

DAYLIGHT AND SUNLIGHT REPORT

**188 Wilmslow Road
Manchester
M14 6LJ**

Client
Watkin Jones

Dated
17 December 2020

Prepared by
James Williamson

Version
1

CONTENTS

EXECUTIVE SUMMARY

PAGE

1	INSTRUCTIONS AND BRIEF	3
2	THE DEVELOPMENT SITE.....	3
3	PLANNING POLICY	4
4	BRE REPORT “SITE LAYOUT PLANNING FOR DAYLIGHT AND SUNLIGHT: A GUIDE TO GOOD PRACTICE” SECOND EDITION (2011) (‘THE REPORT’)	5
5	RESULTS	8
6	CONCLUSION	12

APPENDICES

Appendix A: Drawings

Appendix B: Vertical Sky Component and Annual Probable Sunlight Hours Spreadsheet

Appendix C: Daylight Distribution Spreadsheet

1 INSTRUCTIONS AND BRIEF

1.1 In accordance with your instructions, we have prepared analysis on the effect the development at 188 Wilmslow Road, Manchester ('the development') will have on the daylight and sunlight amenity to the neighbouring properties.

1.1 We have received the following documents and used them in preparing this report:

- Accucities 3D Model of the Existing Site and Surrounding Properties received on 18 March 2020;
- Tim Groom Architects Proposed Scheme Drawings received on 3 December 2020.

1.2 Our study has been undertaken by preparing a three-dimensional computer model of the site and surrounding buildings and analysing the effect of the Development on the daylight and sunlight levels received by the neighbouring buildings using our bespoke software. Our assessment is based on a visual inspection, the information detailed above and estimates of relevant distances, dimensions and levels which are as accurate as the circumstances allow.

2 THE DEVELOPMENT SITE

2.1 The site is located on the north-west corner of Wilmslow Road and Langley Road and currently comprises office buildings up to three storeys in height. The proposed development comprises the partial demolition of the existing buildings and construction of three blocks containing student accommodation.

2.2 The site (shaded red) and surrounding context is shown in Image 1 below.



Image: 1

Description: Aerial View of Site

3 PLANNING POLICY

3.1 National Policy

- 3.1.1 The revised National Planning Policy Framework ('NPPF') 2019 addresses the need for the flexible application of guidance relating to daylight and sunlight under Section 11 'Making effective use of land'. Paragraph 123. c) under subsection "Achieving appropriate densities" states the following;

c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards).

3.2 Local Policy – Manchester City Council (MCC)

- 3.2.1 Policy DM 1 "Development Management" of Manchester City Council's Core Strategy Development Plan (2012) states:

- 3.2.2 "All development should have regard to the following specific issues for which more detailed guidance may be given within a supplementary planning document:-

- *Appropriate siting, layout, scale, form, massing, materials and detail.*
- *Impact on the surrounding areas in terms of the design, scale and appearance of the proposed development. Development should have regard to the character of the surrounding area.*
- *Effects on amenity, including privacy, **light**, noise, vibration, air quality, odours, litter, vermin, birds, road safety and traffic generation. This could also include proposals which would be sensitive to existing environmental conditions, such as noise...."*

- 3.2.3 Although not specifically referred to in Manchester City Council's Core Strategy Development Plan, the widely accepted method of assessing daylight and sunlight amenity is in accordance with the guidance given in the BRE Report: "Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice" Second Edition (2011).

**4 BRE REPORT “SITE LAYOUT PLANNING FOR DAYLIGHT AND SUNLIGHT: A GUIDE TO GOOD PRACTICE”
SECOND EDITION (2011) (‘THE REPORT’)**

4.1 Principles

- 4.1.1 It is important to note that the introduction to the report stresses that the document is provided for guidance purposes only and it is not intended to be interpreted as a strict set of rules. It also suggests that it may be appropriate to adopt a flexible approach and alternative target values in dealing with “special circumstances” 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.” This is amplified by the following extracts from the introduction (P1, para. 6) and Section 2.2:

“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 guidelines, these should be interpreted flexibly because natural lighting is only one of many factors in site layout design...” (P1, para. 1.6)

“In special circumstances the Developer or Planning Authority may wish to use different target values.” (P1, para. 1.6)

“Note that numerical values given here are purely advisory. Different criteria may be used, based upon the requirements for daylighting in an area viewed against other site layout constraints. 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”. (P7 para. 2.2.3)

- 4.1.2 The examples given in the Report can be applied to any part of the country: suburban, urban and rural areas. The inflexible application of the target values given in the Report may make reaching the BRE criteria difficult in a tight, urban environment where there is unlikely to be the same expectation of daylight and sunlight amenity as in a suburban or rural environment.

4.2 Daylight

- 4.2.1 In summary, the BRE Report states that:

“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 the lowest window, subtends an angle of more than 25 degrees to the horizontal, then the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:

- the vertical sky component ['VSC'] measured at the centre of an existing main window is less than 27%, and less than 0.8 times its former value;

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, store rooms, 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."

...Windows to bathrooms, toilets, store rooms, circulation areas and garages need not be analysed."

4.2.2 The Report also states that:

"Where room layouts are known, the impact on the daylighting distribution ['DD'] 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."

"If, following construction of a new development, the no sky line moves so that the area of the existing room, which does receive direct daylight, is 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."

4.2.3 Guidance has been provided in the Second Edition of the report in relation to existing windows with balconies:

"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 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." (2.2.11)

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." (2.2.12)

- 4.2.4 Further guidance is provided in Appendix F on the types of tests to be applied when considering the loss of light to an existing building. F6 states the following:

“In assessing the loss of light to an existing building, the VSC is generally recommended as the appropriate parameter to use. This is because the VSC depends only on obstruction, and is therefore a measure of the daylit environment as a whole. The average daylight factor (ADF) (Appendix C) also depends on the room and window dimensions, the reflectance of interior surfaces and the type of glass, as well as the obstruction outside. It is an appropriate measure to use in new buildings because most of these factors are within the developer’s control.”

“Use of the ADF for loss of light to existing buildings is not generally recommended. The use of the ADF as a criterion tends to penalise well-daylit existing buildings, because they can take a much bigger and closer obstruction and still remain above the minimum ADFs recommended in BS 8206-2. Because BS 8206-2 quotes a number of recommended ADF values for different qualities of daylight provision, such a reduction in light would still constitute a loss of amenity to the rooms. Conversely if the ADF in an existing building were only just over the recommended minimum, even a tiny reduction in light from a new development would cause it to go below the minimum, restricting what could be built nearby.” (F6 and F7)

4.3 Sunlight

- 4.3.1 The BRE Report advises that new development should take care to safeguard access to sunlight for existing buildings and any non-domestic buildings where there is a particular requirement for sunlight. In summary, the report states:

“If a living room of an existing dwelling has a main window facing within 90 degrees of due south, and any part of a new development subtends an angle of more than 25 degrees 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 affected. This will be the case if the centre of the window:

- *receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March and*
- *receives less than 0.8 times its former sunlight hours during either period and*
- *has a reduction in sunlight over the whole year greater than 4% of annual probable sunlight hours”*

- 4.3.2 The report also states that:

“...It is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within ninety-degrees of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun. In non-domestic buildings any spaces which are deemed to have a special requirement for sunlight should be checked; they will normally face within ninety-degrees of due south anyway.” (3.2.3)

5 RESULTS

- 5.1 We have analysed the effect of the development on the daylight and sunlight amenity to the properties with a reasonable expectation of daylight and sunlight amenity situated around the development site. Properties further afield would satisfy the preliminary 25-degree line test recommended by the BRE Report, and therefore do not require further assessment.
- 5.2 The sensitive neighbouring properties are all located to the south of the site and therefore, most of the windows facing the site are orientated in a northerly direction and do not require assessment for sunlight amenity.
- 5.3 The full list of assessed properties is as follows. The locations of the assessed rooms/windows are shown on the drawings in Appendix A:
- 11-27 Langley Road (odd numbers);
 - 1 & 2 Riga Road;
 - 29-45 Langley Road (odd numbers);
 - 20-28 Mabfield Road (even numbers);
 - 30-48 Mabfield Road (even numbers).
- 5.4 The results of our assessment can be found in Appendix B and are summarised below on a property by property basis.

5.5 11-27 Langley Road (odd numbers)



Image: 2

Location: South of the development

Description: Nine terraced houses.

- 5.5.1 We have obtained estate agent property particulars or planning drawings for 11, 13, 15, 19, 21, 23 and 27 Langley Road and have used these to inform the layouts and room uses within these houses. These show that the windows on the upper floors serve bedrooms and the ground floor windows serve living rooms or bedrooms.
- 5.5.2 The analysis results show that all of the windows tested on these properties would comply with the BRE Report guidelines using the VSC test for daylight amenity, with all windows retaining at least 27% VSC or at least 0.80 times the VSC in the existing conditions.
- 5.5.3 The DD results show that 19 of the 20 rooms assessed would comply with the BRE Report guidelines for daylight amenity. The one room not meeting the guidelines is a second floor bedroom at 27 Langley Road where the lit area within this room would be reduced to 0.76 times the lit area in the existing conditions, only marginally below the 0.80 recommended in the BRE Report.
- 5.5.4 None of the windows facing the site are orientated within 90-degrees of due south and therefore, in accordance with the BRE Report guidelines, do not require analysis for sunlight amenity.

5.6 1 & 2 Riga Road



Image: 3

Location: South of the development

Description: End of terrace houses

5.6.1 These end of terrace houses are located on the corner of Langley Road and Riga Road. We have obtained estate agent particulars for both houses and have used these to model the internal layouts.

5.6.2 The VSC and DD analysis results show that all of the windows and rooms assessed within these houses would comply with the BRE Report guidelines for daylight amenity.

5.6.3 Five of the windows serving 2 Riga Road are orientated within 90-degrees of due south and the analysis shows that these would all comply with the BRE Report guidelines for both annual and winter sunlight amenity.

5.7 29-45 Langley Road (odd numbers)



Image: 4

Location: South of the development

Description: Nine terraced houses

5.7.1 These terraced houses are located directly opposite the proposed block fronting Langley Road. We have obtained floorplans for 33, 43 and 45 Langley Road from MCC's online planning database and have used these, together with layouts obtained from 11-27 Langley Road, to inform the layouts and room uses within all these houses.

- 5.7.2 The VSC results show that 11 of the 20 windows assessed would comply with the BRE Report guidelines using the VSC test. The nine windows not meeting the guidelines would retain between 0.71 and 0.78 times the VSC in the existing conditions, only marginally below the BRE Report recommendation of 0.80. The affected windows would each retain an absolute VSC of between 21.73% and 26.83%, compared to the 27% recommendation. These figures are consistent with occupier expectations in an urban environment.
- 5.7.3 The DD results show that 7 of the 20 rooms assessed would comply with the BRE Report guidelines using this test. The 13 rooms not meeting the guidelines would each retain direct daylight to at least 63% of the room area, compared to the 80% guidance figure.
- 5.7.4 With the exception of one window on 43 Langley Road, all of the windows assessed are orientated in a northerly direction and do not require assessment for sunlight amenity. The window on 43 Langley Road would comply with the BRE Report guidelines for sunlight amenity.

5.8 20-48 Mabfield Road



Image: 5
 Location: South of the development
 Description: Two blocks of terraced houses (shaded blue)

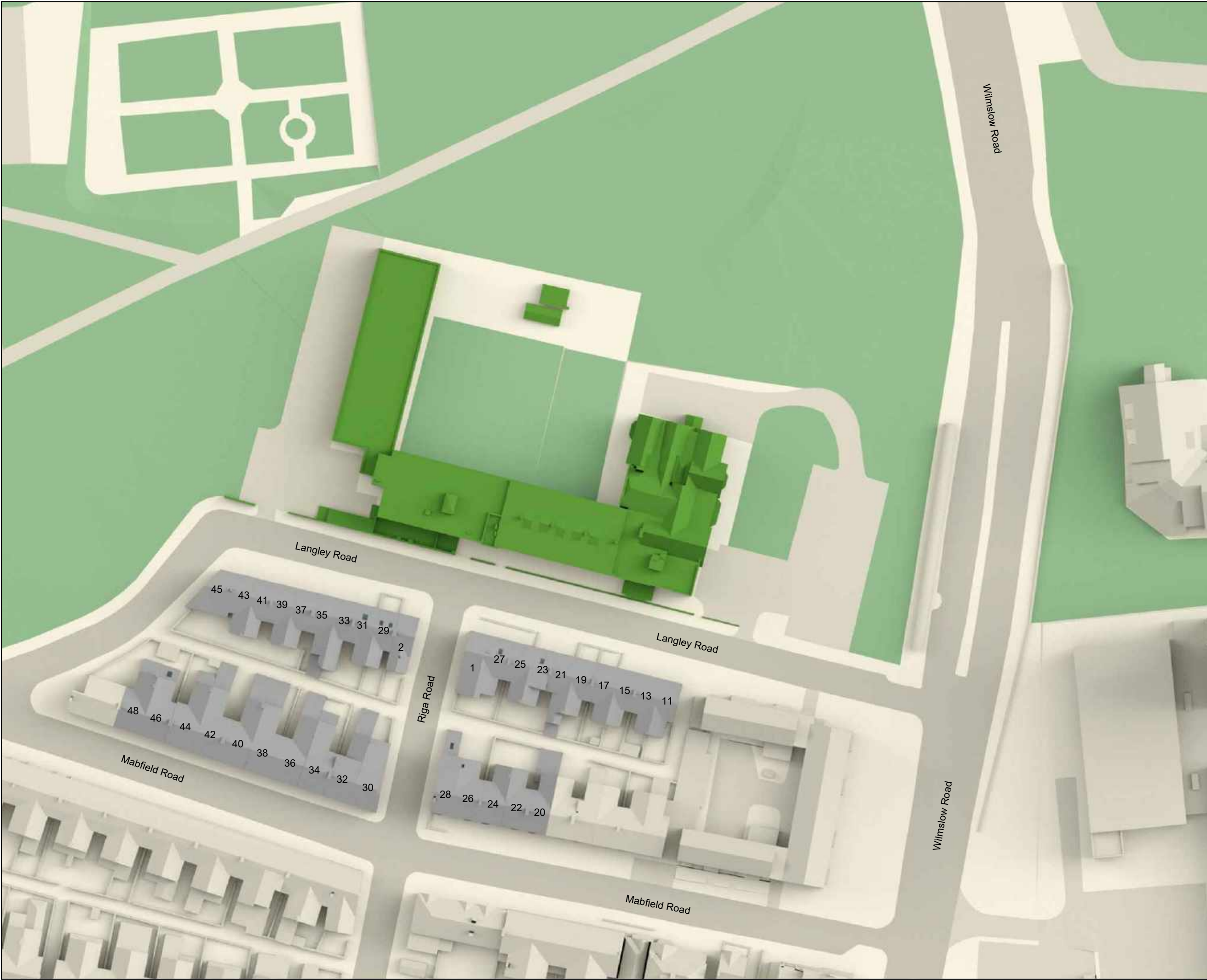
- 5.8.1 These terraced houses are located behind the terraced houses on Langley Road. We have obtained estate agent particulars or planning drawings for 24, 28, 30, 26, 38, 44 and 46 Mabfield Road and have used these to inform the layouts and room uses in all these houses.
- 5.8.2 The VSC and DD analysis results show that all of the windows and rooms assessed would comply with the BRE Report guidelines for daylight amenity.
- 5.8.3 All of the windows assessed that are orientated within 90-degrees of due south would comply with the guidelines for sunlight amenity.

6 CONCLUSION

- 6.1 In terms of daylight amenity, the assessment results demonstrate that the vast majority of assessed windows (91%) would retain Vertical Sky Component (VSC) in-line with BRE Report guidance. The DD results show that 86% of the rooms assessed would comply with the guidelines using this test.
- 6.2 The windows and rooms not meeting the guidelines are all located within 29-41 Langley Road and the effect of the development on daylight amenity to these houses would be minor adverse. The VSC results for these houses show that all of the windows would retain at least 0.71 times the existing VSC, only marginally below the 0.80 recommended in the BRE Report. The retained levels of daylight amenity to these houses are considered contextually appropriate in an urban environment.
- 6.3 Turning to sunlight amenity, whilst the majority of windows assessed are orientated in a northerly direction, the assessment results show that all of the windows facing within 90 degrees of due south retain BRE compliant levels of annual and winter sunlight.
- 6.4 The following passage from the revised National Planning Policy Framework addresses the need for the flexible application of daylight and sunlight guidance to ensure effective use of development land can be made;
- “authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards).”*
- 6.5 This is consistent with advice in the BRE Report guidelines which states:
- “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 guidelines, these should be interpreted flexibly because natural lighting is only one of many factors in site layout design...”*
- 6.6 It is considered that the development would not have an unacceptable impact on levels of daylight and sunlight in adjoining properties, when considered against National and Local Planning Policy, the local context and, more specifically, the guidance given in the BRE Report ‘Site Layout Planning for Daylight and Sunlight’.

