Auckland 1052

SUBMITTED BY

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DOCUMENT CONTROL

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EXECUTIVE SUMMARY

RWDI Australia Pty Ltd (RWDI) was retained to conduct a pedestrian wind assessment for The Point development located in Orakei, Auckland in New Zealand. The pedestrian-level wind tunnel microclimate assessment was conducted for the following configurations of the site:

Existing Configuration: Existing Site with Existing Surrounding Buildings

Proposed Configuration: Proposed Development with Existing Surrounding Buildings

The pedestrian level wind conditions within the public domain were predicted using the results from a boundary-layer wind tunnel test combined with historical meteorological wind records for the region. The wind speeds have been evaluated against suitable criteria to assess pedestrian wind safety and comfort conditions. The results of the assessment are summarised as follows:

Pedestrian Wind Safety

- **Existing Configuration:** The wind speeds in the study area were found to exceed the wind safety criterion at two locations to the northeast of existing site.
- **Proposed Configuration:** With the inclusion of Proposed Development, the safety exceedances for the existing site were resolved. However, winds exceeding the safety limits were observed at three other locations to the northwest of site and to the east of Building 4.

Pedestrian Wind Comfort

- **Existing Configuration:** Wind conditions around the existing site are shaped by its open exposure to southwesterly winds and accelerating northeasterly winds up the slope, resulting in generally higher wind speeds suitable for active pedestrian use (Categories C and D). Localised areas, particularly to the northwest within the reserve walkway and to the north of the site, are expected to experience wind conditions exceeding comfort thresholds (Category E).
- **Proposed Configuration:**
 - Northern areas of the site are likely to benefit from improved sheltering. Favourable wind conditions are anticipated around most pedestrian pathways, including those adjacent to East Cliffe Residential Village. Wind conditions are expected to be suitable for passive to semi-active use (Categories A–C).
 - Higher wind speeds (Category D) are anticipated around building corners and along the reserve walkway, with some areas exceeding comfort thresholds (Category E), particularly around the northwest corner of Buildings 5 and further along the reserve walkways.

Recommendations:

Based on the findings of the wind tunnel study, the following in-principle wind mitigation strategies can be incorporated in the design of the development:

- The landscape concept indicates significant vegetation within and around the site which is expected to reduce mean wind speeds and improve overall comfort across the site. Densely foliated trees with undergrowth are recommended and should be retained along the East and West Public Walkways to support passive to semi-active use (Categories B–C).
- Wind screens (maximum 50% porosity and heights of between 2-3 m) should be installed at the northwest corner of Building 5 and at the southeast corner of Building 4 on the upper level.



- To address wind impacts in the northern reserve walkway, a canopy or trellis between Buildings 4 and 5 and a perimeter wind screen along the northern edge are recommended.

Wind Mitigation Review Summary

RWDI has reviewed the *Landscape Concept – Wind Mitigation Devices* prepared by Boffa Miskell, received on 9 October 2025. The proposed design includes the targeted strategies discussed above to address high winds in the public realm. With the inclusion of these measures, wind conditions within the public domain are expected to be safe and comfortable for intended use.



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1 INTRODUCTION

RWDI Australia Pty Ltd (RWDI) was retained to conduct a pedestrian wind assessment for the Proposed Development “The Point” located in Orakei, Auckland in New Zealand. This report presents the project objectives, background and approach, and discusses the results from RWDI’s wind tunnel assessment. Commentary on conceptual wind control measures is also provided, if necessary.

The project site, shown within its existing surrounding context in Image 1, is located along a sloping ridge line near the coastline of Mission Bay with frontage to the M J Savage Memorial Park to the north. The site has access from Te Arawa Street, Rukutai Street and Aotea Street located to the south. The Proposed Development comprises five buildings (B1 to B5), comprising a mix of podium and elevated homes. A pathway, approved by the Council, runs between Building 5 and the Eastcliffe Retirement Village located to the west of the project site. The homes in Building 1 are designed to offer views towards Mission Bay.



Site Location



Image 1: Aerial Image of the Site and Existing Surrounds

The objective of the study is to assess the wind comfort and safety conditions along pedestrian areas within the public domain around the study site and provide recommendations for minimising adverse wind effects, if needed. This quantitative assessment is based on wind speed measurements on a scale model of the Proposed Development and its surroundings in one of RWDI’s boundary-layer wind tunnels. These measurements were combined with the local wind records and compared with the appropriate criteria to gauge the wind comfort and safety in pedestrian areas. The key outdoor pedestrian-accessible areas of interest associated with the development include the pedestrian footpaths around the site including key walkways to the east and west.

2 APPROACH AND METHODOLOGY

2.1 Wind Tunnel Study Model

To assess the wind environment within and around the Proposed Development, a 1:300 scale model of the project site and surroundings was constructed for the wind tunnel tests of the following configurations:

Existing Configuration: Existing Site with Existing Surrounding Buildings (Image 2A)

Proposed Configuration: Proposed Development with Existing Surrounding Buildings (Image 2B)

The wind tunnel model included all relevant surrounding buildings and topography within a radius of 360 m around the project site. This encompassed both existing structures and those currently under construction, with an expectation that these would likely be present or completed by the time the proposed subject development concludes. Additionally, the wind and turbulence profiles in the atmospheric boundary layer beyond the modelled area were simulated in RWDI's wind tunnel, incorporating spires and roughness blocks.

The wind tunnel model was instrumented with a total of 109 specially designed wind speed sensors to measure mean and gust speeds at a full-scale height of approximately 1.5 - 2 m above local ground in pedestrian areas throughout the study site. Of these, 45 sensors were installed within publicly accessible zones and are the primary focus of this report. The placement of wind measurement sensors was based on RWDI's experience and understanding of the pedestrian usage for this site. Wind speeds were measured for 36 directions in 10-degree increments. The measurements at each sensor location were recorded in the form of ratios of local mean and gust speeds to the mean wind speed at a reference height above the model.

Note that no vegetation was included as part of the configuration tested, in accordance with AWES Guidelines (2024). The method for testing scale models in the wind tunnel is consistent with internationally recognized good practice, and meets the requirements set out in the Australasian Wind Engineering Society Quality Assurance Manual (AWES-QAM-2019).

