



32 Lawn Road, Camden

Planning Application by Fairview Estates (Housing) Ltd

Sunlight, Daylight and Overshadowing Report

October 2014 (revised November 2014)






Fairview NEW HOMES Ltd.







DAYLIGHT, SUNLIGHT AND OVERSHADOWING REPORT

32 Lawn Road,
Belsize Park,
London, NW3

27th November, 2014

CHP SURVEYORS LIMITED

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Daylight, Sunlight and Overshadowing Report

Proposed Development

32 Lawn Road,

Belsize Park

London, NW3

Prepared for:-

Fairview Estates (Housing) Ltd,

50 Lancaster Road

Enfield

Middlesex ,EN2 0BY

Prepared by

James M A Crowley

Date

27th November, 2014

Contents

Appendices

This report is solely for the benefit of **Fairview Estates (Housing) Ltd** and the benefit cannot be transferred to any other party without the express written consent of CHP Surveyors Limited.

CHP Surveyors Limited

CHP Surveyors Limited

1.0 Executive Summary

1.1 This report has been prepared by CHP Surveyors Ltd on behalf of Fairview Estates (Housing) Ltd ('Fairview'). It accompanies an application for full planning permission for a residential development at 32 Lawn Road, Camden, NW3 and considers the implications the proposals for the site will have on the daylight and sunlight enjoyed by the neighbouring residential properties.

1.2 To ensure that this assessment has correctly considered the daylight and sunlight enjoyed by the neighbouring residential properties, it has been undertaken in accordance with the Building Research Establishment's publication "*Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice*" (2011) (the "**BRE Guidelines**").

1.3 The standards and tests applied within this assessment are briefly described in Appendix A.

1.4 Our analysis has considered 258 windows within six neighbouring properties. Having worked closely with the architect, over 99% of the windows will achieve or exceed the recommended minimum VSC or ADF for a suburban location contained within the BRE Guidelines. Given the urban, rather than suburban location of the site, this is an exceptional result.

1.5 With regards to the proposed accommodation, our analysis in accordance with the Mayor of London's Housing SPG as well as the BRE Guidelines demonstrates that all the 215 habitable rooms being provided should achieve or exceeded the recommended minimum ADF.

1.6 Due to their orientation the only properties that need to be considered in relation to sunlight are Palgrave House, 90 and 84-88 Upper Park Road. The results of our analysis demonstrate that the numerical values as set out in the BRE Guideline are met or exceeded for 94% of the windows analysed. The few exceptions are within 90 Upper Park Road and Palgrave House which is inevitable due to its design which restricts the access to sunlight, the property is facing close to 90° from due south and already receives low levels of sunlight despite the underdeveloped nature of the site.

1.7 Our analysis of the sunlight that will be enjoyed by the proposed communal amenity space demonstrates that the BRE Guidelines will be achieved.

1.8 A great deal of consideration has gone into the daylight, sunlight and overshadowing of this centrally located site. Taking into account the dense urban location within which the site is located, the under developed nature of the site and that daylight and sunlight is only one of many matters that should be considered as part of a development of a site, it is considered that the aims of the Building Research Establishments publication "*Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice*" (2011) are met as well as Camden's Core Strategy in minimising the potential impact on amenity.

2.0 Instruction

2.1 We have been instructed by Fairview Estates (Housing) Ltd to establish the implications the proposed redevelopment will have upon the daylight and sunlight amenity of the neighbouring residential properties as well as the daylight the proposed accommodation will enjoy.

2.2 This report considers the results of the analysis with reference to the criteria set out in the BRE Guidelines and with reference to Camden's Core Strategy policy CS7 and Development Policy DP26 which indicate that the numerical values contained within the BRE Guidelines, will be applied flexibly.

3.0 Assessment

3.1 To ensure that this assessment has been appropriately considered, daylight and sunlight assessments have been undertaken in accordance with the BRE Guidelines.

3.2 To assist in the understanding of the analysis that has been undertaken as part of this report, a summary of the relevant BRE Guidelines, entitled the "Principles of Daylight and Sunlight", is at Appendix A.

3.3 Within the Core Strategy it is acknowledged that, due to the inner London location, affecting amenity may be unavoidable and where this is not possible appropriate measures are taken to minimise the potential impact.

4.0 Information

4.1 We have made reference to the following information:-

Ordnance Survey
Site Plan

John Pardey Architects
Drawing numbers 1406 **– 1406_210 to 217 and 450 to 455**

CHP Surveyors Limited
Site Photographs and online research

5.0 Proposals

5.1 The proposed development comprises a building of 5-7 storeys containing 73 apartments of mixed size and set within landscaped grounds. This includes a central landscaped courtyard fronting Upper Park Road and gardens along the Lawn Road frontage, with new trees lining the perimeter of the site as indicated on drawing numbers 1696_32, 33, 34 and 35 attached at Appendix B.

5.2 The site is located within the Belsize Park/Gospel Oak area of NW3, between Lawn Road to the west and Upper Park Road to the east, south of the junction with Fleet Road. The site covers approximately 0.25ha and currently contains two existing buildings. These comprise a former car park building, now utilised as seven (part vacant) commercial units with under croft car parking, and a former launderette, most recently used as a community centre.

5.3 Until earlier this year, the London Borough of Camden was the freehold owner of the site. In 2012, the Council decided to sell the site as part of its Community Investment Programme, intended to raise funds for investment in Camden's schools, homes and community facilities through the sale of underutilised Council assets. In March 2014, the Council agreed the sale of the site to Fairview for redevelopment for housing.

5.4 The existing residential buildings adjacent to the site which have windows serving habitable rooms overlooking the site and have been identified for analysis due to their close proximity to the site are set out below. The results for these buildings demonstrates that the proposals will not have a significant effect on the daylight and sunlight of more remote properties.

Adjacent Buildings Summary Table		
Name/Address of Building	**Assumed Use of Building**	**Position in relation to Site**
Du Maurier House	Residential	South West
Crayford House	Residential	West
Palgrave House	Residential	North East
90 Upper Park Road	Residential	East
84-88 Upper Park Road	Residential	South East
Garnett House	Residential	South

6.0 Limitations

6.1 Our assessment is based on the proposed development drawings by John Pardey Architects.

6.2 A site inspection was undertaken to record the location of windows within the neighbouring properties. Our site inspection included an external inspection of the existing site and surrounding buildings. Access was not available to the surrounding properties and so reasonable assumptions have therefore been made as to the internal room sizes, layouts and uses.

6.3 We refer you to the drawings set out in clause 4.1 above for a list of the third party information relied upon which our 3D computer model and resultant analyses are based.

7.0 Methodology

7.1 Based on online research and onsite observations, we have produced a 3D computer model of the neighbouring residential property to the site as set out in the table above. This includes the window locations and internal configuration. We have not had access to the neighbouring properties and therefore the internal configuration and which windows serve habitable rooms has been based on onsite observations and other information we have been

able to obtain. We have then produced a 3D computer model of the existing structures on the site and the proposals.

7.2 Using a specialist computer programme, we have undertaken the analysis set out in the BRE Guidelines, both in the existing situation to provide a base line and following the implementation of the proposals. There is no requirement to consider the implications during the development process as these will only be short term.

7.3 As clearly stated within the BRE Guidelines, the aims are to help designers not constrain them and the numerical values contained within this document should be interpreted flexibly since natural light is only one of many factors in site layout design. It also states that different target levels may be used in such an urban location as we are considering.

7.4 The numerical values contained within the BRE Guidelines, to establish whether the proposals will have a significant effect on the daylight enjoyed by the neighbouring properties, are based initially on a Vertical Sky Component analysis (VSC). It seeks for each window to achieve a VSC of 27% or 0.8 times the existing. These values are for suburban rather than urban locations where it is considered a VSC of 20% is more appropriate.

7.5 In relation to daylight, the BRE Guidelines also set out numerical values for daylight distribution and seeks to ensure that a significant portion, which is considered to mean at least 0.8 times the existing area of each habitable room lies in front of the NSL.

7.6 With regards to sunlight, the BRE Guidelines seek that all windows within 90° of due south achieve 25% of the Average Probable Sunlight Hours (APSH) with at least 5% during the winter months. Where this is not achieved and the difference between the existing and proposed APSH is more than 4%, the BRE Guidelines state that the proposals will not have a noticeable effect on sunlight provided the total APSH, as well as during the winter months, are within 0.8 times the existing.

7.7 The BRE Guidelines also recommends that the level of sunlight amenity space will enjoy is analysed. It states that the level of sunlight enjoyed on the ground is calculated for 21st March with the recommendation being that to appear adequately sunlit throughout the year, at least half of the area should receive at least two hours of sunlight.

8.0 Daylight Assessment

8.1 General

8.1.1 With regard to daylight enjoyed by the neighbouring residential properties, as the proposals will subtend a 25° line drawn from their lowest window, in accordance with the BRE Guidelines we have calculated the Vertical Sky Component (VSC) to all habitable rooms both in the existing and proposed situation. This establishes the amount of daylight currently enjoyed on the face of the window and as a result of the proposed extension.

8.1.2 The BRE Guidelines state that if the VSC calculated at the centre of each window is 27% or more, then enough skylight should be reaching the window. If with implementation of the proposals the window does not achieve 27% VSC but is more than 0.8 times its former value, then the BRE Guidelines state that skylight is unlikely to be seriously affected. It should however be appreciated that these levels relate to an suburban rather urban location and that therefore a VSC of 20% is considered more appropriate in this instance.

8.1.3 In addition to the above, to ensure that the room will achieve good daylight distribution the NSL is plotted. The BRE Guidelines state that for a room to enjoy good daylight distribution a significant area of the room, which is considered to be 80% or at least 0.8 times the existing area should be infront the NSL.

8.1.4 Where the above is not achieved, in accordance with the BRE Guidelines and the Mayor of London's Housing SPG (November 2011), we have calculated the Average Daylight Factor for each habitable room as this a more accurate reflection on the level of daylight each room will enjoy as it takes into account the size of the room and the size of the window serving it. Within these documents they set out the recommended minimum ADF levels depend on the room use with these being 2% for kitchens, 1.5% for living rooms and 1% for bedrooms.

8.2 Du Maurier House

8.2.1 We have considered the forty windows to Du Maurier House that look out over the site and would appear to serve habitable rooms. In accordance with the BRE Guidelines, circulation space, hallways, storeroom, toilets and bathrooms need not be analysed.

8.2.2 The results of our analysis as set out in the table attached at Appendix C, demonstrates that all windows assessed for Vertical Sky Component will achieve either a value of greater than 0.8 times the existing value in accordance with the BRE Guidelines or of greater than 27%.

8.2.3 In relation to daylight distribution, as indicated on drawing number 1696-42 attached at Appendix B by the green contour for the existing NSL and the red contour for the proposed NSL, all rooms except one will have a significant portion of their area in front of the No Sky Line, with the one exception still achieving 72%,

8.2.4 The results of our analysis, taking into account the urban, rather than sub-urban location of the property, demonstrate that the aims of the BRE Guidelines are met.

8.3 Cayford House

8.3.1 We have considered the thirty six windows to Cayford House that look out over the site and serve habitable rooms. In accordance with the BRE Guidelines, circulation space, hallways, storeroom, toilets and bathrooms need not be analysed.

8.3.2 The results of our analysis as set out in the table attached at Appendix C, demonstrates that 35 of the 36 windows will achieve a VSC value of at least 27%, or at least 0.8 times the existing. For the one window that does not achieve the above, it will achieve a VSC of greater than 20% which is considered appropriate for an urban location such as this. In addition, as set out in 8.1.4 above, we have calculated the ADF for each of the rooms served by the aforementioned windows and our analysis demonstrates that the recommended minimum ADF will be achieved.

8.3.3 In relation to daylight distribution, as indicated on drawing number 1696-43 attached at Appendix B by the green contour for the existing NSL and the red for the NSL, all except eight bedrooms will have a significant portion of their area in front of the No Sky Line. The BRE Guidelines however specifically state that whilst bedrooms should be analysed they are less important.

8.3.4 Taking into the urban location of this property, we consider that in relation to this property, the aims of the BRE Guidelines are met.

8.4 Palgrave House

8.4.1 We have considered thirty six windows to Palgrave House that look out over the site and would appear to serve habitable rooms. In accordance with the BRE Guidelines, circulation space, hallways, storeroom, toilets and bathrooms need not be analysed.

8.4.2 The results of our analysis as set out in the table attached at Appendix B, demonstrate that 26 windows will achieve a VSC value of at least 27%, or at least 0.8 times the existing. For the ten windows that do not achieve the above, all except one, will achieve a VSC of greater than 20% which is considered appropriate for an urban location such as this. In addition, as set out in 8.1.4 above, we have calculated the ADF for each of the rooms served by the aforementioned windows. The results of this analysis demonstrates that all rooms, taking into account the nature of the room, will achieve the recommended minimum ADF.

8.4.3 In relation to daylight distribution, as indicated on drawing number 1696-40A attached at Appendix B by the green contour for the existing NSL and the red contour for the proposed NSL all rooms, except twelve bedrooms, which the BRE Guidelines specifically state are less important, will have a significant portion of their area in front of the No Sky Line.

8.4.4 The results of our analysis demonstrates that taking into account the urban location of the site and the configuration of Palgrave House itself, the aims of the BRE Guidelines are met.

8.5 90 Upper Park Road

8.5.1 We have considered the eleven windows to 90 Upper Park Road which would appear to serve habitable rooms that overlook the site. In accordance with the BRE Guidelines, circulation space, hallways, storeroom, toilets and bathrooms need not be analysed.

8.5.2 The results of our analysis as set out in the Appendix C, demonstrates that no windows will achieve a VSC value of at least 27%, or at least 0.8 times the existing. However, our analysis does demonstrate that for all except one window a VSC of greater than 20% will be achieved which, for an urban location such as this, is considered appropriate. In addition, as set out in 8.1.4 above, we have considered the ADF each room will achieve. The results of this analysis demonstrates that, based on our assumption as to room use, the recommended minimum ADF will be achieved in each instance.

8.5.3 In relation to daylight distribution, in relation to daylight distribution, as indicated on drawing number 1696-41A attached at Appendix B by the green contour for the existing NSL and the red contour for the proposed NSL, all except two rooms will have a significant portion of their area in front of the No Sky Line. In relation to the two rooms that do not achieve the above, both will be over 72% which it is considered would not be a noticeable difference.

8.5.4 It is our opinion that in relation to this property the aims of the BRE Guidelines are met.

8.6 84-88 Upper Park Road

8.6.1 We have considered the twenty eight windows to 84-88 Upper Park Road that look out over the site and would appear to serve habitable rooms. In accordance with the BRE Guidelines, circulation space, hallways, storeroom, toilets and bathrooms need not be analysed.

8.6.2 The results of our analysis as set out in the table attached at Appendix C, demonstrates that 16 of the 28 windows assessed for Vertical Sky Component will achieve either a value of greater than 0.8 times the existing value in accordance with the BRE Guidelines or of greater than 27%.

8.6.3 For the twelve windows that do not achieve the above, all except 4 windows at second floor level will achieve a VSC of greater than 20% will be achieved, which, in an urban location, is considered appropriate. . In addition, as set out in 8.1.4. above, we have considered the ADF for each room served by the twelve windows in question and based on our assumption as to room use, all will achieve the recommended minimum ADF.

8.6.4 In relation to daylight distribution, as indicated on drawing number 1696-41A attached at Appendix B by the green contour for the existing NSL and the red contour for the proposed NSL, of the twenty rooms analysed, seventeen rooms will have a significant portion of their area in front of the No Sky Line. Concerning the three rooms that do not achieve the above, all serve bedrooms, which the BRE Guidelines states are less important, and all will have at least 67% in front of the NSL with one achieving 78%.

8.6.5 Taking into account the urban location of the property and the factors set out above, it is considered that the aims of the BRE Guidelines are met.

8.7 Garnett House

8.7.1 We have considered the one hundred and seven windows to Garnett House that look out over the site and would appear to serve habitable rooms. In accordance with the BRE Guidelines, circulation space, hallways, storeroom, toilets and bathrooms need not be analysed.

8.7.2 The results of our analysis as set out in the table attached at Appendix C, demonstrates that 105 of the 107 windows assessed for Vertical Sky Component will achieve either a value of greater than 0.8 times the existing value in accordance with the BRE Guidelines or of greater than 27%.

8.7.3 The two windows that do not achieve the required VSC are located at ground floor level and currently enjoy a VSC below 20%. This demonstrates that even with the site being underdeveloped, for such an urban location, the design of Garnett House restricts the access of light to these windows. The reduction in VSC for each of these windows is below 30% and therefore is considered would not be noticeable.

8.7.4 In relation to daylight distribution, as indicated on drawing number 1696-44A attached at Appendix B by the green contour for the existing NSL and the red contour for the proposed NSL, all rooms will have a significant portion of their area in front of the No Sky Line, except for four ground floor rooms, all of which will enjoy more than 0.6 times the existing area.

8.7.5 Taking into account the urban location and that Garnett House itself restricts access to daylight, we consider that the aims of the BRE Guidelines are met.

8.8 Daylight Analysis for Proposed Accommodation

8.8.1 In accordance with the BRE Guidelines and the Mayor of London's Housing SPG (November 2011), we have calculated the Average Daylight Factor for each habitable room. The recommended minimum ADF levels depend on the room use with these being 2% for kitchens, 1.5% for living rooms and 1% for bedrooms.

8.8.2 Our analysis of the proposed accommodation at ground floor level is set out in the table attached at Appendix C and with reference to drawing number 1696_30 attached at Appendix B.

8.8.3 From the above results we anticipate that of the 215 habitable rooms proposed, all will achieve or exceed the recommended minimum ADF.

9.0 Sunlight Analysis

9.1 General

9.1.1 The BRE Guidelines require that all windows within 90° of due south should be considered. The recommended numerical values set out within the BRE Guidelines are for a window to achieve Annual Probable Sunlight Hours (APSH) of 25%, including at least 5% during the winter months or where the difference in the APSH is more than 4% between the existing and proposed both the total APSH and those enjoyed within the winter months are more than 0.8 times the existing values. The guidelines however also state that bedrooms are less important than living rooms.

9.1.2 The only neighbouring properties facing within 90° of due south are Palgrave House, 90 Upper Park Road, 84-88 Upper Park Road and Garnett House.

9.2 Palgrave House

9.2.1 As set out in the table attached at Appendix D, all except six windows within Palgrave House achieve the BRE Guidelines.

9.2.1 The site is underdeveloped for such an urban location and therefore any appropriate development will have an implication on the level of sunlight enjoyed. In addition the design of Palgrave House itself restricts access to sunlight with the deep balconies, which is demonstrated by the low level of sunlight currently enjoyed, despite the open outlook.

9.2.3 The reduction in sunlight, in view of the above, is considered to be appropriate to meet the aims of the BRE Guidelines.

9.3 90 Upper Park Road

9.3.1 As set out in the table attached at Appendix D, all except two windows achieve the BRE Guidelines in relation to APSH and all except one do in relation to the winter months. In relation to the windows that do not achieve the numerical values, these serve bedrooms, which the BRE Guidelines state are less important. We consider therefore that the aims of the BRE Guidelines are achieved.

9.4 80-84 Upper Park Road

9.4.1 As set out in the table attached at Appendix D, all windows within 80-84 Upper Park Road achieve the BRE Guidelines.

9.5 Garnett House

9.5.1 As set out in the table attached at Appendix D, all windows within Garnett House achieve the BRE Guidelines.

10.0 Overshadowing

10.1 Paragraph 3.3.17 of the BRE Guidelines in relation to amenity space recommends that, for it to appear adequately sunlit throughout the year, at least half of the area should receive at least 2 hours of sunlight on 21st March.

10.2 Drawing numbers 1773-105 to 109 attached at Appendix B show the passage of the shadow over the ground at hourly intervals on 21st March with the results summarised on drawing number 1696_31 attached at Appendix B. This demonstrates that greater than 50% of the proposed communal amenity space will receive at least two hours of sunlight on the 21st March and that therefore the BRE Guidelines are achieved.

11.0 Conclusion

11.1 Our analysis has been of 258 windows serving the habitable rooms within Du Maurier House, Cayford House, Palgrave House, 90 Upper Park Road, 80-84 Upper Park Road and Garnett House. This demonstrates that 99% of the windows will achieve a VSC of at least

20% or 0.8 times the existing value, or the rooms they serve will achieve the recommended minimum ADF.

11.2 With regards to daylight distribution, our analysis demonstrates that, of the 239 rooms analysed, 89% achieve the numerical values within the BRE Guidelines. The majority that do not achieve the BRE Guidelines are bedrooms, which the Guidelines specifically state are less important.

11.3 A sunlight analysis of those windows facing within 90° of due south demonstrates that 93% achieving the recommended APSH and also during the winter months.

11.4 The results of our analysis therefore demonstrate that, taking into account the urban, rather than sub-urban location, and the under developed nature of the site, the aims of the BRE Guidelines are met in relation to the neighbouring properties.

11.5 Our analysis of the proposed accommodation demonstrates that all of the 215 habitable rooms will achieve the recommended minimum ADF as set out in both the BRE Guidelines and the Mayor of London's Housing SPG are achieved. In addition more than 50% of the communal amenity space will enjoy at least 2 hours of sunlight on the 21st March.

11.6 Taking into account the site is within an the urban location and of an under developed, it is considered that the results of our analysis demonstrate that the aims of the Building Research Establishments publications "*Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice"* (2011) are met as well as Camden's Core Strategy.