APPENDIX A

DRAWINGS



COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020



KEY

- Existing buildings
- Analysed properties
- Surrounding buildings

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

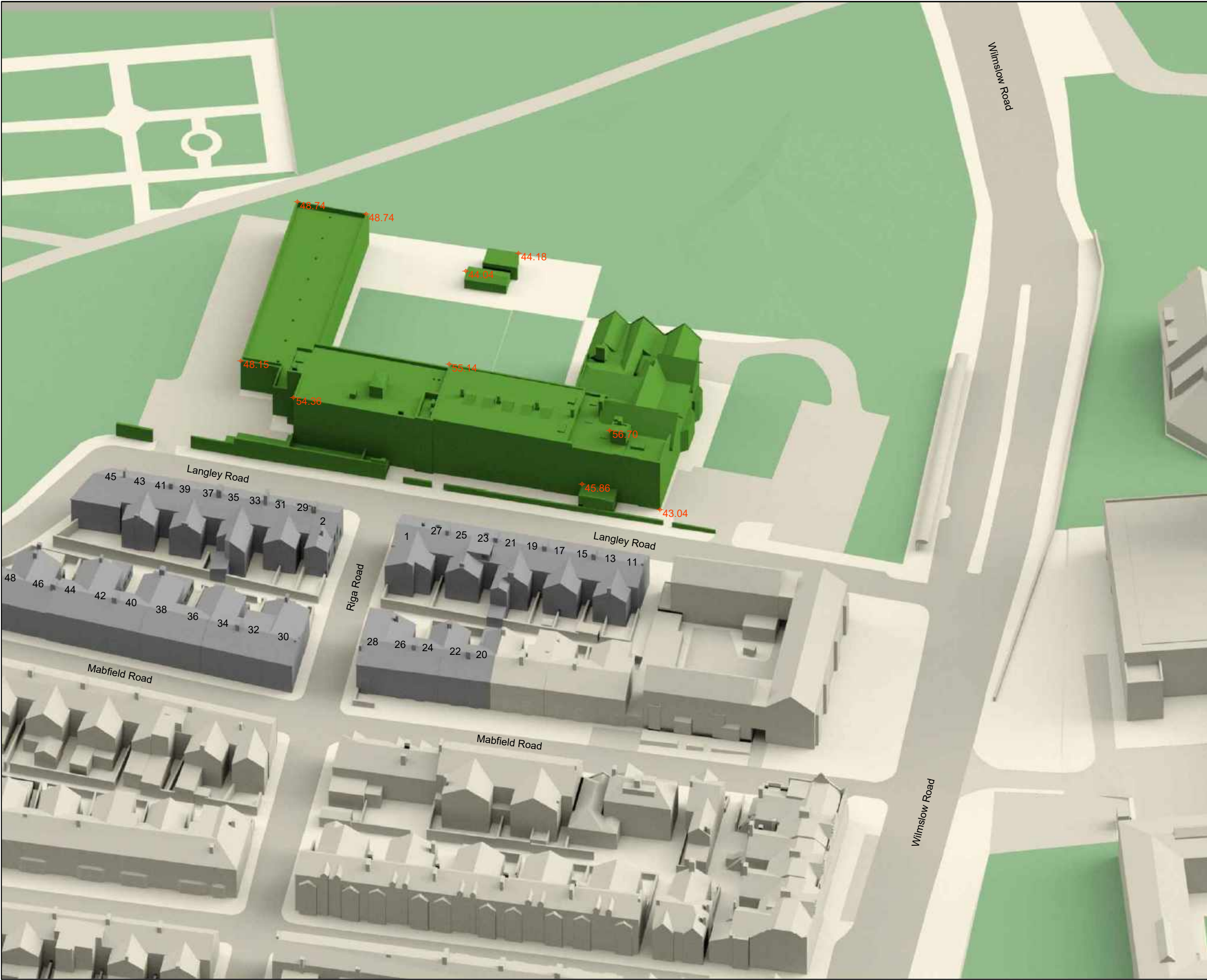
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Existing plan view

SCALE [Not to Scale]	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 011	REV.
-----------------------	------





COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:
Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020

- KEY
- Existing buildings
 - Analysed properties
 - Surrounding buildings

Ordinance Datum Heights

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Existing 3D view

SCALE Not to Scale	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 012	REV.
-----------------------	------





COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:
Tim Groom Architects proposed
scheme received on 03/12/2020

Accutities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020

- KEY
- Existing buildings
 - Analysed properties
 - Surrounding buildings

Ordnance Datum Heights

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

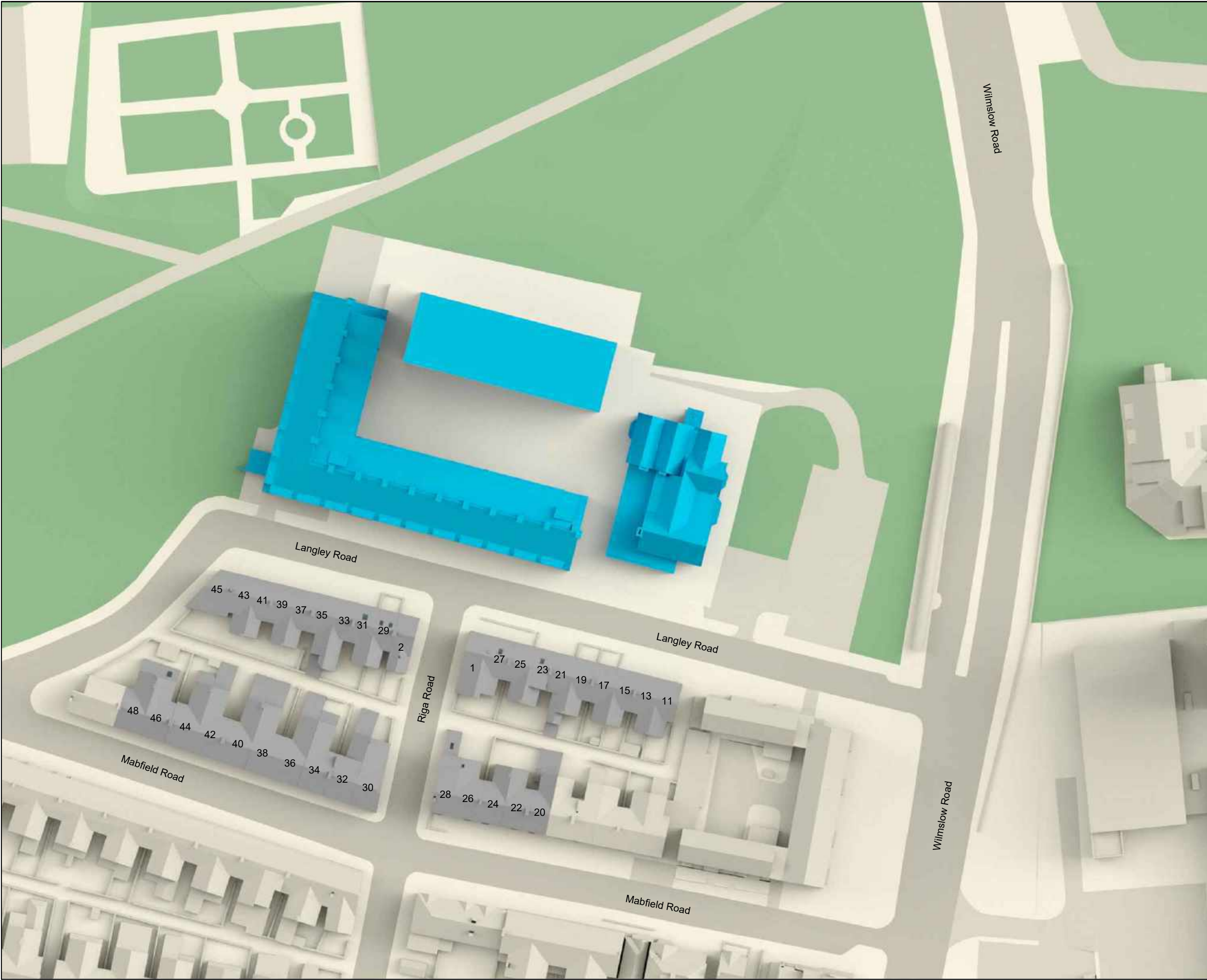
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Existing 3D view

SCALE Not to Scale	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 013	REV.
-----------------------	------





COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020



KEY

- Proposed buildings
- Analysed properties
- Surrounding buildings

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

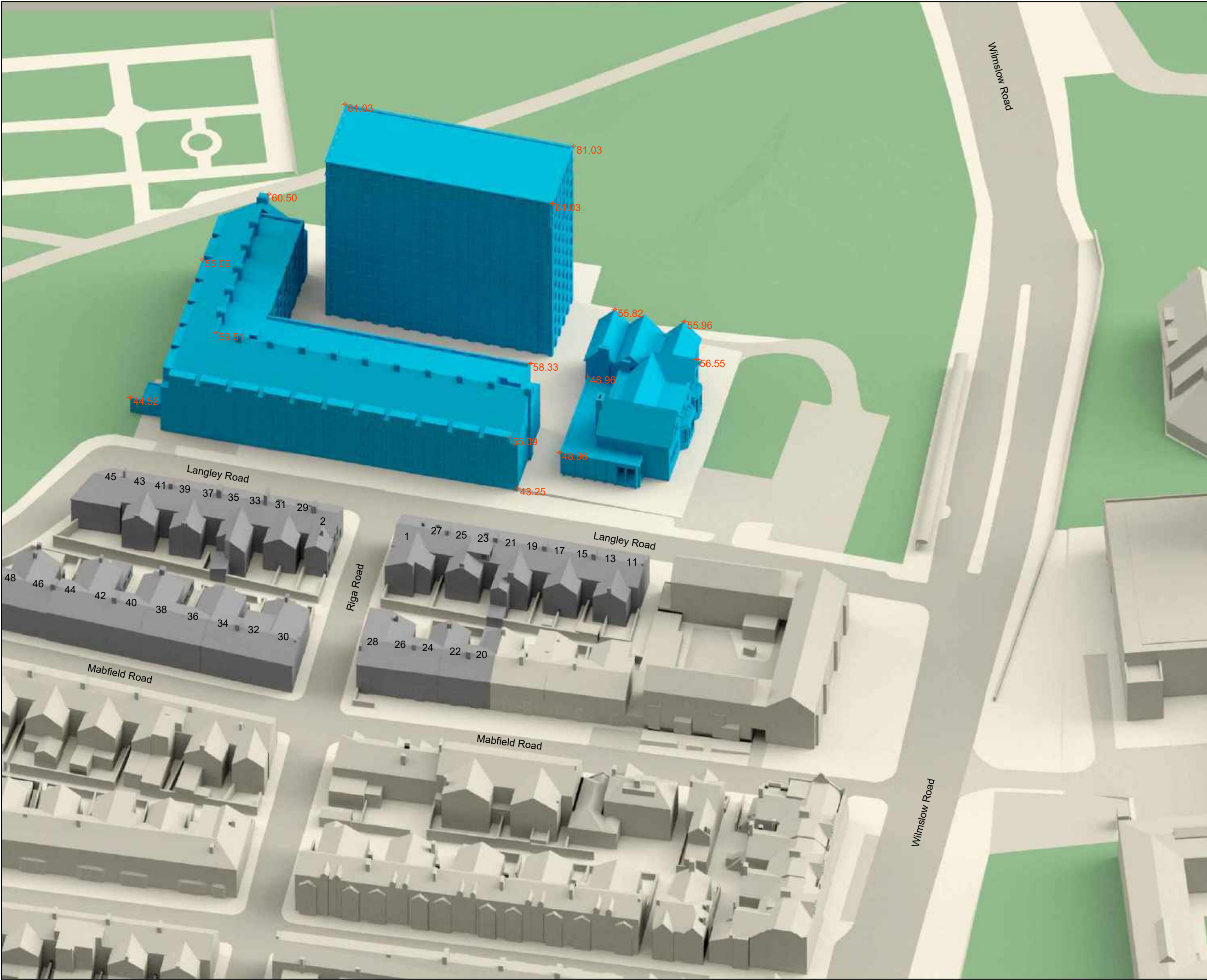
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Proposed plan view

SCALE [Not to Scale]	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 014	REV.
-----------------------	------





COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:
Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020

- KEY
- Proposed buildings
 - Analysed properties
 - Surrounding buildings

Ordinance Datum Heights

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

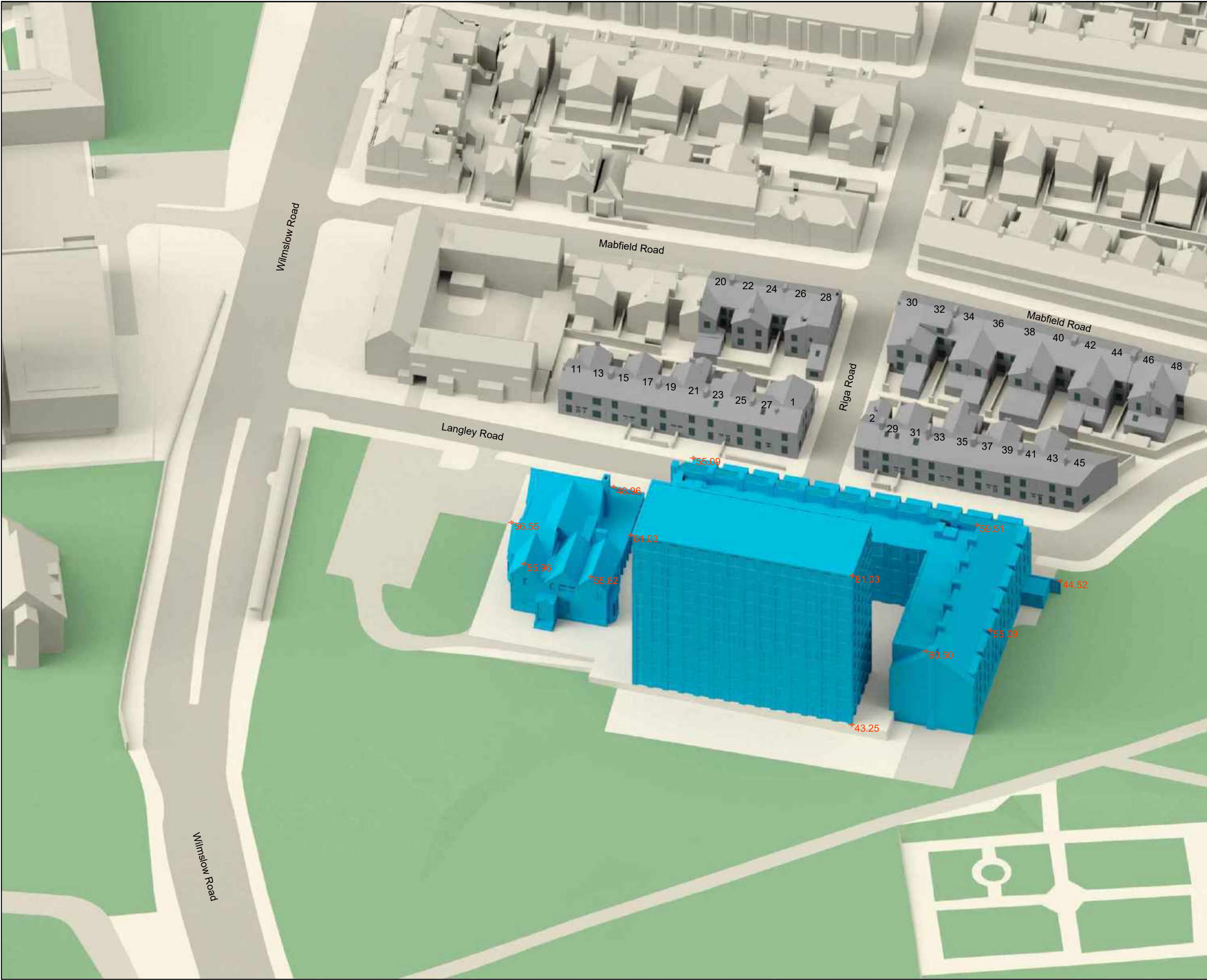
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Proposed 3D view

SCALE Not to Scale	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 015	REV.
-----------------------	------





COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:
Tim Groom Architects proposed
scheme received on 03/12/2020

Accutities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020

- KEY
- Proposed buildings
 - Analysed properties
 - Surrounding buildings

Ordnance Datum Heights

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

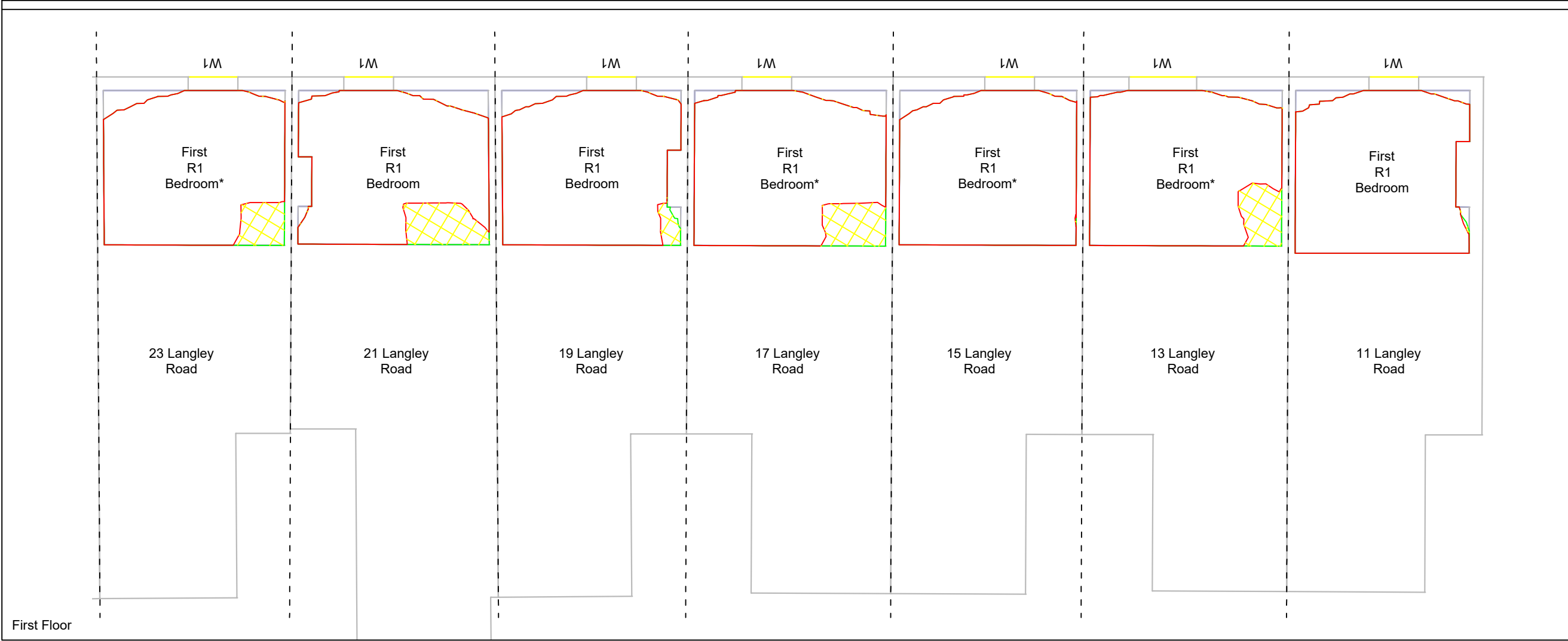
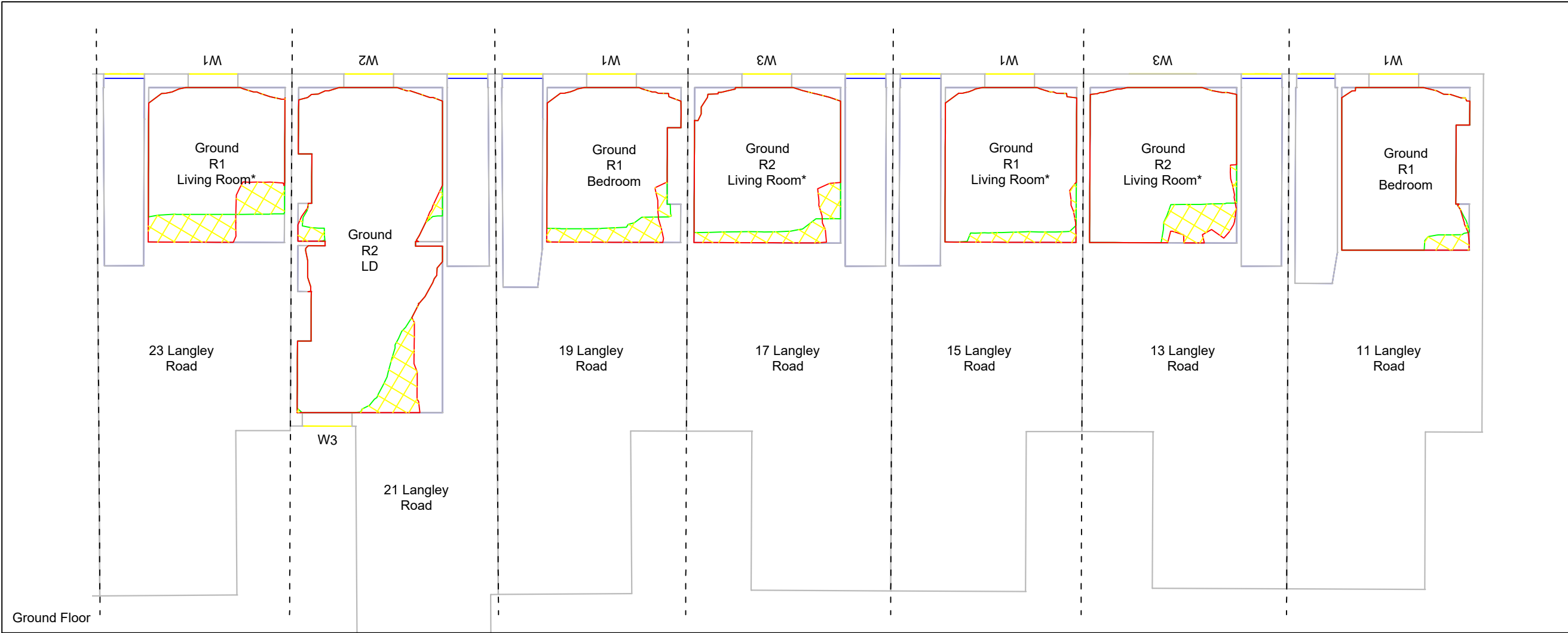
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Proposed 3D view

