

Proposed Office Development
Queens Road
Peckham

Overshadowing Analysis Report

Rev B

For

Wernick Buildings
8th January 2018

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Low Carbon Consultants have the expertise and necessary qualifications to offer advice in a professional capacity on matters relating to Part L of the Building Regulations and sustainability within the construction sector.

This document contains the following information:

- Overshadowing Analysis Report

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Introduction

Melin Consultants are appointed by Wernick Buildings to determine how the construction of the proposed office development at Queens Road, Peckham would impact on the overshadowing to the properties surrounding the proposed development. The assessment has been carried out using IES 2017 dynamic simulation software.

Executive Summary

The proposed development causes some overshadowing to the gardens of Kings Grove in the morning, although the amount of overshadowing caused is within the guidelines of the British Research Establishment (BRE) document 'Site Layout Planning for Daylight and Sunlight: A guide to good practice (2011)'. In addition, the only façade that is overshadowed is the southern façade of 126a Asylum Road, it has been assumed that this façade does not contain any windows, therefore, the proposed development does not overshadow any windows.

Based on this the proposed development complies with the guidelines of the BRE document.

Assessment Criteria

Overshadowing of Facades

For the purposes of this report the British Research Establishment (BRE) document 'Site Layout Planning for Daylight and Sunlight: A guide to good practice (2011)' has been used as for guidelines. For the overshadowing of the existing windows a measure of the Annual Probable Sunlight Hours has been used to check the impact on the new development on neighbouring properties. The guide states that the test should be applied to all main living rooms and conservatories which have a window which faces within 90 degrees of due south.

The guide states that kitchens and bathrooms are less important, although care should be taken not to block too much sunlight. For the purposes of this report we have taken the following as an indicator of a window being adversely affected:

- if the centre of the window receives less than 0.8 times its former sunlight hours

Overshadowing of Gardens

For the rear garden area, the following guidelines have been used, which have been provided by the British Research Establishment (BRE) document 'Site Layout Planning for Daylight and Sunlight: A guide to good practice (2011)', this document states that the availability of sunlight should be checked for all open spaces where sunlight is required. This would normally include:

- Gardens (main back garden of a house)
- Parks and playing fields
- Children's playground
- Outdoor swimming 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

The guidance recommends that at least 50% of the area of each amenity space should receive at least two hours of sunlight on 21st March.

Summary of Results

Overshadowing of Facades:

As outlined in Appendix 1 and 2 below, the proposed building would provide some overshadowing to the South elevation of 126a Asylum Road, however, it has been assumed that there are no windows on this façade of the building. The assessment also concludes that there will be no other shading any other facades, therefore, it can be concluded that no windows are overshadowed by the development.

Overshadowing of Gardens:

As outlined in the BRE document mentioned above 21st March (spring equinox) has been used. The site has been modelled prior to the development and post development, the analysis has been checked hourly from 9am to 4pm to provide a representation of the likely overshadowing that would occur on this date prior to the development and post development. The results of this analysis can be found in Appendix 1 and 2.

Prior to the development, the existing structures provide some slight overshadowing to the gardens of the houses along Kings Grove between the hours of 9am and 10am. Prior to development 50% of the gardens achieve more than 2 hours of sunlight on the 21st March.

