

Appendix 4: Supplementary Documents

**Revised Redline
Winter Garden Plan
Playspace Plan
Revised Principal Public Realm Areas Map
Revised Indicative Demolition and Construction Programme
Wind Microclimate Note
Jolly's Green Ecology Addendum
Climate Change Note
Revised Cumulative ZVI
Air Quality Technical Note**

RWDI TECHNICAL NOTE

DATE:	2022-06-07	RWDI REFERENCE #: 2004108
RE:	Aberfeldy New Village London Borough of Tower Hamlets, UK Jolly's Green and Ailsa Wharf Wind Microclimate Review	

Introduction

During 2021, RWDI were retained to conduct a wind microclimate assessment on the proposed Aberfeldy Village development (the 'Proposed Development') in the London Borough of Tower Hamlets. A desk-based review of the potential wind interactions of the Proposed Development was followed by wind tunnel testing to quantify pedestrian comfort and safety at the Site with reference to the well-established Lawson Comfort Criteria and, where necessary, adjust the massing of the Illustrative Proposals to improve wind conditions within and around the Proposed Development. The results of this assessment are presented within Chapter 13 of the October 2021 Environmental Statement (the 'October 2021 ES').

Further to the wind microclimate assessment in support of the October 2021 ES, RWDI have undertaken a desk based review of the changes set out in the main document of the ES Addendum and those with the potential to influence the outcomes of Chapter 13 of the October 2021 ES have been considered within this note.

Those amendments with the potential to influence the outcomes of the October 2013 ES and considered within this note are:

- The inclusion of Jolly's Green within the site boundary and the associated changes to the Proposed Development;
- Proposed relocation of temporary play space associated with Plot F within Phase A of the Proposed Development from the assessed location at Jura House to Kilbrennan House; and
- The amended form of the Ailsa Wharf scheme (PA/22/00210/A1) to the north of the Proposed Development (adjacent to the Lochnagar Street Buildings) submitted (March 2022) with an increased maximum height of ~20m to a maximum height of ~80m (from ~60m).

Expected Wind Conditions

Jolly's Green

The location of Jolly's Green to the west of the A12 would be upwind of the buildings of the Proposed Development with respect to the prevailing south-westerly winds. As such, for the majority of the time throughout the year the wind would blow over Jolly's Green before interacting with the Proposed Development and the Proposed Development would be

unlikely to have substantial influence on wind conditions at Jolly's Green. Wind tunnel testing of the Proposed Development by RWDI did not include instrumentation to the west of the A12, however, measurements taken along the western boundary of the Site to the east of the A12 indicate that wind conditions would be similar to those at the existing Site (Figure 1). The proposals would include the removal of existing trees along the eastern edge of Jolly's Green, which would result in the space being more exposed to the north-easterly winds common during the spring season than at the existing Site. This additional exposure would be expected to increase windiness such that if wind conditions at Jolly's Green in the context of the existing Site are suitable for sitting use during the summer season, it may be expected that areas at the north-east of Jolly's Green would be suitable for standing use in the context of the Proposed Development (Figure 2) with the north-eastern boundary trees removed. The illustrative landscaping scheme for Jolly's Green identified new trees along the northern boundary of and within Jolly's Green would be expected to reduce potential increases in windiness across the majority of the space provided these trees are planted semi-mature, which could result in an acceptable mix of sitting and standing use wind conditions for a mixed use amenity space. Wind conditions in Jolly's Green will be quantified through wind tunnel testing at the RMA stage, and where necessary, input provided into the landscaping and tree planting proposals.

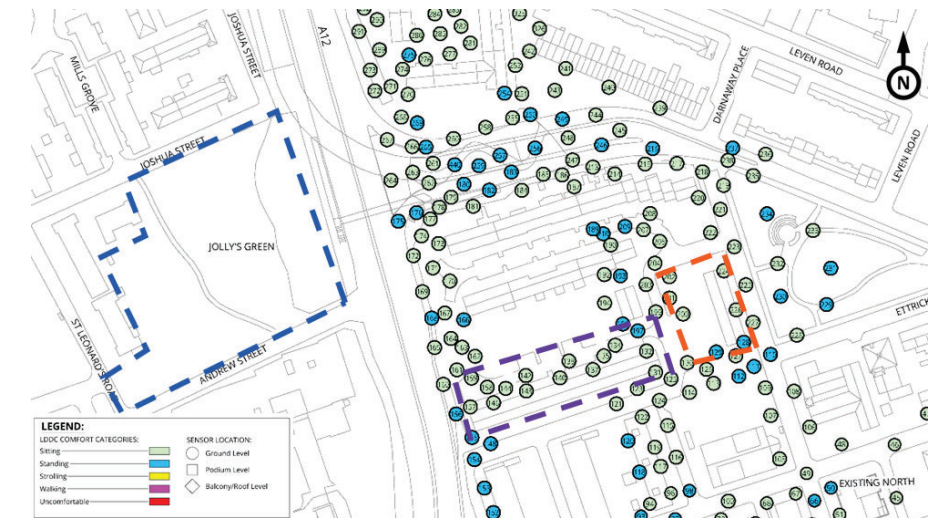


Figure 1: Location of Jolly's Green (blue) and wind conditions at Jura House (orange) and Kilbrennan House (purple) during the windiest season in the context of the existing Site

Similarly, as the western portal of the proposed underpass would be located to the west of the A12, the Proposed Development would have no substantial influence on wind conditions within the proposed underpass. Conditions would therefore be expected to be similar to those of the existing underpasses in the area and unlikely to be perceived as appreciably windier than expected by pedestrian users.