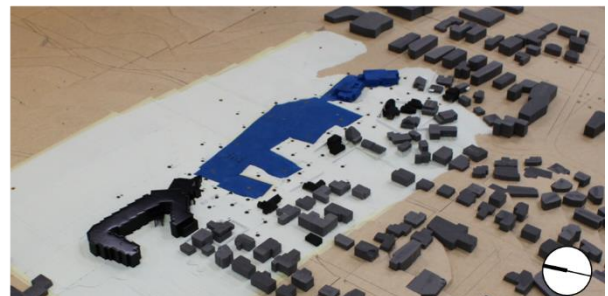
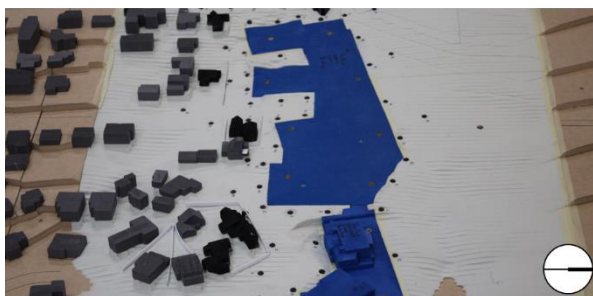
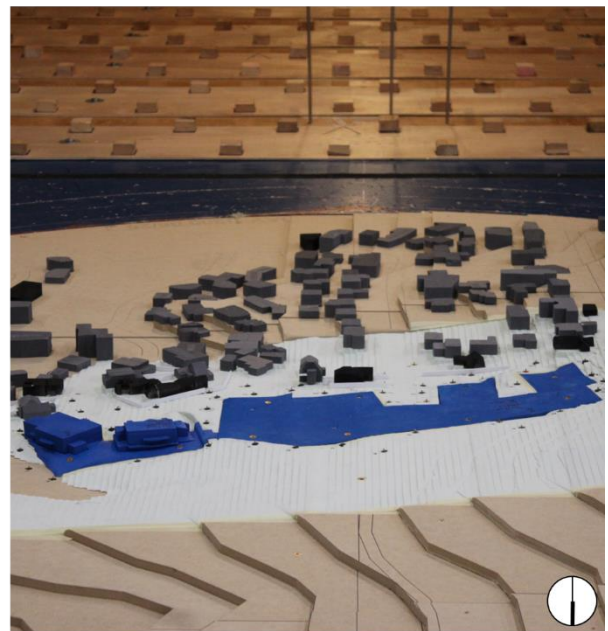


Image 2A: Wind Tunnel Study Model – Existing Configuration

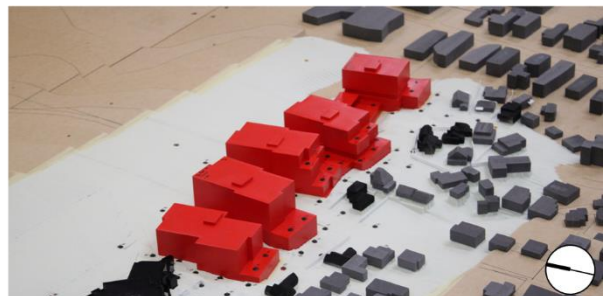
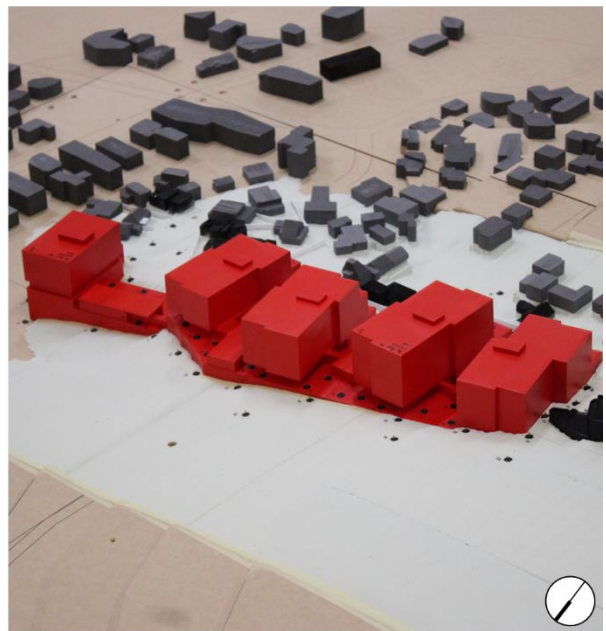
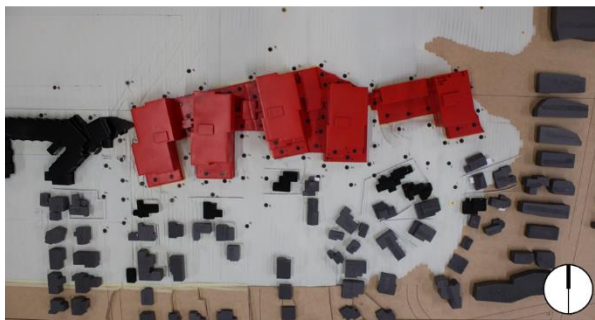
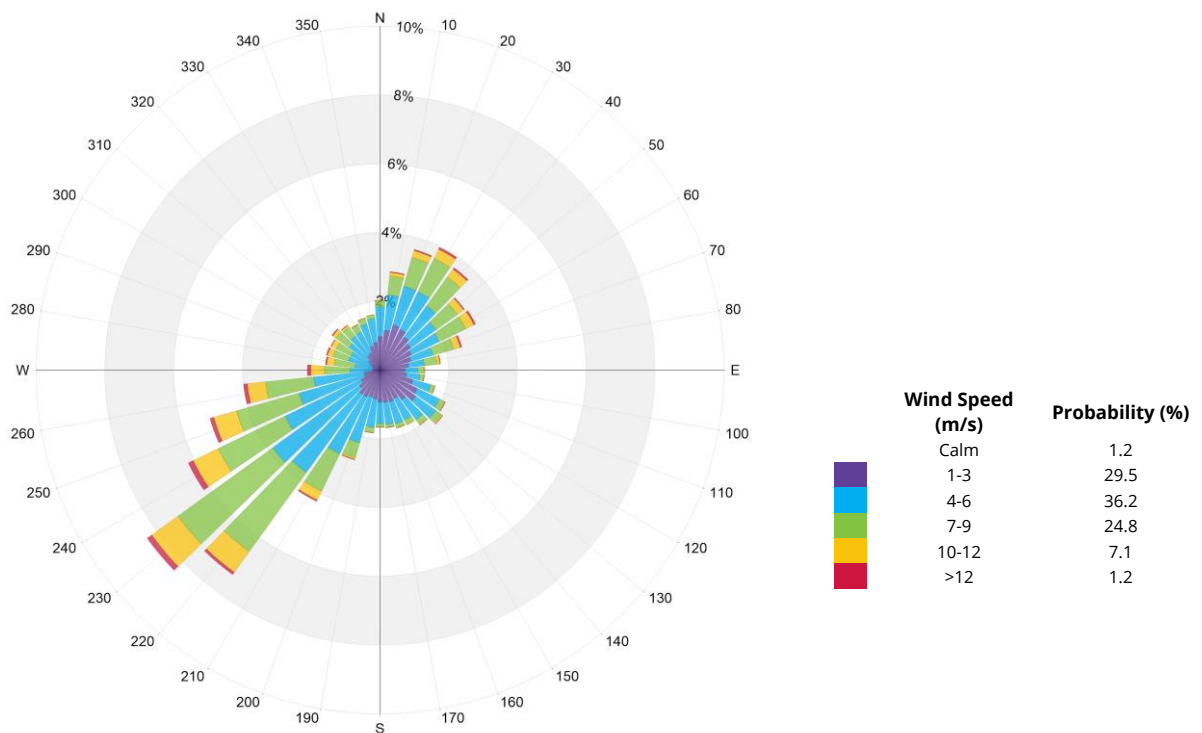


