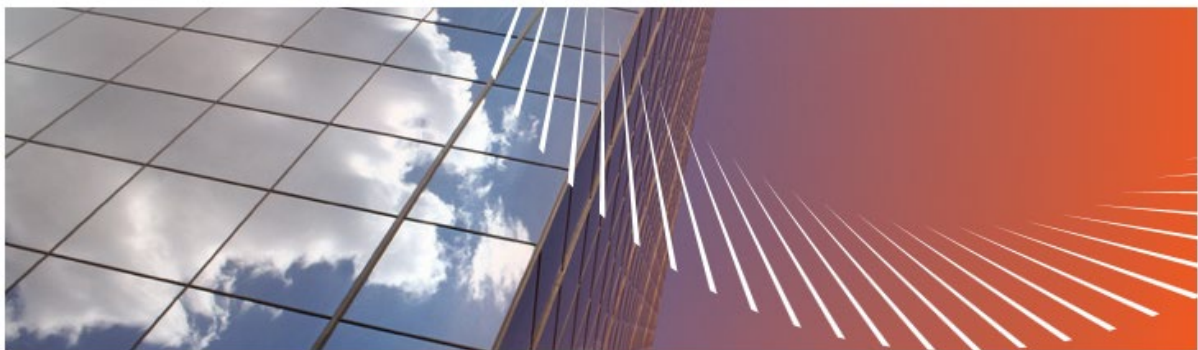

Daylight & Sunlight Report

482 West Green Road

Eurocrest Sub3 Ltd, Eurocrest Sub4 Ltd,
Eurocrest Sub6 Ltd and Eurocrest Sub7 Ltd



26th February 2024



Client: Eurocrest Sub3 Ltd, Eurocrest Sub4 Ltd, Eurocrest Sub6 Ltd and Eurocrest Sub7 Ltd

Solar House, First Floor, 282 Chase Road, London, N14 6HA

Client Lead: Steve Burr (Black Architecture)

Prepared By: MES Building Solutions

Newark Beacon

Beacon Hill Office Park

Cafferata Way

Newark

NG24 2TN

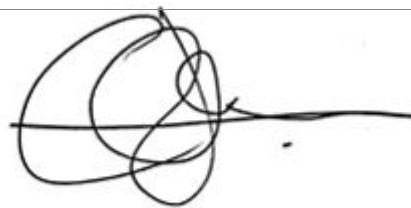
Project: 482 West Green Road, Duckett's Green, N15 3DA

Document Title: Daylight & Sunlight Report

Date: 26th February 2024

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About MES Building Solutions

MES Building Solutions (MES) is an established consultancy practice specialising in providing building solutions throughout the UK.

We offer a full range of services for both residential and commercial buildings from small individual properties through to highly complex mixed use developments.

We are an industry leader in delivering a professional, accredited and certified service to a wide range of clients including architects, developers, builders, housing associations, the public sector and private householders.

Employing highly qualified staff, our team comes from a variety of backgrounds within the construction industry with combined knowledge of building design, engineering, assessment, construction, development, research and surveying.

MES Building Solutions maintains its position at the forefront of changes in building regulations as well as technological advances. Our clients, large or small are therefore assured of a cost effective, cohesive and fully integrated professional service.

About the Authors

Chris Jones is the Technical Director at MES Building Solutions. Chris has a Masters Degree in Energy Efficient & Sustainable Building, as well as an Honours degree in Mechanical Engineering. Chris has over 20 years' experience in providing sustainable building solutions and assists the Neighbourly Matters team at MES. He undertakes daylighting, sunlight and shadow cast analysis for planning applications. Chris is also a qualified BREEAM and Code for Sustainable Homes assessor and has worked with some of the UK's top developers, as well as housing associations and local authorities.

Andrew Pickersgill is an Associate member of the Royal Institution of Chartered Surveyors and leads our neighbourly matters team. He has a BSc (Hons) degree in Building Surveying. Andrew undertakes daylighting, sunlight and shadow analysis for planning applications. He is also involved in party wall issues and carries out other building surveying services for our clients.

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1.0 Executive Summary

We have carried out calculations following guidance in Site Layout Planning for Daylight & Sunlight (SLPDS), PJ Littlefair et al 2022 to ascertain the impact of the proposed new roof to the existing workshop at 482 West Green Road, Duckett's Green, N15 3DA, on the daylight and sunlight provision and overshadowing of the rear gardens of the neighbouring residential properties on Waldeck Road and Willow Way.

There is unlikely to be any significant impact to daylight & sunlight provision to the windows of the neighbouring properties as these will comfortably pass the 25° rule angles test.

None of the neighbouring gardens are likely to experience a significant reduction in sunlight provision with all those assessed comfortably fulfilling the BRE planning guidance. This would be regarded as a high level of compliance in a dense urban environment such as this.

Therefore, in our opinion the proposals accord with the intent and context of the planning guidance in this case.

2.0 Introduction

The purpose of this report is to assess the impact of the proposed new roof to the existing workshop at 482 West Green Road, Duckett's Green, N15 3DA, on the daylight and sunlight provision and overshadowing of the rear gardens of the neighbouring residential properties on Waldeck Road and Willow Way.

This report considers the daylight and sunlight issues against the criteria set out for national guidance in the following publications:

- Site Layout Planning for Daylight & Sunlight (SLPDS), PJ Littlefair et al 2022 published by the BRE (Building Research Establishment).

The SLPDS is the culmination of research undertaken by the BRE to determine whether or not a new development will adversely affect the light to nearby properties. The BRE tests are approved by the Department of the Environment and are widely used by local authorities when deciding on development applications.

- BS 8206-2- Code of practice for skylighting.

There are no minimum mandatory requirements for sunlight & skylight in Building Regulations for England & Wales but the guidance set out in SLPDS is widely accepted as the approved methodology when calculating sunlight & skylight.

3.0 Planning Policy

3.1 National Planning Policy

The national Planning Policy Framework (Department for Levelling Up, Housing & Communities 2023) makes little direct reference to Daylight & Sunlight. However, in Section 11 (Making effective use of land), paragraph 119 states:

“Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions.”

Section 11 continues in paragraph 125c:

“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).”

Section 12 (Achieving well-designed places), paragraph 126, goes on to make a more general statement about high quality design:

“The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities. Being clear about design expectations, and how these will be tested, is essential for achieving this.”

Section 14 (Meeting the challenge of climate change, flooding and coastal change) states:

In paragraph 152; “The planning system should support the transition to a low carbon future in a changing climate” it then goes on to state in paragraph 153; “Plans should take a proactive approach to mitigating and adapting to climate change, taking into account ... the risk of overheating from rising temperatures”.

Paragraph 154 then goes on... “New development should be planned for in ways that:

- a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and
- b) can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government’s policy for national technical standards.”

3.2 London Plan 2021

Policy D6 Housing quality and standards

- c) Housing development should maximise the provision of dual aspect dwellings and normally avoid the provision of single aspect dwellings. A single aspect dwelling should only be provided where it is considered a more appropriate design solution to meet the requirements of Part B in Policy D3 Optimising site capacity through the design-led approach than a dual aspect dwelling, and it can be demonstrated that it will have adequate passive ventilation, daylight and privacy, and avoid overheating.
- d) 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.

3.3 London Plan 2016 Housing SPG

Section 1.3 Optimising housing potential

Standards for privacy, daylight and sunlight

- 1.3.45 Policy 7.6Bd requires new development to avoid causing 'unacceptable harm' to the amenity of surrounding land and buildings, particularly in relation to privacy and overshadowing and where tall buildings are proposed. An appropriate degree of flexibility needs to be applied when using BRE guidelines¹⁰⁰ to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets. This should take into account local circumstances; the need to optimise housing capacity; and scope for the character and form of an area to change over time.
- 1.3.46 The degree of harm on adjacent properties and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London. Decision makers should recognise that fully optimising housing potential on large sites may necessitate standards which depart from those presently experienced but which still achieve satisfactory levels of residential amenity and avoid unacceptable harm.

Section 2.3 Dwellings (Policy 3.5, part C)

Daylight and Sunlight

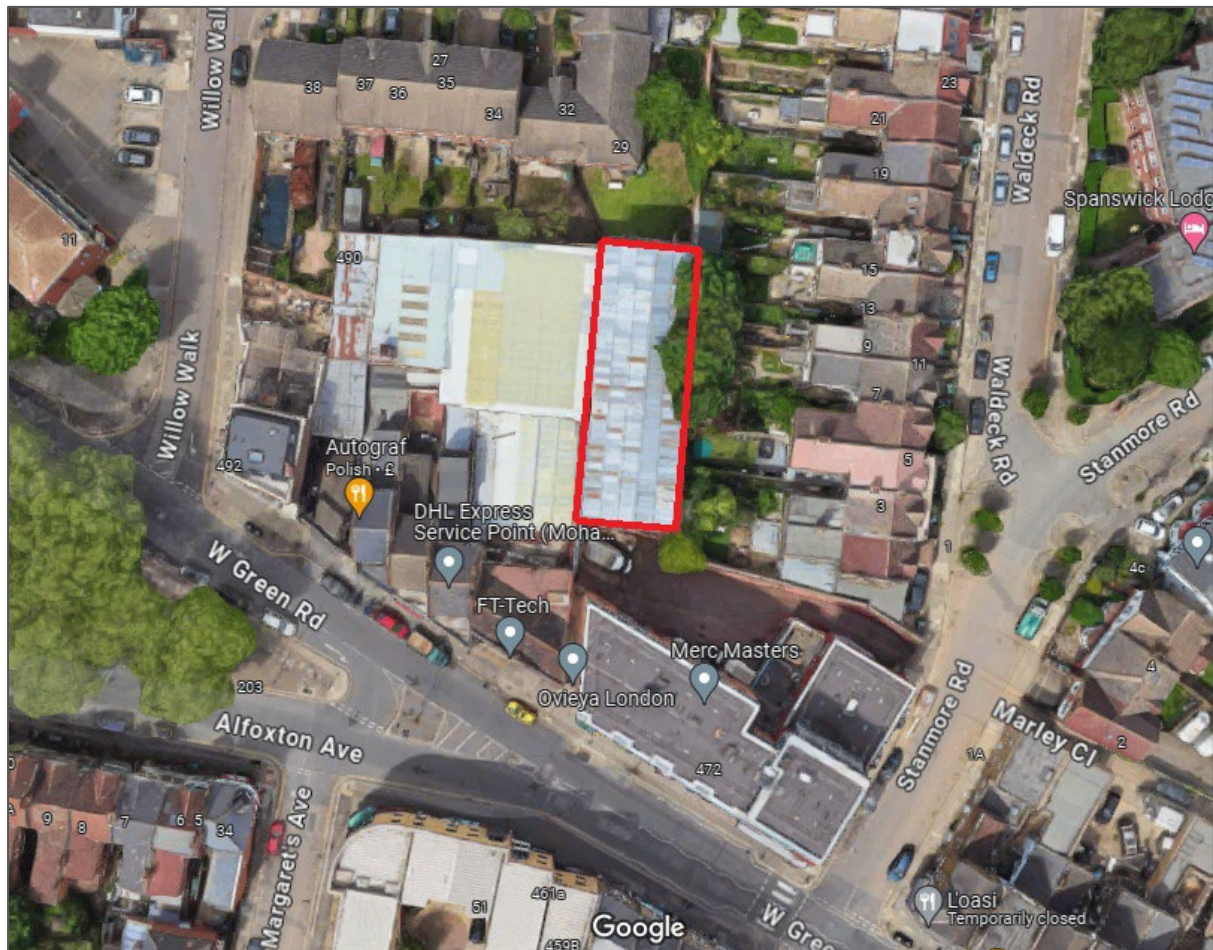
Standard 32- All homes should provide for direct sunlight to enter at least one habitable room for part of the day. Living areas and kitchen dining spaces should preferably receive direct sunlight.

- 2.3.45 Daylight enhances residents' enjoyment of an interior and reduces the energy needed to provide light for everyday activities, while controlled sunlight can help to meet part of the winter heating requirement. Sunlight is particularly desirable in living areas and kitchen dining spaces. The risk of overheating should be taken into account when designing for sunlight alongside the need to ensure appropriate levels of privacy. In addition to the above standards, BRE good practice guidelines and methodology¹⁴⁶ can be used to assess the levels of daylight and sunlight achieved within new developments, taking into account guidance below and in Section 1.3.
- 2.3.46 Where direct sunlight cannot be achieved in line with Standard 32, developers should demonstrate how the daylight standards proposed within a scheme and individual units will achieve good amenity for residents. They should also demonstrate how the design has sought to optimise the amount of daylight and amenity available to residents, for example, through the design, colour and landscaping of surrounding buildings and spaces within a development
- 2.3.47 BRE guidelines¹⁴⁷ on assessing daylight and sunlight should be applied sensitively to higher density development in London, particularly in central and urban settings, recognising the London Plan's strategic approach to optimise housing output (Policy 3.4) and the need to accommodate additional housing supply in locations with good accessibility suitable for higher density development (Policy 3.3). Quantitative standards on daylight and sunlight should not be applied rigidly, without carefully considering the location and context and standards experienced in broadly comparable housing typologies in London.

4.0 Description of Development

The scheme comprises of a new raised roof on an existing automotive workshop at 482 West Green Road, Duckett's Green, N15 3DA.

The site is located at the rear of the address, with commercial properties neighbouring the site to the west and south. The rear gardens of 1-17 Waldeck Road, a residential terrace, back onto the site to the west while the rears of 30-33 Willow Way neighbour the site to the North.



