

MARY FEILDING GUILD CARE HOME, 103-107 NORTH HILL, LONDON N6 4DP

Daylight and Sunlight Report

5 December 2022

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1. Introduction

- 1.1. Delva Patman Redler LLP (“we”) have been engaged by the Applicant to assess daylight and sunlight for a planning application for proposed development at 103-107 North Hill (“the Site”). We have been instructed to assess the potential effects on neighbouring properties.
- 1.2. Our daylight and sunlight study has been carried out using the assessment methodology recommended in the Building Research Establishment (BRE) Report 209, ‘*Site Layout Planning for Daylight and Sunlight: A guide to good practice*’ (third edition, 2022) (“the BRE guide”) and the Professional Guidance Note, ‘*Daylighting and sunlighting*’ (1st edition, 2012), published by the Royal Institution of Chartered Surveyors.
- 1.3. The Site is located within the London Borough of Haringey. The Site is shown central to the aerial photograph in Figure 1 below and on the location plan in Appendix 2.



Figure 1 - Aerial photo of the Site and neighbouring buildings (© Google)

- 1.4. The proposed development is illustrated in spot-height drawings in Appendix 2. It comprises demolition of existing buildings and redevelopment to provide a new care home (Class C2 - Residential Institution), together with a well-being and physiotherapy centre. The proposed care home includes up to 70 bedrooms, a hydrotherapy pool, steam room, sauna, gym, treatment/medical rooms, hairdressing and beauty salon, restaurant, cafe, lounge, bar, well-being shop, general shop, car and cycle parking, refuse/recycling storage, mechanical and electrical plant, landscaping and associated works.
- 1.5. This report is accompanied by Appendices explaining the BRE assessment methodology and containing drawings and tabulated results, as listed on the Contents page.

2. Planning policy and guidance

National Planning Policy and Guidance

National Planning Policy Framework (July 2021)

- 2.1. The National Planning Policy Framework (NPPF) sets out the Government's planning policies and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced. It places an emphasis on sustainable development and delivery of housing.

BRE Report 209, 'Site Layout Planning for Daylight and Sunlight: A guide to good practice' (2022)

- 2.2. The leading publication providing national guidance on the provision of daylight and sunlight to new development, and the impacts of development on daylight and sunlight to neighbouring buildings and open spaces, is BRE Report 209, 'Site Layout Planning for Daylight and Sunlight: A guide to good practice' (third edition, 2022). It is referred to in the development plan documents or supplementary planning documents of most planning authorities. This guide supersedes the 2011 edition, which is now withdrawn. However, the main message is the same.

- 2.3. The BRE guide states:

(Its) main aim is ... to help to ensure good conditions in the local environment, considered broadly, with enough sunlight and daylight on or between buildings for good interior and exterior conditions.

The guide is intended for building designers and their clients, consultants and planning officials. The advice given is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer.

Although it gives numerical guidelines, these should be interpreted flexibly because natural lighting is only one of the many factors in site layout design.

In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings... The calculation methods ... are entirely flexible in this respect

British Standard, BS EN 17037:2019, 'Daylight in buildings'

- 2.4. British Standard, BS EN 17037:2019, 'Daylight in buildings' provides a standard and methodology by which to assess daylight and sunlight in new buildings. It does not deal with sunlight to open spaces or the effects of development on daylight and sunlight to existing neighbouring buildings.

Local planning policy

Haringey Development Management DPD (adopted July 2017)

- 2.5. The Haringey Development Management DPD (2017) contains the following relevant policy:

Policy DM1: Delivering High Quality Design

D Development proposals must ensure a high standard of privacy and amenity for the development's users and neighbours. The Council will support proposals that:

a Provide appropriate sunlight, daylight and open aspects (including private amenity space where required) to all parts of the development and adjacent buildings and land;

- 2.6. The supporting text states:

2.9 The Council recognises that amenity can be compromised in a number of ways through development such as detrimental loss of daylight and sunlight to existing and adjacent occupiers; loss of privacy and outlook due to the proximity and design of developments; harmful noise, odour, vibration and air pollution from existing and proposed developments (typically commercial activities and other activities such as rail); developments with the potential to endanger highway safety; and cause detrimental micro-climate effects. Buildings should therefore be compatible with their local environment and conditions.

2.10 The design and layout of buildings must enable sufficient sunlight and daylight to penetrate into and between buildings, and ensure that adjoining land or properties are protected from unacceptable overshadowing. The Building Research Establishment (BRE) provides guidance on site layout planning to achieve good sun-lighting and day-lighting (BRE Site Layout Planning for Daylight and Sunlight: a guide to good practice).

3. Acceptability of daylight/sunlight levels and impacts

- 3.1. The assessment of impact on daylight and sunlight amenity is a two-part process¹: first, as a matter of calculation, whether there would be a material deterioration in conditions by reference to the BRE guidelines; and second, as a matter of judgment, whether that deterioration would be acceptable in the circumstances.
- 3.2. The first stage can be addressed by applying the BRE assessment methodology and numerical guidelines. The second stage brings into play much wider considerations, such as:
- i) Whether the neighbouring building stands unusually close to the site boundary, including the highway, taking more than its fair share of light, such that a greater reduction in light may be unavoidable if one site is not to be prejudiced by how another has been developed. (A 'mirror-image' study can be informative in such cases.)
 - ii) Whether windows in neighbouring buildings are self-obstructed by overhanging or inset balconies or other projections such as to make relatively larger reductions unavoidable even if there is a modest new obstruction opposite - in effect themselves taking away more than their fair share of light. (A 'without balconies' study can be informative in such cases.)
 - iii) In historic city centres or areas characterised by modern tall buildings, high density and close proximity, a higher degree of obstruction may be unavoidable if new buildings are to match the height and proportion of existing buildings.
 - iv) In areas that are designated by planning authorities for substantial growth or providing opportunities for change and sustainable regeneration, the sort of change that would be brought about by the introduction of taller, denser development is to be expected, including reductions in daylight and sunlight levels, closer proximity, loss of outlook, etc.
- 3.3. Where a higher degree of obstruction may be unavoidable it is appropriate to consider the reasonableness of the retained levels of daylight and sunlight with the proposed development in place.

¹ Rainbird, R (on the application of) v The Council of the London Borough of Tower Hamlets [2018]

4. Assessment methodology and numerical guidelines

- 4.1. The technical assessments that underpin this daylight and sunlight study have been carried out in accordance with the assessment methodology recommended in the BRE guide.
- 4.2. The principal assessments and numerical criteria are summarised below. A fuller explanation of the assessment methodology is given at Appendix 1 of this report.

Existing neighbouring buildings and amenity spaces

Daylight to neighbouring buildings

- 4.3. If the head of the new development subtends an angle of more than 25° measured from the centre of the lowest affected window in an existing neighbouring building in a plane perpendicular to the window wall, then a more detailed check is needed to find the loss of skylight.
- 4.4. The more detailed tests are:
 - i) vertical sky component (**VSC**) at the centre of each main window, which measures the total amount of skylight available; and
 - ii) no-sky line (**NSL**) on the working plane inside a room, where room layouts are known, which measures the area that can receive direct skylight and assesses the distribution of daylight around the room.
- 4.5. Loss of daylight resulting from development will be noticeable if either:
 - the VSC at the centre of the window will be reduced to both less than 27% and less than 0.8 times its former value, or
 - the area of the working plane in a room that is enclosed by the no-sky line (NSL) and can receive direct skylight will be reduced to less than 0.8 times its former value.
- 4.6. In respect of these numerical guidelines, the BRE guide states:

Note that numerical values given here are purely advisory. Different criteria may be used based on the requirements for daylighting in an area viewed against other site layout constraints.

- 4.7. In respect of the windows and rooms to be assessed, the BRE guide states:

The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms.

- 4.8. In housing, living rooms, dining rooms and kitchens have a greater requirement for daylight. Bedrooms should also be analysed but are less important. Bathrooms, stairwells and other areas without a requirement for daylight need not be assessed.
- 4.9. For a bay window, the centre window facing directly outwards can be taken as the main window for the VSC calculation. If there would be a significant loss of light to the main window but the room has one or more smaller windows, an overall VSC may be derived by weighting each VSC element in accordance with the proportion of the total glazing area represented by its windows.

Sunlight to neighbouring buildings

- 4.10. In designing new development, care should be taken to safeguard the access to sunlight for existing dwellings and any nearby non-domestic buildings where there is a particular requirement for sunlight.
- 4.11. Obstruction to sunlight may become an issue if part of the development is situated within 90° of due south of a main window wall of an existing building, and in the section drawn perpendicular to this existing window wall, the new development subtends an angle greater than 25° to the horizontal measured from the centre of the lowest window to a main living room.

- 4.12. The amount of sunlight reaching a room is measured by calculating the percentage of annual probable sunlight hours (**APSH**) at the centre its windows.
- 4.13. If, following development, the APSH will be greater than 25%, including at least 5% of APSH in the winter months between 21 September and 21 March, then the room should still receive enough sunlight.
- 4.14. Sunlight will be adversely affected if the centre of the window will:
- receive less than 25% APSH or less than 5% APSH during the winter months (21 September to 21 March); and
 - less than 0.8 times its former sunlight hours during either period; and
 - the reduction in sunlight over the whole year will be greater than 4% APSH.
- 4.15. All main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Normally loss of sunlight need not be analysed to kitchens and bedrooms, except for bedrooms that also comprise a living space.
- 4.16. Our assessment has assessed the loss of sunlight to all rooms identified to face within 90° of due south for completeness.

Sunlight to neighbouring gardens and amenity spaces

- 4.17. Sunlight should be assessed on the equinox (21 March) to main back gardens of houses, allotments, parks and playing fields, children's playgrounds, outdoor swimming pools, sitting-out areas such as in public squares, and focal points for views, such as a group of monuments or fountains.
- 4.18. The assessment measures the percentage of each area that can receive at least two hours of sunlight on 21 March - the two-hours sun-on-ground (**SOG**) test.
- 4.19. If, following development, the area of the garden or other amenity space that can receive two hours of direct sunlight on 21 March is reduced to both less than 50% of its total area and less than 0.8 times its former value, the loss of sunlight is likely to be noticeable and the space will tend to look more heavily overshadowed.
- 4.20. The assessment normally excludes sunlight at an altitude of 10° or less and ignores fences or walls less than 1.5 metres high, and trees and shrubs. Front gardens, driveways and hard standings for cars need not be assessed.
- 4.21. Where a large building is proposed which may affect a number of gardens or open spaces, it can be illustrative to plot shadow plans showing the location of shadows at different times of day and year. The equinox (21 March) is the best assessment date as it shows the average level of shadowing. Mid-summer (21 June) is an optional addition date when there would be greater sunlight availability and reduced overshadowing.

5. Categorisation of magnitudes of impact and significance of effects

- 5.1. In our summary tables, we have counted the number of impacts inside and outside the BRE guidelines and categorised the latter according to their magnitude of impact. The BRE guide does not include a standard scale of impact, so this study adopts the widely used approach in Table 1 below.

Table 1 – Categorisation of magnitudes of impact on existing neighbouring properties

Impact inside BRE guidelines	Impact outside BRE guidelines		
	0.70-0.79 times former value (21% to 30% loss)	0.60-0.69 times former value (31% to 40% loss)	<0.60 times former value (>40% loss)
Negligible impact	Low impact	Medium impact	High impact

- 5.2. To understand the significance of effect on a building, it is necessary to consider both the number and magnitude of impacts and a range of other factors. Appendix H of the BRE guide, which is intended for use in Environmental Impact Assessments, provides the following advice on ascribing significance to effects:

Adverse impacts occur when there is a significant decrease in the amount of skylight and sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space.

The assessment of impact will depend on a combination of factors, and there is no simple rule of thumb that can be applied.

Where the loss of skylight or sunlight fully meets the guidelines, the impact is assessed as negligible or minor adverse. Where the loss of light is well within the guidelines, or only a small number of windows or limited area of open space lose light (within the guidelines), a classification of negligible impact is more appropriate. Where the loss of light is only just within the guidelines, and a larger number of windows or open space area are affected, a minor adverse impact would be more appropriate, especially if there is a particularly strong requirement for daylight and sunlight in the affected building or open space.

Where the loss of skylight or sunlight does not meet the guidelines, the impact is assessed as minor, moderate or major adverse. Factors tending towards a minor adverse impact include:

- *only a small number of windows or limited area of open space are affected;*
- *the loss of light is only marginally outside the guidelines;*
- *an affected room has other sources of skylight or sunlight;*
- *the affected building or open space only has a low level requirement for skylight or sunlight; and*
- *there are particular reasons why an alternative, less stringent, guideline should be applied.*

Factors tending towards a major adverse impact include:

- *a large number of windows or large area of open space are affected;*
- *the loss of light is substantially outside the guidelines;*
- *all the windows in a particular property are affected; and*
- *the affected indoor or outdoor spaces have a particularly strong requirement for skylight or sunlight, e.g. a living room in a dwelling or a children's playground.*

- 5.3. The sensitivities of the various receptors are set out in Table 2 below.

Table 2 – *Receptor Sensitivity Descriptors*

Sensitivity	Receptors for daylight assessment	Receptors for sunlight assessment
High	Main living rooms and kitchens	Main living rooms, back gardens, and shared or public amenity spaces
Medium	Bedrooms	-
Low	-	Kitchens and bedrooms
Negligible	Circulation spaces, bathrooms and other non-habitable rooms	Circulation spaces, bathrooms and other non-habitable rooms

6. Flexible application of the guidelines and alternative target values

- 6.1. As noted in paragraph 2.2 above, the BRE guide states that its default numerical guidelines are not mandatory and must be interpreted flexibly because natural lighting is only one of many factors in site layout design. In certain circumstances, such as city centres or areas with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings.
- 6.2. We set out below some examples of a flexible approach to applying the BRE guidelines that are of relevance.

Reasonableness of retained values in a site's context

- 6.3. One example of flexible application of the guidelines was demonstrated in the Inspector's appeal decision for a development of the Whitechapel Estate site between Varden Street and Ashfield Street, London E1 in the London Borough of Tower Hamlets in February 2018 (Appeal Ref: APP/E5900/W/17/3171437).
- 6.4. In the aforementioned case the Inspector found that materially adverse impacts on daylight were nonetheless acceptable. He noted that development that resulted in a proportion of residual VSC values in the mid-teens, with a smaller proportion in the bands below 15% VSC, have been found acceptable in major developments across London. More specifically, the Inspector stated:

108. The BRE document offers guidance on generally acceptable standards of daylight and sunlight, but advises that numerical values are not to be rigidly applied and recognises the importance of the specific circumstances of each case. Inner city development is one of the examples where a different approach might be justified. This is specifically endorsed by the [Mayor of London's] Housing SPG, which calls for guidelines to be applied sensitively to higher density developments, especially in (among others) opportunity areas and accessible locations, taking into account local circumstances, the need to optimise housing capacity, and the scope for the character and form of an area to change over time. ... I agree with the appellants that blanket application of the BRE guide optimum standards, which are best achieved in relatively low-rise well spaced layouts, is not appropriate in this instance.

109. The SPG advises that the daylight impact on adjacent properties should be assessed drawing on "broadly comparable residential typologies within the area and of a similar nature across London"...

112. The figures [from comparable typologies from a range of example sites across Central London analysed by the appellants, comprising both traditional urban streets and recently permitted areas of significant development] show that a proportion of residual Vertical Sky Component ('VSC') values in the mid-teens have been found acceptable in major developments across London. This echoes the Mayor's endorsement in the preSPG decision at Monmouth House, Islington that VSC values in the mid-teens are acceptable in an inner urban environment. They also show a smaller proportion in the bands below 15%...

113. I acknowledge that a focus on overall residual levels could risk losing sight of individual problem areas. It is accepted that light is only one factor in assessing overall levels of amenity, but I consider that the trade-off with other factors, such as access to public transport or green space, is likely to be of more relevance to an occupier of new development than to an existing neighbour whose long-enjoyed living conditions would be adversely affected by new buildings. However, I also consider that Inner London is an area where there should generally be a high expectation of development taking place. This is particularly so in the case of the appeal site, where the Whitechapel Vision Masterplan and the City Fringe Opportunity Area Planning Framework have flagged the desirability of high density development. Existing residents would in my view be prepared for change and would not necessarily expect existing standards of daylight and sunlight to persist after development.

- 6.5. Ultimately, it is for the planning authority to judge whether affected properties would be left with acceptable levels of daylight and sunlight in their neighbourhood context, having regard to all relevant planning policies and guidance and balanced against the merits of the proposed development.

Proximity of neighbouring building to site boundary

- 6.6. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light. Appendix F of the BRE guide gives further guidance. This involves setting alternative target values generated from the layout dimensions of the existing neighbouring building and its position relative to the boundary. To ensure that new development matches the height and proportions of existing buildings, the VSC and APSH targets for the neighbouring windows could be set to those for a 'mirror-image' building of the same height and size, an equal distance away on the other side of the boundary.
- 6.7. In the Inspector's appeal decision for a development at Enterprise House, 21 Buckle Street, London E1 8NN in the London Borough of Tower Hamlets dated 17 December 2018 (Appeal Ref: APP/E5900/W/17/3191757) he interpreted this as applying to buildings built at the back edge of pavement and whose windows were therefore "effectively on the site boundary". He stated:

19. ... The BRE Guide recognises that windows that are unusually close to the boundary take more than their fair share of light. This is an acknowledgement that the first built scheme of a local cluster could otherwise prevent the full potential of adjacent sites from being realised.

20. In such inequitable circumstances the Rainbird judgement found that 'If an existing building has been so designed that, whether by the inclusion of balconies or overhangs, it makes relatively larger reductions in daylight unavoidable even if there is a modest new obstruction opposite, that design could be seen as taking for the existing building 'more than their fair share of light' in the same way the BRE Guide regards a building that has windows that 'are unusually close to the site boundary' as doing; in each case, a greater reduction in daylight and sunlight may be unavoidable if one site is not to be unfairly prejudiced by how another has been developed.'²

21. In such a situation the BRE Guide advises that 'To ensure that new development matches the height and proportion of existing buildings, the VSC and APSH targets for these windows could be set to those for a 'mirror-image' building of the same height and size, an equal distance away on the other side of the boundary.'³

22. The appellants carried out an assessment of the impact on all affected windows through a range of criteria, including a mirror image exercise with the 28 storey Altitude/Goldpence Apartments building...

