

Figure 13.21 Configuration 4: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings – Ground Level (Summer Season)



Figure 13.22 Configuration 4: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings – Elevated Levels (Summer Season)

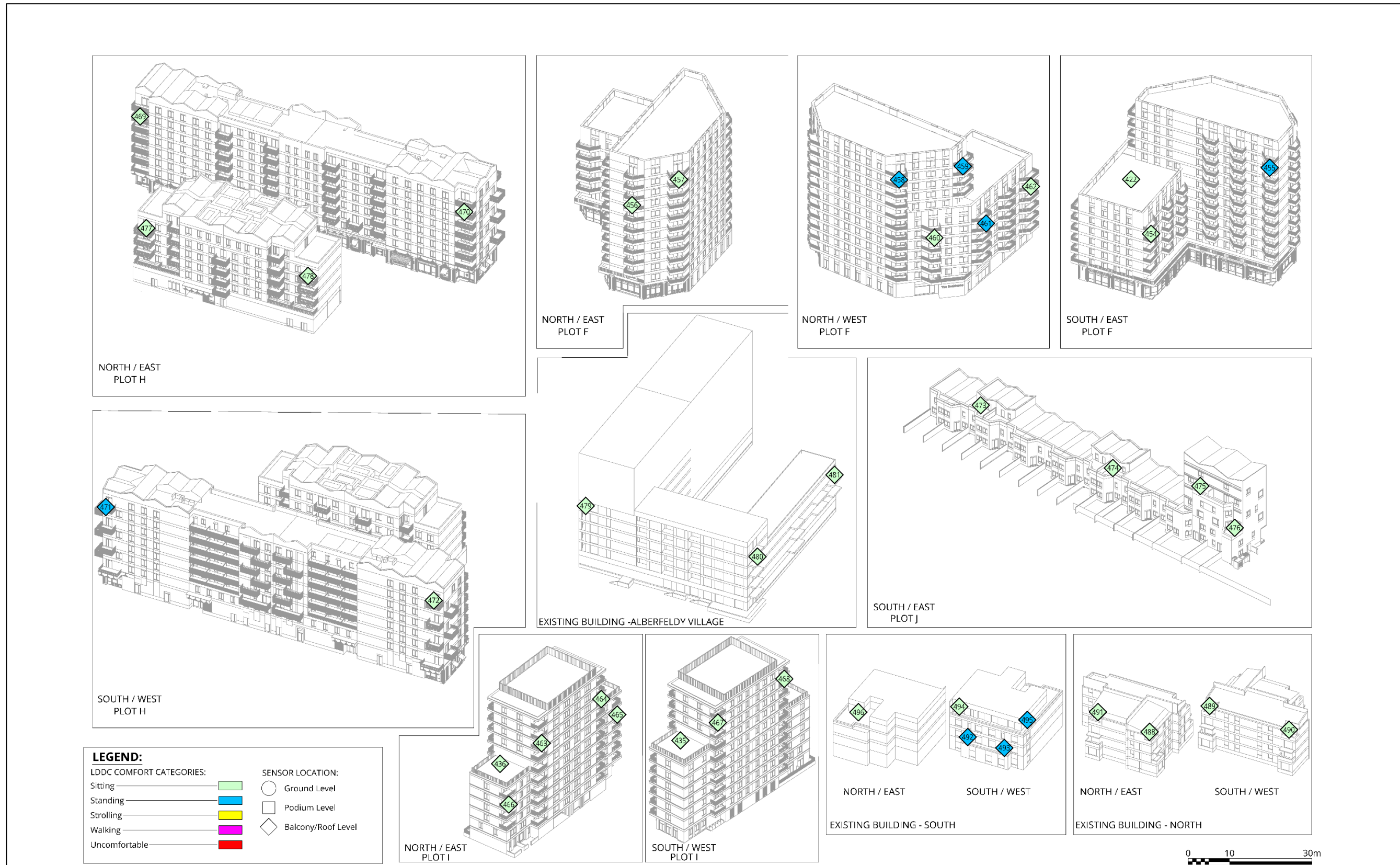


Figure 13.23 Configuration 4: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings – Elevated Levels (Summer Season)





Figure 13.24 Configuration 4: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings – Ground Level (Strong Winds)

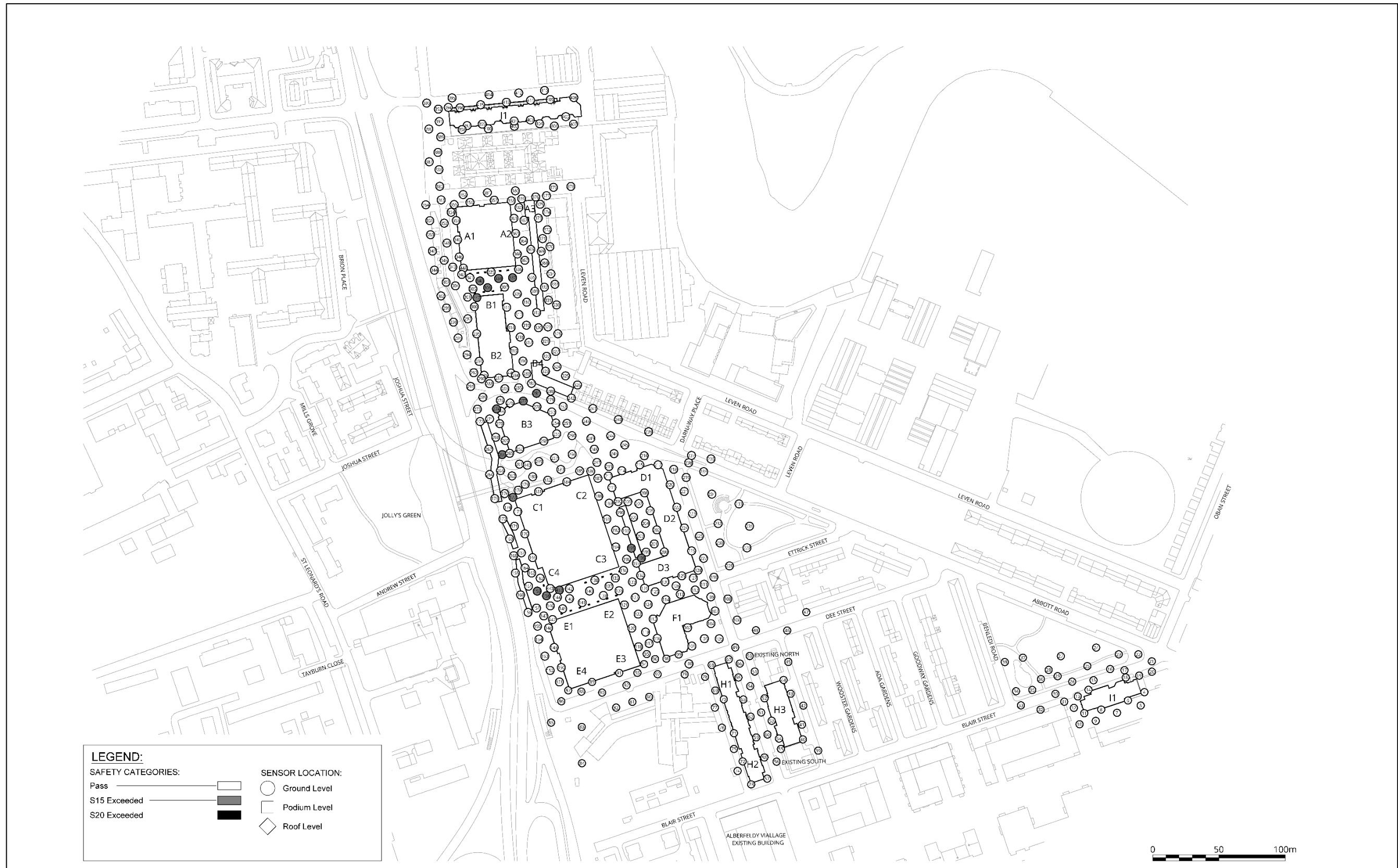




Figure 13.25 Configuration 4: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings – Elevated Levels (Strong Winds)