Site Location Plan (Google Imagery 2024)

5.0 Assessment Process

The SLPDS describes parameters to be assessed in order to measure the impact of the proposed new building on Daylight/Sunlight availability to the key adjacent properties. The three parameters to be assessed are as follows:

- 1) **Daylight:**
- 2) **Sunlight:**
- 3) **Overshadowing (Amenity Space)**

The guidance states that rooms to be assessed should be living rooms, kitchens and bedrooms in residential properties. In non-domestic buildings rooms where occupants 'have a reasonable expectation of daylight' should be assessed. Although these spaces are not defined, examples are given of the type of non-domestic buildings that would normally fall into this category. These include schools, hospitals, hotels and hostels, small workshops and some offices.

As it is difficult to be sure of the specific use of neighbouring spaces, we have taken a view on the relevance of the spaces adjacent to the proposed development. If we have been in any doubt, we have carried out the assessment. However, it should be noted some of the spaces we have assessed could fall outside the test requirement criteria.

It is important to note that the numerical values in the guidance are advisory and different criteria may be used based on the requirements for daylighting in an area viewed against other site layout constraints.

The neighbouring properties we have assessed are as follows:

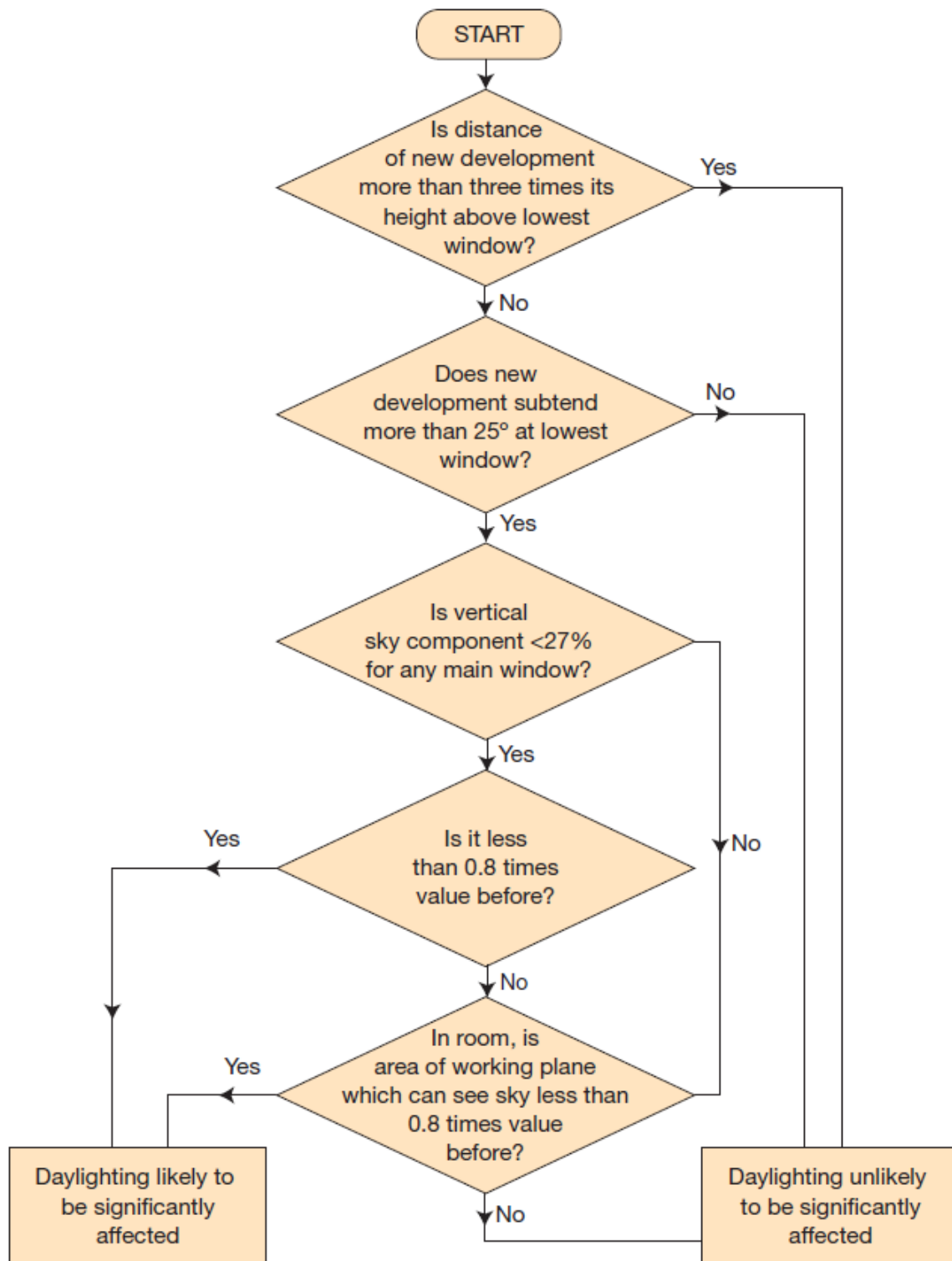
- 1 Waldeck Road
- 3 Waldeck Road
- 5 Waldeck Road
- 7 Waldeck Road
- 9 Waldeck Road
- 11 Waldeck Road
- 13 Waldeck Road
- 15 Waldeck Road
- 17 Waldeck Road
- 19 Waldeck Road
- 21 Waldeck Road
- 30 Willow Walk
- 31 Willow Walk
- 33 Willow Walk

The assessment is based on photographic evidence and OS data, along with the following drawings and 3D CAD Model, provided by Black Architecture:

- 0628-Existing Elevations
- 0628-Existing Ground Floor
- 0628-Existing Roof Plan
- 0628-Existing Site Section
- 0628-Proposed Elevations
- 0628-Proposed Ground Floor
- 0628-Proposed Roof Plan
- 0628-Proposed Site Section – Storage
- 2024.01.09_Massing Model.skp

6.0 Daylight

Site Layout Planning for Daylight & Sunlight contains the following flow chart showing the steps which should be taken in order to establish whether a building will receive adequate daylight:



Distance Check:

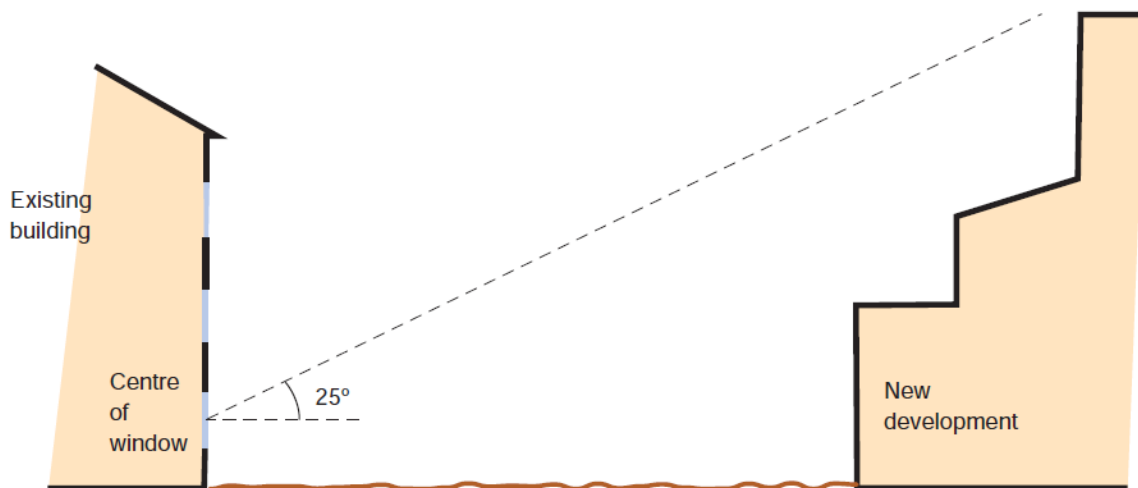
Site Layout Planning for Daylight & Sunlight (2022) states: "Loss of light to existing windows need not be analysed if the distance of each part of the new development from the existing window is three or more times its height above the centre of the existing window."

Distance Check Results

On this occasion the ratio of the height of the proposed building to its distance from the centre of the lowest existing window is likely to be less than 1:3 and the 25° rule must be applied.

25° Rule:

The angle to the horizontal subtended by the new development at the level of the centre of the lowest affected window should be no greater than 25°. If this is the case then it is unlikely to have a noticeable effect on diffuse skylight enjoyed by the existing building.



If, for any part of the development, the angle is more than 25°, a more detailed check is needed to find the loss of skylight to the existing building:

25° Rule Results

On this occasion the angle to the horizontal subtended by the new development at the level of the centre of the lowest affected window will be less than 25° and therefore no more detailed checks are required (See Appendix 1).

7.0 Sunlight & Overshadowing to Amenity spaces

Guidance from the BRE suggests that that at least half of the amenity area should receive at least two hours of sunlight on 21 March. It is instructive to draw the 'two hours sun contour' that marks this area on plan, because the use of specific parts of a site can be planned with sunlight in mind.

Amenity spaces would normally include:

- Gardens, usually the main back garden of a house
- Parks and playing fields
- Children's playgrounds
- Outdoor swimming pools and paddling pools
- Sitting out areas such as those between non-domestic buildings and in public squares
- Focal points for views such as a group of monuments or fountains

Amenity Space Results

Calculations were undertaken in accordance with the planning guidance contained in BRE document 209 'Site Layout Planning for Daylight & Sunlight' - PJ Littlefair et al 2022. The results of our analysis suggest that none of the amenity spaces assessed are likely to experience any noticeable reduction in sunlight provision, with all comfortably meeting the BRE guidance.

Detailed results are in Appendix 2. Corresponding two hour sunlight contours can be found in Appendix 3

6.2 Shadow Cast

The BRE guidance suggests that where a building is proposed that may affect a number of gardens or open spaces it is often illustrative to plot a shadow plan showing the location of shadows at different times of day and year. Where there are existing buildings as well as the proposed one, 'before' and 'after' shadow plots showing the difference that the proposed building makes may be helpful. In interpreting the impact of such differences, it must be borne in mind that nearly all structures will create areas of new shadow, and some degree of transient overshadowing of a space is to be expected. If a space is used all year round, the equinox (21 March) is the best date for which to prepare shadow plots as it gives an average level of shadowing.

Shadow Path diagrams have been produced in accordance with the planning guidance contained in BRE document 209 'Site Layout Planning. These can be found in Appendix 4.

8.0 Notes

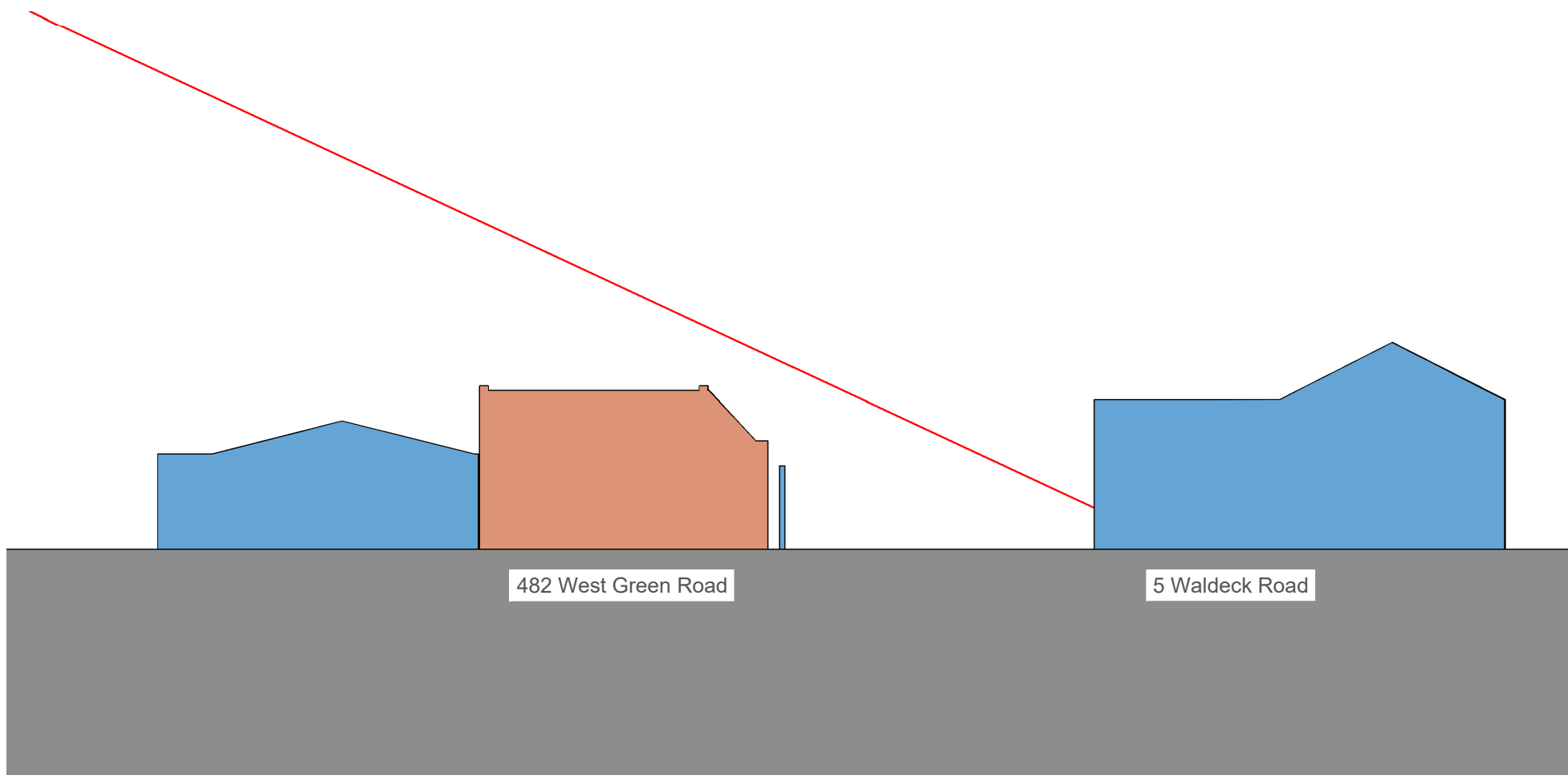
This report has been prepared for the sole use of the Client in support of a planning application. No representation or warranty (expressed or implied) is given to any other parties for any other use. Therefore, this report should not be relied upon by any third party for any use other than that stated above and we accept no liability from the use of this report by any other party for any other purpose.