23. The mirror-image exercise, although not quite to the letter of the guidelines, gives a clear indication that overall, in this more equitable arrangement, many more flats in the Altitude/Goldpence Apartments building would be affected and many more in the upper storeys would have a material deterioration in daylight and sunlight levels similar to those in the lower storeys. Such an impact would be considered acceptable, in terms of a fair share of light. In my view this provides a reasonable justification for a greater reduction in daylight and sunlight levels in the surrounding buildings as a result of this proposal than might otherwise be considered appropriate. By strictly applying the BRE guidelines, development of the site would be unfairly prejudiced.

Self-obstructing balconies, wings and other projections

- 6.8. Balconies and projecting wings to existing neighbouring buildings obstruct the available daylight and sunlight and can therefore cause relative reductions in light to be amplified. The BRE guide states:

² Rainbird, R (on the application of) v The Council of the London Borough of Tower Hamlets [2018]

³ Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice (2nd Edition, 2011) - Appendix F para F5.

- 2.2.11 *Existing windows with balconies above them typically receive less daylight. Because the balcony cuts out light from the top part of the sky, even a modest obstruction opposite may result in a large relative impact on the VSC, and on the area receiving direct skylight. One way to demonstrate this would be to carry out an additional calculation of the VSC and area receiving direct skylight, for both the existing and proposed situations, without the balcony in place. For example, if the proposed VSC with the balcony was under 0.8 times the existing value with the balcony, but the same ratio for the values without the balcony was well over 0.8, this would show that the presence of the balcony, rather than the size of the new obstruction, was the main factor in the relative loss of light.*
- 2.2.12 *A larger relative reduction in VSC may also be unavoidable if the existing window has projecting wings on one or both sides of it, or is recessed into the building so that it is obstructed on both sides as well as above.*
- 3.2.9 *Balconies and overhangs above an existing window tend to block sunlight, especially in summer. Even a modest obstruction opposite may result in a large relative impact on the sunlight received. One way to demonstrate this would be to carry out an additional calculation of the APSH, for both the existing and proposed situations, without the balcony in place. For example, if the proposed APSH with the balcony was under 0.8 times the existing value with the balcony, but the same ratio for the values without the balcony was well over 0.8, this would show that the presence of the balcony, rather than the size of the new obstruction, was the main factor in the relative loss of sunlight.*
- 6.9. Clearly, balconies, wings and other projections from buildings can be a factor in the relative light loss to such buildings. In such instances it can be helpful to run a supplementary assessment with the projections removed, in order to understand the degree to which they contribute to the relative light loss.

Deep, side-lit rooms

- 6.10. Another example where the standard numerical guidelines need to be applied sensibly is in relation to deep, side-lit rooms. The BRE guide states:

If an existing building contains rooms lit from one side only and greater than 5 m deep, then a greater movement of the no sky line may be unavoidable.

7. Scope of the assessment

Neighbouring buildings

- 7.1. The principal recommendations in the BRE guide relate to residential buildings. Its guidelines on daylight are intended for use for rooms in neighbouring dwellings where daylight is required, including living rooms, kitchens and bedrooms (BRE paragraph 2.2.2). Its guidelines on sunlight apply to all main living rooms of neighbouring dwellings and conservatories that have a window facing within 90° of due south (BRE paragraph 3.2.3).
- 7.2. Consequently, our assessment has been scoped to include nearby residential accommodation, as is common practice for studies for planning applications, and relevant amenity spaces.
- 7.3. We identified the properties that are in residential use from a site visit and online research, including the Valuation Office Agency council tax list, local authority planning records, and estate agency websites.
- 7.4. We have run the BRE daylight and sunlight tests in the existing baseline and proposed development scenarios. This establishes the levels that would be retained in the proposed development condition and the degree to which they change from the existing baseline.
- 7.5. We have also run the following supplementary tests:
 - 7.5.1. We have undertaken a 'without balconies' assessment for two of the neighbouring properties adjacent to the site at 34 and 46 Yeatman Road in line with paragraphs 6.8 and 6.9 above. This assesses the impact of the proposed development on VSC and APSH to those buildings without the balconies and other projections above their windows. The assessment identifies whether the VSC and APSH impacts would be BRE adherent were it not for the limitation on view of sky posed by these projections. The results of the 'without balconies' assessment are at Appendix 5.
 - 7.5.2. We have undertaken an assessment including the tree line along the boundary with the Yeatman Road properties. The trees have been modelled simply adopting the tree survey data from Guarda Landscape which included information on the crown height, spread, and base and also the species of each tree. Trees cannot be modelled 100% accurately due to their changing nature across the seasons so these have been modelled crudely. Within the lighting analysis software, we have adopted the relevant species highlighted and studies have been run for summer and winter scenarios. The results of these additional studies are included in Appendix 6.

8. Information used in our technical study

- 8.1. We have undertaken our technical study using a 3D computer model built in AutoCAD and specialist analysis software, which runs the assessments recommended in the BRE guide.
- 8.2. We compiled our 3D computer model from the following information:
- 8.2.1. 3D computer model of the existing buildings on the Site and the contextual massing produced from photogrammetry (aerial photography) supplied by AccuCities Ltd, subsequently enhanced by us with the more detailed information listed below
 - 8.2.2. Measured survey model point cloud produced by our in-house measured survey team in March 2021
 - 8.2.3. Floor plans for neighbouring buildings, where available
 - 8.2.4. Proposed development: 3D model supplied by DWA Architects in September 2021 (file name: Site Model – 2021-CURRENT 2.rvt)
- 8.3. To aid accuracy of the assessment and interpretation of the results, we carried out online searches to obtain the floor plans for the neighbouring buildings referred to above, including from online planning application records and general estate agency websites. This is the approach recommended in the Professional Guidance Note, 'Daylighting and sunlighting' (1st edition, 2012), published by the Royal Institution of Chartered Surveyors, which states:

As a minimum, and subject to any limitations relating to a client instruction, surveyors should undertake searches of the local authority's planning portal to establish existing or proposed room layouts of neighbouring properties if they are available. This will ensure a robust approach and enable the surveyor to produce reliable information for daylight distribution analysis, or if average daylight factor (ADF) tests are appropriate ... Surveyors should also use the internet to search for other relevant information, including estate agent details, which commonly include plans of properties that can also be useful in determining a room layout or use.

- 8.4. Our research yielded the information listed in **Table 3** below. The plan ref. refers to the numbering on the location plan at Appendix 2.

Table 3 - Information on internal layouts of neighbouring properties

Neighbouring property	Information used
1A View Road	Plans from planning archive
2 View Road	Plans from planning archive
2 Wetherley Court	Plans from planning archive – basement and ground only
4 View Road	Plans from planning archive
32 Yeatman Road	Plans from planning archive
46 High Croft	Plans from planning archive
48 Yeatman Road	Plans from planning archive
109 North Hill	Plans from planning archive
111 North Hill	Plans from planning archive – garden office building only
115 North Hill	Plans from planning archive – ground floor plan only

- 8.5. Where we found plans for neighbouring properties, we used them to model their rooms. Where we were been unable to find plans, we modelled their rooms based on estimated dimensions, typically adopting a generic 4m-deep room for residential premises, unless the style of building suggested otherwise.

- 8.6. Our 3D computer model is shown on our spot-height drawings at Appendix 2.

Limitations and assumptions

- 8.7. In compiling our 3D computer model for our technical study, we have sought to be as accurate as reasonably possible within the scope of our instruction. We have relied upon the information noted above.
- 8.8. Whilst we have used plans for neighbouring buildings where available, we have typically made reasonable assumptions as to their internal floor levels and wall thicknesses.
- 8.9. We have used proven and trusted specialist computer software (Waldram Tools for AutoCAD®) to run the calculations recommended in the BRE guide.
- 8.10. To the best of our knowledge, the information and advice contained in this report is accurate at the date of issue, based on the information provided to or procured by us prior to its production.

9. Baseline condition for neighbouring properties

- 9.1. We have assessed the impacts of the proposed development relative to the existing baseline condition.
- 9.2. The existing baseline scenario and the proposed development scenario are shown on our spot-height drawing nos. EX1_001 and PRO_001 respectively at Appendix 2.
- 9.3. The daylight and sunlight levels in the existing baseline and proposed development conditions are shown in the results tables Appendix 5.
- 9.4. The levels in the proposed scenario are then compared with those in the baseline scenario so that the loss of natural light can be quantified and compared with the BRE numerical guidelines.
- 9.5. Window maps for the assessed buildings are attached at Appendix 2.

10. Effects of the proposed development on neighbouring properties

10.1. We assessed the effects of the proposed development on 23 neighbouring properties identified adjacent to the site.

Daylight to neighbouring properties

VSC and NSL

10.2. The results of the VSC and NSL analyses of the neighbouring properties are tabulated in Appendix 3 and summarised in Table 3 below.

Table 3 – Summary of VSC and NSL effects as a result of the proposed development

Property address	No. of windows tested	No. of rooms tested	No. rooms inside VSC & NSL guidelines	VSC (windows)					NSL (rooms)				
				No. windows inside guidelines	No. windows outside guidelines				No. rooms inside guidelines	No. rooms outside guidelines			
					Low reduction	Medium reduction	High reduction	Sub-total		Low reduction	Medium reduction	High reduction	Sub-total
113-115 North Hill	1	1		1	-	-	-	-	1	-	-	-	-
115 North Hill	6	5		6	-	-	-	-	5	-	-	-	-
113 North Hill	5	5		5	-	-	-	-	5	-	-	-	-
111 North Hill	10	6		10	-	-	-	-	6	-	-	-	-
109 North Hill	3	3		3	-	-	-	-	3	-	-	-	-
30 Highcroft	74	59		74	-	-	-	-	59	-	-	-	-
1-3 Wetherley Court	21	14		21	-	-	-	-	14	-	-	-	-
1A View Road	11	6		11	-	-	-	-	5	1	-	-	1
99 View Hill	14	8		14	-	-	-	-	8	-	-	-	-
2 View Road	7	4		7	-	-	-	-	4	-	-	-	-
4 View Road	8	4		8	-	-	-	-	4	-	-	-	-
6 View Road	15	5		15	-	-	-	-	5	-	-	-	-
3 View Road	7	3		7	-	-	-	-	3	-	-	-	-
1-3 Grange Road	21	13		21	-	-	-	-	13	-	-	-	-
32 Yeatman Rd	3	2		3	-	-	-	-	2	-	-	-	-
34 Yeatman Rd	3	2		2	1	-	-	1	2	-	-	-	-
36 Yeatman Rd	3	2		3	-	-	-	-	2	-	-	-	-
38 Yeatman Rd	3	2		3	-	-	-	-	2	-	-	-	-
40 Yeatman Rd	5	2		5	-	-	-	-	2	-	-	-	-
42 Yeatman Rd	4	2		4	-	-	-	-	2	-	-	-	-
44 Yeatman Rd	3	2		3	-	-	-	-	2	-	-	-	-
46 Yeatman Rd	6	3		2	2	2	-	4	2	-	-	1	1
48 Yeatman Rd	4	2		4	-	-	-	-	2	-	-	-	-
Totals:	237	155		232	3	2	0	5	153	1	0	1	2
				98%	1%	1%	0%	2%	99%	1%	0%	1%	1%

10.3. Of the 237 habitable windows assessed in the 23 neighbouring properties, 232 (98%) would satisfy the VSC guidelines, and of the 155 habitable rooms assessed 153 (99%) would satisfy with the NSL guidelines.

10.4. The impacts on VSC and NSL would fully satisfy the BRE guidelines for 20 of the 23 properties assessed.

10.5. The impacts on VSC and NSL would not fully satisfy the BRE guidelines for the following properties, and are examined in further detail:

- 1A View Road
- 34 Yeatman Road
- 46 Yeatman Road

10.6. All five VSC infringements occur to windows which have a canopy or overhang directly above them. An additional alternative baseline assessment has been undertaken removing the effects of these overhangs from the assessment in both the existing and proposed conditions. This alternative assessment demonstrate that all 5 windows will comfortably comply with the assessment criteria illustrating that the effects illustrated in the primary assessment are more as a result of the presence of the canopies themselves rather than as a result of the over development of the proposed building itself.

10.7. The NSL infringement to 1A View Road occurs to a space where the window will comply with the VSC assessment criteria, the retained VSC will be 22.5% and the retained NSL figure will be 70%.

This illustrates, despite the reduction, that the retained light levels will remain very good for this urban location.

Sunlight to neighbouring properties

10.8. The results of the annual and winter sunlight analyses are tabulated in Appendix 3 and summarised in Table 4 below.

Table 4 – Summary of rooms experiencing APSH effects as a result of the proposed development

Property address	No. of rooms tested	No. inside APSH annual & winter guidelines	APSH - annual (rooms)				APSH - winter (rooms)			
			No. outside annual guidelines				No. outside winter guidelines			
			Low reduction	Medium reduction	High reduction	Sub-total	Low reduction	Medium reduction	High reduction	Sub-total
113-115 North Hill	1	1	-	-	-	-	-	-	-	-
115 North Hill	5	5	-	-	-	-	-	-	-	-
113 North Hill	5	5	-	-	-	-	-	-	-	-
111 North Hill	6	6	-	-	-	-	-	-	-	-
109 North Hill	3	2	-	-	-	-	-	-	1	1
30 Highcroft	59	59	-	-	-	-	-	-	-	-
1-3 Wetherley Court	10	10	-	-	-	-	-	-	-	-
1A View Road	2	2	-	-	-	-	-	-	-	-
99 View Hill	4	4	-	-	-	-	-	-	-	-
2 View Road	-	-	-	-	-	-	-	-	-	-
4 View Road	-	-	-	-	-	-	-	-	-	-
6 View Road	-	-	-	-	-	-	-	-	-	-
3 View Road	-	-	-	-	-	-	-	-	-	-
1-3 Grange Road	3	3	-	-	-	-	-	-	-	-
32 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
34 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
36 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
38 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
40 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
42 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
44 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
46 Yeatman Rd	3	3	-	-	-	-	-	-	-	-
48 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
Totals:	117	116	0	0	0	0	0	0	1	1
		99%	0%	0%	0%	0%	0%	0%	1%	1%

10.9. Table 4 shows that of the 117 windows assessed in 19 neighbouring properties, all 117 (100%) would satisfy the BRE guidelines for APSH and 116 (99%) would comply with winter APSH.

10.10. The single winter infringement occurs within 109 North Hill where the retained annual figure is 34% which is well in excess of the 25% requirement and the winter result is reduced to 4% which is only just below the 5% requirement.

Daylight to Neighbouring Properties including trees
Table 5 – Summary of VSC and NSL effects as a result of the proposed development - Summer

Property address	No. of windows tested	No. of rooms tested	VSC (windows)					NSL (rooms)				
			No. windows inside guidelines	No. windows outside guidelines				No. rooms inside guidelines	No. rooms outside guidelines			
				Low reduction	Medium reduction	High reduction	Sub-total		Low reduction	Medium reduction	High reduction	Sub-total
113-115 North Hill	1	1	1	-	-	-	-	1	-	-	-	-
115 North Hill	6	5	6	-	-	-	-	5	-	-	-	-
113 North Hill	5	5	5	-	-	-	-	5	-	-	-	-
111 North Hill	10	6	10	-	-	-	-	6	-	-	-	-
109 North Hill	3	3	3	-	-	-	-	3	-	-	-	-
30 Highcroft	74	59	74	-	-	-	-	59	-	-	-	-
1-3 Wetherley Court	21	14	21	-	-	-	-	14	-	-	-	-
1A View Road	11	6	11	-	-	-	-	5	1	-	-	1
99 View Hill	14	8	14	-	-	-	-	8	-	-	-	-
2 View Road	7	4	7	-	-	-	-	4	-	-	-	-
4 View Road	8	4	8	-	-	-	-	4	-	-	-	-
6 View Road	15	5	15	-	-	-	-	5	-	-	-	-
3 View Road	7	3	7	-	-	-	-	3	-	-	-	-
1-3 Grange Road	21	13	21	-	-	-	-	13	-	-	-	-
32 Yeatman Rd	3	2	3	-	-	-	-	2	-	-	-	-
34 Yeatman Rd	3	2	1	1	1	-	2	2	-	-	-	-
36 Yeatman Rd	3	2	3	-	-	-	-	2	-	-	-	-
38 Yeatman Rd	3	2	3	-	-	-	-	2	-	-	-	-
40 Yeatman Rd	5	2	5	-	-	-	-	2	-	-	-	-
42 Yeatman Rd	4	2	4	-	-	-	-	2	-	-	-	-
44 Yeatman Rd	3	2	3	-	-	-	-	2	-	-	-	-
46 Yeatman Rd	6	3	2	2	2	-	4	2	-	-	1	1
48 Yeatman Rd	4	2	4	-	-	-	-	2	-	-	-	-
Totals:	237	155	231	3	3	0	6	153	1	0	1	2
			97%	1%	1%	0%	3%	99%	1%	0%	1%	1%

10.11. Of the 237 habitable windows assessed in the 23 neighbouring properties, 231 (97%) would satisfy the VSC guidelines, and of the 155 habitable rooms assessed 153 (99%) would satisfy with the NSL guidelines.

10.12. The impacts on VSC and NSL would fully satisfy the BRE guidelines for 20 of the 23 properties assessed.

10.13. There would only be a single additional medium reduction to 34 Yeatman Road overall as a result of the proposed development when taking the tree coverage into account in summer conditions.