Image 2B: Wind Tunnel Study Model – Proposed Configuration

2.2 Meteorological Data

Wind statistics recorded at Auckland International Airport between 1999 and 2023, inclusive, were analysed and were used to assess the wind conditions around the site. Image 3 graphically depicts the annual directional distributions of wind frequencies and speeds recorded at the station. Winds from southwest and northeast directions are predominant throughout the year as indicated by the wind rose. Strong winds of a mean speed greater than 6 m/s measured at the airport (at an anemometer height of 10 m) occur for approximately 33% of the time throughout the year.

Time-history of the wind for the period above were combined with the wind tunnel data to predict the frequency of occurrence of full-scale wind speeds at the site. The full-scale wind predictions were then compared with the wind criteria for pedestrian comfort and safety, as described in Section 2.3.



**Image 3: Directional Distribution of Winds Approaching Auckland International Airport
(1999 - 2023)**

2.3 Pedestrian Wind Criteria

The pedestrian wind criteria, described in the Table below, have been used to assess the wind conditions around the development site for the various configurations. Image 4 shows the wind environment controls from the Auckland Unitary Plan used to derive the criteria.

Table: Pedestrian Wind Comfort and Safety Criteria

Comfort Category	Mean Speed (m/s)	Description
Category A	≤ 2.1	Areas of pedestrian use or adjacent dwellings containing significant formal elements and features intended to encourage longer term recreational or relaxation use such as major and minor public spaces, parks and other open space, and adjacent outdoor living spaces.
Category B	≤ 3.3	Areas of pedestrian use or adjacent dwellings containing minor elements and features intended to encourage short term recreation or relaxation, including adjacent private residential properties such as minor pedestrian open spaces, pleasure areas in road reserves, streets with significant groupings of landscaped seating features.
Category C	≤ 4.1	Areas of formed footpath or open space pedestrian linkages, used primarily for pedestrian transit and devoid of significant or repeated recreational or relaxation features, such as footpaths where not covered in categories A or B above.
Category D	≤ 5.2	Areas of road, carriage way, or vehicular routes, used primarily for vehicular transit and open storage, such as roads generally where devoid of any features or form which would include the spaces in categories A - C above.
Category E	> 5.2	Category E represents conditions which are dangerous to the elderly and infants and of considerable cumulative discomfort to others, including residents in adjacent sites. Category E conditions are unacceptable and are not allocated to any physically defined areas of the city.

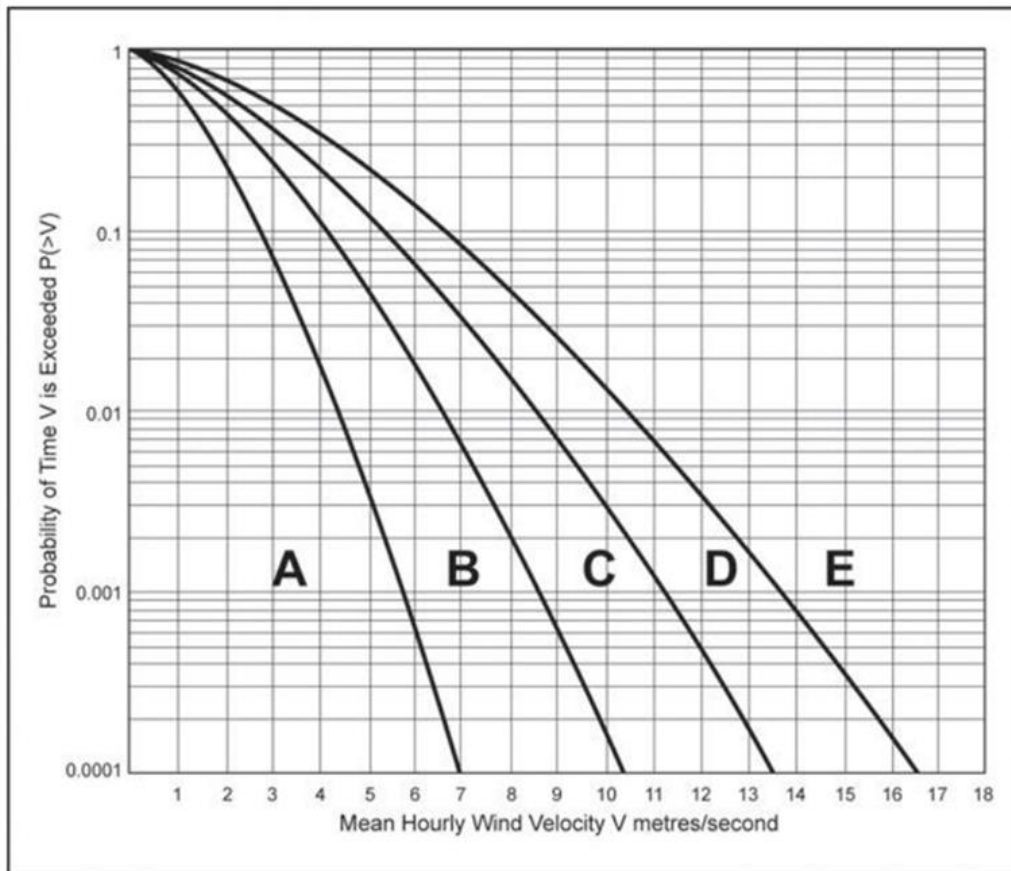
Notes:

Wind conditions are comfortable if the predicted wind speeds are within the respective thresholds for at least 80% of the time between 0:00 and 23:00.

