

PLANNING SUBMISSION – SUNLIGHT STATEMENT

Date: 10th May 2012

Introduction:

The proposed Crown Court Student Residences Development comprises several high-rise buildings, which project to almost 30 metres above ground level at their highest point. Some of the proposed new buildings stand higher than the surrounding buildings, therefore overshadowing from the residences needs to be reviewed.

To identify the extent of overshadowing that the new residences may present to neighbouring properties we have undertaken a sun-path analysis of the buildings in the summer, winter and spring / autumn conditions. This is achieved using IES VE software, a simulation tool used to assist in building design. For this study, the Sun-cast module has been used, which simulates the sun as it travels across the sky and the shadows it would cast on the ground below.

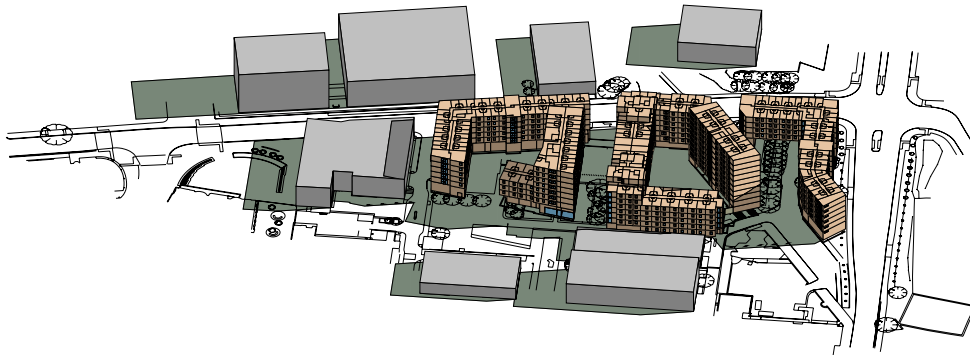
The simulation should be considered a worst case scenario as there is no account taken of the shadowing effects of other adjacent buildings which means that the impact of the new buildings will be less significant than the simulation suggests.

Results:

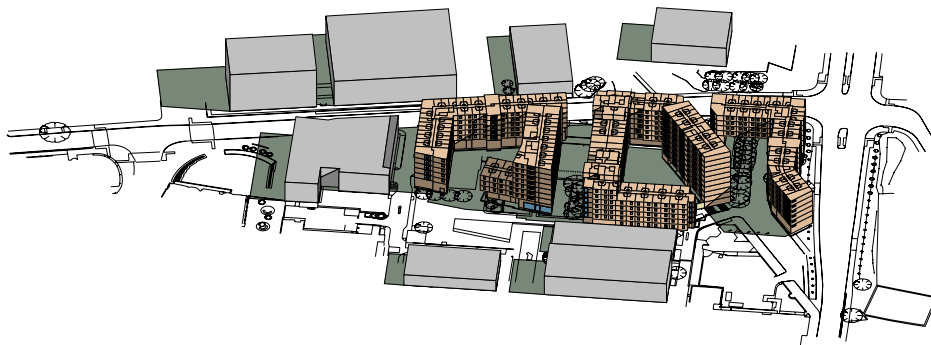
The following diagrams show the results of the sun-path analysis.

Summer (June 21st 0700hrs – 2000hrs):