Table 6 – Summary of VSC and NSL effects as a result of the proposed development - Winter

Property address	No. of windows tested	No. of rooms tested	VSC (windows)					NSL (rooms)				
			No. windows inside guidelines	No. windows outside guidelines				No. rooms inside guidelines	No. rooms outside guidelines			
				Low reduction	Medium reduction	High reduction	Sub-total		Low reduction	Medium reduction	High reduction	Sub-total
113-115 North Hill	1	1	1	-	-	-	-	1	-	-	-	-
115 North Hill	6	5	6	-	-	-	-	5	-	-	-	-
113 North Hill	5	5	5	-	-	-	-	5	-	-	-	-
111 North Hill	10	6	10	-	-	-	-	6	-	-	-	-
109 North Hill	3	3	3	-	-	-	-	3	-	-	-	-
30 Highcroft	74	59	74	-	-	-	-	59	-	-	-	-
1-3 Wetherley Court	21	14	21	-	-	-	-	14	-	-	-	-
1A View Road	11	6	11	-	-	-	-	5	1	-	-	1
99 View Hill	14	8	14	-	-	-	-	8	-	-	-	-
2 View Road	7	4	7	-	-	-	-	4	-	-	-	-
4 View Road	8	4	8	-	-	-	-	4	-	-	-	-
6 View Road	15	5	15	-	-	-	-	5	-	-	-	-
3 View Road	7	3	7	-	-	-	-	3	-	-	-	-
1-3 Grange Road	21	13	21	-	-	-	-	13	-	-	-	-
32 Yeatman Rd	3	2	3	-	-	-	-	2	-	-	-	-
34 Yeatman Rd	3	2	2	1	-	-	1	2	-	-	-	-
36 Yeatman Rd	3	2	3	-	-	-	-	2	-	-	-	-
38 Yeatman Rd	3	2	3	-	-	-	-	2	-	-	-	-
40 Yeatman Rd	5	2	5	-	-	-	-	2	-	-	-	-
42 Yeatman Rd	4	2	4	-	-	-	-	2	-	-	-	-
44 Yeatman Rd	3	2	3	-	-	-	-	2	-	-	-	-
46 Yeatman Rd	6	3	2	2	2	-	4	2	-	-	1	1
48 Yeatman Rd	4	2	4	-	-	-	-	2	-	-	-	-
Totals:	237	155	232	3	2	0	5	153	1	0	1	2
			98%	1%	1%	0%	2%	99%	1%	0%	1%	1%

10.14. Of the 237 habitable windows assessed in the 23 neighbouring properties, 232 (98%) would satisfy the VSC guidelines, and of the 155 habitable rooms assessed 153 (99%) would satisfy with the NSL guidelines.

10.15. The impacts on VSC and NSL would fully satisfy the BRE guidelines for 20 of the 23 properties assessed.

10.16. These winter findings illustrate the same level of overall impact were the trees to be discounted completely from the assessments.

Sunlight to Neighbouring Properties including trees
Table 7 – Summary of rooms experiencing APSH effects as a result of the proposed development - Summer

Property address	No. of rooms tested	No. inside APSH annual & winter guidelines	APSH - annual (rooms)				APSH - winter (rooms)			
			No. outside annual guidelines				No. outside winter guidelines			
			Low reduction	Medium reduction	High reduction	Sub-total	Low reduction	Medium reduction	High reduction	Sub-total
113-115 North Hill	1	1	-	-	-	-	-	-	-	-
115 North Hill	5	5	-	-	-	-	-	-	-	-
113 North Hill	5	5	-	-	-	-	-	-	-	-
111 North Hill	6	6	-	-	-	-	-	-	-	-
109 North Hill	3	2	-	1	-	1	-	-	1	1
30 Highcroft	59	59	-	-	-	-	-	-	-	-
1-3 Wetherley Court	10	10	-	-	-	-	-	-	-	-
1A View Road	2	2	-	-	-	-	-	-	-	-
99 View Hill	4	4	-	-	-	-	-	-	-	-
2 View Road	-	-	-	-	-	-	-	-	-	-
4 View Road	-	-	-	-	-	-	-	-	-	-
6 View Road	-	-	-	-	-	-	-	-	-	-
3 View Road	-	-	-	-	-	-	-	-	-	-
1-3 Grange Road	3	3	-	-	-	-	-	-	-	-
32 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
34 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
36 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
38 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
40 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
42 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
44 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
46 Yeatman Rd	3	3	-	-	-	-	-	-	-	-
48 Yeatman Rd	2	1	-	-	-	-	1	-	-	1
Totals:	117	115	0	1	0	1	1	0	1	2
		98%	0%	1%	0%	1%	1%	0%	1%	2%

10.17. Table 7 shows that of the 117 windows assessed in 19 neighbouring properties, 116 (99%) would satisfy the BRE guidelines for APSH and 115 (98%) would comply with winter APSH.

10.18. This represents only a single additional medium reduction to the APSH and a single additional low reduction to the Winter APSH.

Table 8 – Summary of rooms experiencing APSH effects as a result of the proposed development - Winter

Property address	No. of rooms tested	No. inside APSH annual & winter guidelines	APSH - annual (rooms)				APSH - winter (rooms)			
			No. outside annual guidelines				No. outside winter guidelines			
			Low reduction	Medium reduction	High reduction	Sub-total	Low reduction	Medium reduction	High reduction	Sub-total
113-115 North Hill	1	1	-	-	-	-	-	-	-	-
115 North Hill	5	5	-	-	-	-	-	-	-	-
113 North Hill	5	5	-	-	-	-	-	-	-	-
111 North Hill	6	6	-	-	-	-	-	-	-	-
109 North Hill	3	2	-	1	-	1	-	-	1	1
30 Highcroft	59	59	-	-	-	-	-	-	-	-
1-3 Wetherley Court	10	10	-	-	-	-	-	-	-	-
1A View Road	2	2	-	-	-	-	-	-	-	-
99 View Hill	4	4	-	-	-	-	-	-	-	-
2 View Road	-	-	-	-	-	-	-	-	-	-
4 View Road	-	-	-	-	-	-	-	-	-	-
6 View Road	-	-	-	-	-	-	-	-	-	-
3 View Road	-	-	-	-	-	-	-	-	-	-
1-3 Grange Road	3	3	-	-	-	-	-	-	-	-
32 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
34 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
36 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
38 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
40 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
42 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
44 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
46 Yeatman Rd	3	3	-	-	-	-	-	-	-	-
48 Yeatman Rd	2	2	-	-	-	-	-	-	-	-
Totals:	117	116	0	1	0	1	0	0	1	1
		99%	0%	1%	0%	1%	0%	0%	1%	1%

10.19. Table 8 shows that of the 117 windows assessed in 19 neighbouring properties, 116 (99%) would satisfy the BRE guidelines for APSH and 116 (99%) would comply with winter APSH.

10.20. These winter findings represent only a single additional medium reduction to the APSH and a single additional low reduction to the Winter APSH.

Sunlight to gardens and amenity spaces

10.21. The results of the two-hour sun-on-ground analyses are shown on the relevant drawing in Appendix 4. In summary, a total of 12 neighbouring gardens and amenity spaces have been considered of which 9 gardens/amenity spaces would satisfy the BRE guidelines for sun on ground.

10.22. Two of the infringements are to rear gardens of Yeatman Road gardens where the reductions are each 0.74 times their former value and so only minor infringements beyond the 0.80 times target criteria. As such these infringements are considered to be minor adverse only.

10.23. The remaining infringement is to 109 North Hill which is in closest proximity to the development site where any small addition to the massing could potentially cause an adverse reduction due to proximity.

11. Conclusion

- 11.1. The Site is in an urban location in Highgate, fronting North Hill.
- 11.2. We assessed the potential effects of the proposed development on daylight and sunlight to surrounding residential properties and amenity spaces.
- 11.3. We ran our assessments using methodologies recommended in the BRE guide.
- 11.4. The advice contained in the BRE guide is not mandatory and its numerical guidelines should be interpreted flexibly.
- 11.5. The daylight analysis demonstrates 98% compliance of the primary CSV assessment and 99% compliance of the supporting NSL assessment criteria. Furthermore, an alternative baseline assessment discounting the effect of canopies over ground floor windows to 34 and 46 Yeatman Road demonstrates that the VSC infringements are more as a result of the presence of these canopies rather than as a result of the over development of the proposed massing itself.
- 11.6. The sunlight analysis demonstrates 100% compliance with the APSH and 99% of the winter APSH assessments.
- 11.7. The alternative daylight and sunlight assessments taking into account for the tree line along the boundary with the Yeatman Road properties illustrates only a very minor change to the findings of the analyses with only single isolated additional infringements depending on whether one considered the Summer or winter trees condition.
- 11.8. The shadow assessments of the neighbour gardens and amenity spaces illustrates three gardens which will fall short of the criteria. Two will be minor infringements only with the third impact more noticeable where this garden is in such close proximity to the development boundary.
- 11.9. In conclusion, it is submitted that the layout of the proposed development is generally consistent with the Council's local planning policy on daylight, sunlight and shadowing.

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Appendix 1

Assessment methodology and glossary

1. This appendix explains the daylight and sunlight assessment methodology recommended in BRE Report 209, 'Site Layout Planning for Daylight and Sunlight: A guide to good practice' (2011) and provides a glossary of the terminology used.

Assessment methodology**Daylight and sunlight to neighbouring buildings and amenity spaces**Daylight to neighbouring buildings

2. The BRE guide states:

In designing a new development or extension to a building, it is important to safeguard the daylight to nearby buildings.

The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. The guidelines may also be applied to any existing non-domestic building where the occupants have a reasonable expectation of daylight; this would normally include schools, hospitals, hotels and hostels, small workshops and some offices.

3. To quantify the impact of development on daylight to a building, the BRE guide recommends two tests:
 - a) calculating the vertical sky component (**VSC**) at the centre of each main window on the outside plane of the window wall, to measure the total amount of skylight available to the window; and
 - b) plotting the no-sky line (**NSL**) on the working plane inside a room, where layouts are known, and measuring the area that can receive direct skylight, to assess the distribution of daylight around the room.
4. The VSC measures the skylight available at the window. The guide states:

Any reduction in the total amount of skylight can be calculated by finding the VSC at the centre of each main window ... For a bay window, the centre window facing directly outwards can be taken as the main window. If a room has two or more windows of equal size, the mean of their VSCs may be taken. The reference point is in the external plane of the window wall. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed.

5. The NSL test is described thus:

Where room layouts are known, the impact on the daylighting distribution in the existing building can be found by plotting the 'no sky line' in each of the main rooms. For houses this would include living rooms, dining rooms and kitchens; bedrooms should also be analysed although they are less important. In non-domestic buildings each main room where daylight is expected should be investigated. The no sky line divides points on the working plane which can and cannot see the sky.

6. If, following development, the VSC to a neighbouring window will be greater than 27% then enough skylight should still be reaching the window. Any reduction below this level should be kept to a minimum. If the VSC will be both less than 27% and less than 0.8 times its former value, occupants of the existing building will notice the reduction in the amount of skylight. The area lit by the window is likely to appear more gloomy and electric lighting will be needed more of the time.
7. If, following development, the no-sky line moves so that the area of the existing room that can receive direct skylight will be reduced to less than 0.8 times its former value, this will be noticeable to the

occupants and more of the room will appear poorly lit. This is also true if the no-sky line encroaches on key areas like kitchen sinks and worktops.

Sunlight to neighbouring buildings

8. The BRE guide states:

To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun.

A point at the centre of the window on the outside face of the window wall may be taken [as the calculation point].

9. To quantify the available sunlight, the BRE guide advises measuring the percentage of annual probable sunlight hours (**APSH**), which is defined as follows:

'probable sunlight hours' means the total number of hours in the year that the sun is expected to shine on unobstructed ground, allowing for average levels of cloudiness for the location in question.

10. The assessment calculates the percentage of APSH over the whole year (annual sunlight) and between 21 September and 21 March (winter sunlight).
11. If, following development, the APSH to a neighbouring window will be greater than 25%, including at least 5% of APSH in the winter months between 21 September and 21 March, then the room should still receive enough sunlight. Any reduction in sunlight access below this level should be kept to a minimum.
12. If the available sunlight hours will be both less than the above amounts and less than 0.8 times their former value, either over the whole year or just in the winter months, then the occupants of the building will notice the loss of sunlight; if the overall annual loss is greater than 4% of APSH, the room may appear colder and less cheerful and pleasant.

Sunlight to neighbouring gardens and amenity spaces

13. Sunlight should be assessed on the equinox (21 March) to main back gardens of houses, allotments, parks and playing fields, children's playgrounds, outdoor swimming pools, sitting-out areas, such as in public squares and focal points for views, such as a group of monuments or fountains.
14. The assessment measures the percentage of each area that can receive at least two hours of sunlight on 21 March - the 'two-hours sun-on-ground' (**SOG**) test.
15. It is recommended that at least half of the area of a garden or amenity space should be able to receive at least two hours of sunlight on 21 March. If such a space is already heavily obstructed, then any further loss of sunlight should be kept to a minimum. In this poorly sunlit case, if, following development, the area which can receive two hours of direct sunlight on 21 March is reduced to less than 0.8 times its former size, this loss of sunlight is likely to be noticeable. In such cases the garden or amenity area will tend to look more heavily overshadowed.
16. Sunlight at an altitude of 10° or less is ignored, because it is likely to be blocked by planting, and fences or walls less than 1.5 metres high can also be ignored. Front gardens, driveways and hard standing for cars are usually omitted. Normally, trees and shrubs need not be included, partly because their shapes are almost impossible to predict, and partly because the dappled shade of a tree is more pleasant than a deep shadow of a building.
17. Where a large building is proposed which may affect a number of gardens or open spaces, the guide advises it can be illustrative to plot shadow plans showing the location of shadows at different times of day and year. The equinox (21 March) is the best assessment date as it shows the average level of shadowing. Mid-summer (21 June) is an optional addition date when there would be greater sunlight availability and reduced overshadowing.

Glossary of terms

18. The daylight and sunlight terminology used in our report is explained below.

Term	Meaning
Annual probable sunlight hours (APSH)	The long-term average of the total number of hours during a year in which direct sunlight is expected to shine on the unobstructed ground, allowing for average levels of cloudiness for the location in question.
Daylight	Combined skylight and sunlight.
No-sky line (NSL)	The outline on the working plane of the area from which no sky can be seen. It divides points on the working plane which can and cannot see the sky.
Obstruction angle	The angular altitude of the top of an obstruction above the horizontal, measured from a reference point in a vertical plane in a section perpendicular to the vertical plane.
Sky factor	Ratio of the parts of illuminance at a point on a given plane that would be received directly through unglazed openings from a sky of uniform luminance, to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. The sky factor does not include reflected light, either from outdoor or indoor surfaces.
Sun on ground (SOG)	The measure of sunlight potential to gardens and amenity spaces. It is measured in hours on the spring equinox (21 March) at a point on the ground accounting for the latitude of the site location. Sunlight below an altitude of 10° is usually discounted as it is likely to be prevented from reaching the ground by fences, plants or other low-level obstructions.
Vertical sky component (VSC)	The amount of daylight falling on a vertical wall or window. It is the ratio of that part of illuminance, at a point on a given vertical plane (e.g. window), that is received directly from a CIE standard overcast sky, to simultaneous illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. The VSC does not include reflected light, either from the ground or from other buildings. The ratio is usually expressed as a percentage. The maximum value is almost 40% for a completely unobstructed vertical wall.
Working plane	Horizontal, vertical or inclined plane in which a visual task lies. Normally the working plane may be taken to be horizontal, 0.85 m above the floor in housing.

Appendix 2

Location drawings

Site location plan
Spot-height drawings
Window maps



NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING

KEY:

Existing

Proposed

Neighboring
Property

Consented

Cumulative

Cutback
Envelope

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 21.04.2021
M02-2021-04-20 For Issue_with proposal.dwg

NOTES:

All heights given in m AOD

REV	Description	Drawn	Date

DELVA PATMAN REDLER

Chartered Surveyors

London 020 7936 3668

Liverpool 0151 242 0980

Bristol 0117 450 9703

www.delvapatmanredler.co.uk

info@delvapatmanredler.co.uk

TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL, LONDON,N6 4DP

DRAWING:

EXISTING SCENARIO
Plan View

DRAWN: RP

SCALE: 1:500@A3

DATE: 22.04.2021

JOB NBR:

21047

DWG NO:

EX-001

REV:

-



NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING

KEY:

Existing

Proposed

Neighboring
Property

Consented

Cumulative

Cutback
Envelope

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 21.04.2021
M02-2021-04-20 For Issue_with proposal.dwg

NOTES:

All heights given in m AOD

REV	Description	Drawn	Date

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TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL, LONDON,N6 4DP

DRAWING:

EXISTING SCENARIO
3D View

DRAWN: RP	JOB NBR:
SCALE: NTS	21047
DATE: 22.04.2021	
DWG NO:	REV:
EX-002	-



3D View

NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING

KEY:	
	Existing
	Consented
	Proposed
	Cumulative
	Neighboring Property
	Cutback Envelope

SOURCE DATA:
Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 21.04.2021
M02-2021-04-20 For Issue_with proposal.dwg

NOTES:
All heights given in m AOD

REV	Description	Drawn	Date

DELVA PATMAN REDLER
Chartered Surveyors

London 020 7936 3668
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TITLE:
MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL, LONDON,N6 4DP

DRAWING:
EXISTING SCENARIO
3D View

DRAWN: RP	JOB NBR: 21047	REV: -
SCALE: NTS		
DATE: 22.04.2021		
DWG NO: EX-003		



Plan View

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

	Existing		Consented
	Proposed		Cumulative
	Neighboring Property		Cutback Envelope

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 16.09.2021
Site Model - 2021 - CURRENT 2.rvt

NOTES:

All heights given in mm AOD



REV	Description	Drawn	Date

DELVA PATMAN REDLER
Chartered Surveyors

London 020 7936 3668
Liverpool 0151 242 0980
Bristol 0117 450 9703

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info@delvapatmanredler.co.uk

TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL, LONDON,N6 4DP

DRAWING:

PROPOSED SCENARIO
Plan View

DRAWN: RP	JOB NBR:
SCALE: 1:500@A3	21047
DATE: 20.09.2021	

DWG NO:	REV:
PR-001	-



NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING

KEY:

Existing

Proposed

Neighboring
Property

Consented

Cumulative

Cutback
Envelope

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 16.09.2021
Site Model - 2021 - CURRENT 2.rvt

NOTES:

All heights given in mm AOD

REV	Description	Drawn	Date

DELVA PATMAN REDLER

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Bristol 0117 450 9703

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TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL, LONDON,N6 4DP

DRAWING:

PROPOSED SCENARIO
3D View

DRAWN: RP	JOB NBR:
SCALE: NTS	21047
DATE: 20.09.2021	
DWG NO:	REV:
PR-002	-

3D View



NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

	Existing		Consented
	Proposed		Cumulative
	Neighboring Property		Cutback Envelope

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 16.09.2021
Site Model - 2021 - CURRENT 2.rvt

NOTES:

All heights given in mm AOD

REV	Description	Drawn	Date

DELVA PATMAN REDLER
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TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL, LONDON,N6 4DP

DRAWING:

PROPOSED SCENARIO
3D View

DRAWN: RP		JOB NBR: 21047
SCALE: NTS		
DATE: 22.04.2021		
DWG NO: PR-003		REV: -

Appendix 3

Daylight and sunlight results for neighbouring buildings dwellings

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientatio n	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex . ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./E x. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex	Exis.	Prop.	Pro./E
113-115 North Hill																		
F00	R2	Unknown	W2 ↙	32.6	31.8	N/A	N/A	100%	100%	0.00	1.00	51	50	N/A	N/A	9	8	N/A
115 North Hill																		
F00	R2	Unknown	W2 ↙	30.7	29.3	N/A	N/A											
		Unknown	W3 Hz	51.7	51.5	N/A	N/A	99%	99%	0.00	1.00	66	61	N/A	N/A	21	16	N/A
F01	R1	Unknown	W1 ↙	36.1	34.7	N/A	N/A	96%	96%	0.00	1.00	63	60	N/A	N/A	22	19	N/A
	R2	Unknown	W2 ↙	31.2	29.9	N/A	N/A	98%	98%	0.00	1.00	56	54	N/A	N/A	21	19	N/A
F02	R1	Unknown	W1 ↙	36.1	35.2	N/A	N/A	99%	99%	0.00	1.00	62	60	N/A	N/A	23	21	N/A
	R2	Unknown	W2 ↙	36.5	35.4	N/A	N/A	96%	96%	0.00	1.00	59	58	N/A	N/A	22	21	N/A
113 North Hill																		
F00	R1	Unknown	W1 ↙	34.4	32.6	N/A	N/A	100%	100%	0.02	1.00	59	52	N/A	N/A	17	10	N/A
F01	R1	Unknown	W1 ↙	29.0	28.3	N/A	N/A	97%	97%	0.00	1.00	44	43	N/A	N/A	10	9	N/A
	R2	Unknown	W2 ↙	36.4	35.1	N/A	N/A	95%	95%	0.00	1.00	60	60	N/A	N/A	18	18	N/A
F02	R1	Unknown	W1 ↙	36.0	34.4	N/A	N/A	97%	97%	0.00	1.00	56	55	N/A	N/A	20	19	N/A
	R2	Unknown	W2 ↙	36.4	35.1	N/A	N/A	95%	95%	0.00	1.00	57	57	N/A	N/A	20	20	N/A
111 North Hill																		
F00	R1	Unknown	W1 ↙	25.4	25.0	0.4	0.99											
		Unknown	W2 Inc	30.0	29.9	N/A	N/A											
		Unknown	W3 Inc	56.4	56.3	N/A	N/A	99%	99%	0.00	1.00	46	46	N/A	N/A	11	11	N/A
F01	R1	Unknown	W1 ↙	25.6	25.5	0.2	0.99	97%	97%	0.00	1.00	30	30	N/A	N/A	5	5	N/A
	R2	Unknown	W2 ↙	31.3	27.6	N/A	N/A											
		Unknown	W3 ↙	32.2	29.0	N/A	N/A	99%	99%	0.03	1.00	54	45	N/A	N/A	18	10	N/A
F02	R1	Unknown	W1 ↙	35.0	34.5	N/A	N/A	98%	98%	0.00	1.00	55	56	N/A	1.02	14	15	1.07
	R2	Unknown	W2 ↙	37.6	34.5	N/A	N/A											

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
		Unknown	W3 Hz	86.2	87.0	N/A	1.01	100%	100%	0.00	1.00	75	76	N/A	1.01	19	16	N/A
F03	R1	Unknown	W1 ↙	36.1	34.5	N/A	N/A	86%	80%	0.42	0.94	57	57	N/A	N/A	18	17	N/A
109 North Hill																		
F00	R1	Unknown	W1 ↙	28.0	24.4	3.6	0.87	99%	98%	0.15	0.99	47	34	N/A	N/A	8	4	0.50
	R3	Kitchen	W5 Hz	26.3	27.0	-0.6	1.02	82%	82%	0.00	1.00	14	14	0	1.00	0	0	N/A
F02	R2	Bedroom	W2 ↙	32.6	30.1	N/A	N/A	96%	96%	0.00	1.00	48	45	N/A	N/A	11	7	N/A
30 Highcroft																		
F00	R1	Living Room	W1 ↙	25.2	25.2	-0.1	1.00	99%	99%	0.00	1.00	45	45	N/A	N/A	17	17	N/A
	R2	Bedroom	W2 ↙	25.1	25.2	-0.1	1.00	100%	100%	0.00	1.00	47	47	N/A	N/A	18	18	N/A
	R3	Living Room	W3 ↙	28.2	28.2	N/A	N/A	98%	98%	0.00	1.00	51	50	N/A	N/A	19	18	N/A
	R5	Bedroom	W14 ↙	27.1	27.1	N/A	N/A	99%	99%	0.00	1.00	50	49	N/A	N/A	18	17	N/A
	R6	Unknown	W15 ↙	27.2	27.1	N/A	N/A	99%	99%	0.00	1.00	51	50	N/A	N/A	19	18	N/A
	R7	Unknown	W16 ↙	27.3	27.1	N/A	N/A	92%	92%	0.00	1.00	52	51	N/A	N/A	20	19	N/A
	R8	Unknown	W17 ↙	28.3	28.2	N/A	N/A	100%	100%	0.00	1.00	50	49	N/A	N/A	19	18	N/A
	R9	Living Room	W18 ↙	26.9	26.8	0.1	1.00	98%	98%	0.00	1.00	49	49	N/A	N/A	19	18	N/A
	R10	Living Room	W19 ↙	26.9	26.8	0.1	1.00	98%	98%	0.00	1.00	51	50	N/A	N/A	20	19	N/A
	R11	Bedroom	W20 ↙	27.0	26.9	0.1	1.00	98%	98%	0.00	1.00	51	51	N/A	N/A	20	20	N/A
	R12	Unknown	W21 ↙	29.2	29.1	N/A	N/A	100%	100%	0.00	1.00	53	53	N/A	N/A	21	21	N/A
	R14	Kitchen	W23 ↓	28.0	28.0	N/A	N/A	95%	95%	0.00	1.00	57	56	N/A	N/A	25	25	N/A
	R16	Kitchen	W35 ↓	27.5	27.5	N/A	N/A	94%	94%	0.00	1.00	62	62	N/A	N/A	24	24	N/A
F01	R1	Living Room	W1 ↙	27.3	27.3	N/A	N/A											
		Living Room	W2 ↙	29.9	29.9	N/A	N/A	100%	100%	0.00	1.00	52	53	N/A	1.02	20	21	1.05
	R2	Bedroom	W3 ↙	26.2	26.2	0.0	1.00	100%	100%	0.00	1.00	48	48	N/A	N/A	18	18	N/A
	R3	Living Room	W4 ↙	36.2	36.1	N/A	N/A	95%	95%	0.00	1.00	65	65	N/A	N/A	23	23	N/A
	R4	Living Room	W5 ↙	26.4	26.3	0.1	1.00											
		Living Room	W6 ↙	29.7	29.6	N/A	N/A	98%	98%	0.00	1.00	52	52	N/A	N/A	20	20	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
	R5	Bedroom	W7 ↙	26.1	25.9	0.2	0.99	99%	99%	0.00	1.00	48	48	N/A	N/A	19	19	N/A
	R6	Unknown	W8 ↙	26.2	26.0	0.2	0.99	99%	99%	0.00	1.00	48	48	N/A	N/A	19	19	N/A
	R7	Unknown	W9 ↙	26.8	26.6	0.2	0.99	90%	90%	0.00	1.00	51	51	N/A	N/A	19	19	N/A
	R8	Bedroom	W10 ↙	36.3	36.1	N/A	N/A	100%	100%	0.00	1.00	64	65	N/A	1.02	23	23	N/A
	R9	Living Room	W11 ↙	26.8	26.6	0.2	0.99											
		Living Room	W12 ↙	30.0	29.9	N/A	N/A	98%	98%	0.00	1.00	52	53	N/A	1.02	21	21	N/A
	R10	Living Room	W13 ↙	26.5	26.3	0.1	0.99											
		Living Room	W14 ↙	30.0	29.8	N/A	N/A	98%	98%	0.00	1.00	53	52	N/A	N/A	21	21	N/A
	R11	Bedroom	W15 ↙	26.7	26.6	0.1	1.00	98%	98%	0.00	1.00	48	47	N/A	N/A	19	19	N/A
	R12	Bedroom	W16 ↙	36.4	36.3	N/A	N/A	100%	100%	0.00	1.00	64	64	N/A	N/A	22	22	N/A
	R14	Kitchen	W18 ↓	33.9	33.9	N/A	N/A	95%	95%	0.00	1.00	69	69	N/A	N/A	27	27	N/A
	R15	Living Room	W19 ↓	26.9	26.9	0.0	1.00	100%	100%	0.00	1.00	64	64	N/A	N/A	27	27	N/A
	R16	Kitchen	W20 ↓	33.7	33.7	N/A	N/A	94%	94%	0.00	1.00	76	76	N/A	N/A	27	27	N/A
F02	R1	Living Room	W1 ↙	28.7	28.7	N/A	N/A											
		Living Room	W2 ↙	31.7	31.6	N/A	N/A	100%	100%	0.00	1.00	54	53	N/A	N/A	22	21	N/A
	R2	Bedroom	W3 ↙	27.5	27.5	N/A	N/A	100%	100%	0.00	1.00	48	47	N/A	N/A	19	18	N/A
	R3	Living Room	W4 ↙	37.8	37.7	N/A	N/A	95%	95%	0.00	1.00	65	65	N/A	N/A	23	23	N/A
	R4	Living Room	W5 ↙	27.7	27.6	N/A	N/A											
		Living Room	W6 ↙	31.4	31.2	N/A	N/A	98%	98%	0.00	1.00	54	53	N/A	N/A	22	21	N/A
	R5	Bedroom	W7 ↙	27.4	27.2	N/A	N/A	99%	99%	0.00	1.00	49	48	N/A	N/A	20	19	N/A
	R6	Unknown	W8 ↙	27.5	27.3	N/A	N/A	99%	99%	0.00	1.00	49	49	N/A	N/A	20	20	N/A
	R7	Unknown	W9 ↙	28.1	27.9	N/A	N/A	90%	90%	0.00	1.00	52	52	N/A	N/A	20	20	N/A
	R8	Bedroom	W10 ↙	37.9	37.7	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R9	Living Room	W11 ↙	28.1	27.9	N/A	N/A											
		Living Room	W12 ↙	31.6	31.5	N/A	N/A	98%	98%	0.00	1.00	54	54	N/A	N/A	22	22	N/A
	R10	Living Room	W13 ↙	27.8	27.6	N/A	N/A											
		Living Room	W14 ↙	31.6	31.4	N/A	N/A	98%	98%	0.00	1.00	54	54	N/A	N/A	22	22	N/A
	R11	Bedroom	W15 ↙	27.9	27.8	N/A	N/A	98%	98%	0.00	1.00	50	50	N/A	N/A	21	21	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex	Exis.	Prop.	Pro./Ex
	R12	Bedroom	W16 ↙	37.9	37.8	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R14	Kitchen	W18 ↓	35.6	35.6	N/A	N/A	95%	95%	0.00	1.00	71	71	N/A	N/A	29	29	N/A
	R15	Living Room	W19 ↓	29.2	29.1	N/A	N/A											
		Living Room	W20 ↓	32.8	32.7	N/A	N/A	100%	100%	0.00	1.00	84	84	N/A	N/A	29	29	N/A
	R16	Kitchen	W21 ↓	35.5	35.4	N/A	N/A	94%	94%	0.00	1.00	79	79	N/A	N/A	29	29	N/A
F03	R1	Living Room	W1 ↙	38.8	38.7	N/A	N/A											
		Living Room	W2 ↙	38.7	38.6	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R2	Bedroom	W3 ↙	37.9	37.8	N/A	N/A	100%	100%	0.00	1.00	57	58	N/A	1.02	19	20	1.05
	R3	Living Room	W4 ↙	38.8	38.8	N/A	N/A	95%	95%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R4	Living Room	W5 ↙	38.2	38.1	N/A	N/A											
		Living Room	W6 ↙	38.6	38.5	N/A	N/A	98%	98%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R5	Bedroom	W7 ↙	38.8	38.7	N/A	N/A	99%	99%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R6	Unknown	W8 ↙	38.6	38.4	N/A	N/A	99%	99%	0.00	1.00	62	62	N/A	N/A	21	21	N/A
	R7	Unknown	W9 ↙	37.9	37.8	N/A	N/A	90%	90%	0.00	1.00	58	58	N/A	N/A	20	20	N/A
	R8	Bedroom	W10 ↙	38.9	38.7	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R9	Living Room	W11 ↙	38.3	38.2	N/A	N/A											
		Living Room	W12 ↙	38.7	38.5	N/A	N/A	98%	98%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R10	Living Room	W13 ↙	38.9	38.8	N/A	N/A											
		Living Room	W14 ↙	38.9	38.7	N/A	N/A	98%	98%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R11	Bedroom	W15 ↙	38.5	38.4	N/A	N/A	99%	99%	0.00	1.00	61	61	N/A	N/A	21	21	N/A
	R12	Bedroom	W16 ↙	38.9	38.7	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R14	Kitchen	W18 ↓	38.7	38.6	N/A	N/A	96%	96%	0.00	1.00	85	85	N/A	N/A	30	30	N/A
	R15	Living Room	W19 ↓	38.7	38.7	N/A	N/A											
		Living Room	W20 ↓	38.6	38.6	N/A	N/A	100%	100%	0.00	1.00	86	86	N/A	N/A	30	30	N/A
	R16	Kitchen	W21 ↓	38.7	38.6	N/A	N/A	94%	94%	0.00	1.00	86	86	N/A	N/A	30	30	N/A
F04	R2	Unknown	W3 ↙	29.6	29.6	N/A	N/A											
		Unknown	W4 ↙	24.9	24.9	0.0	1.00	83%	83%	0.00	1.00	60	60	N/A	N/A	24	24	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
1-3 Wetherley Court																		
B00	R1	Kitchen	W1 ↙	4.2	4.2	0.0	1.00											
		Kitchen	W2 ↙	13.5	13.5	0.0	1.00	97%	97%	0.00	1.00	25	25	N/A	N/A	4	4	1.00
F00	R1	Reception Room	W1 ↗	32.1	32.1	N/A	N/A											
		Reception Room	W2 ↖	26.6	25.9	0.6	0.98	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Study	W7 ↖	27.4	25.5	1.9	0.93											
		Study	W8 ↙	32.5	32.1	N/A	N/A	98%	98%	0.01	1.00	60	59	N/A	N/A	21	21	N/A
	R4	Unknown	W9 ↙	23.1	23.0	0.0	1.00	83%	83%	0.00	1.00	50	50	N/A	N/A	18	18	N/A
	R5	Living Room	W10 ↙	29.8	29.6	N/A	N/A											
		Living Room	W11 ↙	30.3	30.1	N/A	N/A	98%	98%	0.00	1.00	57	56	N/A	N/A	18	18	N/A
	R7	Bedroom	W13 ↙	34.5	34.0	N/A	N/A	98%	98%	0.00	1.00	65	64	N/A	N/A	23	23	N/A
F01	R3	Bedroom	W3 ↖	30.0	28.0	N/A	N/A	89%	83%	0.84	0.93	North	North	N/A	N/A	North	North	N/A
	R5	Unknown	W5 ↙	31.4	30.9	N/A	N/A											
		Unknown	W6 ↙	31.5	31.0	N/A	N/A	99%	99%	0.00	1.00	57	57	N/A	N/A	19	19	N/A
	R7	Unknown	W8 ↙	34.4	33.8	N/A	N/A	98%	98%	0.00	1.00	59	58	N/A	N/A	23	22	N/A
F02	R1	Bedroom	W1 ↗	32.1	32.1	N/A	N/A											
		Bedroom	W2 ↖	33.0	31.8	N/A	N/A	76%	75%	0.26	0.99	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W4 Inc	76.9	75.6	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W5 ↙	33.4	32.7	N/A	N/A	94%	94%	0.00	1.00	59	59	N/A	N/A	24	24	N/A
	R5	Unknown	W6 ↙	35.1	34.2	N/A	N/A											
		Unknown	W7 ↙	35.2	34.3	N/A	N/A	98%	98%	0.00	1.00	60	60	N/A	N/A	24	24	N/A
	R6	Unknown	W8 ↙	34.0	33.1	N/A	N/A	94%	94%	0.00	1.00	56	56	N/A	N/A	19	19	N/A
1A View Road																		
F00	R3	Kitchen	W4 ↖	27.7	22.3	5.4	0.81											
		Kitchen	W5 ↙	15.3	12.2	3.1	0.80											
		Kitchen	W6 Inc	63.8	58.6	N/A	N/A											
		Kitchen	W7 ↖	28.8	23.9	4.9	0.83											