SCALE Not to Scale	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 016	REV.
-----------------------	------





COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:
Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020

KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

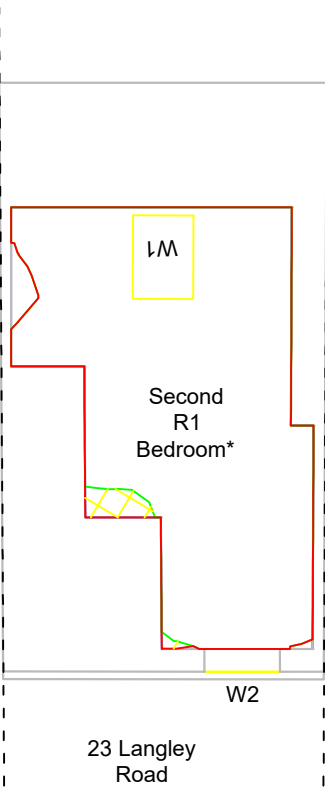
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Daylight Distribution contours
11-23 Langley Road

SCALE 1:100 @A3	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 201	REV.
------------------------------	-------------

Second Floor



COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

Tim Groom Architects proposed
scheme received on 03/12/2020

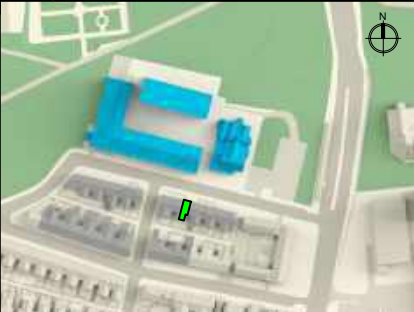
Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

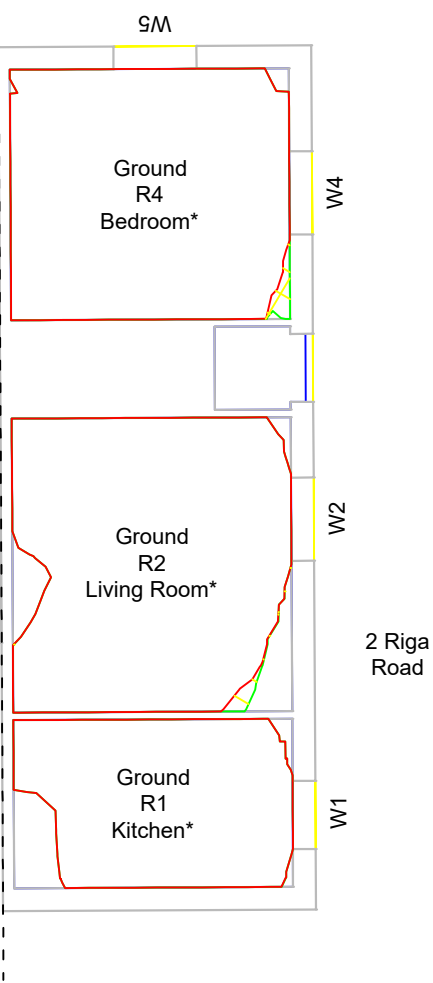
DRAWING TITLE
Daylight Distribution contours
23 Langley Road

SCALE 1:100 @A3	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 202	REV.
-----------------------	------

CONSIL

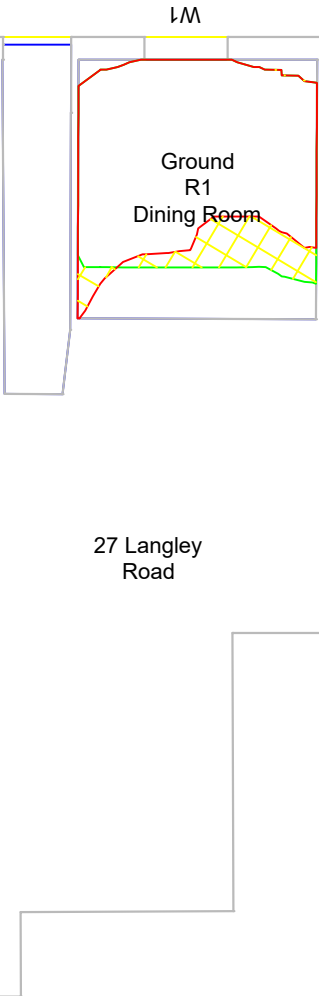
Ground Floor



1 Riga Road



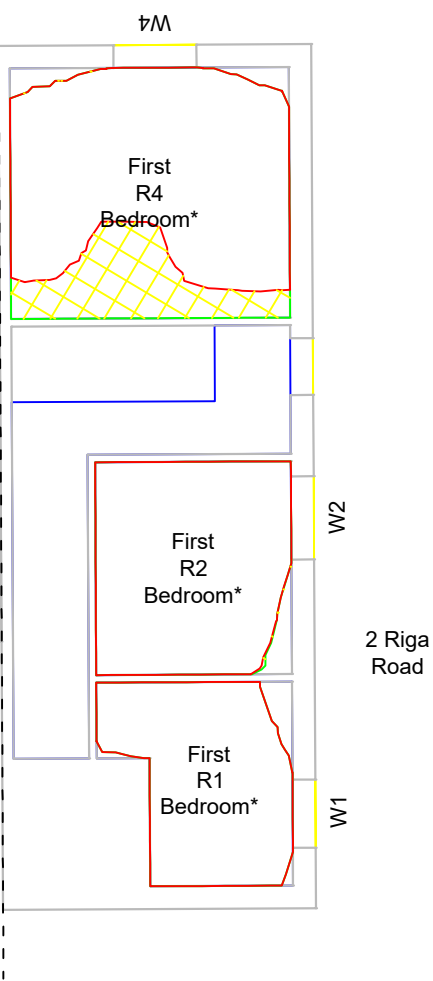
27 Langley Road



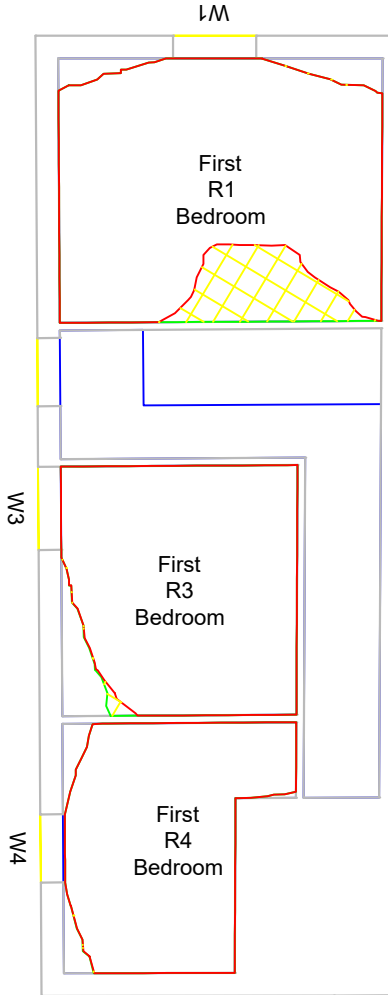
25 Langley Road



First Floor



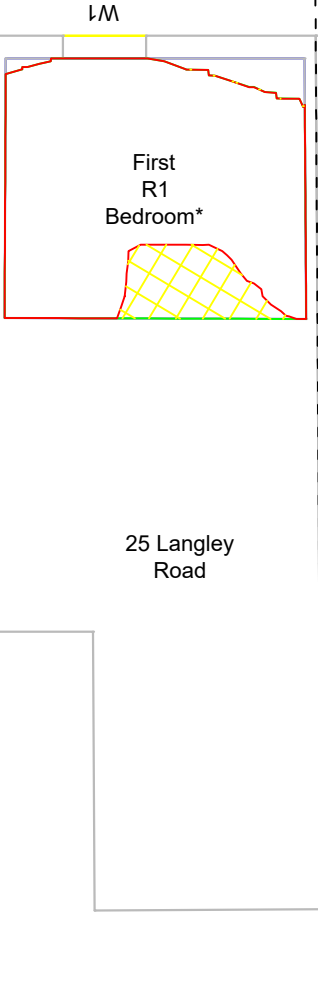
1 Riga Road



27 Langley Road



25 Langley Road



COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

Tim Groom Architects proposed
scheme received on 03/12/2020

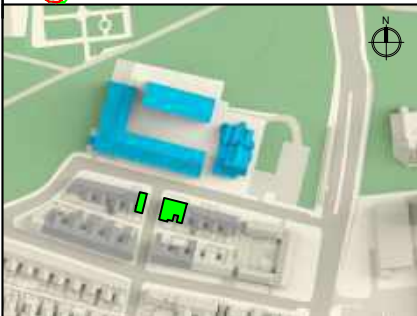
Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

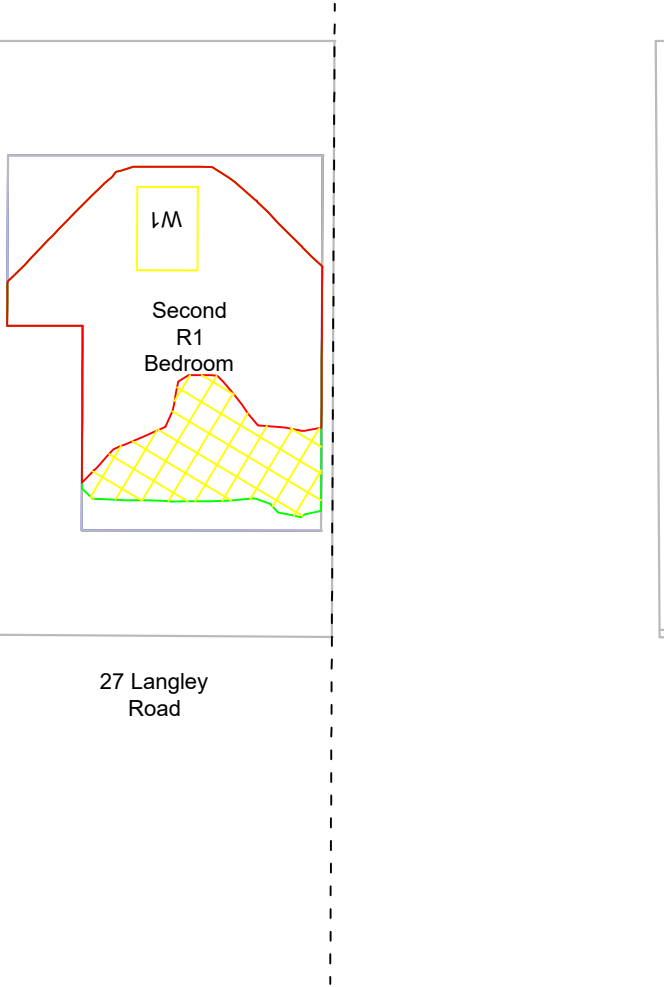
DRAWING TITLE
Daylight Distribution contours
25-27 Langley Road
1-2 Riga Road

SCALE 1:100 @A3	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 203	REV.
-----------------------	------



Second Floor



COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

Tim Groom Architects proposed
scheme received on 03/12/2020

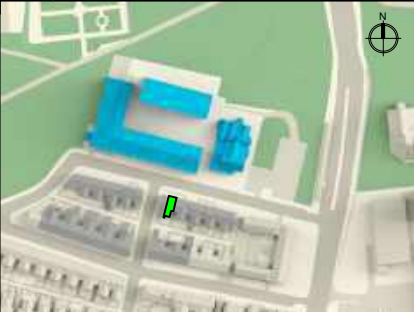
Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

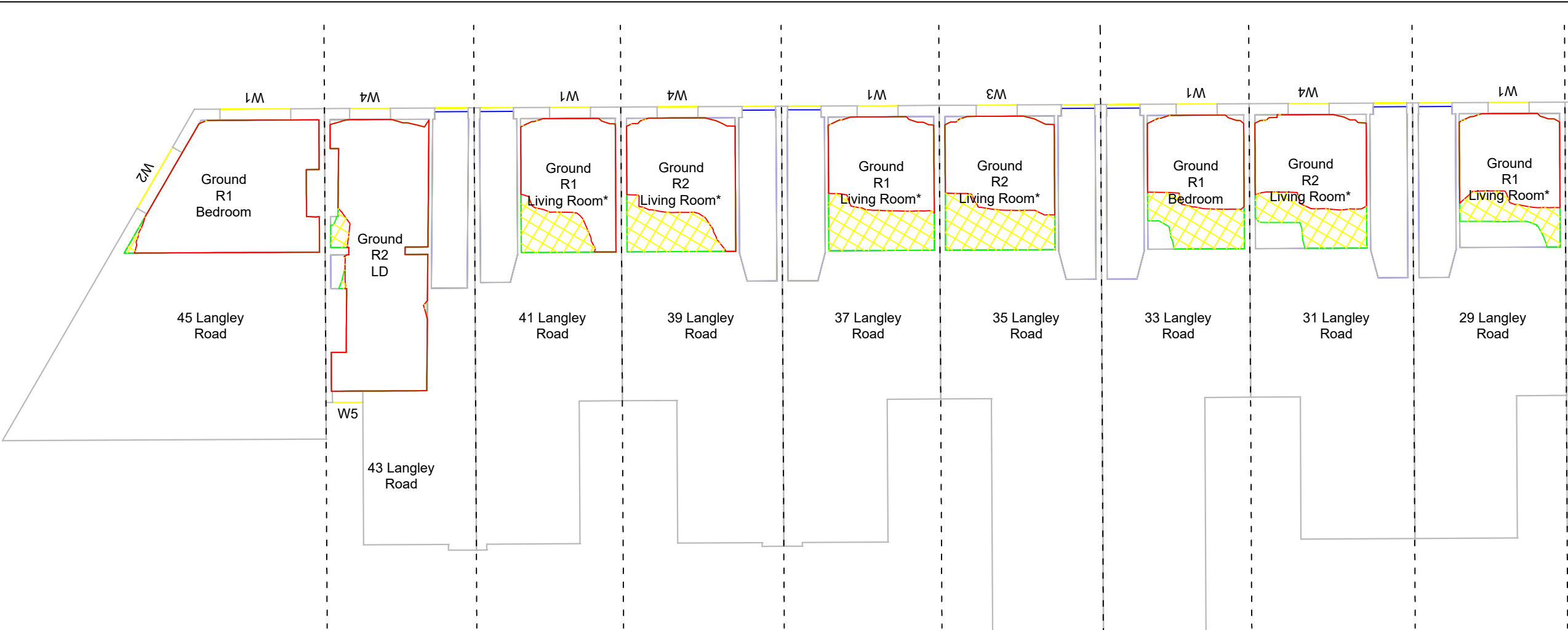
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Daylight Distribution contours
27 Langley Road

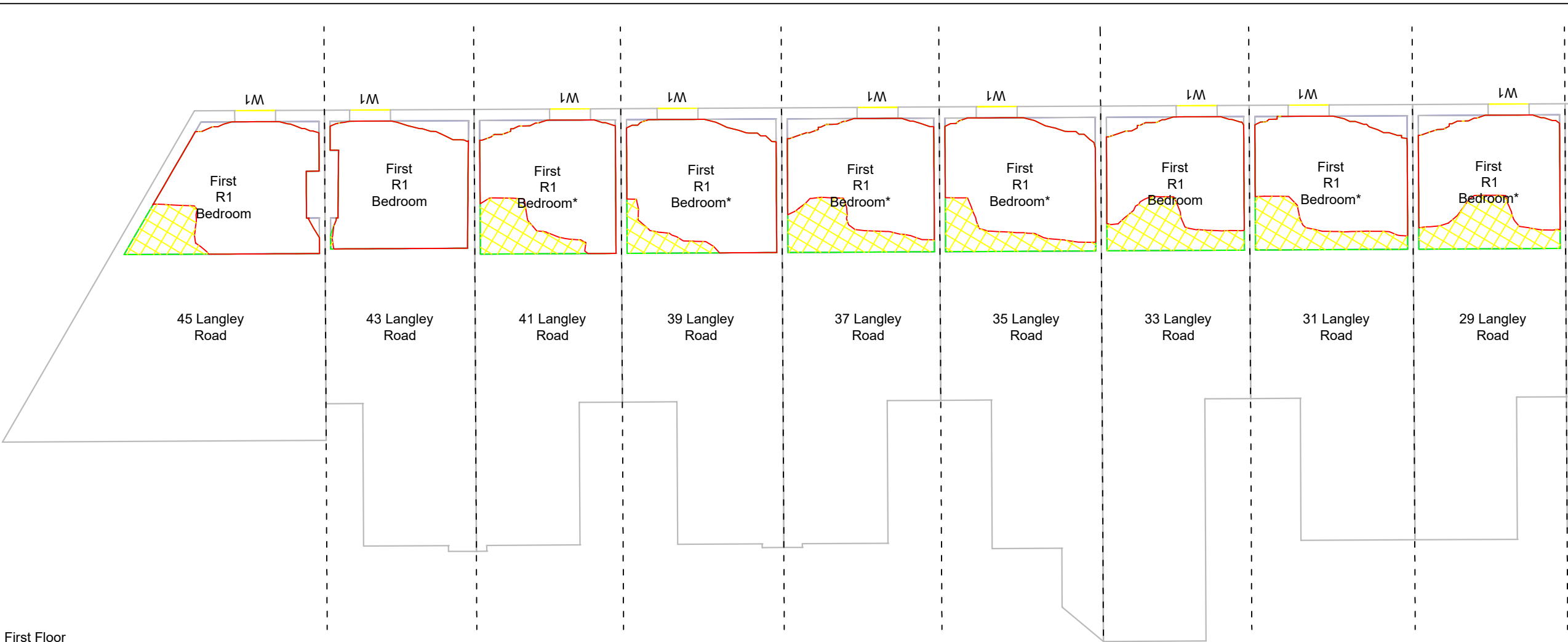
SCALE 1:100 @A3	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 204	REV.
-----------------------	------





Ground Floor



First Floor

COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

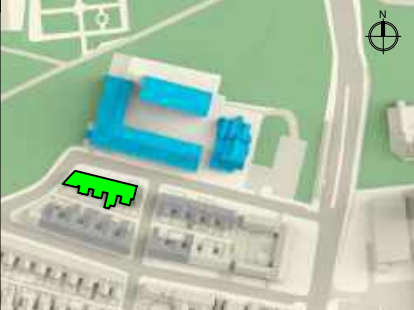
SOURCES OF INFORMATION:
Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020



- KEY
- R1 Room area
 - Existing no-skyline
 - Proposed no-skyline
 - Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

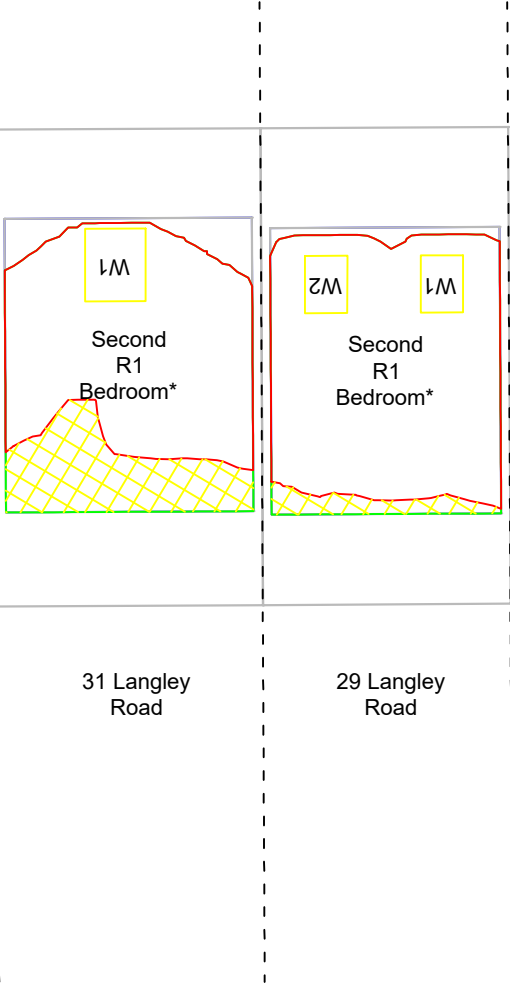
DRAWING TITLE
Daylight Distribution contours
29-45 Langley Road