0700hrs



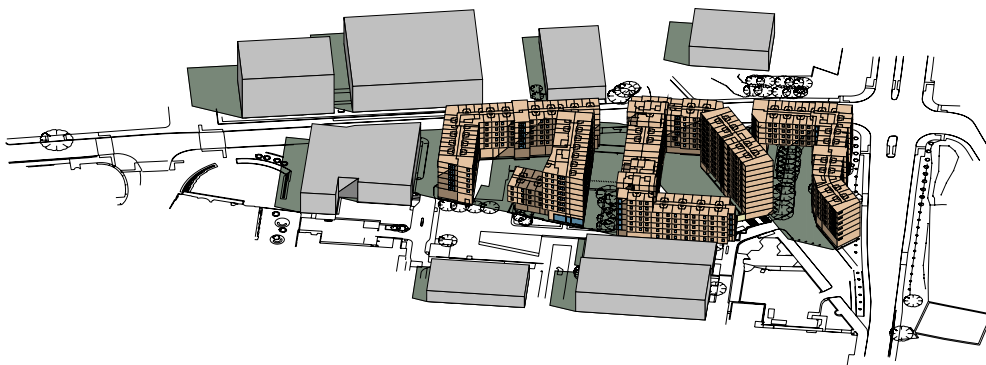
0800hrs



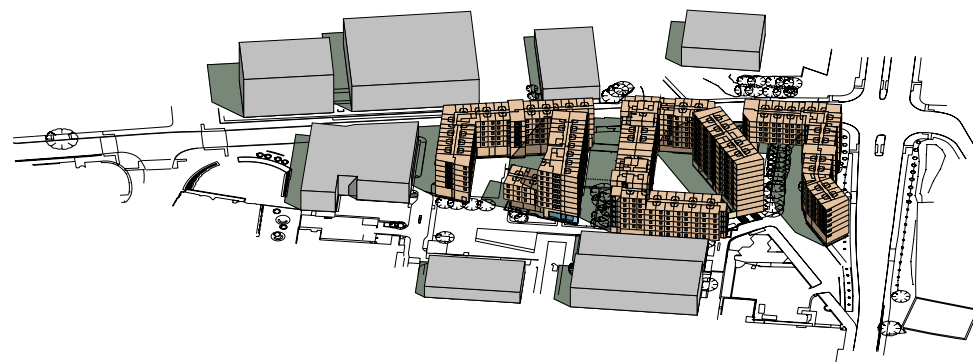
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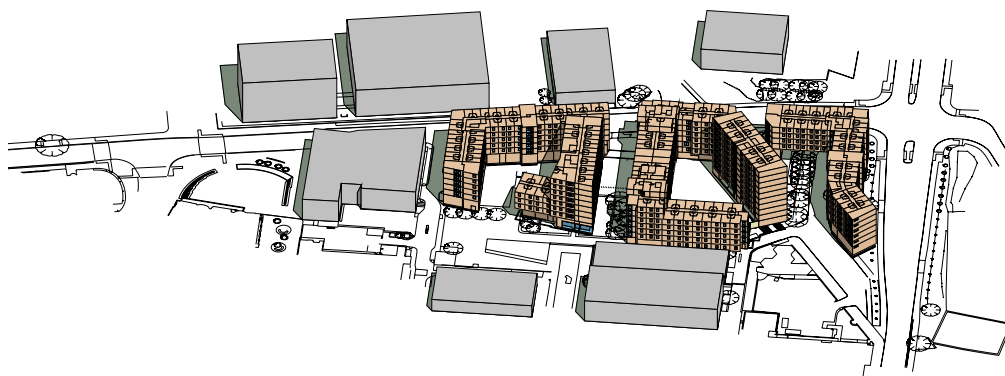
0900hrs



