



5th Floor, Holborn Gate
330 High Holborn
London
WC1V 7PP

T: +44 (0)20 7148 6290
E: info@eb7.co.uk
W: www.eb7.co.uk

DAYLIGHT & SUNLIGHT REPORT

Northaw Road East,
Cuffley, EN6 4LQ

Our Ref:5448

19 June 2024

Contents

1	Introduction.....	2
2	Guidance.....	3
3	Application of the guidance.....	5
4	Planning Policy.....	7
5	Sources of Information & Assumptions	9
6	The Site and Proposal.....	10
7	Assessment results.....	12
8	Conclusions.....	15

Appendix 1 – Drawings of the existing, proposed and surrounding buildings

Appendix 2 – Detailed results of the daylight and sunlight assessment within neighbouring properties

Appendix 3 – Results of the sunlight amenity assessment

Report details

Client: Bellway Homes Limited

Prepared by: JL

Date of issue: 19/06/2024

1 Introduction

- 1.1.1 eb7 have been instructed to assess the Daylight and Sunlight effect of the proposals at Northhaw Rad East, Cuffley on the daylight and sunlight to the existing surrounding properties and neighbouring amenity spaces. Our original assessments and earlier report dated August 2022 assessed the Reserved Matters AAO Architecture proposals. We have now been asked to consider the effects of the updated 'drop in' for ten units comprising:

Approval of reserved matters (appearance, landscaping, layout, and scale) following outline planning permission S6/2015/1342/PP as varied by 6/2023/1352/VAR for residential development of 10 dwellings and associated infrastructure."

- 1.1.2 The methodology and criteria used for these assessments is provided by Building Research Establishment's (BRE) guidance 'Site layout planning for daylight and sunlight: A guide to good practice' (BRE 209 3rd edition, 2022).
- 1.1.3 In order to carry out an assessment, we have generated a 3D computer model (Test Environment) of the existing site, the key surrounding properties and the proposed scheme. Using this model and our specialist software, we have calculated the daylight and sunlight levels in both the existing and proposed conditions for the relevant neighbouring buildings.
- 1.1.4 As well as considering the daylight and sunlight to neighbouring properties, we have also quantified the overshadowing effects to neighbouring amenity areas and gardens, again considering both the existing and proposed conditions.
- 1.1.5 The numerical criteria suggested within the BRE guidelines has been applied to each of the assessments mentioned above. It is important to note that these guidelines are not a rigid set of rules but are advisory and need to be applied flexibly according to the specific context of a site.

June 2024 Scheme Amendments

- 1.1.6 Amendments have been made to the scheme design since undertaking our technical assessments contained herein based on the August 2022 Reserved Matters scheme. These revisions are however limited to the dwellings along the northern boundary where a number of 2-storey dwellings have now been amended to 2.5-storey dwellings.
- 1.1.7 Whilst these modifications lead to marginal increases in height and the inclusion of additional dormer windows to the rooves, these dwellings are sufficiently offset from the neighbours such that these would not have a material impact on the daylight and sunlight condition set out below based on the earlier August 2022 scheme.
- 1.1.8 Given the alterations would have no material bearing in the findings / conclusions from the August 2022 scheme, we have not revisited our technical assessments for daylight and sunlight based on the latest scheme.

2 Guidance

2.1 Daylight & sunlight for planning

'Site layout planning for daylight and sunlight: A guide to good practice', BRE 2022

- 2.1.1 The Building Research Establishment (BRE) Report 209, *'Site layout planning for daylight and sunlight: A guide to good practice'*, is the reference document used by most local authorities for assessing daylight and sunlight in relation to new developments. Commonly referred to as 'the BRE guidelines', it provides various testing methodologies to calculate the potential light levels received by neighbours of a development site and provided within proposed new development.
- 2.1.2 The guidance given within the BRE document makes direct reference to the British Standard BS EN17037 (2018) and the CIBSE (Chartered Institute of Building Services Engineers) guide LG10: Daylighting – a guide for designers (2014). It is intended to be used in conjunction with these documents, which provide guidance on the assessment of daylight and sunlight within new buildings.
- 2.1.3 The 2022 update to the BRE guidance was published on 9th June 2022. The assessment methodologies and target metrics in respect of the impacts to neighbouring properties remain broadly unchanged from the earlier guidance save for some areas of clarification. The primary change relates to the assessment of internal daylight and sunlight amenity within proposed habitable accommodation. The new guidance reflects the British Standard BS EN17037, published in 2018, which was based on the relevant European Standard but, included a 'National Annex' clarifying the proposed application of the new internal guidance within the UK.
- 2.1.4 Detailed guidance upon the updated internal amenity standards is set out below. It is however important to note that the standards set out within BS EN17037 & BRE 209 (2022) are generally harder to achieve than the previous Average Daylight Factor (ADF) assessments adopted under the 2011 version of the guidance. A lower compliance rate with the new targets does not therefore indicate a less acceptable scheme as the difference in the assessment metrics should be noted. This is particularly so in respect of urban development where a number of important design factors such as the provision of balcony private amenity space and limiting solar gain / overheating may lead to a trade-off against achieving higher internal amenity levels.

Daylight and Sunlight to Neighbouring Properties

Detailed daylight assessments

- 2.1.5 The BRE guidance outlines two detailed methods for calculating daylight within properties neighbouring a proposed development: the Vertical Sky Component (VSC) and the No-Sky Line (NSL) tests.

- 2.1.6 The VSC test measures the amount of sky that is visible to a specific point on the outside of a property, which is directly related to the amount of daylight that can be received. It is measured on the outside face of the external walls, usually at the centre point of a window.
- 2.1.7 The NSL test calculates the distribution of daylight within rooms by determining the area of the room at desk / work surface height (the 'working plane') which can and cannot receive a direct view of the sky and hence 'sky light'. The working plane height is set at 850mm above floor level within residential property.
- 2.1.8 For the above methods, the guidance suggests that existing daylight may be noticeably affected by new development if: -
- Windows achieve a VSC below 27% and are reduced to less than 0.8 times their former value; and / or
 - Levels of NSL within rooms are reduced to less than 0.8 times their former values.
- 2.1.9 Where rooms are greater than 5m in depth and lit from only one side, the guidance recognises that *"a greater movement of the no sky-line may be unavoidable"* (page 16, paragraph 2.2.12).

