



Willow Mead

Overshadowing Report

Design Stage Report

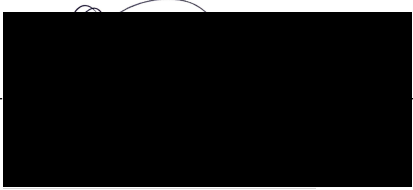
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EXECUTIVE SUMMARY

This report discusses the findings of an overshadowing assessment conducted on the proposed development at Willow Mead shared amenity. The report will show that the proposed development is anticipated to receive 4 hours of unobstructed sun to the main amenity on the 21st of March in line with the recommendations of "BRE 209 2022 Site Layout and Planning for Daylight and Sunlight".

To assess the performance of the proposed redevelopment the IES <VE> FlucsDL software has been used. This software is compliant with the requirements of CIBSE Application Manual AM11. HDSgreentech have input agreed parameters with Wessex Planning to the software that effect the main amenities.

INTRODUCTION

The development is two proposed bungalows with a floor area of circa 150m².

This report looks at the proposed development to ensure the communal amenity to the rear of the properties receive adequate direct sunlight.

This report has been generated as evidence for planning to show it is in line with the recommendations set out in BRE 209 "Site layout planning for daylight and sunlight" 2022.

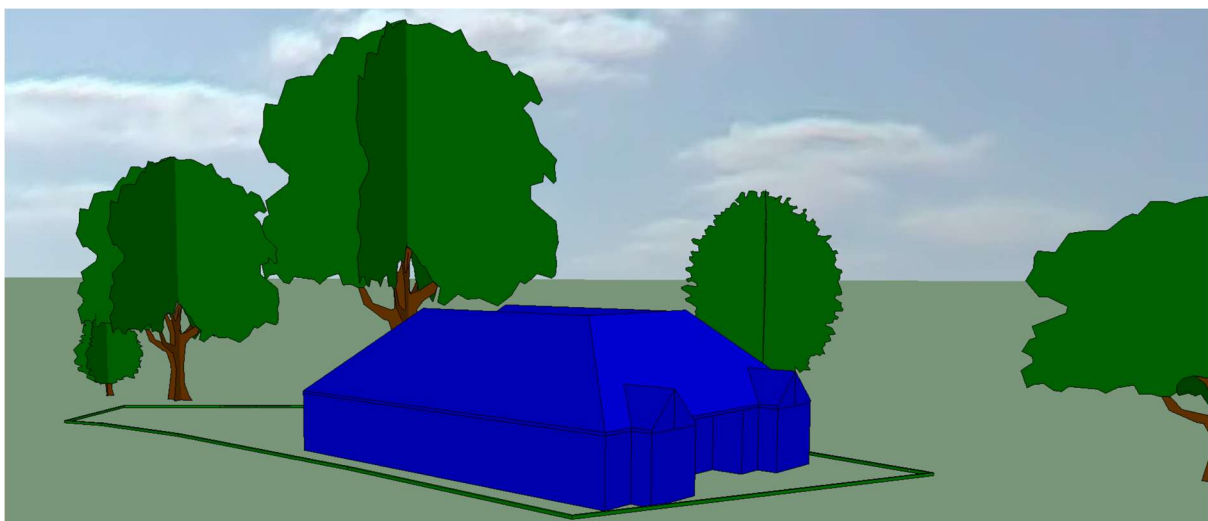
ASSESSMENT CRITERIA

To show the shading effect of the proposed development on the amenities, an overshadowing assessment on the 21st of March (Equinox) has been performed as recommended by the BRE methodology. The main amenity should receive 2 hours of direct daylight over 50% of the area.

APPROACH

To deliver this study HDSgreentech have used the SunCast package from the Virtual Environment analysis suite. This software provides daylight calculation and analysis in accordance with the governing standard 'BS 8206-2:2008, Lighting for buildings, Code of practice for daylighting'.