Appendix A

Principles of Daylight and Sunlight

In 2011 the Building Research Establishment (BRE) published a handbook titled "Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice" to provide advice to building designers on site layout planning in order to achieve good daylight and sunlight amenity to the proposed development, the open spaces between the proposed blocks and the existing surrounding properties.

As stated within the Introduction of this document, the aim of these guidelines 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 application of the BRE Guidelines are suited more to low density suburban development sites where there is a greater flexibility for site layout planning. In dense urban development sites, these are usually constrained often by adjacent buildings and the guidelines state that these should be applied more flexibly in these instances, as contained within the introduction of the BRE Guidelines:- "*The Guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and this document should not be seen as an instrument of planning policy. Its aim is to help rather than constrain the designer. Although it gives numerical guides, these should be interpreted flexibly because natural lighting is only one of many factors in site layout design…*"

It must therefore be appreciated and as can be seen from the above extracts and which is reiterated throughout, the handbook is for guidance only.

Daylight

Daylight assessments should be undertaken to habitable rooms where the occupants can expect to receive a reasonable amount of daylight.

The first assessment is to establish whether the proposals will subtend an angle of 25° from the centre of the window. If it does not, then it is considered there will be good daylight. The BRE Guidelines advise:- "*If any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building, from the centre of a lowest window, subtends an angle of more than 25° to the horizontal may be affected.*"

This assessment is most appropriate for well spaced, low density or low rise, uniform proposed developments. It is not an appropriate assessment for dense urban environments where the existing building on the development site already subtends at an angle greater than 25° to the horizontal from the subject window. It is for this reason that this 25° assessment is generally dispensed with and the more detailed analysis outlined below is undertaken.

- **Vertical Sky Component (VSC)**

  The Vertical Sky Component (VSC) analysis establishes the amount of available daylight received directly from the sky for each individual window. The reference point for the analysis being the centre of the window, on the plane of the outer window wall.

  The VSC is the amount of direct sky a window enjoys, expressed as a percentage of the amount of direct sky a horizontal, unobstructed rooflight would receive.

  The maximum percentage of direct skylight a vertical window can receive is 40%. The BRE have determined that where a VSC of 27% is achieved, then daylight should reach the window of an existing building.

  Where a VSC of less than 27%, is either before the implementation of the proposals enjoyed, or it is enjoyed following the implementation, then the BRE Guidelines

state that provided the new value is greater than 0.8 times the existing value, daylight will not be significantly affected.

- **Daylight Distribution**

The Daylight Distribution analysis is undertaken at working plane level, with this set at 0.85m above floor level of a dwelling.

The BRE Guidelines state that provided a significant area of the room, which is considered to be 80% is in front of the No Sky Line (the point behind which at desk top level no sky is visible) or at least 0.8 times the existing area, then the room will enjoy good daylight distribution.

If in the existing situation this is not the case, the BRE Guidelines state that provided that the area following the implementation of the proposals is at least 0.8 times the existing area, there will not be a significant affect.

Sunlight

This analysis is undertaken in a similar method to calculating VSC. Within residential accommodation the analysis for a sunlight analysis relates to the main windows that are within 90° of due south. It is considered that sunlight to kitchens and bedrooms is less important, although care should be taken not to block out too much.

Within commercial or non-domestic buildings, the use of the building will determine whether a sunlight assessment is required.

In relation to neighbouring residential buildings, if a window is facing within 90° of due south and overlooking any part of the proposals subtends an angle of more than 25° to the horizontal measured from the centre of the window in a vertical section perpendicular to the window, then the sunlight of the existing dwelling may be affected.

- **Annual Probable Sunlight Hours (APSH)**

The 'Probable Sunlight Hours' can be defined as the total number of hours in the year that sun is expected to shine.

The APSH assessment is undertaken to the main window of residential buildings, where the window faces 90° of due south. Within the BRE Guidelines it sets out the criteria for this assessment:-

"*If a living room of an existing dwelling has a main window facing within 90° of due south, and any part of a new development subtends an angle of more than 25° to the horizontal measured from the centre of the window in a vertical section perpendicular to the window, then the sunlighting of the existing dwelling may be adversely effected. This will be the case if a point at the centre of the window, in the plane of the inner window wall, received in the year less than one quarter (25%) of annual probable sunlight hours including at least 5% of annual probable sunlight hours between 21 September and 21 March, and less than 0.8 times its former sunlight hours during either period.*"

In summary, if it does not achieve the specific numerical values, the sunlight to an existing building may be reduced by 20% in either the annual or winter periods before that loss becomes noticeable as a result of a proposed development.

Appendix B

SOURCES

Notes

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PROJECT TITLE
Lawn Road

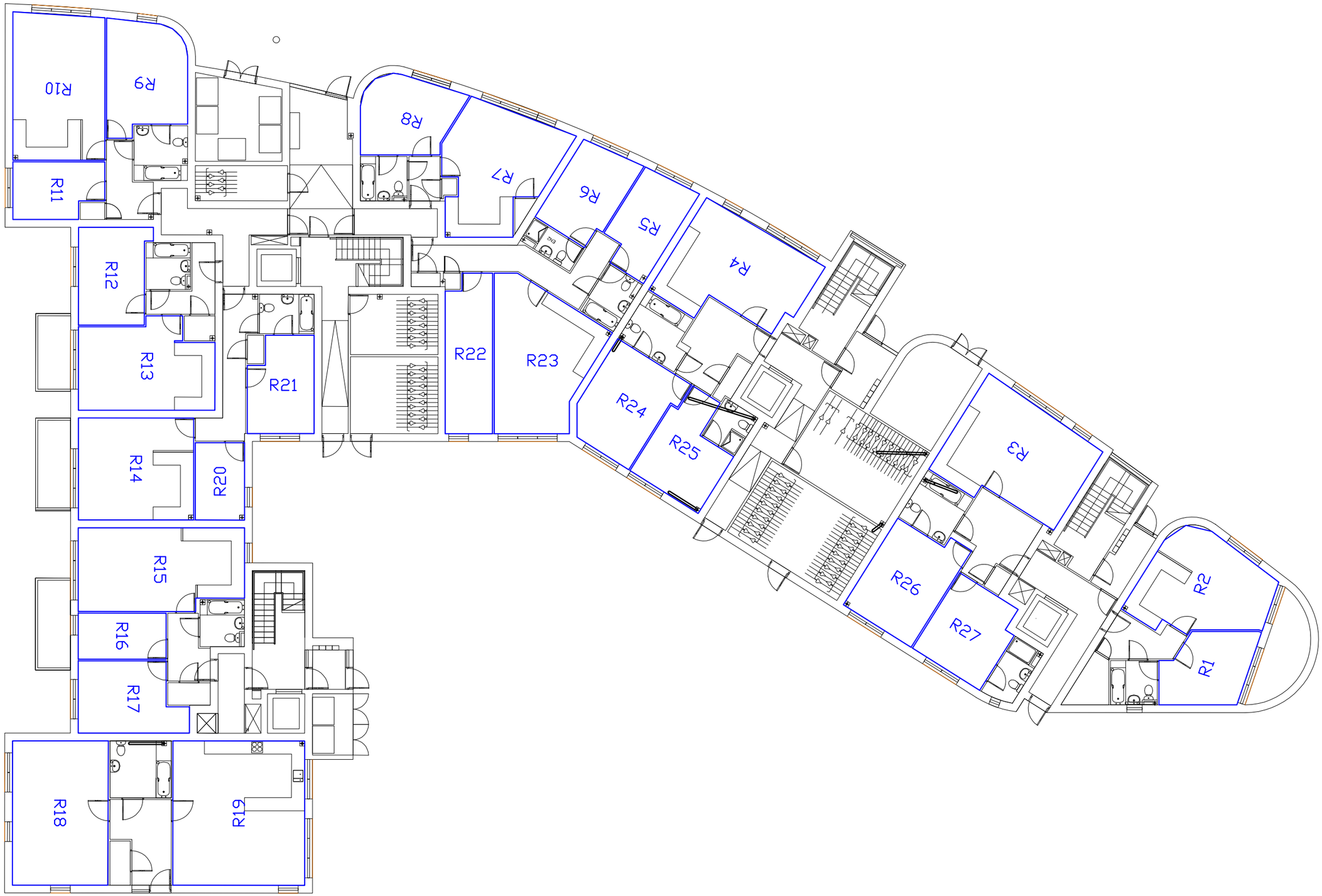
DRAWING TITLE
Window Map

SCALE	DATE	ISSUE
NTS	300914	14

DWG NO	REV
1696_23	-

SOURCES

Notes



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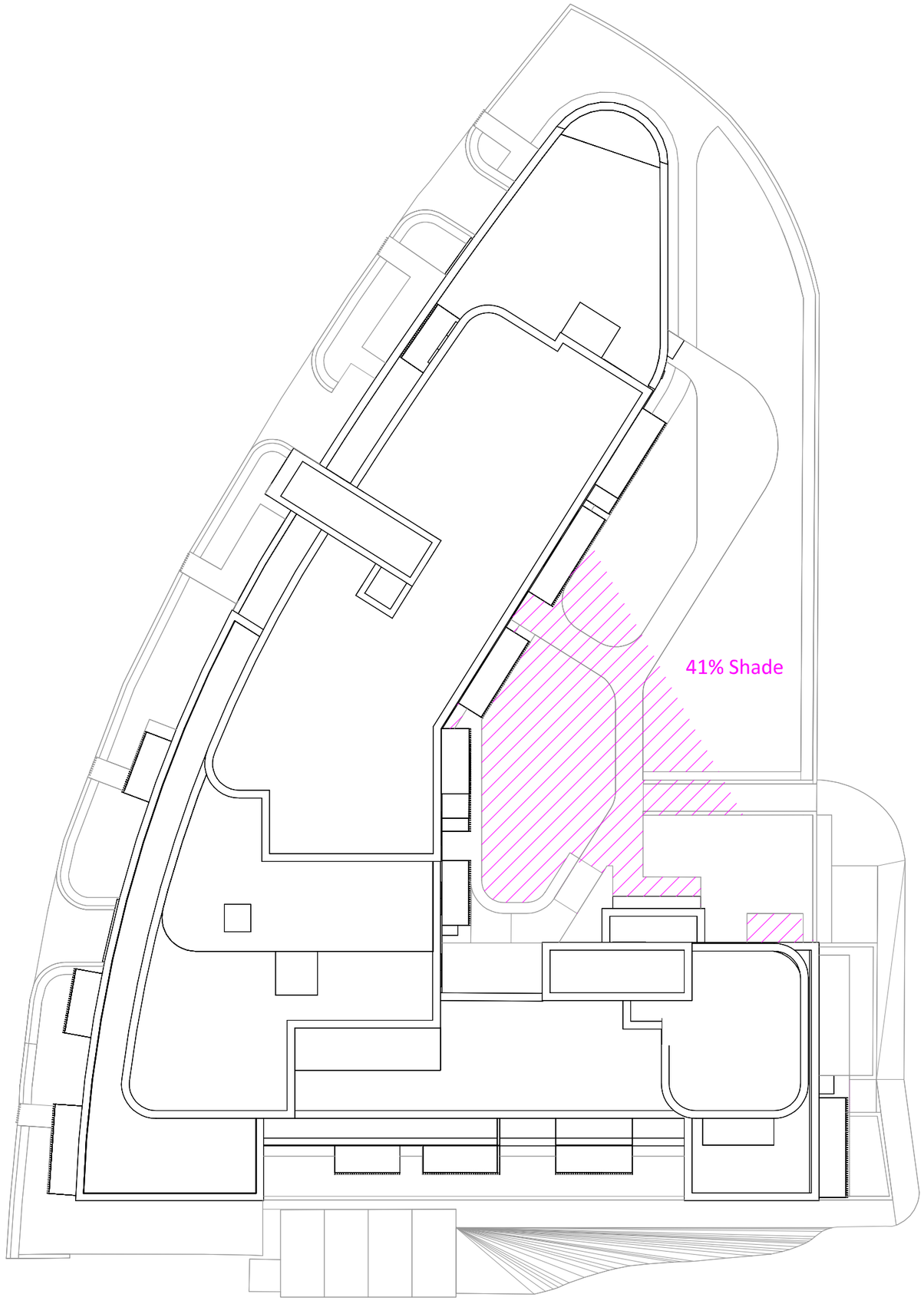
PROJECT TITLE
Lawn Road

DRAWING TITLE
Ground Floor Internal Room Map

SCALE	DATE	ISSUE
NTS	081014	15
DWG NO		REV
1696_30		-



SOURCES

Notes

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PROJECT TITLE
Lawn Road

DRAWING TITLE
2h BRE Shadow Analysis

SCALE	DATE	ISSUE
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DWG NO	REV
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SOURCES

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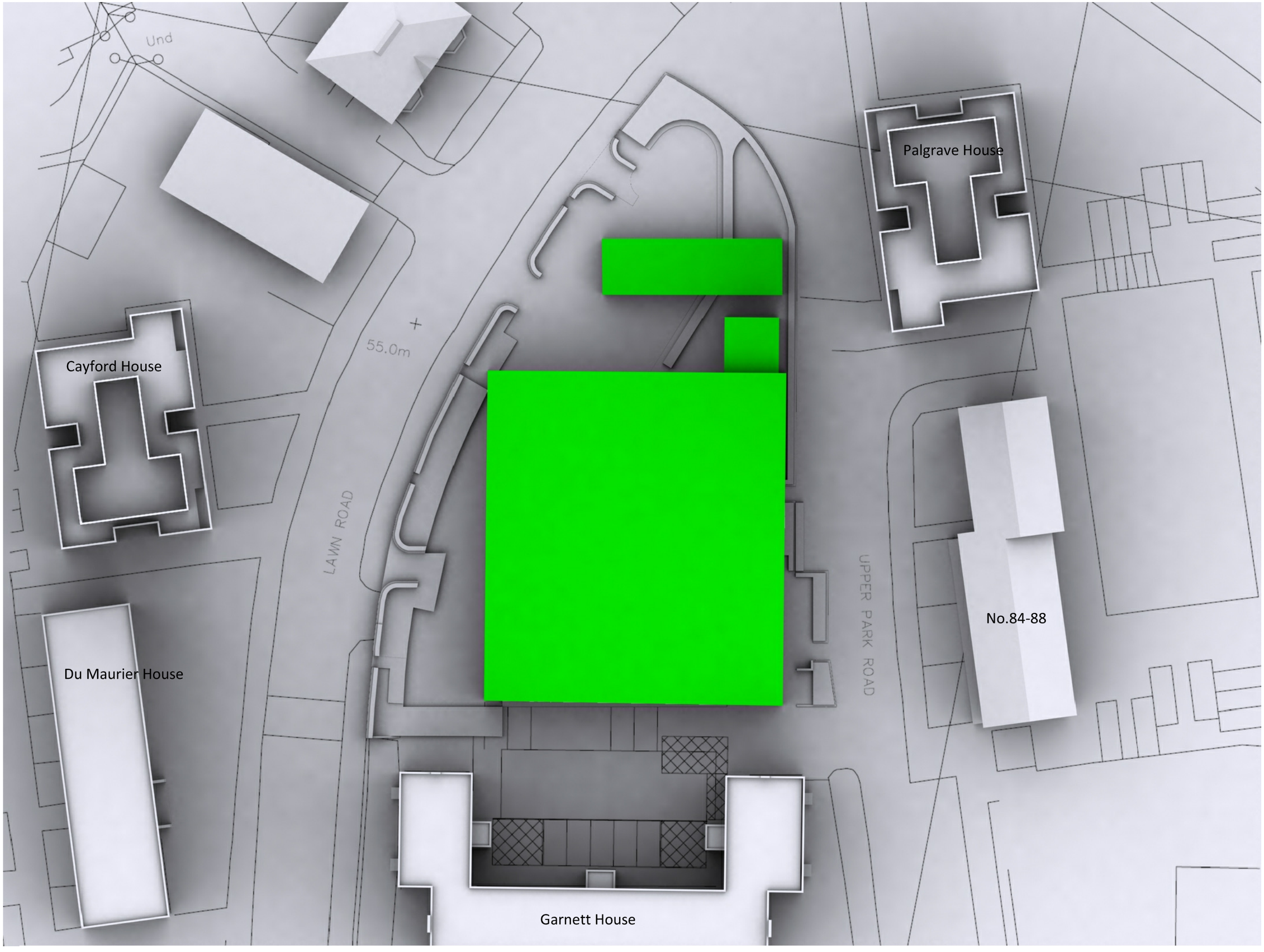

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PROJECT TITLE
Lawn Road

DRAWING TITLE
Plan View Existing

SCALE	DATE	ISSUE
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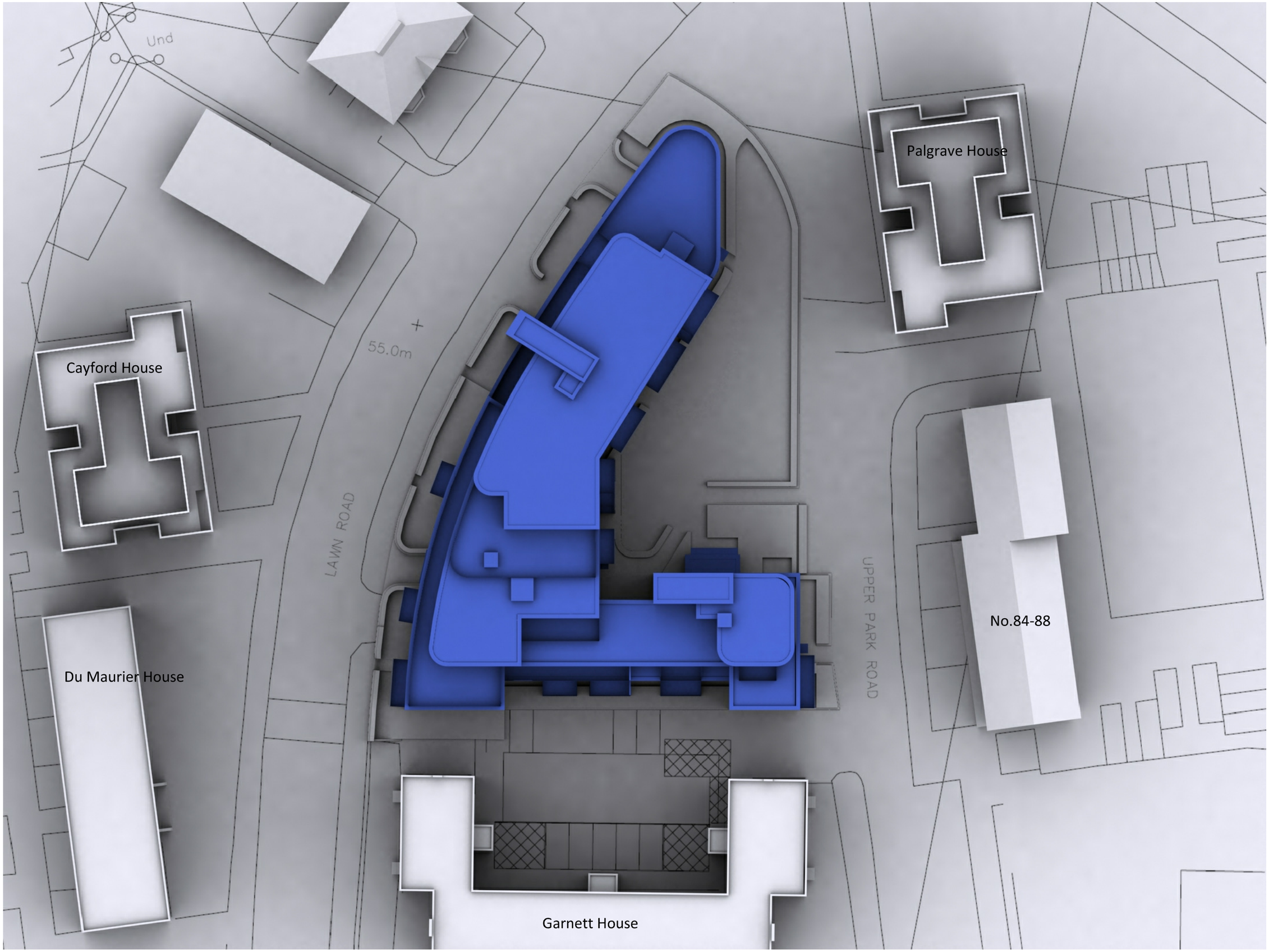
DWG NO		REV
1696_32		-