Detailed sunlight assessments

- 2.1.10 For sunlight, the Annual Probable Sunlight Hours (APSH) test calculates the percentage of probable hours of sunlight received by a window or room over the course of a year.
- 2.1.11 In assessing sunlight effects to existing properties surrounding a new development, only those windows orientated within 90° of due south and which overlook the site require assessment. The main focus is on living rooms, with bedrooms and kitchens deemed less important.
- 2.1.12 The guide suggests that occupiers will notice the loss of sunlight if the APSH to main living rooms is both less than 25% annually (with 5% during winter) and that the amount of sunlight, following the proposed development, is reduced by more than 4%, to less than 0.8 times its former value.

Sunlight to gardens and outdoor spaces

- 2.1.13 Where sunlight to an amenity space may be affected by new development, the BRE guidelines recommend that an overshadowing assessment is conducted. The key analysis is the '2hr sun on ground' test, which quantifies the proportion of an amenity area (e.g. rear gardens, parks and playing fields, public squares etc.) receiving at least 2hrs of sun on the 21st of March.
- 2.1.14 The BRE guidance recognises that different types of amenity space may have different sunlighting requirements. Generally, if an existing neighbouring open space receives less than 50%, then the guidelines suggest that the loss in sunlight may be noticeable if it is reduced below 0.8 times its former value.

3 Application of the guidance

3.1 Scope of assessment

Impact analysis for neighbouring buildings

- 3.1.1 The BRE guidelines advise that, when assessing any potential effects on surrounding properties, only those windows and rooms that have a 'reasonable expectation' of daylight and sunlight need to be considered. At paragraph 2.2.2 it states: -

"The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed."

- 3.1.2 Our assessments therefore consider the neighbouring residential properties only, which the BRE recognises have the highest expectation for natural light. We have tested the impact on the main rooms in each residential property and ignored non-habitable space (e.g. staircases, hallways, bathrooms, toilets, stores etc.) as per BRE guidance.

3.2 Application of the numerical criteria

- 3.2.1 The opening paragraphs of the BRE guidelines state:

"1.6 The guide is intended for building designers and their clients, consultants, and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design (see Section 5). In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings."

- 3.2.2 It is therefore very important to apply the BRE guidance sensibly and flexibly, with careful consideration of the specific site context. Its numerical targets theoretically apply to any built environment, from city centres to rural villages. However, in more tightly constrained environments, achieving the default BRE targets can be very challenging and conflict with other beneficial factors of site layout design.
- 3.2.3 With the above in mind, rigid adherence to the BRE in certain situations could easily result in an inappropriate form of development. In which case it may be appropriate to adopt lower target values more appropriate to the location concerned. This is acknowledged in the BRE guidance at paragraph 2.2.3 (page 14):

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

- 3.2.4 For buildings that neighbour a new development, the guidance suggests that daylight will be adversely affected by the development, if either; its windows achieve a VSC below 27% and have their levels reduced to less than 0.8 times their former value, or the levels of NSC within rooms are reduced to less than 0.8 times their former values.

4 Planning Policy

- 4.1.1 We have considered local, regional and national planning policy relating to daylight and sunlight. In general terms, planning policy advises that new development will only be permitted where it is shown not to cause unacceptable loss of daylight or sunlight amenity to neighbouring properties.
- 4.1.2 The need to protect amenity of neighbours is echoed within recent publications from the Secretary of State for Housing, Communities and Local Government. Although, these documents also stress that current guidance needs to be used flexibly where developments are located in urban areas and intend to achieve higher densities. Specifically, these documents suggest that the nationally applicable criteria given within the BRE guidance needs to be applied in consideration of the development's context.

4.2 Welwyn Hatfield District Plan (2005)

- 4.2.1 Welwyn Hatfield Borough Council encourages good quality design in all new development in the district and stresses that all new development should contribute to the quality design in the district, be appropriate to the setting and context of the area of development and be of the highest standard.

Policy D1: Quality of Design

"The Council will require the standard of design in all new development to be of a high quality. The design of new development should incorporate the design principles and policies in the Plan and the guidance contained in the Supplementary Design Guidance."

4.3 Welwyn Hatfield District Plan – Supplementary Design Guidance (2005)

- 4.3.1 Paragraph 3.18 of the Welwyn Hatfield District Plan SPD provides the following in respect of daylight and sunlight:

"This section supplements Policy D1 Quality of Design in the District Plan. All new developments should be designed and built to ensure that there is a satisfactory level of sunlight and daylight to both the new development and surrounding developments and/or open spaces. Access to sunlight and daylight not only improves the interior and exterior appearance of a building, it also improves the standard of living or workspace for the residents or users of a building. Access to sunlight can help to make a building more energy efficient, whilst daylight reduces the need for electric lighting and winter solar gain can meet some of the heating requirements. Advice on site layout planning to achieve good sunlight and daylight within buildings and the open spaces between them is set out in the Building Research Establishment's document entitled, 'Site Layout Planning for Daylight and Sunlight: a guide to good practice'."

4.4 The National Planning Policy Framework - Department for Housing, Communities and Local Government (July 2021)

- 4.4.1 The latest version of the National Planning Policy Framework was issued in July 2021. The document sets out planning policies for England and how these are expected to be applied. In respect of daylight and sunlight it stresses the need to make optimal use of sites and to take a flexible approach to daylight and sunlight guidance. Para 125 States: -

11. Making effective use of land

Achieving appropriate densities

"125. Area-based character assessments, design guides and codes and masterplans can be used to help ensure that land is used efficiently while also creating beautiful and sustainable places. Where there is an existing or anticipated shortage of land for meeting identified housing needs, it is especially important that planning policies and decisions avoid homes being built at low densities, and ensure that developments make optimal use of the potential of each site. In these circumstances:

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).

