gia CHARTERED SURVEYORS

DAYLIGHT & SUNLIGHT

IMPACT ON NEIGHBOURING PROPERTIES REPORT

The Hall School

Prestbury Investment Holdings Limited

04 October 2022

GIA No: **10747**

PROJECT DATA:

Client	**Prestbury Investment Holdings Limited**
Architect	**Norr Consultants Ltd**
Project Title	**The Hall School**
Project Number	**10747**

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APPENDICES (BOUND SEPARATELY)

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1 EXECUTIVE SUMMARY

GIA have assessed the proposed Norr Consultants Ltd scheme "proposed development" for the The Hall School site to understand the potential changes in light to the relevant surrounding properties.

1.1 GIA have been instructed by Prestbury Investment Holdings Limited to provide daylight and sunlight advice in relation to the The Hall School development in London.

1.2 GIA have undertaken a technical daylight and sunlight assessment of the architect's scheme at The Hall School "the site" to understand the potential effect of the development on the daylight and sunlight amenity of the relevant neighbouring properties.

1.3 The requirement in London boroughs for significantly more living and working spaces necessitates higher density development. The Site is located within the London Borough of Camden.

1.4 The daylight and sunlight analysis has been considered by reference to the criteria and methodology within the Building Research Establishment Guidelines (2022), which when published, recognised that it should not form a mandatory set of criteria, rather it should be used to help and inform design.

1.5 Upon successful completion of the proposed scheme 13 of the 14 (93%) properties assessed will meet the national numerical values identified in paragraphs 2.2.21 and 3.2.11 of the BRE handbook for daylight and sunlight.

2 THE SITE

GIA have been instructed to review and advise on the daylight and sunlight impacts associated with the implementation of the proposed development at The Hall School.

THE SITE

2.1 The Site is located in the London Borough of Camden and comprises a part three, part four storey building facing onto Crossfield Road, with a two storey extension to the rear.