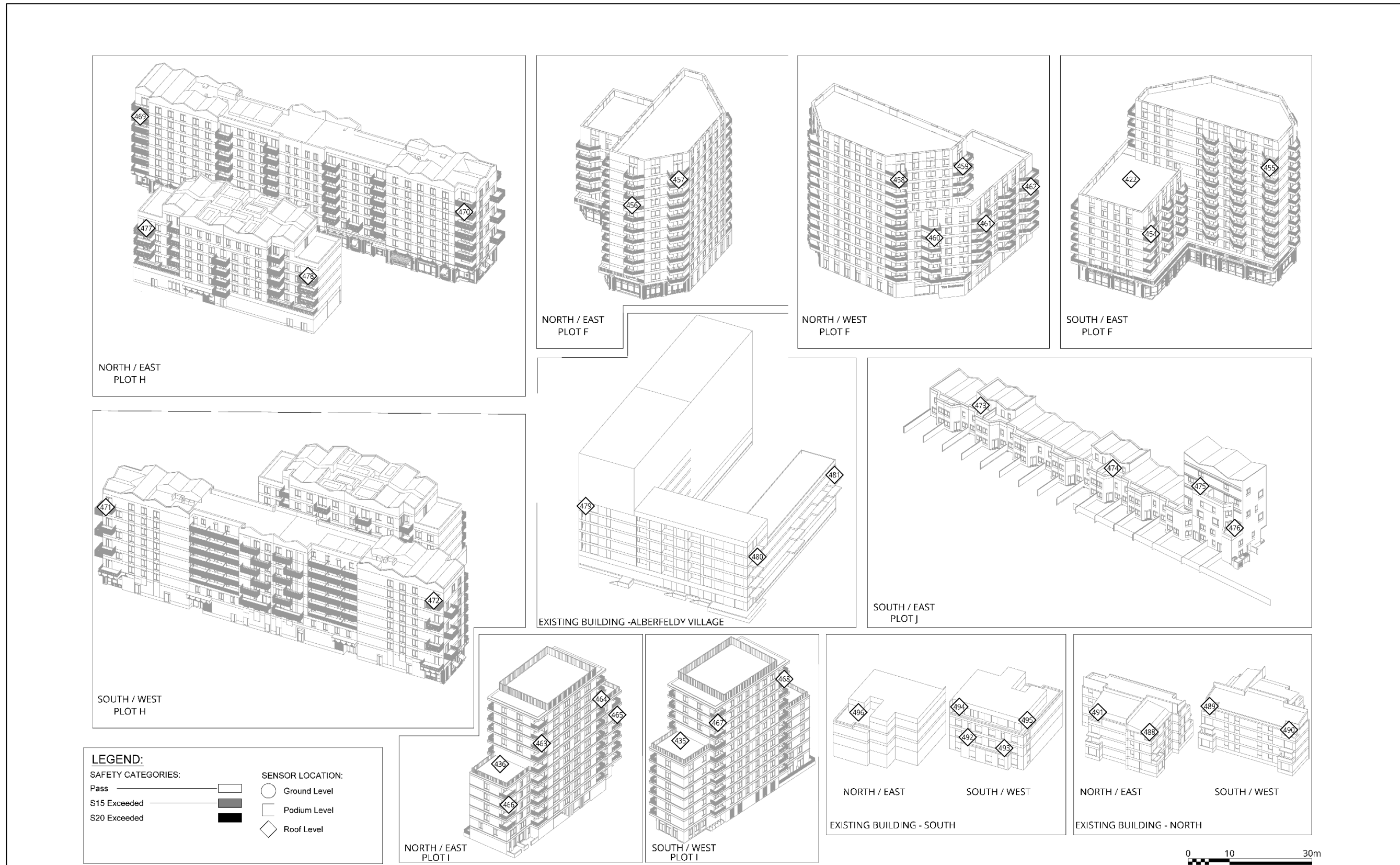
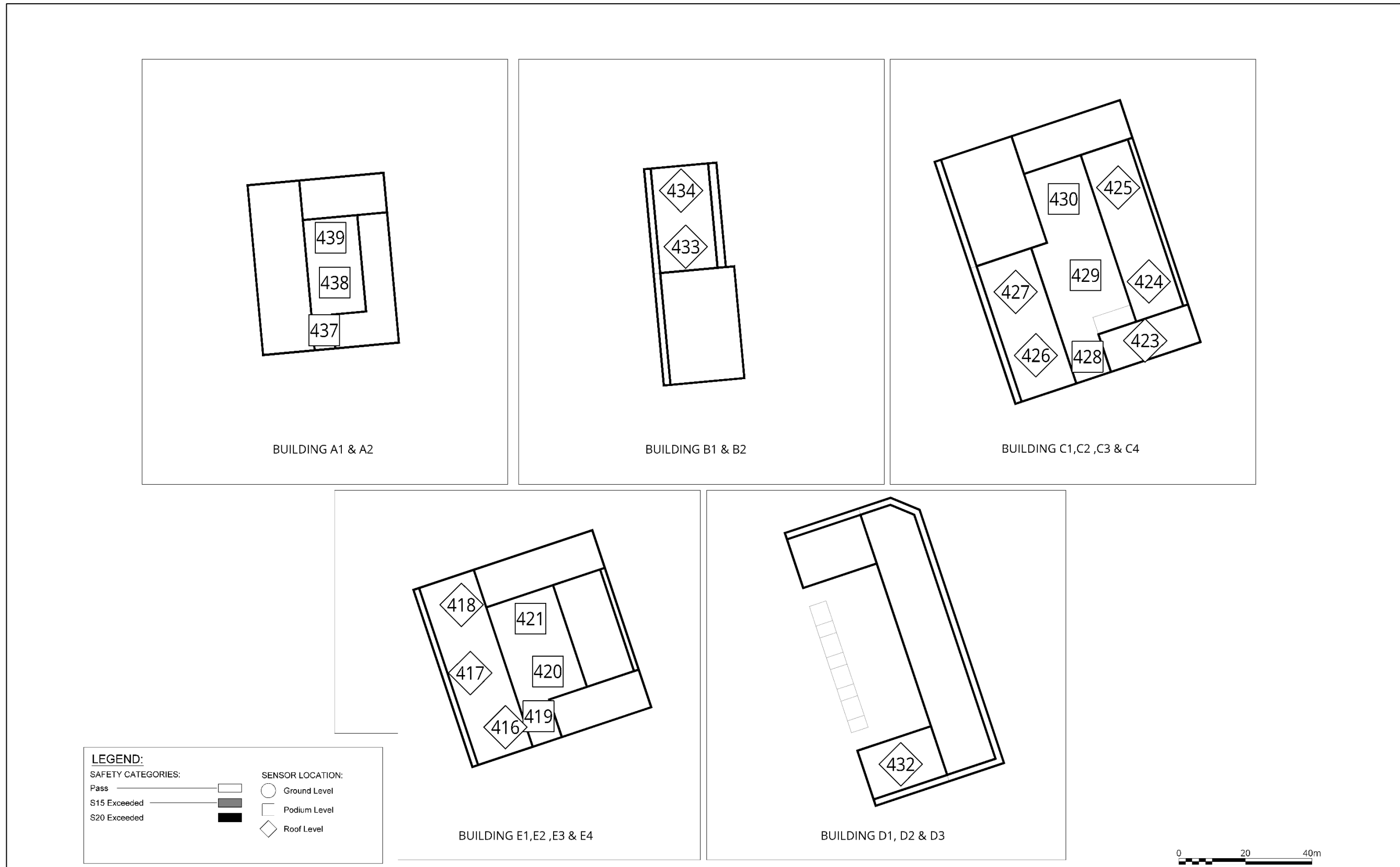


Figure 13.26 Configuration 4: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings – Elevated Levels (Strong Winds)



## MITIGATION, MONITORING AND RESIDUAL EFFECTS

### Demolition and Construction Mitigation

**13.181** During the demolition and construction stage, the areas under construction are expected to be surrounded by hoarding until the point at which the landscaping measures have been incorporated and the building becomes occupied, which would provide some shelter to the Site. The landscaping (trees and planters) tested within the wind tunnel and the mitigation described below would need to be put in place prior to the completion and occupation of the Proposed Development.

**13.182** No monitoring is required.

### Completed Development Mitigation

**13.183** The impact of wind mitigation measures has been investigated only for the Illustrative Proposals of the Proposed Development, as mitigating the maximum built parameters of the Outline Proposals is expected to require unnecessarily large wind mitigation measures which could be unfeasible and unrealistic, and this would not be representative of a scheme which could be developed and for which no landscaping has been proposed. Mitigation is only conducted on the Illustrative Scheme as it provides a more realistic representation of the real wind conditions when the Proposed Development comes forward. Further wind testing will be required at the reserved matters stage (to be implemented through a planning condition) to inform the detailed design and identify any required wind mitigation measures.

**13.184** No specific monitoring measures have been proposed.

**13.185** The following areas of the Illustrative Scheme model of the Proposed Development would require mitigation measures:

#### Illustrative Scheme

- Thoroughfares at **probe locations 158, 177, 266, 274, 277, 305, 447 and 453**;
- Entrances at **probe locations 141, 142, 145, 162, 195, 260, 276, 280, 300, 306, 335 and 339**;
- Ground level amenity at **probe locations 259, 265, 316 and 440**;
- Roof terrace amenity at **probe locations 416, 418 and 434**; and
- Roads at **probe locations 159, 198, 281, 337, 338 and 340**.