We are not aware of any conflicts of interest between ourselves and any other party concerning this project.



Appendix 1

25° Test Image



Newark Beacon
Cafferata Way
Newark NG24 2TN
01636 653 055
www.mesbuildingsolutions.co.uk

CLIENT:
Black Architecture

PROJECT :
West Green Road
Heringey
London

DRAWING TITLE:
25 Degree Rule

DRAWN BY:
NJW

DATE:
26/2/2024

CHECKED BY:
CJ

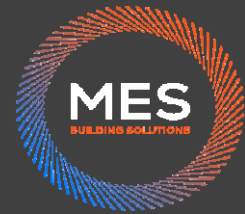
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NTS



Appendix 2

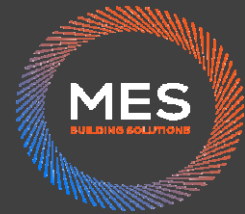
Sunlight to Amenity Space Results

Two Hour Sunlight to Amenity Space Test Results
 Project: 482 West Green Road
 Date of Analysis: 26/02/2024



Floor Ref	Amenity Ref		Amenity Area	Lit Area Existing	Lit Area Proposed	Light Retained	Meets BRE Guidance
1 Waldeck Road							
Ground	A1	Area m2	59.25	6.95	6.95	100%	YES
		Percentage		12%	12%		
3 Waldeck Road							
Ground	A1	Area m2	71.30	12.37	12.37	100%	YES
		Percentage		17%	17%		
5 Waldeck Road							
Ground	A1	Area m2	64.97	31.80	30.37	96%	YES
		Percentage		49%	47%		
7 Waldeck Road							
Ground	A1	Area m2	71.44	29.52	29.04	98%	YES
		Percentage		41%	41%		
9 Waldeck Road							
Ground	A1	Area m2	79.57	34.44	33.58	97%	YES
		Percentage		43%	42%		
11 Waldeck Road							
Ground	A1	Area m2	87.47	40.39	38.23	95%	YES
		Percentage		46%	44%		
13 Waldeck Road							
Ground	A1	Area m2	86.60	42.42	42.41	100%	YES
		Percentage		49%	49%		
15 Waldeck Road							
Ground	A1	Area m2	74.20	33.32	32.98	99%	YES
		Percentage		45%	44%		

Two Hour Sunlight to Amenity Space Test Results
 Project: 482 West Green Road
 Date of Analysis: 26/02/2024

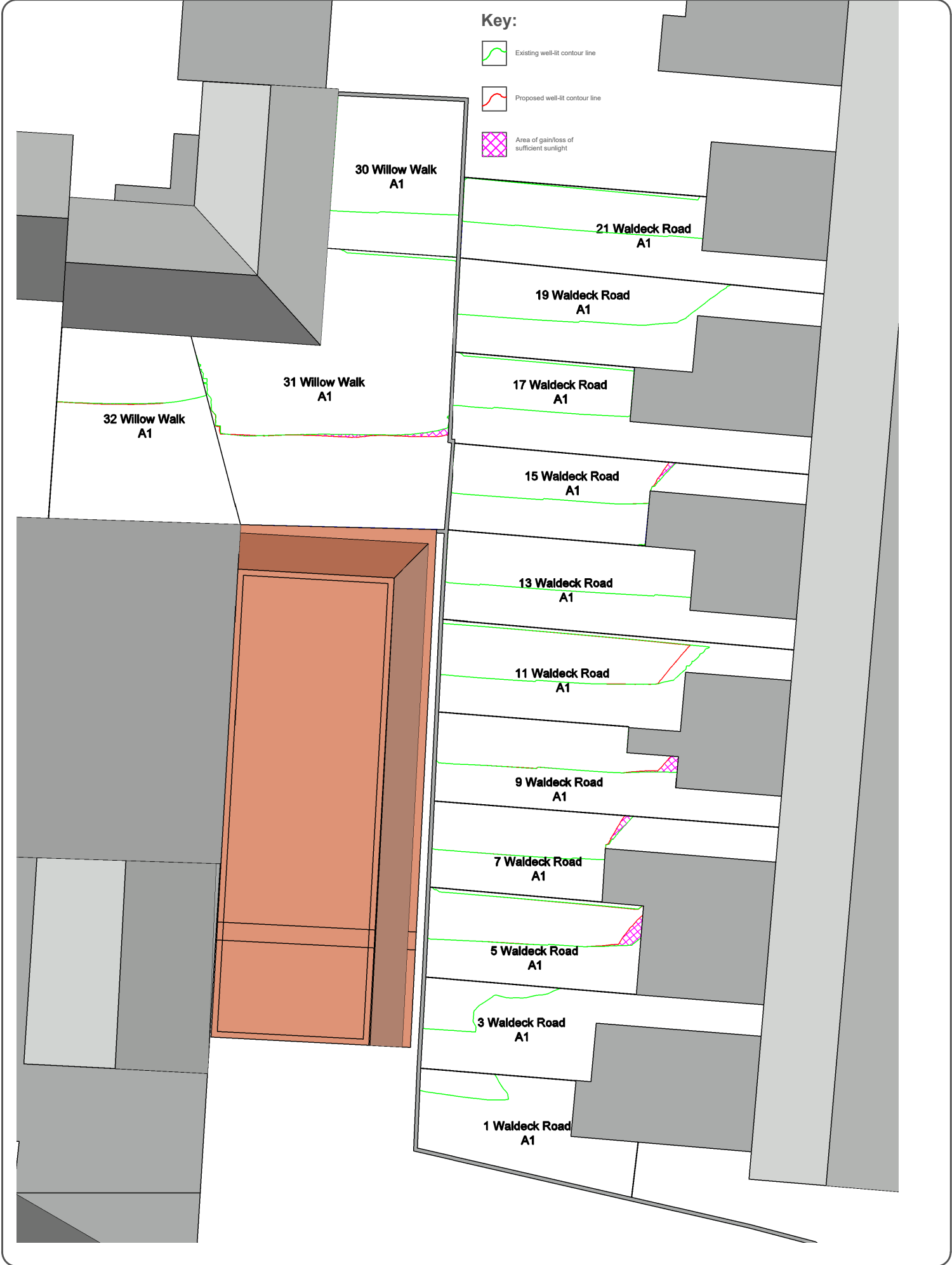


Floor Ref	Amenity Ref		Amenity Area	Lit Area Existing	Lit Area Proposed	Light Retained	Meets BRE Guidance
17 Waldeck Road							
Ground	A1	Area m2	78.45	29.58	29.58	100%	YES
		Percentage		38%	38%		
19 Waldeck Road							
Ground	A1	Area m2	89.45	42.62	42.62	100%	YES
		Percentage		48%	48%		
21 Waldeck Road							
Ground	A1	Area m2	81.77	34.16	34.16	100%	YES
		Percentage		42%	42%		
30 Willow Walk							
Ground	A1	Area m2	67.85	50.14	50.14	1.00	YES
		Percentage		74%	74%		
31 Willow Walk							
Ground	A1	Area m2	186.99	115.80	117.02	1.01	YES
		Percentage		62%	63%		
32 Willow Walk							
Ground	A1	Area m2	103.11	33.57	33.75	1.01	YES
		Percentage		33%	33%		



Appendix 3

Two Hour Sunlight Contours



Newark Beacon
Cafferata Way
Newark NG24 2TN
01636 653 055
www.mesbuildingsolutions.co.uk

CLIENT:
Black Architecture

PROJECT :
West Green Road
Heringey
London

DRAWING TITLE:
Amenity Contours

DRAWN BY:
NJW

DATE:
26/2/2024

CHECKED BY:
CJ

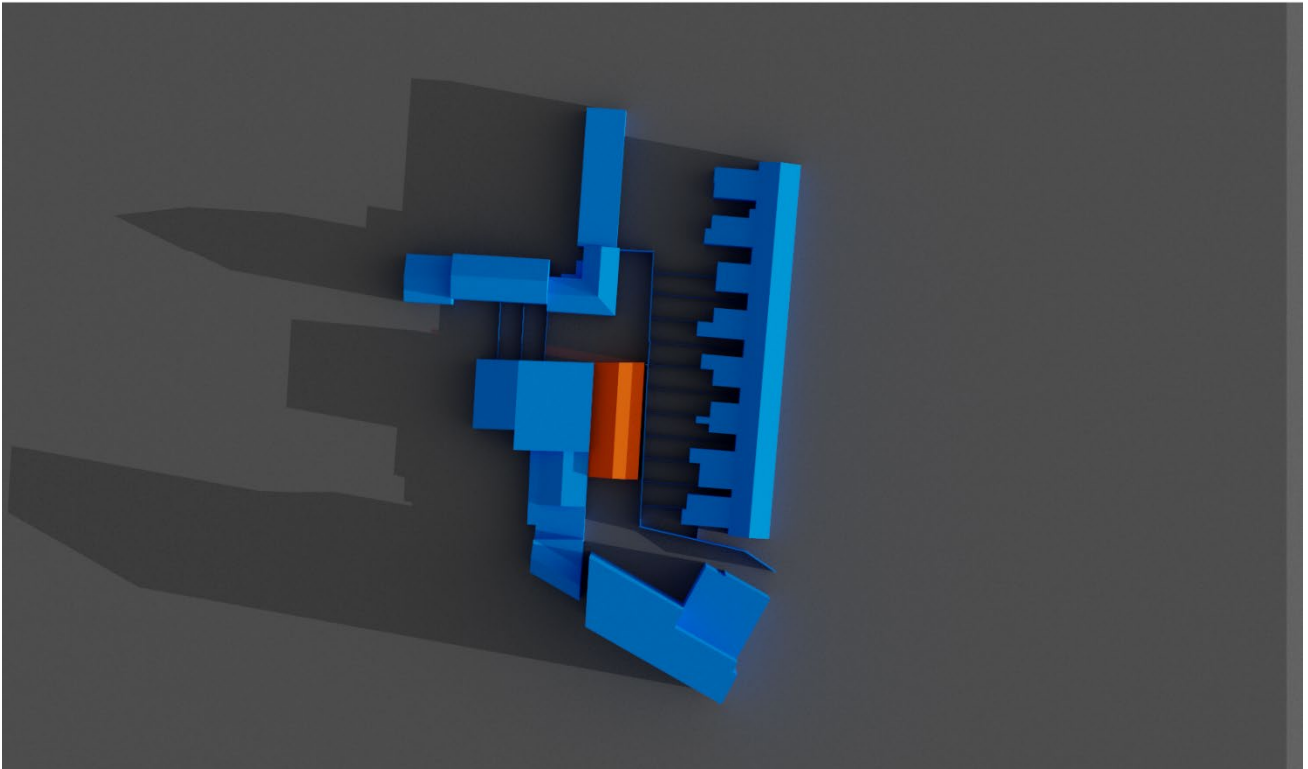
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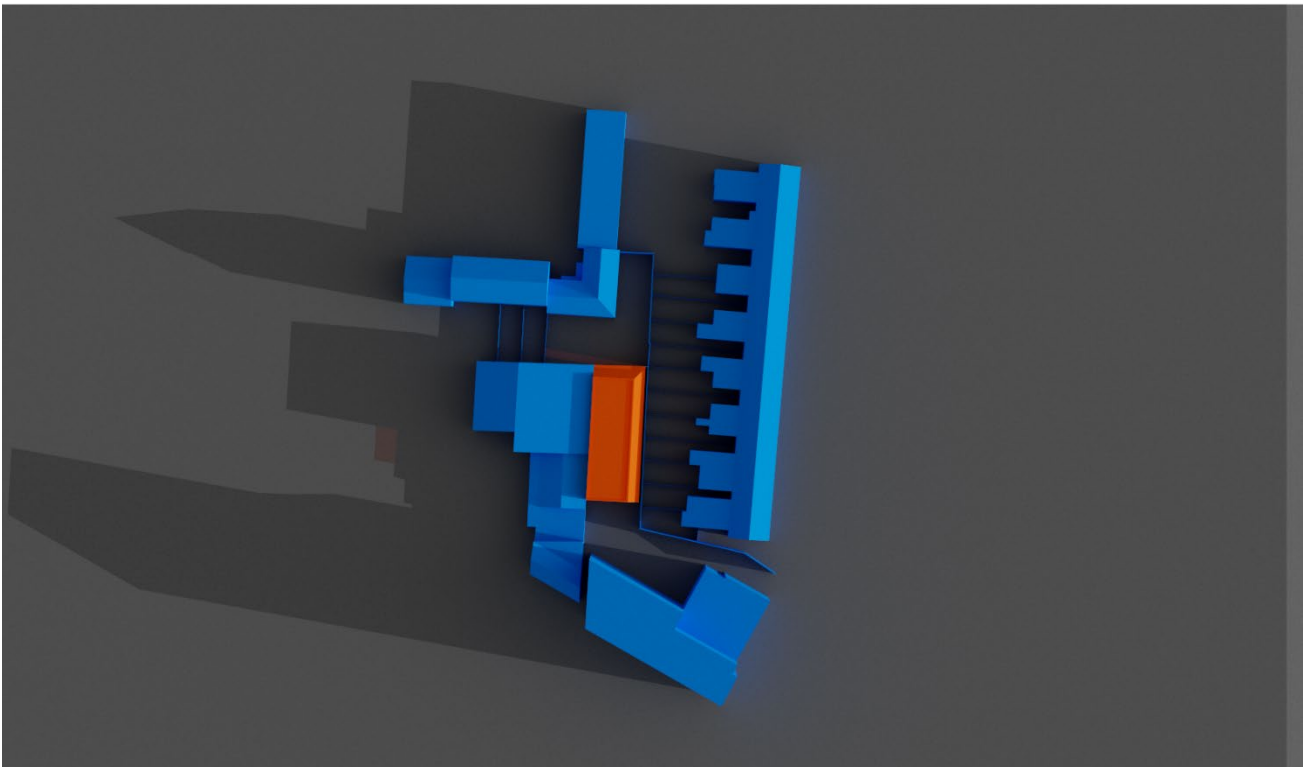
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Shadow Cast Images.