Safety Criterion	Gust Speed (m/s)	Description
Exceeded	> 25	Excessive gust speeds that can adversely affect a pedestrian's balance and footing. Wind mitigation is typically required.

Notes:

- (1) Gust Speed = Mean Speed + 3*RMS Speed
- (2) Based on an annual exceedance of one hour per year or 0.0114% of the time for 24 hours a day.



Derivation of the wind environment control graph:

The curves on the graph delineating the boundaries between the acceptable categories (A-D) and unacceptable (E) categories of wind performance are described by the Weibull expression:

$$P(>V) = e^{-(v/c)^k}$$

where V is a selected value on the horizontal axis, and P is the corresponding value of the vertical axis:

and where:

$P(>V)$ = Probability of a wind speed V being exceeded;

e = The Napierian base 2.7182818285

v = the velocity selected;

k = the constant 1.5; and

c = a variable dependent on the boundary being defined:

A/B, c = 1.548

B/C, c = 2.322

C/D, c = 3.017

D/E, c = 3.715

Image 4: Wind Environment Controls
(Reproduced from Auckland Unitary Plan)

3 RESULTS AND DISCUSSION

The predicted wind conditions within the public domain are shown on site plans in Figures 1A through 2B located in the “Figures” section of this report. These conditions and the associated wind speeds are also represented in Table 1, located in the “Tables” section of this report. The following is a detailed discussion of the suitability of the predicted wind conditions for the anticipated pedestrian use of each area of interest. Note that wind tunnel tests have been carried out without any form of wind ameliorations or vegetation/landscaping to establish a baseline understanding of the wind conditions around the site, as per guidelines.

3.1 Generalised Wind Flows

In the discussion of wind conditions on and around the Proposed Development, reference may be made to the following generalised wind flows (see Image 5). If these building/wind combinations occur for prevailing winds, there is a greater potential for increased wind activity and uncomfortable or potentially unsafe conditions. Design details such as setting back a tower from the edges of a podium, deep canopies close to ground level, windscreens / tall trees with dense landscaping, etc. as shown in Image 4 can help to reduce the high wind activity. The choice and effectiveness of these measures would depend on the exposure and orientation of the site with respect to the prevailing wind directions and the size and massing of the proposed buildings.

Conversely, in areas where higher wind velocities are desired, design measures can be implemented to enhance wind flow. For instance, channels aligned with prevailing wind directions can be integrated into the design to promote increased wind infiltration in regions prone to stagnant conditions. Such measures are particularly beneficial in areas with generally milder climates and high humidity levels, such as those closer to the equator.

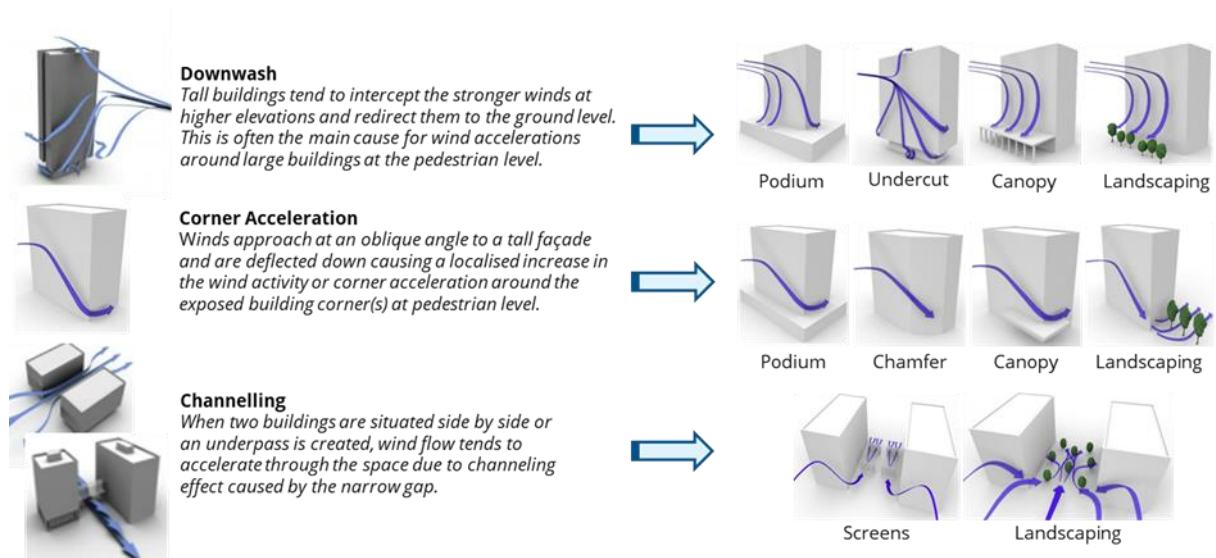


Image 5: General Wind Flows around Buildings and Examples of Wind Control Measures

3.2 Pedestrian Wind Safety

The wind speeds were observed to be within the acceptable threshold for pedestrian safety at most of the locations for both the existing and proposed configurations of the site. However, high winds exceeding the safety criterion were observed at the following locations:

- **Existing Configuration:** Two safety exceedances were noted at the northeast corner of the site (Sensors 31 and 32) due to the exposure to the southwest prevailing winds (Figure 2A).
- **Proposed Configuration:** The safety exceedance noted in the existing configuration are expected to be resolved due to the sheltering of the prevailing winds by the Proposed Development. However, new exceedances were observed within the public domain around the east of Building 4 (Sensor 43) and to the northwest of site (Sensors 86 and 91). These exceedances are primarily caused by northeast and southwest winds. Refer to Figure 2B.