MODEL IMAGES



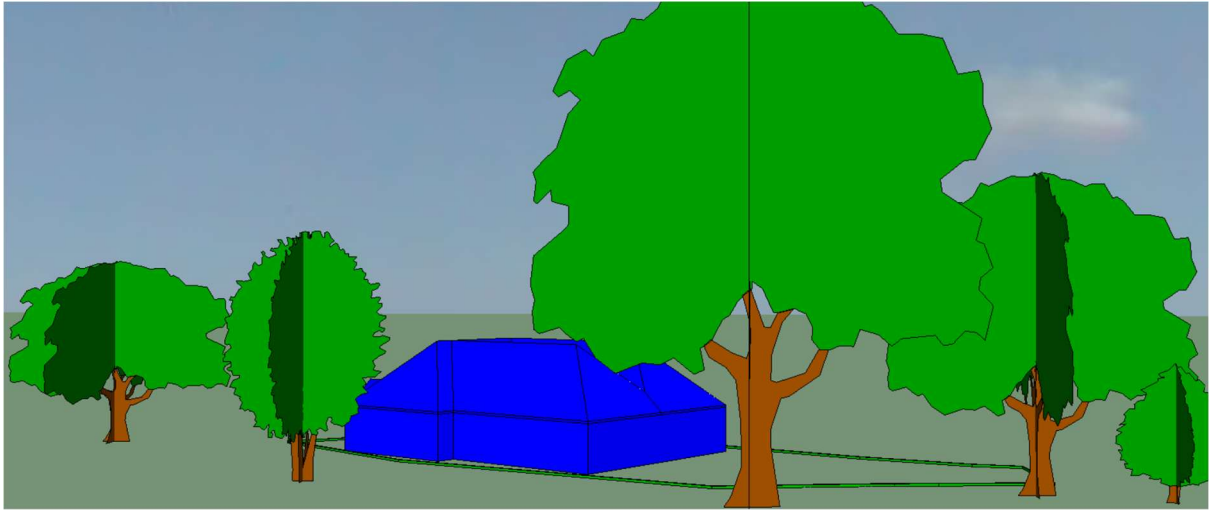


Figure 1 - Model images



Figure 2 - Site Orientation (North up the page)