#### Mitigation Measures

- Proposed landscaping (as described in the DAS);
- 2x evergreen 6m tall evergreen trees with shrubs 1m in height underneath at the north-western corner of Block A;
- 2x evergreen 6m tall trees with shrubs 1m in height underneath along the northern elevation of Block B1;
- 1x deciduous 6m tall tree with shrubs 1m in height underneath at the centre of the southern elevation of Block A;
- 5x evergreen 6m tall along the northern elevation of Building B3 with shrubs underneath 1-1.5m in height;
- 3x deciduous trees 3m tall at the south-western corner of Building B3 with shrubs underneath 1-1.5m in height;
- Shrubs 1-1.5m in height along the southern elevation of Building B3 to the eastern side of the proposed seating area;
- 1x deciduous trees 6m tall to the existing building north-west of Block C;
- Balustrades 1.5m in height around the perimeter of the roof terraces of Buildings B1 and C4;
- Shrubs 1.5m in height along the western and northern edges of Building B1 roof terrace;
- 4x evergreen 6m tall trees with shrubs 1m in height underneath along the western elevation leading to the south-western corner of Block C;

- 4x evergreen 6m tall trees with shrubs 1m in height underneath along the southern elevation leading to the south-western corner of Block C;
- 3x evergreen 6m tall trees with shrubs 1m in height underneath along the northern elevation of Block E;
- 5x evergreen 6m tall trees with shrubs 1m in height underneath along the southern elevation of Block B3;
- Shrubs 1.5m in height along the western and south edges of Building C4 roof terrace;
- 4x trees 3m in height along the western edge of the roof terraces of Buildings B1 and C4; and
- Replaced 5x deciduous trees at the north-western corner of Block B1 to 6m tall evergreen with 1m tall shrubs underneath.

**13.186** These wind mitigation measures were incorporated to demonstrate that with an appropriately developed wind mitigation strategy the Illustration Scheme would improve such that the majority of areas would be safe and suitable for the intended use. The strategy would likely evolve as the detailed design develops and further wind tunnel testing is undertaken to inform the later reserved matters applications.

#### Detailed Proposals

**13.187** The following exceedances are in the context of the Illustrative Scheme with proposed landscaping and the above wind mitigation measures.

- Entrance at **probe location 116**;
- Ground level amenity – seating area at **probe location 115**; and
- Existing bus stop at **probe locations 105**.

#### Configuration 5: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings, Proposed Landscaping and Wind Mitigation Measures

**13.188** The assessment of the wind conditions for Configuration 5 is based on the results presented in **Figure 13.27** and **Figure 13.28** for the windiest and summer seasons respectively for ground floor level and **Figure 13.29** and **Figure 13.30** for elevated levels during the summer season. Safety exceedances are presented in **Figure 13.31** for ground floor level and **Figure 13.32** and **Figure 13.33** for elevated levels.

#### Pedestrian Comfort

**13.189** With the inclusion of the proposed landscaping and the developed wind mitigation measures to the Illustrative Scheme, wind conditions would improve at the majority of areas and would range from suitable for sitting to strolling use during the windiest season at the majority of locations except for two areas to the north-western corners of Plots B3 and C.

**13.190** During the summer season, wind conditions are either the same category or one category calmer and range from suitable for sitting to strolling use.

#### Thoroughfares

##### Detailed Proposals

**13.191** Wind conditions at thoroughfares with the Detailed Proposals would range from suitable for sitting to strolling use during the windiest season. This would represent **Moderate Beneficial (Not Significant)** to **Negligible (Not Significant)** effects.

##### Illustrative Scheme

**13.192** Wind conditions at the majority of thoroughfares within the Illustrative Scheme would range from suitable for sitting to strolling use during the windiest season. This would represent **Moderate Beneficial (Not Significant)** to **Negligible (Not Significant)** effects.

**13.193** The exception to this would be at probe locations 177 and 274 which would be one category windier than suitable representing a **Minor Adverse (Significant)** effect.

##### Off-site

**13.194** Off-site thoroughfares in the vicinity of the Proposed Development would be suitable for sitting (probe locations 47, 79, 84, 228, 229, 230, 231, 232, 233, 234, 235, 330, 333, 370, 374 and 377), standing (probe locations 48,



78, 236, 328, 386, 388 and 389) and strolling (probe location 385) use during the windiest season, which would represent a **Negligible (Not Significant)** effect.

## *Entrances*

### Detailed Proposals

**13.195** Wind conditions at the majority of entrances within the Detailed Proposals would range from suitable for sitting to standing use. This would represent **Minor Beneficial (Not Significant)** to **Negligible (Not Significant)** effects.

**13.196** The exception to this would be at probe location 116 which would be one category windier than suitable for the intended use. This would represent a **Minor Adverse (Significant)** effect.

### Illustrative Scheme

**13.197** Wind conditions at the majority of entrances within the Illustrative Scheme would range from suitable for sitting to standing use. This would represent **Minor Beneficial (Not Significant)** to **Negligible (Not Significant)** effects.

**13.198** The exception to this would be at probe locations 195, 276, 280, 287, 306, 309 and 339 which would be one category windier than suitable for entrance use. This would represent a **Minor Adverse (Significant)** effect.

## *Bus stops*

**13.199** Bus stops around the Site would have wind conditions suitable for sitting (probe locations 106 and 169) during the windiest season. This would represent **Minor Beneficial (Not Significant)** to **Negligible (Not Significant)** effect.

**13.200** Probe location 105 would be suitable for strolling use during the windiest season, one category windier than suitable for the intended use. This would represent a **Minor Adverse (Significant)** effect.

## *Pedestrian Crossings*

**13.201** Wind conditions at pedestrian crossings around the Site (probe locations 237 and 238) would be suitable for standing use during the windiest season representing a **Moderate Beneficial (Not Significant)** effect.

## *Ground Level Amenity – Mixed Use*

### Detailed Proposals

**13.202** Wind conditions at ground level amenity spaces within the Detailed Proposals would range from suitable for sitting to standing use during the summer season. This would represent a **Negligible (Not Significant)** effect.

### Illustrative Scheme

**13.203** Wind conditions at ground level amenity spaces within the Illustrative Scheme would range from suitable for sitting to standing use during the summer season. This represents a **Negligible (Not Significant)** effect.

### Off-Site

**13.204** Wind conditions at the school court (represented by probe 83) would be suitable for sitting use during the summer season. This represents **Negligible (Not Significant)** effect.

## *Ground Level Amenity – Seating*

### Detailed Proposals

**13.205** Wind conditions at designated seating areas within the Detailed Proposals would be suitable for sitting use during the summer season. This would represent a **Negligible (Not Significant)** effect.

### Illustrative Scheme

**13.206** Wind conditions at the majority of designated seating areas within the Illustrative Scheme would be suitable for sitting use during the summer season. This would represent a **Negligible (Not Significant)** effect.

**13.207** The exception to this would be at probe locations 192 and 265 which would be one category windier than suitable for the intended use. This would represent a **Minor Adverse (Significant)** effect.

## *Podium Level Amenity – Mixed Use*

### Illustrative Scheme

**13.208** Podium amenity spaces (at probe locations 419, 420, 421, 428, 429, 430, 437, 438 and 439) would range from suitable for sitting to standing use during the summer season. These wind conditions would represent a **Negligible (Not Significant)** effect.

## *Roof Terrace Amenity – Mixed Use*

### Detailed Proposals

**13.209** Wind conditions at roof terraces within the Detailed Proposals would be suitable for sitting use during the summer season representing a **Negligible (Not Significant)** effect.

### Illustrative Scheme

**13.210** Wind conditions at the majority of roof terraces within the Illustrative Scheme would range from suitable for sitting to standing use during the summer season. This represents a **Negligible (Not Significant)** effect.

**13.211** The exception to this would be at probe locations 416 and 418 which would be one category windier than suitable during the windiest season. This would represent a **Minor Adverse (Significant)** effect.

### Off-site

**13.212** Wind conditions at off-site roof terraces represented by probe locations 483, 484, 486, 487 and 496 would be suitable for sitting use during the summer season. This would represent a **Negligible (Not Significant)** effect.

## *Balcony Levels*

### Detailed Proposals

**13.213** Wind conditions at balconies within the Detailed Proposals would range from suitable for sitting to standing use during the summer season representing a **Negligible (Not Significant)** effect.

### Illustrative Scheme

**13.214** Wind conditions at balconies within the Illustrative Scheme would range from suitable for sitting to standing use during the summer season. This would represent a **Negligible (Not Significant)** effect.

### Off-site

**13.215** Wind conditions at off-site balconies of neighbouring buildings represented by probe locations 479, 480, 481, 488, 489, 490, 491, 492, 493, 494 and 495 would range from suitable for sitting to standing use during the summer season. This would represent a **Negligible (Not Significant)** effect.

## *Strong winds*

### Detailed Proposals

**13.216** There would be no instances of strong winds exceeding the safety threshold within the Detailed Proposals.

### Illustrative Scheme

**13.217** There would be instances of strong winds exceeding the safety threshold at probe location 177 within or around the Proposed Development including roads and car parks.

## *Summary and Residual Effects*

**13.218** With the developed wind mitigation strategy in addition to the proposed landscaping the majority of wind conditions would improve to be safe and suitable for the intended use. The exception to these would be at the following locations:

- Thoroughfares at **probe locations 177 and 274**: Would require additional trees 6m tall localised at two sides of the north-western corner of Plot C1 and B3.
- Entrances at **probe location 116**: Recessing the entrance by 1.5m from the façade line or including shrubs on both sides of the entrance extending 2m from the façade line and 1.5m in height.
- Potential Entrances at **probe locations 195, 276, 280, 287, 306, 309 and 339**: In the first instance, these must not be located in areas with unsuitable wind conditions. Entrances to the Proposed Development must be located in areas with conditions suitable for 'standing' (or calmer) use during the windiest season.