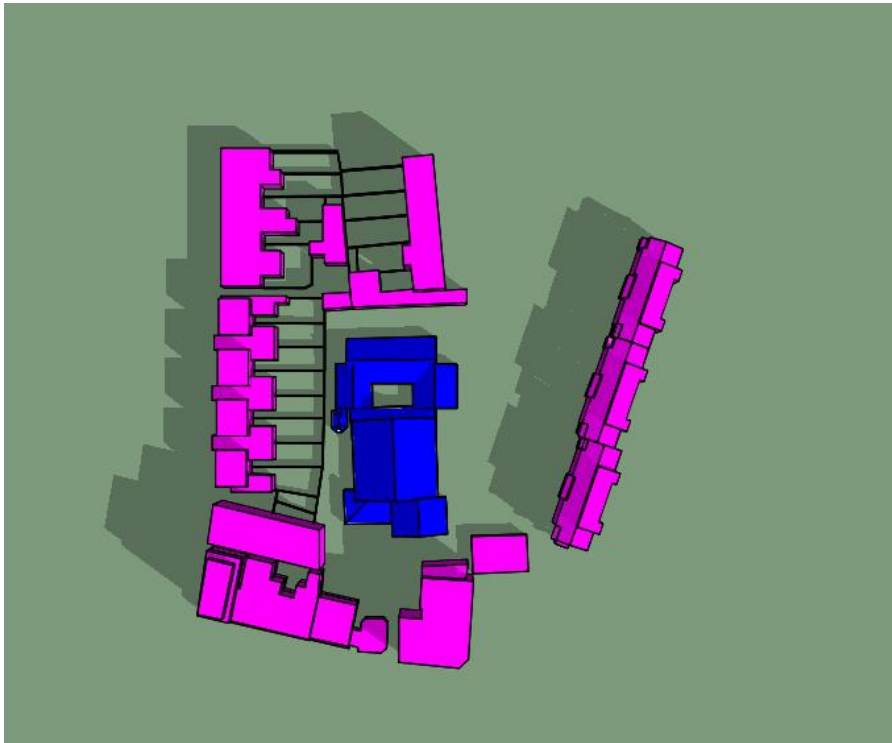
Post development the proposed building does produce more overshadowing to the gardens of the houses along Kings Grove between the hours of 9am and 10am. Between 10am and 1pm the proposed development does not overshadow the gardens and the majority of the gardens receive full sunlight. After 1pm the dwellings along Kings Grove start to cast shadows on the gardens until they are fully overshadowed by 4pm.

Conclusion

Although the proposed development causes some overshadowing of the gardens of the dwellings on Kings Grove, the amount of overshadowing caused is within the guidelines of the British Research Establishment (BRE) document 'Site Layout Planning for Daylight and Sunlight: A guide to good practice (2011)', as 50% of all of the gardens achieve at least 2 hours of sunlight on the 21st March. In addition, the overshadowing of the southern facade of 126a Asylum Road is within the guidelines, as it has been assumed that there are no windows on this facade. Based on this the proposed development complies with the guidelines of the BRE document.

Appendix 1 –Shading Results (Prior to Development)

