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BARTON WILLMORE
bartonwillmore.co.uk
7 Soho Square
London
W1D 3QB
T/ 0207 446 6888

BY POST AND EMAIL

Development Control
Royal Borough of Kingston upon Thames
Guildhall 2
Kingston upon Thames
KT1 1EU

8th April 2021
26902/A5/GM

CAMBRIDGE ROAD ESTATE
TOWNSCAPE AND VISUAL STATEMENT OF CONFORMITY

The purpose of this letter is to provide a Statement of Conformity concerning changes to the design of the scheme and the predicted effect these will have on the receptors identified in the Townscape and Visual Impact Assessment (TVIA). The contents of this letter are as follows:

- Summary of design changes;
- Changes to planning policy and guidance;
- Changes to the baseline conditions;
- The predicted townscape and visual effects that will arise, considering the changes to the scheme;
- Statement of conformity; and
- Two fully rendered verifiable views that demonstrate the changes.

Design

The main design changes, which are of relevance to the TVIA and its findings, are limited to Plot E and in relation to the corner balconies of the top floor, whereby the soffit is proposed to be removed and instead replaced with a brick-faced beam on the façade, with the inside face of the beam (along with the internal lining of the corner balconies) benefitting from an altered material that is of a lightened concrete appearance.

Planning policy and guidance

The notable change to planning policy and guidance since the TVIA was undertaken is the adoption of the London Plan, which was adopted in March 2021. However, the TVIA did consider the emerging planning policy context, including being cognisant of Policy D1 and Policy D9, which are of most relevance to townscape and visual matters.

As you will be aware, Kingston is identified as an Opportunity Area within London Plan, with the Cambridge Road Estate recognised as an area where there is significant scope for change. Policy recognises that Opportunity Areas are locations where tall buildings could have a role in contributing to the emerging character and vision for a place. Furthermore, the Strategic Development Brief identifies the Site as being a suitable location for tall buildings.

IEMA - EIA -
bsi. ISO 9001 Quality Management FS 29637
Registered in England Number: OC342692
Barton Willmore LLP
Registered Office:
The Blade
Abbey Square
Reading
RG1 3BE
F/ +44 (0)118 943 0001

Moreover, it is of note that the Greater London Authority (GLA) have reviewed the development proposals and consider that the scheme meets the policy tests regarding tall buildings (Policy D9) in the London Plan.

Baseline conditions

There are no known substantive changes to the baseline conditions of the Site or its surroundings.

Townscape effects

In townscape character terms, the alternations to the design will affect a relatively small proportion of the buildings and this will manifest as a relatively subtle change to one element of townscape character. There will be no change to the footprints, scale, mass and height of the buildings. The buildings will continue to form part of a cluster of taller buildings, improving the legibility of the area.

The improvements to the public realm will continue to be beneficial and result in a coherent landscape structure and strong sense of place that revitalises the area, while adding additional interest in the townscape, urban greening and improved accessibility. For these reasons, the overall significance of effect on the character of TCA 7-6 'Kingston Road including the Cambridge Road Estate' remains Minor Beneficial and the changes proposed have no material effect on the conclusions of the TVIA.

Visual effects

To facilitate a greater understanding of the appearance of the design changes, two fully rendered verifiable views have been prepared/amended, from Viewpoint 16 (view north from Piper Road) and Viewpoint 29 (view north from King's Cemetery) respectively. In relation to Viewpoint 16, the south-western corner of the setback within Plot E will be of a noticeably 'less heavy' appearance, with the removal of the soffit and altered materiality/colouration of the internal lining giving rise to a perceived 'airy' corner that appears more flood with light and in turn slightly diminishing the perceived visual bulk of the built form. However, the footprint, scale and height of the building will remain as previously and on balance the Minor Beneficial significance of effect reported will remain unaltered. Concerning Viewpoint 29, the lighter appearance of the corner balconies will be less immediately apparent as much of Plot E will be screened from view by the intervening forms associated with the outline Phase 5, with the reported significance of effect again remaining unaltered.

Statement of conformity

In conclusion and having regard to the baseline townscape context and planning policy framework, the Proposed Development is considered to respond positively to its local area and will overall have beneficial effects on the existing and future townscape character and visual amenity, with the overarching findings and significance of effects remaining as previously reported in the TVIA.

Yours sincerely

GREG MAHON CMLI PIEMA

Associate

[Enclosed: Photomontage methodology and supporting evidence, April 2021]

Cambridge Road Estate, Kingston

Photomontage methodology and supporting evidence

April 2021

Contents

1.0 Overview

This document has been prepared by Realm Communications to explain the methodology used to create accurate visual representations (AVRs) of the proposed development known as Cambridge Road Estate, Kingston. The visual assessment of the proposed development reflects current best practice in relation to the verification of images, a process which is constantly being refined and improved with advances in technology and industry experience.