If they are located in windier locations, mitigation will be required to ensure they are suitable for their intended use - mitigation can include recessing the entrances or providing some shelter through landscaping or screens on either side of entrances. Note that if these entrances secondary (i.e. fire exits or used for maintenance) these wind conditions would be acceptable.

- Bus stop at **probe location 105**: The existing bus stop would be equipped with a bus stop shelter that would be expected to provide the adequate protection and therefore no additional mitigation would be required.
- Potential ground level amenity at **probe locations 192 and 265**: 3m tall trees with shrubs 1m in height underneath located on two sides of seating areas to provide localised shelter. Alternatively, the use of solid screens or 50% porous 1.5m in height 2m wide placed two sides of the seating areas.
- Potential roof terrace amenity at **probe locations 416 and 418**: Populating the roof terrace with trees and low dense planting to break-up the open space.
- Amenity areas where seating is proposed will be located in areas with conditions suitable for 'sitting' during the summer season. If located in areas with conditions suitable for standing use, additional localised shelter at least 1.5m in height would be required to the south and west of the seating area.

**13.219** The specific mitigation measures required for the Outline Proposals that will be implemented will be determined and tested at the reserved matters application stage and secured by an appropriately worded planning condition. The measures above would be expected to mitigate adverse effects to a suitable wind environment. The effectiveness of any wind mitigation measures at reducing the occurrence of strong winds will also require further assessment at reserved matters stage.

**13.220** All of the residual effects resulting from the Proposed Development, relating to Configurations 2, 3 and 5, are presented in **Table 13.5, Table 13.6, Table 13.7** respectively, identifying whether the effect is significant or not.

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**Table 13.5 Residual Effects - Detailed Proposals (Configuration 2)**

Receptor	Description of the Residual Effect	Scale and Nature	Qualitative Mitigation Measures	Significant / Not Significant	Geo	D I	P T	St Mt Lt
<b>Demolition and Construction</b>								
Demolition Site	Wind conditions at the demolition and construction site	Negligible	N/A	Not Significant	L	D	P	St
<b>Completed Development (On-Site)</b>								
Thoroughfares (Windiest)	Wind conditions on thoroughfares	Moderate Beneficial to Negligible	N/A	Not Significant	L	D	P	Lt
Entrances (Windiest)	Wind conditions at entrances	Minor Beneficial to Minor Adverse	Probe location 116: Recessing the entrance by 1.5m from the façade line or including shrubs on both sides of the entrance extending 2m from the façade line and 1.5m in height.	Significant	L	D	P	Lt
Bus Stops (Windiest)	Wind conditions at bus stops	Minor Beneficial to Minor Adverse	The existing bus stop would be equipped with a bus stop shelter that would be expected to provide the adequate protection and therefore no additional mitigation would be required.	Significant	L	D	P	Lt
Pedestrian Crossing (Windiest)	Wind conditions at pedestrian crossings	Major Beneficial to Moderate Beneficial	N/A	Not Significant	L	D	P	Lt
Ground Level Amenity – Mixed Use (Summer)	Wind conditions at ground level amenity – mixed use	Negligible	N/A	Not Significant	L	D	P	Lt
Ground Level Amenity – Seating (Summer)	Wind conditions at ground level amenity seating areas	Minor Adverse	Probe location 115: 3m tall trees with shrubs 1m in height underneath located on two sides of seating areas to provide localised shelter. Alternatively, the use of solid screens or 50% porous 1.5m in height 2m wide placed two sides of the seating areas.	Significant	L	D	P	Lt
Roof Terrace Amenity (Summer)	Wind conditions roof terrace amenity	Negligible	N/A	Not Significant	L	D	P	Lt
Balcony Levels (Summer)	Wind conditions at balcony levels	Negligible to Minor Adverse	Probe location 455: the stack of balconies represented by this receptor would require 1.5m tall solid balustrade or alternatively the use of 50% porous balustrade of similar height.	Significant	L	D	P	Lt
Strong Winds	Strong winds exceeding 15m/s for more than 0.025% of the time	N/A	N/A	Not Significant	L	D	P	Lt
<b>Completed Development (Off-Site)</b>								
Thoroughfares (Windiest)	Wind conditions on thoroughfares	Negligible	N/A	Not Significant	L	D	P	Lt
Ground Level Amenity – Mixed Use (Summer)	Wind conditions at ground level amenity – mixed use	Negligible	N/A	Not Significant	L	D	P	Lt
Roof Terrace Amenity (Summer)	Wind conditions roof terrace amenity	Negligible	N/A	Not Significant	L	D	P	Lt
Balcony Levels (Summer)	Wind conditions at balcony levels	Negligible	N/A	Not Significant	L	D	P	Lt
Strong Winds	Strong winds exceeding 15m/s for more than 0.025% of the time	Negligible	N/A	Not Significant	L	D	P	Lt
<p><b>Notes:</b></p> <p>Residual Effect</p> <ul style="list-style-type: none"> <li>- Scale = Negligible / Minor / Moderate / Major</li> <li>- Nature = Beneficial or Adverse</li> </ul> <p>Geo (Geographic Extent) = Local (L), Borough (B), Regional (R), National (N)</p> <p>D = Direct / I = Indirect</p> <p>P = Permanent / T = Temporary</p> <p>St = Short Term / Mt = Medium Term / Lt = Long Term</p> <p>N/A = not applicable / not assessed</p>								



Table 13.6 Residual Effects - Outline Proposals and Detailed Proposals (Configuration 3)

Receptor	Description of the Residual Effect	Scale and Nature	Qualitative Mitigation Measures	Significant / Not Significant	Geo	D I	P T	St Mt Lt
<b>Demolition and Construction</b>								
Demolition Site	Wind conditions at the demolition and construction site	Negligible	N/A	Not Significant	L	D	P	St
<b>Completed Development (On-Site)</b>								
Thoroughfares (Windiest)	Wind conditions on thoroughfares	Moderate Beneficial to Minor Adverse	<p>The impact of wind mitigation measures has been investigated only for the Illustrative Proposals of the Proposed Development, as mitigating the Outline Proposals is expected to require unnecessarily large wind mitigation measures which could be unfeasible and unrealistic, and this would not be representative of a scheme which could be developed.</p> <p>Mitigation is only conducted on the Illustrative Scheme as it provides a more realistic representation of the real wind conditions when the Proposed Development comes forward.</p> <p>Therefore, significant residual effects are still reported here for the Outline Proposals, and these would be addressed through further detailed design and the associated reserved matters applications, which would be controlled by the LBTH through appropriately worded planning conditions on the Outline Proposals.</p>	Significant	L	D	P	Lt
Entrances (Windiest)	Wind conditions at entrances	Minor Beneficial to Moderate Adverse		Significant	L	D	P	Lt
Bus Stops (Windiest)	Wind conditions at bus stops	Minor Beneficial to Minor Adverse		Significant	L	D	P	Lt
Pedestrian Crossing (Windiest)	Wind conditions at pedestrian crossings	Moderate Beneficial		Not Significant	L	D	P	Lt
Ground Level Amenity – Mixed Use (Summer)	Wind conditions at ground level amenity – mixed use	Negligible to Minor Adverse		Significant	L	D	P	Lt
Ground Level Amenity – Seating (Summer)	Wind conditions at ground level amenity seating areas	Negligible to Moderate Adverse		Significant	L	D	P	Lt
Podium Level Amenity (Summer)	Wind conditions at podium level amenity	Negligible		Not Significant	L	D	P	Lt
Roof Terrace Amenity (Summer)	Wind conditions roof terrace amenity	Negligible to Minor Adverse		Significant	L	D	P	Lt
Balcony Levels (Summer)	Wind conditions at balcony levels	Negligible		Not Significant	L	D	P	Lt
Strong Winds	Strong winds exceeding 15m/s for more than 0.025% of the time	N/A		Significant	L	D	P	Lt
<b>Completed Development (Off-Site)</b>								
Thoroughfares (Windiest)	Wind conditions on thoroughfares	Negligible	N/A	Not Significant	L	D	P	Lt
Ground Level Amenity – Mixed Use (Summer)	Wind conditions at ground level amenity – mixed use	Negligible	N/A	Not Significant	L	D	P	Lt
Roof Terrace Amenity (Summer)	Wind conditions roof terrace amenity	Negligible	N/A	Not Significant	L	D	P	Lt
Balcony Levels (Summer)	Wind conditions at balcony levels	Negligible	N/A	Not Significant	L	D	P	Lt
Strong Winds	Strong winds exceeding 15m/s for more than 0.025% of the time	Negligible	N/A	Not Significant	L	D	P	Lt

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**Table 13.7 Residual Effects – Illustrative Proposals and Detailed Proposals (Configuration 5)**