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex	Exis.	Prop.	Pro./Ex
		Kitchen	W12 ↗	22.8	22.8	0.0	1.00	98%	90%	3.61	0.92	40	37	N/A	N/A	4	4	1.00
	R4	Dining Room	W8 ↖	27.6	22.5	5.1	0.81	97%	70%	5.21	0.72	North	North	N/A	N/A	North	North	N/A
	R5	Living Room	W9 ↘	20.7	16.8	4.0	0.81											
		Living Room	W10 ↘	32.7	32.9	N/A	1.00	100%	100%	-0.01	1.00	82	77	N/A	N/A	24	25	1.04
F01	R1	Kitchen	W1 Inc	65.3	61.5	N/A	N/A	100%	99%	0.12	0.99	North	North	N/A	N/A	North	North	N/A
	R3	Bedroom	W3 ↗	28.9	28.4	N/A	N/A	85%	84%	0.22	0.98	North	North	N/A	N/A	North	North	N/A
	R6	Dressing	W6 ↖	31.9	26.4	5.5	0.83	99%	84%	2.46	0.85	North	North	N/A	N/A	North	North	N/A
99 View Hill																		
F00	R1	Unknown	W1 ↘	27.4	27.1	N/A	N/A											
		Unknown	W7 ↗	33.5	33.5	N/A	N/A											
		Unknown	W8 ↗	34.6	34.6	N/A	N/A	100%	100%	0.00	1.00	70	70	N/A	N/A	9	9	N/A
	R2	Unknown	W2 ↘	32.6	32.2	N/A	N/A											
		Unknown	W3 ↖	33.5	33.2	N/A	N/A	100%	100%	0.00	1.00	55	55	N/A	N/A	13	13	N/A
	R3	Unknown	W4 ↖	33.4	33.2	N/A	N/A											
		Unknown	W5 ↖	33.5	33.3	N/A	N/A	89%	89%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W6 ↖	33.9	33.8	N/A	N/A	86%	86%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Unknown	W1 ↘	30.2	29.8	N/A	N/A	100%	100%	0.00	1.00	50	50	N/A	N/A	14	14	N/A
	R2	Unknown	W2 ↘	32.0	31.6	N/A	N/A											
		Unknown	W3 ↖	32.0	31.7	N/A	N/A	100%	100%	0.00	1.00	56	56	N/A	N/A	20	20	N/A
	R3	Unknown	W4 ↖	32.1	31.8	N/A	N/A	96%	96%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W5 ↖	32.1	31.9	N/A	N/A											
		Unknown	W6 ↗	32.2	32.2	N/A	N/A	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
2 View Road																		
F00	R1	Living Room	W1 ←	29.6	29.0	N/A	N/A											
		Living Room	W2 ↖	34.9	34.3	N/A	N/A											
		Living Room	W3 ↑	29.7	29.5	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
F01	R1	Bedroom	W1 ↖	36.0	35.3	N/A	N/A											
		Bedroom	W2 ↖	36.0	35.3	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Bedroom	W3 ↖	30.4	29.7	N/A	N/A	95%	95%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Dressing	W6 ↖	15.0	14.9	0.1	1.00	33%	33%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
4 View Road																		
F00	R1	Living Room	W1 ←	30.0	29.2	N/A	N/A											
		Living Room	W2 ↖	35.4	34.5	N/A	N/A											
		Living Room	W3 ↑	28.6	28.3	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Bedroom	W1 ↖	36.3	35.4	N/A	N/A											
		Bedroom	W2 ↖	36.3	35.5	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Bedroom	W3 ↖	30.3	29.6	N/A	N/A											
		Bedroom	W4 ↗	19.6	19.6	0.0	1.00	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Bedroom	W6 ↖	15.3	15.3	0.1	1.00	47%	47%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
6 View Road																		
F00	R1	Unknown	W1 ↑	29.9	29.5	N/A	N/A											
		Unknown	W2 ↑	34.5	33.7	N/A	N/A											
		Unknown	W3 ↖	35.6	34.6	N/A	N/A											
		Unknown	W4 ↖	33.5	32.4	N/A	N/A											
		Unknown	W5 ←	24.5	23.7	0.9	0.96	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Unknown	W6 ↑	25.3	24.7	0.6	0.98											
		Unknown	W7 ↑	33.3	32.4	N/A	N/A											
		Unknown	W8 ↖	35.6	34.5	N/A	N/A											
		Unknown	W9 ↖	34.5	33.4	N/A	N/A											
		Unknown	W10 ←	28.4	27.5	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Unknown	W1 ↖	36.0	35.0	N/A	N/A											
		Unknown	W2 ↖	36.0	34.9	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
	R2	Unknown	W3 ↖	36.0	34.9	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W4 ↖	35.7	34.6	N/A	N/A											
		Unknown	W5 ↖	35.7	34.6	N/A	N/A	98%	98%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
3 View Road																		
F00	R1	Unknown	W1 ↗	18.6	15.6	2.9	0.84											
		Unknown	W2 ↖	37.1	34.8	N/A	N/A											
		Unknown	W3 ↖	37.3	35.8	N/A	N/A											
		Unknown	W4 ↖	37.5	36.4	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Unknown	W1 ↖	36.4	34.6	N/A	N/A	91%	87%	0.61	0.96	North	North	N/A	N/A	North	North	N/A
F02	R1	Unknown	W1 ↗	35.9	34.4	N/A	N/A											
		Unknown	W2 ↗	35.9	34.5	N/A	N/A	96%	96%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
1-3 Grange Road																		
F00	R1	Unknown	W1 ↗	8.3	8.3	0.0	1.00											
		Unknown	W2 ↗	2.9	2.9	0.0	1.00											
		Unknown	W3 ↗	20.0	19.9	0.1	1.00	87%	87%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Unknown	W4 ↖	33.9	32.8	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W7 ↗	0.8	0.6	0.1	0.86											
		Unknown	W8 ↖	33.8	32.8	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W9 ↖	35.6	34.6	N/A	N/A											
		Unknown	W10 ←	30.7	30.4	N/A	N/A											
		Unknown	W11 ↙	32.3	32.2	N/A	N/A											
		Unknown	W12 ↓	27.8	27.8	N/A	N/A	100%	100%	0.00	1.00	64	64	N/A	N/A	21	21	N/A
F01	R1	Unknown	W1 ↗	28.6	28.5	N/A	N/A	87%	87%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Unknown	W2 ↖	35.3	34.1	N/A	N/A	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W3 ↖	34.2	33.0	N/A	N/A	93%	93%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W4 ↖	35.3	34.1	N/A	N/A	98%	98%	0.00	1.00	North	North	N/A	N/A	North	North	N/A

Property, room & window attributes				VSC				NSL				APSH (room)							
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)			
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.	
	R5	Unknown	W5 ↖	35.2	34.1	N/A	N/A	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A	
	R6	Unknown	W6 ↙	34.9	34.8	N/A	N/A	94%	94%	0.00	1.00	64	64	N/A	N/A	22	22	N/A	
F02	R1	Unknown	W1 ↗	30.1	30.1	N/A	N/A												
		Unknown	W2 ↖	36.6	35.5	N/A	N/A	95%	95%	0.00	1.00	North	North	N/A	N/A	North	North	N/A	
	R2	Unknown	W3 ↖	36.5	35.5	N/A	N/A	96%	96%	0.00	1.00	North	North	N/A	N/A	North	North	N/A	
	R3	Unknown	W4 ↖	36.5	35.5	N/A	N/A												
		Unknown	W5 ↙	33.1	33.1	N/A	N/A	96%	96%	0.00	1.00	58	58	N/A	N/A	22	22	N/A	
32 Yeatman Rd																			
F00	R1	KD	W1 ↘	30.2	28.3	N/A	N/A												
		KD	W2 Hz	80.5	79.9	N/A	N/A	100%	93%	2.02	0.93	87	85	N/A	N/A	26	25	N/A	
F01	R2	Bedroom	W2 ↘	32.8	30.9	N/A	N/A	96%	96%	0.00	1.00	68	67	N/A	N/A	23	22	N/A	
34 Yeatman Rd																			
F00	R1	KD	W1 ↘	10.5	8.0	2.4	0.77												
		KD	W2 ↘	14.8	12.3	2.5	0.83	90%	89%	0.11	0.99	33	30	N/A	N/A	16	14	N/A	
F01	R1	Bedroom	W1 ↘	27.8	25.5	2.3	0.92	95%	95%	0.00	1.00	64	62	N/A	N/A	26	25	N/A	
36 Yeatman Rd																			
F00	R1	KD	W1 ↘	30.1	27.0	N/A	N/A												
		KD	W2 ↘	30.8	27.9	N/A	N/A	96%	96%	0.00	1.00	70	65	N/A	N/A	24	20	N/A	
F01	R1	Bedroom	W2 ↘	28.1	25.4	2.6	0.91	95%	94%	0.08	0.99	64	62	N/A	N/A	26	24	N/A	
38 Yeatman Rd																			
F00	R1	Bedroom	W1 ↘	30.3	26.9	3.3	0.89												
		Bedroom	W2 ↘	31.4	27.9	N/A	N/A	96%	96%	0.00	1.00	74	68	N/A	N/A	25	20	N/A	
F01	R1	Bedroom	W2 ↘	27.9	24.9	3.0	0.89	95%	95%	0.00	1.00	63	60	N/A	N/A	25	22	N/A	

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
40 Yeatman Rd																		
F00	R1	KD	W1 ↘	20.9	18.4	2.5	0.88											
		KD	W2 ↘	29.9	26.4	3.6	0.88											
		KD	W3 ↘	28.2	24.9	3.4	0.88											
		KD	W4 ↘	24.2	21.3	2.8	0.88	98%	98%	0.00	1.00	70	65	N/A	N/A	24	19	N/A
F01	R1	Bedroom	W1 ↘	29.2	26.0	3.3	0.89	95%	95%	0.00	1.00	63	58	N/A	N/A	22	17	N/A
42 Yeatman Rd																		
F00	R1	KD	W1 ↘	27.5	24.0	3.5	0.87											
		KD	W2 ↘	29.9	26.0	3.9	0.87											
		KD	W3 ↘	24.7	21.4	3.3	0.87	97%	97%	0.00	1.00	75	68	N/A	N/A	25	18	N/A
F01	R1	Bedroom	W2 ↘	29.1	25.6	3.5	0.88	96%	96%	0.00	1.00	66	61	N/A	N/A	26	21	N/A
44 Yeatman Rd																		
F00	R1	KD	W1 ↘	28.5	25.2	3.3	0.88											
		KD	W2 ↘	23.6	20.6	3.0	0.87	94%	94%	0.00	1.00	64	59	N/A	N/A	21	16	N/A
F01	R1	Bedroom	W1 ↘	24.9	21.3	3.6	0.85	96%	84%	0.90	0.88	58	54	N/A	N/A	25	21	N/A
46 Yeatman Rd																		
F00	R1	KD	W1 ↘	10.9	7.7	3.2	0.71											
		KD	W2 ↘	9.9	6.4	3.5	0.65											
		KD	W3 ↘	10.4	6.7	3.7	0.64											
		KD	W4 ↘	11.8	8.4	3.3	0.72	78%	44%	7.17	0.57	42	33	N/A	N/A	18	11	N/A
F01	R2	Bedroom	W2 ↘	24.1	20.7	3.4	0.86	96%	81%	1.19	0.84	58	51	N/A	N/A	25	19	N/A
F02	R1	Bedroom	W1 ↘	35.9	33.3	N/A	N/A	92%	92%	0.00	1.00	79	77	N/A	N/A	28	26	N/A
48 Yeatman Rd																		
F00	R1	KD	W1 ↘	27.3	24.3	2.9	0.89											

Property, room & window attributes				VSC				NSL				APSH (room)							
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)			
														Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.
		KD	W2 ↘	26.8	23.9	2.9	0.89												
		KD	W3 ↘	26.7	23.7	3.0	0.89	96%	96%	0.00	1.00	64	61	N/A	N/A	17	13	N/A	
F01	R2	Bedroom	W1 ↘	23.9	20.7	3.2	0.86	96%	93%	0.22	0.97	55	51	N/A	N/A	23	19	N/A	

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (%)	Prop. (%)	Loss (%)	Pro./Ex. ratio	Exis. (%)	Prop. (%)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
				(% VSC)	(% VSC)	(% VSC)		(% rm)	(% rm)			Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
1A View Road																		
F00	R3	LKD	W4 ↖	26.7	22.2	4.5	0.83											
		LKD	W5 ↘	16.2	13.0	3.2	0.80											
		LKD	W6 Inc	61.7	58.5	N/A	N/A											
		LKD	W8 ↖	27.6	22.5	5.1	0.81											
		LKD	W12 ↗	22.8	22.8	0.0	1.00	98%	79%	12.19	0.81	43	40	N/A	N/A	4	4	1.00
	R5	Living Room	W9 ↘	20.7	16.8	4.0	0.81											
		Living Room	W10 ↘	32.7	32.9	N/A	1.00	100%	100%	-0.01	1.00	82	77	N/A	N/A	24	25	1.04

Appendix 4

Sun-on-ground results for neighbouring gardens & amenity spaces



Plan View

	Amenity Area (m²)	Existing Area	Existing %age of Area	Proposed Area	Proposed %age of Area	%age Change	Meets BRE
32 Yeatman Rd\F00\A1	40.5	28.08	69%	26.71	66%	95%	Pass
34 Yeatman Rd\F00\A2	52.67	31.16	59%	27.37	52%	88%	Pass
36 Yeatman Rd\F00\A3	57.77	42.71	74%	33.88	59%	79%	Pass
38 Yeatman Rd\F00\A4	58.68	44.45	76%	38.08	65%	86%	Pass
40 Yeatman Rd\F00\A5	58.5	44.33	76%	33.5	57%	76%	Pass
42 Yeatman Rd\F00\A6	57.52	41.97	73%	31.22	54%	74%	Pass
44 Yeatman Rd\F00\A7	57.26	34.12	60%	25.3	44%	74%	Fail
46 Yeatman Rd\F00\A8	46.95	28	60%	20.87	44%	75%	Fail
48 Yeatman Rd\F00\A9	151.99	123.16	81%	115.75	76%	94%	Pass
109 North Hill\F00\A10	49.54	23.72	48%	10.8	22%	46%	Fail
111 North Hill\F00\A11	44.05	35.72	81%	34.72	79%	97%	Pass
113-115 North Hill\F00\A12	161.45	144.81	90%	144.11	89%	100%	Pass
Total	836.88	622.23	74%	542.31	65%	87%	Pass

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

Existing 2-Hr Sunlit Area

Proposed 2-Hr Sunlit Area

A02 Amenity Area Number

SOURCE DATA:
Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 16.09.2021
Site Model - 2021 - CURRENT 2.rvt

NOTES:
All heights given in m AOD

REV	Description	Drawn	Date

DELVA PATMAN REDLER
Chartered Surveyors

London 020 7936 3668
Liverpool 0151 242 0980
Bristol 0117 450 9703

www.delvapatmanredler.co.uk
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TITLE:
MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL, LONDON,N6 4DP

DRAWING:
TWO-HOURS SUN-ON-GROUND STUDY
Plan View

DRAWN: RP	JOB NBR: 21047	REV: A
SCALE: NTS		
DATE: 23.09.2021		
DWG NO: SHD-002		

Appendix 5

Alternative 'Without Balconies' daylight and sunlight results for 34 & 46 Yeatman Road

Property, room & window attributes				VSC				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
								Exis.	Prop.	Loss	Pro./Ex	Exis.	Prop.	Pro./Ex
34 Yeatman Rd														
F00	R1	KD	W1 ↘	28.0	25.6	2.4	0.91							
		KD	W2 ↘	31.3	28.8	N/A	N/A	73	70	N/A	N/A	23	21	N/A
46 Yeatman Rd														
F00	R1	KD	W1 ↘	25.3	22.1	3.2	0.87							
		KD	W2 ↘	26.9	23.4	3.5	0.87							
		KD	W3 ↘	27.4	23.7	3.7	0.86							
		KD	W4 ↘	26.3	23.0	3.3	0.87	69	60	N/A	N/A	20	13	N/A

Appendix 6

Alternative with trees daylight and sunlight results for both summer and winter conditions



Plan View

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

	Existing		Consented
	Proposed		Cumulative
	Neighboring Property		Cutback Envelope

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 16.09.2021
Site Model - 2021 - CURRENT 2.rvt

NOTES:
All heights given in mm AOD

REV	Description	Drawn	Date

DELVA PATMAN REDLER
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London 020 7936 3668
Liverpool 0151 242 0980
Bristol 0117 450 9703

www.delvapatmanredler.co.uk
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TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL, LONDON,N6 4DP

DRAWING:

PROPOSED SCENARIO
Plan View

DRAWN: RP		JOB NBR: 21047
SCALE: 1:500@A3		
DATE: 19.11.2021		
DWG NO: PR-001		REV: B



3D View

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

Existing	Consented
Proposed	Cumulative
Neighboring Property	Cutback Envelope

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 16.09.2021
Site Model - 2021 - CURRENT 2.rvt

NOTES:
All heights given in mm AOD

REV	Description	Drawn	Date

DELVA PATMAN REDLER
Chartered Surveyors

London 020 7936 3668
Liverpool 0151 242 0980
Bristol 0117 450 9703

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TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL, LONDON,N6 4DP

DRAWING:

PROPOSED SCENARIO
3D View

DRAWN: RP	JOB NBR:
SCALE: NTS	21047
DATE: 19.11.2021	
DWG NO:	REV:
PR-002	B



NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

	Existing		Consented
	Proposed		Cumulative
	Neighboring Property		Cutback Envelope

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 16.09.2021
Site Model - 2021 - CURRENT 2.rvt

NOTES:
All heights given in mm AOD

REV	Description	Drawn	Date

DELVA PATMAN REDLER
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London 020 7936 3668
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TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL, LONDON,N6 4DP

DRAWING:

PROPOSED SCENARIO
3D View

DRAWN: RP		JOB NBR: 21047
SCALE: NTS		
DATE: 19.11.2021		
DWG NO: PR-003		REV: B

Property, room & window attributes			VSC					NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
113-115 North Hill																		
F00	R2	Unknown	W2 ↙	28.8	28.8	N/A	N/A	100%	100%	0.00	1.00	46.41	46.21	N/A	N/A	4.412	4.208	0.95
115 North Hill																		
F00	R2	Unknown	W2 ↙	27.2	26.5	0.7	0.97											
		Unknown	W3 Hz	50.7	50.7	N/A	N/A	99%	99%	0.00	1.00	60.67	57.46	N/A	N/A	15.67	12.46	N/A
F01	R1	Unknown	W1 ↙	33.8	33.0	N/A	N/A	96%	96%	0.00	1.00	59.44	57.41	N/A	N/A	18.44	16.41	N/A
	R2	Unknown	W2 ↙	28.9	28.2	N/A	N/A	98%	98%	0.00	1.00	52.27	51.26	N/A	N/A	17.27	16.26	N/A
F02	R1	Unknown	W1 ↙	34.4	33.9	N/A	N/A	99%	99%	0.00	1.00	59.42	57.42	N/A	N/A	20.42	18.42	N/A
	R2	Unknown	W2 ↙	34.9	34.3	N/A	N/A	96%	96%	0.00	1.00	57.25	56.25	N/A	N/A	20.25	19.25	N/A
113 North Hill																		
F00	R1	Unknown	W1 ↙	29.1	28.1	N/A	N/A	100%	100%	0.02	1.00	50.47	45.06	N/A	N/A	10.86	5.451	N/A
F01	R1	Unknown	W1 ↙	26.3	26.0	0.3	0.99	97%	97%	0.00	1.00	40.45	40.25	N/A	N/A	6.455	6.251	N/A
	R2	Unknown	W2 ↙	34.0	33.2	N/A	N/A	95%	95%	0.00	1.00	56.45	57.41	N/A	1.02	14.45	15.41	1.07
F02	R1	Unknown	W1 ↙	34.2	33.0	N/A	N/A	97%	97%	0.00	1.00	54.21	53.21	N/A	N/A	18.21	17.21	N/A
	R2	Unknown	W2 ↙	34.7	33.8	N/A	N/A	95%	95%	0.00	1.00	55.05	55.05	N/A	N/A	18.05	18.05	N/A
111 North Hill																		
F00	R1	Unknown	W1 ↙	20.2	20.2	0.0	1.00											
		Unknown	W2 Inc	28.9	28.9	N/A	N/A											
		Unknown	W3 Inc	55.4	55.4	N/A	N/A	99%	99%	0.00	1.00	41.64	41.64	N/A	N/A	7.44	7.44	N/A
F01	R1	Unknown	W1 ↙	23.6	23.6	0.0	1.00	97%	97%	0.00	1.00	28.05	28.05	N/A	N/A	3.047	3.047	1.00
	R2	Unknown	W2 ↙	26.9	23.7	3.2	0.88											
		Unknown	W3 ↙	27.7	25.0	2.7	0.90	99%	99%	0.03	1.00	46.64	39.43	N/A	N/A	12.24	6.02	N/A
F02	R1	Unknown	W1 ↙	33.2	33.0	N/A	N/A	98%	98%	0.00	1.00	53.21	54.21	N/A	1.02	12.21	13.21	1.08
	R2	Unknown	W2 ↙	34.3	31.7	N/A	N/A											