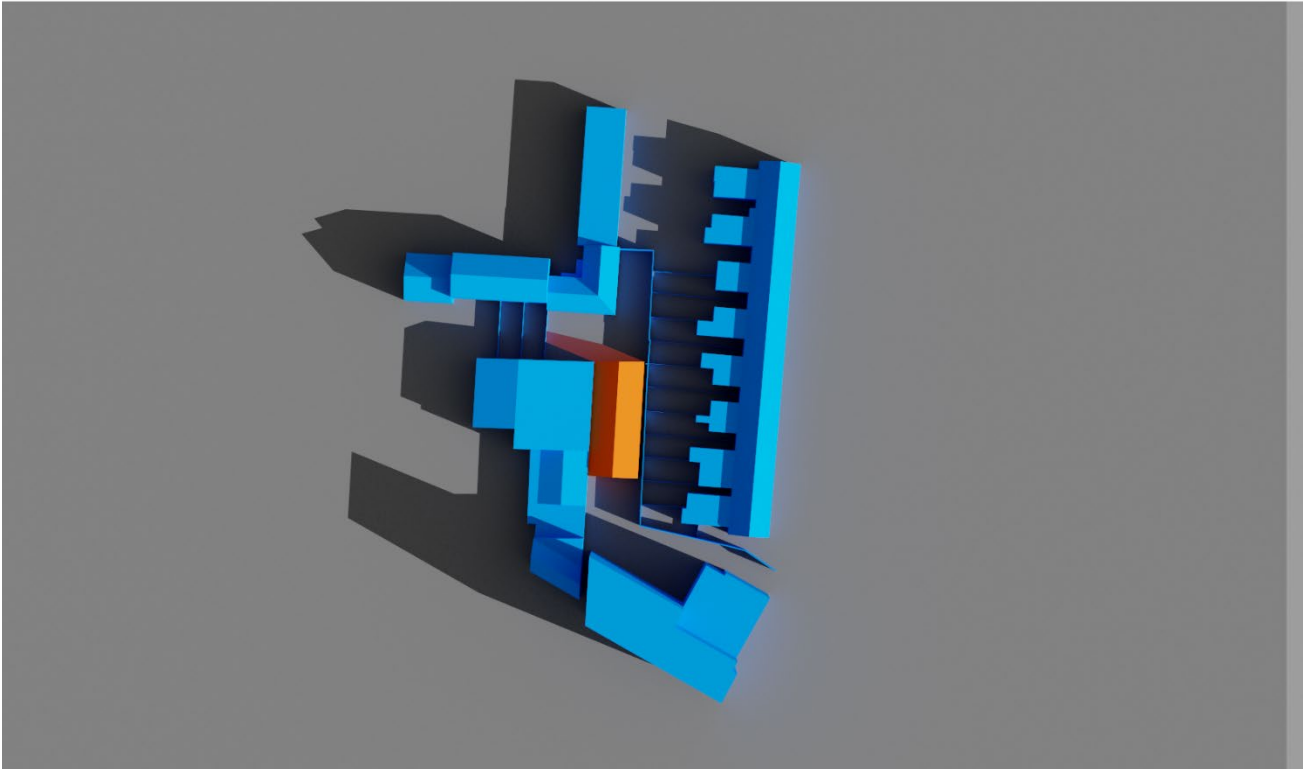
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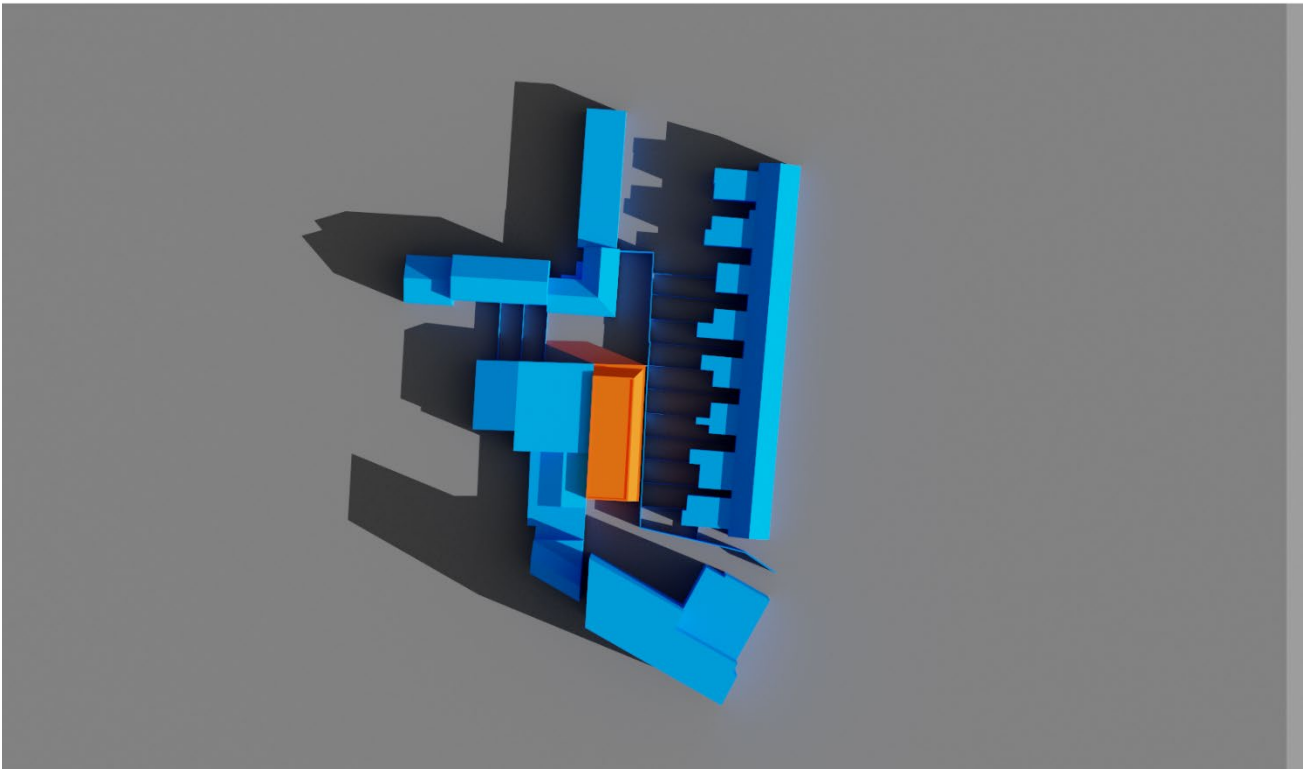
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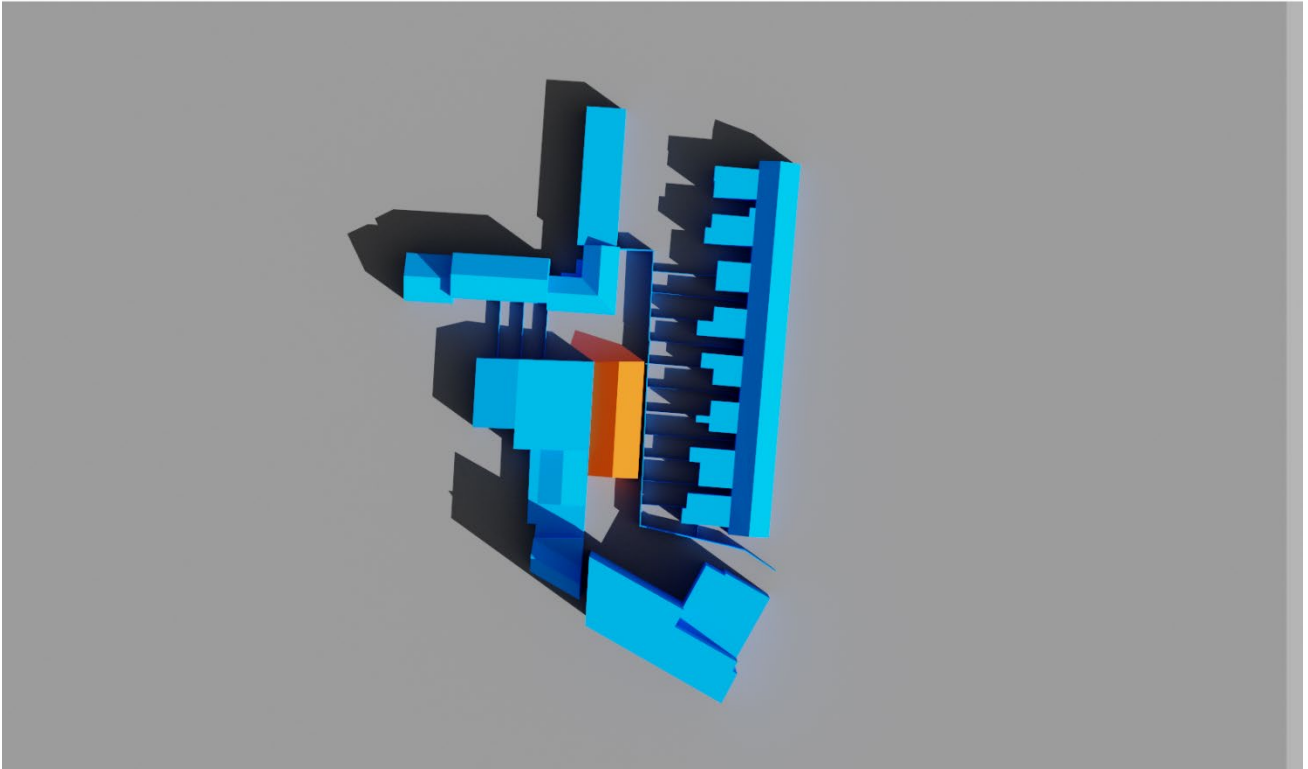
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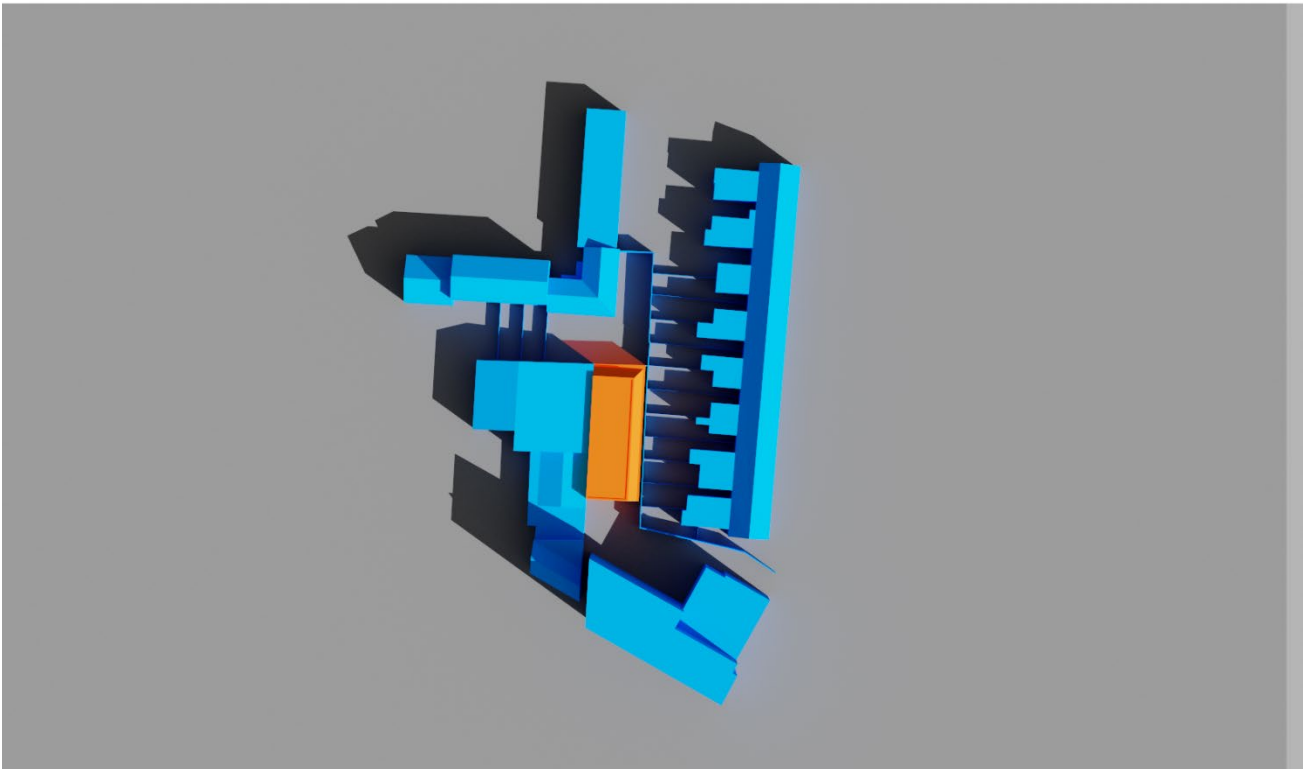
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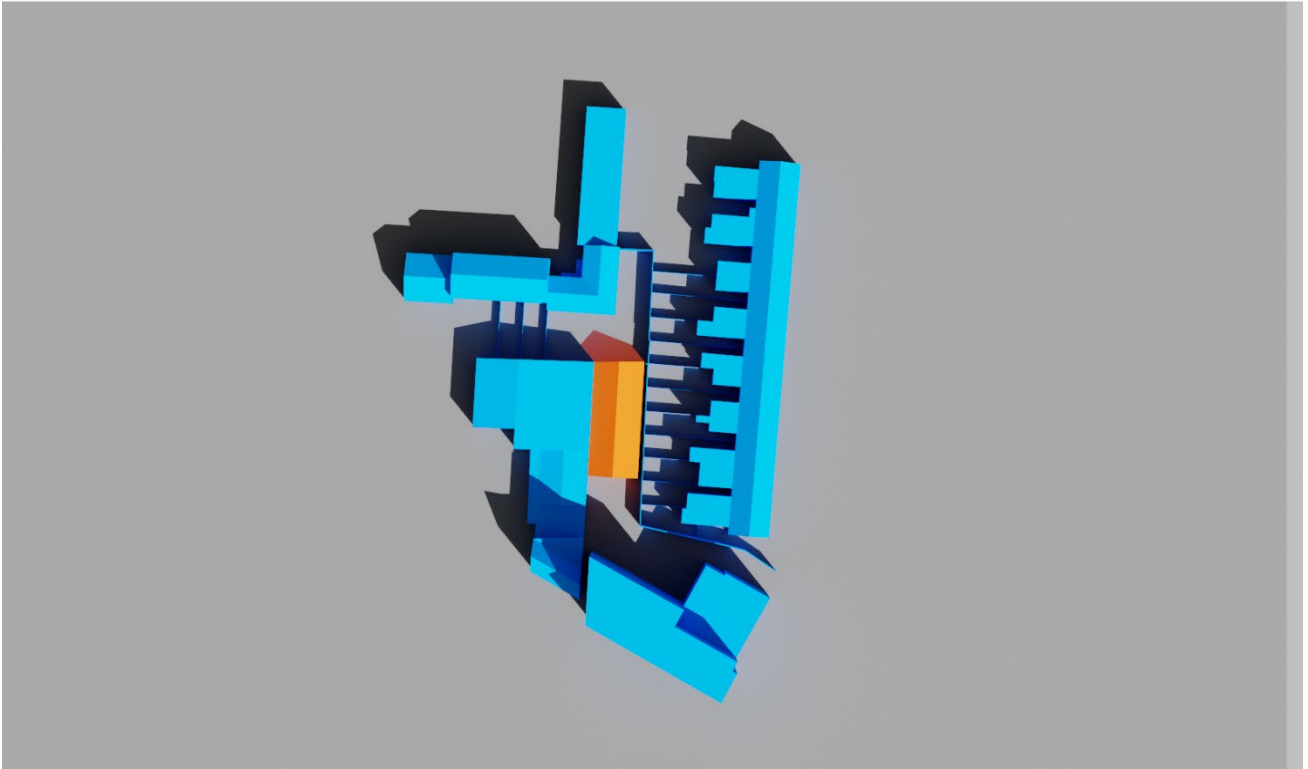
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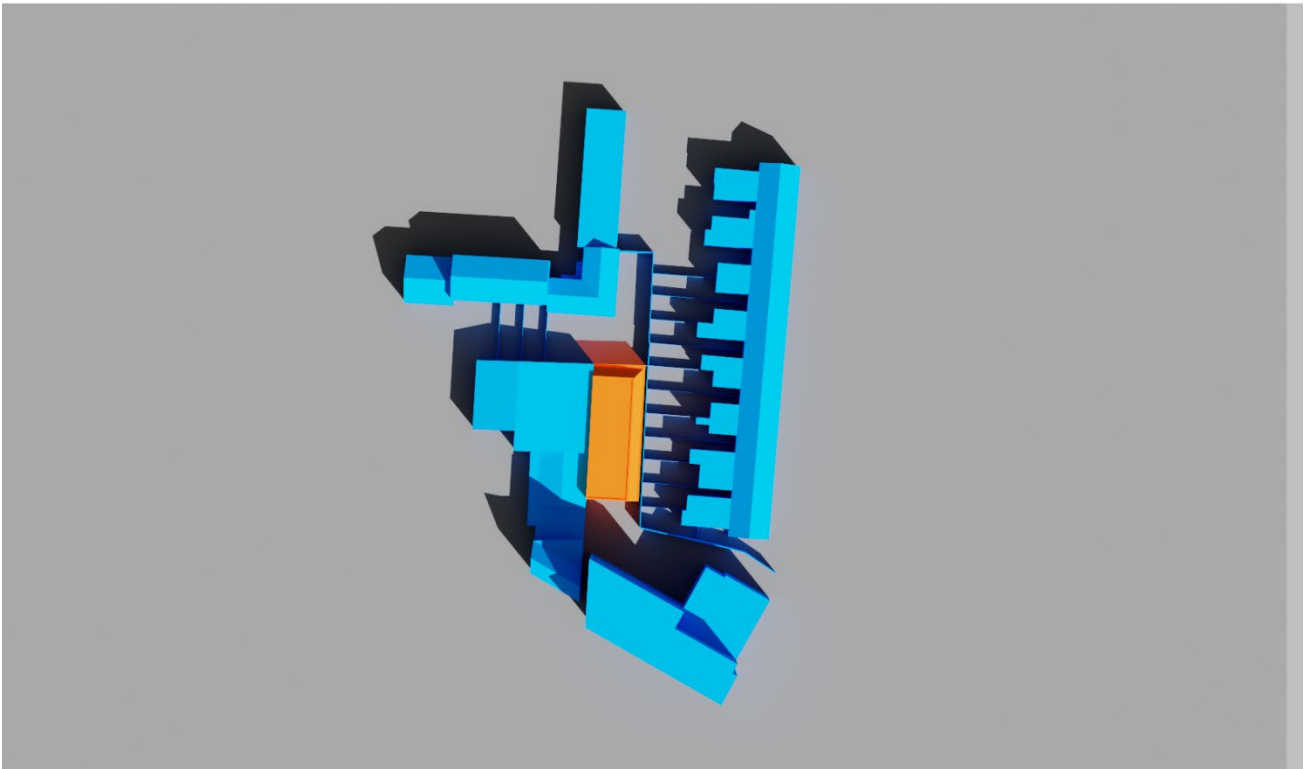
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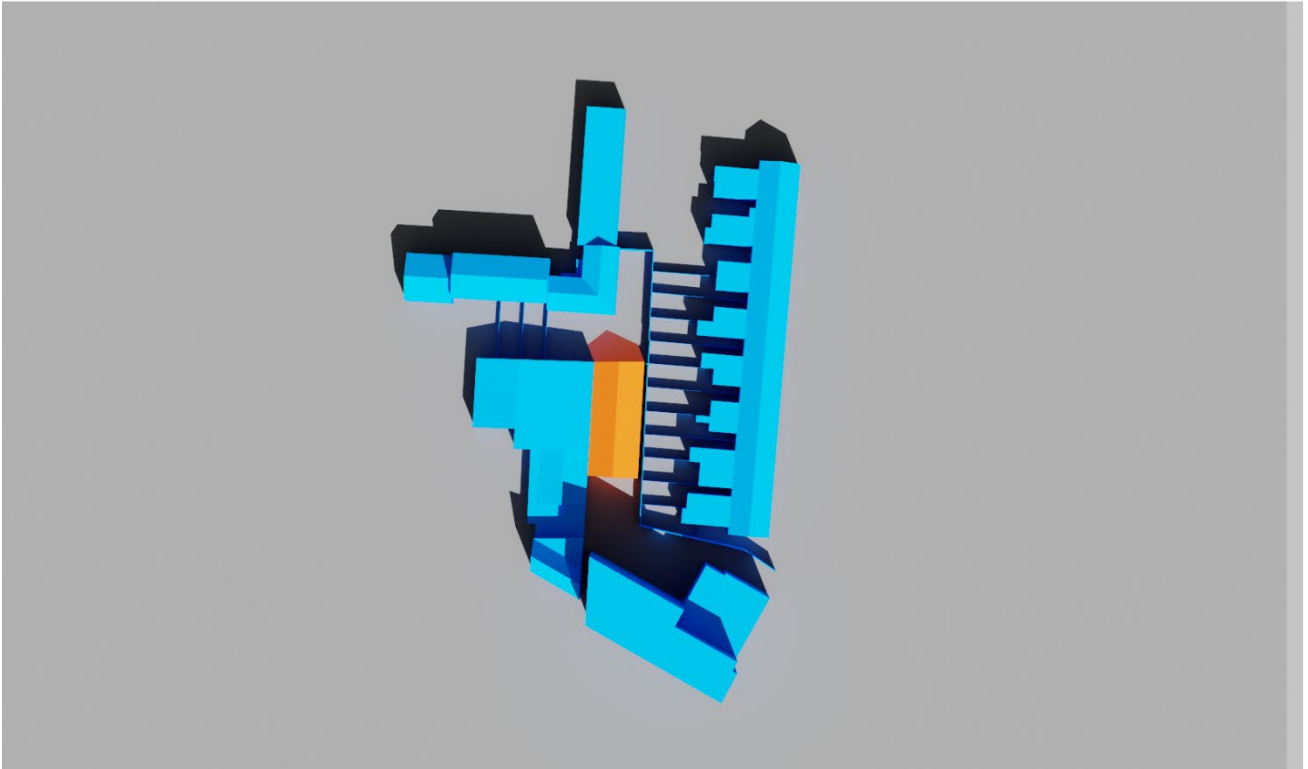