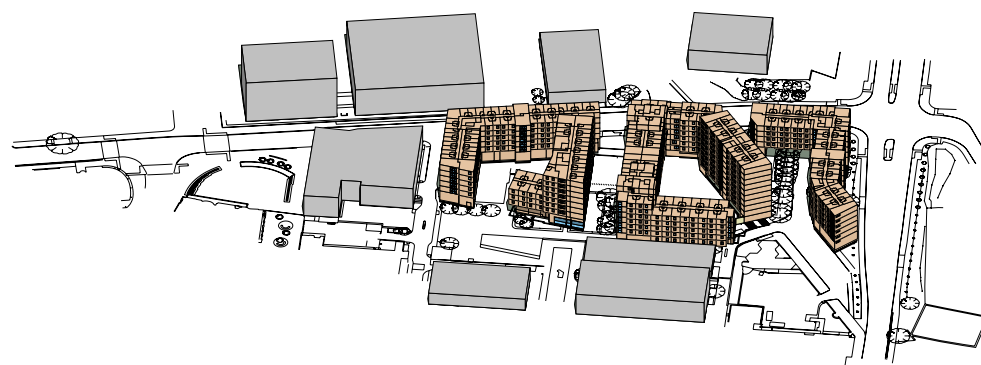
1000hrs



1100hrs



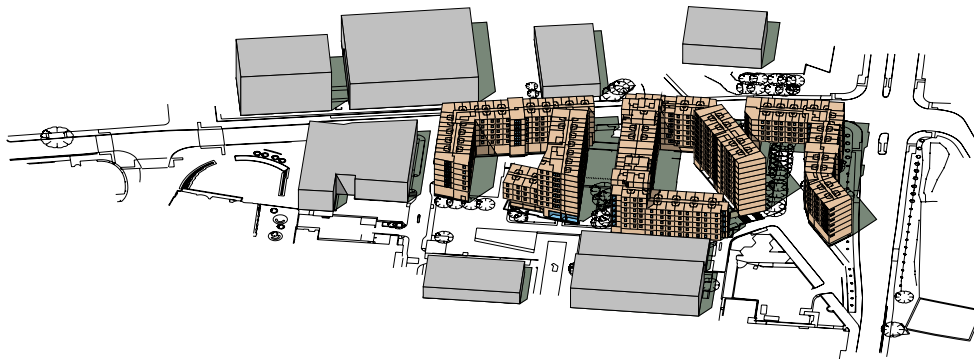
1200hrs



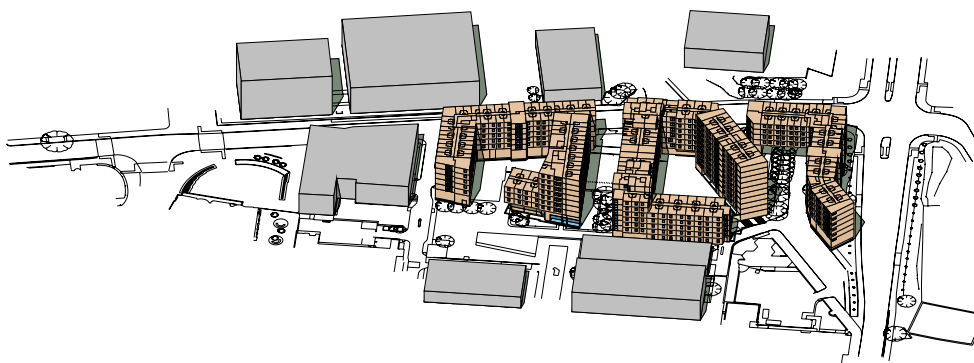
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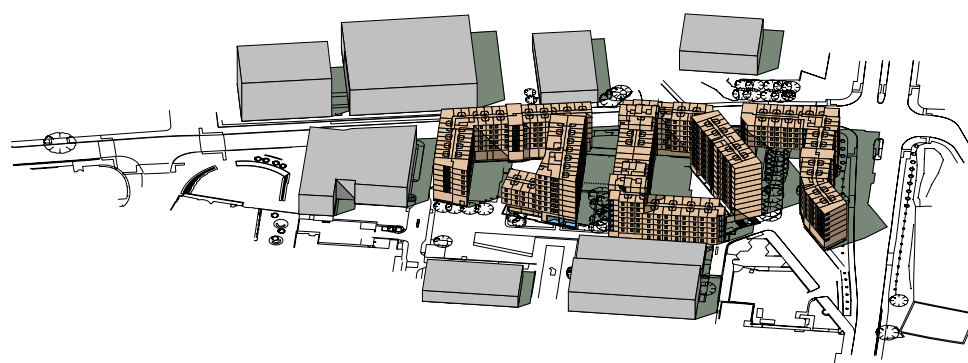
1300hrs