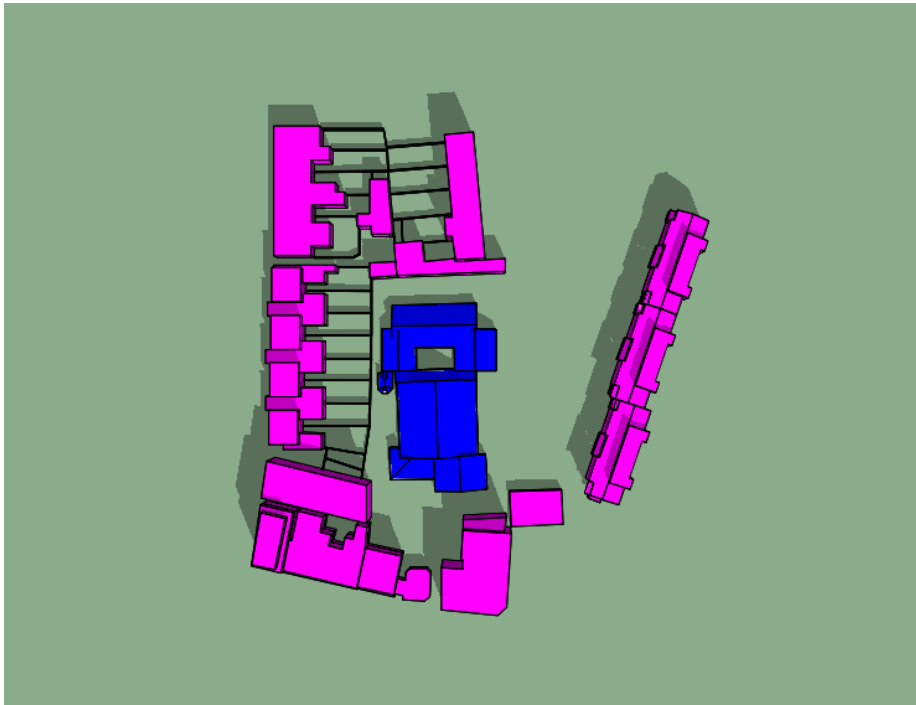
9am



10am



11am



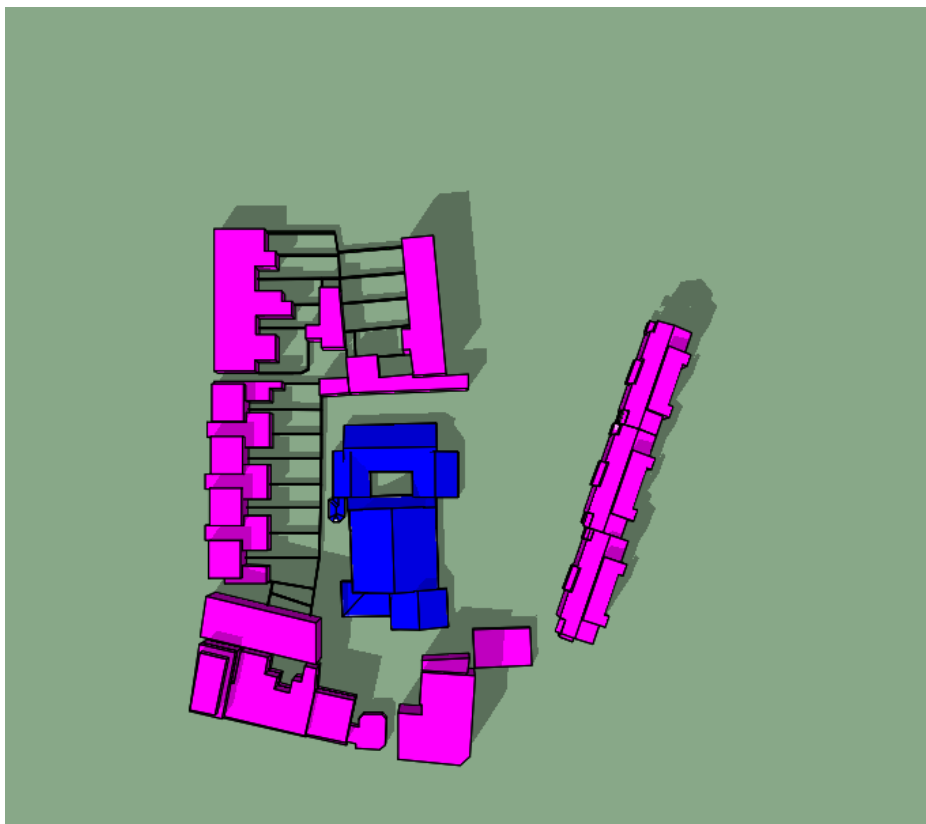