2.2 Figure 02 below illustrates the Site. Further drawings are enclosed at Appendix 03 of this report.

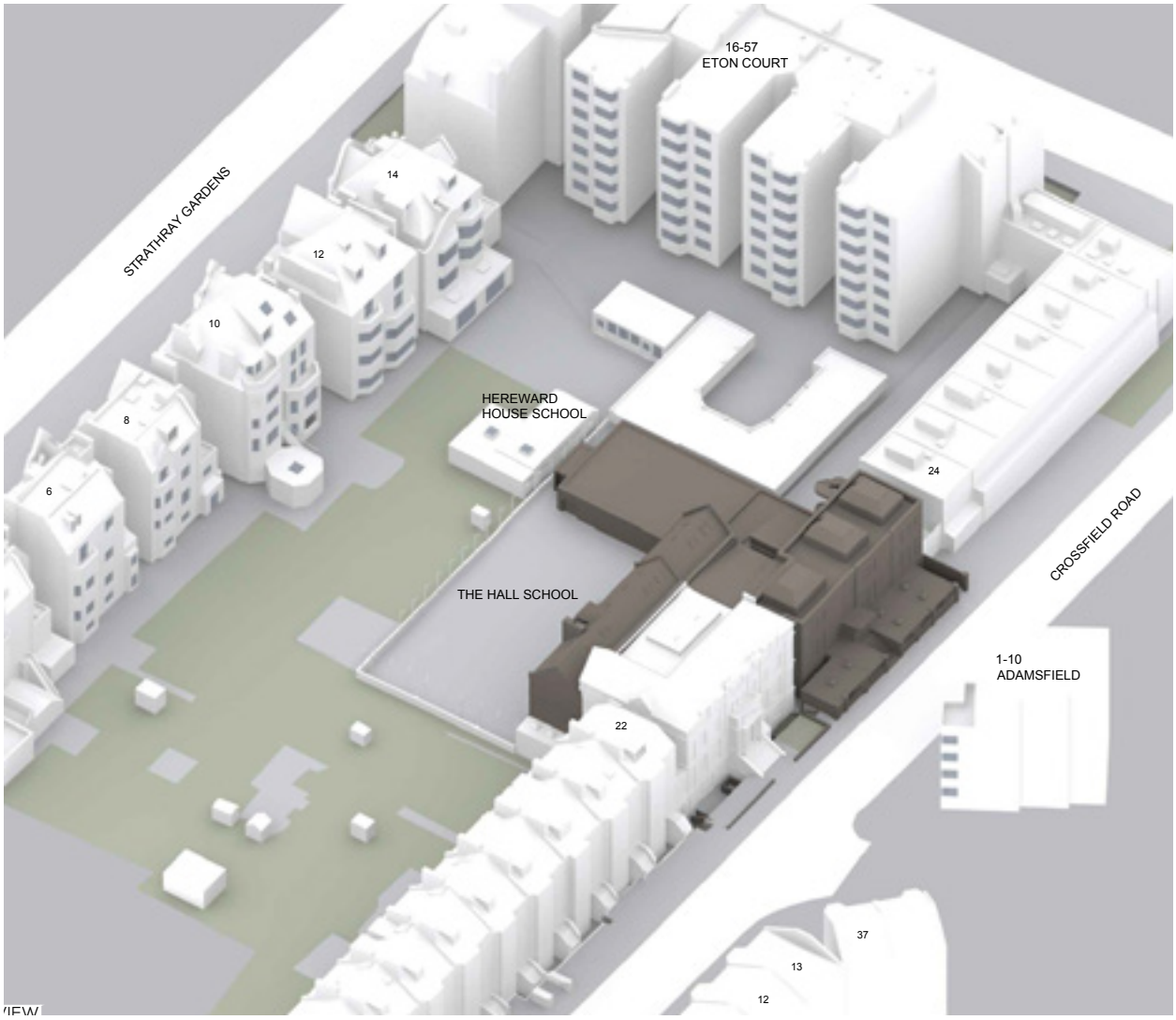

Figure 01: 3D model of the site and Existing Property

PROPOSED DEVELOPMENT

2.3 The Norr Consultants Ltd scheme seeks to implement a single storey roof extension at the rear of the property in order to provide space for four new classrooms.

2.4 GIA's understanding of the Proposed Development is illustrated in Figure 03 and further drawings are enclosed at Appendix 03.