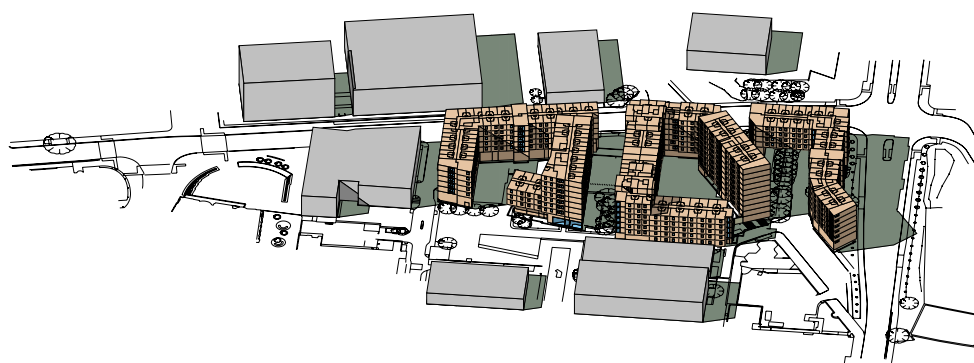
1400hrs



1500hrs



1600hrs



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1700hrs



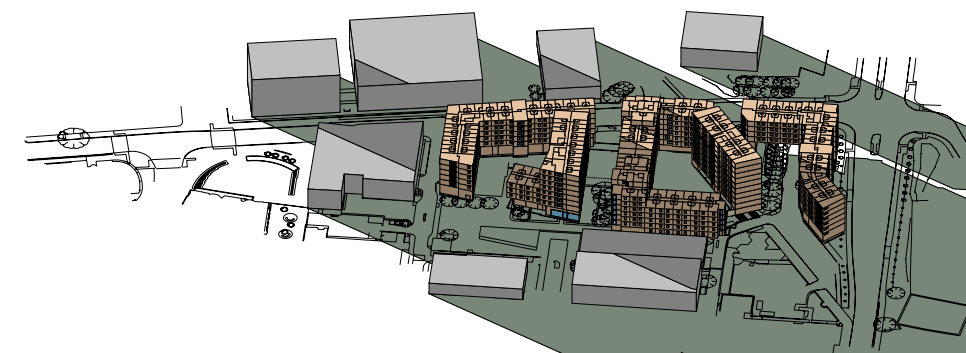
1800hrs



1900hrs



2000hrs

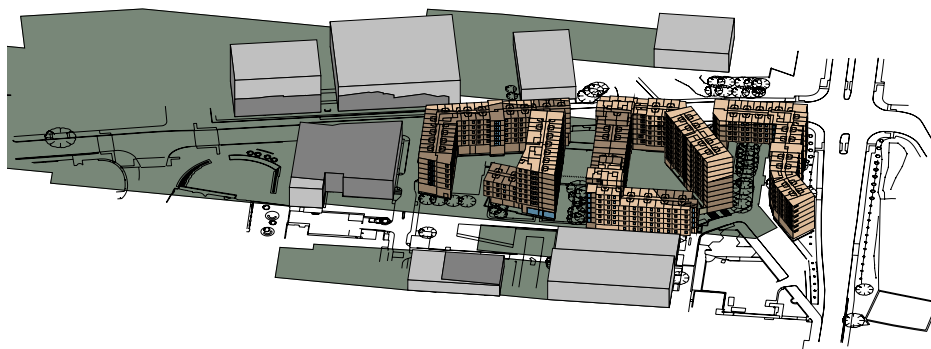


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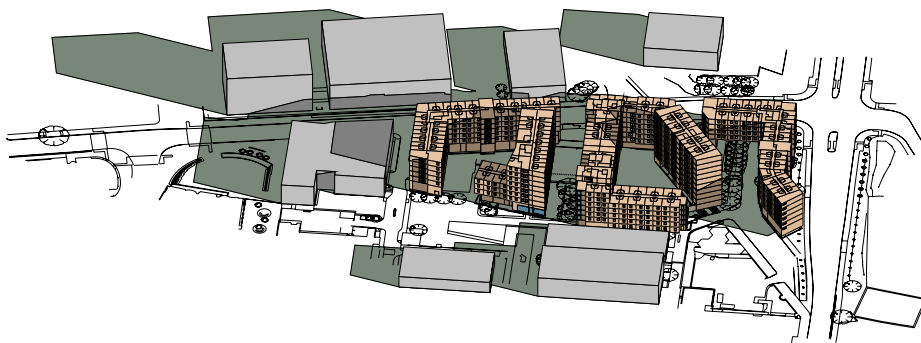
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Autumn / Spring (March 21st 0700hrs – 1800hrs):