3.3 Pedestrian Wind Comfort

The wind comfort results for both configurations are shown in Figures 1A and 1B located in the “Figures” section of the report. The following is a summary of expected wind comfort levels.

3.3.1 Existing Configuration

Wind conditions around the existing site are impacted by the open exposure to southwesterly winds and northeast winds accelerating up the slope. Hence, higher wind speeds suitable for active pedestrian use (Categories C & D) are typically anticipated around the site. High winds that are likely to exceed the comfort criteria (Category E) are also expected to the north of the site along the reserve walkway of the M J Savage Memorial Park (Sensors 31, 32, 34, 87 and 88 as in Figure 1A). Calmer wind conditions (Categories A and B) were observed at certain locations toward the southern end, where direct shelter from existing housing provides a noticeable reduction in wind exposure.

It is noted that the existing vegetation within and around the site will reduce the overall exposure with the wind conditions likely to be at least one categories calmer. However, note that the reserve walkway within M J Savage Memorial Park is not sheltered by vegetation and high winds are likely to persist here.

3.3.2 Proposed Configuration

With the inclusion of the Proposed Development, wind speeds are expected to increase along the northwest and southeast site boundaries due to local acceleration of regional winds around the corners. Areas to the north of the site are expected to benefit from sheltering of winds. Key wind effects are noted below and shown in Figure 1B:

- Most of the **thoroughfares and pedestrian footpaths**, including the passageway between the Proposed Development and the adjacent East Cliffe Residential Village, are expected to be suitable for passive to semiactive use (Categories A - C). These conditions are appropriate for leisure strolling, aligning well with the intended use of the surrounding streets.
- Category D conditions observed around the site are mainly due to the acceleration of the prevailing winds around corners and are expected to be suitable for active use (e.g., along reserve walkway of the M J Savage Memorial Park). Higher wind speeds exceeding the comfort criteria (Category E) on **grade**

level were observed to the northwest of Building 5 (Sensor 91), and along parts of the reserve walkway to MJ Savage Memorial Park (Sensor 88 – similar to existing site).

The overall wind environment within the public domain is expected to improve with the inclusion of the Proposed Development. Notably, the number of locations exhibiting high wind conditions exceeding the comfort threshold (Category E) is reduced from five in the existing site to only two in the proposed scenario. Furthermore, the integration of vegetation within and around the site is anticipated to provide additional mitigation of wind effects, contributing to a more comfortable pedestrian environment with conditions expected to be at least a category or two calmer than those noted here.

3.4 Design Advice and Recommendations

Based on the findings of the wind tunnel study, the following in-principle wind mitigation strategies can be incorporated in the design of the development to improve the overall wind environment (refer to Image 6 for a markup):

- Landscape concept plan, received by RWDI in September 2025 and shown in Image 6, is expected to considerably mitigate mean winds and improve overall wind comfort levels around the site. Landscaping, in particular for the East and West Public Walkways, should comprise of densely foliating trees with dense undergrowth to further reduce winds for passive to semi-active use (Category B-C).
- Wind screening, with a maximum porosity of 50% and a height of between 2 to 3 m, is recommended at the northwest corner of Building 5 to reduce the impact of high gusts around the corners
- Wind screening, with a maximum porosity of 50% and a height of between 2 to 3 m, is recommended at the southeast corner of Building 4 within the upper-level terrace to reduce wind spill onto the street.
- To mitigate wind impacts within the reserve walkway to the north, it is recommended to include a canopy/trellis between Buildings 4 & 5 as well as a perimeter wind screen along the northern perimeter to mitigate wind channelling.



Image 6: Landscape Concept Plan with Proposed Mitigation Strategy
(Prepared by Boffa Miskell)

3.5 Review of Landscape Concept

RWDI has reviewed the *Landscape Concept – Wind Mitigation Devices* prepared by Boffa Miskell, received on 9 October 2025. The concept incorporates targeted wind mitigation strategies, in line with Image 6, designed to address the high winds within the public realm. As illustrated in Image 7, these mitigation elements are expected to effectively resolve the wind safety exceedances within the public realm. It is understood that wind conditions within the private realm will be addressed as design of the development progresses.



Image 7: Landscape Concept – Wind Mitigation Devices
(Prepared by Boffa Miskell)

4 STATEMENT OF LIMITATIONS

Limitations

This report, entitled *The Point: Pedestrian Wind Study* was prepared by RWDI Australia Pty Ltd ("RWDI") for Generus Living ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("Project"). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilise the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and to understand the different factors which may impact the conclusions and recommendations provided.

Design Assumptions

RWDI confirms that the pedestrian wind assessment (the "**Assessment**") discussed herein was performed by RWDI in accordance with generally accepted professional standards at the time when the Assessment was performed and in the location of the Project. No other representations, warranties, or guarantees are made with respect to the accuracy or completeness of the information, findings, recommendations, or conclusions contained in this Report. This report is not a legal opinion regarding compliance with applicable laws.

The findings and recommendations set out in this report are based on the following information disclosed to RWDI. Drawings and information listed below were received from the client and used to construct the scale model of the development ("**Project Data**")

File Name	File Type	Date Received
20250731_The Point_Study Buildings	.stl	31 July 2025
20250814_The Point_opt1A_studybuildings.stl	.stl	18 August 2025

The recommendations and conclusions are based on the assumption that the Project Data and Climate Data are accurate and complete. RWDI assumes no responsibility for any inaccuracy or deficiency in information it has received from others. In addition, the recommendations and conclusions in this report are partially based on historical data and can be affected by a number of external factors, including but not limited to Project design, quality of materials and construction, site conditions, meteorological events, and climate change. As such, the conclusions and recommendations contained in this report do not list every possible outcome.