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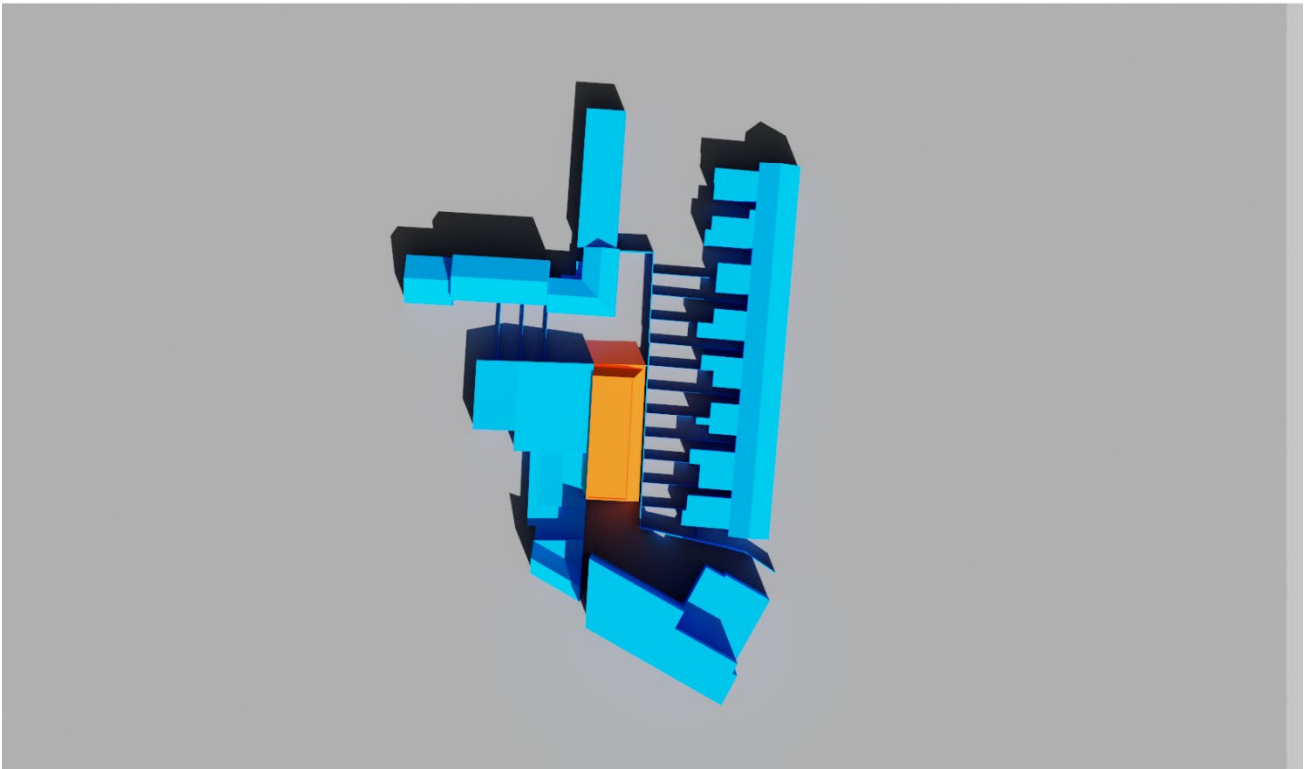
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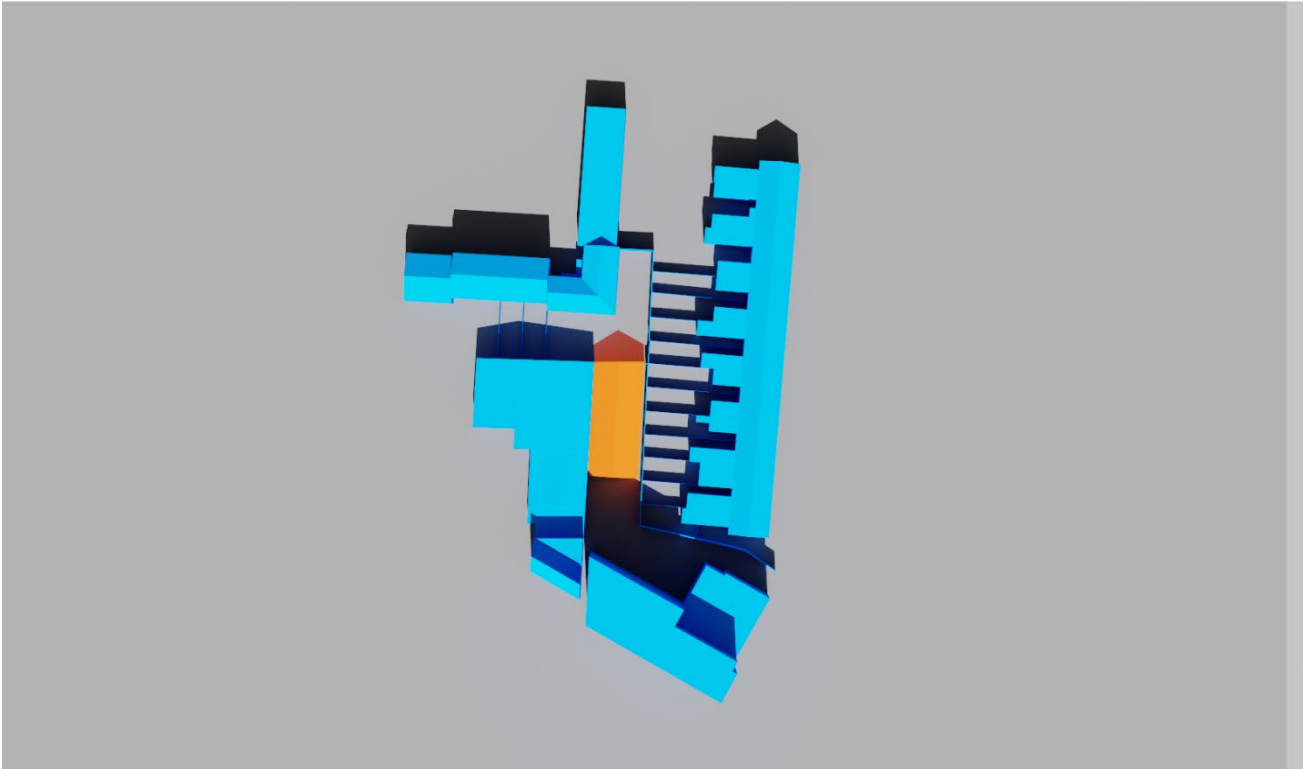
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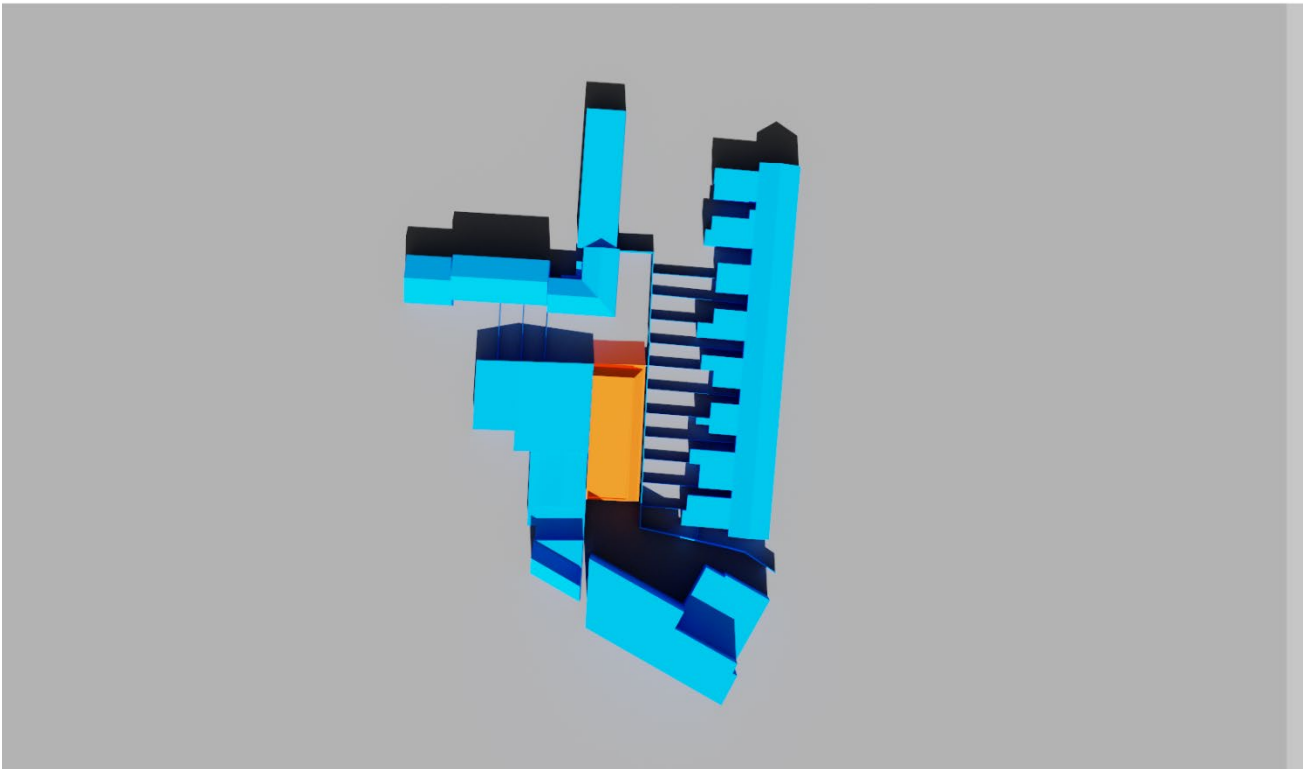
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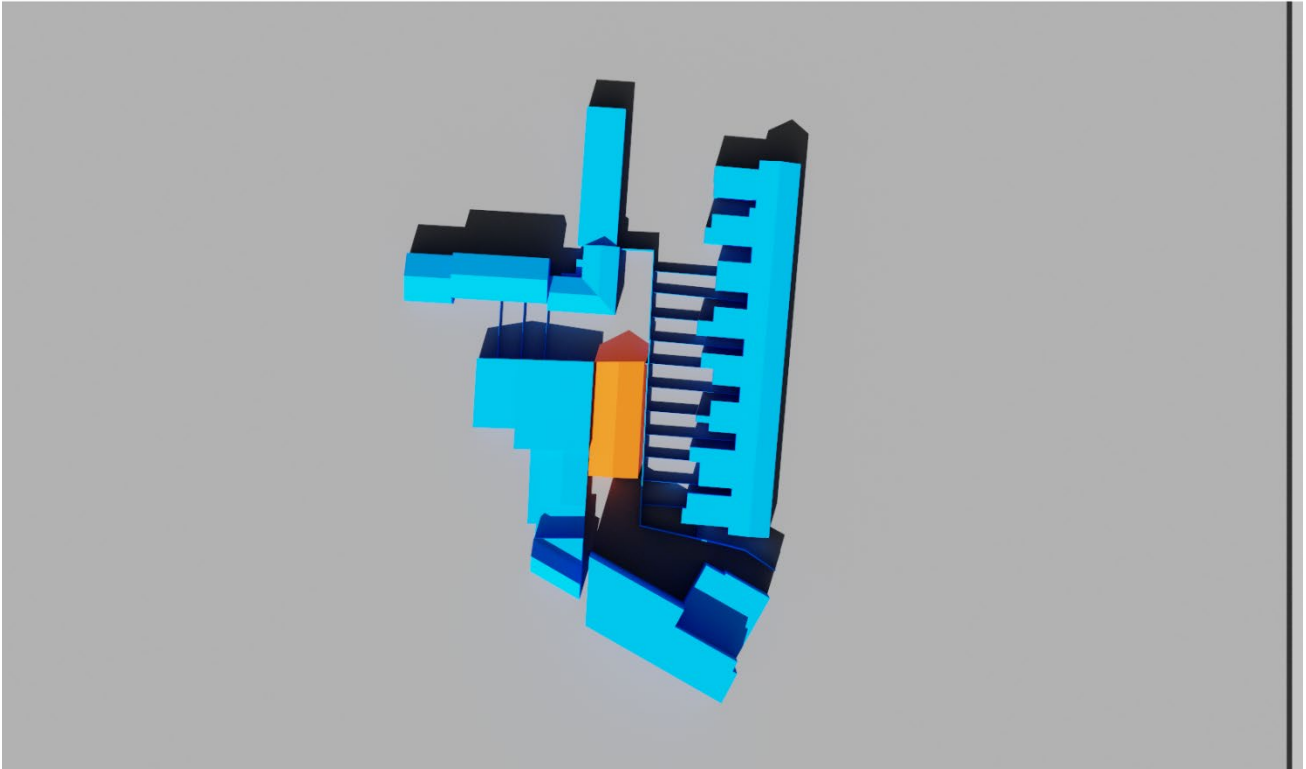
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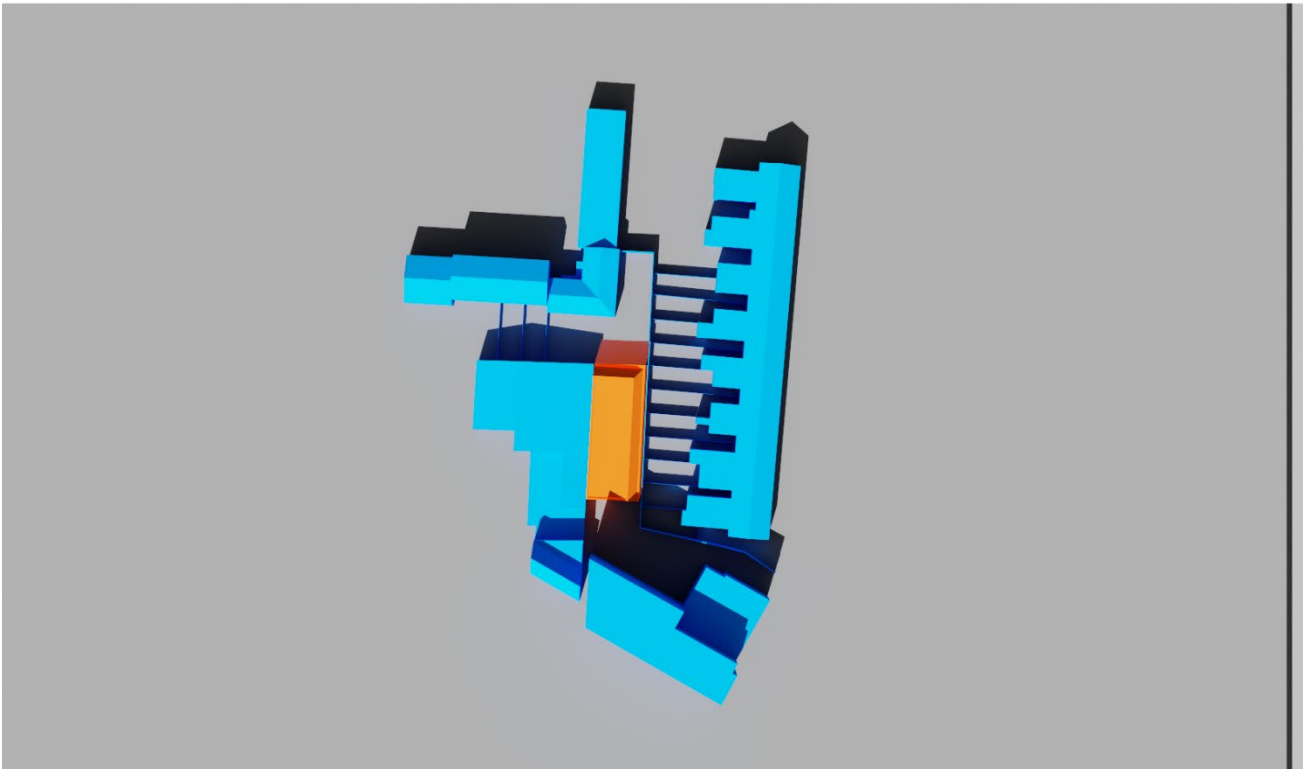
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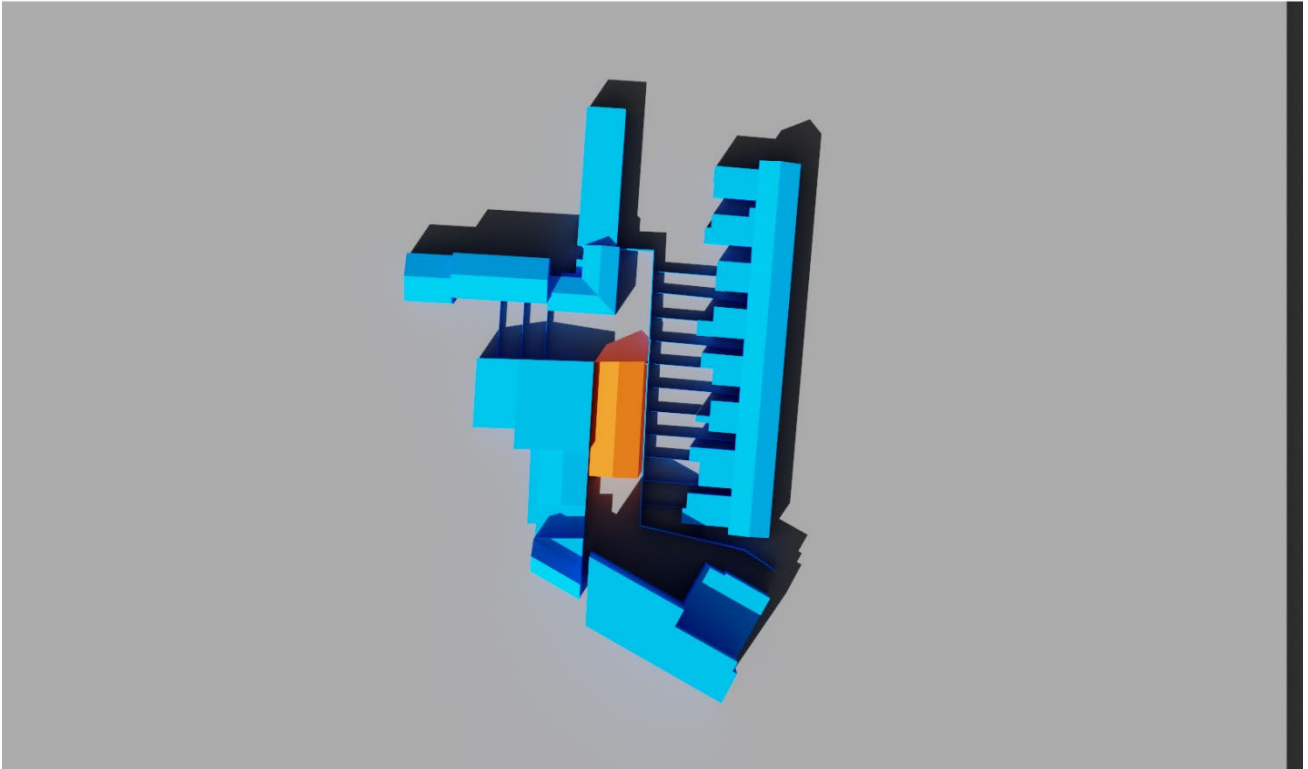