The purpose of the photomontages is to present an accurate overview of the proposed development which enables its effect on the landscape and views to be objectively evaluated. Every image contained within this document is verified unless otherwise stated. Final images should not be used as a standalone tool to assess the suitability of a development, but should be used in conjunction with a site visit.

This audit trail demonstrates the key stages of production (that can, if required, be checked by a third party) including photography, surveying, 3D modelling and camera matching processes - all critical to ensuring the accuracy of the final photomontages. These methodologies are in accordance with current best practice and follow recommendations from The Landscape Institute's Technical Guidance Note (TGN 06/19) : Visual Representation of Development Proposals. The entities responsible for the preparation of the views set out in the following pages comprise:

Selection of Viewpoints & Commissioning Practice
Countryside Properties (UK) Ltd
Aurora House
71-75 Uxbridge
Ealing
London
W5 5SL

Barton Willmore
7 Soho Square
London
W1D 3QB
Phone: 0207 446 6888

Photography
Arcminute Ltd
25b Pall Mall Deposit
124-128 Barlby Road
Ladbroke Grove
London W10 6BL
Phone: 07774 857 627

Survey of existing views and camera locations
Datum Survey Services
Brickfield Business Centre, Brickfield House
High Road, Thornwood, Epping CM16 6TH
Phone: 07977 111 935

Production and checking of verified images
Realm Communications
The Workshop
Old Barn Cottage
Down Lane
Compton, Guildford GU3 1DQ
Phone: 01483 813 888

Supply of 3D building model, spot height and landscape information
Patel Taylor
48 Rawstorne St
London
EC1V 7ND
Phone: 0207 278 2323

2.0 Methodology

2.1 Photography

The professional architectural photographer employed on this project was briefed by Realm to work to a methodology which conforms to the principles specified in section 1.0 Overview.

The following methodology statement has been supplied by Arcminute:

Photography brief The following methodology applies to the production of photographic images originated in March 2020 which form the pictorial basis for visual impact assessment photomontages for 2 views for the site known as Cambridge Road Estate, Kingston.

Overview The Arcminute system is designed to create geometrically accurate photography and verifiable data for all its associated parameters and is fully compliant with all guidelines covering images required to be aligned with survey data for use in planning applications.

Equipment Images are captured on a 36mm x 24mm 36 megapixel digital sensor in combination with the following lenses: 17mm, 24mm, 35mm, 52mm and 80mm with shift capability (specially selected for best in class resolution and customised to conform to the high precision focal length and optical axis settings required in the process). Re camera mounts, custom made designs for both single frame and panoramic capture are used to obtain high precision camera positioning and orientation tolerances.

Choice of lens We prefer to replicate (as far as possible) what may have already been provided in terms of preliminary view studies as typically these would have been generated using pre-considered factors as to what each view would need to illustrate e.g. context, key visual receptors etc. In the absence of a definitive steer, we will generally use a 74° HFOV lens for medium to close views in an urban environment and a 40° HFOV lens for long distance views. However, the actual size and nature of a scheme (single building or large multibuilding development) and its location will also be considered before lens selection. The Landscape Institute's latest guidelines have been relaxed with regard to lens choice and they are no longer insistent that a 'standard' lens be used wherever possible.

Photography The camera is set up at eye level (1.55-1.75m) and orientated to within 0.02 deg of pitch and roll to the horizon. The point on the camera that coincides with the origin of perspective is positioned in relation to a survey marker to within 2mm in XYZ. The scene is then captured in a RAW format using standard high quality architectural photographic practice.

For panoramic images the camera is setup in portrait orientation and rotated around the camera coordinate capturing sequential frames with a 50% overlap. Each frame has the same orientation tolerance as a single frame capture.

For every view, a photographic record is made of the tripod location, the survey mark and the height reading of the camera above it.

Post production Standard image processing for dealing with RAW files is undertaken to create a TIFF image that honestly represents the scene in terms of tonality and colour. This image is then processed to remove lens distortion and identify the XY position on the image of the optical axis. Using an image that is fully corrected for distortion enables all the survey points in the image to be used for alignment and not just those confined to the so-called central 'safe area'.

The following data is recorded on a text layer:

- Date and time
- Lens focal length (to nearest 0.005mm)
- Image size in pixels and mm
- Height above survey point (to nearest 0.001m)
- Lens shift (nominal figure to nearest mm)

The survey points are marked up on a separate layer by the survey team. This layer can be set in a blending mode so that the precise point on the image below the marked dot can be seen.