MODEL CONSTRUCTION INFORMATION

The model has been based on drawing provided by Solent Design: -

2023 ARBORICULTURAL REPORT

TOPOGRAPHICAL SURVEY

Site and Location Plans SD-2005-00 E

GAs SD-2005-01 C

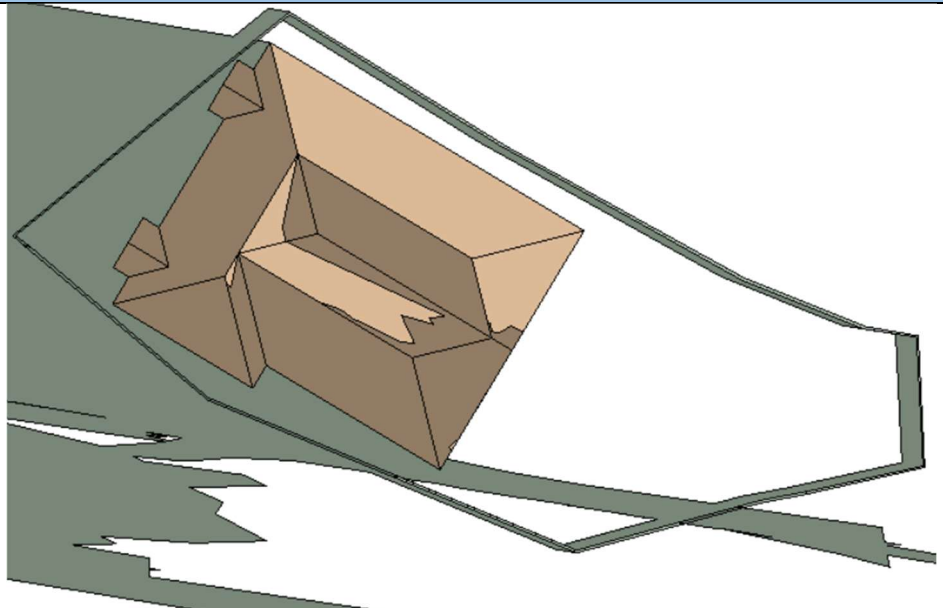
Elevations SD-2005-02 C

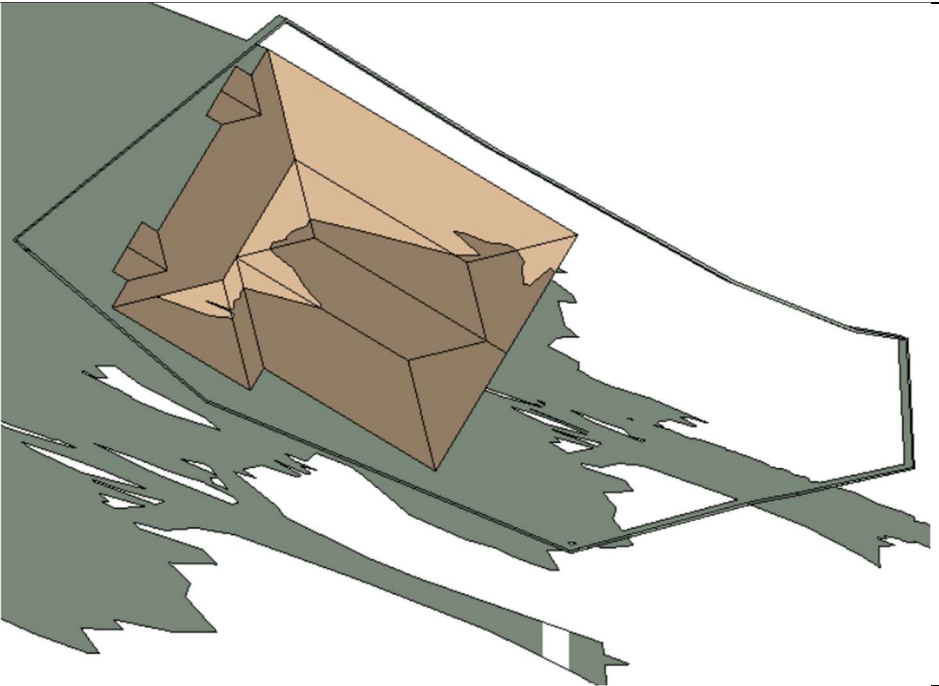
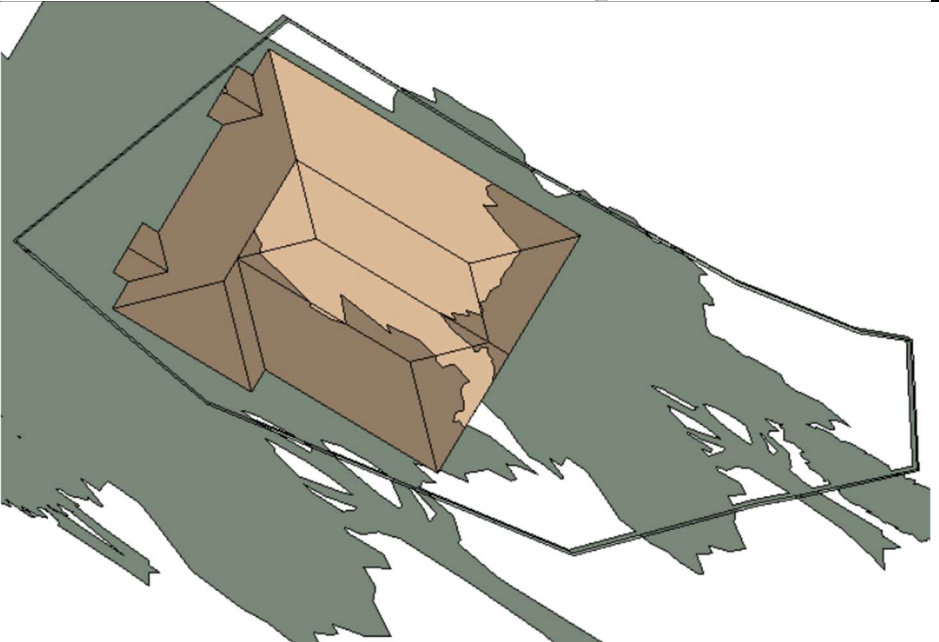
LOCATION