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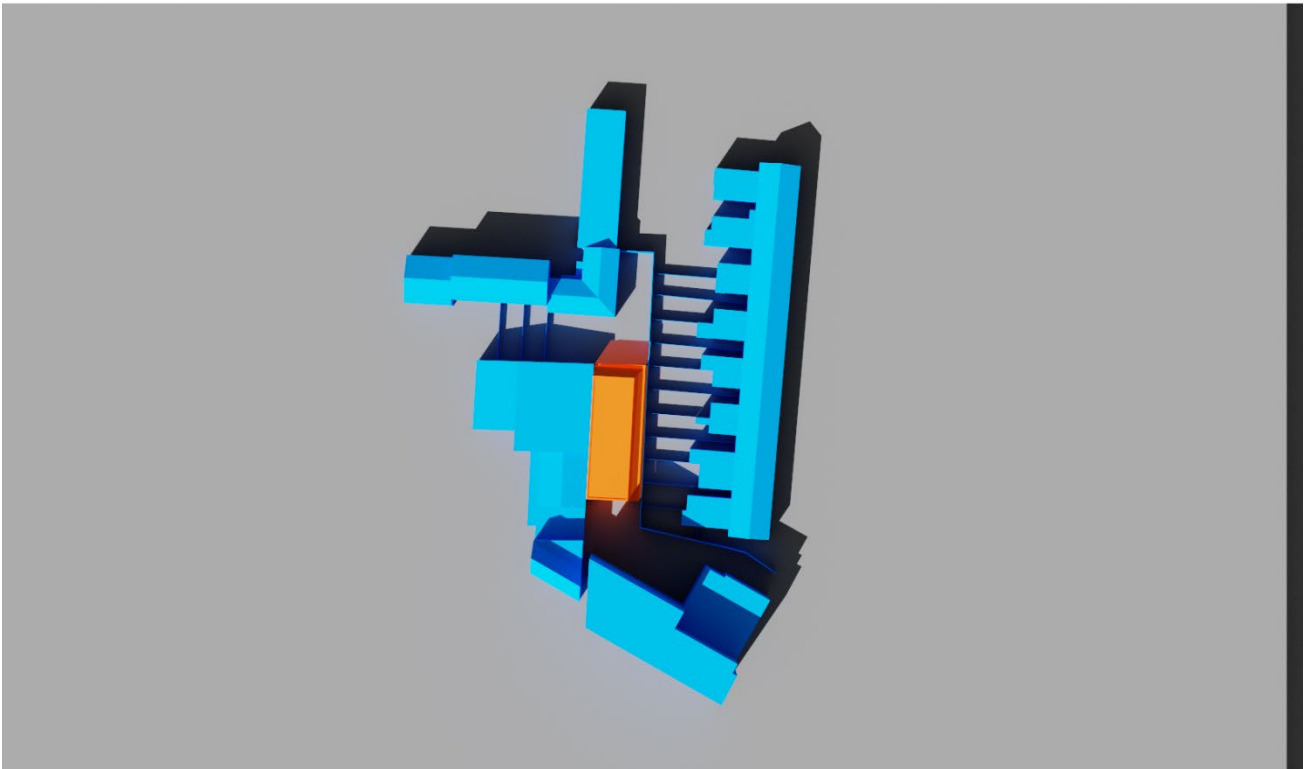
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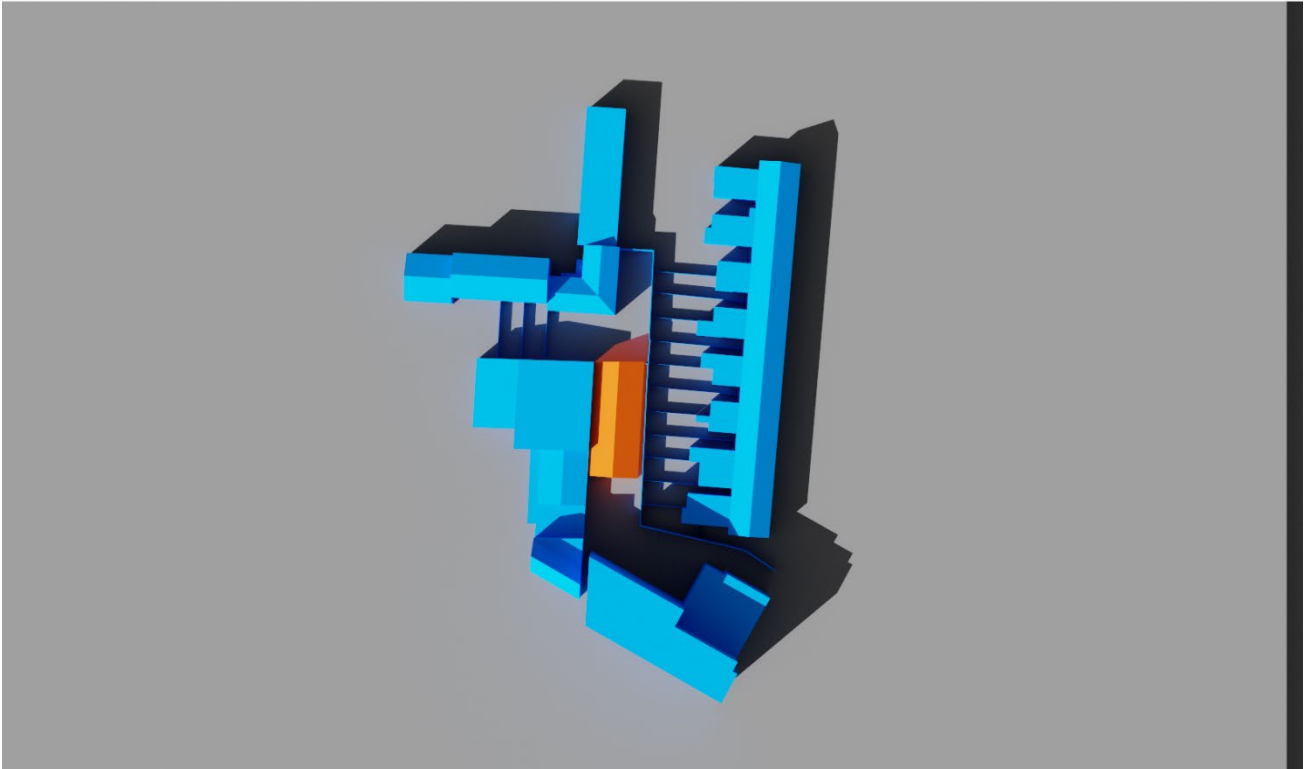
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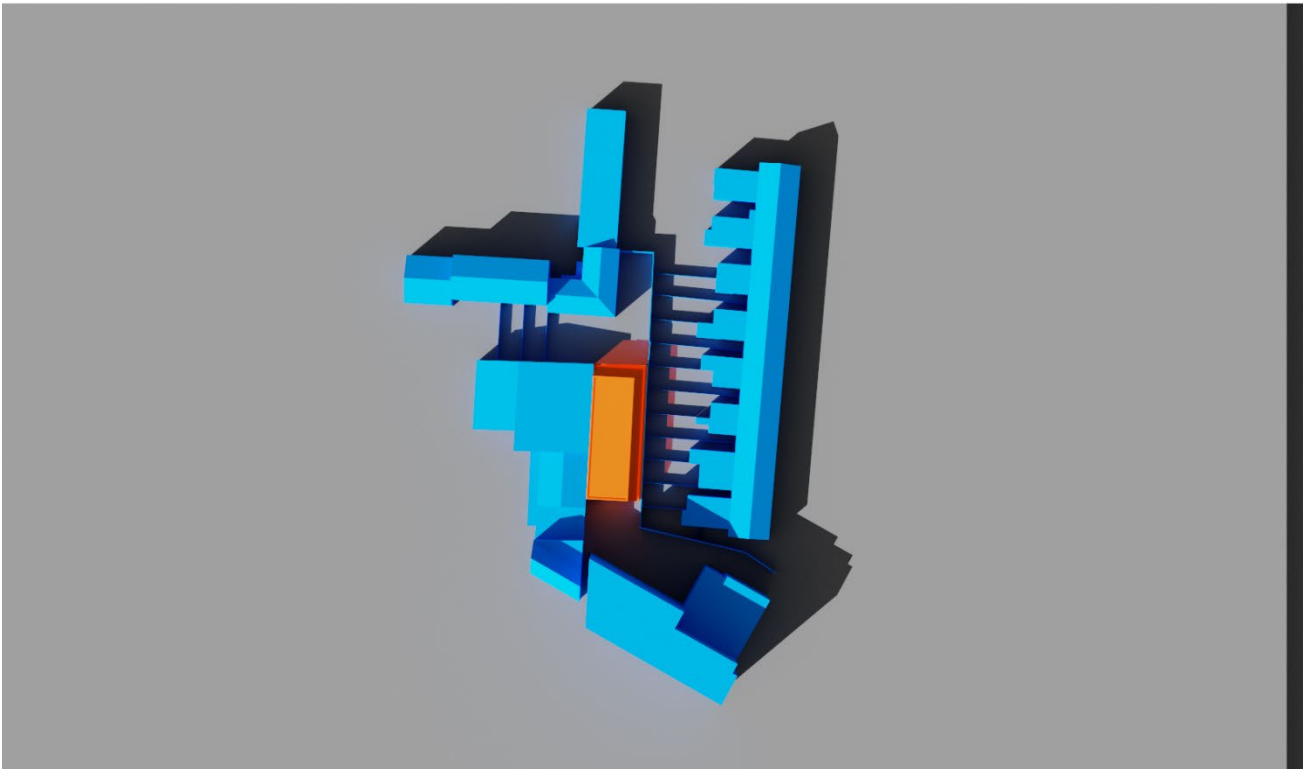
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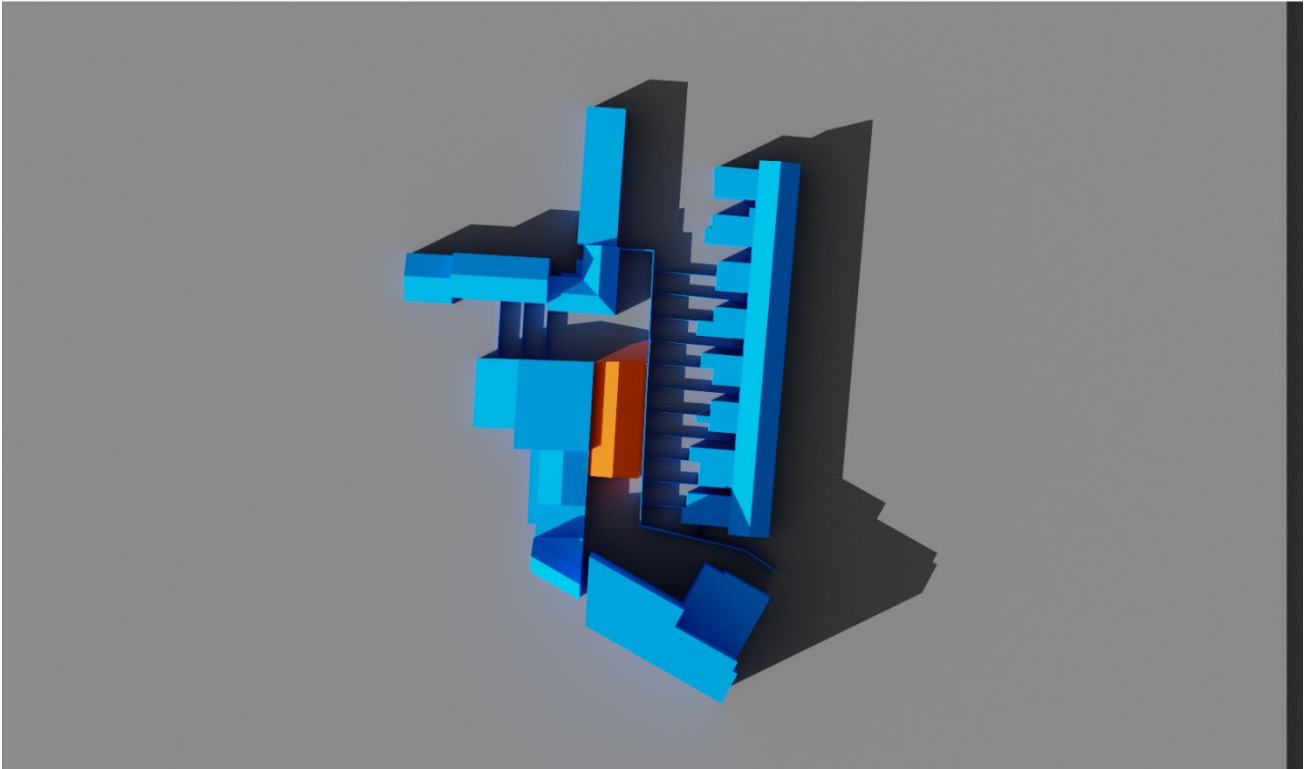
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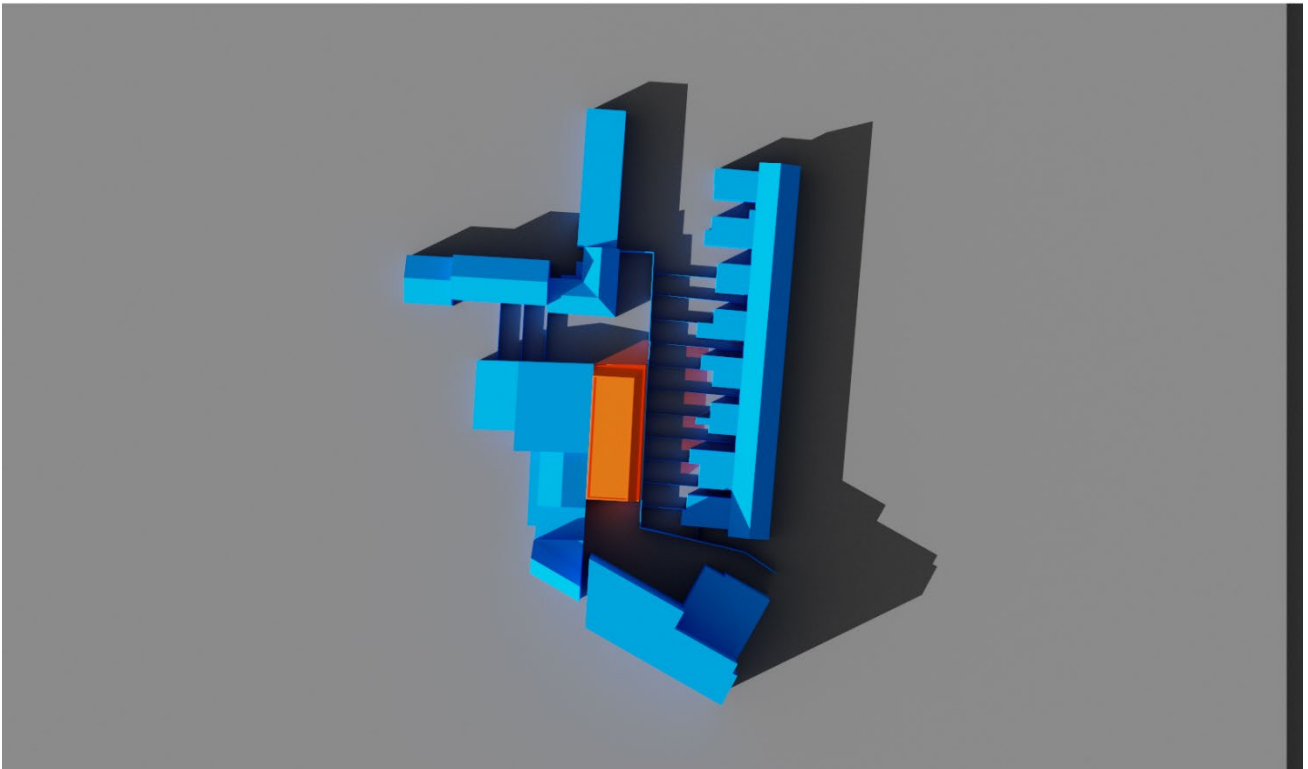
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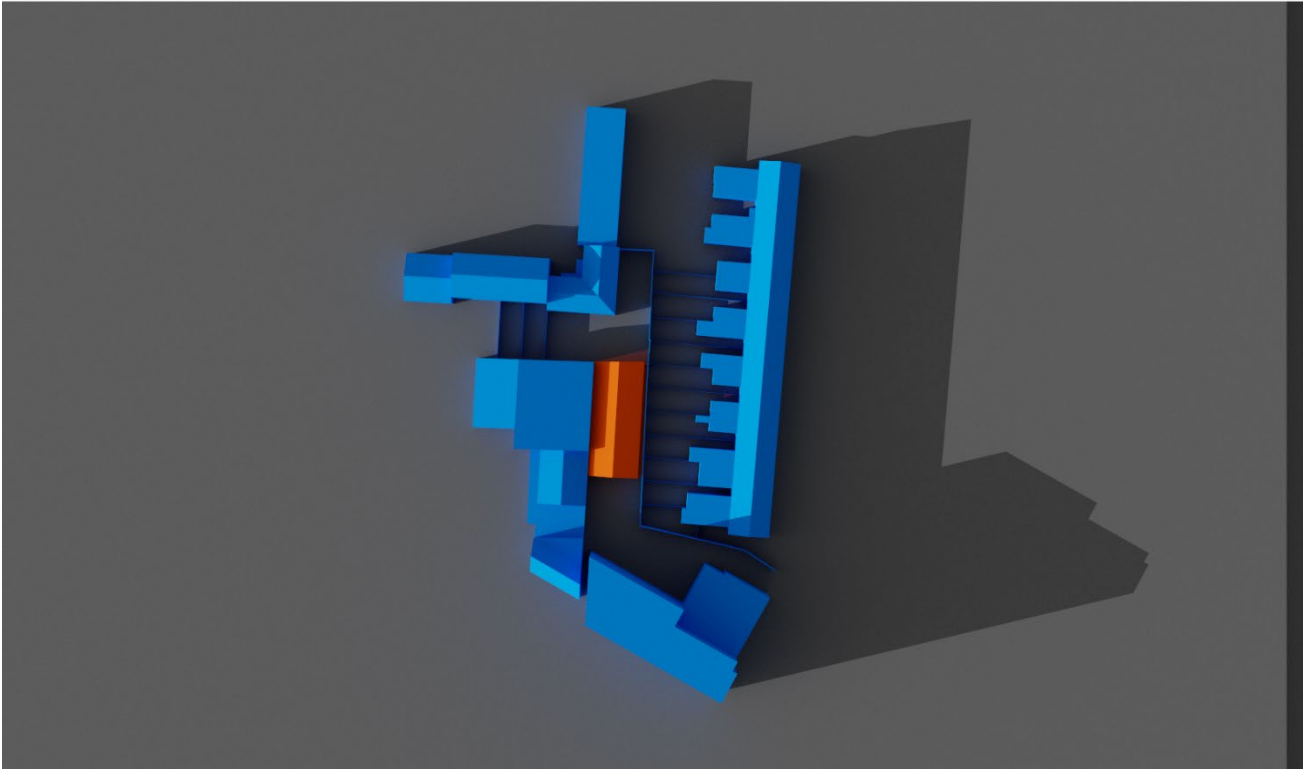
240216 West Green Road
EXISTING-21-Mar 16-00