Receptor	Description of the Residual Effect	Scale and Nature	Qualitative Mitigation Measures	Significant / Not Significant	Geo	D I	P T	St Mt Lt
<b>Demolition and Construction</b>								
Demolition Site	Wind conditions at the demolition and construction site	Negligible	N/A	Not Significant	L	D	P	St
<b>Completed Development (On-Site)</b>								
Thoroughfares (Windiest)	Wind conditions on thoroughfares	Moderate Beneficial to Negligible	Illustrative Proposals - 177 and 274: Would require additional trees 6m tall localised at two sides of the north-western corner of Plot C1 and B3.	Not Significant	L	D	P	Lt
Entrances (Windiest)	Wind conditions at entrances	Minor Beneficial to Negligible	Illustrative Proposals - 195, 276, 280, 287, 306, 309 and 339: In the first instance, these must not be located in areas with unsuitable wind conditions. Entrances to the Proposed Development must be located in areas with conditions suitable for 'standing' (or calmer) use during the windiest season. If they are located in windier locations, mitigation will be required to ensure they are suitable for their intended use - mitigation can include recessing the entrances or providing some shelter through landscaping or screens on either side of entrances. Note that if these entrances secondary (i.e. fire exits or used for maintenance) these wind conditions would be acceptable.  Detailed Proposals – 116: Recessing the entrance by 1.5m from the façade line or including shrubs on both sides of the entrance extending 2m from the façade line and 1.5m in height.	Not Significant	L	D	P	Lt
Bus Stops (Windiest)	Wind conditions at bus stops	Minor Beneficial to Negligible	The existing bus stop would be equipped with a bus stop shelter that would be expected to provide the adequate protection and therefore no additional mitigation would be required.	Not Significant	L	D	P	Lt
Pedestrian Crossing (Windiest)	Wind conditions at pedestrian crossings	Moderate Beneficial	N/A	Not Significant	L	D	P	Lt
Ground Level Amenity – Mixed Use (Summer)	Wind conditions at ground level amenity – mixed use	Negligible	N/A	Not Significant	L	D	P	Lt
Ground Level Amenity – Seating (Summer)	Wind conditions at ground level amenity seating areas	Negligible	Illustrative Proposals: 192 and 265: 3m tall trees with shrubs 1m in height underneath located on two sides of seating areas to provide localised shelter. Alternatively, the use of solid screens or 50% porous 1.5m in height 2m wide placed two sides of the seating areas.	Not Significant	L	D	P	Lt
Podium Level Amenity (Summer)	Wind conditions at podium level amenity	Negligible	N/A	Not Significant	L	D	P	Lt
Roof Terrace Amenity (Summer)	Wind conditions roof terrace amenity	Negligible	N/A	Not Significant	L	D	P	Lt
Balcony Levels (Summer)	Wind conditions at balcony levels	Negligible	N/A	Not Significant	L	D	P	Lt
Strong Winds	Strong winds exceeding 15m/s for more than 0.025% of the time	N/A	N/A	Not Significant	L	D	P	Lt
<b>Completed Development (Off-Site)</b>								
Thoroughfares (Windiest)	Wind conditions on thoroughfares	Negligible	N/A	Not Significant	L	D	P	Lt
Ground Level Amenity – Mixed Use (Summer)	Wind conditions at ground level amenity – mixed use	Negligible	N/A	Not Significant	L	D	P	Lt
Roof Terrace Amenity (Summer)	Wind conditions roof terrace amenity	Negligible	N/A	Not Significant	L	D	P	Lt
Balcony Levels (Summer)	Wind conditions at balcony levels	Negligible	N/A	Not Significant	L	D	P	Lt
Strong Winds	Strong winds exceeding 15m/s for more than 0.025% of the time	Negligible	N/A	Not Significant	L	D	P	Lt
<p><b>Notes:</b></p> <p>Residual Effect</p> <ul style="list-style-type: none"> <li>- Scale = Negligible / Minor / Moderate / Major</li> <li>- Nature = Beneficial or Adverse</li> </ul> <p>Geo (Geographic Extent) = Local (L), Borough (B), Regional (R), National (N)</p> <p>D = Direct / I = Indirect</p> <p>P = Permanent / T = Temporary</p> <p>St = Short Term / Mt = Medium Term / Lt = Long Term</p> <p>N/A = not applicable / not assessed</p>								

Figure 13.27 Configuration 5: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings, Proposed Landscaping and Wind Mitigation Measures – Ground Level (Windiest Season)





Figure 13.28 Configuration 5: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings, Proposed Landscaping and Wind Mitigation Measures – Ground Level (Summer Season)



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Figure 13.29 Configuration 5: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings, Proposed Landscaping and Wind Mitigation Measures – Elevated Levels (Summer Season)

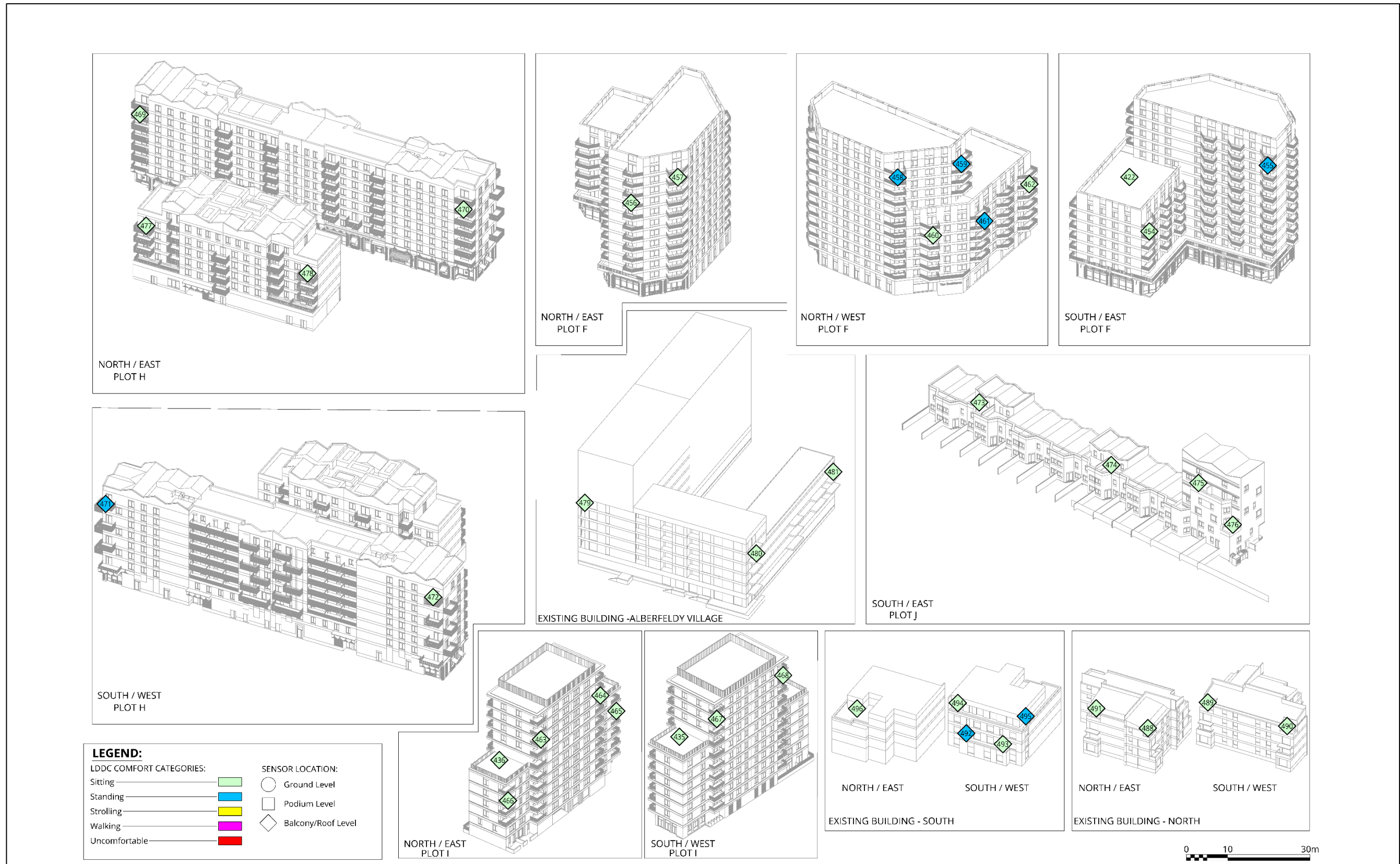


Figure 13.30 Configuration 5: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings, Proposed Landscaping and Wind Mitigation Measures – Elevated Levels (Summer Season)





Figure 13.31 Configuration 5: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings, Proposed Landscaping and Wind Mitigation Measures – Ground Level (Strong Winds)