SCALE 1:125 @A3	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 205	REV.
-----------------------	------



Second Floor



COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

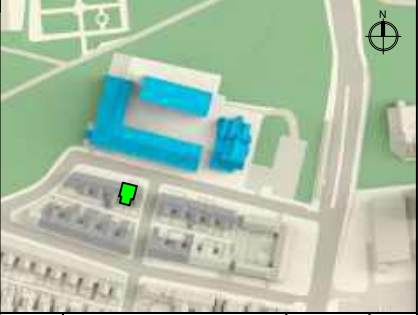
Consil site photography taken on
27/10/2020



KEY

- R1

 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

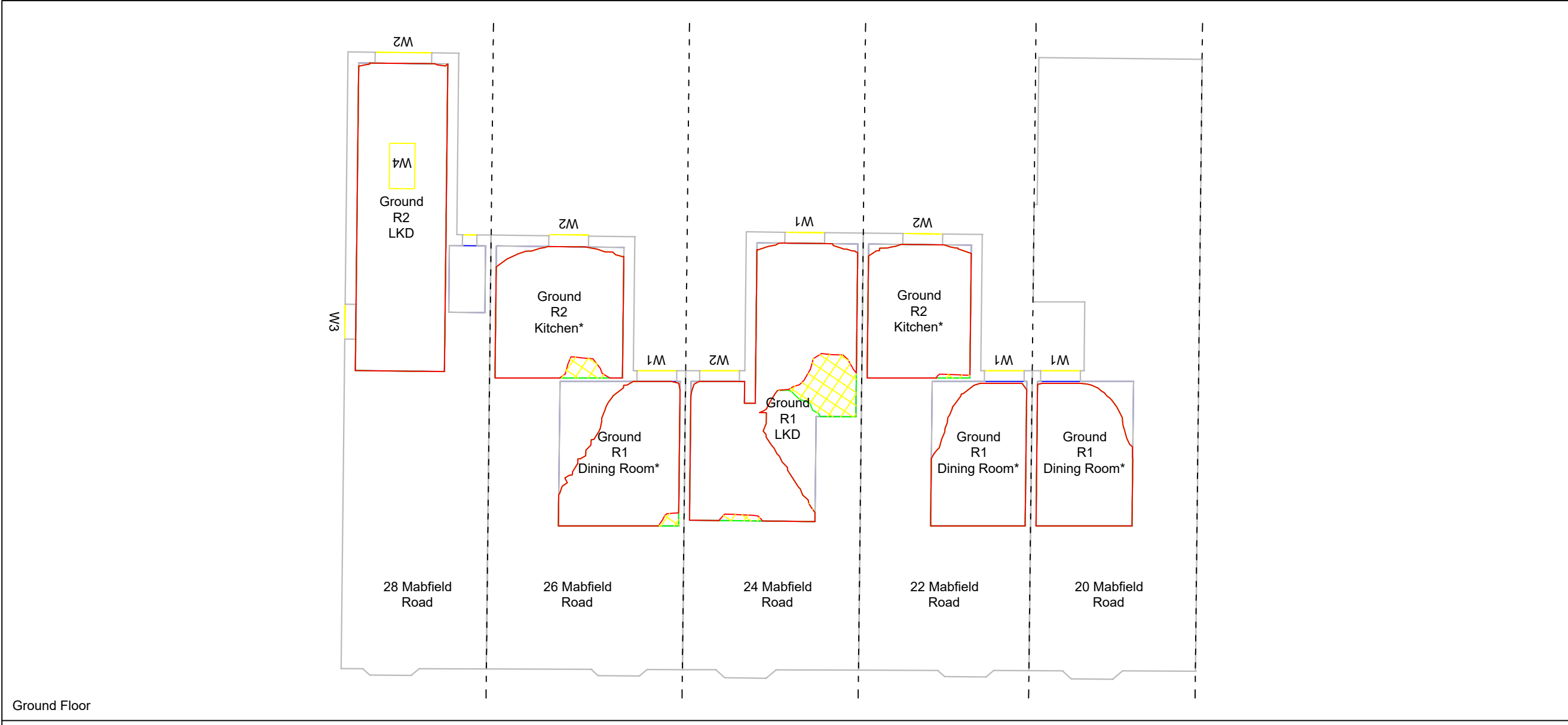
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Daylight Distribution contours
29-31 Langley Road

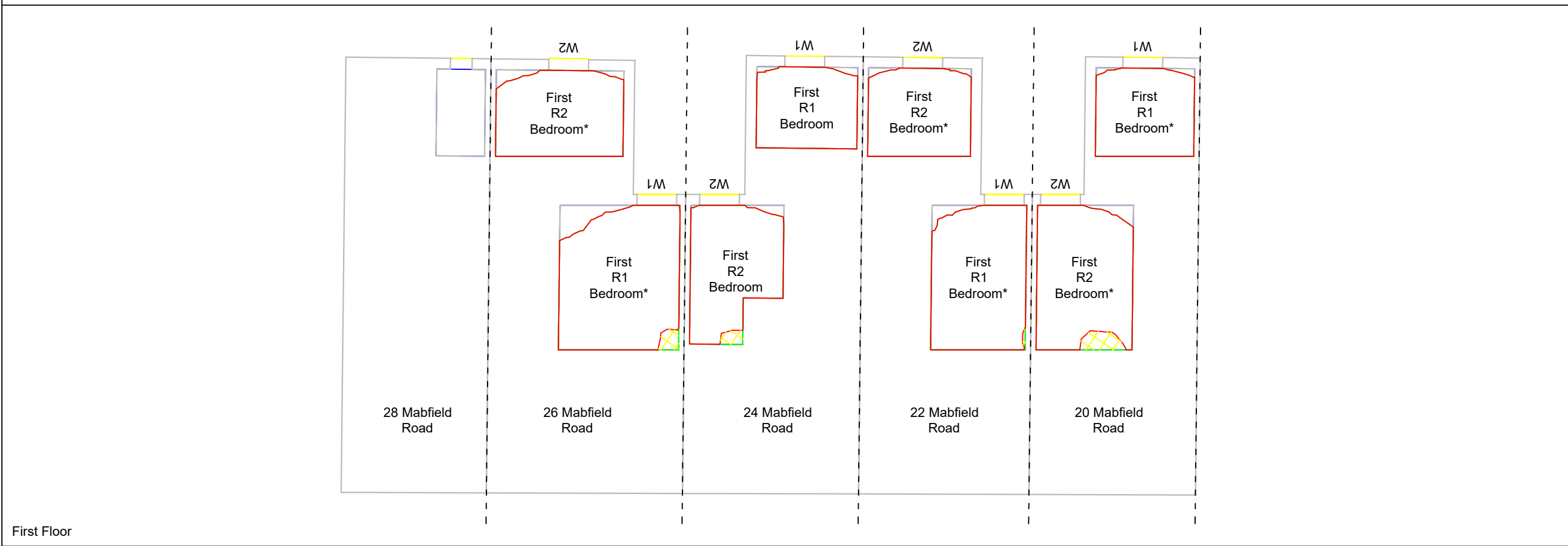
SCALE 1:125 @A3	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 206	REV.
-----------------------	------





Ground Floor



First Floor

COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:
Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020

KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

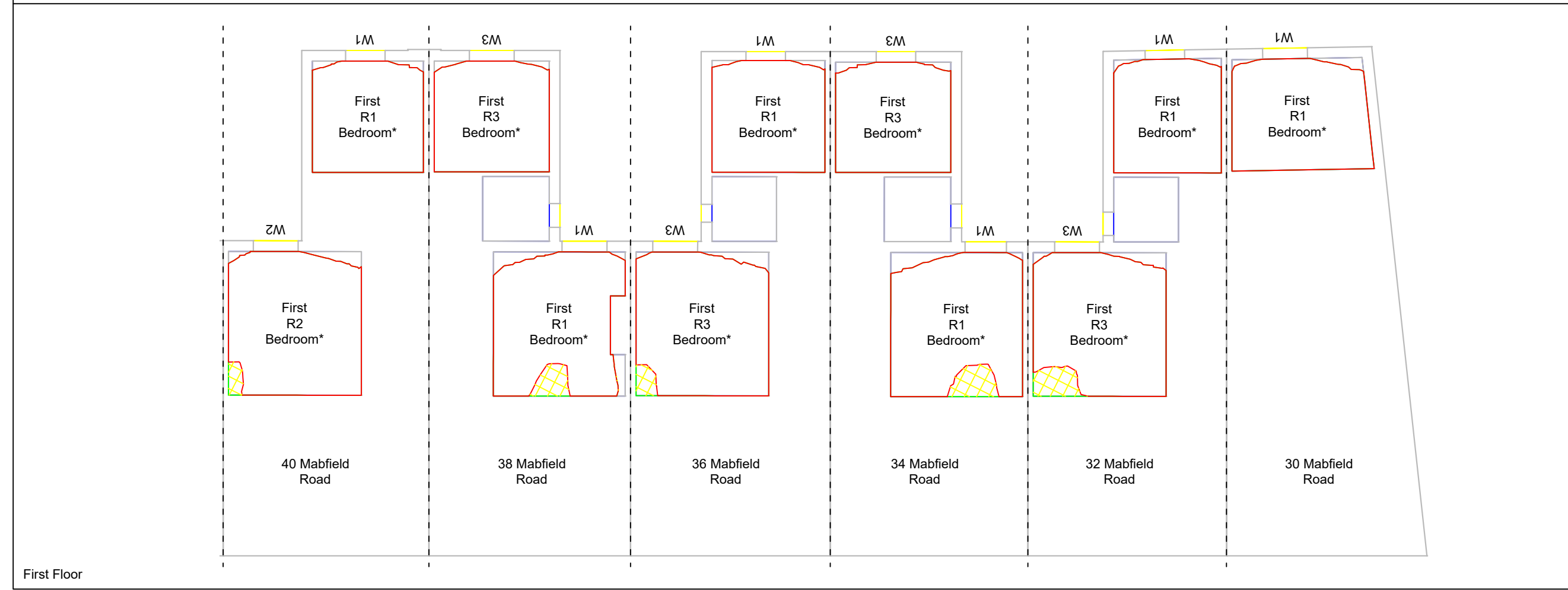
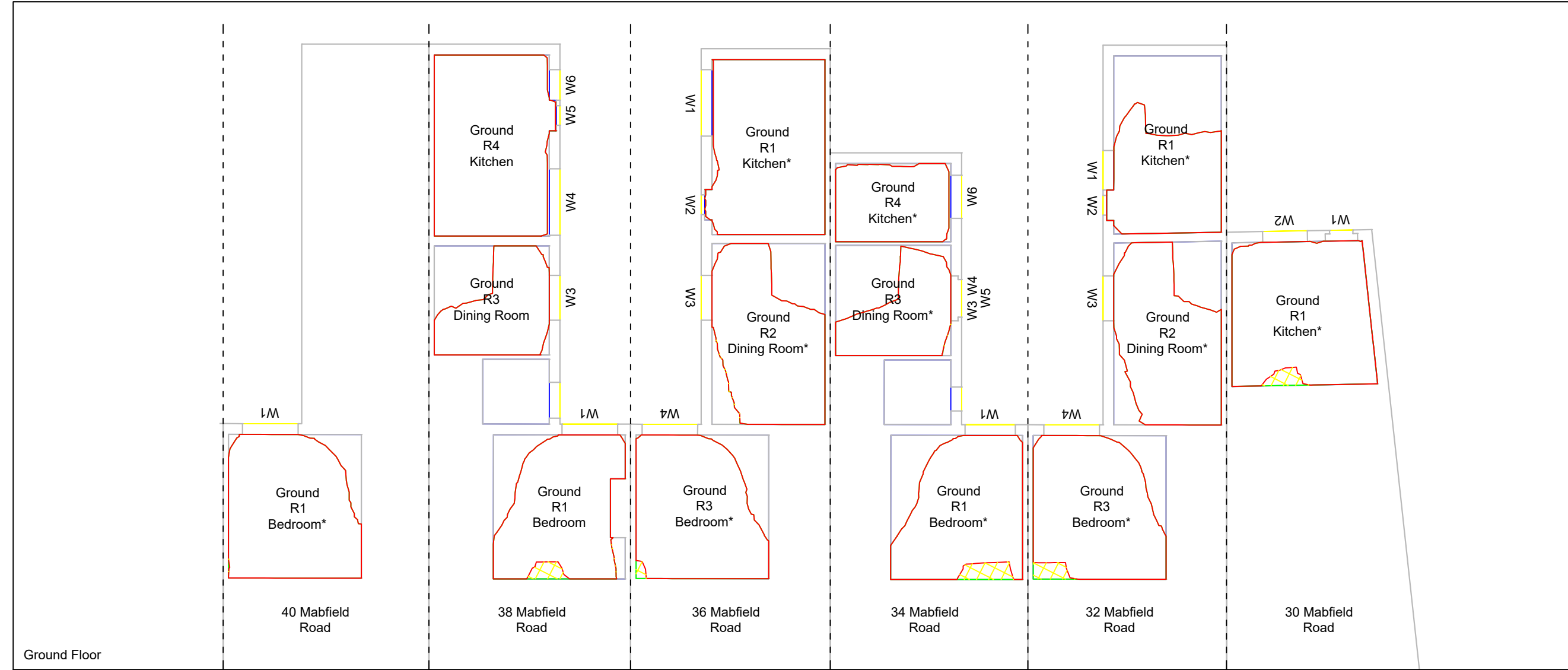
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Daylight Distribution contours
20-28 Mabfield Road

SCALE 1:125 @A3	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 207	REV.
------------------------------	-------------

CONSIL



COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:
Tim Groom Architects proposed
scheme received on 03/12/2020
Accucities surrounding model received
on 18/03/2020
Consil site photography taken on
27/10/2020

KEY
R1 Room area
Existing no-skyline
Proposed no-skyline
Area of loss / gain

CLIENT
Watkin Jones

PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Daylight Distribution contours
30-40 Mabfield Road

REV	DETAILS	DATE	BY
A	*	*	*

SCALE	DATE
1:125 @A3	07/12/2020

DRAWN BY	CHECKED BY
BG	DR

DWG No.	REV.
D+S/1/ 208	

CONSIL

Second Floor



COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

Tim Groom Architects proposed
scheme received on 03/12/2020

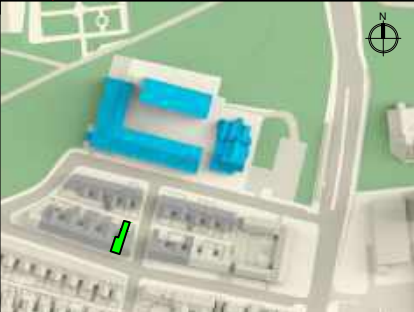
Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

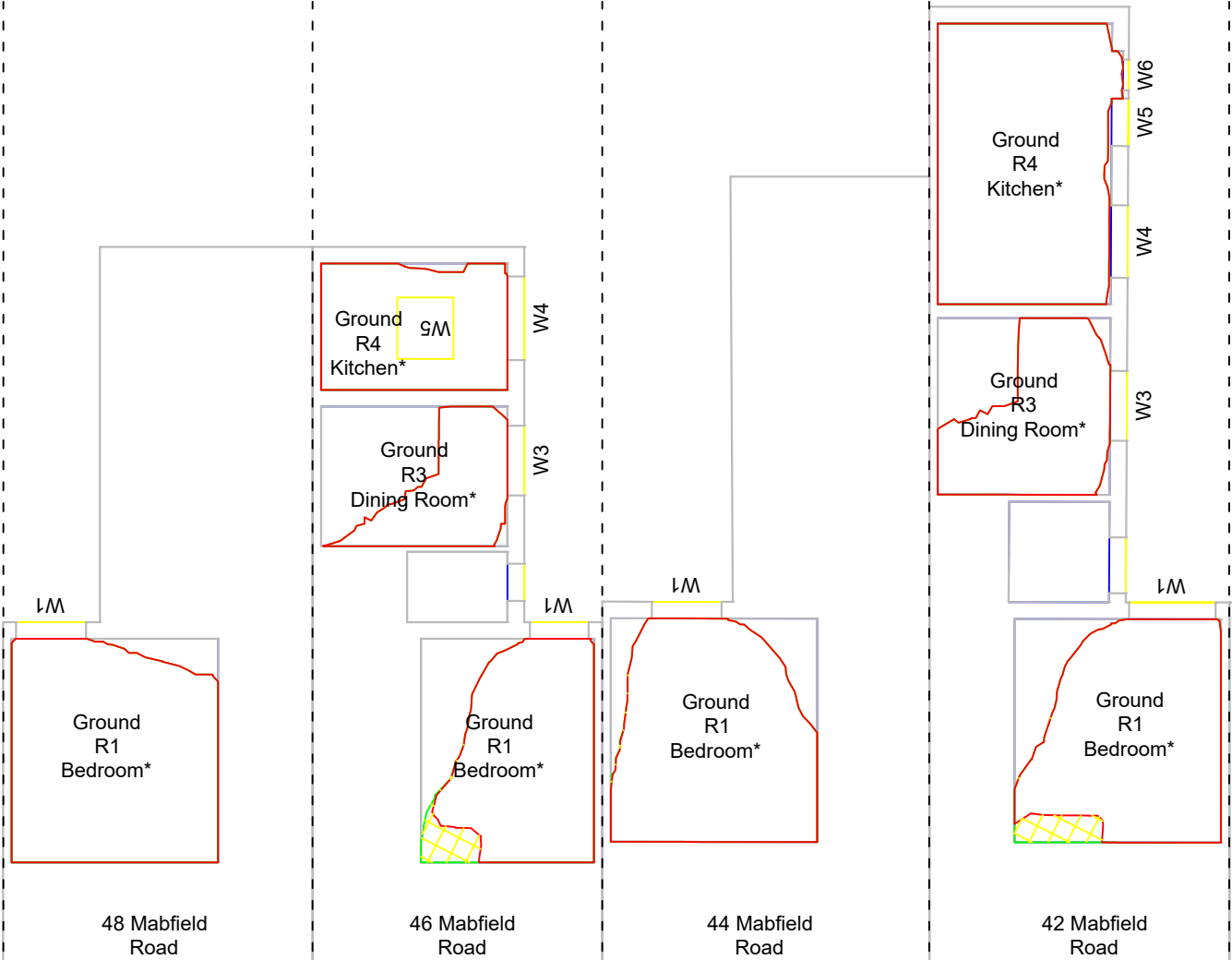
DRAWING TITLE
Daylight Distribution contours
32 Mabfield Road