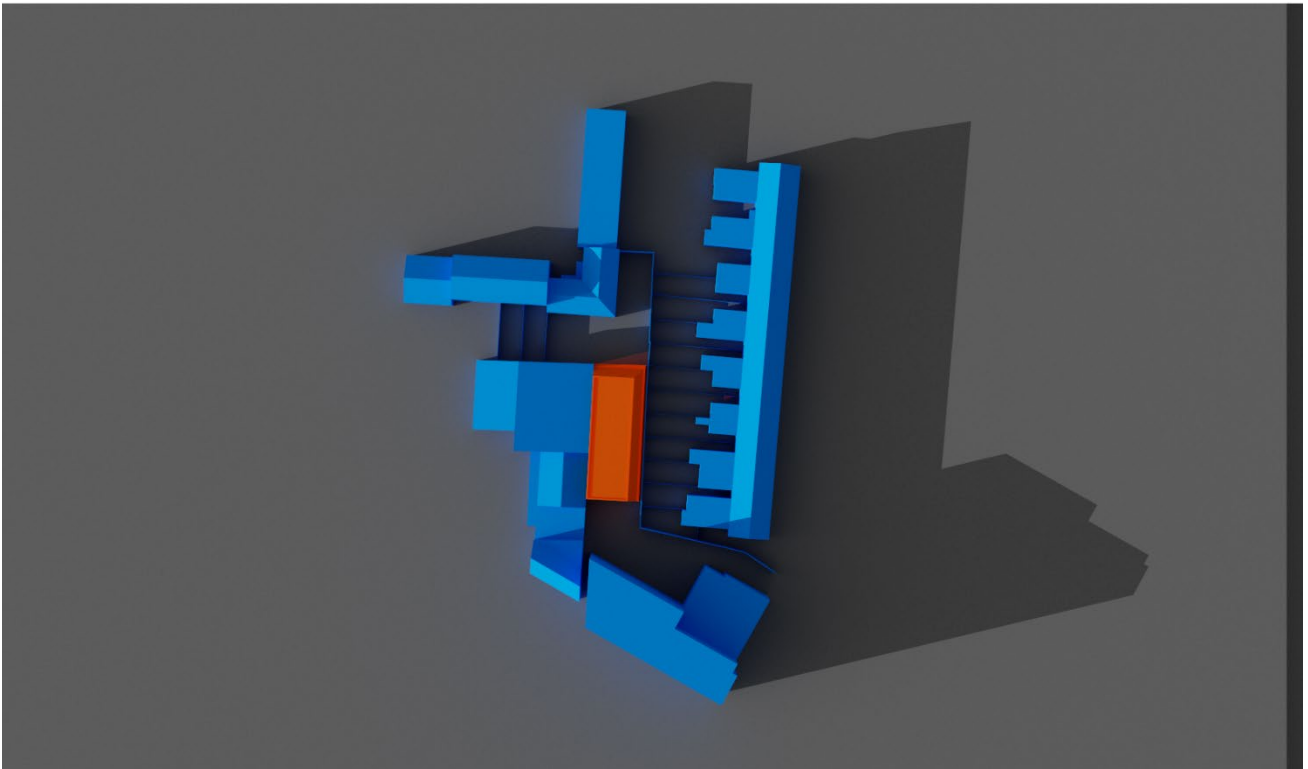
240216 West Green Road
PROPOSED-21-Mar 16-00