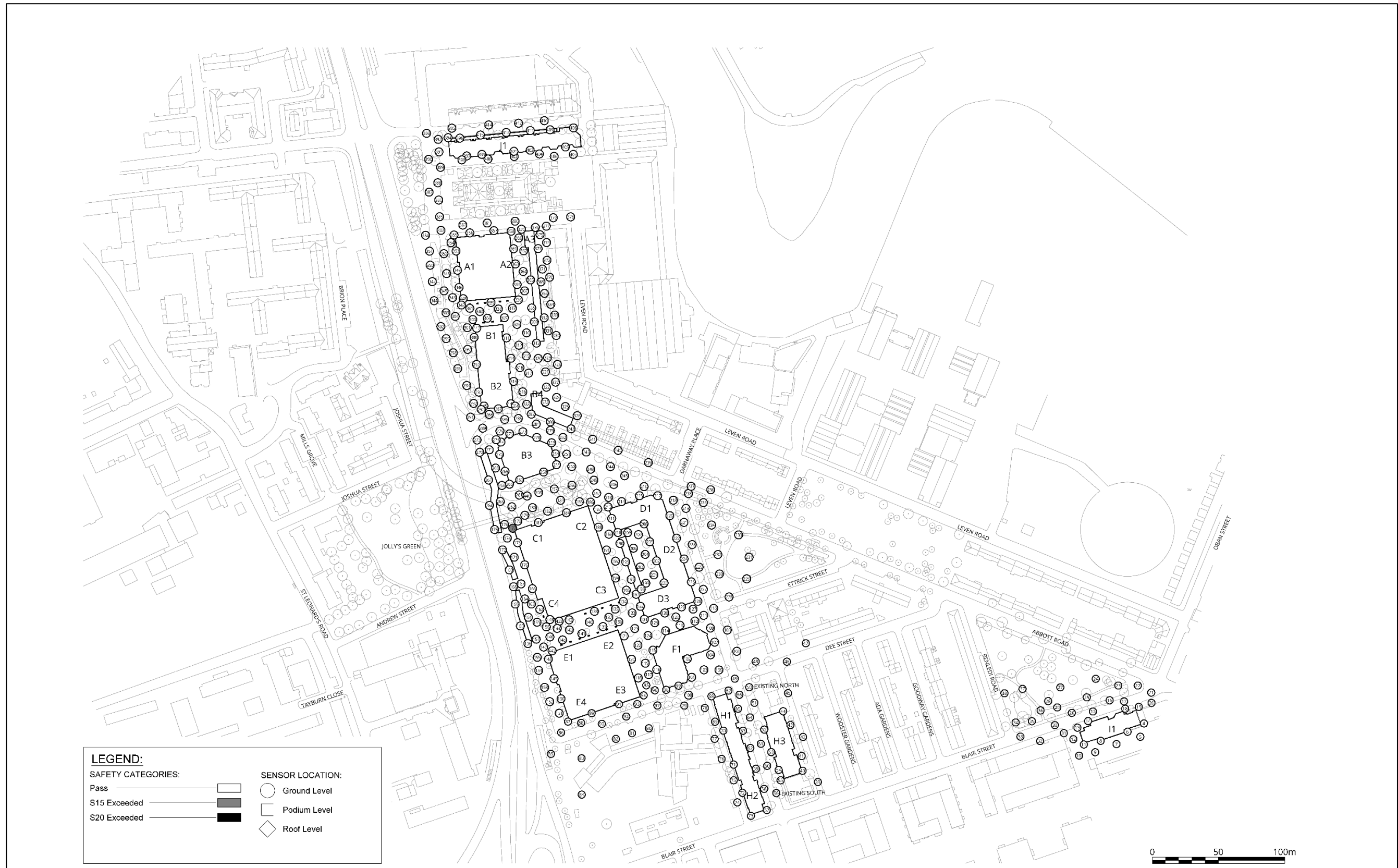
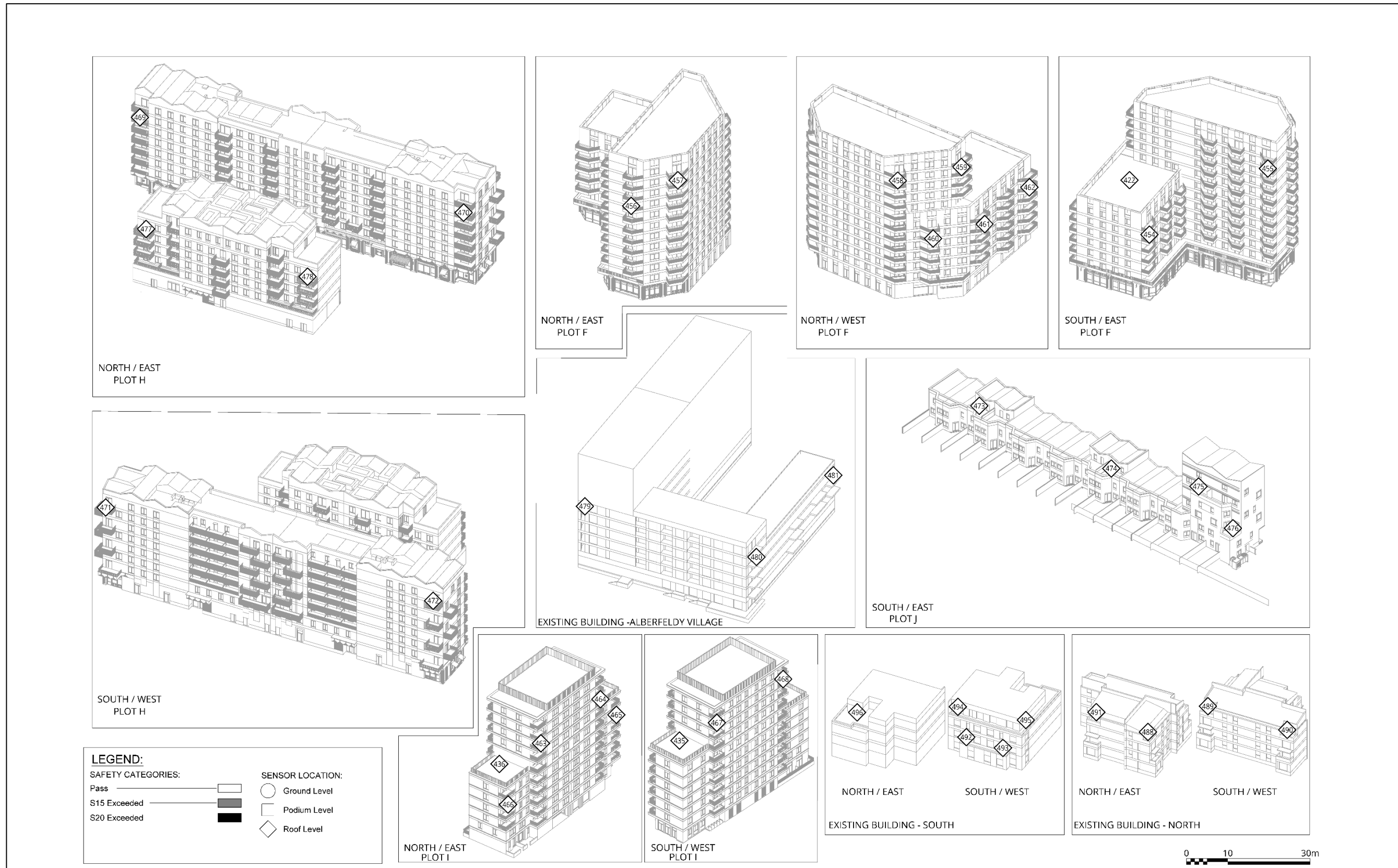


Figure 13.32 Configuration 5: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings, Proposed Landscaping and Wind Mitigation Measures – Elevated Levels (Strong Winds)



**Figure 13.33 Configuration 5: Proposed Development (Illustrative Scheme) and Phase A with Existing Surrounding Buildings, Proposed Landscaping and Wind Mitigation Measures – Elevated Levels (Strong Winds)**





## ASSESSMENT OF THE FUTURE ENVIRONMENT

### *Evolution of the Baseline Scenario*

- 13.221** The assessment of the cumulative effects has been carried out including the following cumulative schemes identified within a 450m radius of the centre of the Site.
- 13.222** Cumulative schemes identified within a 450m radius of the Site and included within the wind tunnel model are:
- Leven Road Gasworks (Planning Ref: PA/18/02803/A1);
  - London Docklands Travelodge Hotel (Planning Ref: PA/18/03088/A1);
  - Ailsa Wharf (Planning Ref: PA/16/02692 & PA/18/03461); and
  - Islay Wharf (Planning Ref: PA/19/01760).
- 13.223** Several probes (482, 483, 484, 485, 486, 487) were also included on balconies and roof terraces of the nearby cumulative scheme to assess the wind microclimate at those amenity spaces.

### *Configuration 6: Existing Site with Cumulative Surrounding Buildings*

- 13.224** Wind conditions for Configuration 6 (the future baseline scenario) are presented in **Figure 13.34** for the windiest season and **Figure 13.35** for the summer season. **Figure 13.36** presents summer season results for elevated levels. Occurrence of annual strong winds are presented in **Figure 13.37** for ground floor and **Figure 13.38** for elevated levels.