Issued files The following files were issued to Realm:

- A layered TIFF containing the image and all of the above data.
- A flattened JPEG showing the survey points for use in the alignment process
- A photo of the tripod setup
- Any other supporting evidence deemed relevant to the end user such as a KMZ file of camera locations and other supplementary photography.

2.2 Survey

All of the baseline photographs were taken by a professional architectural photographer. Each viewpoint location is surveyed and identified by Ordnance Survey co-ordinates. The heights and distances of significant points within each view that are easily distinguishable have also been recorded as Ordnance Survey grid and level datum and their accuracy has been checked

relative to the fixed camera position. The survey points for each view provide an effective check for ensuring that the 3D model and existing views are accurately merged together.

The following methodology statement has been supplied by Datum Survey Services:

Survey brief We were commissioned to survey and record co-ordinates (Eastings, Northings and AOD Height) of known points of detail located around the study site known as Cambridge Road Estate, Kingston. Digital files of the 2 views together with camera point locations were provided by the photographer.

Date of surveys March 2020.

Camera point positioning Network RTK solutions were established using a Leica GPS + GLONASS SmartRover receiver. The equipment was set-up directly over the camera position (survey nail) and multiple observations were recorded. A second (reference) point was taken approximately 100m away from the camera position using the same method.

Data capture Traditional survey techniques were employed to record the points of detail within each view. A Leica TCRA TS15 Total Station with long range reflector-less distance measurement capabilities was set-up directly over the camera point and orientated to Ordnance Survey National Grid using the two sets of co-ordinates determined by the SmartRover receiver.

Deliverables The completed survey data was issued as follows:

- Excel Spreadsheet comprising point numbers, coordinate data and descriptions
- PDF copies of each photo with point locations and view specific point numbers clearly marked
- AutoCAD DWG file containing 3D survey points with view specific point numbers.

2.3 3D building model

The massing and detailed 3D models were supplied by the architect. A manual crosscheck of heights was then carried out by Realm across all buildings, using AOD spot heights as supplied.

2.4 3D landscape

The landscape CAD was supplied by the architect along with the 3D models.

2.5 Camera matching

The verification process confirms the accuracy of the 3D model in relation to each view. The camera matching process involves accurately matching the position of the virtual camera with the real world camera in OS space, and the location of the 3D model of the proposed development within each (existing) view. This is achieved through aligning the imported 3D cloud of survey points within the base photo and 3D environment, creating a virtual camera that replicates the exact position and height of the real world camera to produce an image where the rendered survey points match in visual location those recorded by the survey team and photographer.

The specifications of the lens type relating to each existing view are also entered into 3DS Max to help guide with alignment. An alignment is deemed correct only when all survey points sit exactly over the pixel in the photo that corresponds with the marked-up survey photo. If all points match, the virtual camera must therefore be correctly aligned.

For each view we measure the distance from camera to target and apply respective equations to establish the potential adjustment necessary to compensate for both curvature of the earth and light refraction. Typically, when the real world camera is positioned within 1.5km from the target, the effects of curvature of the earth and light refraction are deemed to be negligible in terms of their visual impact and therefore no adjustment is made to the Z axis of the building model within the view.

2.6 Lighting and rendering

To accurately light the 3D model, 3DS Max's 'daylight system' is set to replicate the solar time, date and geographic location (longitude and latitude) as recorded in the base photograph. The settings used for each base photograph (F stop, shutter speed etc) are replicated in both this 'daylight system' and the virtual camera set-up. This process mimics the virtual sun so that the lighting falls upon the 3D model as it would in real life at the point when the photograph was captured. Fine tuning is sometimes necessary to better match the resultant lighting and shadows to the base photograph.

Once the camera matching and lighting processes are complete, the render of the 3D model is output to the same pixel resolution as per each respective base photograph.

2.7 Post production

Fully rendered views The render of the three-dimensional model was superimposed on the existing still views in Adobe Photoshop. The foreground of the existing views was then copied and placed over the rendered model in order to ensure that the depth is accurate within the photomontage view between the foreground, background and the rendered model. At this stage, for the fully rendered photomontages, the textured model can be further adjusted to match the resolution, colouring and saturation of the photograph taken to create a close impression of what the textures of the buildings and structures would look like. This is a qualitative exercise and requires interpretation by the designer on how the structure will look. A final qualitative check of all of the photomontage images has been carried out to ensure that they provide objectively accurate views of the proposed development.

Wireline views These photomontages show the outline of the maximum envelope of built form in accordance with development parameters as a red line for the building (a solid line where visible, a dotted line when obscured by foreground objects).