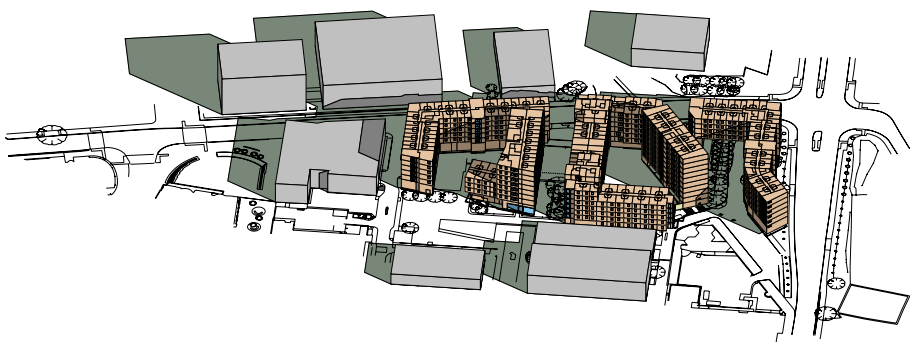
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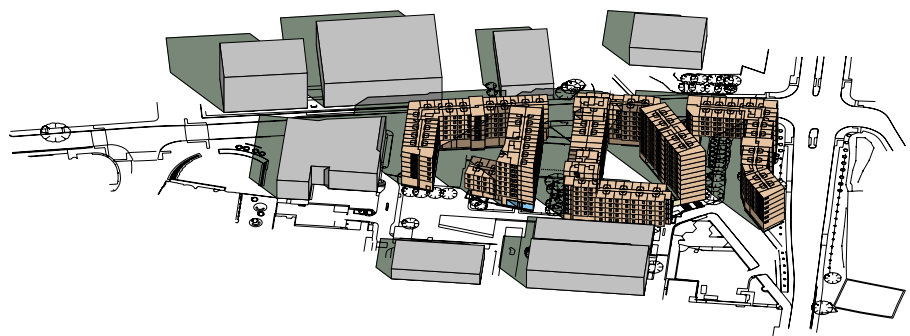
0800hrs