SOURCES

Notes



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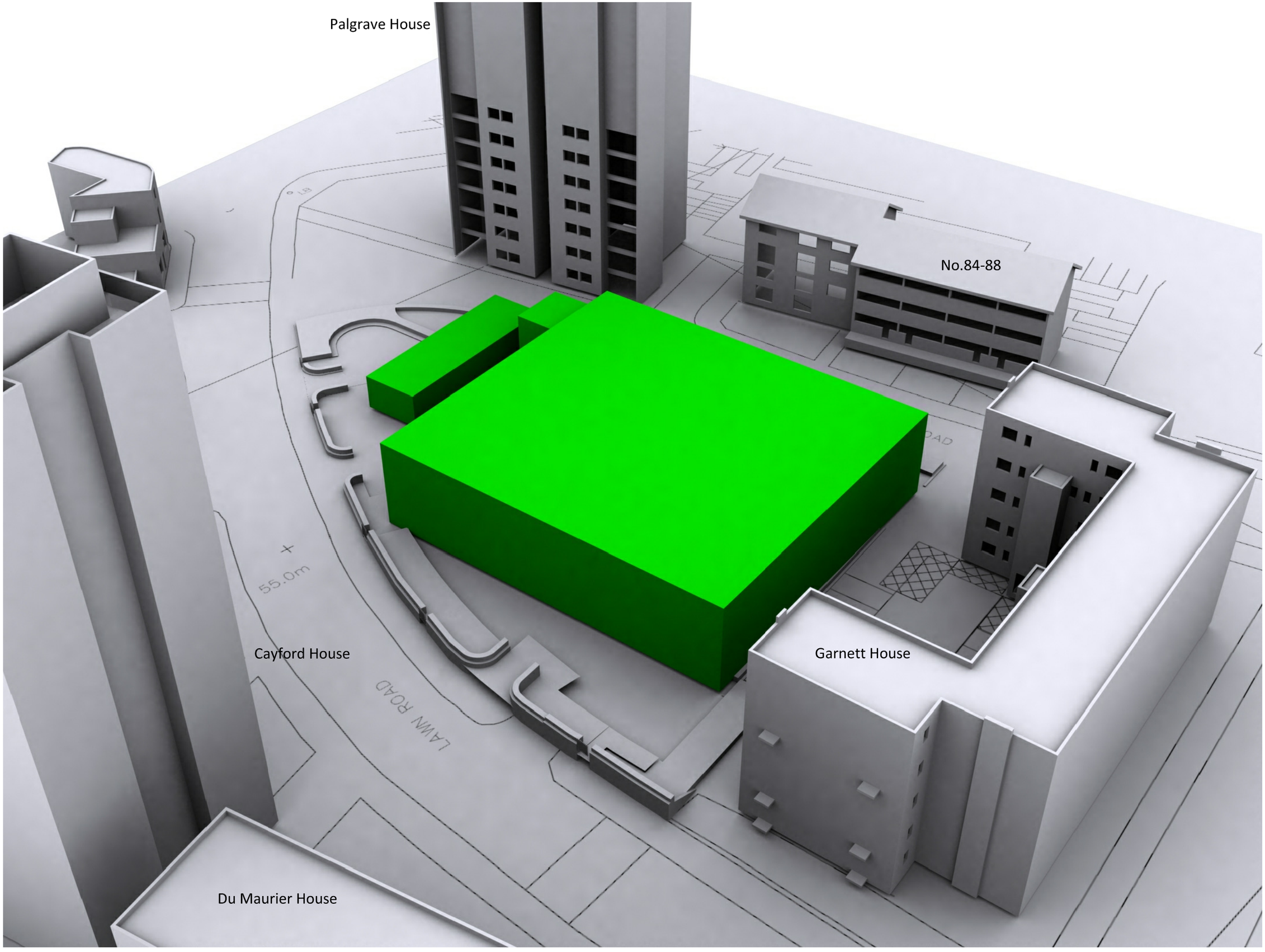
PROJECT TITLE
Lawn Road

DRAWING TITLE
Plan View Proposed

SCALE	DATE	ISSUE
NTS	300914	14
DWG NO		REV
1696_33		-

SOURCES

Notes



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PROJECT TITLE
Lawn Road

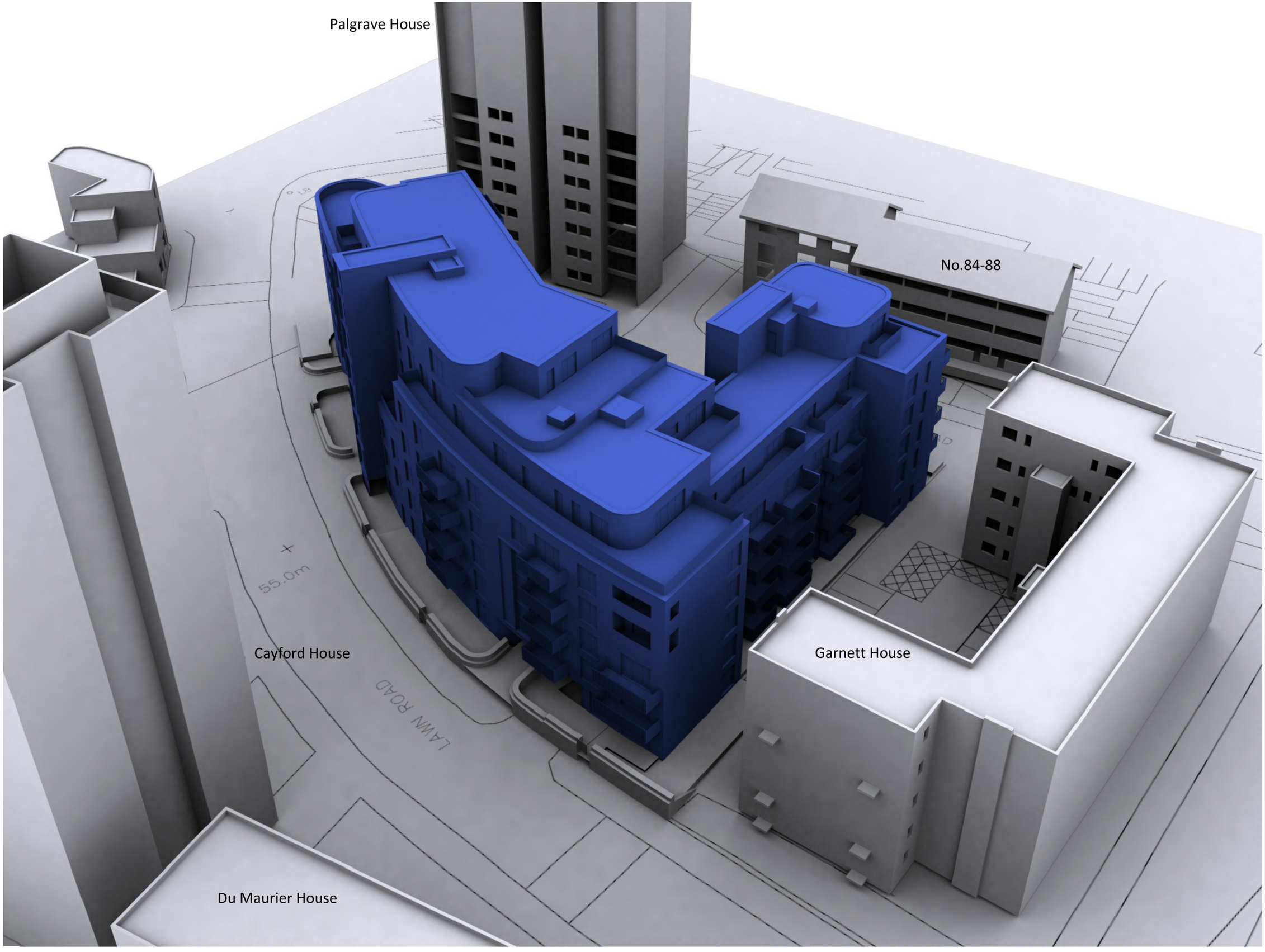
DRAWING TITLE
Perspective View Existing

SCALE	DATE	ISSUE
NTS	300914	14

DWG NO	REV
1696_34	-

SOURCES

Notes



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PROJECT TITLE
Lawn Road

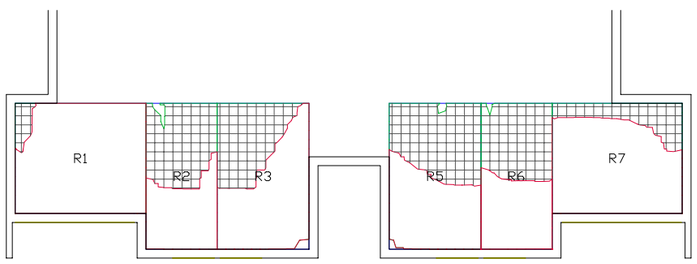
DRAWING TITLE
Perspective View Proposed

SCALE	DATE	ISSUE
NTS	300914	14

DWG NO	REV
1696_35	-

SOURCES

Notes



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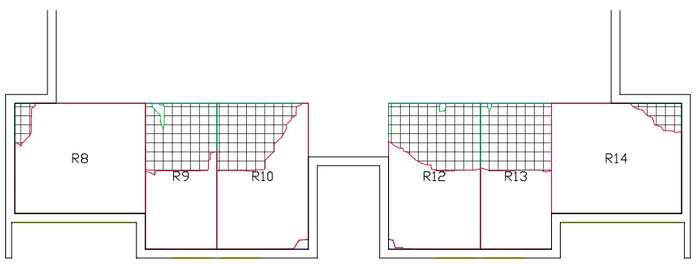

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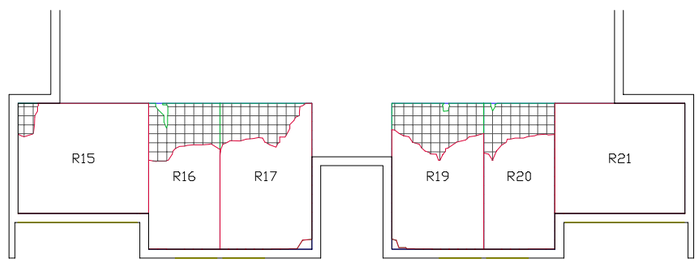

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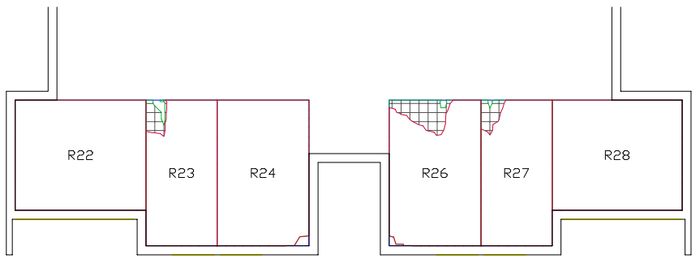

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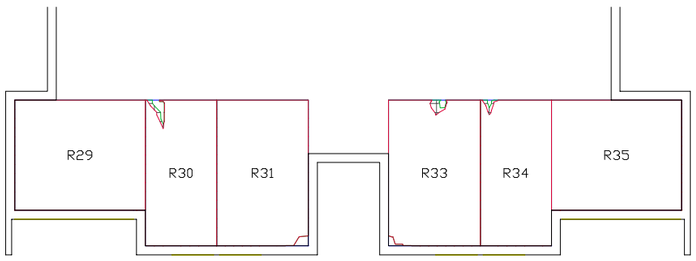

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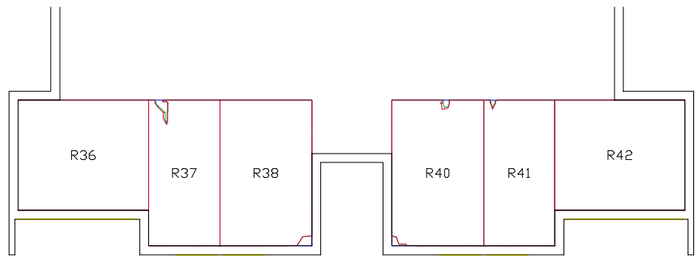

SIXTH FLOOR

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PROJECT TITLE
Lawn Road

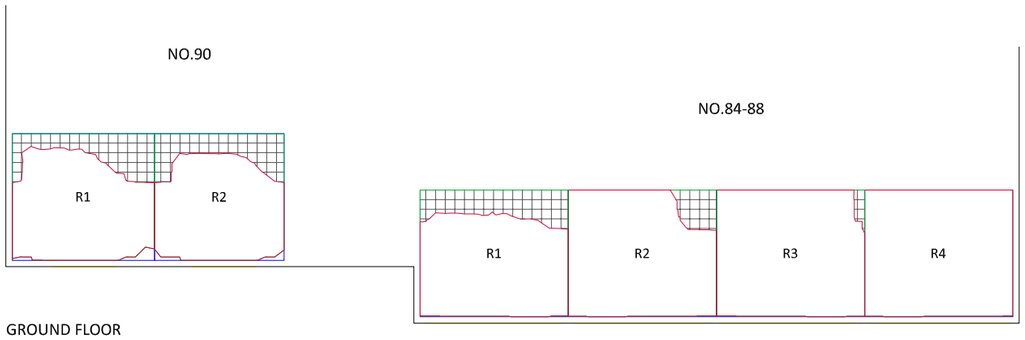
DRAWING TITLE
Palgrave House
Noskyline Contours

SCALE	DATE	ISSUE
NTS	261114	15

DWG NO	REV
1696_40	A

SOURCES

Notes



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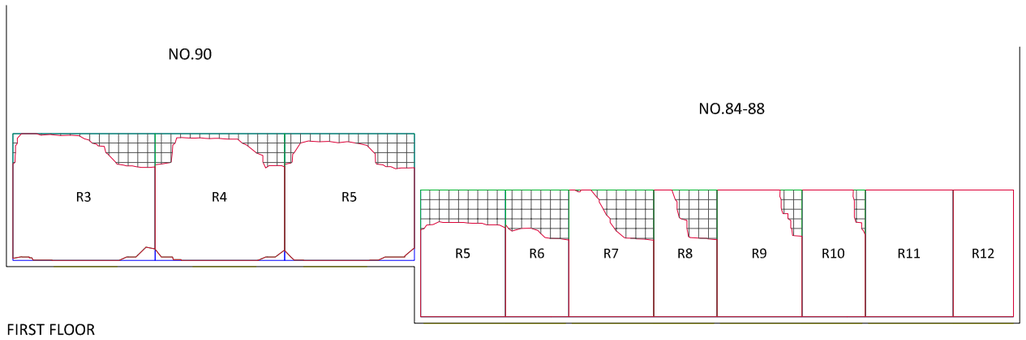

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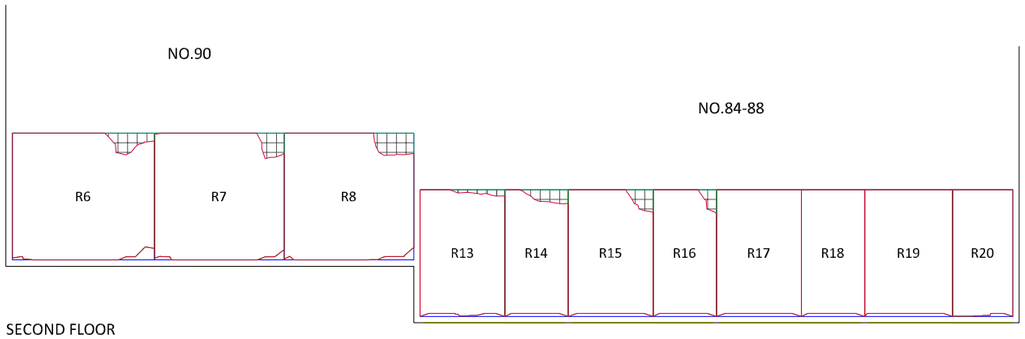

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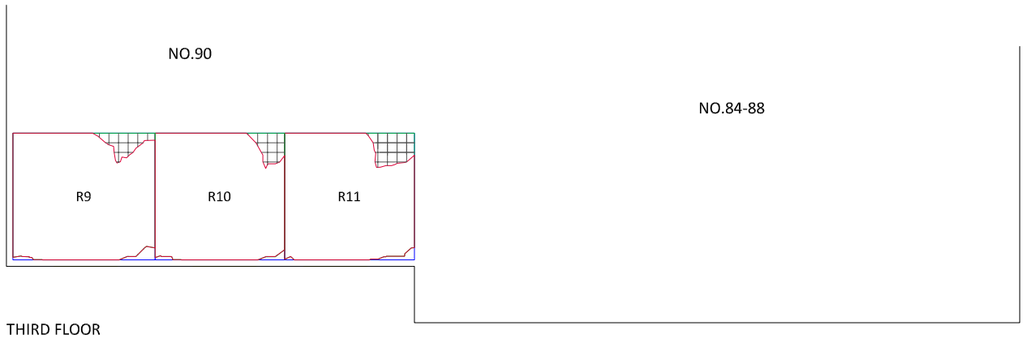

THIRD FLOOR

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PROJECT TITLE
Lawn Road

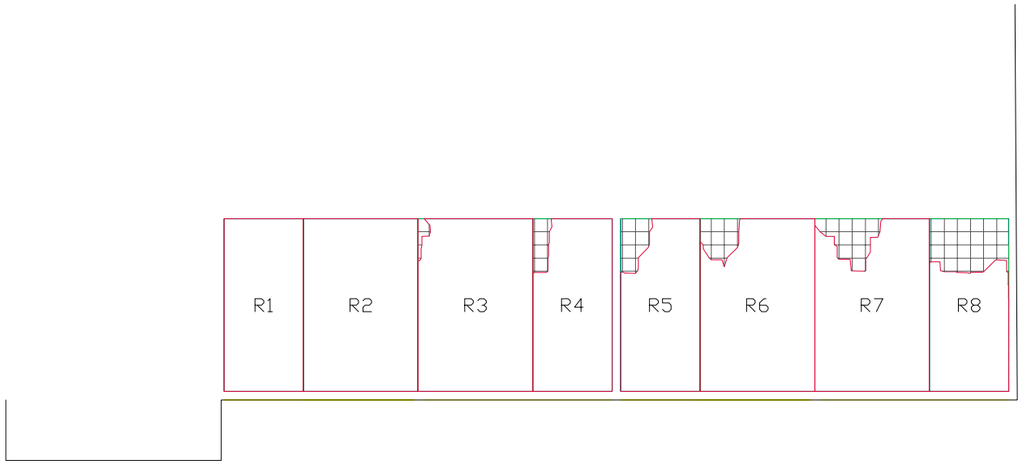
DRAWING TITLE
No.90 & No.84-88
Noskyline Contours

SCALE	DATE	ISSUE
NTS	261114	15

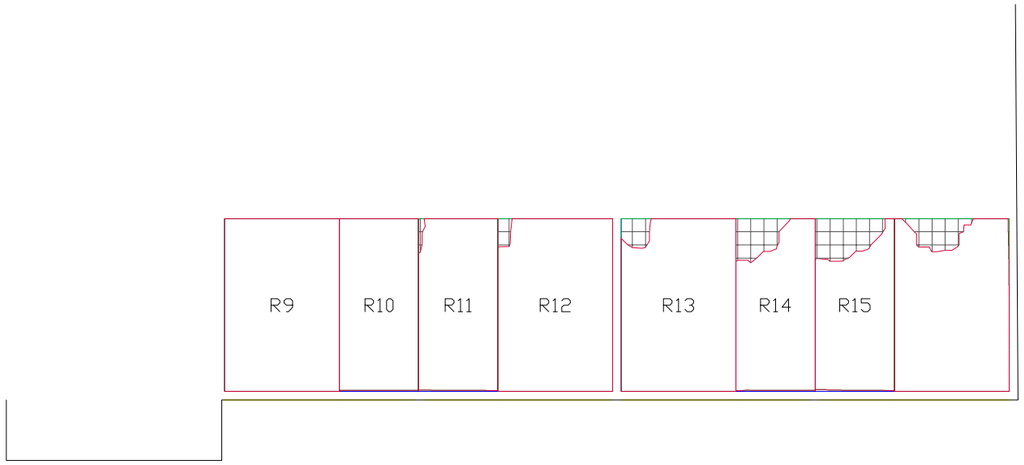
DWG NO	REV
1696_41	A

SOURCES

Notes



GROUND FLOOR



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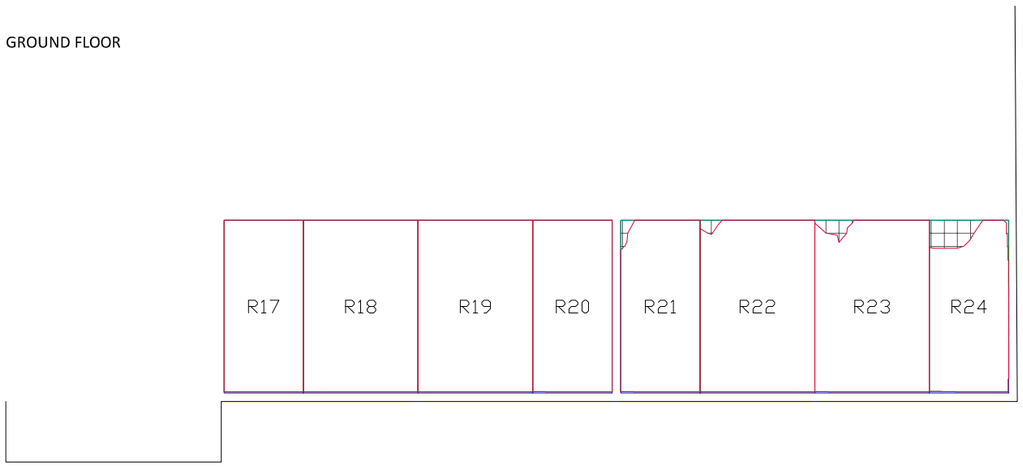