12pm



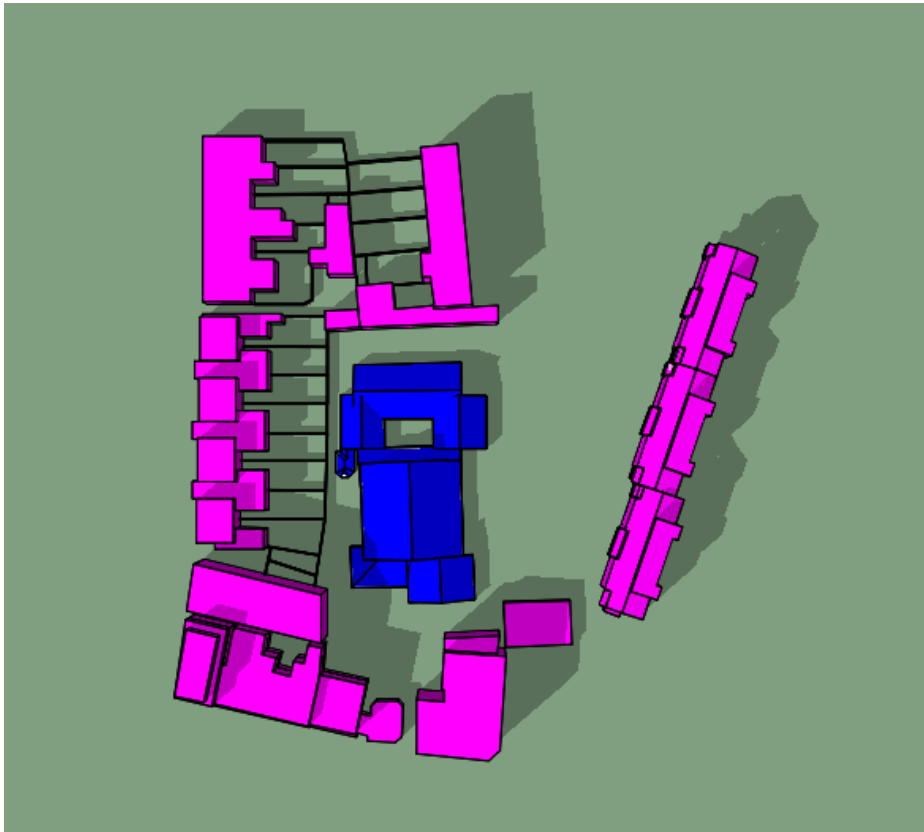
1pm



2pm



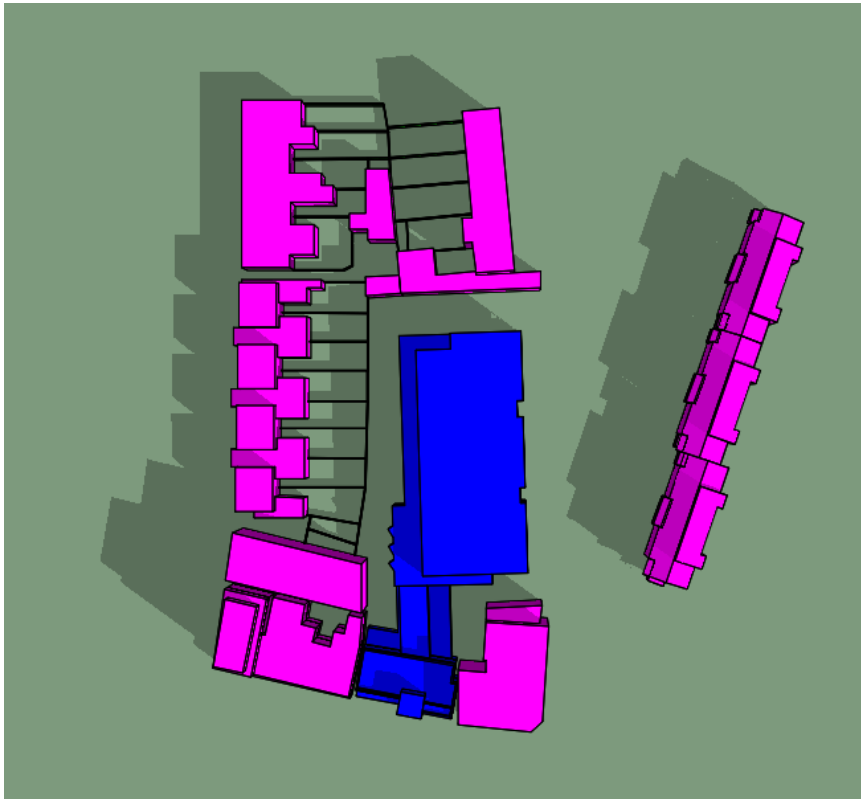
3pm