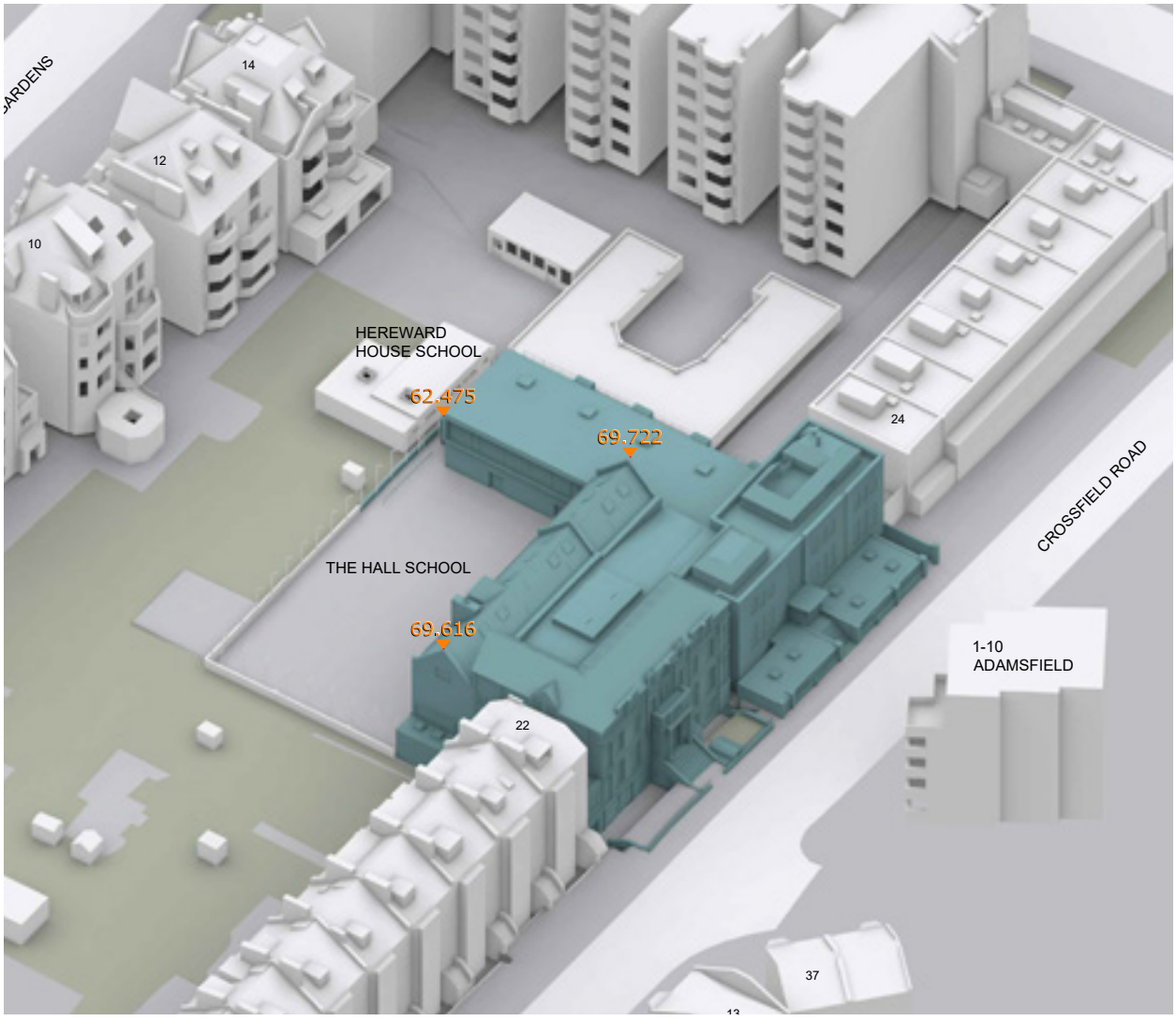

Figure 02: 3D Perspective View of the Proposed Scheme

3 POLICY & THE WIDER CONTEXT

3.1 Below we have detailed sections from the following documents as they are, in our opinion, the most pertinent in relation to daylight and sunlight matters and how we have approached the effects of the Proposed Development on the relevant neighbouring properties:

- National Planning Policy Framework (NPPF) (Feb 2019) (Ministry of Housing Communities and Local Government (MHCLG));
- National Planning Practice Guidance (NPPG) (updated October 2019) (MHCLG);
- The London Plan (March 2021) (Greater London Authority);
- Sustainable Design and Construction Supplementary Guidance (2014); and
- Camden Local Plan (2017).

NATIONAL PLANNING POLICY FRAMEWORK (JUNE 2019)

3.2 The NPPF (Feb 2019) states that local planning authorities should refuse applications which they consider fail to make efficient use of land. The discussion in relation to daylight and sunlight highlights the Government's recognition that increased flexibility is required in response to the requirement for higher density development.

> *"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)"*

NATIONAL PLANNING PRACTICE GUIDANCE (UPDATED JULY 2019)

3.3 In light of the update to the Government's Planning Practice Guidance, we have considered the relevant paragraphs on daylight and sunlight.

3.4 Paragraph 6 of the NPPG (Ref ID: 66-006-20190722) acknowledges that new development may cause an impact on daylight and sunlight levels enjoyed by neighbouring occupiers. It requires local authorities to assess whether the impact to neighbouring occupiers would be "unreasonable".