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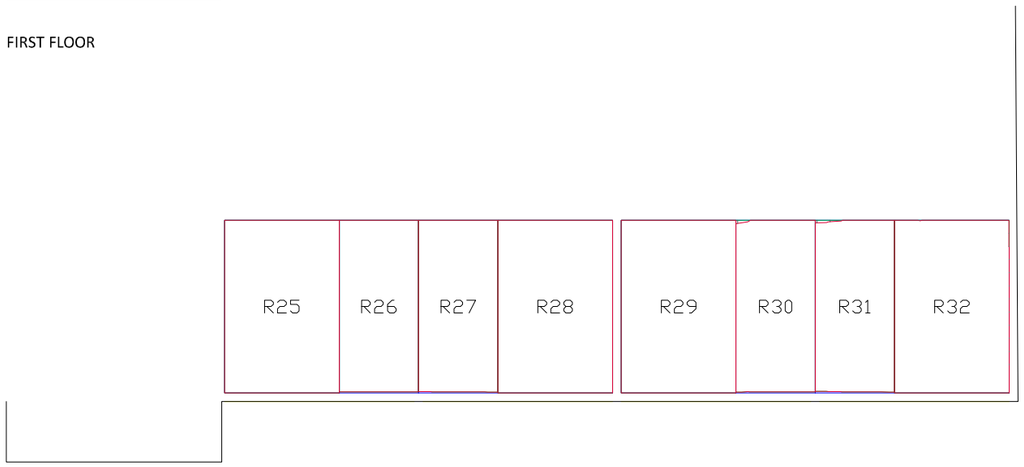

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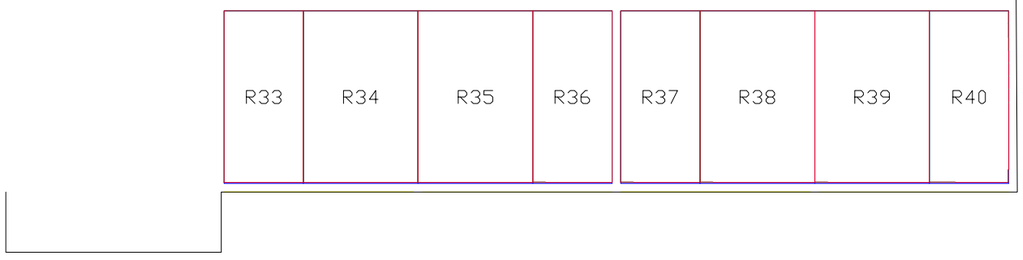

FOURTH FLOOR

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PROJECT TITLE
Lawn Road

DRAWING TITLE
Du Maurier House
Noskyline Contours

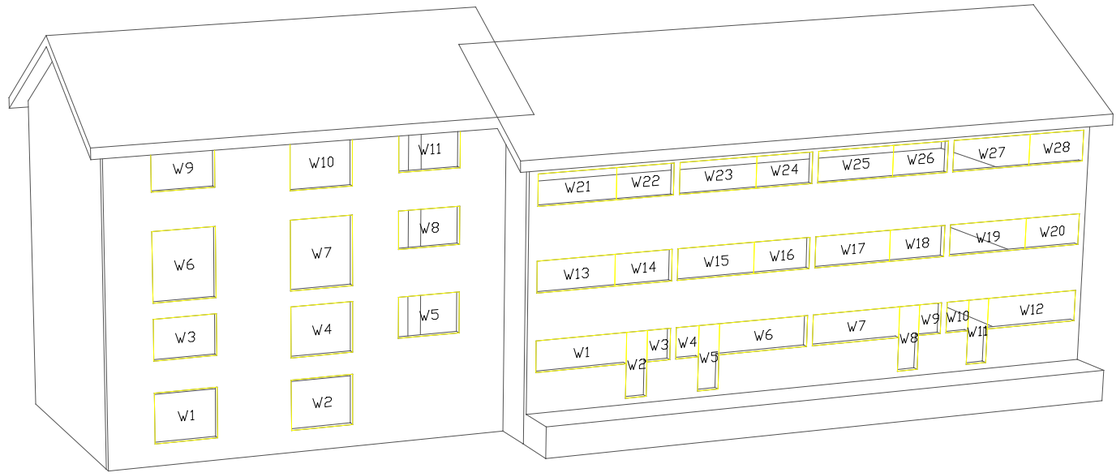
SCALE	DATE	ISSUE
NTS	261114	15

DWG NO	REV
1696_42	A

PALGRAVE HOUSE

NO.90

NO 84-88



SOURCES

Notes

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PROJECT TITLE
Lawn Road

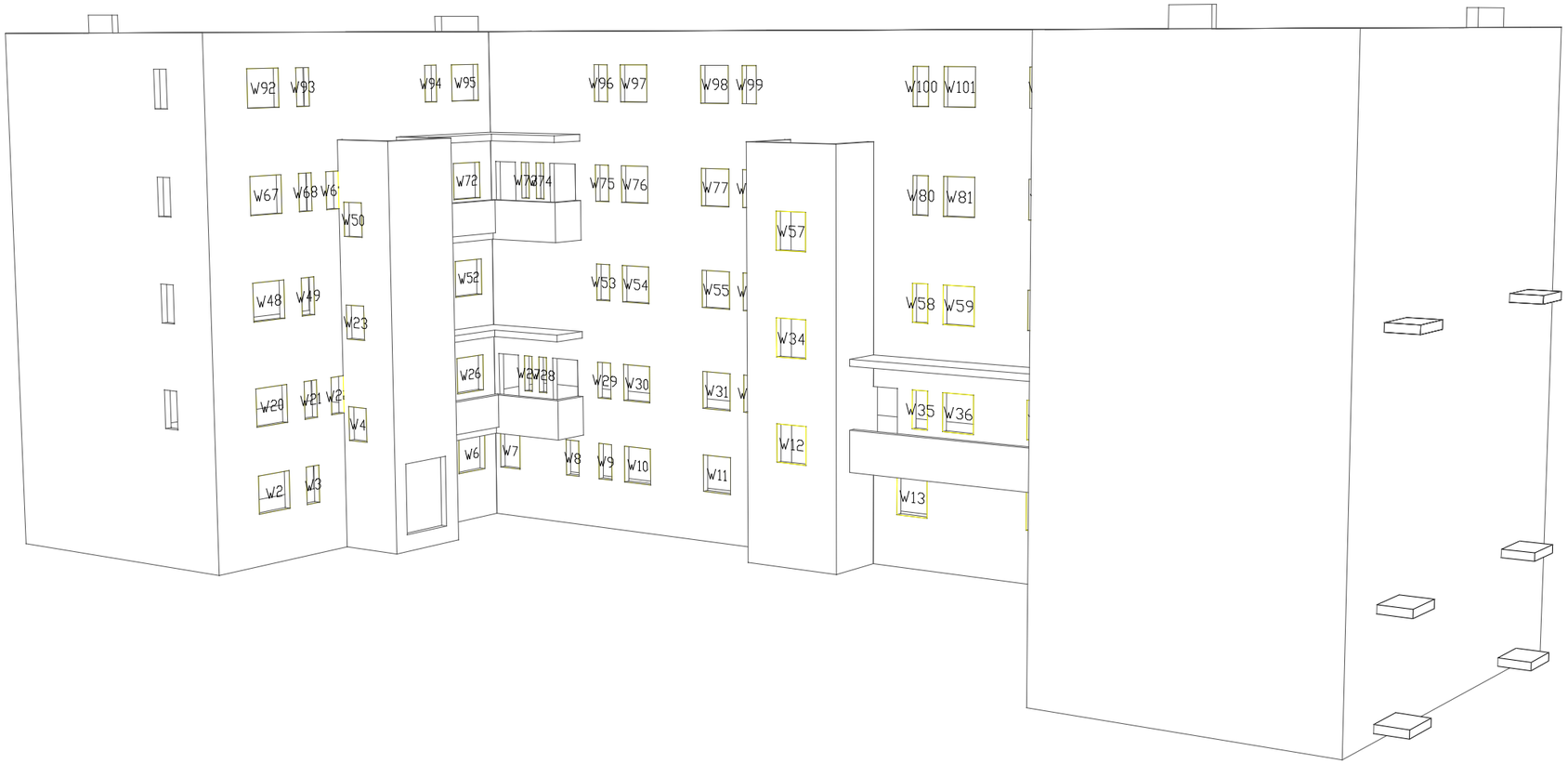
DRAWING TITLE
Window Map

SCALE	DATE	ISSUE
NTS	300914	14

DWG NO	REV
1696_21	-

SOURCES

Notes



GARNET HOUSE

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PROJECT TITLE
Lawn Road

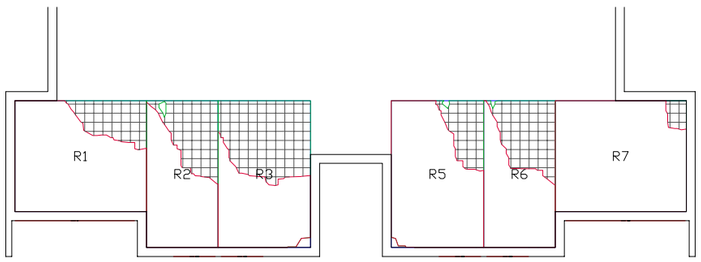
DRAWING TITLE
Window Map

SCALE	DATE	ISSUE
NTS	300914	14

DWG NO	REV
1696_22	-

SOURCES

Notes



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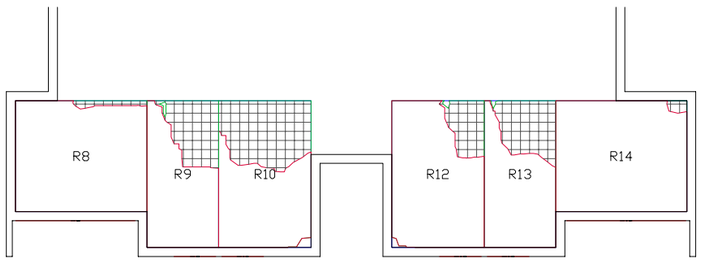

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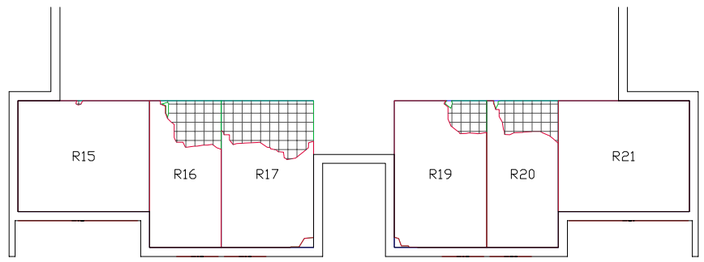

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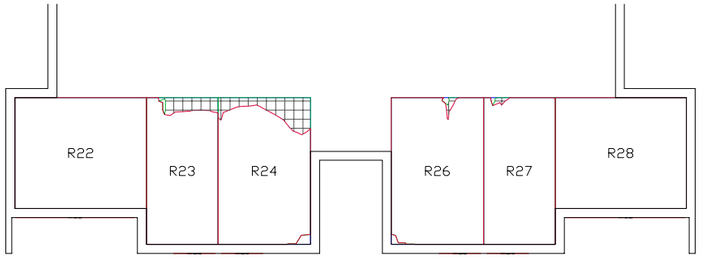

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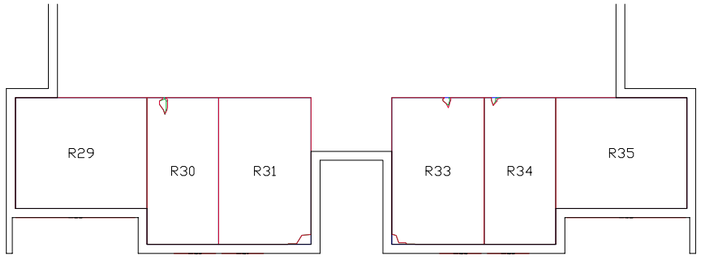

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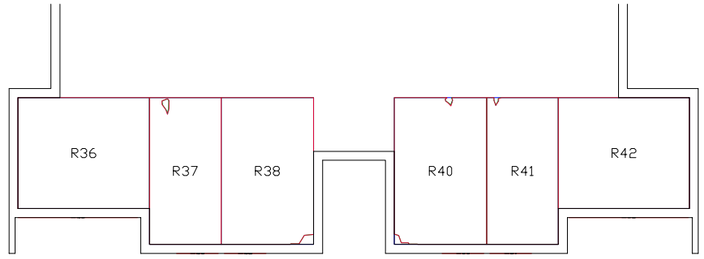

SIXTH FLOOR

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PROJECT TITLE
Lawn Road

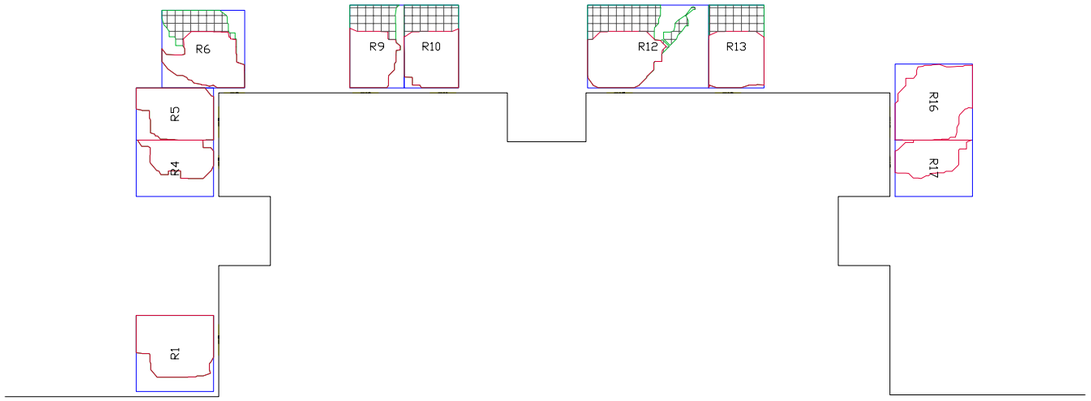
DRAWING TITLE
Cayford House
Noskyline Contours

SCALE	DATE	ISSUE
NTS	261114	15

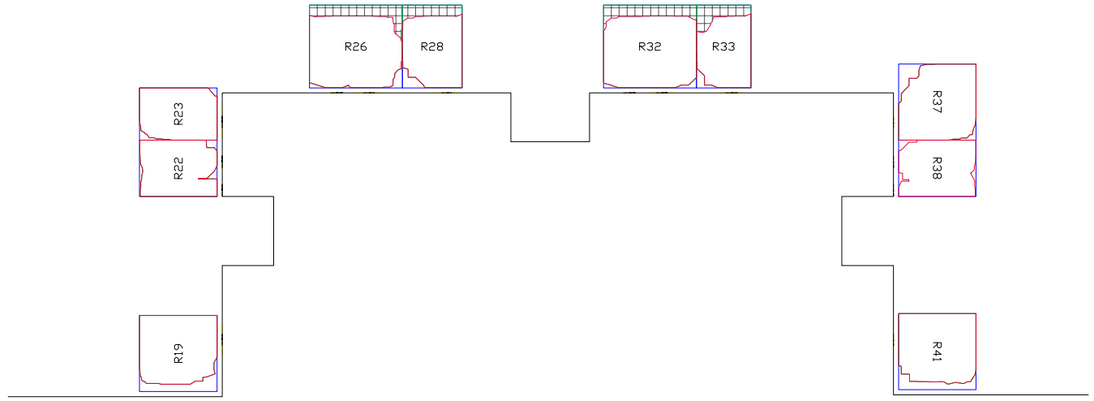
DWG NO	REV
1696_43	A

SOURCES

Notes



GROUND FLOOR



FIRST FLOOR

SECOND FLOOR

THIRD FLOOR

FOURTH FLOOR

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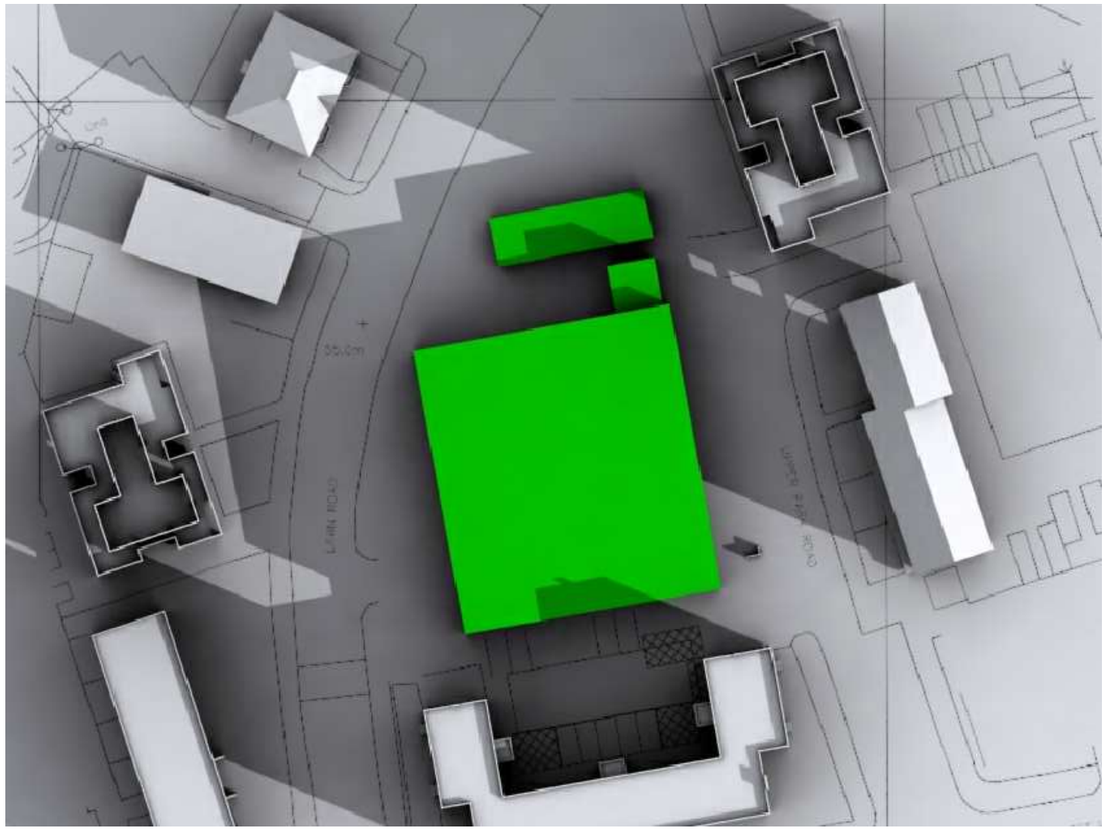
PROJECT TITLE
Lawn Road