5 Sources of Information & Assumptions

- 5.1.1 A measured survey, architectural drawings, site photographs and Ordnance Survey information have been used to create a 3D computer model of the proposed development in the context of the existing site and surrounding buildings.
- 5.1.2 Where survey or planning information was unavailable, the position of the neighbouring property elevations has been estimated based upon brick counts from site photographs. Window positions and dimensions used directly affect the results of all assessment methods.
- 5.1.3 We have not sought access to the surrounding properties and, unless we have been able to source floor layouts via public records, the internal configuration and floor levels have been estimated. Unless the building form dictates otherwise, we assume room depths of c. 4.2m for principal living space. Room layouts used directly affect the results of the NSL assessments.
- 5.1.4 Where possible neighbouring building use has been identified via online research, including Valuation Office Agency (VOA) searches, and/or external observation.

6 The Site and Proposal

- 6.1.1 The site measures approximately 5.52 ha and is located to the south Cuffley, Welwyn Hatfield. The site is currently in agricultural use.
- 6.1.2 The site is bound to the north by existing residential development and the grounds of Cuffley Primary School. The railway line and Northaw Road East (B156) form strong eastern and western boundaries respectively. On the opposite side of the road there are three pairs of semi-detached dwellings which are accessed from Colesdale to the north. The southern boundary is defined by a mature hedgerow and tree belt lining the Hertfordshire Way footpath.
- 6.1.3 Beyond the footpath to the south west of the Site and fronting Northaw Road East is the King George V (KGV) Playing Fields, comprising various sports clubs, and including three sports pavilions, a recreation area with hard surfaced MUGA, sport pitches and a small area of formal play equipment.
- 6.1.4 The site is not subject to an existing vehicular access from Northaw Road East, however a vehicular access has been consented at this location as part of the Site Access Parameter Plan included in the outline consent.



Image 1 - Plan view of the proposed development within its context

- 6.1.5 The August 2022 planning application for which our technical assessments are based on consisted of the following:

"Reserved matters (appearance, landscaping, layout and scale) for outline planning permission S6/2015/1342/PP for residential development of up to 121 dwellings, associated infrastructure and a change of use from agricultural land to an extension of the King George V playing field. In addition, to approve details

for Condition 4 (Construction Environmental Management Plan), Condition 6 (Surface Water Drainage Scheme), Condition 8 (Arboricultural Method Statement), Condition 9 (Refuse and Recycling), Condition 10 (Noise), Condition 11 (Air Quality), Condition 16 (Landscape and Ecological Management Plan) and Condition 19 (Flood Risk Assessment)."

- 6.1.6 Following the issue of this Reserved Matters application, amendments have since been made to the dwellings along the northern boundary with the latest drop-in proposals comprising:

"Approval of reserved matters (appearance, landscaping, layout, and scale) following outline planning permission S6/2015/1342/PP as varied by 6/2023/1352/VAR for residential development of 10 dwellings and associated infrastructure."

- 6.1.7 As there is limited change in the height of these properties we do not consider the changes will lead to any shift in the effects to the neighbours. As such there we have not revisited our technical assessments in this regard and instead restate the effects of the results of the earlier August 2022 Reserved Matters scheme as set out below.

7 Assessment results

7.1 Daylight and sunlight to neighbouring buildings

- 7.1.1 Full results of the daylight and sunlight assessments are attached within Appendix 2. Drawings to show the existing and proposed buildings in the context of the neighbouring properties as well as window maps showing individual window references are attached within Appendix 1.
- 7.1.2 Our assessment has considered all of the closest neighbouring residential properties with windows overlooking the proposed development. These are shown on the following image: -

- | | |
|--------------------------|----------------------|
| 1. 1-11 Colesdale (odds) | 2. 2 Colesdale |
| 3. 83 Greenfields | 4. 81 Greenfields |
| 5. 75 Greenfields | 6. 67 Greenfields |
| 7. 53 Greenfields | 8. 35-41 Greenfields |
| 9. 33 Greenfields | 10. 29B Greenfields |



Image 2 - Map showing site location and neighbouring residential properties

Daylight / Sunlight Results

- 7.1.3 The results of our technical assessments demonstrate that all of the neighbouring properties considered within our scope above which have windows overlooking the site will experience no material reduction in daylight and sunlight amenity as a result of the proposals.
- 7.1.4 For daylight to the windows, our Vertical Sky Component (VSC) assessments show that all of the neighbouring windows serving habitable rooms remain comfortably in excess of the BRE's target of retaining at least 0.80 times their existing level and are therefore considered unnoticeable effects under the BRE guidelines.
- 7.1.5 The limited effect upon these neighbouring properties is confirmed by our No-Sky Line (NSL) analysis which demonstrates that there will be no material shift in the daylight penetration to the neighbouring rooms with the scheme in place.
- 7.1.6 When referring to the potential sunlight effects of the scheme, our Annual Probable Sunlight Hours (APSH) results show that all of the neighbouring rooms with windows within 90° of due south will retain sunlight levels well in excess of the BRE recommendations of at least 25% for total annual levels and 5% for the winter months.
- 7.1.7 Overall, the daylight and sunlight effects of the proposed Reserved Matters Scheme are therefore considered in fully compliance with the BRE recommendations.

7.2 Overshadowing to neighbouring amenity

Sunlight Amenity Assessment (2-hour sun on ground)

- 7.2.1 We have assessed the scheme's potential effect on overshadowing using the two-hour sun on ground / sunlight amenity assessment. This test quantifies the area of each space that receives at least two hours of sunlight on 21st March, in both the existing and the proposed situations. The 21st March is chosen as it represents the mid-point of the sun's position throughout the year.
- 7.2.2 For our assessments, we have considered the all of the neighbouring gardens / amenity spaces to the north of site along Greenfields as these are the most likely to experience a change due to their orientation.
- 7.2.3 The results of the analysis are shown on our drawings labelled 5448-SA01 within Appendix 3.



Image 3 - BRE 2-hour sun contour assessment to the neighbouring gardens on the 21st March

Results – Neighbouring Gardens

- 7.2.4 The results of our BRE 2-hour sun assessment shows that all of the neighbouring gardens along the northern boundary will continue to enjoy high levels of sunlight in the proposed condition with no change recorded from the existing position. All 10 of the spaces achieve 2 or more hours of sunlight to well over half of the space on the 21st March (equinox).
- 7.2.5 The proposal will not result in material overshadowing to the neighbouring amenity spaces and demonstrates that sunlight levels will continue to be good across the whole year in line with the BRE recommendations.