2.8 Recommended viewing distances

It is recommended that final images are viewed at an optimum viewing distance (in relation to the size of printed photomontage) to give a correct sense of scale. We recommend that images are printed to a size that creates a comfortable viewing distance of up to 525mm. The recommended viewing distance for each image is specified within Section 4.0 of this document.

2.9 Caveats

Please note that the Phase 1 landscape was modelled on a view-specific basis in accordance with the mark-ups supplied by the architect. Tree planting is based on heights of between four and five metres.

Key to cumulative schemes (phases):

3.0 Supporting evidence

Ordance survey co-ordinates			
View Ref	Eastings	Northings	AOD Height
16a	519056.045	168851.710	13.797
29	519178.651	168817.511	18.729

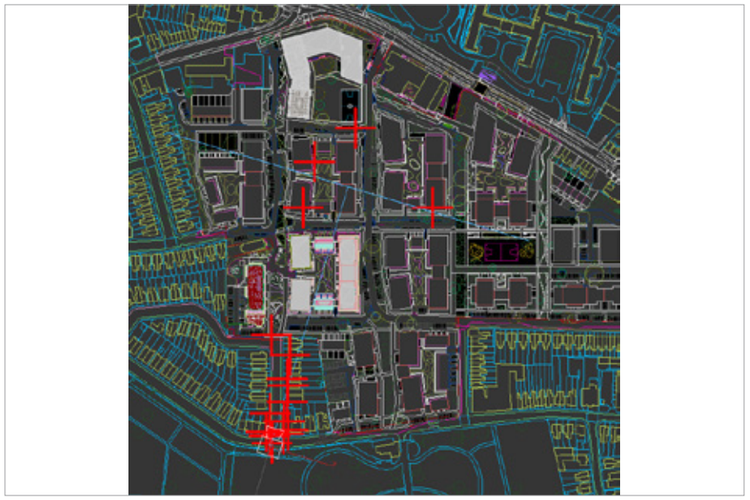
View 16a

3.1 Ordinance survey co-ordinates			
Point Ref	Eastings	Northings	AOD height
16A01	519057.631	168855.498	13.812
16A02	519055.540	168861.505	15.198
16A03	519052.651	168865.134	15.557
16A04	519056.143	168881.522	19.292
16A05	519057.223	168950.801	14.200
16A06	519131.300	169133.434	54.372
16A07	519085.204	169062.943	15.260
16A08	519095.158	169103.728	22.663
16A09	519073.758	168932.933	21.838
16A10	519071.194	168911.907	15.554
16A11	519072.040	168906.098	20.841
16A12	519071.464	168891.896	19.459
16A13	519199.774	169063.118	57.427
16A14	519071.592	168866.782	19.755
16A15	519068.019	168863.586	14.892
16A16	519068.407	168874.758	15.659

3.2 OS survey points marked on base photograph

3.3 View 16a camera location

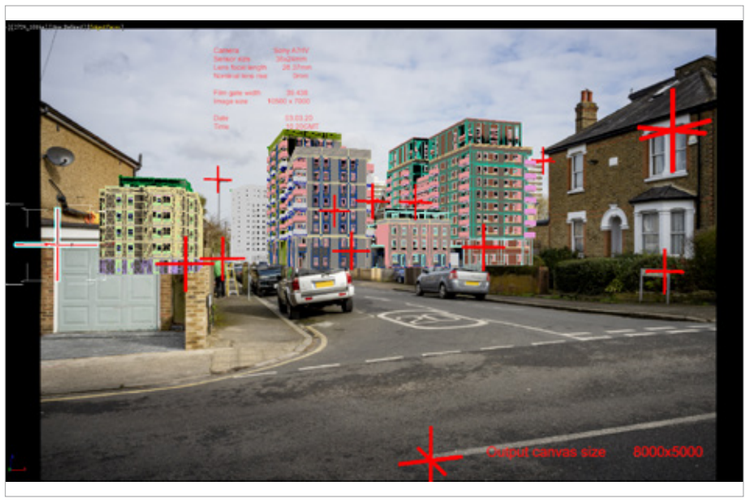
Eastings	519056.045m
Northings	168851.710m
AOD height	13.797m
Approx distance to centre of site	252m
Approx bearing from North	17°