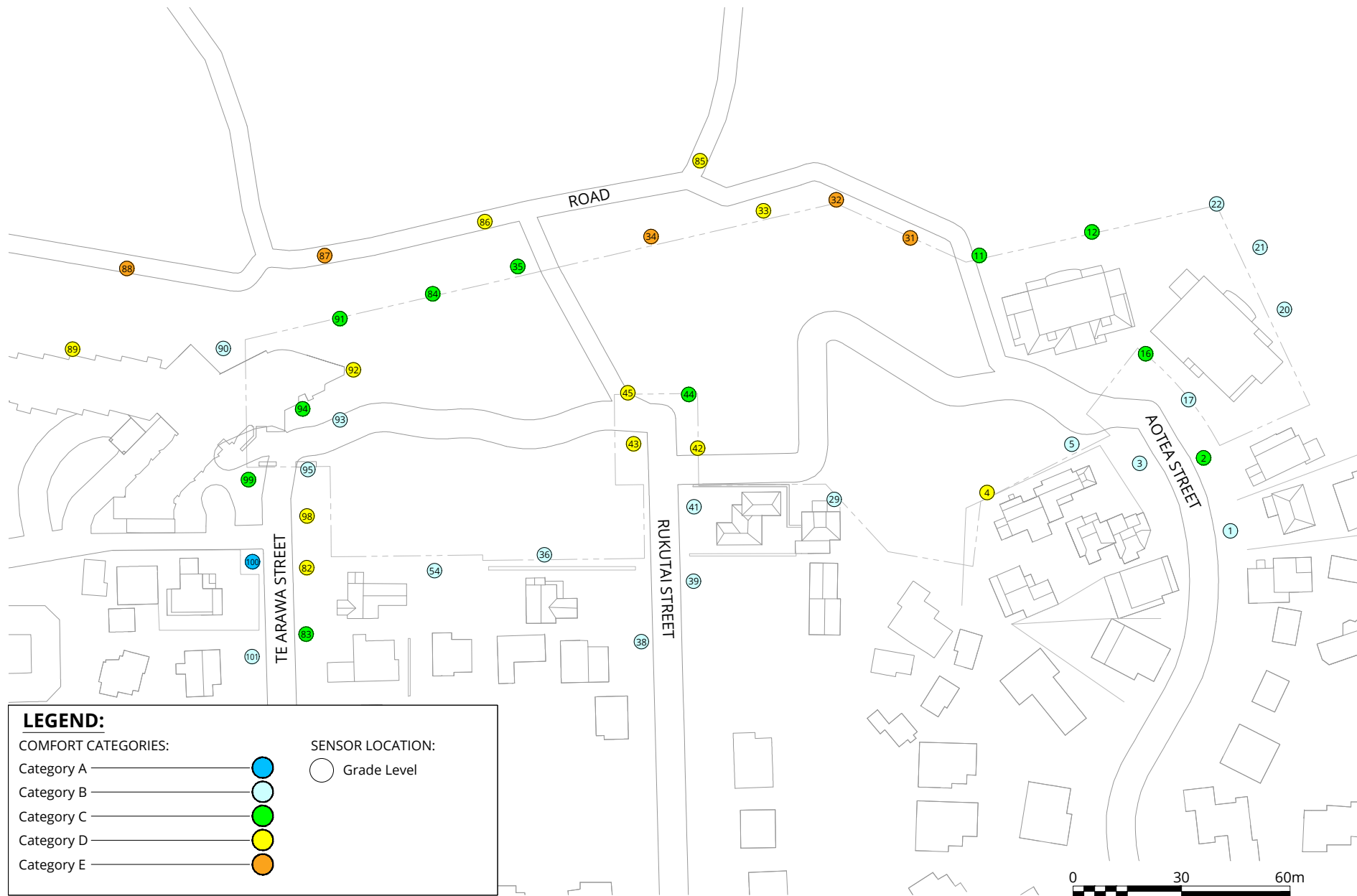
The opinions in this report can only be relied upon to the extent that the Project Data and Project Specific Conditions have not changed. Any change in the Project Data or Project Specific Conditions not reflected in this report can impact and/or alter the recommendations and conclusions in this report. Therefore, it is incumbent upon the Client and/or any other third party reviewing the recommendations and conclusions in this report to contact RWDI in the event of any change in the Project Data and Project Specific Conditions in order to determine whether any such change(s) may impact the assumptions upon which the recommendations and conclusions were made.

5 REFERENCES

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FIGURES



Pedestrian Wind Comfort Conditions

Existing Configuration
Annual (January to December, 0:00 to 23:00)

The Point - Orakei, Auckland

True North



Drawn by: SMJ

Figure: 1A

Approx. Scale: 1:1500

Project #2512057

Date Revised: Oct. 14, 2025





Pedestrian Wind Comfort Conditions

Proposed Configuration
Annual (January to December, 0:00 to 23:00)