4pm



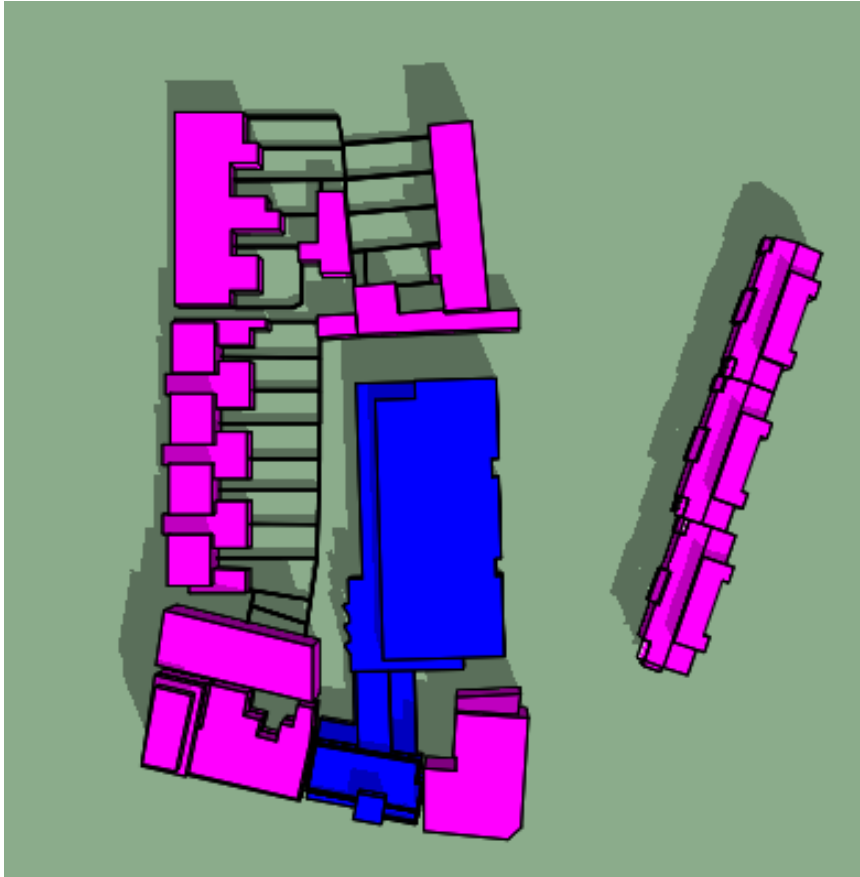
Appendix 2 – Shading Results (Post Development)
9.00am