DRAWING TITLE
Garnet House
Noskyline Contours

SCALE	DATE	ISSUE
NTS	261114	15

DWG NO	REV
1696_44	A



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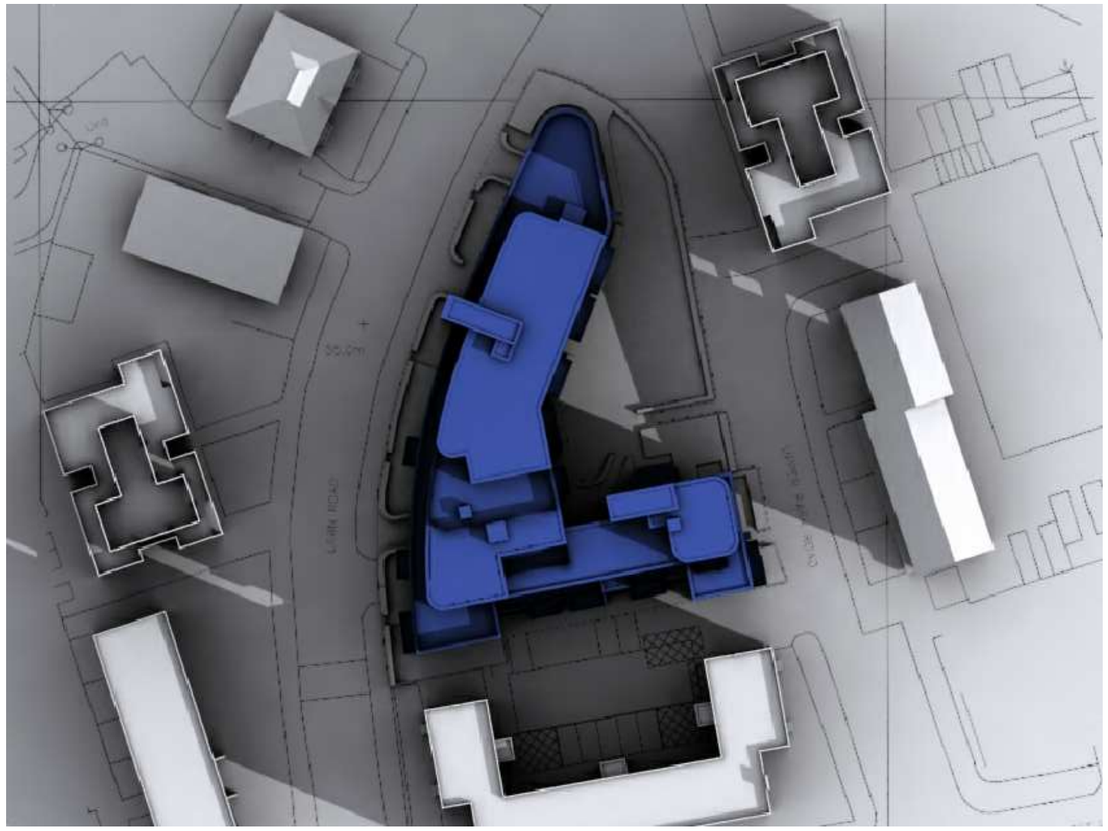
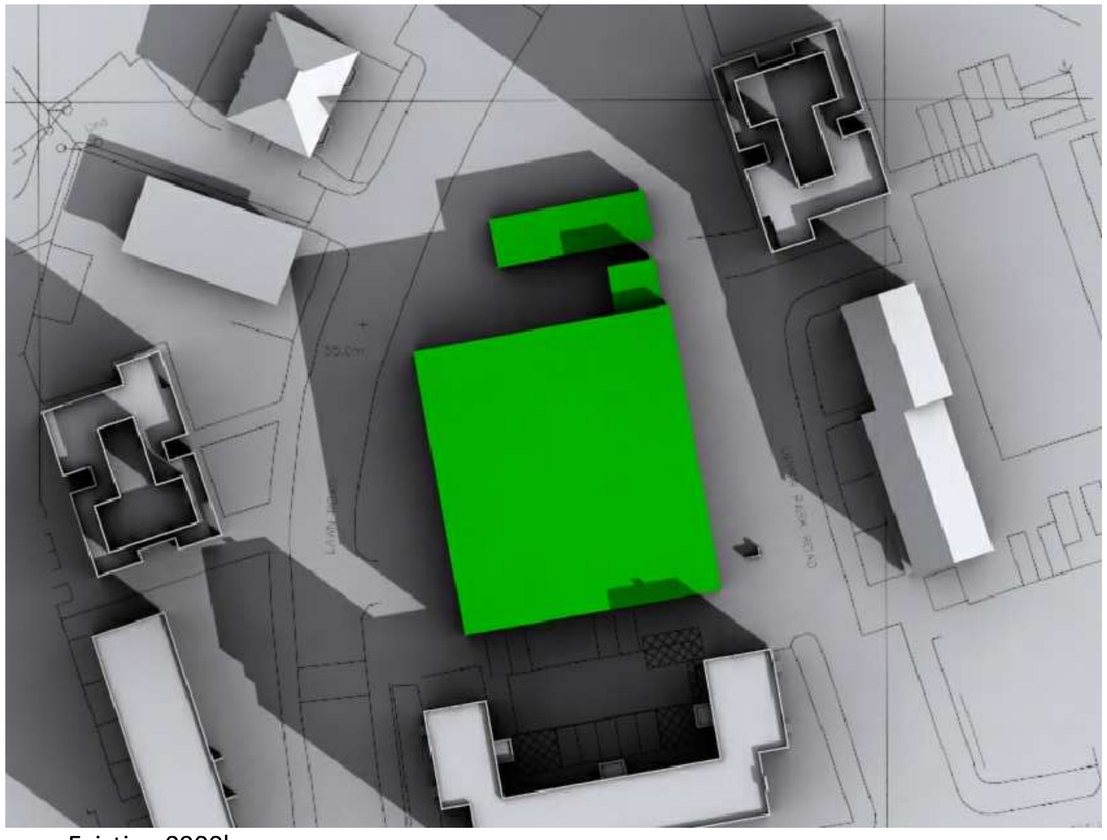
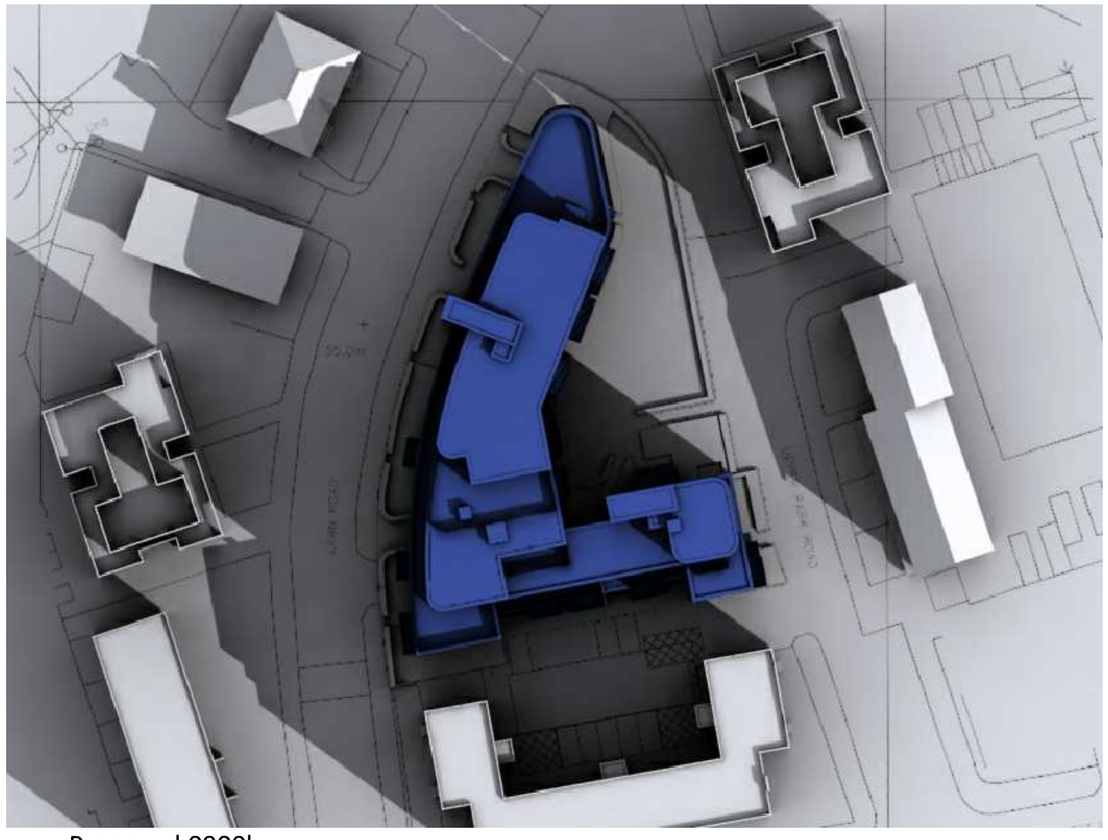


Proposed 0800h



Existing 0900h



Proposed 0900h

Sources

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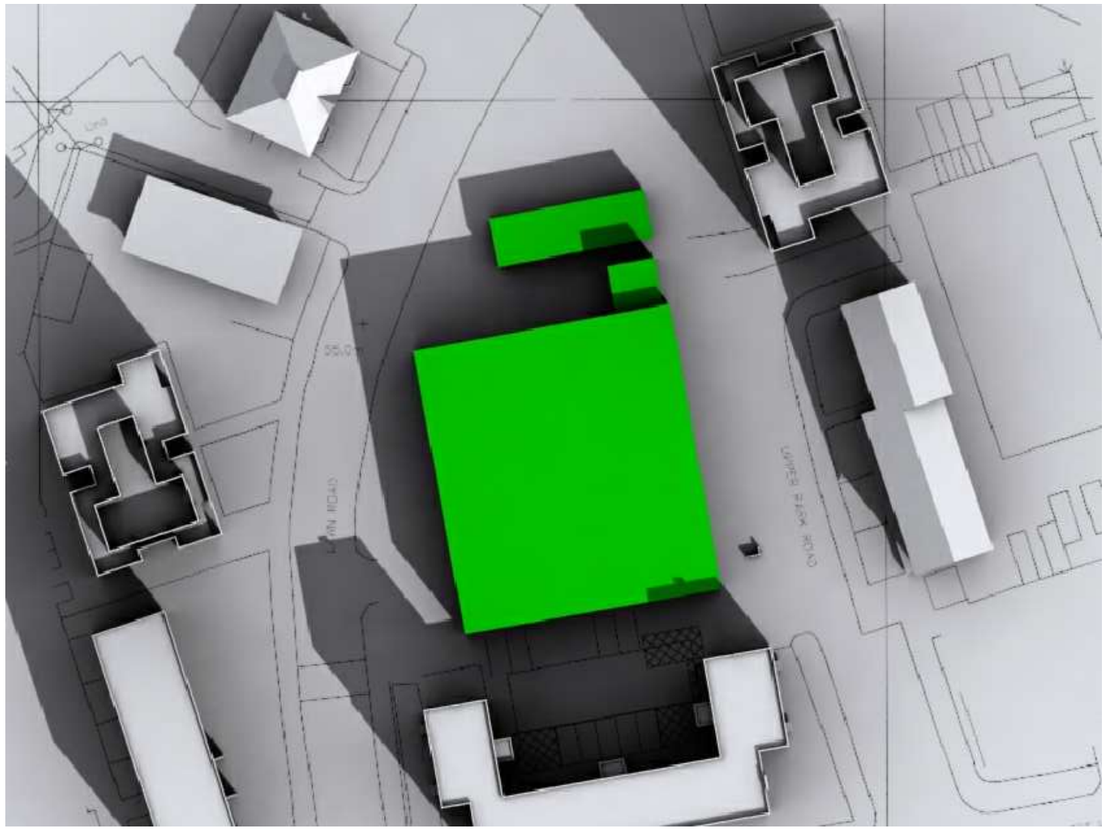
PROJECT TITLE
Lawn Road

DRAWING TITLE
21st March Shadow Study

SCALE	DATE	ISSUE
NTS	27-11-2014	15

DWG NO	REV
1773_105	-



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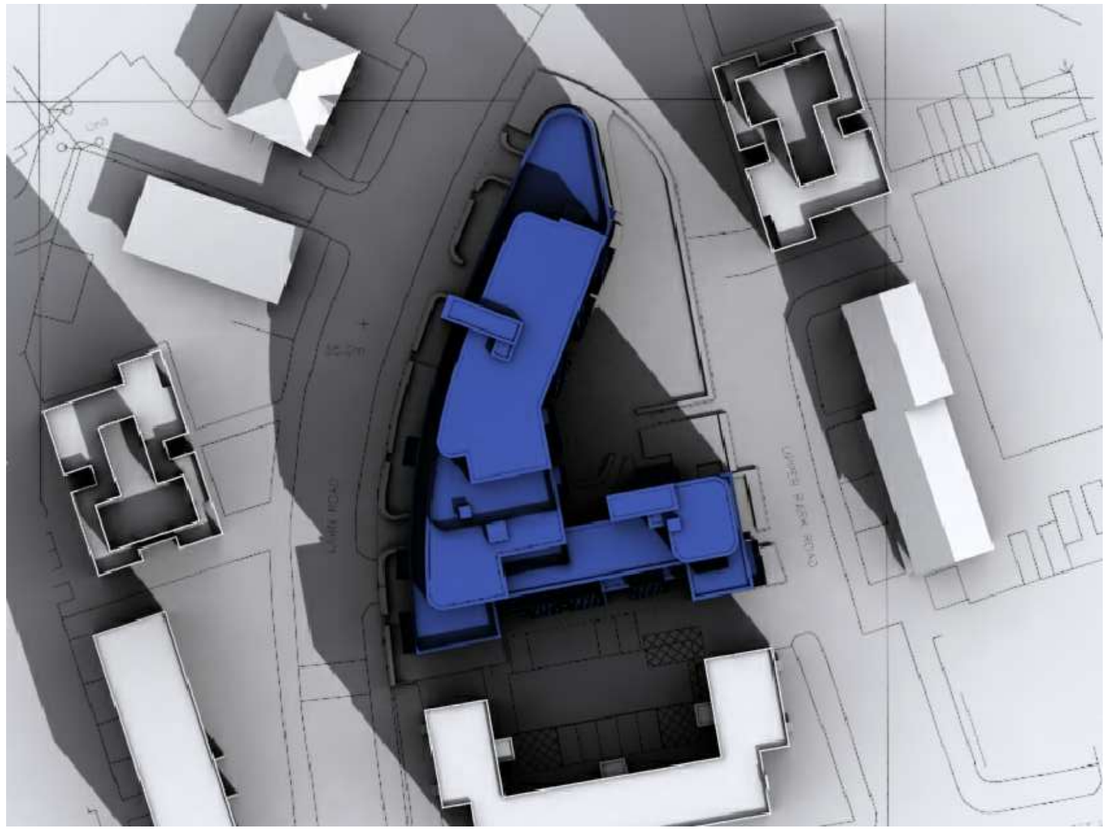
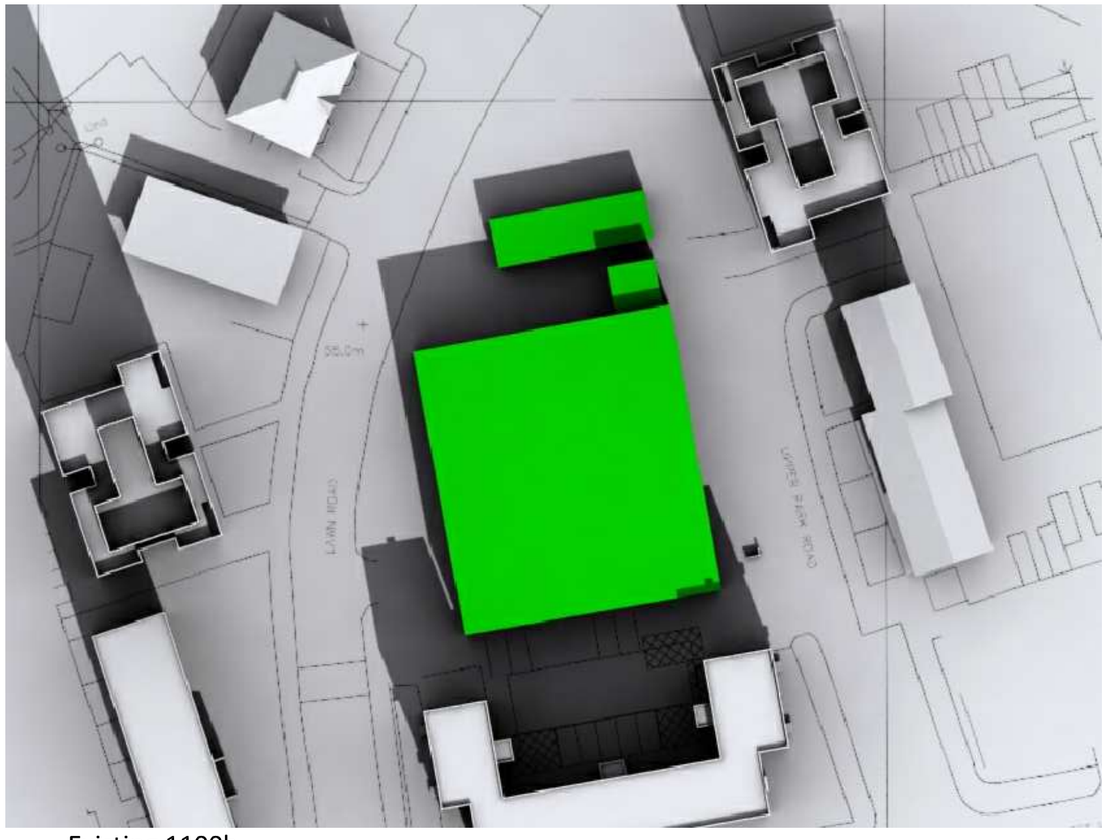
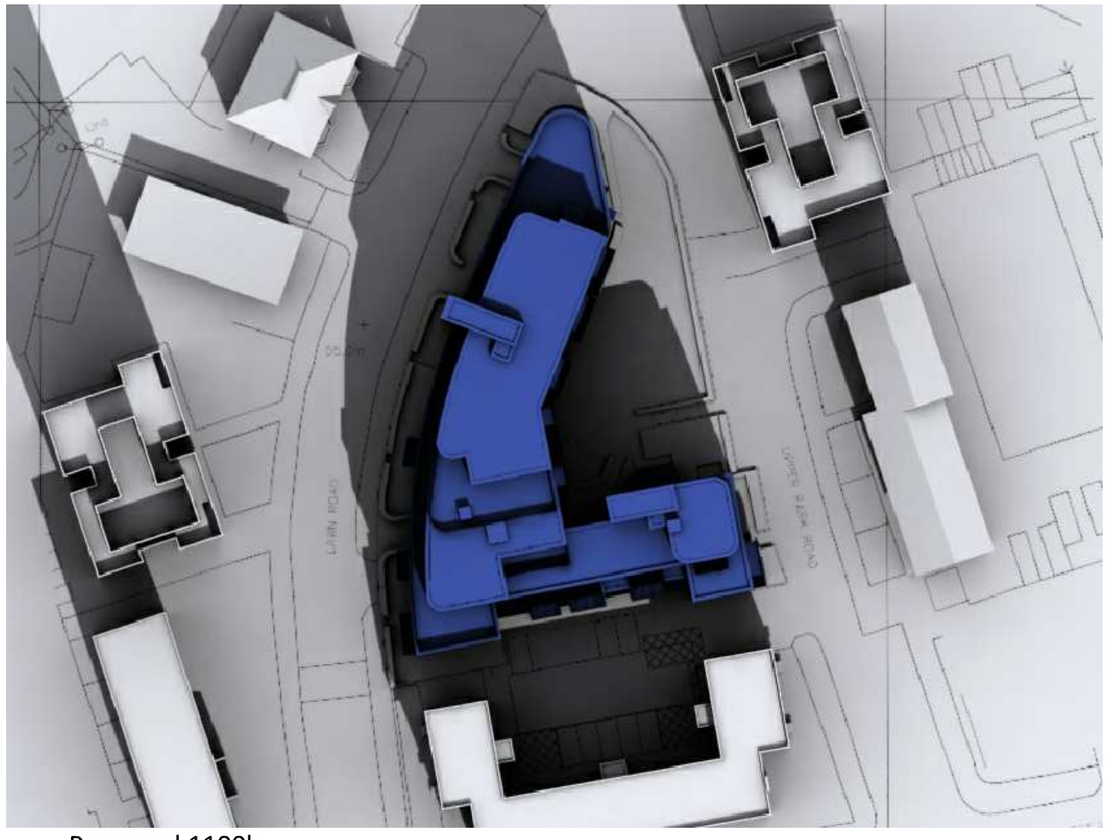


Proposed 1000h



Existing 1100h



Proposed 1100h

Sources

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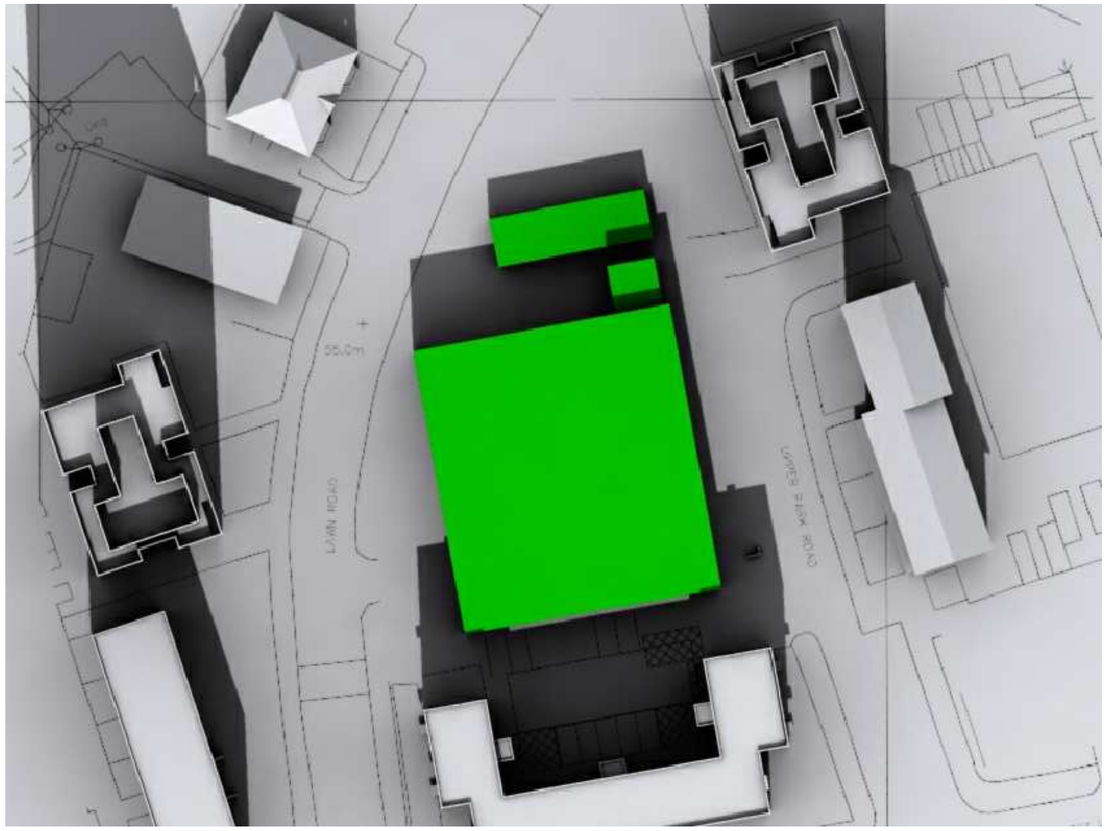
PROJECT TITLE
Lawn Road