THE LONDON PLAN (MARCH 2021)

3.5 The London Plan was published in March 2021 and sets out the integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years.

3.6 Part D of Policy D6 (Housing Quality and Standards) states that the design of development "should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space."

3.7 It is clear that the GLA's focus is on sufficient or retained daylight and sunlight to neighbouring properties and highlights that context will be a consideration to determine sufficiency.

SUSTAINABLE DESIGN & CONSTRUCTION SUPPLEMENTARY PLANNING GUIDANCE (2014)

3.8 Section 2.3 of the SPG provides guidance on key areas such as site layout and micro-climate in relation to site layout and building design.

3.9 With regard to site layout, paragraph 2.3.6 refers to measures to reduce carbon dioxide emissions *"include enabling access to daylight and sunlight for uses that require [light]."* In addition, the guidance states that *"site planning can minimise the impact of the shadow created by the new buildings to protect existing features such as open space and renewable solar technologies on roofs."* It goes on to say that *"developers should ensure the layout of their site and buildings maximises the opportunities provided by natural systems, such as light."*

3.10 Paragraph 2.3.8 of the SPG continues with effects on the micro-climate caused by new buildings which include *"overshadowing and reducing access to sunlight."*

3.11 The guidance states that the above effects should "be considered during the design of a development and assessed once the designed is finalised."

CAMDEN LOCAL PLAN (2017)

3.12 The Camden Local Plan (2017) outlines that:

> *"To assess whether acceptable levels of daylight and sunlight are available to habitable, outdoor amenity and open spaces, the Council will take into account the most recent guidance published by the Building Research Establishment (currently the Building Research Establishment's Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice 2011)."*

4 BRE GUIDELINES & CONTEXT METHODOLOGY

The Building Research Establishment (BRE) have set out in their handbook *'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice (2022)'*, guidelines and methodology for the measurement and assessment of daylight and sunlight.

BUILDING RESEARCH ESTABLISHMENT GUIDELINES 2011

4.1 The BRE Guidelines note that the document is intended to be used in conjunction with the interior daylight recommendations found within the British Standard BS8206-2:2008 and The Applications Manual on Window Design of the Chartered Institution of Building Services Engineers (CIBSE).

4.2 The BRE Guidelines provides three methodologies for daylight assessment of neighbouring properties, namely;

1. The Vertical Sky Component (VSC);
2. The No Sky Line (NSL); and
3. The Average Daylight Factor (ADF).

4.3 For daylight to be compliant (in accordance with figure 20 of the Guide), both the VSC and NSL tests have to be met.

4.4 The BRE Guidelines suggest that the ADF assessment should only be used to *"check that adequate daylight is provided in new rooms"*, rather than existing buildings.

4.5 There is one methodology provided by the BRE Guidelines for sunlight assessment, denoted as Annual Probable Sunlight Hours (APSH).

4.6 Appendix 02 of this report elaborates on the mechanics of each of the above assessment criteria, explains the appropriateness of their use and the parameters of each specific recommendation.

5 DAYLIGHT & SUNLIGHT IMPACTS TO NEIGHBOURING PROPERTIES

This section details the daylight and sunlight impacts in relation to the relevant properties neighbouring the Site.

5.1 A three-dimensional computer model of the Site and surrounding properties was produced to carry out the relevant technical studies. All relevant assumptions made in producing this model can be found in Appendix 01.

SURROUNDING PROPERTIES

5.2 GIA have identified the following properties as relevant for daylight and sunlight assessment:

- 16-57 Eton Court;
- 12 Strathay Gardens;
- 8 Strathay Gardens;
- 6 Strathay Gardens;
- 37 Adamson Road;
- 24 Crossfield Road;
- 22 Crossfield Road;
- 13 Crossfield Road;
- 12 Crossfield Road;
- 1-10 Adamfields;
- Hereward House School, 14 Strathay Gardens;
- Hereward House School South;
- Hereward House School North; and
- 10 Strathay Gardens.