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
		Unknown	W3 Hz	85.8	86.7	N/A	1.01	100%	100%	0.00	1.00	72.45	74.25	N/A	1.02	16.45	14.25	N/A
F03	R1	Unknown	W1 ↙	34.8	33.4	N/A	N/A	86%	80%	0.42	0.94	56.04	56.04	N/A	N/A	17.04	16.04	N/A
109 North Hill																		
F00	R1	Unknown	W1 ↙	19.2	16.3	2.9	0.85	99%	98%	0.15	0.99	30.97	19.56	11.41	0.63	3.647	1.239	0.34
	R3	Kitchen	W5 Hz	26.3	27.0	-0.6	1.02	82%	82%	0.00	1.00	14	14	0	1.00	0	0	N/A
F02	R2	Bedroom	W2 ↙	30.5	28.2	N/A	N/A	96%	96%	0.00	1.00	45.45	43.25	N/A	N/A	8.451	5.247	N/A
30 Highcroft																		
F00	R1	Living Room	W1 ↙	25.1	25.2	-0.1	1.00	99%	99%	0.00	1.00	45	45	N/A	N/A	17	17	N/A
	R2	Bedroom	W2 ↙	25.1	25.1	0.0	1.00	100%	100%	0.00	1.00	47	47	N/A	N/A	18	18	N/A
	R3	Living Room	W3 ↙	28.2	28.2	N/A	N/A	98%	98%	0.00	1.00	51	50	N/A	N/A	19	18	N/A
	R5	Bedroom	W14 ↙	27.1	27.1	N/A	N/A	99%	99%	0.00	1.00	50	49	N/A	N/A	18	17	N/A
	R6	Unknown	W15 ↙	27.2	27.1	N/A	N/A	99%	99%	0.00	1.00	51	50	N/A	N/A	19	18	N/A
	R7	Unknown	W16 ↙	27.3	27.1	N/A	N/A	92%	92%	0.00	1.00	52	51	N/A	N/A	20	19	N/A
	R8	Unknown	W17 ↙	28.3	28.2	N/A	N/A	100%	100%	0.00	1.00	50	49	N/A	N/A	19	18	N/A
	R9	Living Room	W18 ↙	26.9	26.8	0.1	1.00	98%	98%	0.00	1.00	49	49	N/A	N/A	19	18	N/A
	R10	Living Room	W19 ↙	26.9	26.8	0.1	1.00	98%	98%	0.00	1.00	51	50	N/A	N/A	20	19	N/A
	R11	Bedroom	W20 ↙	27.0	26.9	0.1	1.00	98%	98%	0.00	1.00	51	51	N/A	N/A	20	20	N/A
	R12	Unknown	W21 ↙	29.1	29.1	N/A	N/A	100%	100%	0.00	1.00	53	53	N/A	N/A	21	21	N/A
	R14	Kitchen	W23 ↓	28.0	28.0	N/A	N/A	95%	95%	0.00	1.00	57	56	N/A	N/A	25	25	N/A
	R16	Kitchen	W35 ↓	27.5	27.5	N/A	N/A	94%	94%	0.00	1.00	62	62	N/A	N/A	24	24	N/A
F01	R1	Living Room	W1 ↙	27.3	27.3	N/A	N/A											
		Living Room	W2 ↙	29.9	29.8	N/A	N/A	100%	100%	0.00	1.00	51.2	52.2	N/A	1.02	19.2	20.2	1.05
	R2	Bedroom	W3 ↙	26.1	26.1	0.0	1.00	100%	100%	0.00	1.00	48	48	N/A	N/A	18	18	N/A
	R3	Living Room	W4 ↙	36.2	36.1	N/A	N/A	95%	95%	0.00	1.00	65	65	N/A	N/A	23	23	N/A
	R4	Living Room	W5 ↙	26.4	26.3	0.1	1.00											
		Living Room	W6 ↙	29.7	29.5	N/A	N/A	98%	98%	0.00	1.00	52	52	N/A	N/A	20	20	N/A

Existing V.P. Proposed

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
	R5	Bedroom	W7 ↙	26.1	25.9	0.2	0.99	99%	99%	0.00	1.00	48	48	N/A	N/A	19	19	N/A
	R6	Unknown	W8 ↙	26.2	26.0	0.2	0.99	99%	99%	0.00	1.00	48	48	N/A	N/A	19	19	N/A
	R7	Unknown	W9 ↙	26.8	26.6	0.2	0.99	90%	90%	0.00	1.00	51	51	N/A	N/A	19	19	N/A
	R8	Bedroom	W10 ↙	36.3	36.1	N/A	N/A	100%	100%	0.00	1.00	64	65	N/A	1.02	23	23	N/A
	R9	Living Room	W11 ↙	26.8	26.6	0.2	0.99											
		Living Room	W12 ↙	30.0	29.9	N/A	N/A	98%	98%	0.00	1.00	52	53	N/A	1.02	21	21	N/A
	R10	Living Room	W13 ↙	26.5	26.3	0.1	1.00											
		Living Room	W14 ↙	29.9	29.8	N/A	N/A	98%	98%	0.00	1.00	53	52	N/A	N/A	21	21	N/A
	R11	Bedroom	W15 ↙	26.6	26.6	0.1	1.00	98%	98%	0.00	1.00	48	47	N/A	N/A	19	19	N/A
	R12	Bedroom	W16 ↙	36.3	36.3	N/A	N/A	100%	100%	0.00	1.00	64	64	N/A	N/A	22	22	N/A
	R14	Kitchen	W18 ↓	33.9	33.9	N/A	N/A	95%	95%	0.00	1.00	69	69	N/A	N/A	27	27	N/A
	R15	Living Room	W19 ↓	26.9	26.9	0.0	1.00	100%	100%	0.00	1.00	64	64	N/A	N/A	27	27	N/A
	R16	Kitchen	W20 ↓	33.7	33.7	N/A	N/A	94%	94%	0.00	1.00	76	76	N/A	N/A	27	27	N/A
F02	R1	Living Room	W1 ↙	28.7	28.6	N/A	N/A											
		Living Room	W2 ↙	31.6	31.6	N/A	N/A	100%	100%	0.00	1.00	54	53	N/A	N/A	22	21	N/A
	R2	Bedroom	W3 ↙	27.5	27.4	N/A	N/A	100%	100%	0.00	1.00	48	47	N/A	N/A	19	18	N/A
	R3	Living Room	W4 ↙	37.8	37.7	N/A	N/A	95%	95%	0.00	1.00	65	65	N/A	N/A	23	23	N/A
	R4	Living Room	W5 ↙	27.7	27.6	N/A	N/A											
		Living Room	W6 ↙	31.3	31.2	N/A	N/A	98%	98%	0.00	1.00	54	53	N/A	N/A	22	21	N/A
	R5	Bedroom	W7 ↙	27.4	27.2	N/A	N/A	99%	99%	0.00	1.00	49	48	N/A	N/A	20	19	N/A
	R6	Unknown	W8 ↙	27.5	27.3	N/A	N/A	99%	99%	0.00	1.00	49	49	N/A	N/A	20	20	N/A
	R7	Unknown	W9 ↙	28.1	27.9	N/A	N/A	90%	90%	0.00	1.00	52	52	N/A	N/A	20	20	N/A
	R8	Bedroom	W10 ↙	37.9	37.7	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R9	Living Room	W11 ↙	28.1	27.9	N/A	N/A											
		Living Room	W12 ↙	31.6	31.5	N/A	N/A	98%	98%	0.00	1.00	54	54	N/A	N/A	22	22	N/A
	R10	Living Room	W13 ↙	27.7	27.6	N/A	N/A											
		Living Room	W14 ↙	31.6	31.4	N/A	N/A	98%	98%	0.00	1.00	54	54	N/A	N/A	22	22	N/A
	R11	Bedroom	W15 ↙	27.9	27.8	N/A	N/A	98%	98%	0.00	1.00	50	50	N/A	N/A	21	21	N/A

Existing V Proposed

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex	Exis.	Prop.	Pro./Ex
	R12	Bedroom	W16 ↙	37.9	37.8	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R14	Kitchen	W18 ↓	35.6	35.6	N/A	N/A	95%	95%	0.00	1.00	71	71	N/A	N/A	29	29	N/A
	R15	Living Room	W19 ↓	29.2	29.1	N/A	N/A											
		Living Room	W20 ↓	32.7	32.7	N/A	N/A	100%	100%	0.00	1.00	84	84	N/A	N/A	29	29	N/A
	R16	Kitchen	W21 ↓	35.4	35.4	N/A	N/A	94%	94%	0.00	1.00	79	79	N/A	N/A	29	29	N/A
F03	R1	Living Room	W1 ↙	38.8	38.7	N/A	N/A											
		Living Room	W2 ↙	38.7	38.6	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R2	Bedroom	W3 ↙	37.9	37.8	N/A	N/A	100%	100%	0.00	1.00	57	58	N/A	1.02	19	20	1.05
	R3	Living Room	W4 ↙	38.8	38.7	N/A	N/A	95%	95%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R4	Living Room	W5 ↙	38.2	38.1	N/A	N/A											
		Living Room	W6 ↙	38.6	38.5	N/A	N/A	98%	98%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R5	Bedroom	W7 ↙	38.8	38.7	N/A	N/A	99%	99%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R6	Unknown	W8 ↙	38.5	38.4	N/A	N/A	99%	99%	0.00	1.00	62	62	N/A	N/A	21	21	N/A
	R7	Unknown	W9 ↙	37.9	37.8	N/A	N/A	90%	90%	0.00	1.00	58	58	N/A	N/A	20	20	N/A
	R8	Bedroom	W10 ↙	38.9	38.7	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R9	Living Room	W11 ↙	38.3	38.2	N/A	N/A											
		Living Room	W12 ↙	38.6	38.5	N/A	N/A	98%	98%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R10	Living Room	W13 ↙	38.9	38.8	N/A	N/A											
		Living Room	W14 ↙	38.8	38.7	N/A	N/A	98%	98%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R11	Bedroom	W15 ↙	38.5	38.4	N/A	N/A	99%	99%	0.00	1.00	61	61	N/A	N/A	21	21	N/A
	R12	Bedroom	W16 ↙	38.8	38.7	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R14	Kitchen	W18 ↓	38.7	38.6	N/A	N/A	96%	96%	0.00	1.00	85	85	N/A	N/A	30	30	N/A
	R15	Living Room	W19 ↓	38.7	38.7	N/A	N/A											
		Living Room	W20 ↓	38.6	38.6	N/A	N/A	100%	100%	0.00	1.00	86	86	N/A	N/A	30	30	N/A
	R16	Kitchen	W21 ↓	38.7	38.6	N/A	N/A	94%	94%	0.00	1.00	86	86	N/A	N/A	30	30	N/A
F04	R2	Unknown	W3 ↙	29.6	29.6	N/A	N/A											
		Unknown	W4 ↙	24.9	24.9	0.0	1.00	83%	83%	0.00	1.00	60	60	N/A	N/A	24	24	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
1-3 Wetherley Court																		
B00	R1	Kitchen	W1 ↙	4.2	4.2	0.0	1.00											
		Kitchen	W2 ↙	13.5	13.5	0.0	1.00	97%	97%	0.00	1.00	25	25	N/A	N/A	4	4	1.00
F00	R1	Reception Room	W1 ↗	32.1	32.1	N/A	N/A											
		Reception Room	W2 ↖	26.0	25.8	0.2	0.99	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Study	W7 ↖	26.8	25.2	1.6	0.94											
		Study	W8 ↙	32.3	32.0	N/A	N/A	98%	98%	0.01	1.00	59.03	59	N/A	N/A	21	21	N/A
	R4	Unknown	W9 ↙	23.1	23.0	0.0	1.00	83%	83%	0.00	1.00	50	50	N/A	N/A	18	18	N/A
	R5	Living Room	W10 ↙	29.7	29.6	N/A	N/A											
		Living Room	W11 ↙	30.2	30.0	N/A	N/A	98%	98%	0.00	1.00	57	56	N/A	N/A	18	18	N/A
	R7	Bedroom	W13 ↙	34.4	34.0	N/A	N/A	98%	98%	0.00	1.00	65	64	N/A	N/A	23	23	N/A
F01	R3	Bedroom	W3 ↖	29.3	27.6	N/A	N/A	89%	83%	0.84	0.93	North	North	N/A	N/A	North	North	N/A
	R5	Unknown	W5 ↙	31.3	30.9	N/A	N/A											
		Unknown	W6 ↙	31.4	31.0	N/A	N/A	99%	99%	0.00	1.00	57	57	N/A	N/A	19	19	N/A
	R7	Unknown	W8 ↙	34.2	33.7	N/A	N/A	98%	98%	0.00	1.00	59	58	N/A	N/A	23	22	N/A
F02	R1	Bedroom	W1 ↗	32.1	32.1	N/A	N/A											
		Bedroom	W2 ↖	32.6	31.7	N/A	N/A	76%	75%	0.26	0.99	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W4 Inc	76.4	75.3	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W5 ↙	33.4	32.7	N/A	N/A	94%	94%	0.00	1.00	59	59	N/A	N/A	24	24	N/A
	R5	Unknown	W6 ↙	34.8	34.1	N/A	N/A											
		Unknown	W7 ↙	34.9	34.2	N/A	N/A	98%	98%	0.00	1.00	60	60	N/A	N/A	24	24	N/A
	R6	Unknown	W8 ↙	33.7	33.1	N/A	N/A	94%	94%	0.00	1.00	56	56	N/A	N/A	19	19	N/A
1A View Road																		
F00	R3	Kitchen	W4 ↖	26.1	22.0	4.1	0.84											
		Kitchen	W5 ↙	15.3	12.2	3.1	0.80											
		Kitchen	W6 Inc	62.0	58.1	N/A	N/A											
		Kitchen	W7 ↖	27.6	23.6	4.0	0.86											