DRAWING TITLE
21st March Shadow Study

SCALE	DATE	ISSUE
NTS	27-11--2014	15

DWG NO	REV
1773_106	-



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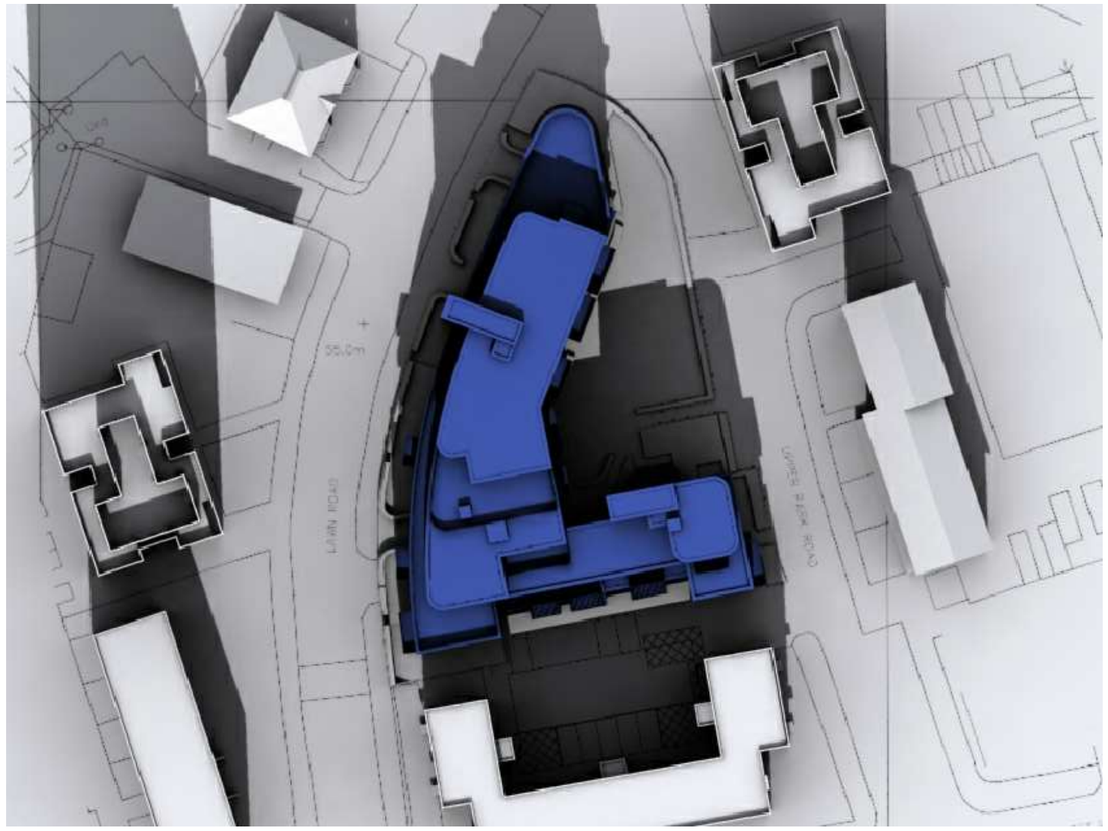
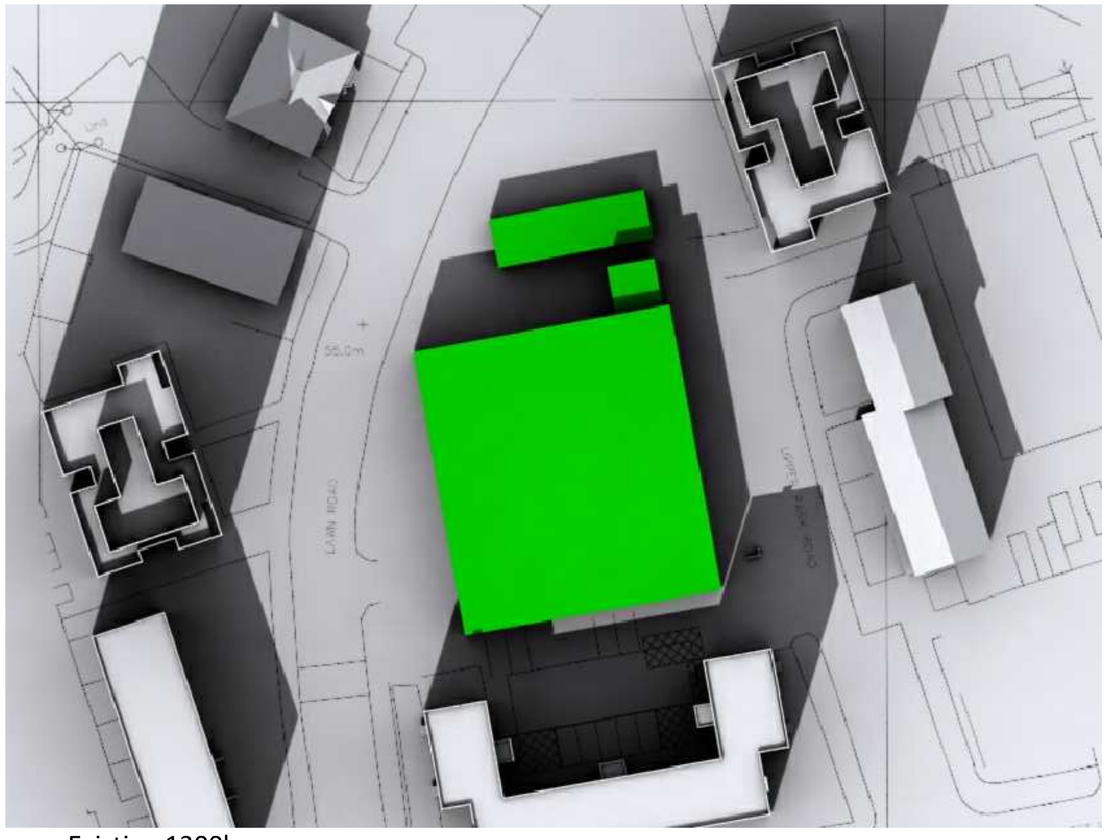


Proposed 1200h



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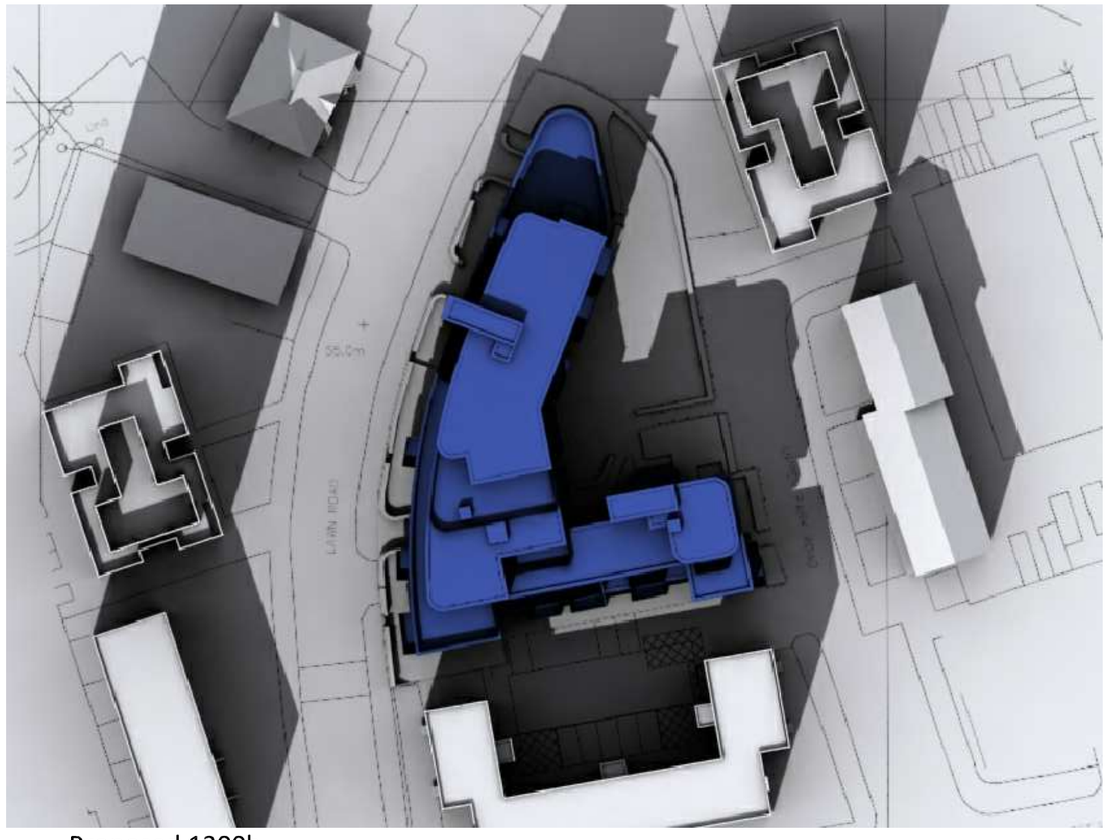

Proposed 1300h

Sources

KEY

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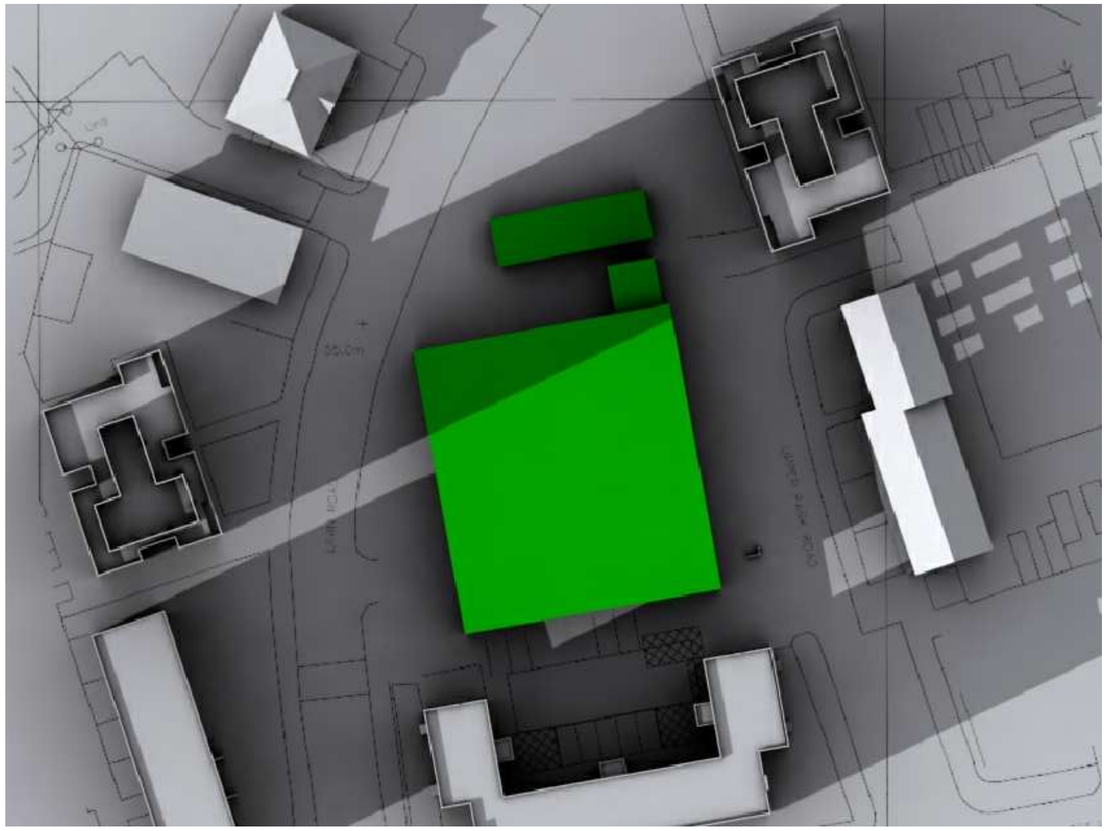
PROJECT TITLE
Lawn Road

DRAWING TITLE
21st March Shadow Study

SCALE	DATE	ISSUE
NTS	27-11-2014	15

DWG NO	REV
1773_107	-



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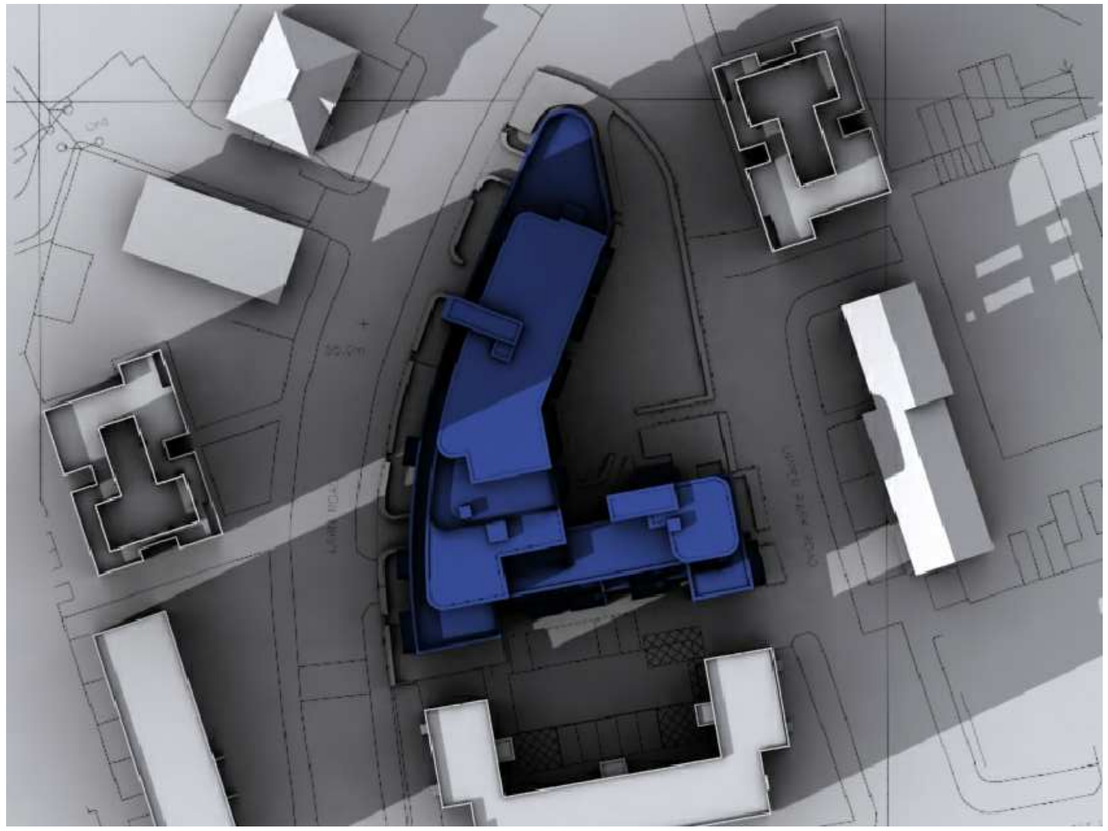
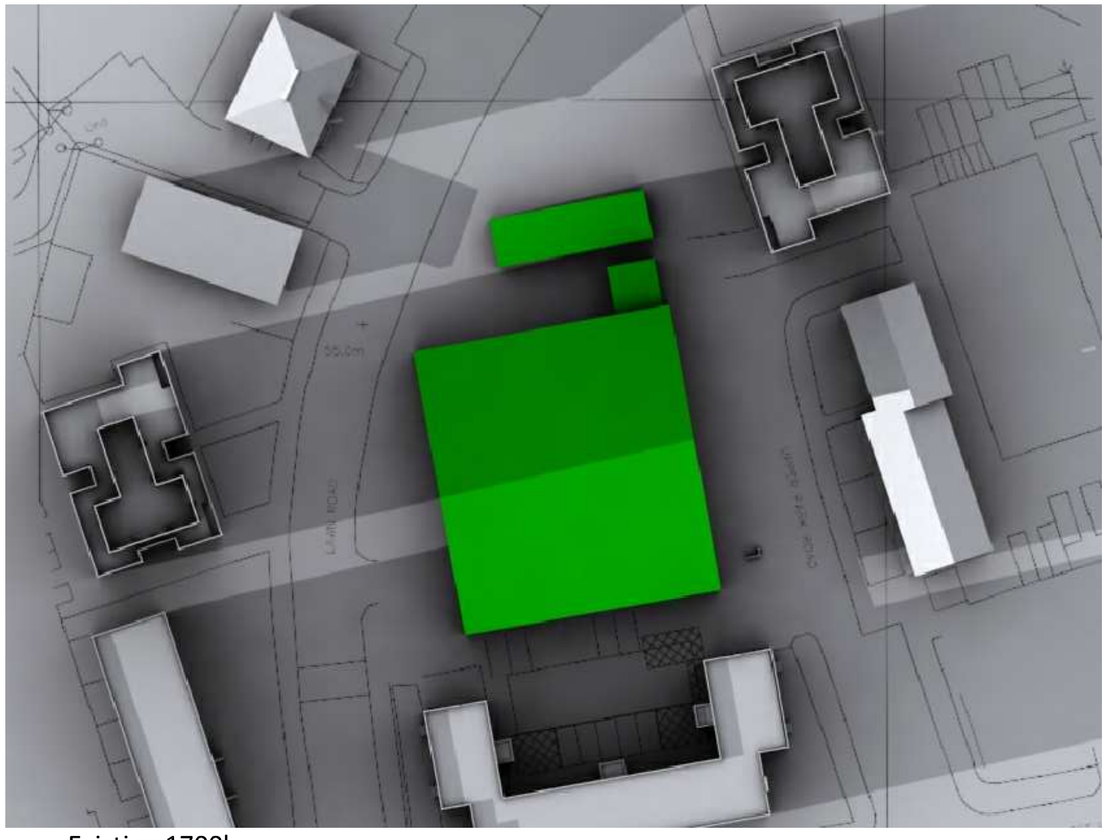
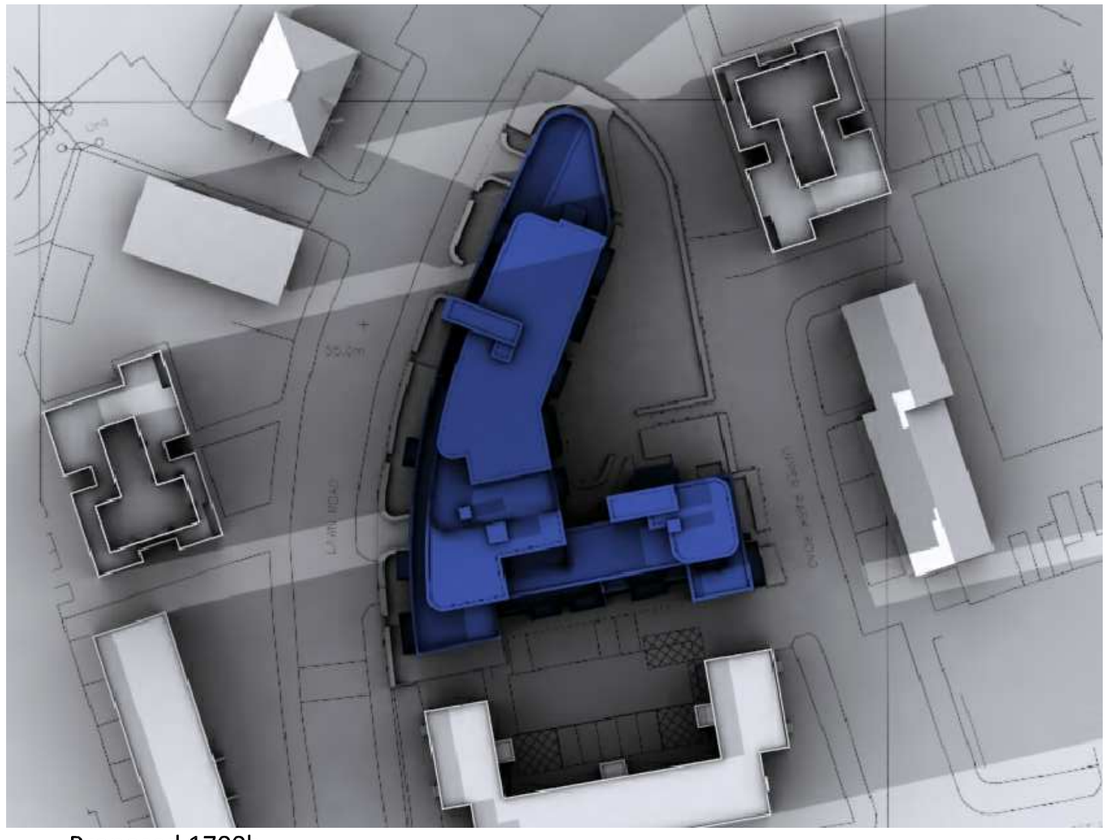