### *Pedestrian Comfort*

- 13.225** During the windiest season (**Figure 13.34**) wind conditions at all on-site and off-site probe locations (throughfares, entrances, bus stops and pedestrian crossings) range from suitable for sitting to standing use.
- 13.226** Wind conditions during the summer season (**Figure 13.35**) are typically the same or one category calmer with a larger area fulfilling the sitting use criteria.
- 13.227** Wind conditions at elevated levels of the off-Site buildings shown in Figure 13.7 would also be suitable for sitting to standing use during the summer season (**Figure 13.36**).

### *Strong Winds*

- 13.228** There are no instances of strong winds exceeding the safety threshold at any probe location within and around the Site in the future baseline scenario.

Figure 13.34 Configuration 6: Existing Site with Cumulative Surrounding Buildings – Ground Level (Windiest Season)

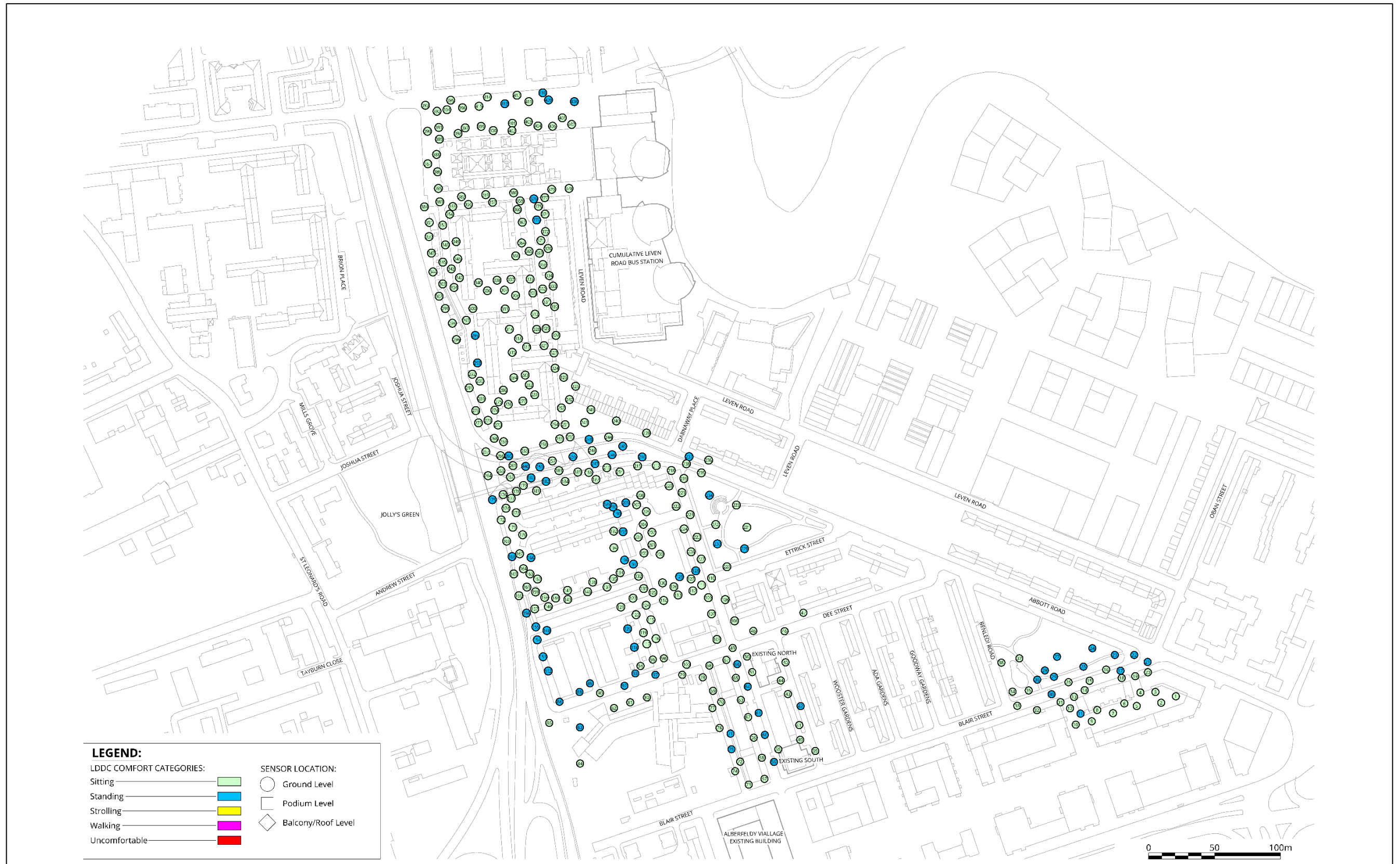


Figure 13.35 Configuration 6: Existing Site with Cumulative Surrounding Buildings – Ground Level (Summer Season)





Figure 13.36 Configuration 6: Existing Site with Cumulative Surrounding Buildings – Elevated Levels (Summer Season)

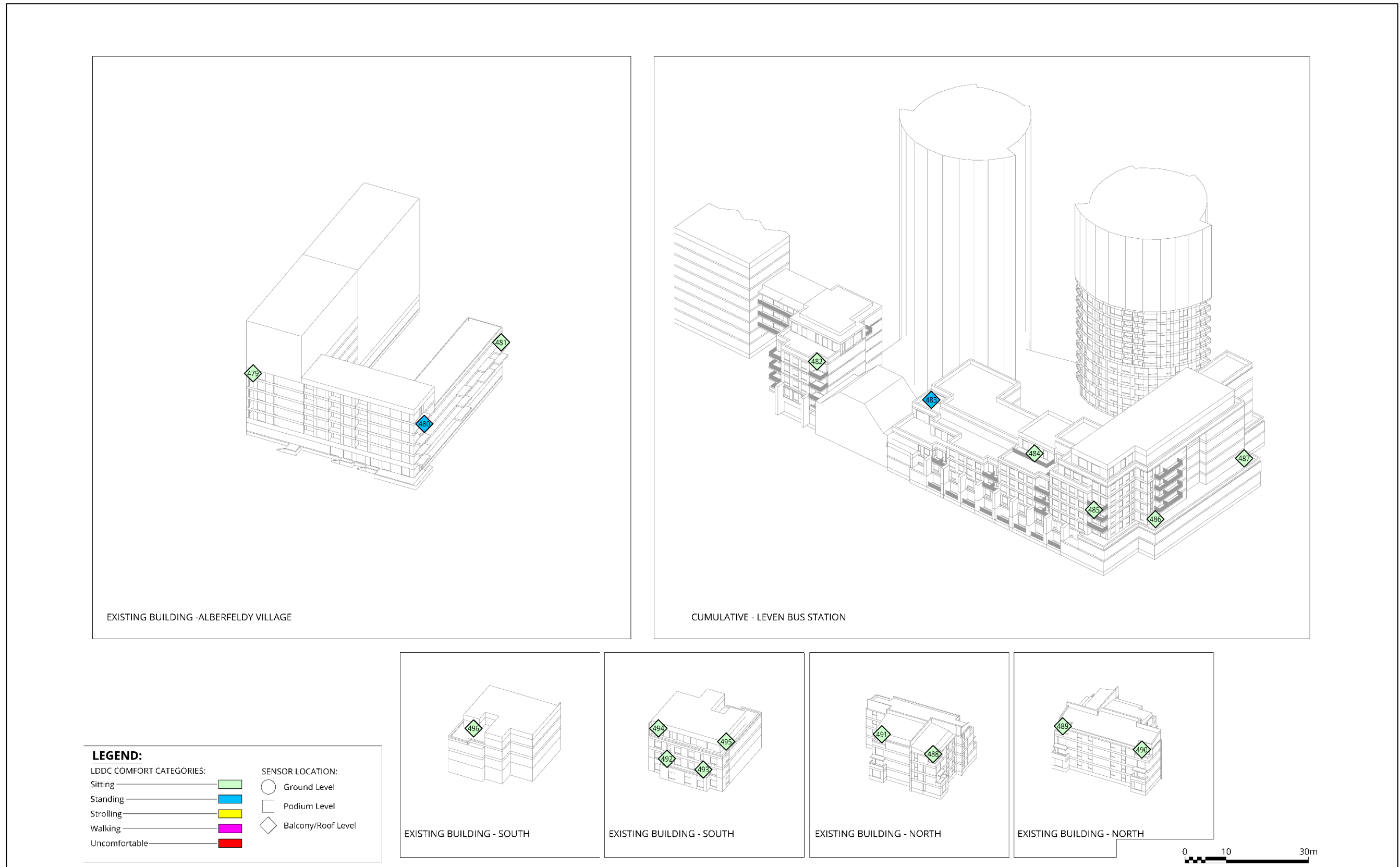
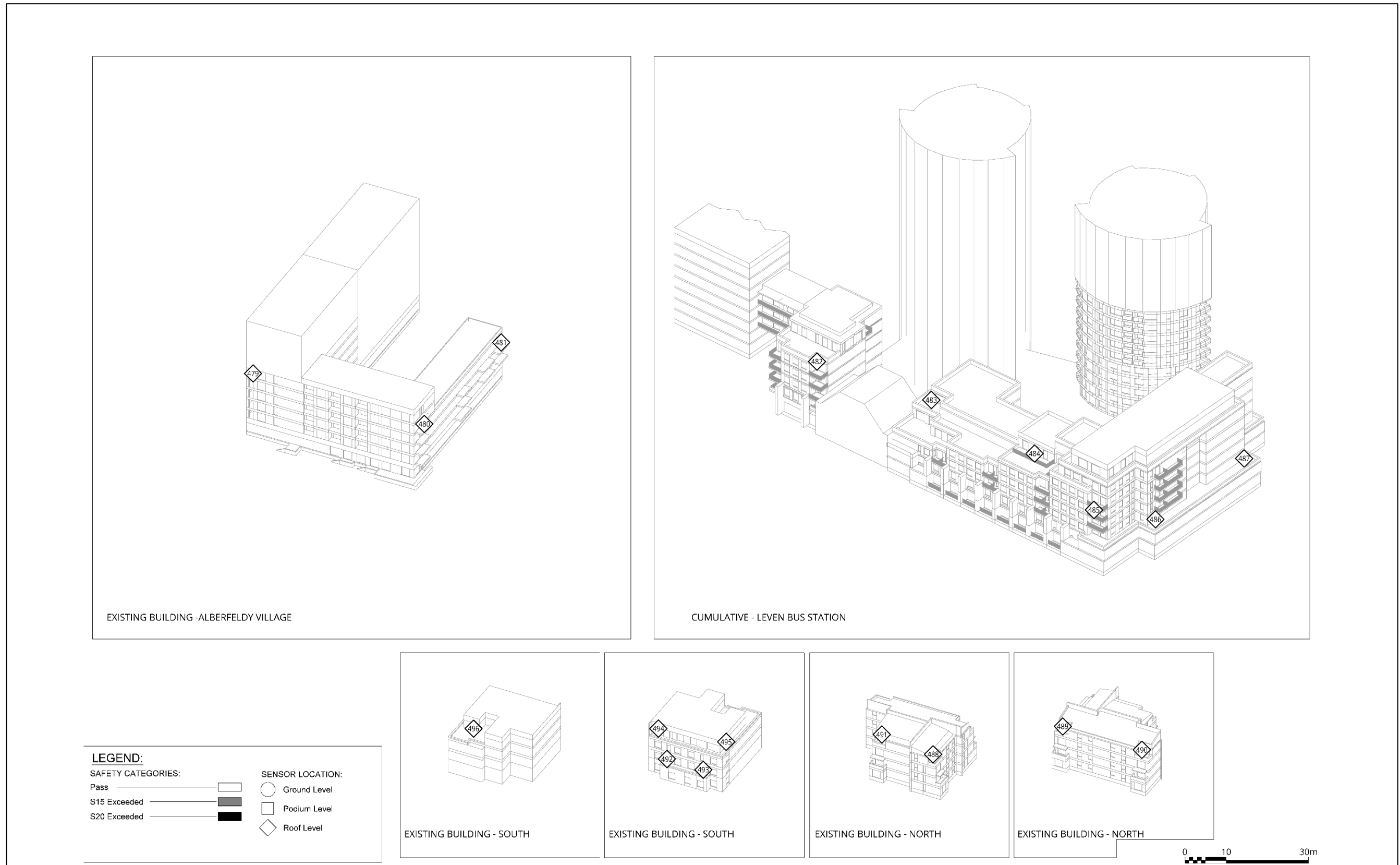