Conclusions

- 7.2.6 This practice has undertaken a detailed assessment of the potential daylight and sunlight effects of the proposed development at Northhaw Rad East, Cuffley on the key neighbouring properties and amenity spaces.

7.3 Daylight and sunlight impact to neighbouring properties

- 7.3.1 Our assessments have been undertaken using the VSC and NSL (daylight) and APSH (sunlight) tests set out within the BRE guidance 'Site layout planning for daylight and sunlight: A guide to good practice' (2022).
- 7.3.2 The results of our daylight and sunlight assessments have shown that, whilst there will be some minor changes in sky view to individual windows within the neighbouring properties, the amount of daylight received by each of the neighbouring habitable rooms / windows will remain very high and well in excess of the BRE recommendations.
- 7.3.3 The assessment of sunlight to neighbouring windows has also shown full compliance with the BRE criteria with no material alteration in sunlight recorded to the neighbouring rooms.

7.4 Overshadowing impact to neighbouring properties

- 7.4.1 The assessment of sunlight amenity (overshadowing) to the neighbouring gardens along Greenfields to the north has shown that all of the spaces will experience no material shading as a result of the development with all gardens / amenity maintaining sunlight levels well within the BRE's target of 0.8 times its former level in the proposed condition.
- 7.4.2 Overall, the scheme responds positively to its context and demonstrates full compliance with the BRE guidelines in terms of daylight and sunlight effects to the neighbouring properties. The recent amends in respect of the drop-in application will not material change these findings and the scheme remains fully compliant with the BRE targets.



Appendix 1

Drawings of the existing, proposed and surrounding buildings



Sources of information

Cloud10
George Playing Fields-DISI-24-05-2022.
dwg
Received 27/05/2022
George Playing Fields-DISI-15-06-2022.
dwg
Received 15/06/2022

AAP Architecture
BA TYPE - THE BAKER.dwg
BLOCK 1 - THE NEWSAM.dwg
BM TYPE - BLENMERE.dwg
CN TYPE - COINER.dwg
CO TYPE - THE COOPER.dwg
CT TYPE - THE CARTOGRAPHER.dwg
FO TYPE - THE FORESTER.dwg
FR TYPE - FRAMER.dwg
GARAGES.dwg
HA TYPE - HARPER.dwg
P1848 BLOCKS 2 & 3.dwg
P1848-Planning Layout-ZD.dwg
PH TYPE - PHILOSOPHER.dwg
PH+ TYPE - AMENDED PHILOSOPHER.dwg
PK TYPE - THE PARKMAN.dwg
PW TYPE - THE PLOUGHWRIGHT.dwg
RE TYPE - REEDMAKER.dwg
RE+ TYPE - REEDMAKER.dwg
TH TYPE - THESPIAN.dwg
TI TYPE - THE TILLMAN.dwg
WE TYPE - WEAVER.dwg
Received 21/07/2022