The Point - Orakei, Auckland

True North



Drawn by: SMJ

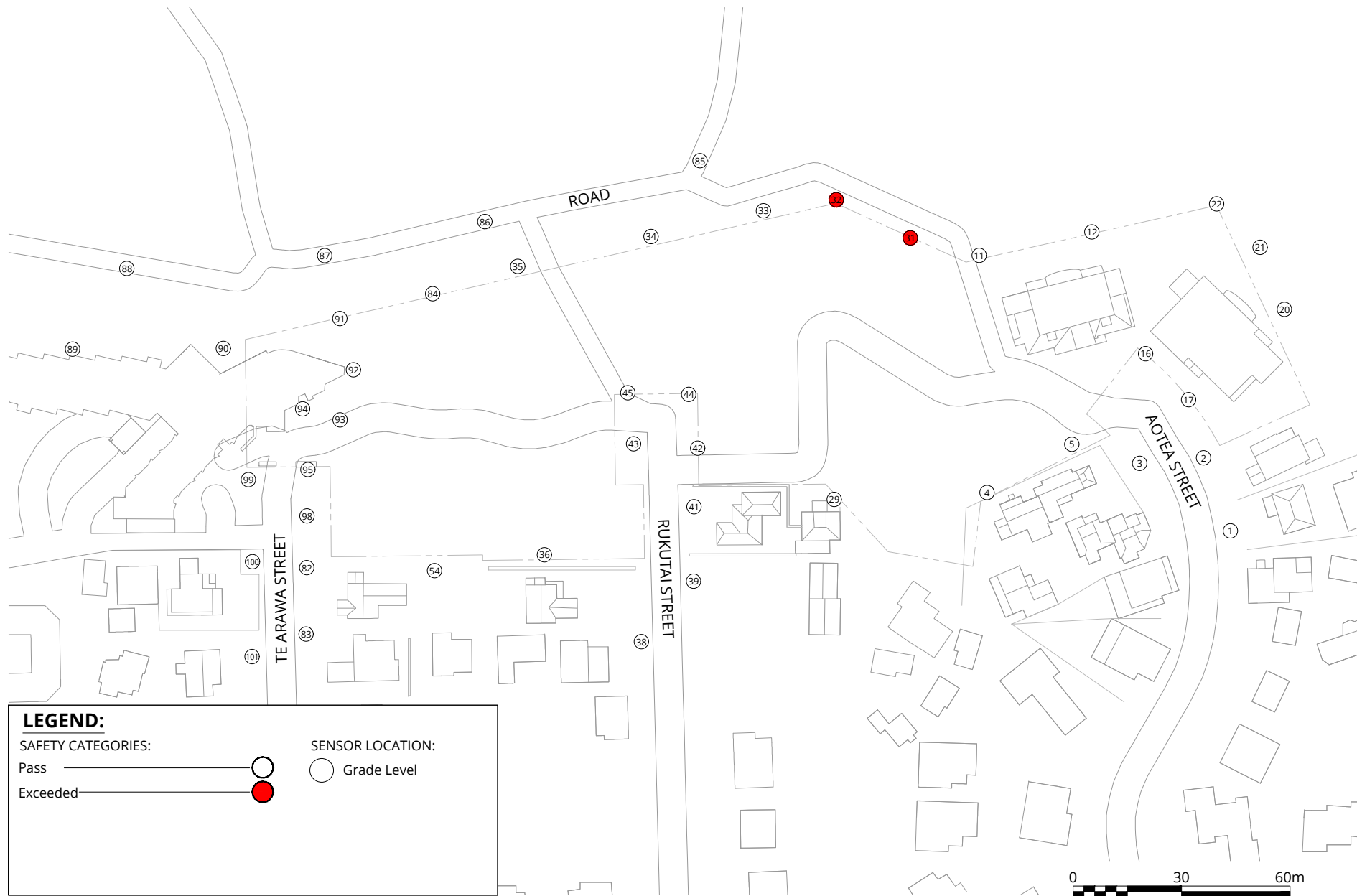
Figure: 1B

Approx. Scale: 1:1500

Project #2512057

Date Revised: Oct. 14, 2025





Pedestrian Wind Safety Conditions

Existing Configuration
Annual (January to December, 0:00 to 23:00)

The Point - Orakei, Auckland

True North



Project #2512057

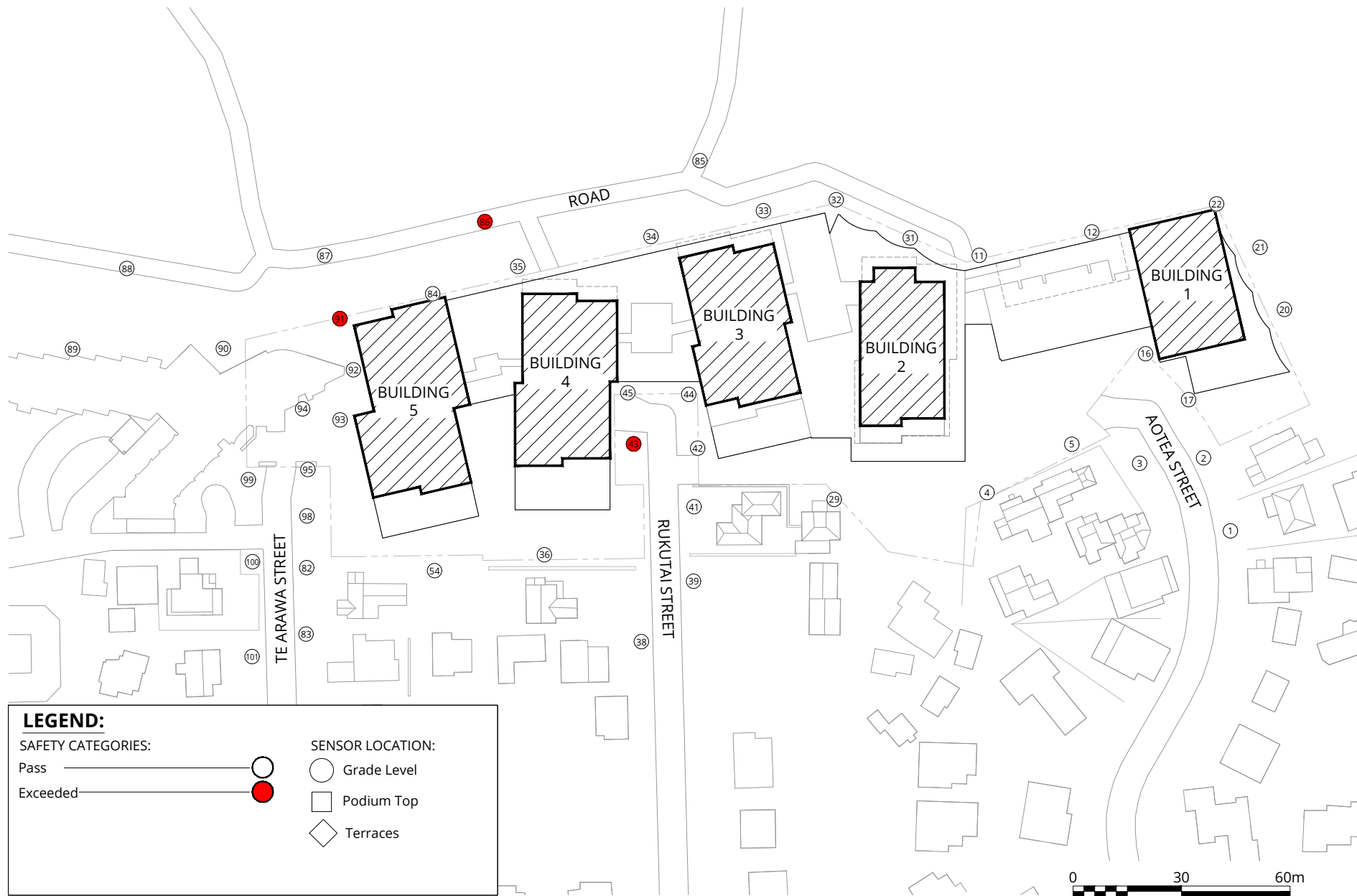
Drawn by: SMJ

Figure: 2A

Approx. Scale: 1:1500

Date Revised: Oct. 14, 2025





Pedestrian Wind Safety Conditions Proposed Configuration Annual (January to December, 0:00 to 23:00)