0900hrs



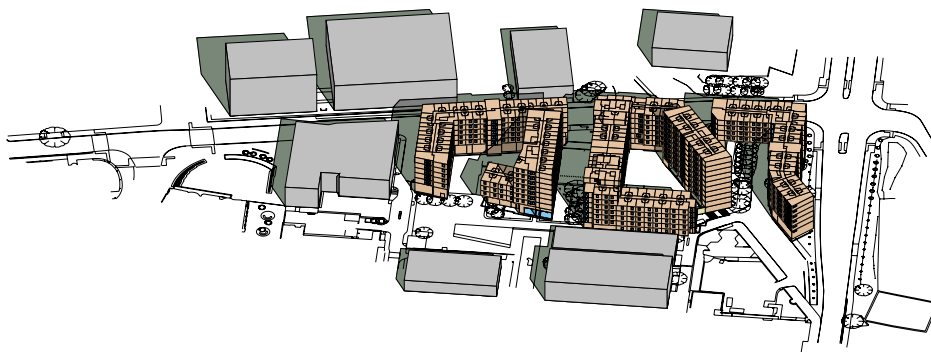
1000hrs



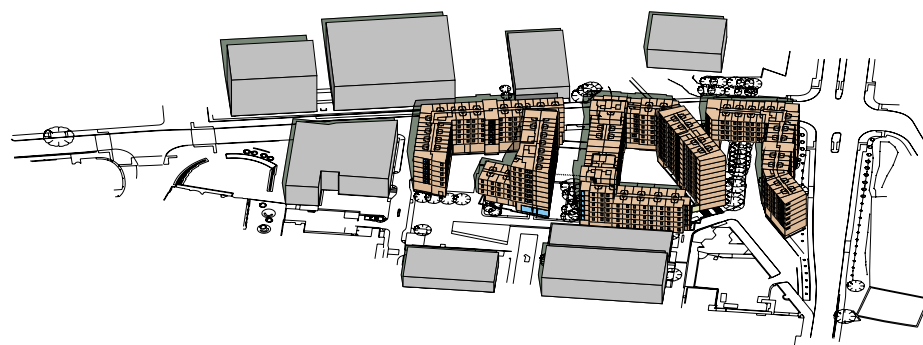
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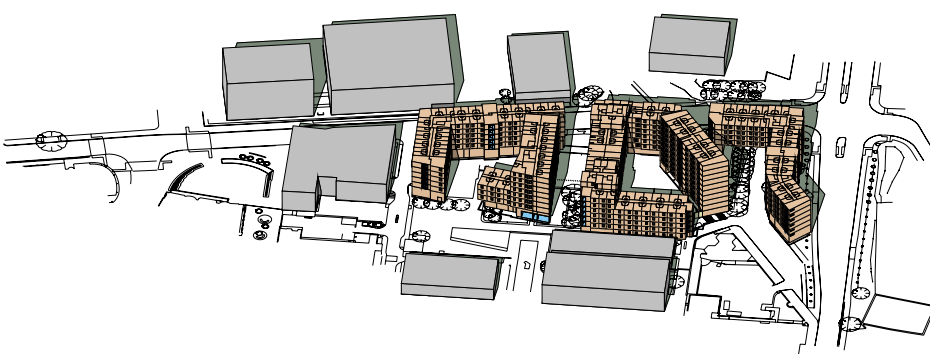
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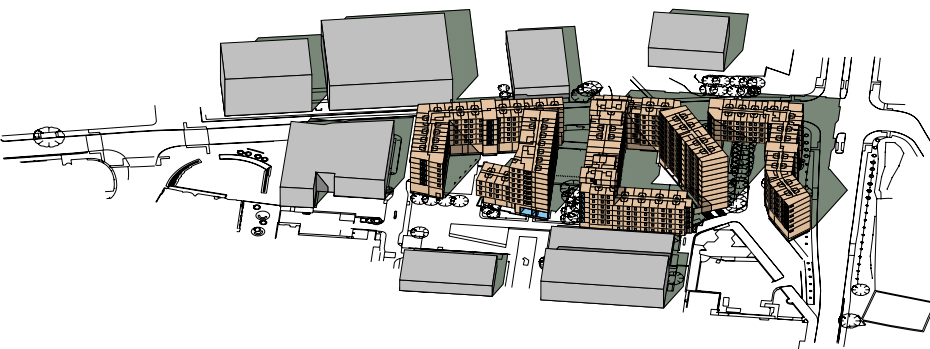
1200hrs



1300hrs



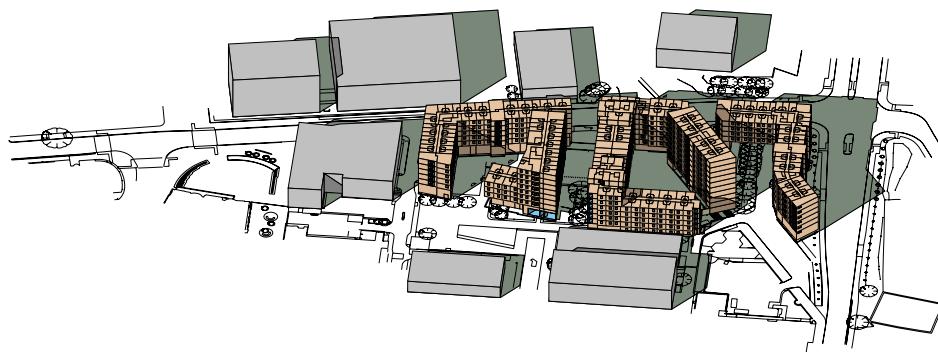
1400hrs



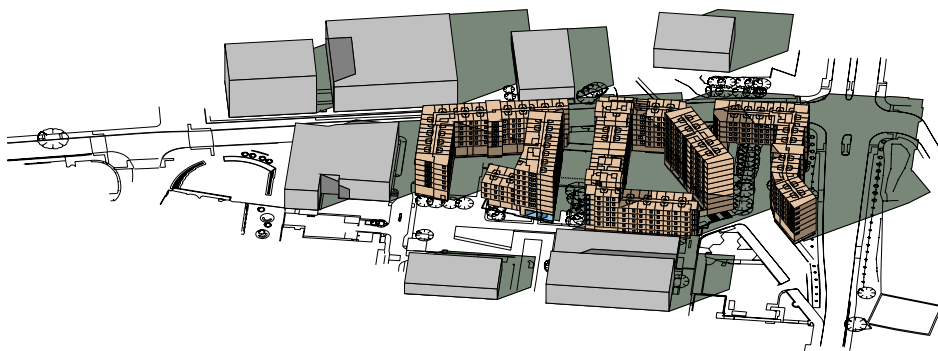
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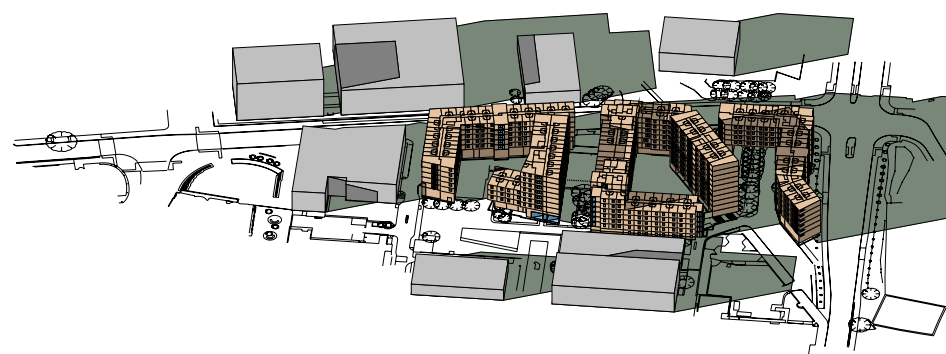
1500hrs