EB7 Ltd
Site Photographs
Ordnance Survey

Key:
 Existing



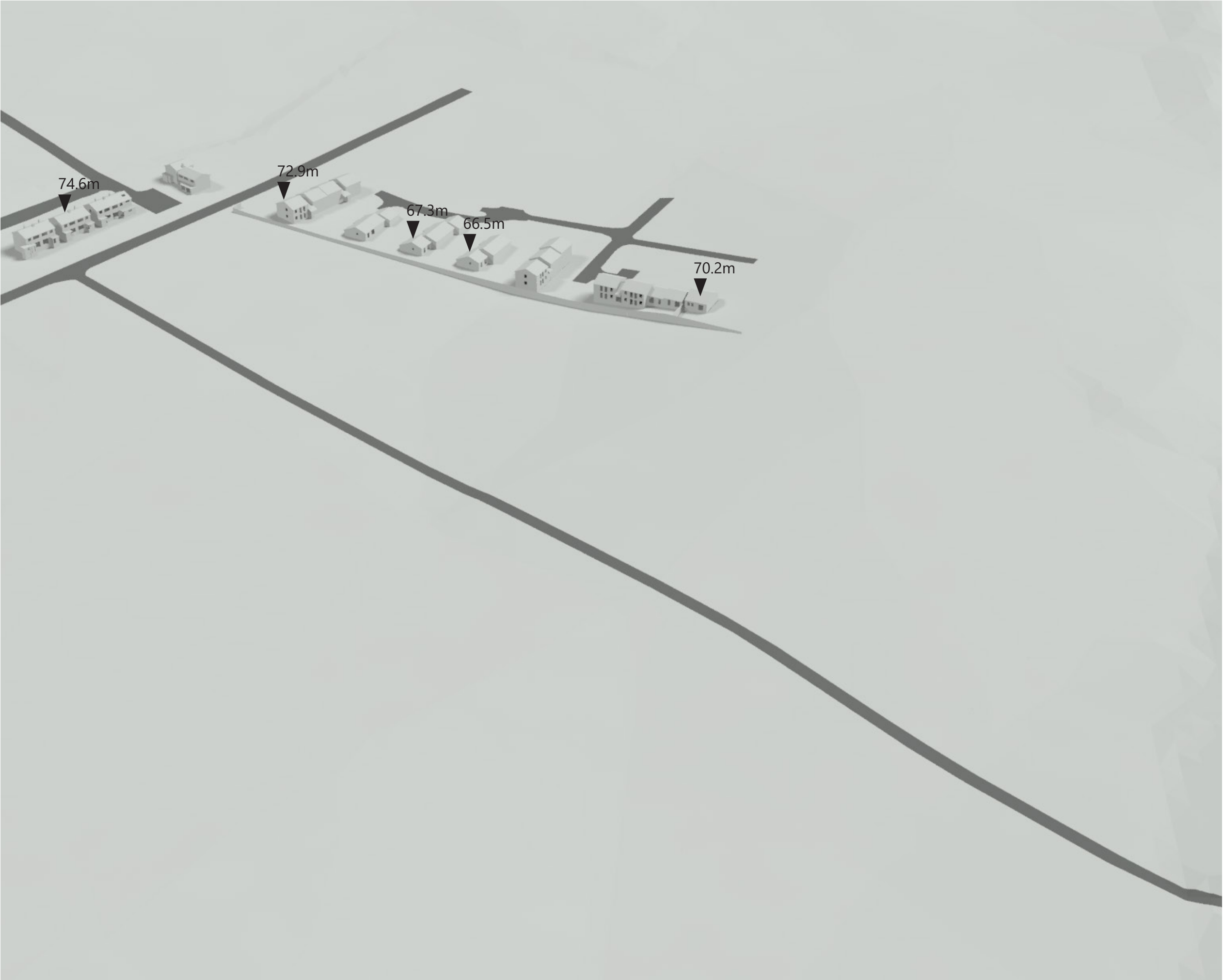
Project Northaw Road East, Cuffley

Title Existing Condition
Plan View

Drawn MZ Checked --

Date 05/08/2022 Project 5448

Rel no. 01 Prefix DS01 Page no. 01




Sources of information

Cloud10
George Playing Fields-DISI-24-05-2022.
dwg
Received 27/05/2022
George Playing Fields-DISI-15-06-2022.
dwg
Received 15/06/2022

AAP Architecture
BA TYPE - THE BAKER.dwg
BLOCK 1 - THE NEWSAM.dwg
BM TYPE - BLENMERE.dwg
CN TYPE - COINER.dwg
CO TYPE - THE COOPER.dwg
CT TYPE - THE CARTOGRAPHER.dwg
FO TYPE - THE FORESTER.dwg
FR TYPE - FRAMER.dwg
GARAGES.dwg
HA TYPE - HARPER.dwg
P1848 BLOCKS 2 & 3.dwg
P1848-Planning Layout-ZD.dwg
PH TYPE - PHILOSOPHER.dwg
PH+ TYPE - AMENDED PHILOSOPHER.dwg
PK TYPE - THE PARKMAN.dwg
PW TYPE - THE PLOUGHWRIGHT.dwg
RE TYPE - REEDMAKER.dwg
RE+ TYPE - REEDMAKER.dwg
TH TYPE - THESPIAN.dwg
TI TYPE - THE TILLMAN.dwg
WE TYPE - WEAVER.dwg
Received 21/07/2022

EB7 Ltd
Site Photographs
Ordnance Survey

Key:

 Existing

Project Northaw Road East, Cuffley

Title Existing Condition
3D View

Drawn MZ Checked --

Date 05/08/2022 Project 5448

Rel no. 01 Prefix DS01 Page no. 02




Sources of information


Cloud10
George Playing Fields-DISI-24-05-2022.
dwg
Received 27/05/2022
George Playing Fields-DISI-15-06-2022.
dwg
Received 15/06/2022

AAP Architecture
BA TYPE - THE BAKER.dwg
BLOCK 1 - THE NEWSAM.dwg
BM TYPE - BLENMERE.dwg
CN TYPE - COINER.dwg
CO TYPE - THE COOPER.dwg
CT TYPE - THE CARTOGRAPHER.dwg
FO TYPE - THE FORESTER.dwg
FR TYPE - FRAMER.dwg
GARAGES.dwg
HA TYPE - HARPER.dwg
P1848 BLOCKS 2 & 3.dwg
P1848-Planning Layout-ZD.dwg
PH TYPE - PHILOSOPHER.dwg
PH+ TYPE - AMENDED PHILOSOPHER.dwg
PK TYPE - THE PARKMAN.dwg
PW TYPE - THE PLOUGHWRIGHT.dwg
RE TYPE - REEDMAKER.dwg
RE+ TYPE - REEDMAKER.dwg
TH TYPE - THESPIAN.dwg
TI TYPE - THE TILLMAN.dwg
WE TYPE - WEAVER.dwg
Received 21/07/2022

EB7 Ltd
Site Photographs
Ordnance Survey

Key:

 Proposed

 NORTH

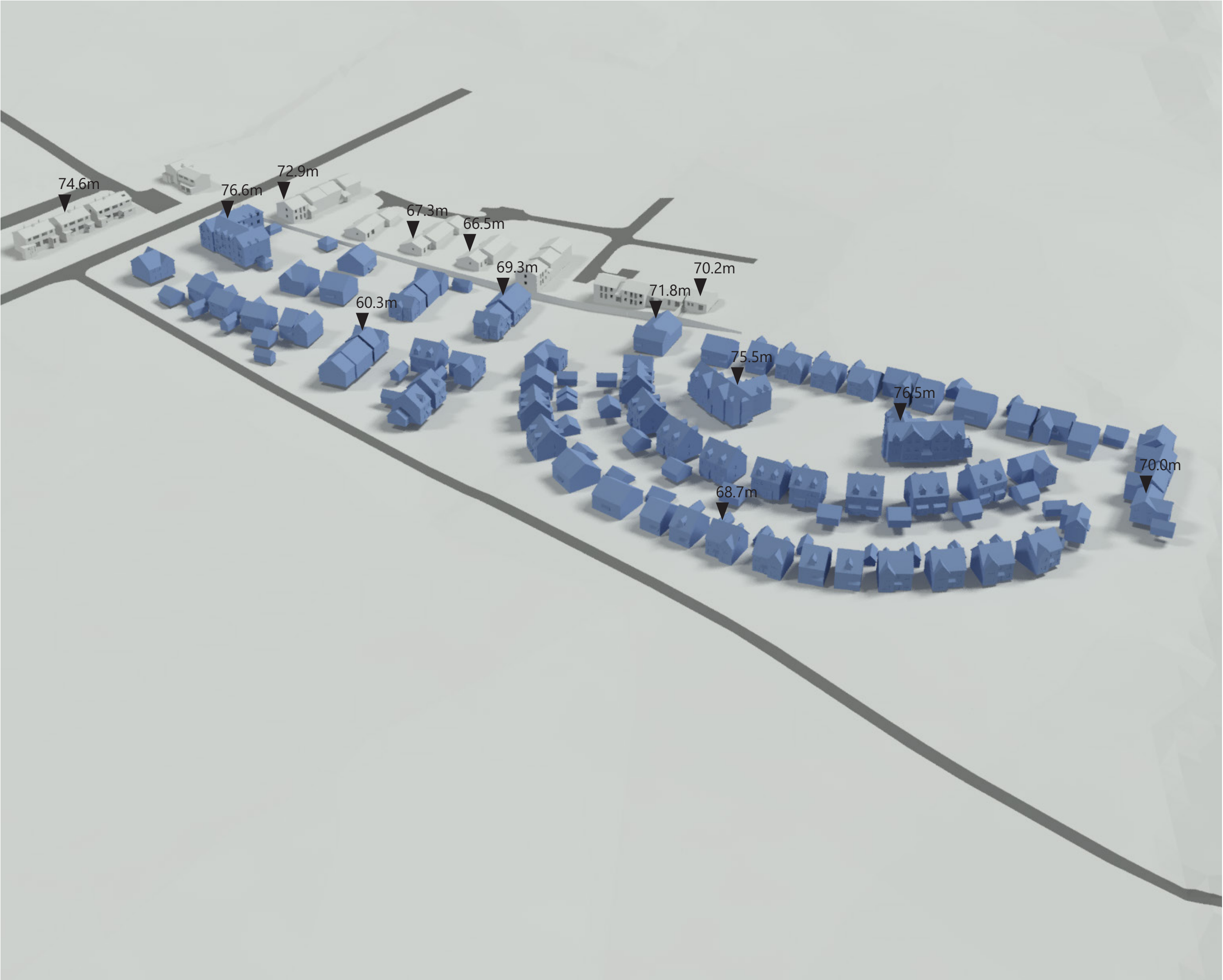
Project Northaw Road East, Cuffley

Title Proposed Development
Plan View

Drawn MZ Checked --

Date 05/08/2022 Project 5448

Rel no. 01 Prefix DS01 Page no. 03



Sources of information

Cloud10
George Playing Fields-DISI-24-05-2022.
dwg
Received 27/05/2022
George Playing Fields-DISI-15-06-2022.
dwg
Received 15/06/2022

AAP Architecture
BA TYPE - THE BAKER.dwg
BLOCK 1 - THE NEWSAM.dwg
BM TYPE - BLENMERE.dwg
CN TYPE - COINER.dwg
CO TYPE - THE COOPER.dwg
CT TYPE - THE CARTOGRAPHER.dwg
FO TYPE - THE FORESTER.dwg
FR TYPE - FRAMER.dwg
GARAGES.dwg
HA TYPE - HARPER.dwg
P1848 BLOCKS 2 & 3.dwg
P1848-Planning Layout-ZD.dwg
PH TYPE - PHILOSOPHER.dwg
PH+ TYPE - AMENDED PHILOSOPHER.dwg
PK TYPE - THE PARKMAN.dwg
PW TYPE - THE PLOUGHWRIGHT.dwg
RE TYPE - REEDMAKER.dwg
RE+ TYPE - REEDMAKER.dwg
TH TYPE - THESPIAN.dwg
TI TYPE - THE TILLMAN.dwg
WE TYPE - WEAVER.dwg
Received 21/07/2022

EB7 Ltd
Site Photographs
Ordnance Survey

Key:
 Proposed

Project Northaw Road East, Cuffley

Title Proposed Development
3D View

Drawn MZ Checked --

Date 05/08/2022 Project 5448

Rel no. 01 Prefix DS01 Page no. 04



Appendix 2

Results of the daylight and sunlight assessments
within neighbouring properties

[illegible]

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room						
				Existing	Proposed	Proportion	Room Area	Existing NSL		Proposed NSL		Proportion Retained	Existing APSH		Proposed APSH		Retained	
				VSC	VSC	Retained		m²	%	m²	%		Total	Winter	Total	Winter	Total	Winter
First	R1	W7-U	Bedroom	35.2	34.6	0.98	16.2	15.8	98%	15.8	98%	1.00	64	19	63	18	0.98	0.95
		W1-L W1-U					6.0	5.8	96%	5.8	96%	1.00	57	21	57	21	1.00	1.00
First	R2	W2-L W2-U	Bedroom	35.1	34.5	0.98	12.2	12.0	99%	12.0	98%	1.00	57	21	57	21	1.00	1.00
7 Colesdale																		
Ground	R1	W1-L	Living Room	37.4	36.3	0.97	16.5	16.2	98%	16.2	98%	1.00	66	23	66	23	1.00	1.00
		W1-U		37.3	36.1	0.97												
		W2-L		34.3	33.2	0.97												
		W2-U		27.4	26.8	0.98												
		W3-L																
Ground	R2	W3-U	Circulation	21.6	21.6	1.00	2.1	2.1	100%	2.1	100%	1.00	74	24	74	24	1.00	1.00
		W4-L		37.8	36.4	0.96												
		W4-U		36.6	35.2	0.96												
		W5-L																
		W5-U																
First	R1	W6-L	Bedroom	35.1	34.5	0.98	12.2	12.0	98%	12.0	98%	1.00	57	21	57	21	1.00	1.00
		W6-U																
First	R2	W7	Bedroom	35.1	34.5	0.98	6.1	5.9	96%	5.9	96%	1.00	57	21	57	21	1.00	1.00
9 Colesdale																		
Ground	R1	W1	Bathroom	12.0	11.9	0.99	1.5	0.0	0%	0.0	0%	0.00	20	15	20	15	1.00	1.00
Ground	R2	W2	Circulation	29.4	27.9	0.95	2.2	2.2	100%	2.2	100%	1.00	66	24	66	24	1.00	1.00
		W3-L		38.4	36.7	0.96												
		W3-U		20.3	19.8	0.97												
Ground	R3	W4	Living Room	22.2	21.2	0.95	17.0	16.7	98%	16.7	98%	1.00	66	19	66	19	1.00	1.00
		W5		33.6	32.2	0.96												
		W6		36.8	35.3	0.96												
		W7		34.1	32.7	0.96												
First	R1	W8	Circulation	21.8	21.8	1.00	5.2	4.6	89%	4.6	89%	1.00	50	10	50	10	1.00	1.00
		W1-L W1-U																

[illegible]

[illegible]