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
		Kitchen	W12 ↗	22.8	22.8	0.0	1.00	98%	90%	3.61	0.92	40	37	N/A	N/A	4	4	1.00
	R4	Dining Room	W8 ↖	26.8	22.3	4.4	0.83	97%	70%	5.21	0.72	North	North	N/A	N/A	North	North	N/A
	R5	Living Room	W9 ↘	20.7	16.8	3.9	0.81											
		Living Room	W10 ↘	32.7	32.9	N/A	1.00	100%	100%	-0.01	1.00	82	77	N/A	N/A	24	25	1.04
F01	R1	Kitchen	W1 Inc	65.3	61.5	N/A	N/A	100%	99%	0.12	0.99	North	North	N/A	N/A	North	North	N/A
	R3	Bedroom	W3 ↗	28.9	28.4	N/A	N/A	85%	84%	0.22	0.98	North	North	N/A	N/A	North	North	N/A
	R6	Dressing	W6 ↖	30.4	26.1	4.3	0.86	99%	84%	2.46	0.85	North	North	N/A	N/A	North	North	N/A
99 View Hill																		
F00	R1	Unknown	W1 ↘	27.3	27.1	N/A	N/A											
		Unknown	W7 ↗	33.5	33.5	N/A	N/A											
		Unknown	W8 ↗	34.6	34.6	N/A	N/A	100%	100%	0.00	1.00	70	70	N/A	N/A	9	9	N/A
	R2	Unknown	W2 ↘	32.5	32.2	N/A	N/A											
		Unknown	W3 ↖	33.4	33.2	N/A	N/A	100%	100%	0.00	1.00	55	55	N/A	N/A	13	13	N/A
	R3	Unknown	W4 ↖	33.4	33.2	N/A	N/A											
		Unknown	W5 ↖	33.5	33.3	N/A	N/A	89%	89%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W6 ↖	33.9	33.8	N/A	N/A	86%	86%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Unknown	W1 ↘	30.1	29.8	N/A	N/A	100%	100%	0.00	1.00	50	50	N/A	N/A	14	14	N/A
	R2	Unknown	W2 ↘	31.9	31.6	N/A	N/A											
		Unknown	W3 ↖	31.9	31.7	N/A	N/A	100%	100%	0.00	1.00	56	56	N/A	N/A	20	20	N/A
	R3	Unknown	W4 ↖	32.0	31.8	N/A	N/A	96%	96%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W5 ↖	32.1	31.9	N/A	N/A											
		Unknown	W6 ↗	32.2	32.2	N/A	N/A	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
2 View Road																		
F00	R1	Living Room	W1 ←	29.5	28.9	N/A	N/A											
		Living Room	W2 ↖	34.8	34.2	N/A	N/A											
		Living Room	W3 ↑	29.6	29.5	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
F01	R1	Bedroom	W1 ↖	35.7	35.2	N/A	N/A											
		Bedroom	W2 ↖	35.7	35.2	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Bedroom	W3 ↖	30.2	29.6	N/A	N/A	95%	95%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Dressing	W6 ↖	14.8	14.8	0.0	1.00	33%	33%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
4 View Road																		
F00	R1	Living Room	W1 ←	29.9	29.2	N/A	N/A											
		Living Room	W2 ↖	35.2	34.5	N/A	N/A											
		Living Room	W3 ↑	28.5	28.3	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Bedroom	W1 ↖	36.0	35.4	N/A	N/A											
		Bedroom	W2 ↖	36.0	35.4	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Bedroom	W3 ↖	30.1	29.5	N/A	N/A											
		Bedroom	W4 ↗	19.6	19.6	0.0	1.00	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Bedroom	W6 ↖	15.3	15.2	0.1	1.00	47%	47%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
6 View Road																		
F00	R1	Unknown	W1 ↑	29.8	29.5	N/A	N/A											
		Unknown	W2 ↑	34.3	33.7	N/A	N/A											
		Unknown	W3 ↖	35.5	34.6	N/A	N/A											
		Unknown	W4 ↖	33.3	32.4	N/A	N/A											
		Unknown	W5 ←	24.4	23.7	0.8	0.97	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Unknown	W6 ↑	25.2	24.7	0.5	0.98											
		Unknown	W7 ↑	33.2	32.4	N/A	N/A											
		Unknown	W8 ↖	35.5	34.5	N/A	N/A											
		Unknown	W9 ↖	34.4	33.4	N/A	N/A											
		Unknown	W10 ←	28.3	27.5	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Unknown	W1 ↖	35.7	34.9	N/A	N/A											
		Unknown	W2 ↖	35.7	34.9	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
	R2	Unknown	W3 ↖	35.7	34.9	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W4 ↖	35.4	34.6	N/A	N/A											
		Unknown	W5 ↖	35.5	34.6	N/A	N/A	98%	98%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
3 View Road																		
F00	R1	Unknown	W1 ↗	18.1	15.4	2.7	0.85											
		Unknown	W2 ↖	35.3	33.2	N/A	N/A											
		Unknown	W3 ↖	35.6	34.4	N/A	N/A											
		Unknown	W4 ↖	35.9	35.1	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Unknown	W1 ↖	35.5	33.9	N/A	N/A	91%	87%	0.61	0.96	North	North	N/A	N/A	North	North	N/A
F02	R1	Unknown	W1 ↗	35.6	34.2	N/A	N/A											
		Unknown	W2 ↗	35.6	34.3	N/A	N/A	96%	96%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
1-3 Grange Road																		
F00	R1	Unknown	W1 ↗	8.3	8.3	0.0	1.00											
		Unknown	W2 ↗	2.9	2.9	0.0	1.00											
		Unknown	W3 ↗	20.0	19.9	0.1	1.00	87%	87%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Unknown	W4 ↖	33.8	32.8	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W7 ↗	0.7	0.6	0.1	0.87											
		Unknown	W8 ↖	33.8	32.7	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W9 ↖	35.6	34.6	N/A	N/A											
		Unknown	W10 ←	30.7	30.4	N/A	N/A											
		Unknown	W11 ↘	32.3	32.2	N/A	N/A											
		Unknown	W12 ↓	27.8	27.8	N/A	N/A	100%	100%	0.00	1.00	64	64	N/A	N/A	21	21	N/A
F01	R1	Unknown	W1 ↗	28.6	28.5	N/A	N/A	87%	87%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Unknown	W2 ↖	35.2	34.1	N/A	N/A	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W3 ↖	34.0	32.9	N/A	N/A	93%	93%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W4 ↖	35.1	34.1	N/A	N/A	98%	98%	0.00	1.00	North	North	N/A	N/A	North	North	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
	R5	Unknown	W5 ↖	35.1	34.1	N/A	N/A	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R6	Unknown	W6 ↘	34.9	34.8	N/A	N/A	94%	94%	0.00	1.00	64	64	N/A	N/A	22	22	N/A
F02	R1	Unknown	W1 ↗	30.1	30.1	N/A	N/A											
		Unknown	W2 ↖	36.3	35.5	N/A	N/A	95%	95%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Unknown	W3 ↖	36.3	35.4	N/A	N/A	96%	96%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W4 ↖	36.3	35.4	N/A	N/A											
		Unknown	W5 ↘	33.1	33.1	N/A	N/A	96%	96%	0.00	1.00	58	58	N/A	N/A	22	22	N/A
32 Yeatman Rd																		
F00	R1	KD	W1 ↘	15.8	14.6	1.2	0.92											
		KD	W2 Hz	73.1	72.9	N/A	N/A	100%	93%	2.02	0.93	59.55	59.14	N/A	N/A	11.01	10.8	N/A
F01	R2	Bedroom	W2 ↘	22.0	21.5	0.4	0.98	96%	96%	0.00	1.00	49.78	49.57	N/A	N/A	9.714	9.51	N/A
34 Yeatman Rd																		
F00	R1	KD	W1 ↘	3.3	2.1	1.2	0.63											
		KD	W2 ↘	5.7	4.5	1.2	0.78	90%	89%	0.11	0.99	12.18	11.89	0.29	0.98	4.42	4.173	0.94
F01	R1	Bedroom	W1 ↘	16.5	15.8	0.7	0.96	95%	95%	0.00	1.00	44.45	44.36	N/A	N/A	11.5	11.46	N/A
36 Yeatman Rd																		
F00	R1	KD	W1 ↘	17.9	16.5	1.4	0.92											
		KD	W2 ↘	18.7	17.3	1.3	0.93	96%	96%	0.00	1.00	40.9	40.04	N/A	N/A	8.278	7.463	N/A
F01	R1	Bedroom	W2 ↘	16.6	15.8	0.7	0.96	95%	94%	0.08	0.99	43.82	43.73	N/A	N/A	11.71	11.62	N/A
38 Yeatman Rd																		
F00	R1	Bedroom	W1 ↘	17.8	16.5	1.3	0.93											
		Bedroom	W2 ↘	18.7	17.4	1.3	0.93	96%	96%	0.00	1.00	43.63	41.93	N/A	N/A	9.706	8.212	N/A
F01	R1	Bedroom	W2 ↘	16.0	15.3	0.7	0.96	95%	95%	0.00	1.00	42.13	41.68	N/A	N/A	11.3	10.85	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
40 Yeatman Rd																		
F00	R1	KD	W1 ↘	11.9	11.4	0.5	0.96											
		KD	W2 ↘	17.3	16.3	1.0	0.94											
		KD	W3 ↘	16.4	15.4	1.1	0.94											
		KD	W4 ↘	14.1	13.2	0.9	0.93	98%	98%	0.00	1.00	43.82	42.96	N/A	N/A	8.867	8.008	N/A
F01	R1	Bedroom	W1 ↘	17.1	16.5	0.6	0.97	95%	95%	0.00	1.00	43.73	42.87	N/A	N/A	7.961	7.102	N/A
42 Yeatman Rd																		
F00	R1	KD	W1 ↘	16.0	15.2	0.8	0.95											
		KD	W2 ↘	17.3	16.2	1.1	0.94											
		KD	W3 ↘	13.6	12.6	1.0	0.93	97%	97%	0.00	1.00	44.73	43.56	N/A	N/A	6.467	5.302	N/A
F01	R1	Bedroom	W2 ↘	16.9	16.4	0.5	0.97	96%	96%	0.00	1.00	43.66	43.29	N/A	N/A	8.769	8.404	N/A
44 Yeatman Rd																		
F00	R1	KD	W1 ↘	16.3	15.6	0.7	0.96											
		KD	W2 ↘	13.1	12.3	0.7	0.94	94%	94%	0.00	1.00	41.69	40.03	N/A	N/A	7.596	5.941	N/A
F01	R1	Bedroom	W1 ↘	12.3	11.8	0.6	0.96	96%	84%	0.90	0.88	34.51	33.85	N/A	N/A	8.137	7.482	N/A
46 Yeatman Rd																		
F00	R1	KD	W1 ↘	2.6	2.0	0.6	0.77											
		KD	W2 ↘	2.0	1.4	0.6	0.68											
		KD	W3 ↘	2.2	1.5	0.7	0.67											
		KD	W4 ↘	3.1	2.4	0.7	0.76	78%	44%	7.17	0.57	15.92	13.45	2.467	0.85	3.608	1.549	N/A*
F01	R2	Bedroom	W2 ↘	12.2	11.7	0.5	0.96	96%	81%	1.19	0.84	37.26	36.36	N/A	N/A	7.494	6.804	N/A
F02	R1	Bedroom	W1 ↘	26.9	26.5	0.3	0.99	92%	92%	0.00	1.00	65.49	65.09	N/A	N/A	15.29	14.88	N/A
48 Yeatman Rd																		
F00	R1	KD	W1 ↘	17.0	16.5	0.5	0.97											

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
		KD	W2 ↘	16.5	16.0	0.5	0.97											
		KD	W3 ↘	16.1	15.5	0.6	0.96	96%	96%	0.00	1.00	40.31	40.56	N/A	1.01	3.129	2.376	0.76
F01	R2	Bedroom	W1 ↘	12.6	12.2	0.5	0.96	96%	93%	0.22	0.97	36.17	35.41	N/A	N/A	6.561	5.796	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
113-115 North Hill																		
F00	R2	Unknown	W2 ↘	30.0	29.7	N/A	N/A	100%	100%	0.00	1.00	47.63	47.08	N/A	N/A	5.631	5.078	N/A
115 North Hill																		
F00	R2	Unknown	W2 ↘	28.3	27.4	N/A	N/A											
		Unknown	W3 Hz	51.0	51.0	N/A	N/A	99%	99%	0.00	1.00	62.3	58.58	N/A	N/A	17.3	13.58	N/A
F01	R1	Unknown	W1 ↘	34.5	33.5	N/A	N/A	96%	96%	0.00	1.00	60.46	58.16	N/A	N/A	19.46	17.16	N/A
	R2	Unknown	W2 ↘	29.5	28.7	N/A	N/A	98%	98%	0.00	1.00	53.2	52.03	N/A	N/A	18.2	17.03	N/A
F02	R1	Unknown	W1 ↘	34.9	34.3	N/A	N/A	99%	99%	0.00	1.00	60.27	58.27	N/A	N/A	21.27	19.27	N/A
	R2	Unknown	W2 ↘	35.4	34.6	N/A	N/A	96%	96%	0.00	1.00	57.86	56.86	N/A	N/A	20.86	19.86	N/A
113 North Hill																		
F00	R1	Unknown	W1 ↘	30.7	29.5	N/A	N/A	100%	100%	0.02	1.00	53.36	47.25	N/A	N/A	12.7	6.596	N/A
F01	R1	Unknown	W1 ↘	27.1	26.7	0.4	0.98	97%	97%	0.00	1.00	41.44	40.89	N/A	N/A	7.443	6.89	N/A
	R2	Unknown	W2 ↘	34.7	33.7	N/A	N/A	95%	95%	0.00	1.00	57.44	58.14	N/A	1.01	15.44	16.14	1.04
F02	R1	Unknown	W1 ↘	34.7	33.4	N/A	N/A	97%	97%	0.00	1.00	54.6	53.6	N/A	N/A	18.6	17.6	N/A
	R2	Unknown	W2 ↘	35.2	34.2	N/A	N/A	95%	95%	0.00	1.00	55.47	55.47	N/A	N/A	18.47	18.47	N/A
111 North Hill																		
F00	R1	Unknown	W1 ↘	21.8	21.7	0.1	0.99											
		Unknown	W2 Inc	28.9	28.9	N/A	N/A											
		Unknown	W3 Inc	55.4	55.4	N/A	N/A	99%	99%	0.00	1.00	43	43	N/A	N/A	8.453	8.453	N/A
F01	R1	Unknown	W1 ↘	24.1	24.1	0.1	1.00	97%	97%	0.00	1.00	28.36	28.36	N/A	N/A	3.357	3.357	1.00
	R2	Unknown	W2 ↘	28.4	24.9	3.4	0.88											
		Unknown	W3 ↘	29.2	26.3	2.9	0.90	99%	99%	0.03	1.00	49.59	41.87	N/A	N/A	14.49	7.765	N/A
F02	R1	Unknown	W1 ↘	33.7	33.4	N/A	N/A	98%	98%	0.00	1.00	53.6	54.6	N/A	1.02	12.6	13.6	1.08
	R2	Unknown	W2 ↘	35.4	32.6	N/A	N/A											

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
		Unknown	W3 Hz	85.9	86.8	N/A	1.01	100%	100%	0.00	1.00	73.41	74.86	N/A	1.02	17.41	14.86	N/A
F03	R1	Unknown	W1 ↙	35.2	33.7	N/A	N/A	86%	80%	0.42	0.94	56.31	56.31	N/A	N/A	17.31	16.31	N/A
109 North Hill																		
F00	R1	Unknown	W1 ↙	22.2	19.0	3.2	0.86	99%	98%	0.15	0.99	36.88	24.77	12.11	0.67	5.016	1.91	0.38
	R3	Kitchen	W5 Hz	26.3	27.0	-0.6	1.02	82%	82%	0.00	1.00	14	14	0	1.00	0	0	N/A
F02	R2	Bedroom	W2 ↙	31.2	28.8	N/A	N/A	96%	96%	0.00	1.00	46.41	43.86	N/A	N/A	9.412	5.859	N/A
30 Highcroft																		
F00	R1	Living Room	W1 ↙	25.1	25.2	-0.1	1.00	99%	99%	0.00	1.00	45	45	N/A	N/A	17	17	N/A
	R2	Bedroom	W2 ↙	25.1	25.1	0.0	1.00	100%	100%	0.00	1.00	47	47	N/A	N/A	18	18	N/A
	R3	Living Room	W3 ↙	28.2	28.2	N/A	N/A	98%	98%	0.00	1.00	51	50	N/A	N/A	19	18	N/A
	R5	Bedroom	W14 ↙	27.1	27.1	N/A	N/A	99%	99%	0.00	1.00	50	49	N/A	N/A	18	17	N/A
	R6	Unknown	W15 ↙	27.2	27.1	N/A	N/A	99%	99%	0.00	1.00	51	50	N/A	N/A	19	18	N/A
	R7	Unknown	W16 ↙	27.3	27.1	N/A	N/A	92%	92%	0.00	1.00	52	51	N/A	N/A	20	19	N/A
	R8	Unknown	W17 ↙	28.3	28.2	N/A	N/A	100%	100%	0.00	1.00	50	49	N/A	N/A	19	18	N/A
	R9	Living Room	W18 ↙	26.9	26.8	0.1	1.00	98%	98%	0.00	1.00	49	49	N/A	N/A	19	18	N/A
	R10	Living Room	W19 ↙	26.9	26.8	0.1	1.00	98%	98%	0.00	1.00	51	50	N/A	N/A	20	19	N/A
	R11	Bedroom	W20 ↙	27.0	26.9	0.1	1.00	98%	98%	0.00	1.00	51	51	N/A	N/A	20	20	N/A
	R12	Unknown	W21 ↙	29.2	29.1	N/A	N/A	100%	100%	0.00	1.00	53	53	N/A	N/A	21	21	N/A
	R14	Kitchen	W23 ↓	28.0	28.0	N/A	N/A	95%	95%	0.00	1.00	57	56	N/A	N/A	25	25	N/A
	R16	Kitchen	W35 ↓	27.5	27.5	N/A	N/A	94%	94%	0.00	1.00	62	62	N/A	N/A	24	24	N/A
F01	R1	Living Room	W1 ↙	27.3	27.3	N/A	N/A											
		Living Room	W2 ↙	29.9	29.9	N/A	N/A	100%	100%	0.00	1.00	51.55	52.55	N/A	1.02	19.55	20.55	1.05
	R2	Bedroom	W3 ↙	26.2	26.1	0.0	1.00	100%	100%	0.00	1.00	48	48	N/A	N/A	18	18	N/A
	R3	Living Room	W4 ↙	36.2	36.1	N/A	N/A	95%	95%	0.00	1.00	65	65	N/A	N/A	23	23	N/A
	R4	Living Room	W5 ↙	26.4	26.3	0.1	1.00											
		Living Room	W6 ↙	29.7	29.6	N/A	N/A	98%	98%	0.00	1.00	52	52	N/A	N/A	20	20	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m ²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
	R5	Bedroom	W7 ↙	26.1	25.9	0.2	0.99	99%	99%	0.00	1.00	48	48	N/A	N/A	19	19	N/A
	R6	Unknown	W8 ↙	26.2	26.0	0.2	0.99	99%	99%	0.00	1.00	48	48	N/A	N/A	19	19	N/A
	R7	Unknown	W9 ↙	26.8	26.6	0.2	0.99	90%	90%	0.00	1.00	51	51	N/A	N/A	19	19	N/A
	R8	Bedroom	W10 ↙	36.3	36.1	N/A	N/A	100%	100%	0.00	1.00	64	65	N/A	1.02	23	23	N/A
	R9	Living Room	W11 ↙	26.8	26.6	0.2	0.99											
		Living Room	W12 ↙	30.0	29.9	N/A	N/A	98%	98%	0.00	1.00	52	53	N/A	1.02	21	21	N/A
	R10	Living Room	W13 ↙	26.5	26.3	0.1	1.00											
		Living Room	W14 ↙	29.9	29.8	N/A	N/A	98%	98%	0.00	1.00	53	52	N/A	N/A	21	21	N/A
	R11	Bedroom	W15 ↙	26.6	26.6	0.1	1.00	98%	98%	0.00	1.00	48	47	N/A	N/A	19	19	N/A
	R12	Bedroom	W16 ↙	36.4	36.3	N/A	N/A	100%	100%	0.00	1.00	64	64	N/A	N/A	22	22	N/A
	R14	Kitchen	W18 ↓	33.9	33.9	N/A	N/A	95%	95%	0.00	1.00	69	69	N/A	N/A	27	27	N/A
	R15	Living Room	W19 ↓	26.9	26.9	0.0	1.00	100%	100%	0.00	1.00	64	64	N/A	N/A	27	27	N/A
	R16	Kitchen	W20 ↓	33.7	33.7	N/A	N/A	94%	94%	0.00	1.00	76	76	N/A	N/A	27	27	N/A
F02	R1	Living Room	W1 ↙	28.7	28.6	N/A	N/A											
		Living Room	W2 ↙	31.6	31.6	N/A	N/A	100%	100%	0.00	1.00	54	53	N/A	N/A	22	21	N/A
	R2	Bedroom	W3 ↙	27.5	27.4	N/A	N/A	100%	100%	0.00	1.00	48	47	N/A	N/A	19	18	N/A
	R3	Living Room	W4 ↙	37.8	37.7	N/A	N/A	95%	95%	0.00	1.00	65	65	N/A	N/A	23	23	N/A
	R4	Living Room	W5 ↙	27.7	27.6	N/A	N/A											
		Living Room	W6 ↙	31.3	31.2	N/A	N/A	98%	98%	0.00	1.00	54	53	N/A	N/A	22	21	N/A
	R5	Bedroom	W7 ↙	27.4	27.2	N/A	N/A	99%	99%	0.00	1.00	49	48	N/A	N/A	20	19	N/A
	R6	Unknown	W8 ↙	27.5	27.3	N/A	N/A	99%	99%	0.00	1.00	49	49	N/A	N/A	20	20	N/A
	R7	Unknown	W9 ↙	28.1	27.9	N/A	N/A	90%	90%	0.00	1.00	52	52	N/A	N/A	20	20	N/A
	R8	Bedroom	W10 ↙	37.9	37.7	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R9	Living Room	W11 ↙	28.1	27.9	N/A	N/A											
		Living Room	W12 ↙	31.6	31.5	N/A	N/A	98%	98%	0.00	1.00	54	54	N/A	N/A	22	22	N/A
	R10	Living Room	W13 ↙	27.7	27.6	N/A	N/A											
		Living Room	W14 ↙	31.6	31.4	N/A	N/A	98%	98%	0.00	1.00	54	54	N/A	N/A	22	22	N/A
	R11	Bedroom	W15 ↙	27.9	27.8	N/A	N/A	98%	98%	0.00	1.00	50	50	N/A	N/A	21	21	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex	Exis.	Prop.	Pro./Ex
	R12	Bedroom	W16 ↙	37.9	37.8	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R14	Kitchen	W18 ↓	35.6	35.6	N/A	N/A	95%	95%	0.00	1.00	71	71	N/A	N/A	29	29	N/A
	R15	Living Room	W19 ↓	29.2	29.1	N/A	N/A											
		Living Room	W20 ↓	32.7	32.7	N/A	N/A	100%	100%	0.00	1.00	84	84	N/A	N/A	29	29	N/A
	R16	Kitchen	W21 ↓	35.4	35.4	N/A	N/A	94%	94%	0.00	1.00	79	79	N/A	N/A	29	29	N/A
F03	R1	Living Room	W1 ↙	38.8	38.7	N/A	N/A											
		Living Room	W2 ↙	38.7	38.6	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R2	Bedroom	W3 ↙	37.9	37.8	N/A	N/A	100%	100%	0.00	1.00	57	58	N/A	1.02	19	20	1.05
	R3	Living Room	W4 ↙	38.8	38.8	N/A	N/A	95%	95%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R4	Living Room	W5 ↙	38.2	38.1	N/A	N/A											
		Living Room	W6 ↙	38.6	38.5	N/A	N/A	98%	98%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R5	Bedroom	W7 ↙	38.8	38.7	N/A	N/A	99%	99%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R6	Unknown	W8 ↙	38.5	38.4	N/A	N/A	99%	99%	0.00	1.00	62	62	N/A	N/A	21	21	N/A
	R7	Unknown	W9 ↙	37.9	37.8	N/A	N/A	90%	90%	0.00	1.00	58	58	N/A	N/A	20	20	N/A
	R8	Bedroom	W10 ↙	38.9	38.7	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R9	Living Room	W11 ↙	38.3	38.2	N/A	N/A											
		Living Room	W12 ↙	38.6	38.5	N/A	N/A	98%	98%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R10	Living Room	W13 ↙	38.9	38.8	N/A	N/A											
		Living Room	W14 ↙	38.8	38.7	N/A	N/A	98%	98%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R11	Bedroom	W15 ↙	38.5	38.4	N/A	N/A	99%	99%	0.00	1.00	61	61	N/A	N/A	21	21	N/A
	R12	Bedroom	W16 ↙	38.8	38.7	N/A	N/A	100%	100%	0.00	1.00	66	66	N/A	N/A	24	24	N/A
	R14	Kitchen	W18 ↓	38.7	38.6	N/A	N/A	96%	96%	0.00	1.00	85	85	N/A	N/A	30	30	N/A
	R15	Living Room	W19 ↓	38.7	38.7	N/A	N/A											
		Living Room	W20 ↓	38.6	38.6	N/A	N/A	100%	100%	0.00	1.00	86	86	N/A	N/A	30	30	N/A
	R16	Kitchen	W21 ↓	38.7	38.6	N/A	N/A	94%	94%	0.00	1.00	86	86	N/A	N/A	30	30	N/A
F04	R2	Unknown	W3 ↙	29.6	29.6	N/A	N/A											
		Unknown	W4 ↙	24.9	24.9	0.0	1.00	83%	83%	0.00	1.00	60	60	N/A	N/A	24	24	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
1-3 Wetherley Court																		
B00	R1	Kitchen	W1 ↙	4.2	4.2	0.0	1.00											
		Kitchen	W2 ↙	13.5	13.5	0.0	1.00	97%	97%	0.00	1.00	25	25	N/A	N/A	4	4	1.00
F00	R1	Reception Room	W1 ↗	32.1	32.1	N/A	N/A											
		Reception Room	W2 ↖	26.2	25.9	0.3	0.99	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Study	W7 ↖	27.0	25.3	1.7	0.94											
		Study	W8 ↙	32.4	32.0	N/A	N/A	98%	98%	0.01	1.00	59.31	59	N/A	N/A	21	21	N/A
	R4	Unknown	W9 ↙	23.1	23.0	0.0	1.00	83%	83%	0.00	1.00	50	50	N/A	N/A	18	18	N/A
	R5	Living Room	W10 ↙	29.7	29.6	N/A	N/A											
		Living Room	W11 ↙	30.3	30.0	N/A	N/A	98%	98%	0.00	1.00	57	56	N/A	N/A	18	18	N/A
	R7	Bedroom	W13 ↙	34.4	34.0	N/A	N/A	98%	98%	0.00	1.00	65	64	N/A	N/A	23	23	N/A
F01	R3	Bedroom	W3 ↖	29.6	27.7	N/A	N/A	89%	83%	0.84	0.93	North	North	N/A	N/A	North	North	N/A
	R5	Unknown	W5 ↙	31.3	30.9	N/A	N/A											
		Unknown	W6 ↙	31.4	31.0	N/A	N/A	99%	99%	0.00	1.00	57	57	N/A	N/A	19	19	N/A
	R7	Unknown	W8 ↙	34.3	33.7	N/A	N/A	98%	98%	0.00	1.00	59	58	N/A	N/A	23	22	N/A
F02	R1	Bedroom	W1 ↗	32.1	32.1	N/A	N/A											
		Bedroom	W2 ↖	32.8	31.8	N/A	N/A	76%	75%	0.26	0.99	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W4 Inc	76.4	75.3	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W5 ↙	33.4	32.7	N/A	N/A	94%	94%	0.00	1.00	59	59	N/A	N/A	24	24	N/A
	R5	Unknown	W6 ↙	34.9	34.1	N/A	N/A											
		Unknown	W7 ↙	35.0	34.2	N/A	N/A	98%	98%	0.00	1.00	60	60	N/A	N/A	24	24	N/A
	R6	Unknown	W8 ↙	33.8	33.1	N/A	N/A	94%	94%	0.00	1.00	56	56	N/A	N/A	19	19	N/A
1A View Road																		
F00	R3	Kitchen	W4 ↖	26.7	22.2	4.6	0.83											
		Kitchen	W5 ↙	15.3	12.2	3.1	0.80											
		Kitchen	W6 Inc	62.0	58.1	N/A	N/A											
		Kitchen	W7 ↖	28.0	23.7	4.3	0.85											