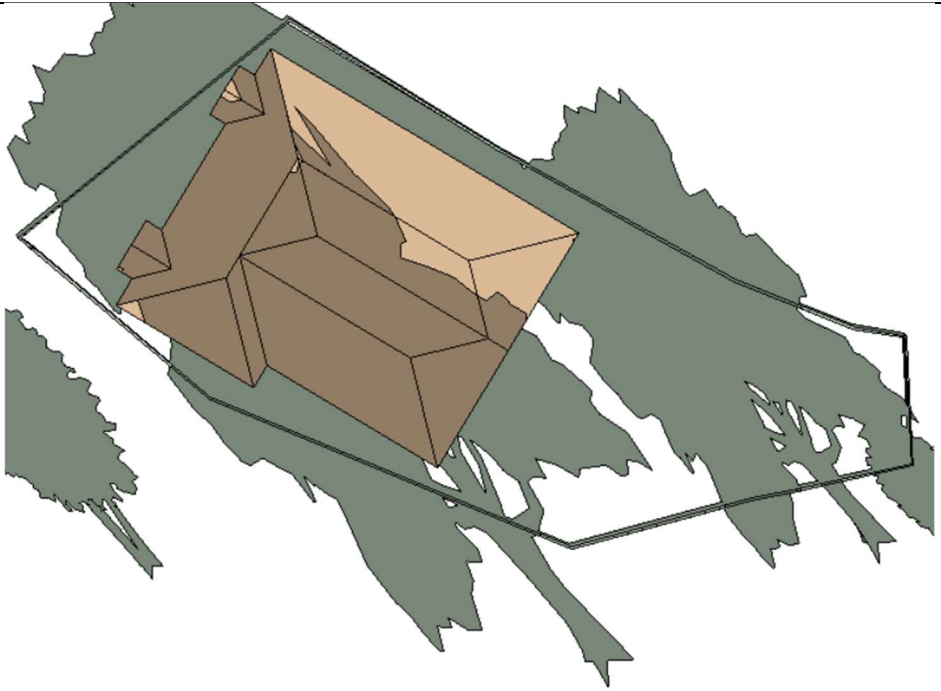
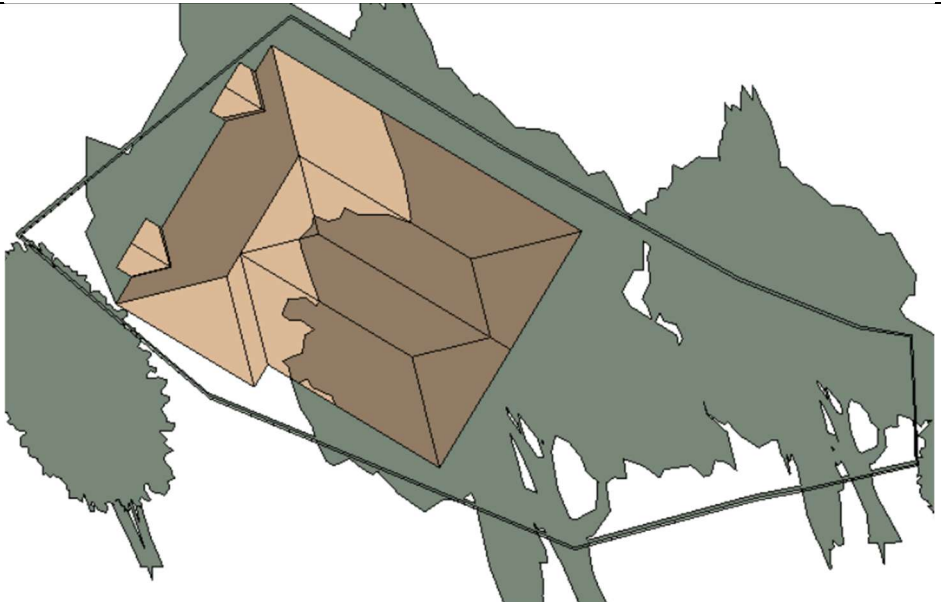
This project uses the location of Southampton, this being the most appropriate location to the site location Hedge End in Hampshire. The relevant weather file for an Overshadowing assessment of a development such as this is the Southampton DSY1 2020, high emissions, 50% percentile scenario weather file.