SCALE 1:125 @A3	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

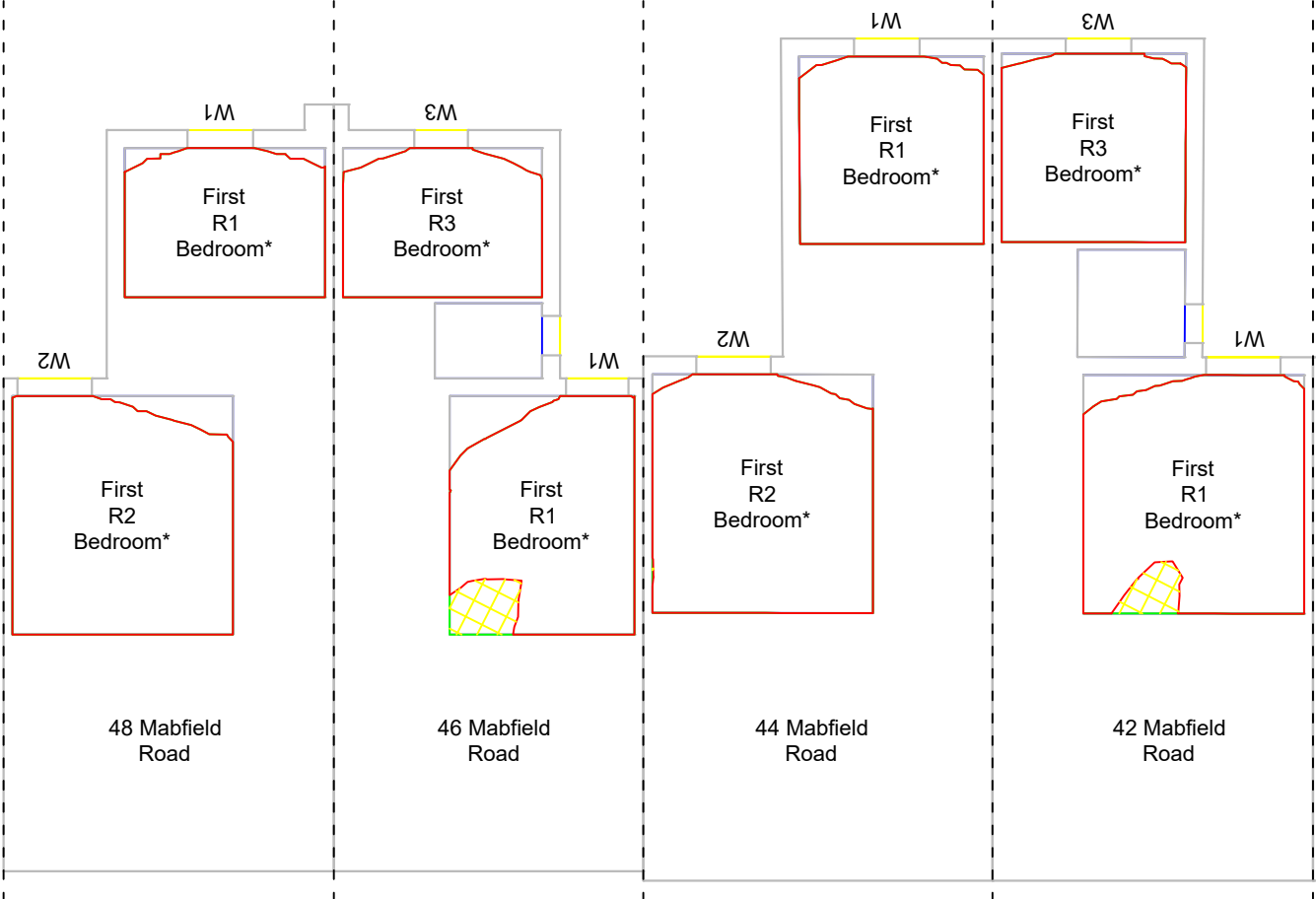
DWG No. D+S/1/ 209	REV.
-----------------------	------



Ground Floor



First Floor



COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

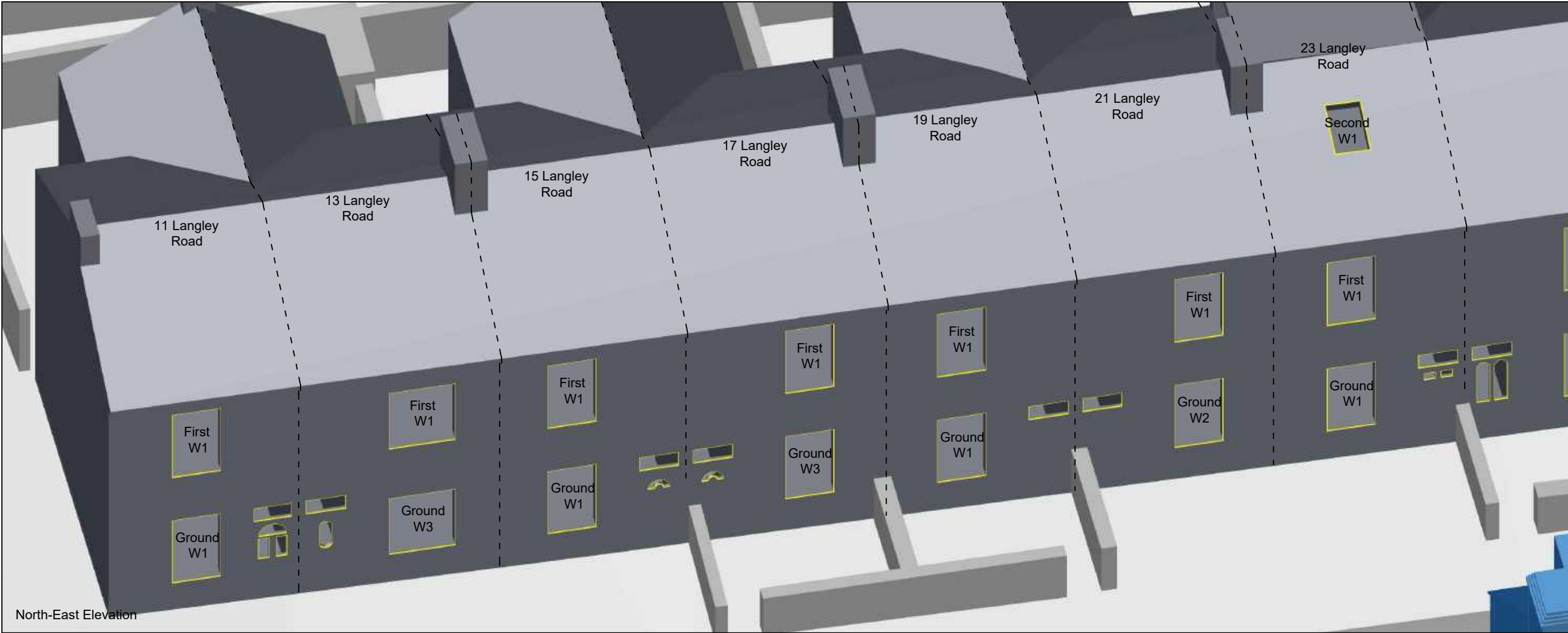
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Daylight Distribution contours
42-48 Mabfield Road

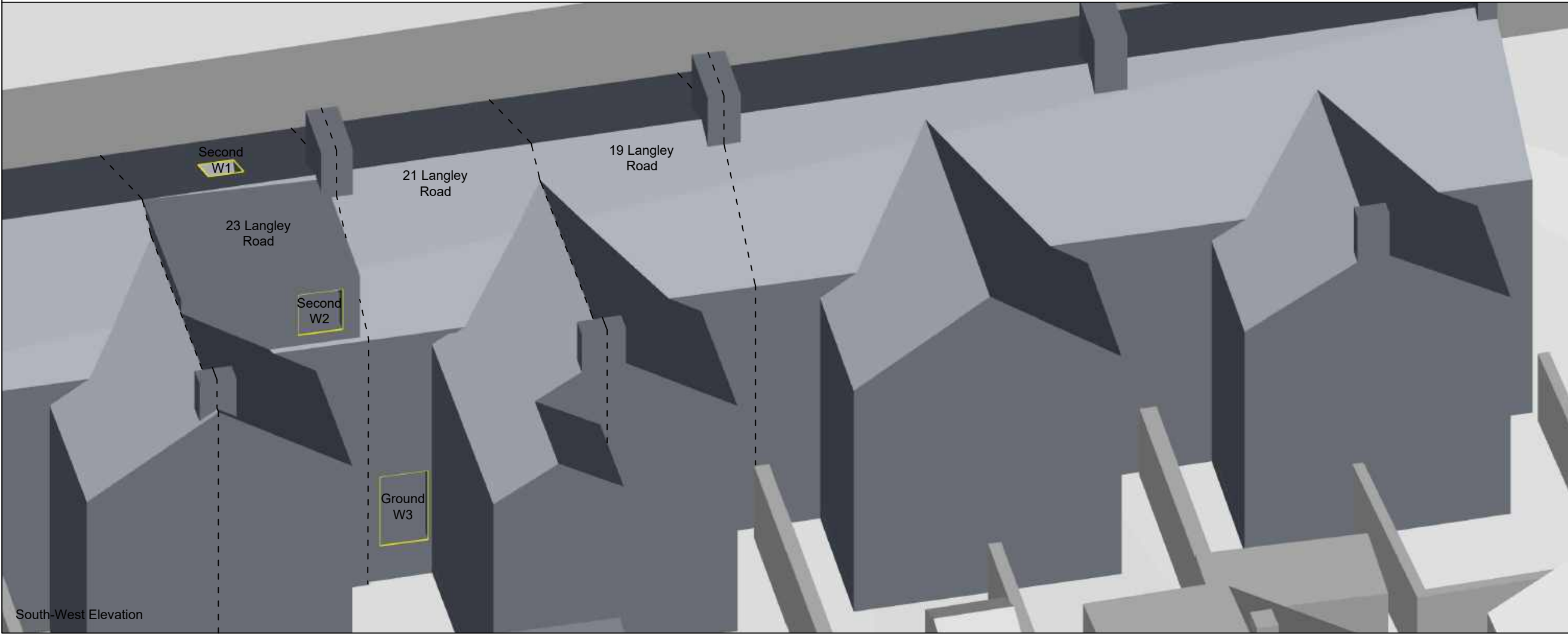
SCALE 1:125 @A3	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 210	REV.
-----------------------	------





North-East Elevation



South-West Elevation

COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

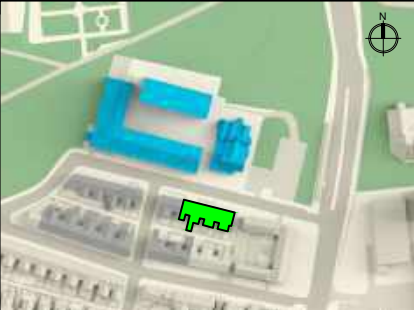
Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020

KEY

-  Analysed properties
-  Surrounding buildings
-  Window Location



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

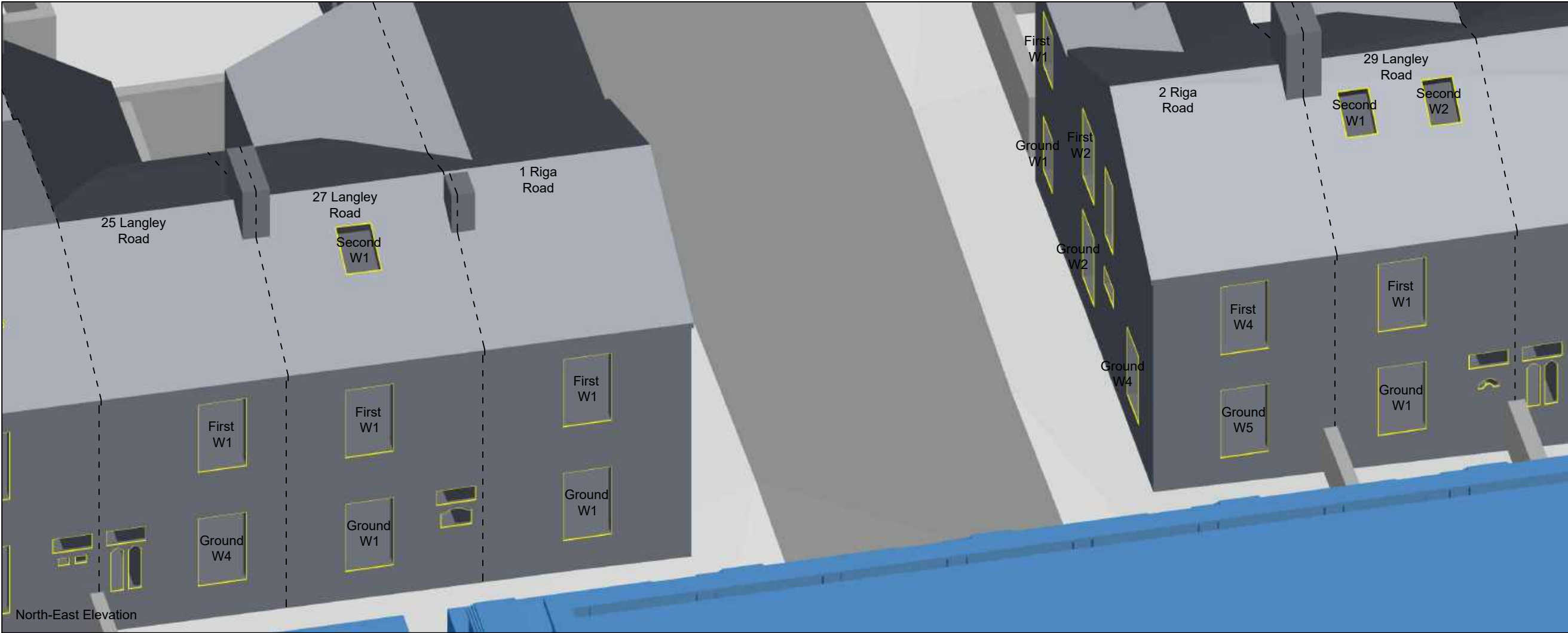
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Window Maps
11-23 Langley Road

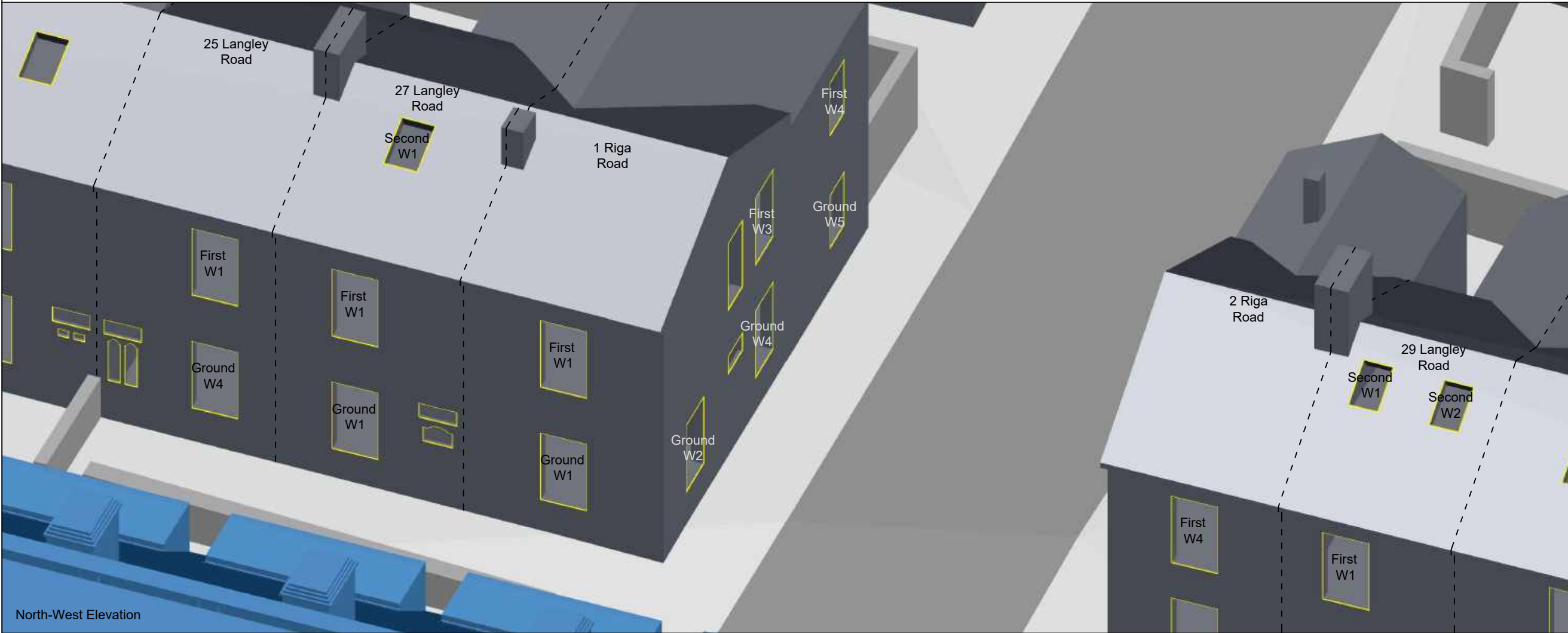
SCALE Not to Scale	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 301	REV.
-----------------------	------





North-East Elevation



North-West Elevation

COPYRIGHT NOTICE

THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART), RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