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
		Kitchen	W12 ↗	22.8	22.8	0.0	1.00	98%	90%	3.61	0.92	40	37	N/A	N/A	4	4	1.00
	R4	Dining Room	W8 ↖	27.1	22.4	4.7	0.83	97%	70%	5.21	0.72	North	North	N/A	N/A	North	North	N/A
	R5	Living Room	W9 ↙	20.7	16.8	3.9	0.81											
		Living Room	W10 ↘	32.7	32.9	N/A	1.00	100%	100%	-0.01	1.00	82	77	N/A	N/A	24	25	1.04
F01	R1	Kitchen	W1 Inc	65.3	61.5	N/A	N/A	100%	99%	0.12	0.99	North	North	N/A	N/A	North	North	N/A
	R3	Bedroom	W3 ↗	28.9	28.4	N/A	N/A	85%	84%	0.22	0.98	North	North	N/A	N/A	North	North	N/A
	R6	Dressing	W6 ↖	31.0	26.2	4.8	0.85	99%	84%	2.46	0.85	North	North	N/A	N/A	North	North	N/A
99 View Hill																		
F00	R1	Unknown	W1 ↙	27.3	27.1	N/A	N/A											
		Unknown	W7 ↗	33.5	33.5	N/A	N/A											
		Unknown	W8 ↗	34.6	34.6	N/A	N/A	100%	100%	0.00	1.00	70	70	N/A	N/A	9	9	N/A
	R2	Unknown	W2 ↙	32.5	32.2	N/A	N/A											
		Unknown	W3 ↖	33.5	33.2	N/A	N/A	100%	100%	0.00	1.00	55	55	N/A	N/A	13	13	N/A
	R3	Unknown	W4 ↖	33.4	33.2	N/A	N/A											
		Unknown	W5 ↖	33.5	33.3	N/A	N/A	89%	89%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W6 ↖	33.9	33.8	N/A	N/A	86%	86%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Unknown	W1 ↙	30.2	29.8	N/A	N/A	100%	100%	0.00	1.00	50	50	N/A	N/A	14	14	N/A
	R2	Unknown	W2 ↙	31.9	31.6	N/A	N/A											
		Unknown	W3 ↖	32.0	31.7	N/A	N/A	100%	100%	0.00	1.00	56	56	N/A	N/A	20	20	N/A
	R3	Unknown	W4 ↖	32.0	31.8	N/A	N/A	96%	96%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W5 ↖	32.1	31.9	N/A	N/A											
		Unknown	W6 ↗	32.2	32.2	N/A	N/A	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
2 View Road																		
F00	R1	Living Room	W1 ←	29.5	28.9	N/A	N/A											

Existing V1 Proposed

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
F01	R1	Bedroom	W1 ↖	35.8	35.3	N/A	N/A											
		Bedroom	W2 ↖	35.8	35.2	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Bedroom	W3 ↖	30.3	29.7	N/A	N/A	95%	95%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Dressing	W6 ↖	14.9	14.8	0.0	1.00	33%	33%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
4 View Road																		
F00	R1	Living Room	W1 ←	30.0	29.2	N/A	N/A											
		Living Room	W2 ↖	35.3	34.5	N/A	N/A											
		Living Room	W3 ↑	28.5	28.3	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Bedroom	W1 ↖	36.1	35.4	N/A	N/A											
		Bedroom	W2 ↖	36.1	35.4	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Bedroom	W3 ↖	30.2	29.6	N/A	N/A											
		Bedroom	W4 ↗	19.6	19.6	0.0	1.00	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Bedroom	W6 ↖	15.3	15.2	0.1	1.00	47%	47%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
6 View Road																		
F00	R1	Unknown	W1 ↑	29.9	29.5	N/A	N/A											
		Unknown	W2 ↑	34.4	33.7	N/A	N/A											
		Unknown	W3 ↖	35.5	34.6	N/A	N/A											
		Unknown	W4 ↖	33.4	32.4	N/A	N/A											
		Unknown	W5 ←	24.5	23.7	0.8	0.97	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Unknown	W6 ↑	25.2	24.7	0.5	0.98											
		Unknown	W7 ↑	33.2	32.4	N/A	N/A											
		Unknown	W8 ↖	35.5	34.5	N/A	N/A											
		Unknown	W9 ↖	34.5	33.4	N/A	N/A											
		Unknown	W10 ←	28.4	27.5	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Unknown	W1 ↖	35.8	34.9	N/A	N/A											
		Unknown	W2 ↖	35.8	34.9	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
	R2	Unknown	W3 ↖	35.8	34.9	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W4 ↖	35.6	34.6	N/A	N/A											
		Unknown	W5 ↖	35.6	34.6	N/A	N/A	98%	98%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
3 View Road																		
F00	R1	Unknown	W1 ↗	18.3	15.5	2.8	0.85											
		Unknown	W2 ↖	36.0	33.8	N/A	N/A											
		Unknown	W3 ↖	36.3	35.0	N/A	N/A											
		Unknown	W4 ↖	36.5	35.6	N/A	N/A	100%	100%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
F01	R1	Unknown	W1 ↖	35.8	34.2	N/A	N/A	91%	87%	0.61	0.96	North	North	N/A	N/A	North	North	N/A
F02	R1	Unknown	W1 ↗	35.7	34.3	N/A	N/A											
		Unknown	W2 ↗	35.8	34.4	N/A	N/A	96%	96%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
1-3 Grange Road																		
F00	R1	Unknown	W1 ↗	8.3	8.3	0.0	1.00											
		Unknown	W2 ↗	2.9	2.9	0.0	1.00											
		Unknown	W3 ↗	20.0	19.9	0.1	1.00	87%	87%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Unknown	W4 ↖	33.8	32.8	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W7 ↗	0.7	0.6	0.1	0.87											
		Unknown	W8 ↖	33.8	32.7	N/A	N/A	99%	99%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W9 ↖	35.6	34.6	N/A	N/A											
		Unknown	W10 ←	30.7	30.4	N/A	N/A											
		Unknown	W11 ↘	32.3	32.2	N/A	N/A											
		Unknown	W12 ↓	27.8	27.8	N/A	N/A	100%	100%	0.00	1.00	64	64	N/A	N/A	21	21	N/A
F01	R1	Unknown	W1 ↗	28.6	28.5	N/A	N/A	87%	87%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Unknown	W2 ↖	35.2	34.1	N/A	N/A	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W3 ↖	34.1	32.9	N/A	N/A	93%	93%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R4	Unknown	W4 ↖	35.2	34.1	N/A	N/A	98%	98%	0.00	1.00	North	North	N/A	N/A	North	North	N/A

Existing V Proposed

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
	R5	Unknown	W5 ↖	35.1	34.1	N/A	N/A	97%	97%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R6	Unknown	W6 ↘	34.9	34.8	N/A	N/A	94%	94%	0.00	1.00	64	64	N/A	N/A	22	22	N/A
F02	R1	Unknown	W1 ↗	30.1	30.1	N/A	N/A											
		Unknown	W2 ↖	36.4	35.5	N/A	N/A	95%	95%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R2	Unknown	W3 ↖	36.4	35.5	N/A	N/A	96%	96%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
	R3	Unknown	W4 ↖	36.4	35.5	N/A	N/A											
		Unknown	W5 ↘	33.1	33.1	N/A	N/A	96%	96%	0.00	1.00	58	58	N/A	N/A	22	22	N/A
32 Yeatman Rd																		
F00	R1	KD	W1 ↘	21.6	20.1	1.5	0.93											
		KD	W2 Hz	76.1	75.7	N/A	N/A	100%	93%	2.02	0.93	70.45	69.35	N/A	N/A	17.04	16.48	N/A
F01	R2	Bedroom	W2 ↘	26.2	25.2	1.0	0.96	96%	96%	0.00	1.00	57.14	56.59	N/A	N/A	15.07	14.52	N/A
34 Yeatman Rd																		
F00	R1	KD	W1 ↘	6.0	4.3	1.7	0.72											
		KD	W2 ↘	9.2	7.5	1.7	0.81	90%	89%	0.11	0.99	20.55	19.39	1.165	0.94	9.106	8.247	N/A
F01	R1	Bedroom	W1 ↘	20.9	19.6	1.3	0.94	95%	95%	0.00	1.00	51.85	51.24	N/A	N/A	16.92	16.61	N/A
36 Yeatman Rd																		
F00	R1	KD	W1 ↘	22.6	20.6	2.0	0.91											
		KD	W2 ↘	23.4	21.4	2.0	0.92	96%	96%	0.00	1.00	52.48	49.96	N/A	N/A	14.62	12.41	N/A
F01	R1	Bedroom	W2 ↘	21.0	19.5	1.5	0.93	95%	94%	0.08	0.99	51.65	51.04	N/A	N/A	17.27	16.66	N/A
38 Yeatman Rd																		
F00	R1	Bedroom	W1 ↘	22.6	20.5	2.1	0.91											
		Bedroom	W2 ↘	23.6	21.5	2.1	0.91	96%	96%	0.00	1.00	55.26	51.99	N/A	N/A	15.47	12.75	N/A
F01	R1	Bedroom	W2 ↘	20.6	19.0	1.5	0.93	95%	95%	0.00	1.00	50.34	48.93	N/A	N/A	16.36	14.95	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
40 Yeatman Rd																		
F00	R1	KD	W1 ↘	15.3	14.1	1.2	0.92											
		KD	W2 ↘	22.2	20.2	2.0	0.91											
		KD	W3 ↘	21.0	19.1	1.9	0.91											
		KD	W4 ↘	18.0	16.4	1.6	0.91	98%	98%	0.00	1.00	53.89	51.37	N/A	N/A	14.72	12.2	N/A
F01	R1	Bedroom	W1 ↘	21.8	20.2	1.6	0.93	95%	95%	0.00	1.00	51.26	48.75	N/A	N/A	13.58	11.06	N/A
42 Yeatman Rd																		
F00	R1	KD	W1 ↘	20.5	18.7	1.8	0.91											
		KD	W2 ↘	22.2	20.1	2.1	0.90											
		KD	W3 ↘	17.9	16.1	1.9	0.90	97%	97%	0.00	1.00	56.79	53.16	N/A	N/A	13.79	10.16	N/A
F01	R1	Bedroom	W2 ↘	21.6	19.9	1.6	0.92	96%	96%	0.00	1.00	51.91	50.13	N/A	N/A	15.08	13.31	N/A
44 Yeatman Rd																		
F00	R1	KD	W1 ↘	21.0	19.3	1.7	0.92											
		KD	W2 ↘	17.2	15.6	1.6	0.91	94%	94%	0.00	1.00	50.94	47.98	N/A	N/A	12.86	9.894	N/A
F01	R1	Bedroom	W1 ↘	17.1	15.4	1.7	0.90	96%	84%	0.90	0.88	43.86	41.89	N/A	N/A	14.68	12.72	N/A
46 Yeatman Rd																		
F00	R1	KD	W1 ↘	5.8	4.1	1.7	0.71											
		KD	W2 ↘	5.0	3.2	1.8	0.65											
		KD	W3 ↘	5.3	3.4	1.9	0.64											
		KD	W4 ↘	6.4	4.6	1.8	0.72	78%	44%	7.17	0.57	26.27	20.99	5.282	0.80	9.271	5.094	N/A
F01	R2	Bedroom	W2 ↘	16.8	15.2	1.6	0.90	96%	81%	1.19	0.84	45.02	41.89	N/A	N/A	13.8	11.23	N/A
F02	R1	Bedroom	W1 ↘	30.4	29.1	N/A	N/A	92%	92%	0.00	1.00	70.78	69.67	N/A	N/A	20.23	19.12	N/A
48 Yeatman Rd																		
F00	R1	KD	W1 ↘	21.2	19.7	1.5	0.93											

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
		KD	W2 ↘	20.6	19.1	1.5	0.93											
		KD	W3 ↘	20.2	18.7	1.6	0.92	96%	96%	0.00	1.00	49.72	48.65	N/A	N/A	8.329	6.259	N/A
F01	R2	Bedroom	W1 ↘	17.0	15.5	1.6	0.91	96%	93%	0.22	0.97	43.4	41.19	N/A	N/A	12.75	10.53	N/A