The Point - Orakei, Auckland



Project #2512057

Drawn by: SMJ	Figure: 2B
Approx. Scale: 1:1500	
Date Revised: Oct. 14, 2025	





TABLES

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Season	Configuration	Wind Comfort		Wind Safety	
			Speed	Rating	Speed	Rating
1	Annual	Existing	3.3	Category B	18	Pass
		Proposed	3.4	Category C	19	Pass
2	Annual	Existing	3.4	Category C	18	Pass
		Proposed	3.5	Category C	23	Pass
3	Annual	Existing	2.6	Category B	16	Pass
		Proposed	2.9	Category B	21	Pass
4	Annual	Existing	4.2	Category D	20	Pass
		Proposed	4.2	Category D	21	Pass
5	Annual	Existing	3.1	Category B	18	Pass
		Proposed	2.5	Category B	16	Pass
11	Annual	Existing	3.7	Category C	19	Pass
		Proposed	2.1	Category A	13	Pass
12	Annual	Existing	3.8	Category C	18	Pass
		Proposed	2.9	Category B	23	Pass
16	Annual	Existing	3.9	Category C	23	Pass
		Proposed	3.2	Category B	22	Pass
17	Annual	Existing	3.0	Category B	18	Pass
		Proposed	3.8	Category C	24	Pass
20	Annual	Existing	2.7	Category B	17	Pass
		Proposed	3.3	Category B	22	Pass
21	Annual	Existing	2.9	Category B	16	Pass
		Proposed	3.5	Category C	23	Pass
22	Annual	Existing	2.9	Category B	15	Pass
		Proposed	3.5	Category C	24	Pass
29	Annual	Existing	3.0	Category B	19	Pass
		Proposed	2.5	Category B	16	Pass
31	Annual	Existing	6.1	Category E	27	Exceeded
		Proposed	2.3	Category B	20	Pass
32	Annual	Existing	6.1	Category E	26	Exceeded
		Proposed	3.4	Category C	23	Pass
33	Annual	Existing	4.4	Category D	19	Pass
		Proposed	2.8	Category B	19	Pass
34	Annual	Existing	5.4	Category E	23	Pass
		Proposed	3.4	Category C	22	Pass
35	Annual	Existing	4.1	Category C	19	Pass
		Proposed	4.3	Category D	22	Pass
36	Annual	Existing	2.2	Category B	15	Pass
		Proposed	2.4	Category B	16	Pass

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Season	Configuration	Wind Comfort		Wind Safety	
			Speed	Rating	Speed	Rating
38	Annual	Existing	2.7	Category B	16	Pass
		Proposed	2.3	Category B	15	Pass
39	Annual	Existing	3.2	Category B	18	Pass
		Proposed	2.6	Category B	16	Pass
41	Annual	Existing	2.9	Category B	17	Pass
		Proposed	2.4	Category B	15	Pass
42	Annual	Existing	4.8	Category D	22	Pass
		Proposed	2.7	Category B	20	Pass
43	Annual	Existing	4.6	Category D	21	Pass
		Proposed	4.5	Category D	26	Exceeded
44	Annual	Existing	3.4	Category C	16	Pass
		Proposed	3.1	Category B	18	Pass
45	Annual	Existing	4.4	Category D	21	Pass
		Proposed	3.1	Category B	18	Pass
54	Annual	Existing	2.7	Category B	15	Pass
		Proposed	2.3	Category B	15	Pass
82	Annual	Existing	4.2	Category D	20	Pass
		Proposed	2.7	Category B	18	Pass
83	Annual	Existing	3.9	Category C	20	Pass
		Proposed	3.0	Category B	17	Pass
84	Annual	Existing	4.0	Category C	19	Pass
		Proposed	2.7	Category B	22	Pass
85	Annual	Existing	5.0	Category D	22	Pass
		Proposed	3.3	Category B	20	Pass
86	Annual	Existing	4.7	Category D	20	Pass
		Proposed	5.1	Category D	26	Exceeded
87	Annual	Existing	5.3	Category E	23	Pass
		Proposed	4.8	Category D	22	Pass
88	Annual	Existing	5.8	Category E	24	Pass
		Proposed	5.5	Category E	23	Pass
89	Annual	Existing	4.7	Category D	21	Pass
		Proposed	4.4	Category D	19	Pass
90	Annual	Existing	2.8	Category B	16	Pass
		Proposed	2.4	Category B	16	Pass
91	Annual	Existing	3.5	Category C	19	Pass
		Proposed	5.5	Category E	26	Exceeded
92	Annual	Existing	4.3	Category D	23	Pass
		Proposed	3.6	Category C	23	Pass

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Season	Configuration	Wind Comfort		Wind Safety	
			Speed	Rating	Speed	Rating
93	Annual	Existing	3.1	Category B	17	Pass
		Proposed	4.2	Category D	22	Pass
94	Annual	Existing	3.5	Category C	18	Pass
		Proposed	3.4	Category C	22	Pass
95	Annual	Existing	2.8	Category B	13	Pass
		Proposed	2.3	Category B	13	Pass
98	Annual	Existing	4.2	Category D	21	Pass
		Proposed	3.0	Category B	22	Pass
99	Annual	Existing	3.4	Category C	16	Pass
		Proposed	2.6	Category B	15	Pass
100	Annual	Existing	2.0	Category A	12	Pass
		Proposed	1.8	Category A	12	Pass
101	Annual	Existing	3.1	Category B	18	Pass
		Proposed	2.5	Category B	15	Pass

Seasons	Months	Hours	Wind Comfort (m/s)		Wind Safety (m/s)	
Annual	January - December	0:00 - 23:00	≤ 2.1	Category A	≤ 25	Pass
			≤ 3.3	Category B	> 25	Exceeded
			≤ 4.1	Category C		
			≤ 5.2	Category D		
			> 5.2	Category E		

Configurations

Existing	Existing site and surroundings
Proposed	Project with existing surroundings