5.3 The following properties adhere to the numerical values set out within the BRE Guidelines and are not discussed further:

- 16-57 Eton Court;
- 12 Strathay Gardens;
- 8 Strathay Gardens;
- 6 Strathay Gardens;
- 37 Adamson Road;
- 24 Crossfield Road;
- 22 Crossfield Road;
- 13 Crossfield Road;
- 12 Crossfield Road;
- 1-10 Adamfields;
- Hereward House School, 14 Strathay Gardens;
- Hereward House School South; and
- 10 Strathay Gardens.

5.4 Where changes in daylight and sunlight occur to the remaining properties, the impacts are fully discussed in the following sections. All results can be found in Appendix 04.

DISCUSSION OF RESULTS

Hereward House School North

5.5 Hereward House School North is a building forming part of Hereward House School situated to the east of the development site. GIA were unable to obtain floorplans for this property and it has therefore been modelled using standard assumed room dimensions, as is common practice in this situation.

5.6 We have assessed 13 windows within this property serving 1 room for daylight (NSL & VSC). nine of these windows face within 90 degrees of due south of the development and have therefore been assessed for sunlight (APSH).

Daylight (VSC & NSL)

5.7 The analysis for the window-based assessment (VSC) demonstrates that nine of the 13 windows assessed within this property (69.2%) would adhere to the baseline BRE guidelines.

5.8 Of the four windows that show transgressions beyond the BRE guidelines, two would experience a 'minor' 20-30% alteration and two would experience a 'moderate' 30-40% transgression.

5.9 In relation to the four windows which would experience transgressions, two would retain mid-teen VSC values of c. 14-14.5%, whilst the remaining two windows will retain VSC values of 11-12%.

5.10 Despite the transgressions noted above in relation to VSC, the single room the relevant windows are serving will remain fully BRE compliant for NSL owing to its dual aspect nature, and will retain very good daylight distribution to over 85% of the room. This is depicted in the NSL contour plot in Figure 03 overleaf.

Sunlight (APSH)

5.11 Of the nine windows assessed for sunlight, six (66.7%) will adhere to the baseline BRE guidelines.

5.12 Of the three affected windows, all will experience 'minor' to 'moderate' annual PSH transgressions, but will remain fully BRE compliant for winter PSH.

5.13 Further to this, the room the affected windows are serving will remain fully BRE compliant for room-based APSH, given the majority of the windows serving it remain largely unaffected.

Conclusion

5.14 Taking into consideration the aforementioned, we would consider the minimal daylight and sunlight transgressions experienced by this property to be acceptable from a daylight and sunlight perspective.