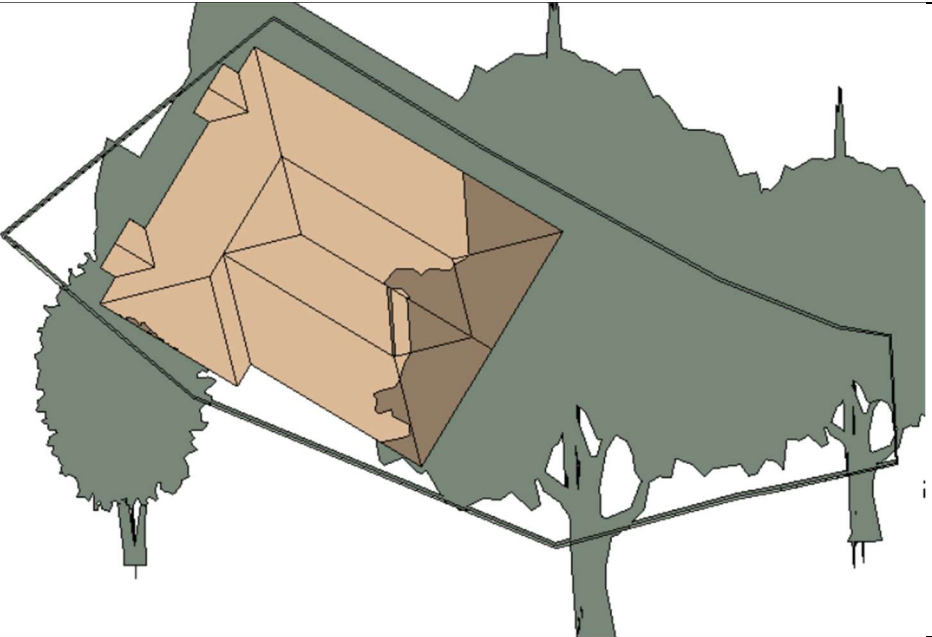
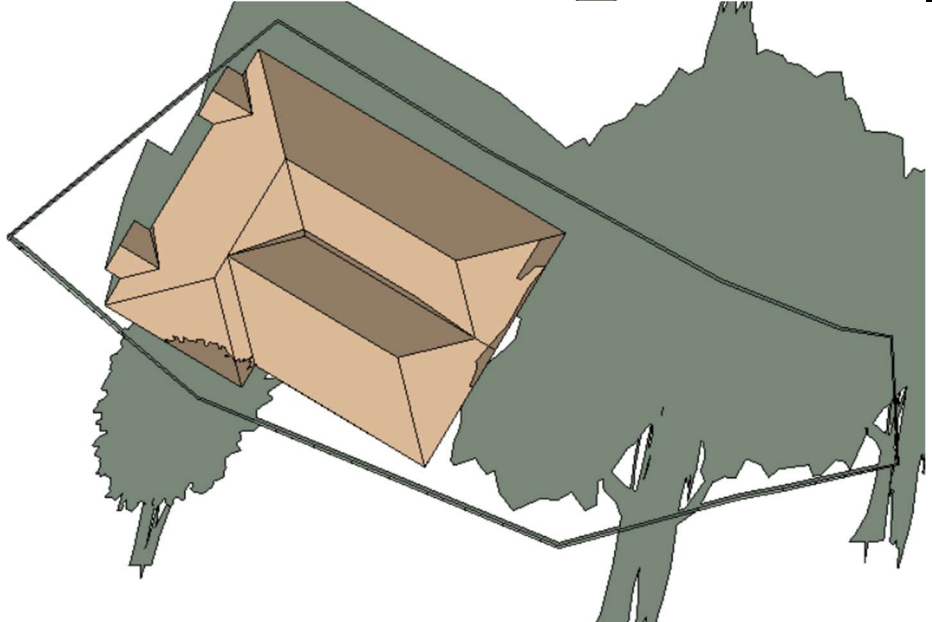
EXTERNAL SHADING