Proposed 1600h



Existing 1700h



Proposed 1700h

Sources

KEY

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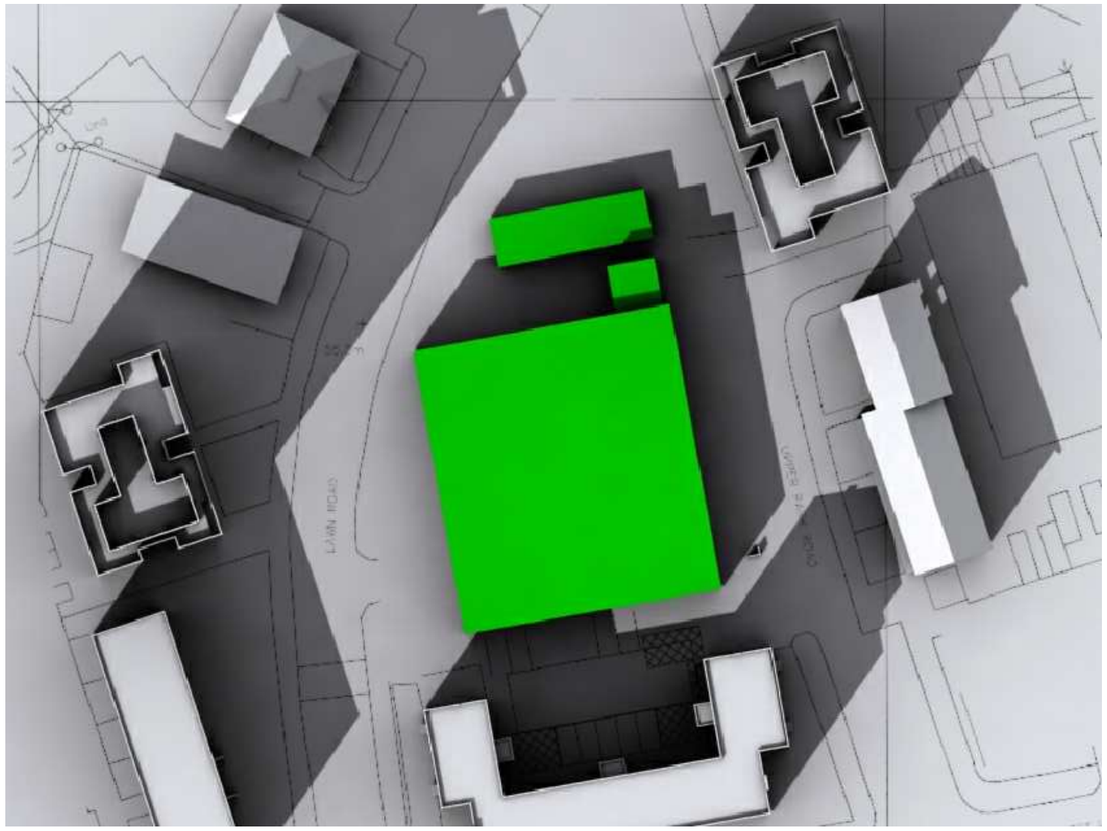
PROJECT TITLE
Lawn Road

DRAWING TITLE
21st March Shadow Study

SCALE	DATE	ISSUE
NTS	27-11-2014	15

DWG NO	REV
1773_109	-



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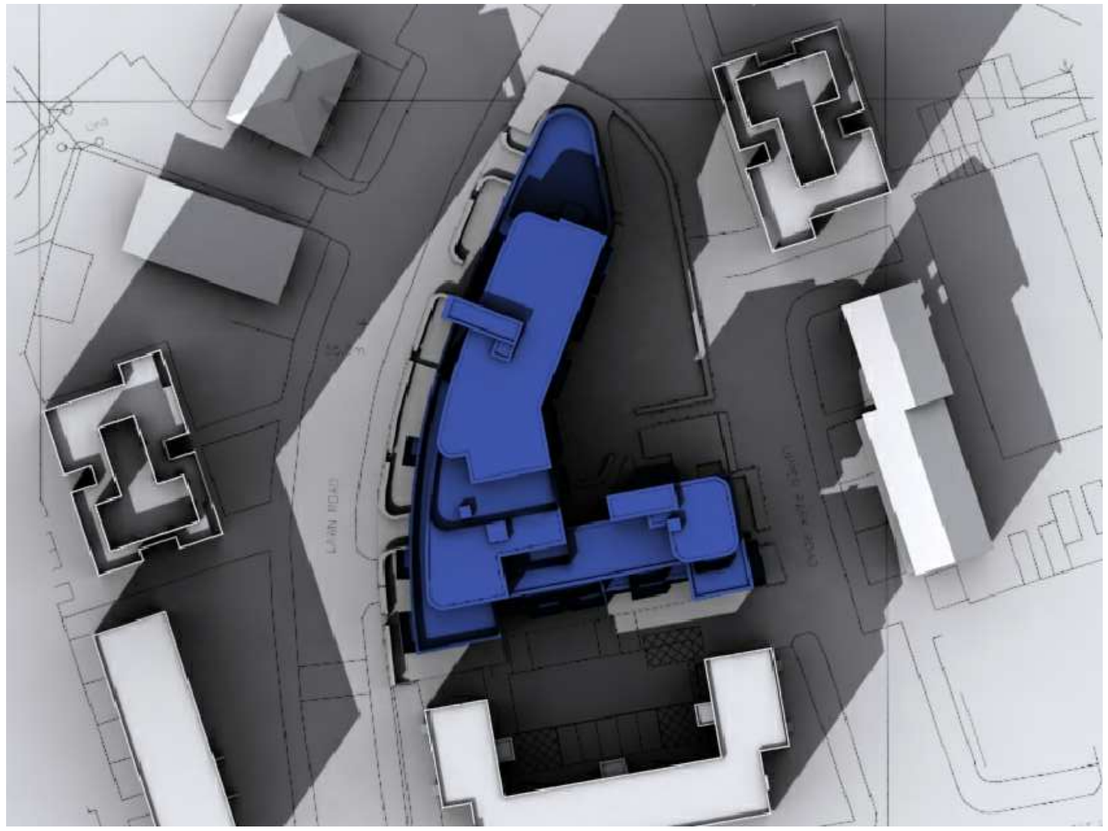

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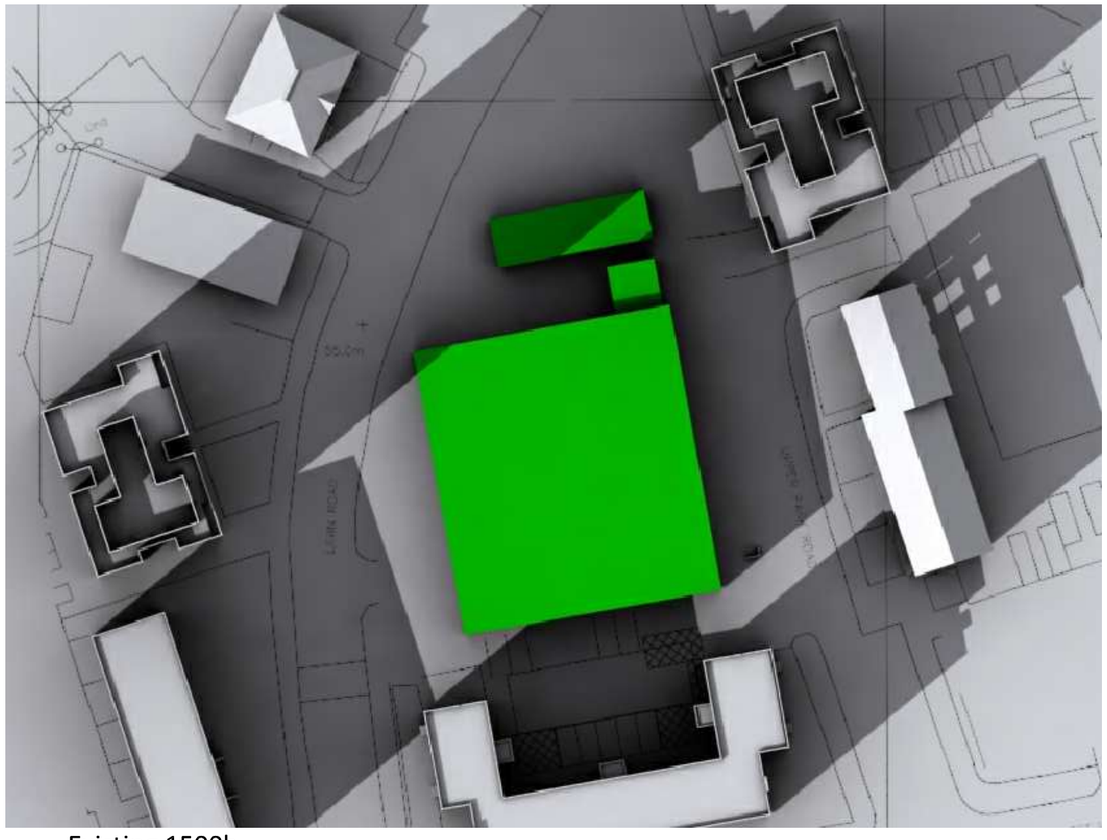
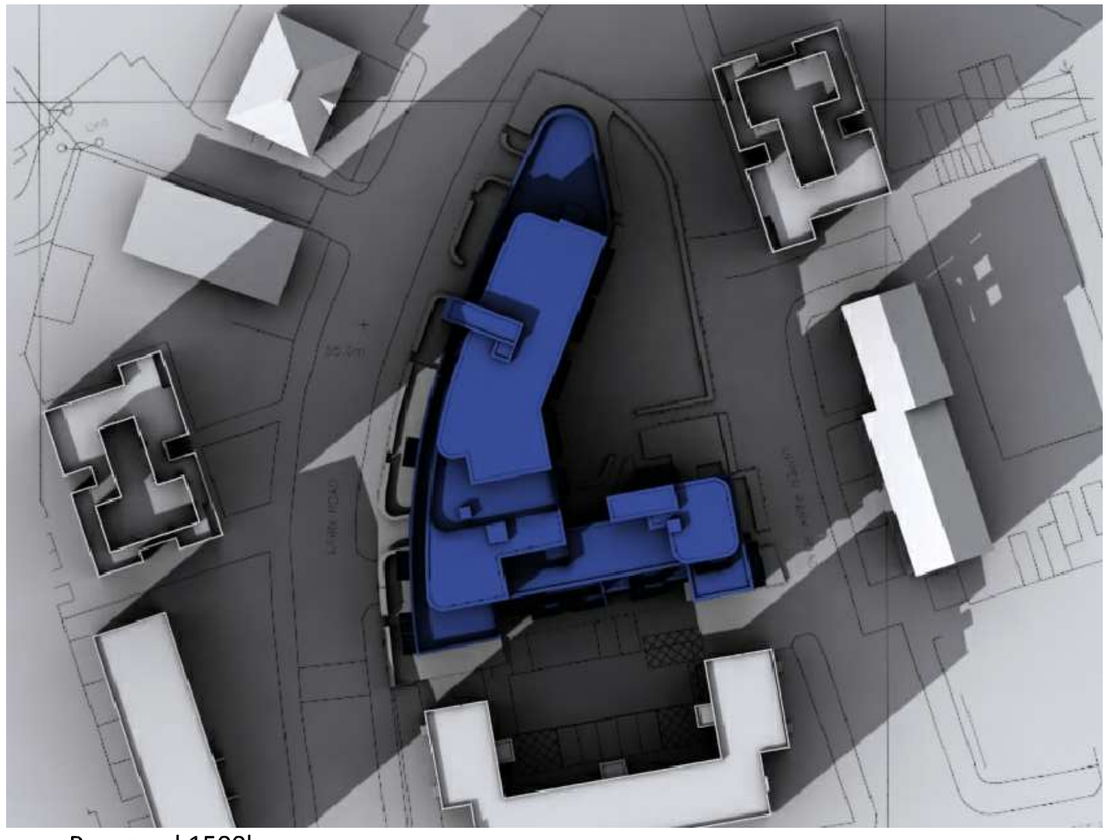


Existing 1500h



Proposed 1500h

Sources

KEY

CHP
SURVEYORS LIMITED
Hudson House - 8 Tavistock Street - London WC2E 7PP
TEL: 020 7083 0133
www.CHP.gb.com

PROJECT TITLE
Lawn Road

DRAWING TITLE
21st March Shadow Study

SCALE	DATE	ISSUE
NTS	27-11-2014	15

DWG NO	REV
1773_108	-

Appendix C

32 Lawn Road, Belsize Park, London NW3

Daylight Results

LEVEL	WINDOW	ROOM	VSC	Pass 27% or 0.8 x Existing	LOSS	% LOSS	NOSKY	Pass 80% or 0.8 x Existing	ADF Proposed Pass 1.5% Living Room - 1% Bedroom
			EXISTING	PROPOSED			EXISTING	PROPOSED	
Du Maurier House									
LEV 0	W1	R1	23.3	20.7	2.6	11.2	100%	100%	
	W2	R2	29.5	26.7	2.8	9.5	100%	100%	
	W3	R3	30.4	27.2	3.2	10.5	100%	98%	
	W4	R4	30.3	26.9	3.4	11.2	100%	94%	
	W5	R5	29.9	26.1	3.8	12.7	100%	89%	
	W6	R6	29.3	25.1	4.2	14.3	100%	93%	
	W7	R7	28.0	23.6	4.4	15.7	100%	90%	
	W8	R8	26.3	21.8	4.5	17.1	100%	72%	
LEV 1	W9	R9	28.2	25.8	2.4	8.5	100%	100%	
	W10	R10	32.1	29.4	2.7	8.4	99%	99%	
	W11	R11	32.2	29.4	2.8	8.7	99%	98%	
	W12	R12	31.9	28.8	3.1	9.7	100%	98%	
	W13	R13	31.3	27.7	3.6	11.5	100%	96%	
	W14	R14	30.7	26.8	3.9	12.7	99%	89%	
	W15	R15	29.7	25.6	4.1	13.8	99%	82%	
	W16	R16	27.9	23.8	4.1	14.7	100%	93%	
LEV 2	W17	R17	34.2	32.1	2.1	6.1	99%	99%	
	W18	R18	34.1	31.8	2.3	6.7	99%	99%	
	W19	R19	33.8	31.3	2.5	7.4	99%	99%	
	W20	R20	33.4	30.7	2.7	8.1	99%	99%	
	W21	R21	32.9	29.9	3.0	9.1	99%	99%	
	W22	R22	32.2	28.8	3.4	10.6	99%	99%	
	W23	R23	30.8	27.2	3.6	11.7	99%	99%	
	W24	R24	28.9	25.3	3.6	12.5	99%	99%	
LEV 3	W25	R25	35.4	33.7	1.7	4.8	100%	100%	
	W26	R26	35.3	33.5	1.8	5.1	99%	99%	
	W27	R27	35.1	33.1	2.0	5.7	99%	99%	
	W28	R28	34.6	32.4	2.2	6.4	100%	100%	
	W29	R29	33.8	31.3	2.5	7.4	100%	100%	
	W30	R30	33.1	30.5	2.6	7.9	99%	99%	
	W31	R31	32.0	29.2	2.8	8.8	99%	99%	
	W32	R32	30.2	27.3	2.9	9.6	100%	100%	
LEV 4	W33	R33	36.7	35.6	1.1	3.0	99%	99%	
	W34	R34	36.5	35.2	1.3	3.6	99%	99%	
	W35	R35	36.1	34.7	1.4	3.9	99%	99%	
	W36	R36	35.6	34.1	1.5	4.2	99%	99%	
	W37	R37	35.0	33.4	1.6	4.6	99%	99%	
	W38	R38	34.1	32.4	1.7	5.0	99%	99%	

32 Lawn Road, Belsize Park, London NW3

Daylight Results

	W39	R39	32.6	30.7	1.9	5.8	99%	99%	
	W40	R40	30.6	28.7	1.9	6.2	99%	99%	
Cayford House									
LEV 1	W1	R1	29.1	22.4	6.7	23.0	100%	82%	3.0
	W2	R2	34.3	27.7	6.6	19.2	99%	63%	
	W3	R3	34.4	27.9	6.5	18.9	99%	50%	
	W4	R4	-	-	-	-			
	W5	R5	34.7	29.1	5.6	16.1	99%	82%	
	W6	R6	34.7	29.3	5.4	15.6	100%	62%	
	W7	R7	29.7	25.0	4.7	15.8	100%	97%	
LEV 2	W8	R8	30.5	24.4	6.1	20.0	100%	97%	
	W9	R9	35.8	29.8	6.0	16.8	100%	70%	
	W10	R10	35.8	30.0	5.8	16.2	99%	53%	
	W11	R11	-	-	-	-			
	W12	R12	36.0	30.9	5.1	14.2	99%	85%	
	W13	R13	36.0	31.1	4.9	13.6	100%	70%	
	W14	R14	30.9	26.6	4.3	13.9	100%	99%	
LEV 3	W15	R15	31.5	26.3	5.2	16.5	100%	99%	
	W16	R16	36.7	31.8	4.9	13.4	100%	79%	
	W17	R17	36.7	31.9	4.8	13.1	99%	73%	
	W18	R18	-	-	-	-			
	W19	R19	36.8	32.6	4.2	11.4	99%	90%	
	W20	R20	36.8	32.7	4.1	11.1	100%	81%	
	W21	R21	31.6	27.9	3.7	11.7	100%	99%	
LEV 4	W22	R22	32.1	28.3	3.8	11.8	100%	100%	
	W23	R23	37.3	33.7	3.6	9.7	100%	94%	
	W24	R24	37.3	33.8	3.5	9.4	99%	87%	
	W25	R25	-	-	-	-			
	W26	R26	37.3	34.2	3.1	8.3	99%	98%	
	W27	R27	37.3	34.3	3.0	8.0	100%	98%	
	W28	R28	32.0	29.2	2.8	8.8	100%	100%	
LEV 5	W29	R29	32.5	30.2	2.3	7.1	100%	100%	
	W30	R30	37.8	35.6	2.2	5.8	99%	99%	
	W31	R31	37.8	35.6	2.2	5.8	99%	99%	
	W32	R32	-	-	-	-			
	W33	R33	37.7	35.7	2.0	5.3	99%	99%	
	W34	R34	37.7	35.7	2.0	5.3	100%	100%	
	W35	R35	32.3	30.4	1.9	5.9	100%	100%	
LEV 6	W36	R36	32.8	31.8	1.0	3.1	100%	100%	
	W37	R37	38.0	37.1	0.9	2.4	100%	99%	
	W38	R38	38.0	37.1	0.9	2.4	99%	99%	
	W39	R39	-	-	-	-			
	W40	R40	37.9	37.0	0.9	2.4	99%	99%	
	W41	R41	37.9	37.0	0.9	2.4	100%	100%	

32 Lawn Road, Belsize Park, London NW3

Daylight Results

	W42	R42	32.5	31.5	1.0	3.1	100%	100%	
Palgrave House									
LEV 1	W1	R1	30.4	23.5	6.9	22.7	100%	98%	3.2
	W2	R2	35.2	25.9	9.3	26.4	99%	48%	1.2
	W3	R3	35.1	25.2	9.9	28.2	99%	65%	1.0
	W5	R5	34.3	23.5	10.8	31.5	99%	50%	1.0
	W6	R6	34.0	23.3	10.7	31.5	100%	50%	1.2
	W7	R7	28.4	18.7	9.7	34.2	100%	74%	2.6
LEV 2	W8	R8	31.3	25.6	5.7	18.2	100%	99%	
	W9	R9	36.3	28.5	7.8	21.5	99%	55%	
	W10	R10	36.2	27.9	8.3	22.9	99%	69%	
	W12	R12	36.0	26.3	9.7	26.9	99%	57%	1.1
	W13	R13	35.9	26.1	9.8	27.3	100%	51%	1.3
	W14	R14	30.4	21.2	9.2	30.3	100%	95%	3.1
LEV 3	W15	R15	31.9	27.6	4.3	13.5	100%	99%	
	W16	R16	37.0	31.2	5.8	15.7	99%	68%	
	W17	R17	36.9	30.7	6.2	16.8	99%	80%	
	W19	R19	36.7	29.3	7.4	20.2	99%	68%	
	W20	R20	36.7	29.1	7.6	20.7	100%	67%	
	W21	R21	31.3	23.9	7.4	23.6	100%	100%	3.5
LEV 4	W22	R22	32.2	29.3	2.9	9.0	100%	100%	
	W23	R23	37.4	33.7	3.7	9.9	99%	91%	
	W24	R24	37.3	33.5	3.8	10.2	99%	99%	
	W26	R26	37.2	32.4	4.8	12.9	99%	90%	
	W27	R27	37.2	32.2	5.0	13.4	100%	94%	
	W28	R28	31.8	26.6	5.2	16.4	100%	100%	
LEV 5	W29	R29	32.6	30.9	1.7	5.2	100%	100%	
	W30	R30	37.8	35.9	1.9	5.0	99%	99%	
	W31	R31	37.8	35.9	1.9	5.0	99%	99%	
	W33	R33	37.7	35.1	2.6	6.9	99%	99%	
	W34	R34	37.7	34.9	2.8	7.4	100%	99%	
	W35	R35	32.3	29.0	3.3	10.2	100%	100%	
LEV 6	W36	R36	32.8	32.0	0.8	2.4	100%	100%	
	W37	R37	38.0	37.3	0.7	1.8	99%	99%	
	W38	R38	38.0	37.3	0.7	1.8	99%	99%	
	W40	R40	37.9	36.9	1.0	2.6	99%	99%	
	W41	R41	37.9	36.8	1.1	2.9	100%	100%	
	W42	R42	32.5	31.0	1.5	4.6	100%	100%	
No.90									
LEV 0	W1	R1	27.8	21.7	6.1	21.9	98%	72%	1.6
	W2	R2	27.9	21.9	6.0	21.5	99%	74%	1.7