Tim Groom Architects proposed scheme received on 03/12/2020

Accucities surrounding model received on 18/03/2020

Consil site photography taken on 27/10/2020

KEY

Analysed properties

Surrounding buildings

xxxxx
wx

Window Location

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT

Watkin Jones

PROJECT

188 Wilmslow Road, Fallowfield, Manchester M14 6LJ

DRAWING TITLE

Window Maps

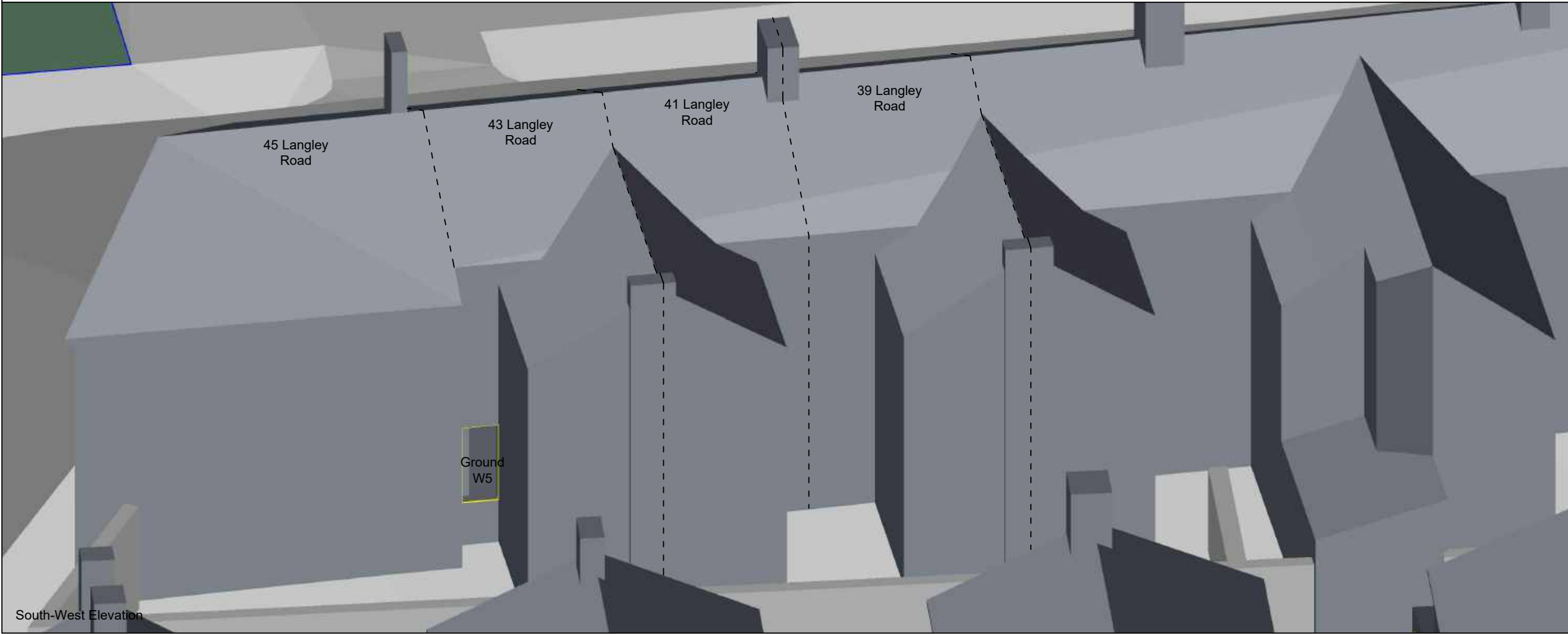
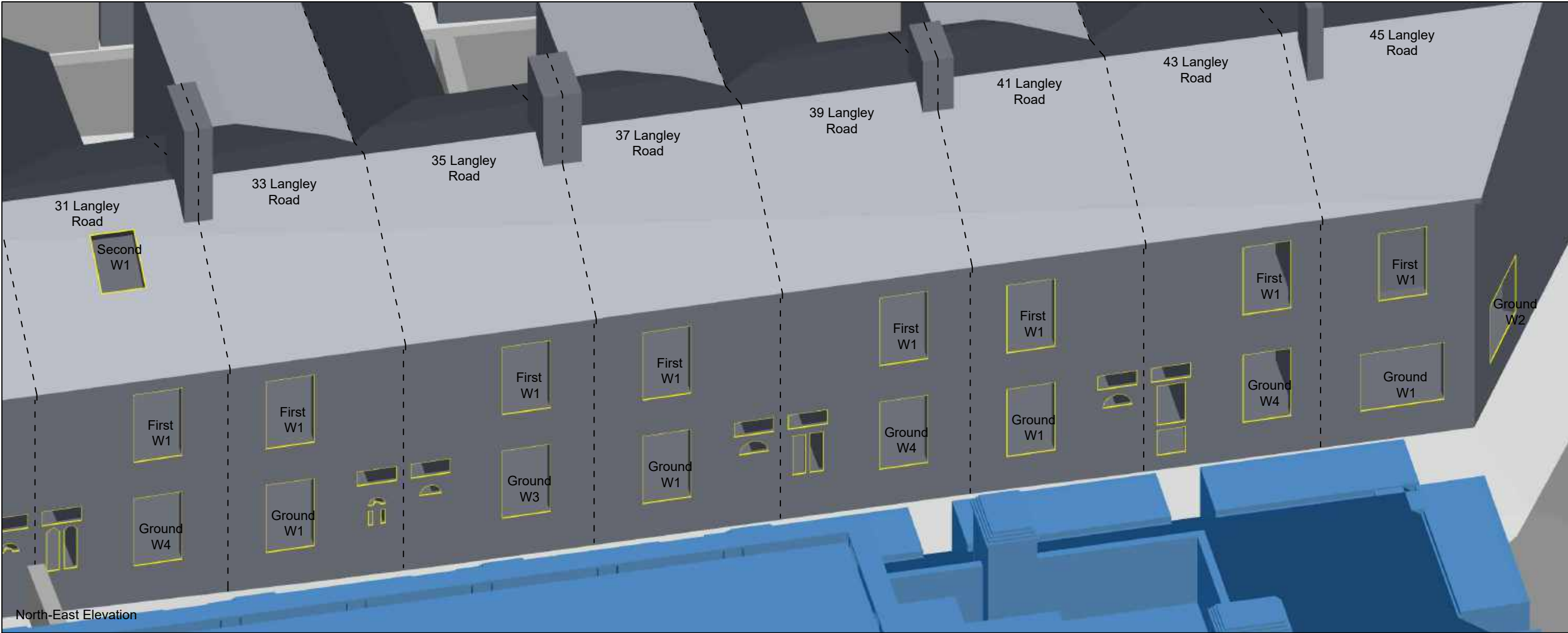
25-29 Langley Road

1-2 Riga Road

SCALE	DATE
Not to Scale	07/12/2020
DRAWN BY	CHECKED BY
BG	DR

DWG No.	REV.
D+S/1/ 302	

CONSIL



COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:
Tim Groom Architects proposed
scheme received on 03/12/2020

Accutities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020

- KEY**
- Analysed properties
 - Surrounding buildings
 - Window Location



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

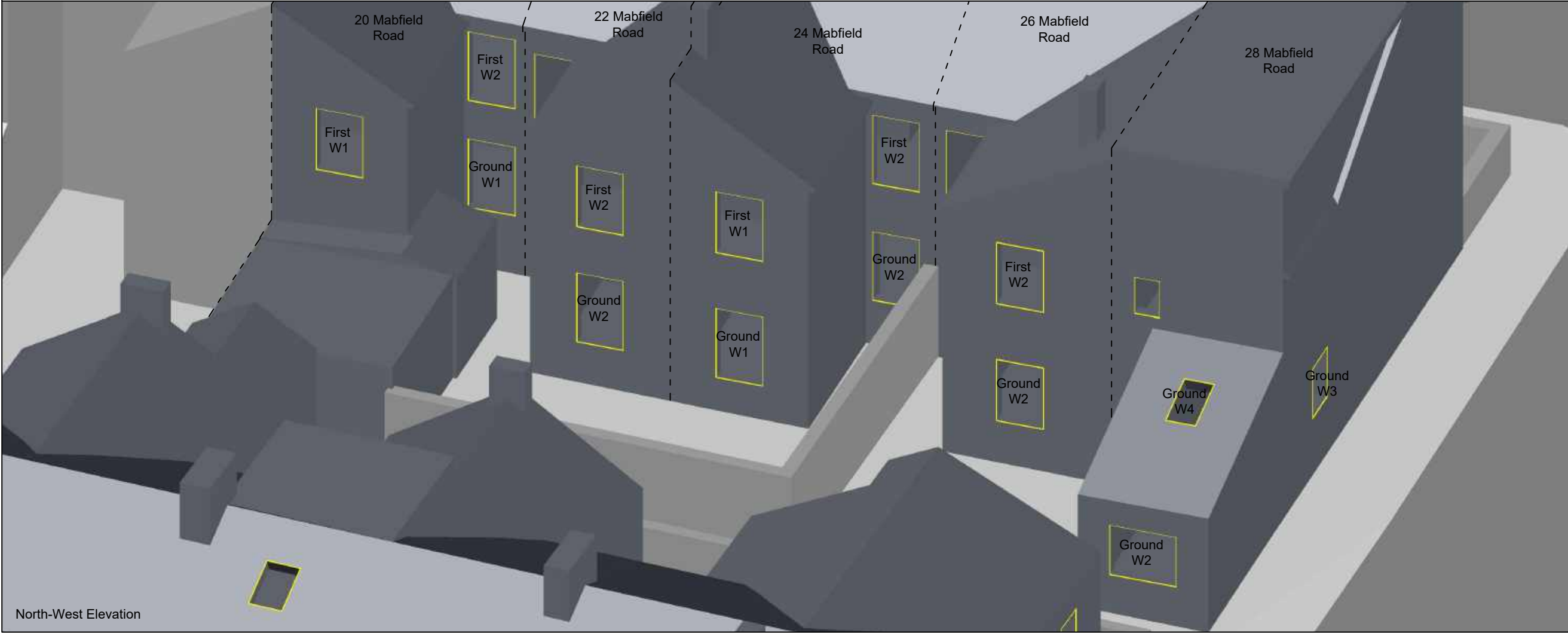
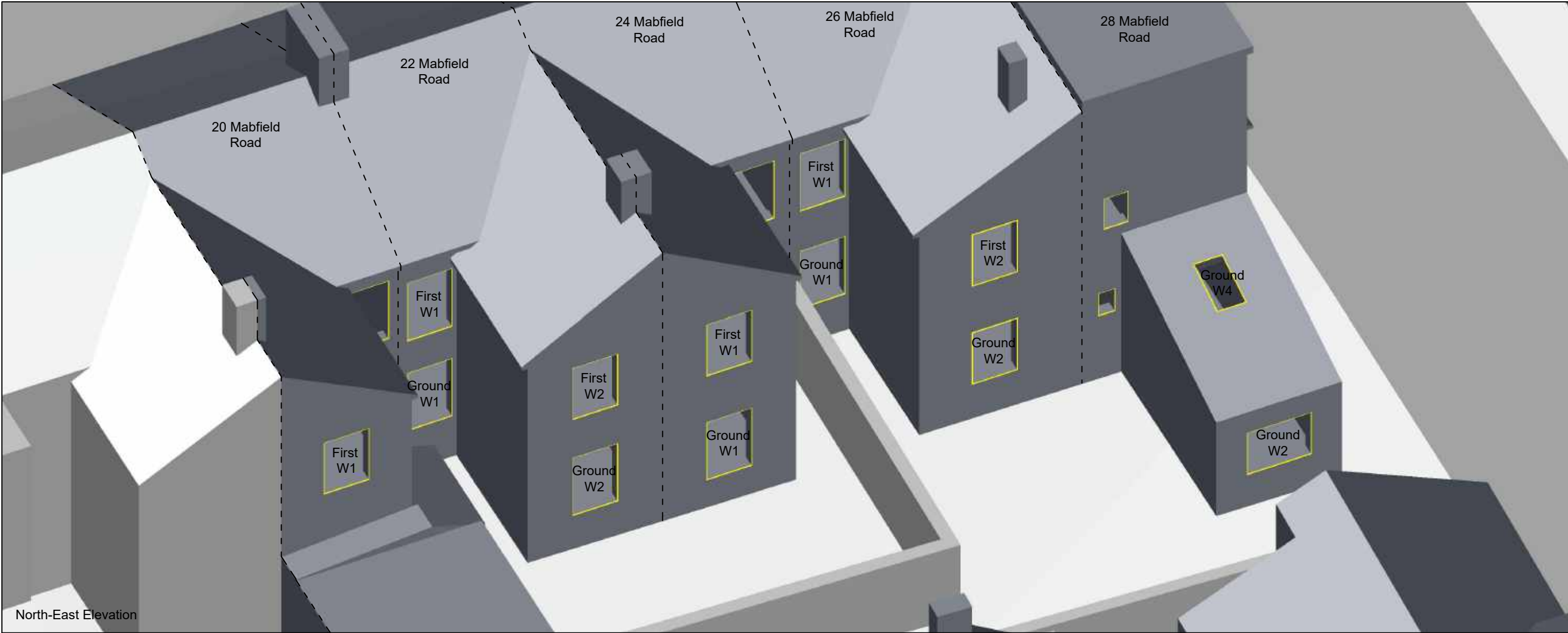
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Window Maps
31-45 Langley Road

SCALE Not to Scale	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 303	REV.
------------------------------	-------------





COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

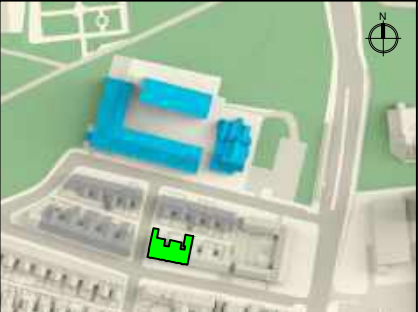
DO NOT SCALE

SOURCES OF INFORMATION:
Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020

- KEY
-  Analysed properties
 -  Surrounding buildings
 -  Window Location



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

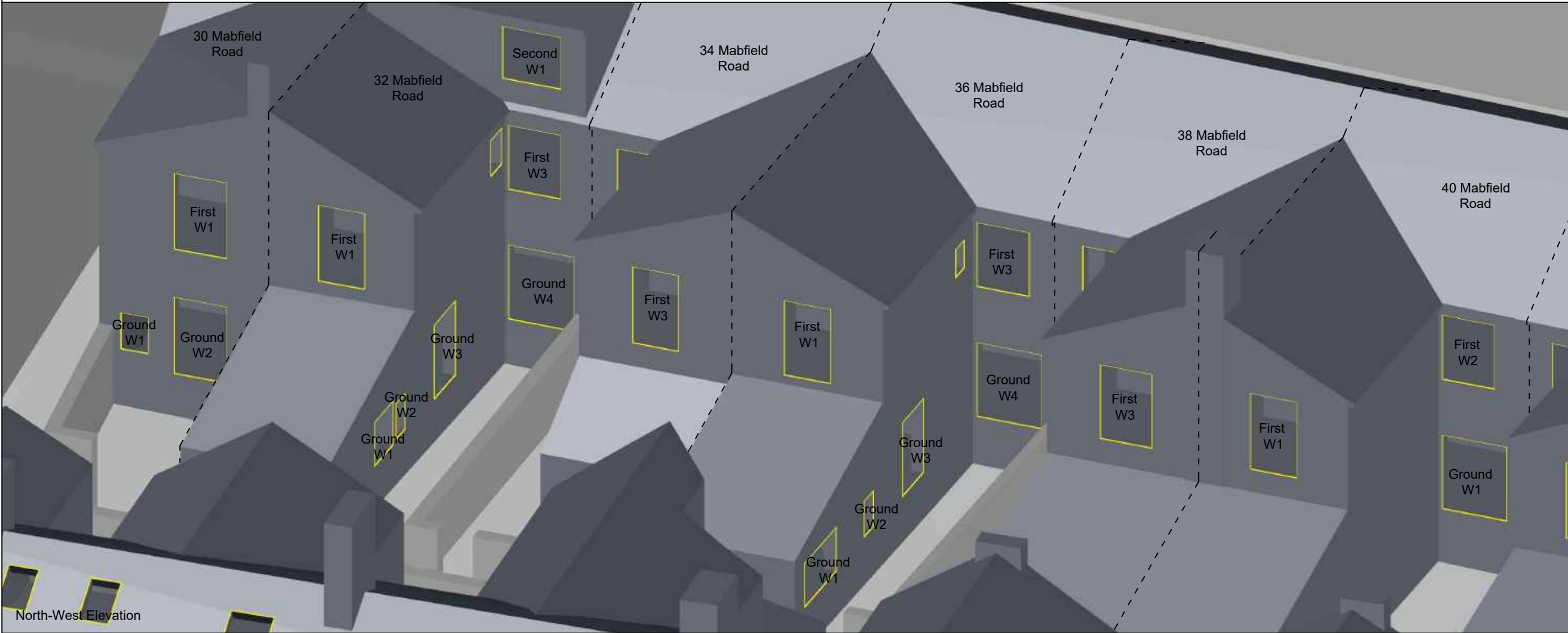
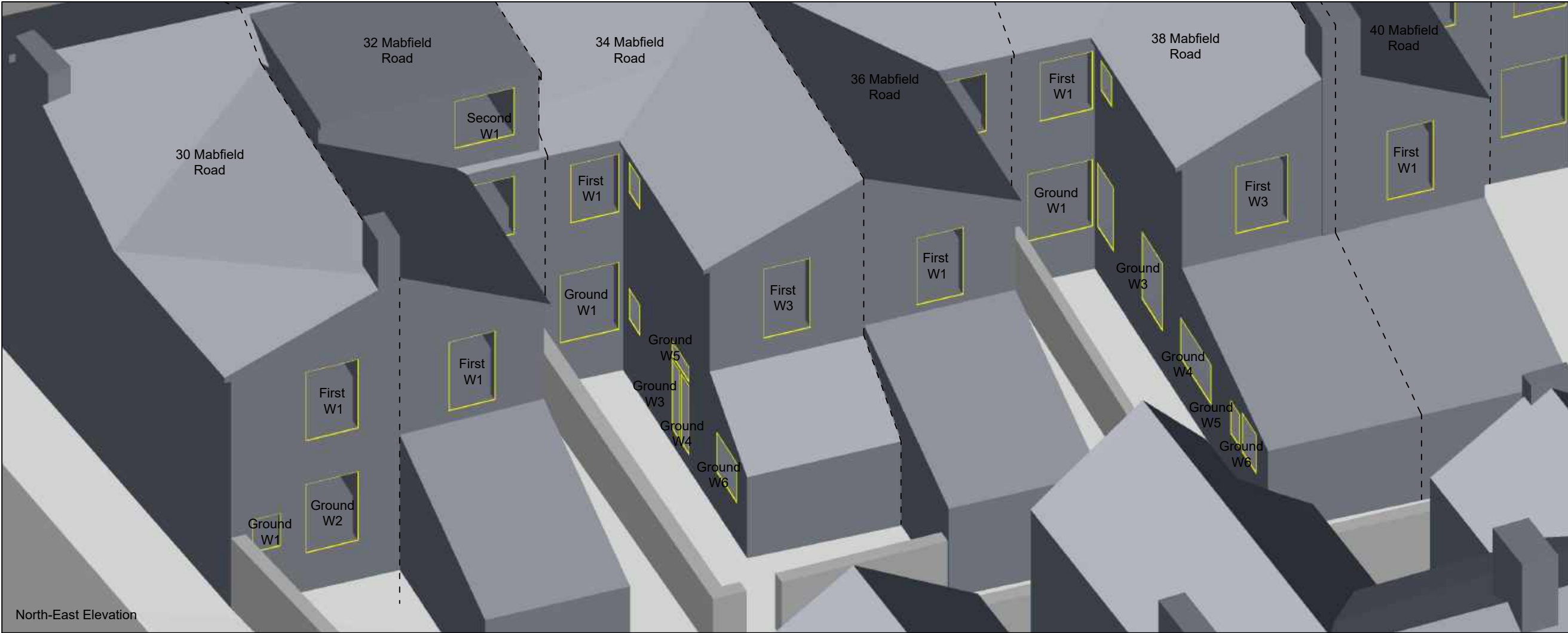
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Window Maps
20-28 Mabfield Road

SCALE Not to Scale	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 304	REV.
-----------------------	------





COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

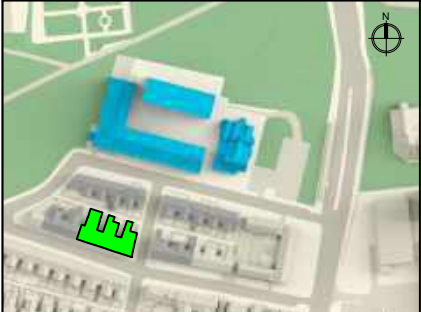
Tim Groom Architects proposed
scheme received on 03/12/2020