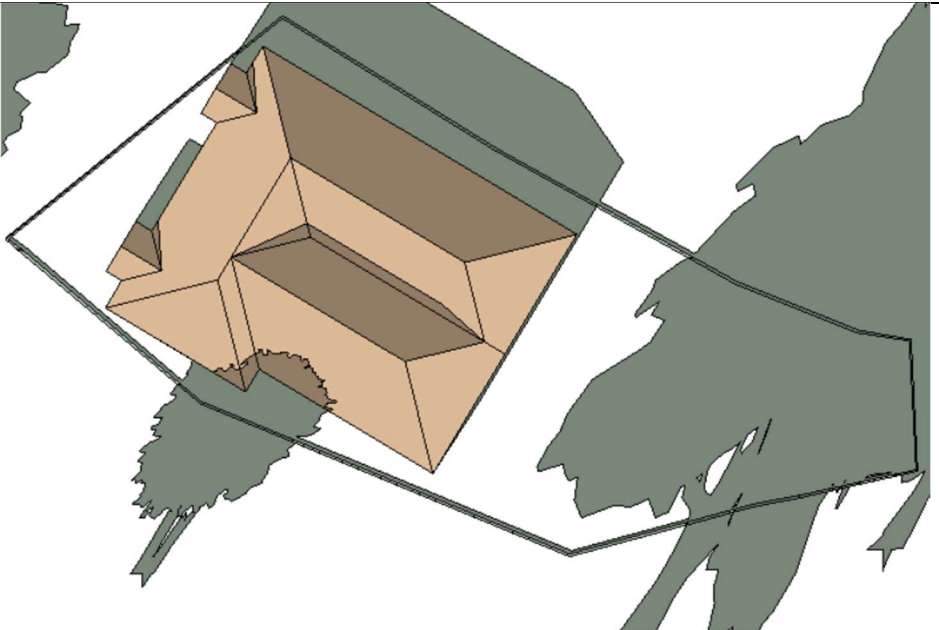
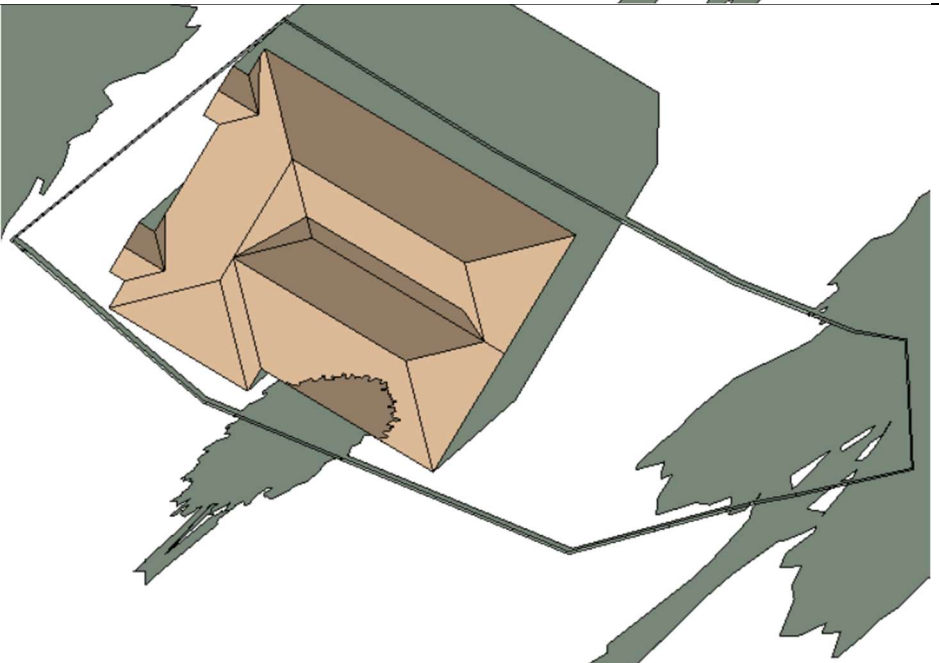
The table below presents the results from an overshadowing assessment on the 21st of March (Equinox) on the proposed development. The main amenity should receive 2 hours of direct daylight over 50% of the area.