32 Lawn Road, Belsize Park, London NW3

Daylight Results

LEV 1	W3	R3	30.4	23.7	6.7	22.0	98%	88%	1.4
	W4	R4	30.4	23.8	6.6	21.7	99%	87%	1.8
	W5	R5	27.9	21.4	6.5	23.3	99%	84%	1.4
LEV 2	W6	R6	32.2	25.4	6.8	21.1	99%	92%	2.4
	W7	R7	32.5	25.8	6.7	20.6	99%	93%	2.6
	W8	R8	29.9	23.4	6.5	21.7	99%	93%	1.3
LEV 3	W9	R9	22.8	17.1	5.7	25.0	98%	92%	1.1
	W10	R10	26.2	20.5	5.7	21.8	99%	91%	1.6
	W11	R11	22.4	16.8	5.6	25.0	99%	89%	1.2
No.84-88									
LEV 0	W1		29.9	23.3	6.6	22.1			
	W2		29.3	22.8	6.5	22.2			
	W3	R1	29.9	23.3	6.6	22.1	100%	81%	2.6
	W4		29.9	23.4	6.5	21.7			
	W5		29.3	23.0	6.3	21.5			
	W6	R2	29.8	23.7	6.1	20.5	100%	92%	2.6
	W7		29.8	24.3	5.5	18.5			
	W8		29.2	24.2	5.0	17.1			
	W9	R3	29.6	24.9	4.7	15.9	100%	98%	
	W10		29.6	25.1	4.5	15.2			
	W11		29.1	24.9	4.2	14.4			
	W12	R4	29.7	26.0	3.7	12.5	100%	100%	
LEV 1	W13	R5	32.3	25.2	7.1	22.0	100%	74%	2.0
	W14	R6	32.2	25.3	6.9	21.4	100%	67%	1.8
	W15	R7	32.2	25.5	6.7	20.8	100%	81%	2.0
	W16	R8	32.0	25.9	6.1	19.1	100%	78%	
	W17	R9	31.9	26.4	5.5	17.2	100%	94%	
	W18	R10	31.7	26.9	4.8	15.1	100%	96%	
	W19	R11	31.6	27.5	4.1	13.0	100%	100%	
	W20	R12	31.6	28.2	3.4	10.8	100%	100%	
LEV 2	W21	R13	25.2	18.6	6.6	26.2	98%	95%	1.6
	W22	R14	25.1	18.6	6.5	25.9	98%	92%	1.5
	W23	R15	25.0	19.0	6.0	24.0	98%	94%	1.8
	W24	R16	24.9	19.4	5.5	22.1	98%	95%	1.5
	W25	R17	24.7	19.9	4.8	19.4	98%	98%	
	W26	R18	24.5	20.3	4.2	17.1	98%	98%	
	W27	R19	24.3	20.8	3.5	14.4	98%	98%	
	W28	R20	24.3	21.5	2.8	11.5	99%	99%	
Garnet House									
LEV 0	W2	R1	19.6	18.1	1.5	7.7	73%	73%	

32 Lawn Road, Belsize Park, London NW3

Daylight Results

	W5	R4	9.1	9.1	0.0	0.0	49%	49%	
	W6	R5	10.6	10.2	0.4	3.8	87%	87%	
	W7	R6	9.1	7.9	1.2	13.2	73%	58%	
	W10	R9	19.1	15.6	3.5	18.3	80%	55%	
	W11	R10	19.9	16.2	3.7	18.6	98%	65%	
	W13	R12	18.8	14.4	4.4	23.4	59%	36%	0.5
	W14	R13	22.0	16.4	5.6	25.5	99%	66%	0.9
	W17	R16	11.9	11.0	0.9	7.6	82%	82%	
	W18	R17	10.0	9.6	0.4	4.0	48%	48%	
LEV 1	W20	R19	22.9	20.9	2.0	8.7	86%	86%	
	W24	R22	6.3	6.3	0.0	0.0	95%	95%	
	W25		10.7	10.7	0.0	0.0			
	W26	R23	12.1	11.7	0.4	3.3	96%	96%	
	W29	R26	21.0	17.3	3.7	17.6	97%	81%	
	W30		22.2	18.6	3.6	16.2			
	W31	R28	22.9	19.2	3.7	16.2	95%	81%	
	W35		22.3	17.9	4.4	19.8			
	W36	R32	25.3	20.3	5.0	19.8	98%	84%	
	W37	R33	24.9	19.9	5.0	20.0	96%	81%	
	W41	R37	13.6	12.6	1.0	7.4	91%	91%	
	W42	R38	11.8	11.4	0.4	3.4	95%	95%	
	W43		6.4	6.4	0.0	0.0			
	W47	R41	24.3	21.7	2.6	10.7	88%	88%	
LEV 2	W48	R42	27.3	24.9	2.4	8.8	95%	95%	
	W49	R43	24.0	21.9	2.1	8.8	92%	91%	
	W51	R45	13.5	13.5	0.0	0.0	67%	67%	
	W52	R46	14.6	14.2	0.4	2.7	99%	99%	
	W54	R48	26.5	22.2	4.3	16.2	91%	85%	
	W55	R49	27.0	22.5	4.5	16.7	98%	96%	
	W59	R53	29.0	23.5	5.5	19.0	99%	97%	
	W60	R54	28.8	23.4	5.4	18.8	98%	89%	
	W62	R56	16.0	15.2	0.8	5.0	93%	93%	
	W63	R57	14.6	14.3	0.3	2.1	69%	69%	
	W66	R60	28.5	25.8	2.7	9.5	96%	96%	
LEV 3	W67	R61	32.1	30.4	1.7	5.3	99%	99%	
	W70	R63	13.4	13.4	0.0	0.0	99%	99%	
	W71		20.1	20.1	0.0	0.0			
	W72	R64	19.1	18.7	0.4	2.1	99%	99%	
	W76	R68	30.3	26.9	3.4	11.2	97%	95%	
	W77	R69	31.4	27.9	3.5	11.2	99%	99%	
	W81	R72	32.4	28.4	4.0	12.4	99%	99%	
	W82	R73	32.1	28.2	3.9	12.2	99%	99%	
	W86	R77	20.4	19.9	0.5	2.5	98%	98%	
	W87	R78	21.2	21.0	0.2	0.9	99%	99%	

32 Lawn Road, Belsize Park, London NW3

Daylight Results

	W88		13.4	13.4	0.0	0.0		
	W91	R80	33.2	31.3	1.9	5.7	99%	99%
LEV 4	W92	R81	35.8	34.7	1.1	3.1	99%	99%
	W93	R82	35.6	34.6	1.0	2.8	94%	94%
	W94	R83	32.5	31.8	0.7	2.2	97%	97%
	W95	R84	27.2	26.5	0.7	2.6	100%	100%
	W97	R86	34.3	32.2	2.1	6.1	99%	99%
	W98	R87	34.8	32.6	2.2	6.3	99%	99%
	W101	R90	34.9	32.6	2.3	6.6	99%	99%
	W102	R91	34.6	32.3	2.3	6.7	99%	99%
	W104	R93	28.1	27.5	0.6	2.1	99%	99%
	W107	R96	36.8	35.8	1.0	2.7	99%	99%

32 Lawn Road, Belsize Road,

London, NW3

Internal Results

LEVEL	ROOM	ROOMUSE	ADF REQUIRED	ADF PASS/FAIL
LEV 1	R1	Bedroom	1.0	3.7
	R2	Livingroom	1.5	3.6
	R3	Livingroom	1.5	3.5
	R4	Livingroom	1.5	3.0
	R5	Bedroom	1.0	2.8
	R6	Bedroom	1.0	2.5
	R7	Livingroom	1.5	2.2
	R8	Bedroom	1.0	2.2
	R9	Bedroom	1.0	1.0
	R10	Livingroom	1.5	1.5
	R11	Bedroom	1.0	2.2
	R12	Bedroom	1.0	1.6
	R13	Livingroom	1.5	1.5
	R14	Livingroom	1.5	1.5
	R15	Livingroom	1.5	1.6
	R16	Bedroom	1.0	1.0
	R17	Bedroom	1.0	1.3
	R18	Bedroom	1.0	1.8
	R19	Livingroom	1.5	1.9
	R20	Bedroom	1.0	1.0
	R21	Bedroom	1.0	1.3
	R22	Bedroom	1.0	1.3
	R23	Livingroom	1.5	1.3
	R24	Bedroom	1.0	1.4
	R25	Bedroom	1.0	1.5
	R26	Bedroom	1.0	1.6
	R27	Bedroom	1.0	1.9

Appendix D

32 Lawn Road, Belsize Park,

London NW3

Sunlight Results

		EXISTING			PROPOSED			% LOSS	
LEVEL	WINDOW	SUMMER	WINTER	TOTAL	SUMMER	WINTER	TOTAL	WINTER	TOTAL
Palgrave House									
LEV 1	W1	18%	8%	26%	12.0%	2.0%	14.0%	75.00	46.15
	W2	35%	15%	50%	24.0%	7.0%	31.0%	53.33	38.00
	W3	35%	14%	49%	23.0%	7.0%	30.0%	50.00	38.78
	W4	7%	0%	7%	4.0%	0.0%	4.0%	-	-
	W5	33%	12%	45%	21.0%	6.0%	27.0%	50.00	40.00
	W6	33%	12%	45%	21.0%	6.0%	27.0%	50.00	40.00
	W7	15%	4%	19%	6.0%	1.0%	7.0%	75.00	63.16
LEV 2	W8	18%	8%	26%	14.0%	2.0%	16.0%	75.00	38.46
	W9	35%	16%	51%	29.0%	8.0%	37.0%	50.00	27.45
	W10	35%	15%	50%	27.0%	8.0%	35.0%	46.67	30.00
	W11	8%	0%	8%	7.0%	0.0%	7.0%	-	-
	W12	34%	14%	48%	24.0%	8.0%	32.0%	42.86	33.33
	W13	34%	14%	48%	24.0%	7.0%	31.0%	50.00	35.42
	W14	16%	6%	22%	6.0%	3.0%	9.0%	50.00	59.09
LEV 3	W15	18%	8%	26%	17.0%	2.0%	19.0%	75.00	26.92
	W16	35%	16%	51%	33.0%	9.0%	42.0%	43.75	17.65
	W17	35%	15%	50%	30.0%	9.0%	39.0%	40.00	22.00
	W18	8%	0%	8%	7.0%	0.0%	7.0%	-	-
	W19	34%	14%	48%	28.0%	11.0%	39.0%	21.43	18.75
	W20	34%	14%	48%	26.0%	12.0%	38.0%	14.29	20.83
	W21	17%	7%	24%	10.0%	5.0%	15.0%	28.57	37.50
LEV 4	W22	18%	8%	26%	18.0%	3.0%	21.0%	62.50	19.23
	W23	35%	16%	51%	34.0%	11.0%	45.0%	31.25	11.76
	W24	35%	15%	50%	34.0%	10.0%	44.0%	33.33	12.00
	W25	8%	0%	8%	8.0%	0.0%	8.0%	-	-
	W26	34%	14%	48%	33.0%	13.0%	46.0%	7.14	4.17
	W27	34%	14%	48%	33.0%	13.0%	46.0%	7.14	4.17
	W28	17%	7%	24%	14.0%	6.0%	20.0%	14.29	16.67
LEV 5	W29	18%	8%	26%	18.0%	7.0%	25.0%	12.50	3.85
	W30	35%	16%	51%	35.0%	14.0%	49.0%	12.50	3.92
	W31	35%	15%	50%	35.0%	14.0%	49.0%	6.67	2.00
	W32	8%	0%	8%	8.0%	0.0%	8.0%	-	-
	W33	34%	14%	48%	34.0%	13.0%	47.0%	7.14	2.08
	W34	34%	14%	48%	34.0%	13.0%	47.0%	7.14	2.08
	W35	17%	7%	24%	16.0%	6.0%	22.0%	14.29	8.33
LEV 6	W36	18%	8%	26%	18.0%	8.0%	26.0%	0.00	0.00
	W37	35%	16%	51%	35.0%	15.0%	50.0%	6.25	1.96
	W38	35%	15%	50%	35.0%	14.0%	49.0%	6.67	2.00
	W39	9%	0%	9%	9.0%	0.0%	9.0%	-	-
	W40	35%	14%	49%	35.0%	13.0%	48.0%	7.14	2.04
	W41	35%	14%	49%	35.0%	13.0%	48.0%	7.14	2.04
	W42	18%	7%	25%	18.0%	6.0%	24.0%	14.29	4.00

32 Lawn Road, Belsize Park,

London NW3

Sunlight Results

90 Upper Park Road									
LEV 0	W1	30%	10%	40%	25.0%	7.0%	32.0%	30.00	20.00
	W2	28%	9%	37%	25.0%	6.0%	31.0%	33.33	16.22
LEV 1	W3	34%	13%	47%	27.0%	8.0%	35.0%	38.46	25.53
	W4	34%	10%	44%	28.0%	7.0%	35.0%	30.00	20.45
	W5	27%	6%	33%	19.0%	2.0%	21.0%	66.67	36.36
LEV 2	W6	35%	15%	50%	29.0%	11.0%	40.0%	26.67	20.00
	W7	35%	13%	48%	29.0%	8.0%	37.0%	38.46	22.92
	W8	29%	8%	37%	24.0%	2.0%	26.0%	75.00	29.73
LEV 3	W9	18%	13%	31%	13.0%	8.0%	21.0%	38.46	32.26
	W10	23%	12%	35%	18.0%	7.0%	25.0%	41.67	28.57
	W11	17%	12%	29%	14.0%	7.0%	21.0%	41.67	27.59
84-88 Upper Park Road									
LEV 0	W1	28%	12%	40%	23.0%	9.0%	32.0%	25.00	20.00
	W2	30%	13%	43%	22.0%	11.0%	33.0%	15.38	23.26
	W3	27%	9%	36%	19.0%	7.0%	26.0%	22.22	27.78
	W4	29%	11%	40%	21.0%	9.0%	30.0%	18.18	25.00
	W5	30%	13%	43%	23.0%	12.0%	35.0%	7.69	18.60
	W6	29%	9%	38%	19.0%	9.0%	28.0%	0.00	26.32
	W7	28%	10%	38%	21.0%	10.0%	31.0%	0.00	18.42
	W8	29%	11%	40%	23.0%	11.0%	34.0%	0.00	15.00
	W9	27%	9%	36%	21.0%	8.0%	29.0%	11.11	19.44
	W10	28%	10%	38%	23.0%	10.0%	33.0%	0.00	13.16
	W11	28%	12%	40%	24.0%	12.0%	36.0%	0.00	10.00
	W12	27%	9%	36%	23.0%	9.0%	32.0%	0.00	11.11
LEV 1	W13	31%	13%	44%	24.0%	9.0%	33.0%	30.77	25.00
	W14	30%	13%	43%	24.0%	10.0%	34.0%	23.08	20.93
	W15	30%	13%	43%	23.0%	12.0%	35.0%	7.69	18.60
	W16	30%	12%	42%	23.0%	11.0%	34.0%	8.33	19.05
	W17	29%	12%	41%	22.0%	11.0%	33.0%	8.33	19.51
	W18	29%	11%	40%	23.0%	10.0%	33.0%	9.09	17.50
	W19	30%	12%	42%	25.0%	12.0%	37.0%	0.00	11.90
	W20	29%	11%	40%	26.0%	11.0%	37.0%	0.00	7.50
LEV 2	W21	19%	11%	30%	15.0%	7.0%	22.0%	36.36	26.67
	W22	18%	11%	29%	14.0%	8.0%	22.0%	27.27	24.14
	W23	18%	11%	29%	14.0%	9.0%	23.0%	18.18	20.69
	W24	18%	11%	29%	15.0%	9.0%	24.0%	18.18	17.24
	W25	18%	10%	28%	15.0%	8.0%	23.0%	20.00	17.86
	W26	18%	10%	28%	14.0%	8.0%	22.0%	20.00	21.43
	W27	18%	9%	27%	15.0%	9.0%	24.0%	0.00	11.11
	W28	18%	10%	28%	15.0%	10.0%	25.0%	0.00	10.71
Garnet House									
LEV 0	W2	17%	0%	17%	15.0%	0.0%	15.0%	0.00	11.76
	W3	-	-	-	-	-	-	-	-
	W4	-	-	-	-	-	-	-	-
	W5	4%	0%	4%	4.0%	0.0%	4.0%	0.00	0.00
	W6	1%	0%	1%	1.0%	0.0%	1.0%	0.00	0.00

32 Lawn Road, Belsize Park,

London NW3

Sunlight Results

	W7	-	-	-	-	-	-	-	-
	W8	-	-	-	-	-	-	-	-
	W9	-	-	-	-	-	-	-	-
	W10	-	-	-	-	-	-	-	-
	W11	-	-	-	-	-	-	-	-
	W12	-	-	-	-	-	-	-	-
	W13	-	-	-	-	-	-	-	-
	W14	-	-	-	-	-	-	-	-
	W15	-	-	-	-	-	-	-	-
	W16	-	-	-	-	-	-	-	-
	W17	-	-	-	-	-	-	-	-
	W18	-	-	-	-	-	-	-	-
	W19	-	-	-	-	-	-	-	-
LEV 1	W20	21%	0%	21%	19.0%	0.0%	19.0%	0.00	9.52
	W21	-	-	-	-	-	-	-	-
	W22	-	-	-	-	-	-	-	-
	W23	-	-	-	-	-	-	-	-
	W24	-	-	-	-	-	-	-	-
	W25	7%	0%	7%	7.0%	0.0%	7.0%	0.00	0.00
	W26	3%	0%	3%	3.0%	0.0%	3.0%	0.00	0.00
	W27	-	-	-	-	-	-	-	-
	W28	-	-	-	-	-	-	-	-
	W29	-	-	-	-	-	-	-	-
	W30	-	-	-	-	-	-	-	-
	W31	-	-	-	-	-	-	-	-
	W32	-	-	-	-	-	-	-	-
	W33	-	-	-	-	-	-	-	-
	W34	-	-	-	-	-	-	-	-
	W35	-	-	-	-	-	-	-	-
	W36	-	-	-	-	-	-	-	-
	W37	-	-	-	-	-	-	-	-
	W38	-	-	-	-	-	-	-	-
	W39	-	-	-	-	-	-	-	-
	W40	-	-	-	-	-	-	-	-
	W41	-	-	-	-	-	-	-	-
	W42	-	-	-	-	-	-	-	-
	W43	-	-	-	-	-	-	-	-
	W44	-	-	-	-	-	-	-	-
	W45	-	-	-	-	-	-	-	-
	W46	-	-	-	-	-	-	-	-
	W47	-	-	-	-	-	-	-	-
LEV 2	W48	25%	1%	26%	24.0%	1.0%	25.0%	0.00	3.85
	W49	17%	0%	17%	17.0%	0.0%	17.0%	0.00	0.00
	W50	-	-	-	-	-	-	-	-
	W51	8%	0%	8%	8.0%	0.0%	8.0%	0.00	0.00
	W52	4%	0%	4%	4.0%	0.0%	4.0%	0.00	0.00
	W53	-	-	-	-	-	-	-	-
	W54	-	-	-	-	-	-	-	-
	W55	-	-	-	-	-	-	-	-
	W56	-	-	-	-	-	-	-	-
	W57	-	-	-	-	-	-	-	-

32 Lawn Road, Belsize Park,

London NW3

Sunlight Results

	W58	-	-	-	-	-	-	-	-
	W59	-	-	-	-	-	-	-	-
	W60	-	-	-	-	-	-	-	-
	W61	-	-	-	-	-	-	-	-
	W62	-	-	-	-	-	-	-	-
	W63	-	-	-	-	-	-	-	-
	W64	-	-	-	-	-	-	-	-
	W65	-	-	-	-	-	-	-	-
	W66	-	-	-	-	-	-	-	-
LEV 3	W67	29%	7%	36%	29.0%	7.0%	36.0%	0.00	0.00
	W68	-	-	-	-	-	-	-	-
	W69	-	-	-	-	-	-	-	-
	W70	-	-	-	-	-	-	-	-
	W71	14%	0%	14%	14.0%	0.0%	14.0%	0.00	0.00
	W72	5%	0%	5%	5.0%	0.0%	5.0%	0.00	0.00
	W73	-	-	-	-	-	-	-	-
	W74	-	-	-	-	-	-	-	-
	W75	-	-	-	-	-	-	-	-
	W76	-	-	-	-	-	-	-	-
	W77	-	-	-	-	-	-	-	-
	W78	-	-	-	-	-	-	-	-
	W79	-	-	-	-	-	-	-	-
	W80	-	-	-	-	-	-	-	-
	W81	-	-	-	-	-	-	-	-
	W82	-	-	-	-	-	-	-	-
	W83	-	-	-	-	-	-	-	-
	W84	-	-	-	-	-	-	-	-
	W85	-	-	-	-	-	-	-	-
	W86	-	-	-	-	-	-	-	-
	W87	-	-	-	-	-	-	-	-
	W88	-	-	-	-	-	-	-	-
	W89	-	-	-	-	-	-	-	-
	W90	-	-	-	-	-	-	-	-
	W91	-	-	-	-	-	-	-	-
LEV 4	W92	29%	15%	44%	29.0%	15.0%	44.0%	0.00	0.00
	W93	25%	10%	35%	25.0%	10.0%	35.0%	0.00	0.00
	W94	26%	6%	32%	26.0%	6.0%	32.0%	0.00	0.00
	W95	22%	0%	22%	22.0%	0.0%	22.0%	0.00	0.00
	W96	-	-	-	-	-	-	-	-
	W97	-	-	-	-	-	-	-	-
	W98	-	-	-	-	-	-	-	-
	W99	-	-	-	-	-	-	-	-
	W100	-	-	-	-	-	-	-	-
	W101	-	-	-	-	-	-	-	-
	W102	-	-	-	-	-	-	-	-
	W103	-	-	-	-	-	-	-	-
	W104	-	-	-	-	-	-	-	-
	W105	-	-	-	-	-	-	-	-
	W106	-	-	-	-	-	-	-	-
	W107	-	-	-	-	-	-	-	-

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