Accucities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020

KEY

- Analysed properties
- Surrounding buildings
- Window Location



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

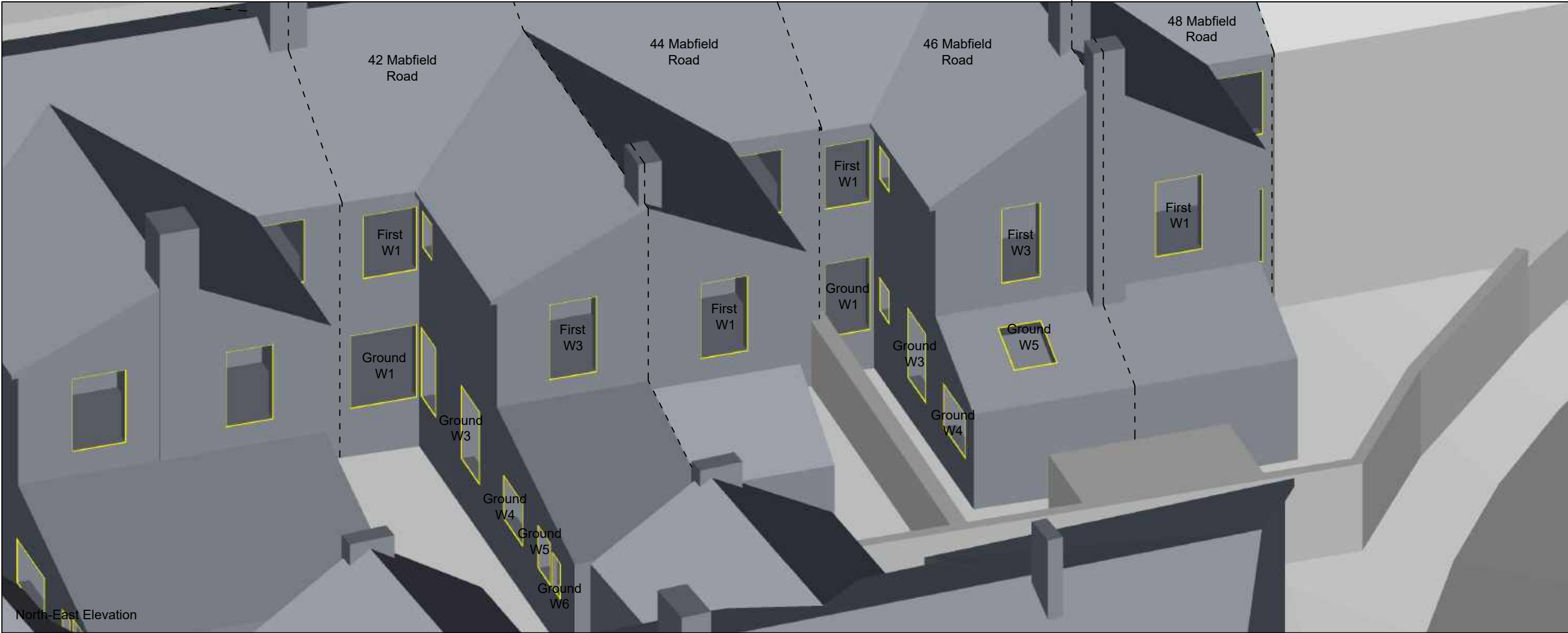
PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Window Maps
30-40 Mabfield Road

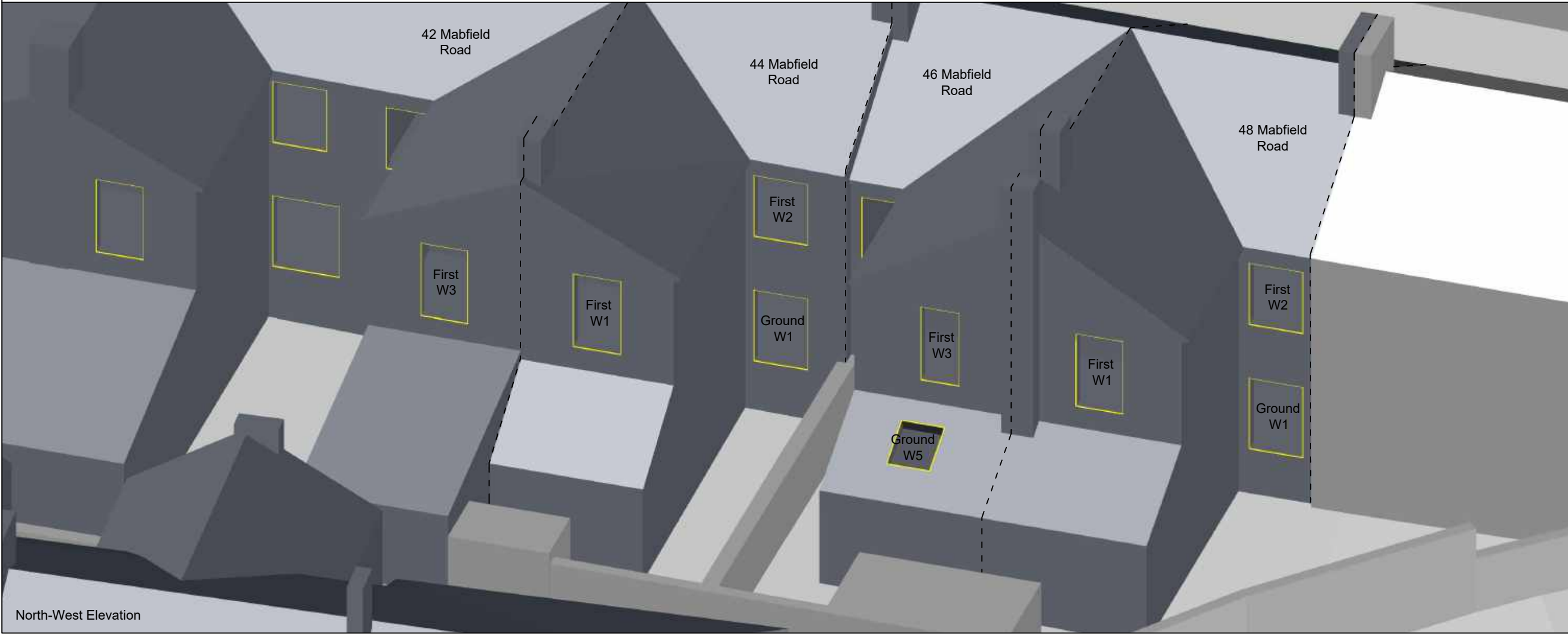
SCALE Not to Scale	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 305	REV.
-----------------------	------





North-East Elevation



North-West Elevation

COPYRIGHT NOTICE
THIS DRAWING MAY NOT BE COPIED (IN WHOLE OR IN PART),
RETAINED OR DISCLOSED WITHOUT THE PRIOR WRITTEN
CONSENT OF CONSIL.

DO NOT SCALE

SOURCES OF INFORMATION:

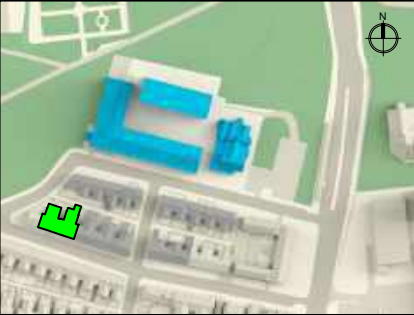
Tim Groom Architects proposed
scheme received on 03/12/2020

Accutities surrounding model received
on 18/03/2020

Consil site photography taken on
27/10/2020

KEY

- Analysed properties
- Surrounding buildings
- Window Location



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT
Watkin Jones

PROJECT
188 Wilmslow Road, Fallowfield,
Manchester M14 6LJ

DRAWING TITLE
Window Maps
42-48 Mabfield Road

SCALE Not to Scale	DATE 07/12/2020
DRAWN BY BG	CHECKED BY DR

DWG No. D+S/1/ 306	REV.
-----------------------	------



APPENDIX B

VERTICAL SKY COMPONENT AND ANNUAL PROBABLE SUNLIGHT HOURS SPREADSHEET

Im Groom Architects proposed scheme received on 03/12/2020

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.		VSC Results		APSH Results by Window				APSH Results by Room	
						VSC	Pr/Ex	Annual	Pr/Ex	Winter	Pr/Ex	Annual	Winter
11 Langley Road													
Ground	R1	Residential	Bedroom	W1	Existing Proposed	31.30 30.95	0.99		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom	W1	Existing Proposed	33.34 31.92	0.96		*North*		*North*		
												North	*North*
13 Langley Road													
Ground	R2	Residential	Living Room*	W3	Existing Proposed	28.83 29.29	1.02		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	31.68 30.63	0.97		*North*		*North*		
												North	*North*
15 Langley Road													
Ground	R1	Residential	Living Room*	W1	Existing Proposed	27.43 28.52	1.04		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	30.68 30.00	0.98		*North*		*North*		
												North	*North*
17 Langley Road													
Ground	R2	Residential	Living Room*	W3	Existing Proposed	25.89 27.54	1.06		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	29.53 29.16	0.99		*North*		*North*		
												North	*North*
19 Langley Road													
Ground	R1	Residential	Bedroom	W1	Existing Proposed	25.02 27.26	1.09		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom	W1	Existing Proposed	28.92 28.92	1.00		*North*		*North*		
												North	*North*
21 Langley Road													
Ground	R2	Residential	LD	W2	Existing Proposed	24.41 26.95	1.10		*North*		*North*		
				W3	Existing Proposed	10.80 10.80	1.00	18.00 18.00	1.00	6.00 6.00	1.00	29.00 30.00	6.00 6.00
First	R1	Residential	Bedroom	W1	Existing Proposed	28.39 28.46	1.00		*North*		*North*		
												North	*North*
23 Langley Road													
Ground	R1	Residential	Living Room*	W1	Existing Proposed	23.99 25.79	1.08		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	28.10 27.52	0.98		*North*		*North*		
												North	*North*
Second	R1	Residential	Bedroom*	W1	Existing Proposed	89.36 86.70	0.97		*North*		*North*		
				W2	Existing Proposed	36.92 36.92	1.00	86.00 86.00	1.00	29.00 29.00	1.00	98.00 99.00	29.00 29.00

Im Groom Architects proposed scheme received on 03/12/2020

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.		VSC Results		APSH Results by Window				APSH Results by Room	
						VSC	Pr/Ex	Annual	Pr/Ex	Winter	Pr/Ex	Annual	Winter
25 Langley Road													
Ground	R2	Residential	Living Room*	W4	Existing Proposed	23.94 23.76	0.99		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	28.04 25.75	0.92		*North*		*North*		
												North	*North*
27 Langley Road													
Ground	R1	Residential	Dining Room	W1	Existing Proposed	23.75 22.83	0.96		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom	W1	Existing Proposed	27.92 24.98	0.89		*North*		*North*		
												North	*North*
Second	R1	Residential	Bedroom	W1	Existing Proposed	89.37 85.57	0.96		*North*		*North*		
												North	*North*
1 Riga Road													
Ground	R1	Residential	Bedroom	W1	Existing Proposed	24.00 22.03	0.92		*North*		*North*		
				W2	Existing Proposed	29.21 27.46	0.94		*North*		*North*		
	R3	Residential	Living Room	W4	Existing Proposed	28.52 27.01	0.95		*North*		*North*	*North*	*North*
	R4	Residential	Kitchen	W5	Existing Proposed	29.86 29.03	0.97		*North*		*North*	*North*	*North*
First	R1	Residential	Bedroom	W1	Existing Proposed	28.15 24.21	0.86		*North*		*North*		
	R3	Residential	Bedroom	W3	Existing Proposed	34.65 33.01	0.95		*North*		*North*	*North*	*North*
	R4	Residential	Bedroom	W4	Existing Proposed	35.16 34.08	0.97		*North*		*North*	*North*	*North*
												North	*North*
2 Riga Road													
Ground	R1	Residential	Kitchen*	W1	Existing Proposed	27.19 26.75	0.98	46.00 46.00	1.00	14.00 14.00	1.00		
												46.00 46.00	14.00 14.00
	R2	Residential	Living Room*	W2	Existing Proposed	26.02 25.67	0.99	43.00 43.00	1.00	14.00 14.00	1.00		
												43.00 43.00	14.00 14.00
	R4	Residential	Bedroom*	W4	Existing Proposed	26.25 26.18	1.00	47.00 47.00	1.00	13.00 13.00	1.00		
				W5	Existing Proposed	25.73 21.39	0.83		*North*		*North*		
												50.00 50.00	13.00 13.00
First	R1	Residential	Bedroom*	W1	Existing Proposed	32.29 31.72	0.98	54.00 54.00	1.00	17.00 17.00	1.00		
												54.00 54.00	17.00 17.00
	R2	Residential	Bedroom*	W2	Existing Proposed	31.67 31.09	0.98	55.00 55.00	1.00	17.00 17.00	1.00		
												55.00 55.00	17.00 17.00
	R4	Residential	Bedroom*	W4	Existing Proposed	29.16 23.36	0.80		*North*		*North*		
												North	*North*

Im Groom Architects proposed scheme received on 03/12/2020

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.	VSC Results			APSH Results by Window				APSH Results by Room	
						VSC	Pr/Ex	Annual	Pr/Ex	Winter	Pr/Ex	Annual	Winter
29 Langley Road													
Ground	R1	Residential	Living Room*	W1	Existing Proposed	26.71 21.40	0.80		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	29.98 23.38	0.78		*North*		*North*		
												North	*North*
Second	R1	Residential	Bedroom*	W1	Existing Proposed	82.53 76.62	0.93		*North*		*North*		
				W2	Existing Proposed	85.83 79.84	0.93		*North*		*North*		
												North	*North*
31 Langley Road													
Ground	R2	Residential	Living Room*	W4	Existing Proposed	28.55 21.73	0.76		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	31.42 23.69	0.75		*North*		*North*		
												North	*North*
Second	R1	Residential	Bedroom*	W1	Existing Proposed	84.29 78.10	0.93		*North*		*North*		
												North	*North*
33 Langley Road													
Ground	R1	Residential	Bedroom	W1	Existing Proposed	29.54 21.84	0.74		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom	W1	Existing Proposed	32.32 23.97	0.74		*North*		*North*		
												North	*North*
35 Langley Road													
Ground	R2	Residential	Living Room*	W3	Existing Proposed	31.72 22.62	0.71		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	33.86 24.66	0.73		*North*		*North*		
												North	*North*
37 Langley Road													
Ground	R1	Residential	Living Room*	W1	Existing Proposed	32.66 23.18	0.71		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	34.63 25.30	0.73		*North*		*North*		
												North	*North*
39 Langley Road													
Ground	R2	Residential	Living Room*	W4	Existing Proposed	34.30 24.98	0.73		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	35.75 26.83	0.75		*North*		*North*		
												North	*North*
41 Langley Road													
Ground	R1	Residential	Living Room*	W1	Existing Proposed	34.89 26.24	0.75		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	36.22 28.02	0.77		*North*		*North*		
												North	*North*

Im Groom Architects proposed scheme received on 03/12/2020

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.		VSC Results		APSH Results by Window				APSH Results by Room	
						VSC	Pr/Ex	Annual	Pr/Ex	Winter	Pr/Ex	Annual	Winter
43 Langley Road													
Ground	R2	Residential	LD	W4	Existing	35.78	0.82		*North*		*North*		
					Proposed	29.47							
				W5	Existing	9.21	1.00	17.00	1.00	5.00	1.00		
					Proposed	9.21		17.00		5.00		28.00	5.00
												27.00	5.00
First	R1	Residential	Bedroom	W1	Existing	36.89	0.83		*North*		*North*		
					Proposed	30.74							
												North	*North*
45 Langley Road													
Ground	R1	Residential	Bedroom	W1	Existing	35.93	0.85		*North*		*North*		
					Proposed	30.63							
				W2	Existing	38.95	0.99		*North*		*North*		
					Proposed	38.41							
												North	*North*
First	R1	Residential	Bedroom	W1	Existing	37.25	0.86		*North*		*North*		
					Proposed	31.86							
												North	*North*
20 Mabfield Road													
Ground	R1	Residential	Dining Room*	W1	Existing	11.66	0.89		*North*		*North*		
					Proposed	10.44							
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing	33.77	0.94		*North*		*North*		
					Proposed	31.68							
	R2	Residential	Bedroom*	W2	Existing	20.59	0.90		*North*		*North*	*North*	*North*
					Proposed	18.62							
												North	*North*
22 Mabfield Road													
Ground	R1	Residential	Dining Room*	W1	Existing	11.09	0.96		*North*		*North*		
					Proposed	10.65							
	R2	Residential	Kitchen*	W2	Existing	28.35	0.97		*North*		*North*	*North*	*North*
					Proposed	27.63							
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing	19.27	0.97		*North*		*North*		
					Proposed	18.62							
	R2	Residential	Bedroom*	W2	Existing	33.68	0.94		*North*		*North*	*North*	*North*
					Proposed	31.56							
												North	*North*
24 Mabfield Road													
Ground	R1	Residential	LKD	W1	Existing	28.22	0.97		*North*		*North*		
					Proposed	27.28							
		W2	Existing	12.16	0.88		*North*		*North*				
					Proposed	10.75							
												North	*North*
First	R1	Residential	Bedroom	W1	Existing	33.86	0.93		*North*		*North*		
					Proposed	31.53							
	R2	Residential	Bedroom	W2	Existing	21.31	0.89		*North*		*North*	*North*	*North*
					Proposed	18.89							
												North	*North*
26 Mabfield Road													
Ground	R1	Residential	Dining Room*	W1	Existing	11.93	0.92		*North*		*North*		
					Proposed	10.97							
	R2	Residential	Kitchen*	W2	Existing	27.19	0.97		*North*		*North*	*North*	*North*
					Proposed	26.46							
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing	20.15	0.93		*North*		*North*		
					Proposed	18.83							
	R2	Residential	Bedroom*	W2	Existing	34.21	0.92		*North*		*North*	*North*	*North*
					Proposed	31.52							
												North	*North*

Im Groom Architects proposed scheme received on 03/12/2020

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.		VSC Results		APSH Results by Window				APSH Results by Room			
						VSC	Pr/Ex	Annual	Pr/Ex	Winter	Pr/Ex	Annual	Winter		
28 Mabfield Road															
Ground	R2	Residential	LKD	W2	Existing	23.93	0.97	*North*		*North*					
					Proposed	23.14									
				W3	Existing	29.88	0.99	*North*		*North*					
					Proposed	29.61									
				W4	Existing	78.52	0.98	*North*		*North*					
					Proposed	77.31									
												North	*North*		
30 Mabfield Road															
Ground	R1	Residential	Kitchen*	W1	Existing	29.72	0.94	*North*		*North*					
					Proposed	27.80									
				W2	Existing	27.55	0.93	*North*		*North*					
					Proposed	25.72									
												North	*North*		
First	R1	Residential	Bedroom*	W1	Existing	34.81	0.91	*North*		*North*					
					Proposed	31.64									
												North	*North*		
32 Mabfield Road															
Ground	R1	Residential	Kitchen*	W1	Existing	23.11	1.00	*North*		*North*					
					Proposed	23.10									
				W2	Existing	21.10	1.00	*North*		*North*					
					Proposed	21.08									
	R2	Residential	Dining Room*	W3	Existing	15.14	1.00	*North*		*North*		*North*	*North*		
					Proposed	15.07									
	R3	Residential	Bedroom*	W4	Existing	12.95	0.91	*North*		*North*		*North*	*North*		
					Proposed	11.77									
													North	*North*	
	First	R1	Residential	Bedroom*	W1	Existing	34.66	0.91	*North*		*North*				
Proposed						31.57									
R3		Residential	Bedroom*	W3	Existing	22.07	0.91	*North*		*North*		*North*			*North*
					Proposed	20.19									
												North	*North*		
Second	R1	Residential	Bedroom*	W1	Existing	36.03	0.91	*North*		*North*					
					Proposed	32.71									
												North	*North*		
34 Mabfield Road															
Ground	R1	Residential	Bedroom*	W1	Existing	12.77	0.88	*North*		*North*					
					Proposed	11.18									
	R3	Residential	Dining Room*	W3	Existing	11.31	0.98	2.00	1.00	0.00	1.00			*North*	*North*
					Proposed	11.13									
				W4	Existing	12.55	0.99	4.00	1.00	0.00	1.00				
					Proposed	12.39						4.00	0.00		
				W5	Existing	16.06	0.98	13.00	1.00	0.00	1.00				
					Proposed	15.81						13.00	0.00		
	R4	Residential	Kitchen*	W6	Existing	19.55	1.00	23.00	1.00	0.00	1.00	13.00	0.00		
					Proposed	19.46								23.00	0.00
														23.00	0.00
														23.00	0.00
														23.00	0.00
														23.00	0.00
	First	R1	Residential	Bedroom*	W1	Existing	21.22	0.89	*North*		*North*				
						Proposed	18.88								
R3		Residential	Bedroom*	W3	Existing	34.65	0.92	*North*		*North*		*North*			*North*
					Proposed	31.80									
												North	*North*		