Plot F Temporary Play Space

There are proposals to move Phase A temporary play provisions associated with Plot F of the Proposed Development from Jura House to Kilbrennan House. The area around both Jura House and Kilbrennan House would have similar wind conditions (Figure 2) throughout the year, both suitable for sitting and standing uses during the windiest season

and suitable for sitting use during the summer season. As such, there would be no change to the outcomes of the wind microclimate assessment.

Ailsa Wharf Scheme Updates

Amendments to the Ailsa Wharf proposals submitted in March 2022 would increase the maximum height, form and orientation of the eastern component of Phase 2 by approximately 20m. An increase in height of 20m would generally be considered substantial in a wind microclimate assessment, however, the location of Ailsa Wharf Phase 2 to the north of the Proposed Development would be outwith the prevailing wind directions and generally sheltered from the Proposed Development by Phase 1 of Ailsa Wharf. As such, the wind microclimate would generally be expected to be no windier around the illustrative context of the Proposed Development with the introduction of Ailsa Wharf scheme.

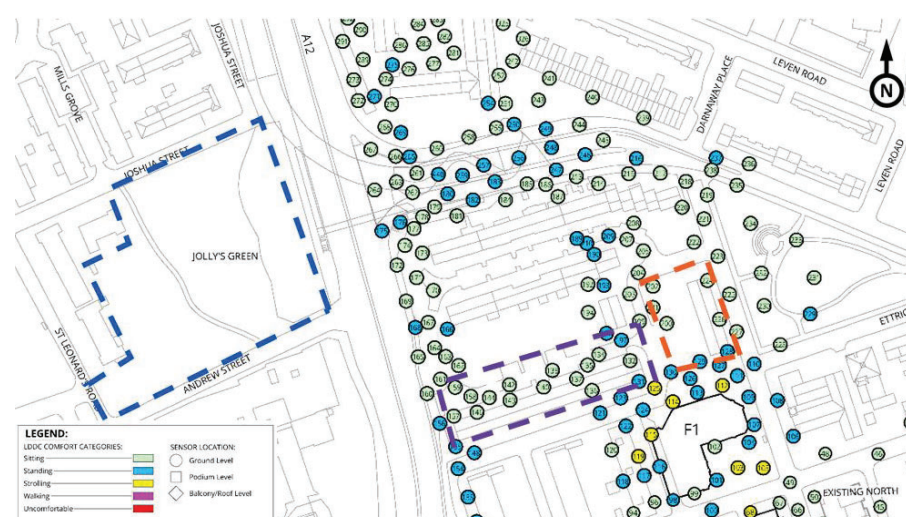


Figure 2: Location of Jolly's Green (blue) and wind conditions at Jura House (orange) and Kilbrennan House (purple) during the windiest season in the context of Phase A of the Proposed Development

The wind conditions between Plot J and Ailsa Wharf would be suitable for standing use during the windiest season, which would be appropriate for a pedestrian thoroughfare based on wind tunnel results. The proposed increase in height of the Ailsa Wharf development would not be expected to substantially influence wind conditions in this area which would be likely to remain suitable for the intended use. As such, the outcomes of the wind microclimate assessment reported in Chapter 13 of the October 2021 ES would be expected to remain valid. Wind conditions on Lochnagar Street in the context of consented cumulative schemes will be quantified through further testing at RMA stage.

Conclusions

Of the changes set out in the ES Addendum, those with the potential to influence the outcomes of Chapter 13 of the October 2021 ES have been reviewed qualitatively.

The potential influence on wind conditions within Jolly's Green in the context of the Proposed Development, the likelihood of changes to the outcomes of the wind microclimate assessment at Plot F temporary play space and the potential impact of a proposed 20m increase in height and change in form and orientation of Phase 2 of the

Ailsa Wharf cumulative scheme to the north of Plot J have been reviewed by RWDI using professional judgement.

The Proposed Development itself would be unlikely to substantially influence wind conditions at Jolly's Green, however, the proposed reduction in trees at the north-eastern boundary of the space would be expected to increase windiness in this area when winds are blowing from north-easterly directions relative to the those in the context of the current Site. Illustrative new trees within Jolly's Green would be expected to reduce potential increases in windiness across the majority of the space provided these trees are planted semi-mature, which could provide an appropriate mix of sitting and standing use wind conditions for a mixed-use amenity space. Wind conditions on Jolly's Green will be quantified through further testing at RMA stage, with input to the landscaping and tree planting proposals as necessary.

Wind conditions in the assessed and the proposed Plot F play spaces would be similar throughout the year. As such, no additional significant effects are anticipated, and the outcomes of Chapter 13 of the October 2021 ES would remain valid.

Similarly, the increase in height of Ailsa Wharf development would be unlikely to substantially influence wind conditions at the Proposed Development despite the substantial proposed increase in height due to the location of Ailsa Wharf to the north of the Site, outwith the prevailing wind directions approaching the Site. Wind conditions would therefore be expected to remain suitable for the intended use. Wind conditions on Lochnagar Street will be quantified through further testing at RMA stage.