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL		Proposed NSL		Proportion Retained	Existing APSH		Proposed APSH		Retained	
								m²	%	m²	%		Total	Winter	Total	Winter	Total	Winter
Ground	R1	W1	Bedroom	28.3	26.6	0.94	8.5	8.2	96%	8.2	96%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W2	Bathroom	20.7	20.2	0.98	3.5	3.1	87%	3.1	87%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W3-L W3-U	Circulation	13.5	12.2	0.90	9.2	3.8	42%	3.8	42%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R4	W4 W5-L W5-U	Kitchen	39.2 37.1	34.6 35.8	0.88 0.96	9.2	9.0	98%	9.0	98%	1.00	99	30	95	27	0.96	0.90
Ground	R5	W6-L W6-U	Living Room	36.8	35.9	0.97	13.7	13.5	98%	13.5	98%	1.00	58	20	58	20	1.00	1.00
75 Greenfields																		
Ground	R1	W1	Bedroom	32.7	31.5	0.96	8.4	8.1	96%	8.1	96%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W2	Bathroom	23.3	22.8	0.98	3.5	3.1	87%	3.1	87%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W3-L W3-U W4 W5	Circulation	14.8 5.4 4.0	13.7 4.7 3.8	0.93 0.88 0.94	9.2	8.1	88%	8.1	88%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R4	W6 W7-L W7-U	Kitchen	39.3 35.9	35.3 34.5	0.90 0.96	9.2	8.9	97%	8.9	97%	1.00	99	30	96	28	0.97	0.93
Ground	R5	W8-L W8-U	Living Room	30.7	29.6	0.97	13.6	13.1	97%	13.1	97%	1.00	56	19	56	19	1.00	1.00
67 Greenfields																		
Ground	R1	W1	Bedroom	32.2	31.0	0.97	8.3	8.1	97%	8.1	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W2	Bathroom	21.7	21.4	0.99	3.5	3.1	86%	3.1	86%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W3-L W3-U W4 W5	Circulation	13.6 3.4 2.1	12.6 2.7 1.9	0.93 0.79 0.91	9.2	7.6	83%	7.6	82%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R4	W6 W7-L W7-U	Kitchen	39.3 33.2	35.0 32.0	0.89 0.96	9.2	9.0	98%	9.0	98%	1.00	96	28	93	25	0.97	0.89

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room																	
				Existing	Proposed	Proportion	Room Area	Existing NSL		Proposed NSL		Proportion Retained	Existing APSH		Proposed APSH		Retained													
				VSC	VSC	Retained		m²	%	m²	%		Total	Winter	Total	Winter	Total	Winter												
Ground	R5	W8-L W8-U	Living Room	27.9	27.0	0.97	13.6	13.1	96%	13.1	96%	1.00	54	17	54	17	1.00	1.00												
53 Greenfields																														
Ground	R1	W1 W2	Residential	37.0 37.2	35.8 35.9	0.97 0.97													14.8	13.9	94%	13.9	94%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W3	Residential	37.3	35.8	0.96	11.1	10.4	93%	10.4	93%	1.00	N/F	N/F	N/F	N/F	N/F	N/F												
Ground	R3	W4-L W4-U	Residential	39.4	32.7	0.83	6.9	6.9	99%	6.6	96%	0.97	84	30	77	23	0.92	0.77												
Ground	R4	W5-L W5-U W6-L W6-U	Residential	37.3 37.2	36.0 36.1	0.97 0.97													15.6	14.7	94%	14.7	94%	1.00	58	19	58	19	1.00	1.00
Ground	R5	W7-L W7-U	Residential	36.7	35.7	0.97													8.8	8.7	98%	8.7	98%	1.00	58	18	58	18	1.00	1.00
First	R1	W1 W2	Residential	32.5 32.4	31.8 31.7	0.98 0.98	14.8	13.7	92%	13.7	92%	1.00	N/F	N/F	N/F	N/F	N/F	N/F												
First	R2	W3	Residential	34.8	34.0	0.98	11.1	10.4	93%	10.4	93%	1.00	N/F	N/F	N/F	N/F	N/F	N/F												
First	R3	W4-L W4-U	Residential	39.4	36.7	0.93	6.9	6.9	99%	6.9	99%	1.00	82	29	82	29	1.00	1.00												
First	R4	W5-L W5-U W6-L W6-U	Residential	36.9 36.8	36.0 36.0	0.98 0.98													15.6	14.7	94%	14.7	94%	1.00	57	20	57	20	1.00	1.00
First	R5	W7-L W7-U	Residential	35.3	34.6	0.98													8.8	8.7	98%	8.7	98%	1.00	50	16	50	16	1.00	1.00
35-41 Greenfields																														
Ground	R1	W1	Residential	37.1	36.0	0.97	6.2	6.1	100%	6.1	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F												
Ground	R2	W2-L W2-U W3-L W3-U	Residential	39.1 38.9	36.4 36.3	0.93 0.93	16.2	15.3	94%	15.3	94%	1.00	84	29	83	28	0.99	0.97												
Ground	R3	W4	Residential	38.2	35.8	0.94													9.8	9.6	98%	9.6	98%	1.00	77	28	76	27	0.99	0.96

[illegible]

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room							
				Existing	Proposed	Proportion	Room Area	Existing NSL		Proposed NSL		Proportion	Existing APSH		Proposed APSH		Retained		
				VSC	VSC	Retained		m²	%	m²	%		Total	Winter	Total	Winter	Total	Winter	
29B Greenfields		W2-U					12.1	12.0	99%	12.0	99%	1.00	78	26	76	24	0.97	0.92	
	Ground	R1	W1	Residential	38.8	35.1	0.91												
			W2		38.7	35.0	0.90	15.7	15.5	99%	15.5	99%	1.00	82	29	82	29	1.00	1.00
	Ground	R2	W3-L	Residential	39.0	34.8	0.89												
		W3-U					17.2	17.1	99%	17.1	99%	1.00	84	30	81	27	0.96	0.90	