Time	Pass	Proposed development shadowing images
0700	YES	

0800	YES	
0900	NO	

1000	NO	
1100	NO	

1200	NO	
1300	NO	

1400	NO	
1500	YES	

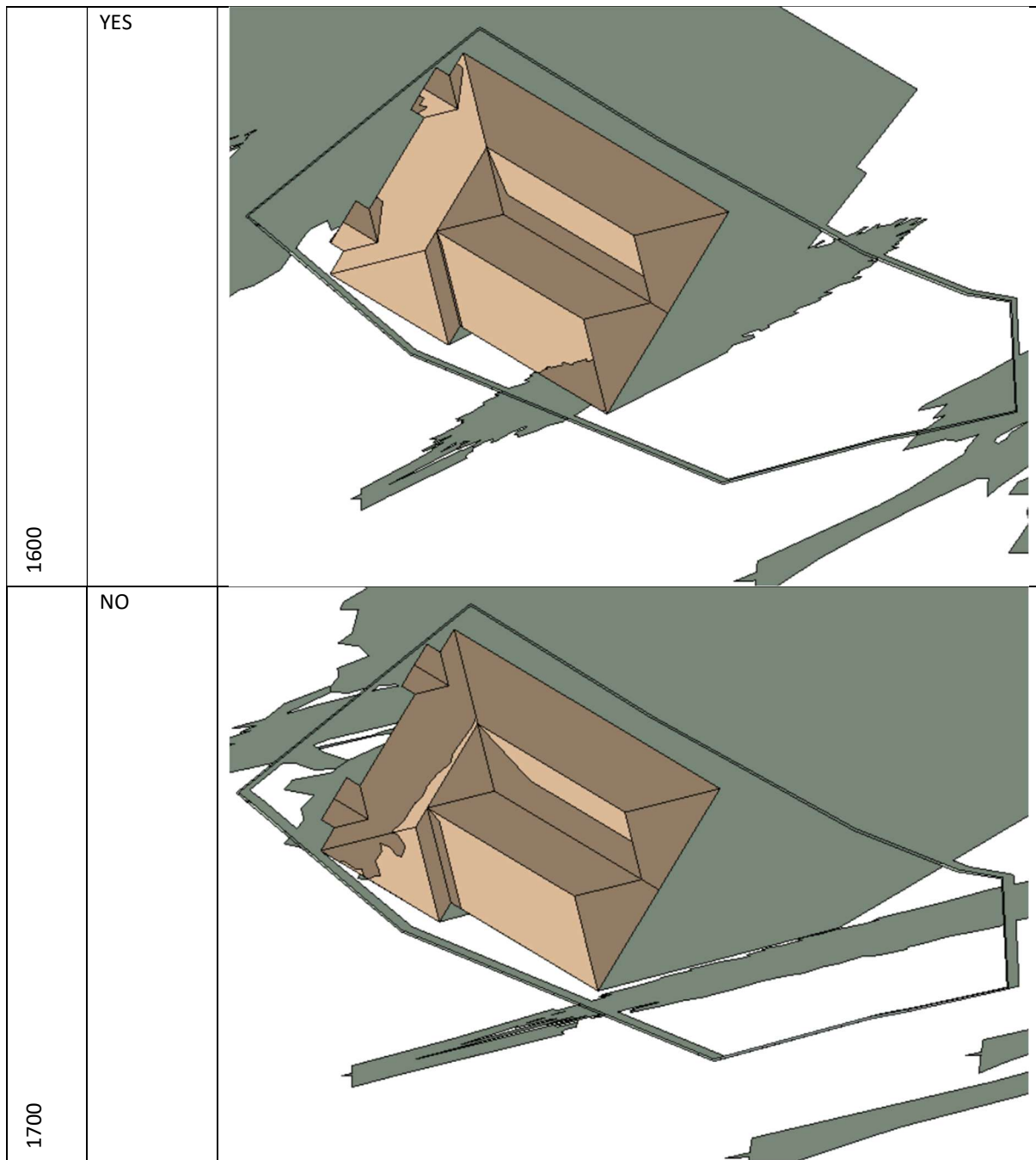


Figure 3 – Shadowing plots

CONCLUSION

The report demonstrates that the proposed development is anticipated to receive 4 hours of unobstructed sunlight to the main amenity on March 21st over 50% of the area, exceeding the recommendations of “BRE 209 2022 Site Layout and Planning for Daylight and Sunlight”.