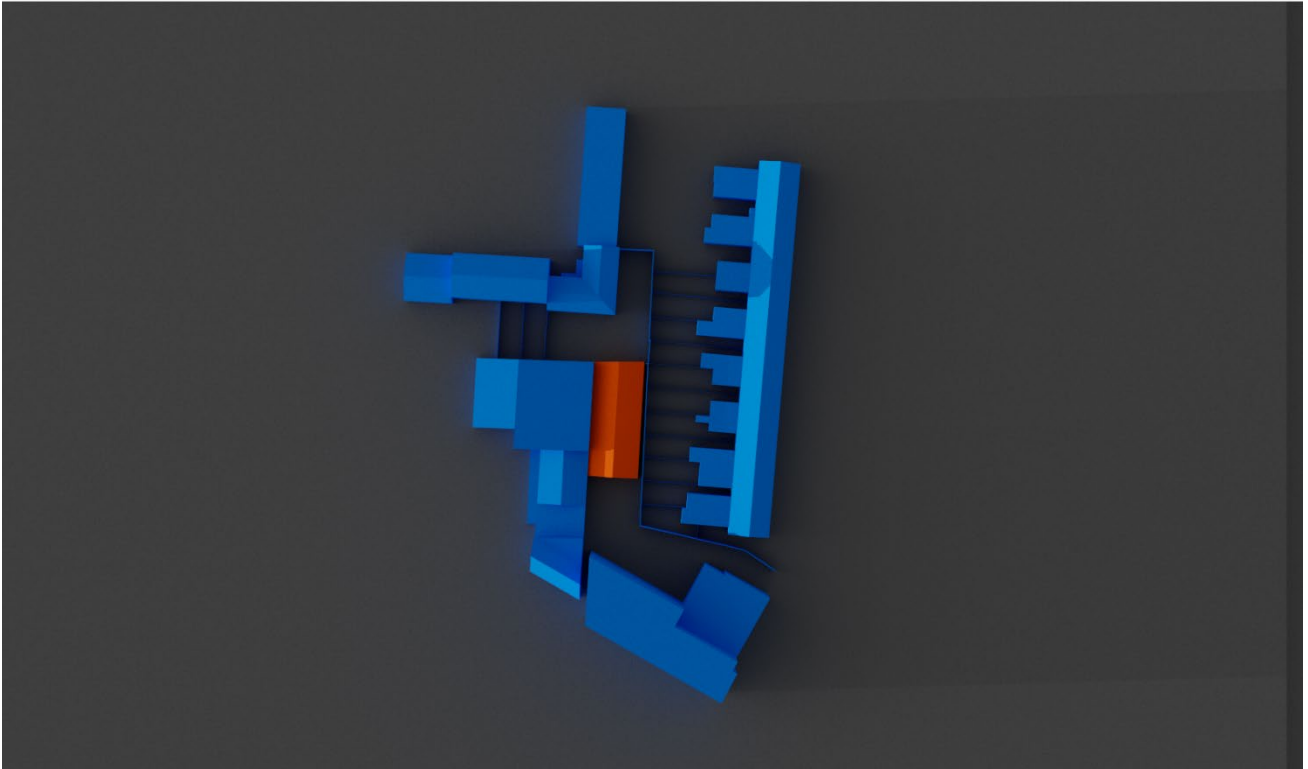
240216 West Green Road
EXISTING-21-Mar 17-00



240216 West Green Road
PROPOSED-21-Mar 17-00



240216 West Green Road
EXISTING-21-Mar 18-00



240216 West Green Road
PROPOSED-21-Mar 18-00