Tim Groom Architects proposed scheme received on 03/12/2020

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.		VSC Results		APSH Results by Window				APSH Results by Room		
						VSC	Pr/Ex	Annual	Pr/Ex	Winter	Pr/Ex	Annual	Winter	
36 Mabfield Road														
Ground	R1	Residential	Kitchen*	W1	Existing	24.58	1.00	*North*		*North*				
				W2	Proposed	24.58	1.00	*North*		*North*				
					Existing	20.02						*North*	*North*	
					Proposed	20.02								
	R2	Residential	Dining Room*	W3	Existing	15.21	1.00	*North*		*North*				
					Proposed	15.19								
R3	Residential	Bedroom*	W4	Existing	12.71	0.96	*North*		*North*		*North*	*North*		
				Proposed	12.16									
												North	*North*	
First	R1	Residential	Bedroom*	W1	Existing	34.40	0.93	*North*		*North*				
					Proposed	31.83								
	R3	Residential	Bedroom*	W3	Existing	21.90	0.94	*North*		*North*		*North*	*North*	
					Proposed	20.61								
												North	*North*	
38 Mabfield Road														
Ground	R1	Residential	Bedroom	W1	Existing	12.50	0.90	*North*		*North*				
					Proposed	11.24								
	R3	Residential	Dining Room	W3	Existing	14.21	0.99	10.00	1.00	0.00	1.00	*North*	*North*	
					Proposed	14.11		10.00		0.00		10.00	0.00	
	R4	Residential	Kitchen	W4	Existing	18.63	1.00	23.00	1.00	0.00	1.00			
					Proposed	18.57		23.00		0.00				
				W5	Existing	21.96	1.00	37.00	1.00	3.00	1.00			
					Proposed	21.93		37.00		3.00				
				W6	Existing	23.10	1.00	39.00	1.00	4.00	1.00			
					Proposed	23.08		39.00		4.00				
													40.00	4.00
													40.00	4.00
First	R1	Residential	Bedroom*	W1	Existing	21.48	0.90	*North*		*North*				
					Proposed	19.23								
	R3	Residential	Bedroom*	W3	Existing	34.45	0.93	*North*		*North*		*North*	*North*	
					Proposed	32.11								
												North	*North*	
40 Mabfield Road														
Ground	R1	Residential	Bedroom*	W1	Existing	13.21	0.97	*North*		*North*				
					Proposed	12.87								
First	R1	Residential	Bedroom*	W1	Existing	34.59	0.93	*North*		*North*				
					Proposed	32.30								
	R2	Residential	Bedroom*	W2	Existing	22.66	0.97	*North*		*North*		*North*	*North*	
					Proposed	21.96								
												North	*North*	
42 Mabfield Road														
Ground	R1	Residential	Bedroom*	W1	Existing	12.66	0.91	*North*		*North*				
					Proposed	11.48								
	R3	Residential	Dining Room*	W3	Existing	14.78	0.98	11.00	1.00	0.00	1.00	*North*	*North*	
					Proposed	14.47		11.00		0.00		11.00	0.00	
	R4	Residential	Kitchen*	W4	Existing	19.81	0.99	25.00	1.00	0.00	1.00			
					Proposed	19.65		25.00		0.00				
				W5	Existing	22.82	1.00	32.00	1.00	2.00	1.00			
					Proposed	22.72		32.00		2.00				
				W6	Existing	23.56	1.00	35.00	1.00	3.00	1.00			
					Proposed	23.48		35.00		3.00				
													36.00	3.00
													36.00	3.00
First	R1	Residential	Bedroom*	W1	Existing	21.15	0.90	*North*		*North*				
					Proposed	19.04								
	R3	Residential	Bedroom*	W3	Existing	34.90	0.94	*North*		*North*		*North*	*North*	
					Proposed	32.94								
												North	*North*	

Im Groom Architects proposed scheme received on 03/12/2020

Floor Ref.	Room Ref.	Property Type	Room Use.	Window Ref.		VSC Results		APSH Results by Window				APSH Results by Room	
						VSC	Pr/Ex	Annual	Pr/Ex	Winter	Pr/Ex	Annual	Winter
44 Mabfield Road													
Ground	R1	Residential	Bedroom*	W1	Existing Proposed	14.55 14.54	1.00		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	35.25 33.41	0.95		*North*		*North*		
												North	*North*
	R2	Residential	Bedroom*	W2	Existing Proposed	23.42 23.32	1.00		*North*		*North*		
												North	*North*
46 Mabfield Road													
Ground	R1	Residential	Bedroom*	W1	Existing Proposed	11.48 10.81	0.94		*North*		*North*		
												North	*North*
	R3	Residential	Dining Room*	W3	Existing Proposed	10.74 10.43	0.97	3.00 3.00	1.00	0.00 0.00	1.00	3.00 3.00	0.00 0.00
	R4	Residential	Kitchen*	W4	Existing Proposed	16.36 16.13	0.99	15.00 15.00	1.00	0.00 0.00	1.00		
				W5	Existing Proposed	71.18 70.42	0.99		*North*		*North*		
												32.00 32.00	0.00 0.00
First	R1	Residential	Bedroom*	W1	Existing Proposed	19.12 17.77	0.93		*North*		*North*		
												North	*North*
	R3	Residential	Bedroom*	W3	Existing Proposed	35.86 34.22	0.95		*North*		*North*		
												North	*North*
48 Mabfield Road													
Ground	R1	Residential	Bedroom*	W1	Existing Proposed	23.27 23.24	1.00		*North*		*North*		
												North	*North*
First	R1	Residential	Bedroom*	W1	Existing Proposed	36.70 34.92	0.95		*North*		*North*		
												North	*North*
	R2	Residential	Bedroom*	W2	Existing Proposed	27.64 27.47	0.99		*North*		*North*		
												North	*North*

APPENDIX C

DAYLIGHT DISTRIBUTION SPREADSHEET

Floor Ref.	Room Ref.	Property Type	Room Use.		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex
11 Langley Road								
Ground	R1	Residential	Bedroom	Area m2 % of room	9.65	9.05 94%	9.37 97%	104.00%
First	R1	Residential	Bedroom	Area m2 % of room	13.44	12.86 96%	12.84 96%	100.00%
13 Langley Road								
Ground	R2	Residential	Living Room*	Area m2 % of room	11.16	9.64 86%	10.82 97%	112.00%
First	R1	Residential	Bedroom*	Area m2 % of room	14.60	14.17 97%	12.99 89%	92.00%
15 Langley Road								
Ground	R1	Residential	Living Room*	Area m2 % of room	9.94	9.19 92%	9.65 97%	105.00%
First	R1	Residential	Bedroom*	Area m2 % of room	13.40	12.80 95%	12.79 95%	100.00%
17 Langley Road								
Ground	R2	Residential	Living Room*	Area m2 % of room	11.13	9.74 88%	10.20 92%	105.00%
First	R1	Residential	Bedroom*	Area m2 % of room	14.57	13.84 95%	12.55 86%	91.00%
19 Langley Road								
Ground	R1	Residential	Bedroom	Area m2 % of room	9.63	8.12 84%	8.92 93%	110.00%
First	R1	Residential	Bedroom	Area m2 % of room	13.14	12.48 95%	12.15 92%	97.00%
21 Langley Road								
Ground	R2	Residential	LD	Area m2 % of room	22.25	18.34 82%	19.69 88%	107.00%
First	R1	Residential	Bedroom	Area m2 % of room	14.04	13.24 94%	11.75 84%	89.00%
23 Langley Road								
Ground	R1	Residential	Living Room*	Area m2 % of room	10.32	8.22 80%	8.64 84%	105.00%
First	R1	Residential	Bedroom*	Area m2 % of room	13.71	13.08 95%	12.16 89%	93.00%
Second	R1	Residential	Bedroom*	Area m2 % of room	17.09	16.47 96%	16.80 98%	102.00%
25 Langley Road								
Ground	R2	Residential	Living Room*	Area m2 % of room	10.13	8.04 79%	7.50 74%	93.00%
First	R1	Residential	Bedroom*	Area m2 % of room	13.65	12.96 95%	11.34 83%	87.00%

Floor Ref.	Room Ref.	Property Type	Room Use.		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex
27 Langley Road								
Ground	R1	Residential	Dining Room	Area m2 % of room	10.80	8.46 78%	7.40 69%	87.00%
First	R1	Residential	Bedroom	Area m2 % of room	14.18	13.52 95%	12.01 85%	89.00%
Second	R1	Residential	Bedroom	Area m2 % of room	17.95	14.14 79%	10.69 60%	76.00%
1 Riga Road								
Ground	R1	Residential	Bedroom	Area m2 % of room	14.88	14.48 97%	14.50 97%	100.00%
	R3	Residential	Living Room	Area m2 % of room	16.45	15.13 92%	14.94 91%	99.00%
	R4	Residential	Kitchen	Area m2 % of room	13.82	12.79 93%	12.79 93%	100.00%
First	R1	Residential	Bedroom	Area m2 % of room	14.88	14.21 96%	12.38 83%	87.00%
	R3	Residential	Bedroom	Area m2 % of room	10.28	9.60 93%	9.51 93%	99.00%
	R4	Residential	Bedroom	Area m2 % of room	8.32	7.81 94%	7.80 94%	100.00%
2 Riga Road								
Ground	R1	Residential	Kitchen*	Area m2 % of room	8.20	7.36 90%	7.36 90%	100.00%
	R2	Residential	Living Room*	Area m2 % of room	14.34	13.32 93%	13.21 92%	99.00%
	R4	Residential	Bedroom*	Area m2 % of room	12.22	12.13 99%	11.98 98%	99.00%
First	R1	Residential	Bedroom*	Area m2 % of room	5.79	5.46 94%	5.46 94%	100.00%
	R2	Residential	Bedroom*	Area m2 % of room	7.29	6.99 96%	6.97 96%	100.00%
	R4	Residential	Bedroom*	Area m2 % of room	12.22	11.80 97%	9.18 75%	78.00%
29 Langley Road								
Ground	R1	Residential	Living Room*	Area m2 % of room	9.68	8.02 83%	6.09 63%	76.00%
First	R1	Residential	Bedroom*	Area m2 % of room	13.63	13.10 96%	9.72 71%	74.00%
Second	R1	Residential	Bedroom*	Area m2 % of room	17.98	17.37 97%	16.23 90%	93.00%
31 Langley Road								
Ground	R2	Residential	Living Room*	Area m2 % of room	10.74	9.65 90%	6.82 64%	71.00%
First	R1	Residential	Bedroom*	Area m2 % of room	14.69	14.03 95%	10.85 74%	77.00%
Second	R1	Residential	Bedroom*	Area m2 % of room	19.86	18.28 92%	13.67 69%	75.00%

Floor Ref.	Room Ref.	Property Type	Room Use.		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex
33 Langley Road								
Ground	R1	Residential	Bedroom	Area m2 % of room	9.30	8.73 94%	5.96 64%	68.00%
First	R1	Residential	Bedroom	Area m2 % of room	13.25	12.73 96%	9.42 71%	74.00%
35 Langley Road								
Ground	R2	Residential	Living Room*	Area m2 % of room	10.55	10.37 98%	6.84 65%	66.00%
First	R1	Residential	Bedroom*	Area m2 % of room	14.50	13.83 95%	11.26 78%	81.00%
37 Langley Road								
Ground	R1	Residential	Living Room*	Area m2 % of room	10.19	10.02 98%	6.66 65%	66.00%
First	R1	Residential	Bedroom*	Area m2 % of room	14.14	13.56 96%	10.18 72%	75.00%
39 Langley Road								
Ground	R2	Residential	Living Room*	Area m2 % of room	10.48	10.31 98%	7.60 73%	74.00%
First	R1	Residential	Bedroom*	Area m2 % of room	14.43	13.78 95%	12.36 86%	90.00%
41 Langley Road								
Ground	R1	Residential	Living Room*	Area m2 % of room	9.14	9.03 99%	6.95 76%	77.00%
First	R1	Residential	Bedroom*	Area m2 % of room	13.09	12.57 96%	9.87 75%	78.00%
43 Langley Road								
Ground	R2	Residential	LD	Area m2 % of room	17.71	17.20 97%	16.77 95%	98.00%
First	R1	Residential	Bedroom	Area m2 % of room	12.30	11.65 95%	11.62 94%	100.00%
45 Langley Road								
Ground	R1	Residential	Bedroom	Area m2 % of room	14.52	14.51 100%	14.38 99%	99.00%
First	R1	Residential	Bedroom	Area m2 % of room	14.52	14.15 97%	12.04 83%	85.00%
20 Mabfield Road								
Ground	R1	Residential	Dining Room*	Area m2 % of room	10.62	9.69 91%	9.69 91%	100.00%
First	R1	Residential	Bedroom*	Area m2 % of room	6.65	6.49 98%	6.49 98%	100.00%
	R2	Residential	Bedroom*	Area m2 % of room	10.62	10.28 97%	9.72 92%	95.00%

Floor Ref.	Room Ref.	Property Type	Room Use.		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex
22 Mabfield Road								
Ground	R1	Residential	Dining Room*	Area m2 % of room	10.47	9.31 89%	9.31 89%	100.00%
	R2	Residential	Kitchen*	Area m2 % of room	10.49	10.29 98%	10.20 97%	99.00%
First	R1	Residential	Bedroom*	Area m2 % of room	10.47	10.15 97%	10.11 97%	100.00%
	R2	Residential	Bedroom*	Area m2 % of room	6.94	6.76 97%	6.76 97%	100.00%
24 Mabfield Road								
Ground	R1	Residential	LKD	Area m2 % of room	24.95	21.80 87%	19.33 77%	89.00%
First	R1	Residential	Bedroom	Area m2 % of room	6.27	6.10 97%	6.10 97%	100.00%
	R2	Residential	Bedroom	Area m2 % of room	8.50	8.30 98%	8.07 95%	97.00%
26 Mabfield Road								
Ground	R1	Residential	Dining Room*	Area m2 % of room	13.30	10.46 79%	10.28 77%	98.00%
	R2	Residential	Kitchen*	Area m2 % of room	12.82	12.43 97%	11.94 93%	96.00%
First	R1	Residential	Bedroom*	Area m2 % of room	13.30	12.41 93%	12.13 91%	98.00%
	R2	Residential	Bedroom*	Area m2 % of room	8.41	8.03 96%	8.03 96%	100.00%
28 Mabfield Road								
Ground	R2	Residential	LKD	Area m2 % of room	21.00	20.97 100%	20.97 100%	100.00%
30 Mabfield Road								
Ground	R1	Residential	Kitchen*	Area m2 % of room	15.37	15.28 99%	14.86 97%	97.00%
First	R1	Residential	Bedroom*	Area m2 % of room	11.76	11.42 97%	11.42 97%	100.00%
32 Mabfield Road								
Ground	R1	Residential	Kitchen*	Area m2 % of room	14.96	8.90 59%	8.90 59%	100.00%
	R2	Residential	Dining Room*	Area m2 % of room	15.25	11.61 76%	11.61 76%	100.00%
	R3	Residential	Bedroom*	Area m2 % of room	14.80	13.01 88%	12.57 85%	97.00%
First	R1	Residential	Bedroom*	Area m2 % of room	9.48	9.30 98%	9.30 98%	100.00%
	R3	Residential	Bedroom*	Area m2 % of room	14.80	14.30 97%	13.32 90%	93.00%
Second	R1	Residential	Bedroom*	Area m2 % of room	12.00	11.83 99%	11.19 93%	95.00%

Floor Ref.	Room Ref.	Property Type	Room Use.		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex
34 Mabfield Road								
Ground	R1	Residential	Bedroom*	Area m2 % of room	14.74	12.28 83%	11.64 79%	95.00%
	R3	Residential	Dining Room*	Area m2 % of room	9.84	6.17 63%	6.17 63%	100.00%
	R4	Residential	Kitchen*	Area m2 % of room	6.99	6.71 96%	6.71 96%	100.00%
First	R1	Residential	Bedroom*	Area m2 % of room	14.74	14.12 96%	13.14 89%	93.00%
	R3	Residential	Bedroom*	Area m2 % of room	9.84	9.57 97%	9.57 97%	100.00%
36 Mabfield Road								
Ground	R1	Residential	Kitchen*	Area m2 % of room	15.50	15.23 98%	15.23 98%	100.00%
	R2	Residential	Dining Room*	Area m2 % of room	15.85	12.05 76%	12.05 76%	100.00%
	R3	Residential	Bedroom*	Area m2 % of room	14.80	12.69 86%	12.57 85%	99.00%
First	R1	Residential	Bedroom*	Area m2 % of room	9.79	9.59 98%	9.59 98%	100.00%
	R3	Residential	Bedroom*	Area m2 % of room	14.80	14.30 97%	13.85 94%	97.00%
38 Mabfield Road								
Ground	R1	Residential	Bedroom	Area m2 % of room	14.06	11.70 83%	11.29 80%	96.00%
	R3	Residential	Dining Room	Area m2 % of room	9.73	6.85 70%	6.85 70%	100.00%
	R4	Residential	Kitchen	Area m2 % of room	16.33	16.09 99%	16.09 99%	100.00%
First	R1	Residential	Bedroom*	Area m2 % of room	14.06	13.26 94%	12.50 89%	94.00%
	R3	Residential	Bedroom*	Area m2 % of room	9.88	9.66 98%	9.66 98%	100.00%
40 Mabfield Road								
Ground	R1	Residential	Bedroom*	Area m2 % of room	14.80	13.38 90%	13.37 90%	100.00%
First	R1	Residential	Bedroom*	Area m2 % of room	9.59	9.36 98%	9.36 98%	100.00%
	R2	Residential	Bedroom*	Area m2 % of room	14.80	14.32 97%	13.97 94%	98.00%
42 Mabfield Road								
Ground	R1	Residential	Bedroom*	Area m2 % of room	14.80	12.55 85%	11.81 80%	94.00%
	R3	Residential	Dining Room*	Area m2 % of room	9.76	7.02 72%	7.01 72%	100.00%
	R4	Residential	Kitchen*	Area m2 % of room	15.81	15.58 99%	15.58 99%	100.00%
First	R1	Residential	Bedroom*	Area m2 % of room	14.80	14.23 96%	13.53 91%	95.00%
	R3	Residential	Bedroom*	Area m2 % of room	9.76	9.56 98%	9.56 98%	100.00%

Tim Groom Architects proposed scheme received on 03/12/2020

Floor Ref.	Room Ref.	Property Type	Room Use.		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex
44 Mabfield Road								
Ground	R1	Residential	Bedroom*	Area m2 % of room	14.80	12.72 86%	12.71 86%	100.00%
First	R1	Residential	Bedroom*	Area m2 % of room	9.71	9.45 97%	9.45 97%	100.00%
	R2	Residential	Bedroom*	Area m2 % of room	14.80	14.23 96%	14.23 96%	100.00%
46 Mabfield Road								
Ground	R1	Residential	Bedroom*	Area m2 % of room	12.40	9.79 79%	9.06 73%	93.00%
	R3	Residential	Dining Room*	Area m2 % of room	8.36	4.26 51%	4.26 51%	100.00%
	R4	Residential	Kitchen*	Area m2 % of room	7.56	7.41 98%	7.41 98%	100.00%
First	R1	Residential	Bedroom*	Area m2 % of room	12.40	11.39 92%	10.38 84%	91.00%
	R3	Residential	Bedroom*	Area m2 % of room	8.36	7.84 94%	7.84 94%	100.00%
48 Mabfield Road								
Ground	R1	Residential	Bedroom*	Area m2 % of room	14.80	13.97 94%	13.97 94%	100.00%
First	R1	Residential	Bedroom*	Area m2 % of room	8.40	8.04 96%	8.04 96%	100.00%
	R2	Residential	Bedroom*	Area m2 % of room	14.80	13.97 94%	13.97 94%	100.00%