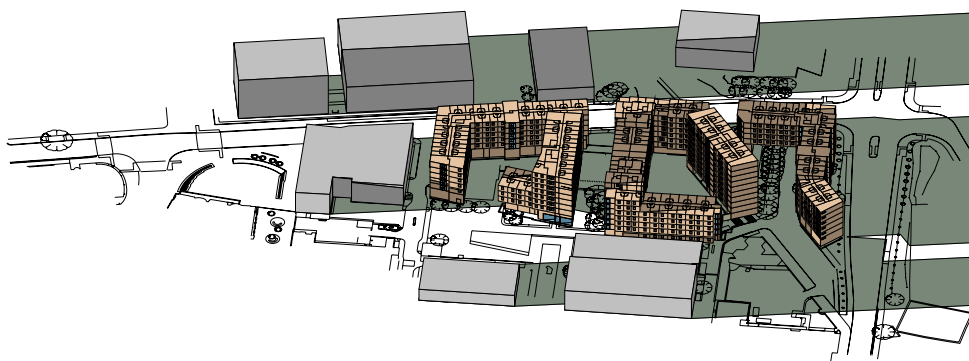
1600hrs



1700hrs



1800hrs

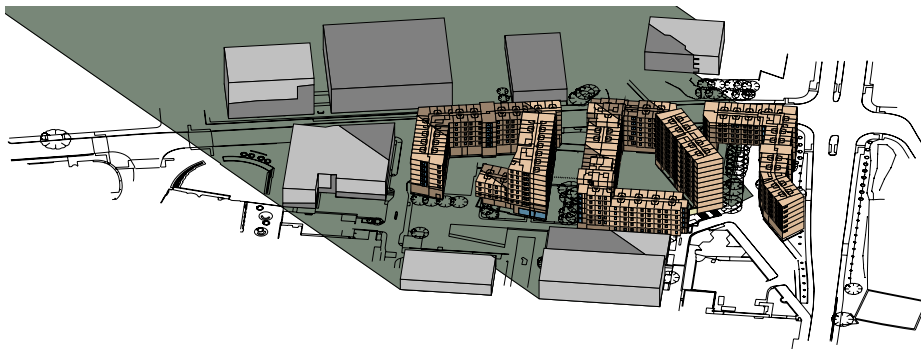


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Winter (December 21st 0900hrs – 1500hrs):