10am



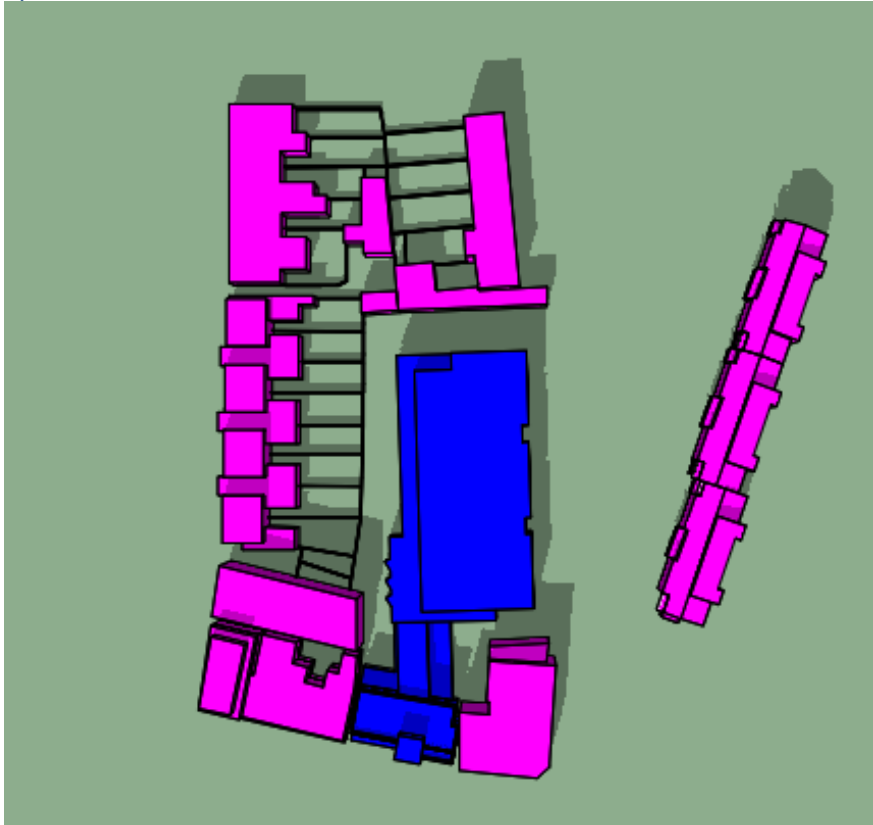
11am



12pm



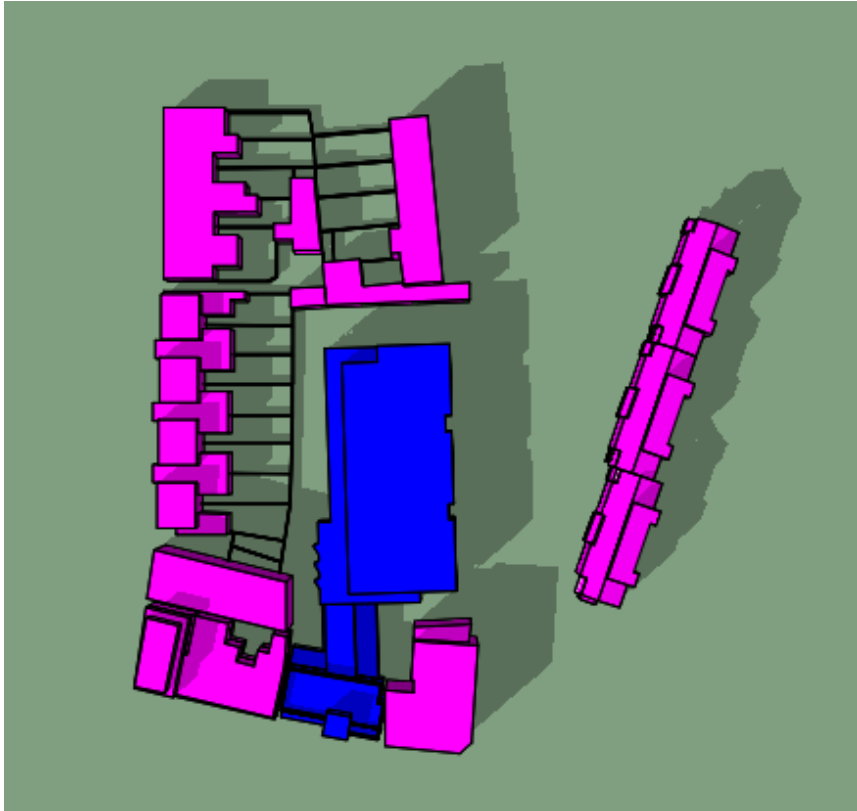
1pm



2pm



3pm



4pm