Figure 13.37 Configuration 6: Existing Site with Cumulative Surrounding Buildings – Ground Level (Strong Winds)



Figure 13.38 Configuration 6: Existing Site with Cumulative Surrounding Buildings – Elevated Levels (Strong Winds)





## Cumulative Effects Assessment

### Demolition and Construction

- 13.229** The cumulative schemes would likely provide sheltering effect on the wind microclimate at the site during demolition and construction, therefore, wind conditions during the demolition and construction works at the site and surrounding area would represent a likely **Negligible (Not Significant)** effect.

### Completed Development

#### Configuration 7: Detailed Proposals (Phase A) with Cumulative Surrounding Buildings

- 13.230** The assessment of the wind conditions for Configuration 7 is based on the results presented in **Figure 13.39** and **Figure 13.40** for the windiest and summer seasons respectively for ground floor level and **Figure 13.41** and **Figure 13.42** for elevated levels during the summer season. Safety exceedances are presented in **Figure 13.43** for the ground level and **Figure 13.44** and **Figure 13.45** for elevated levels.

#### Pedestrian Comfort

- 13.231** With the Detailed Proposals in the context of cumulative surrounding buildings wind conditions within and surrounding the Site would improve compared to Configuration 2 and would be suitable for sitting use to strolling use during the windiest season. This is due to the cumulative buildings providing shelter to parts of the Site from winds.

- 13.232** During the summer season, wind conditions are either the same category or one category calmer and range from suitable for sitting to strolling use.

#### Thoroughfares

- 13.233** Wind conditions at thoroughfares within the Detailed Proposed would range from sitting to strolling use during the windiest season. This would represent **Moderate Beneficial (Not Significant)** to **Negligible (Not Significant)** effects.

- 13.234** All other thoroughfares within the Site would range from suitable for sitting to strolling use during the windiest season representing a **Moderate Beneficial (Not Significant)** to **Negligible (Not Significant)** effects.

#### Off-site

- 13.235** Off-site thoroughfares in the vicinity of the Proposed Development would be suitable for sitting (probe locations 47, 48, 79, 84, 228, 230, 231, 232, 233, 234, 235, 236, 328, 330, 333, 370, 374, 377, 385, 386, 388 and 389), and standing (probe locations 78 and 229) use during the windiest season, which would represent a **Negligible (Not Significant)** effect.

#### Entrances

- 13.236** Wind conditions at the majority of entrances to the Detailed Proposals would be range from suitable for sitting to standing use representing a **Minor Beneficial (Not Significant)** to **Negligible (Not Significant)** effects.

- 13.237** The exception to this would be at probe locations 114 which would one category windier than suitable representing a **Minor Adverse (Significant)** effect.

- 13.238** All other entrances within the Site would range from suitable for sitting to standing use during the windiest season representing a **Minor Beneficial (Not Significant)** to **Negligible (Not Significant)** effects.

#### Bus stops

- 13.239** Bus stops around the Site would have wind conditions suitable for sitting (probe location 169) and standing (probe locations 105, 106) during the windiest season. This would represent **Minor Beneficial (Not Significant)** to **Negligible (Not Significant)** effect.

#### Pedestrian Crossings

- 13.240** Wind conditions at pedestrian crossings around the Site (probe locations 237 and 238) would range from suitable for sitting to standing use during the windiest season representing a **Major Beneficial (Not Significant)** to **Moderate Beneficial (Not Significant)** effect.

#### Ground Level Amenity – Mixed Use

##### On-Site

- 13.241** Wind conditions at ground level amenity spaces within the Detailed Proposals would range from suitable for sitting to standing use during the summer season. This represents a **Negligible (Not Significant)** effect.

- 13.242** All other mixed-use amenity spaces around the Site would range from suitable for sitting to standing use during the summer season, representing a **Negligible (Not Significant)** effect.

##### Off-Site

- 13.243** Wind conditions at the school court (represented by probe 83) would be suitable for sitting use during the summer season. This represents **Negligible (Not Significant)** effect.

#### Ground Level Amenity – Seating

- 13.244** Wind conditions at ground level seating area (north-west of Plot F) within the Detailed Proposals presented by probe location 115 would be one category windier than suitable for sitting use. This represents **Minor Adverse (Significant)** effect.

#### Roof Terrace Amenity – Mixed Use

- 13.245** Wind conditions at roof terraces within the Detailed Proposals would range from suitable for sitting to standing use during the summer season. This represents a **Negligible (Not Significant)** effect.

##### Off-site

- 13.246** Wind conditions at off-site roof terraces represented by probe locations 483, 484, 486, 487 and 496 would be suitable for sitting use during the summer season. This would represent a **Negligible (Not Significant)** effect.

#### Balcony Levels

##### On-site

- 13.247** Wind conditions at balconies within the Detailed Proposals would range from suitable for sitting to standing use during the summer season. This would represent a **Negligible (Not Significant)** effect.

##### Off-site

- 13.248** Wind conditions at off-site balconies of neighbouring buildings represented by probe locations 479, 480, 481, 482, 485, 488, 489, 490, 491, 492, 493, 494 and 495 would range from suitable for sitting to standing use during the summer season. This would represent a **Negligible (Not Significant)** effect.

#### Strong winds

- 13.249** There would be no instances of strong winds exceeding the safety threshold within or around the Site including roads and car parks.

Figure 13.39 Configuration 7: Detailed Proposals (Phase A) with Cumulative Surrounding Buildings – Ground Level (Windiest Season)





Figure 13.40 Configuration 7: Detailed Proposals (Phase A) with Cumulative Surrounding Buildings – Ground Level (Summer Season)