Appendix 3

Results of the sunlight amenity assessment

Sources of information

Cloud10

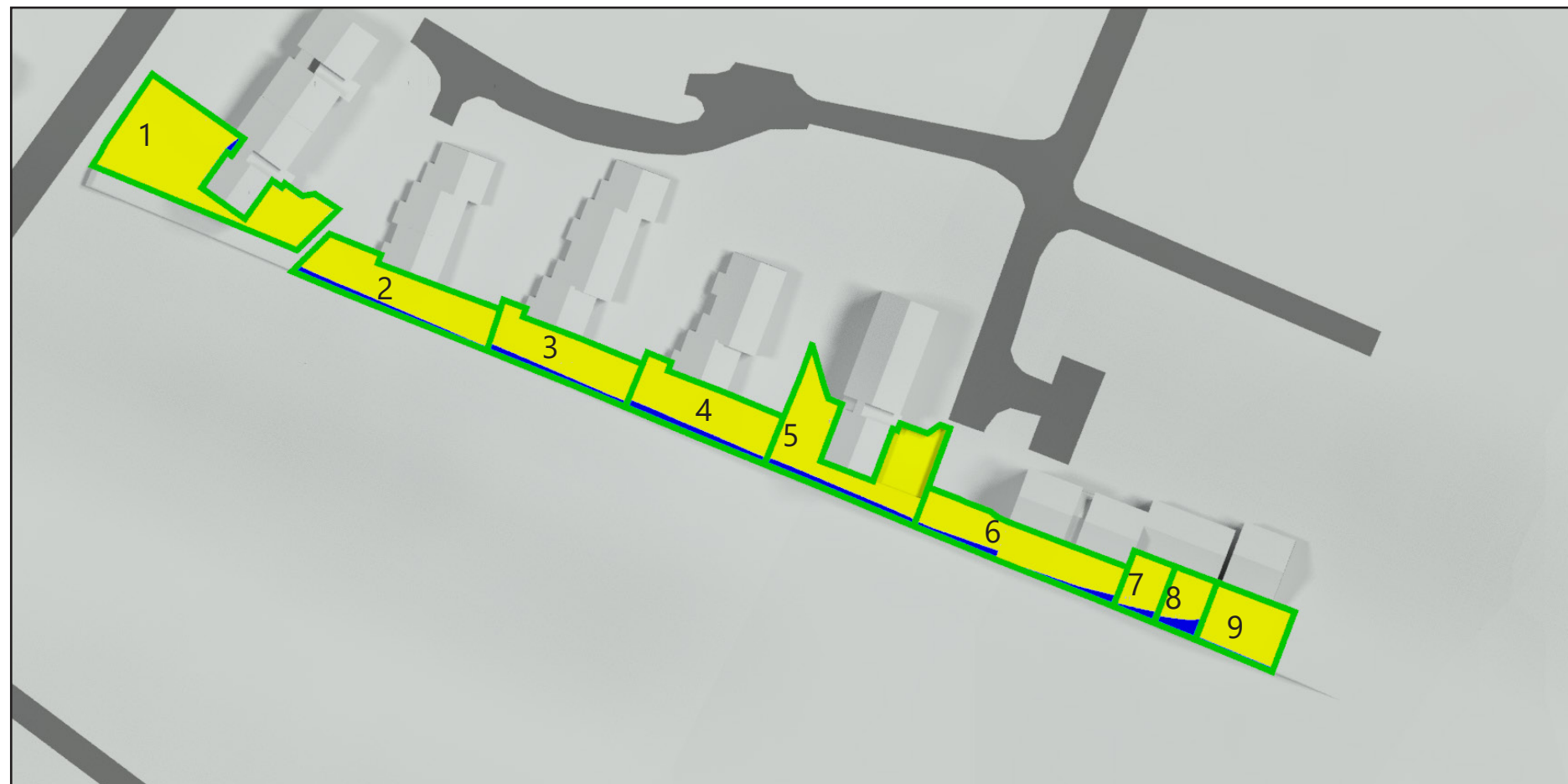
George Playing Fields-DISI-24-05-2022.
dwg
Received 27/05/2022
George Playing Fields-DISI-15-06-2022.
dwg
Received 15/06/2022

AAP Architecture

Proposed scheme dwgs
Received 21/07/2022

EB7 Ltd

Site Photographs
Ordnance Survey



Existing Scenario - March 21st



Proposed Scenario - March 21st

NORTH



Key:

- Existing building
- Proposed development
- Area of assessment
- Area receiving more than two hours of sun on March 21st
- Area receiving less than two hours of sun on March 21st

Project Northaw Road East, Cuffley

Title Sunlight Amenity Study
Existing vs Proposed
21st March

Drawn MZ Checked --

Date 25/08/2022 Project 5448

Rel no. 01 Prefix SA01 Page no. 01

Area	Total Area (sq.m)	Existing Scenario Area recieving more than two hours of sun		Proposed Scenario Area recieving more than two hours of sun		Proportion Retained
		(m²)	%	(m²)	%	
1 - 83 Greenfields	276.50	276.50	100	276.50	100	1.00
2 - 81 Greenfields	195.92	167.89	86	167.86	86	1.00
3 - 75 Greenfields	157.92	139.49	88	139.07	88	1.00
4 - 67 Greenfields	175.69	148.26	84	148.26	84	1.00
5 - 53 Greenfields	253.69	231.26	91	230.76	91	1.00
6 - 35-41Greenfields	195.58	168.27	86	168.25	86	1.00
7 - 33 Greenfields	58.40	51.95	89	51.95	89	1.00
8 - 31 Greenfields	59.31	46.00	78	45.99	78	1.00
9 - 29B 53 Greenfields	114.28	106.34	93	106.34	93	1.00



Sources of information

Cloud10
George Playing Fields-DISI-24-05-2022.
dwg
Received 27/05/2022
George Playing Fields-DISI-15-06-2022.
dwg
Received 15/06/2022

AAP Architecture
Proposed scheme dwgs
Received 21/07/2022

EB7 Ltd
Site Photographs
Ordnance Survey



Key:

- Existing building
- Proposed development
- Area of assessment
- Area receiving more than two hours of sun on March 21st
- Area receiving less than two hours of sun on March 21st

Project Northaw Road East, Cuffley

Title Sunlight Amenity Study
Existing vs Proposed
21st March

Drawn MZ Checked --

Date 25/08/2022 Project 5448

Rel no. 01 Prefix SA01 Page no. 02