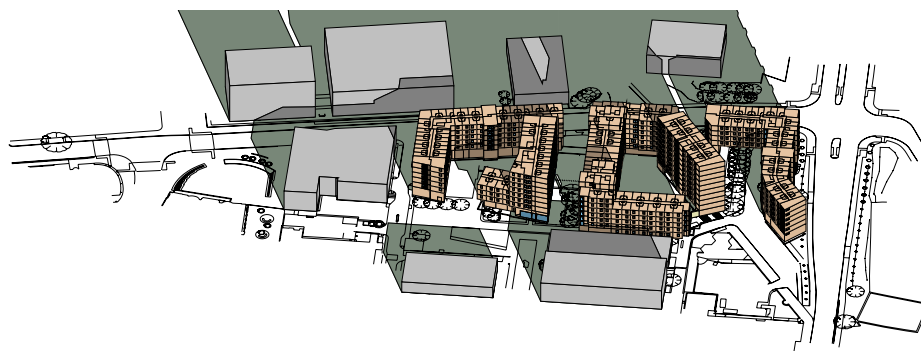
0900hrs



1000hrs



1100hrs



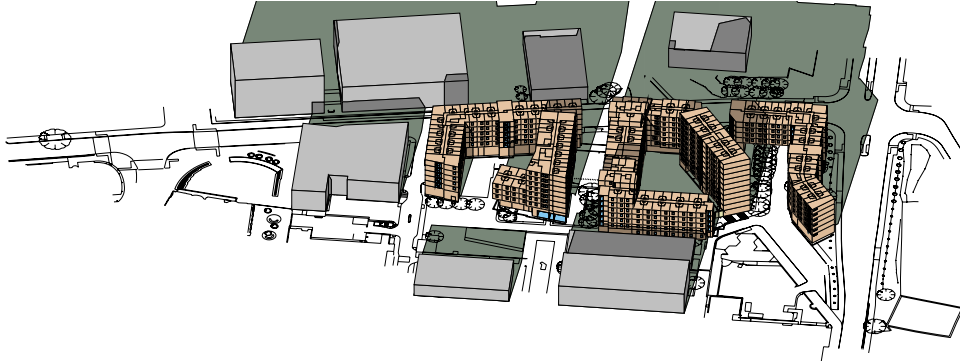
1200hrs



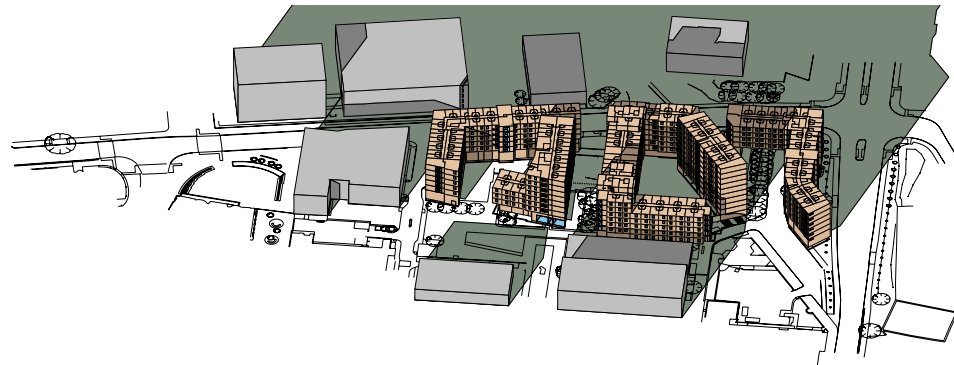
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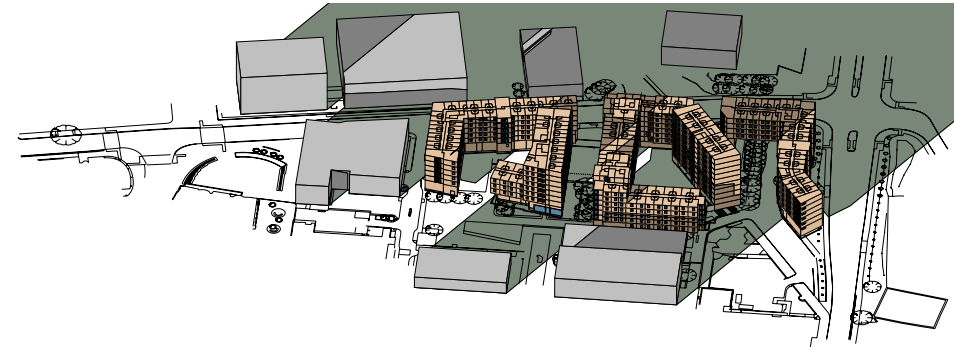
1300hrs



1400hrs



1500hrs



Conclusion:

The images show that in the **winter**, the sun's low altitude casts long shadows and buildings immediately to the north of the new development will spend most of the day in the shade.

In **spring and autumn**, the buildings in the surrounding area are generally not overshadowed for much of the day, except when the sun is low in the sky as it rises and sets.

During the **summer** months, the sun is high in the sky almost all day with the buildings in the surrounding area only affected very early in the morning and very late in the evening.