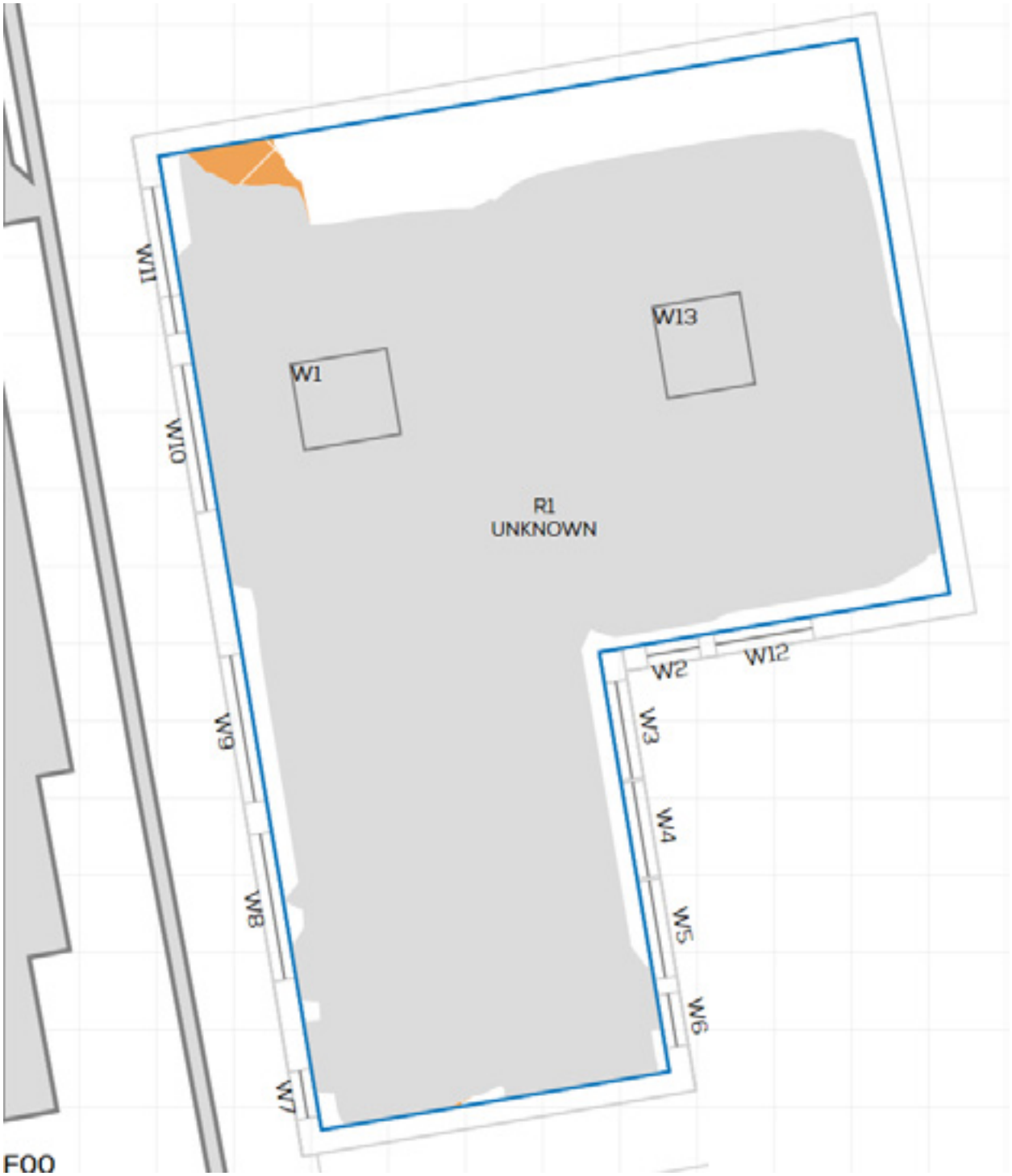

Figure 03: NSL Contour Plot, Hereward House School North

6 CONCLUSIONS

GIA have undertaken a daylight and sunlight assessment in relation to the Proposed Development at The Hall School. The technical analysis has been undertaken in accordance with the BRE Guidelines.

6.1 Throughout the design process, the scheme has been subjected to extensive testing to minimise the daylight and sunlight impacts to the surrounding residential properties.

6.2 When constructing buildings in an urban environment, alterations in daylight and sunlight to adjoining properties are often unavoidable. The numerical guidance given in the BRE document should be treated flexibly, especially in dense urban environments.

6.3 Our technical analysis shows that following the implementation of the Proposed Development, one of the surrounding properties will experience changes outside of the BRE recommendations.

6.4 In summary of the scheme:

- 340 of 344 windows assessed (98.8%) will adhere to the baseline BRE guidelines for VSC;
- 173 of 173 rooms assessed (100%) will adhere to the baseline BRE guidelines for NSL; and
- 124 of 127 windows assessed (97.6%) will adhere to the baseline BRE guidelines for APSH.

6.5 In light of the very high overall compliance rate as outlined above, it is our opinion that a very good standard of daylight and sunlight amenity will be retained by the relevant neighbouring properties, and therefore unacceptable harm will not be caused by the Proposed Development.

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