3.4 Screen grab of camera location in 3DS Max software

3.5 Screen grab of calculated horizon line

3.6 Screen grab of camera matching to survey data



3.7 Screen grab of model matched to photograph

3.8 Final camera matched photomontage

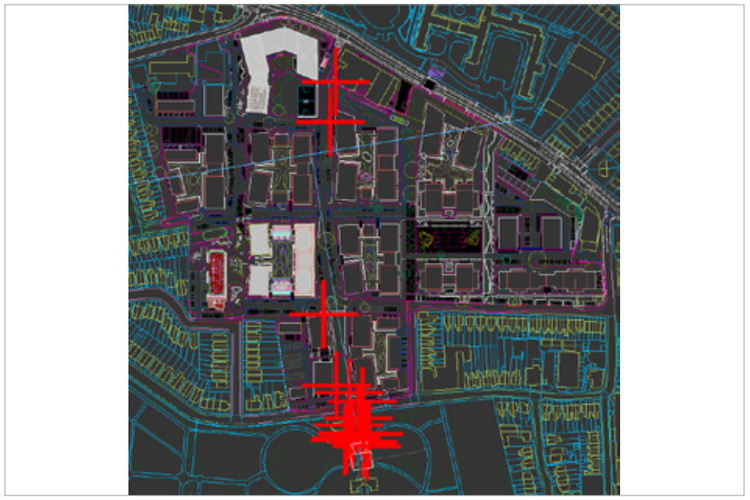
View 29

3.1 Ordinance survey co-ordinates			
Point Ref	Eastings	Northings	AOD height
2901	519164.398	168838.611	19.544
2902	519163.003	168836.563	19.844
2903	519166.132	168850.992	25.218
2904	519169.962	168843.377	19.873
2905	519142.784	168954.202	24.239
2906	519175.139	168857.379	20.660
2907	519179.817	168835.321	19.305
2908	519185.005	168842.834	19.640
2909	519183.249	168831.098	18.522
2910	519181.174	168842.740	19.947
2911	519154.151	169171.122	33.404
2912	519148.983	169133.689	53.179
2913	519166.973	168881.220	19.514
2914	519155.012	168888.017	21.986
2915	519179.331	168872.891	19.646

3.2 OS survey points marked on base photograph

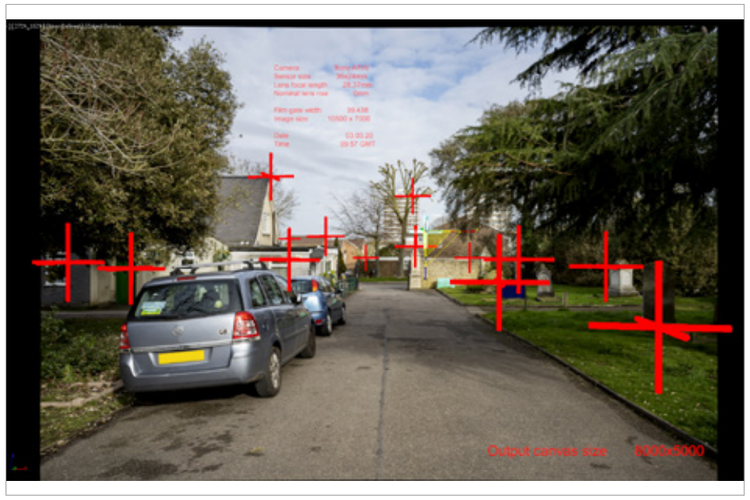
3.3 View 29 camera location

Eastings	519178.651m
Northings	168817.511m
AOD height	18.729m
Approx distance to centre of site	254m
Approx bearing from North	351°

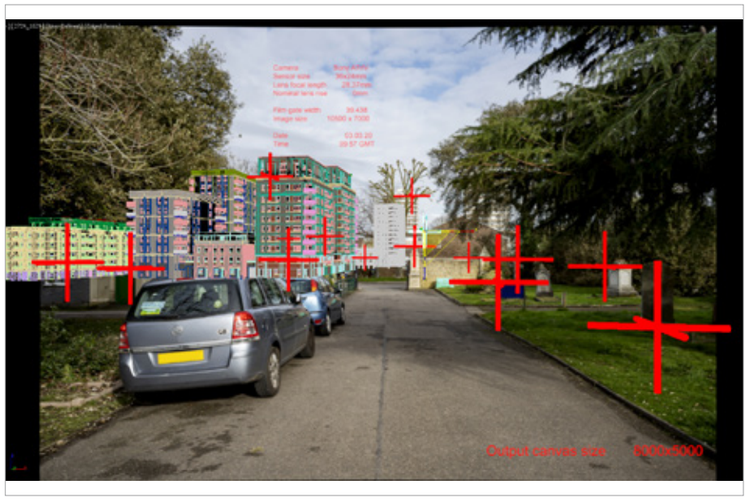


3.4 Screen grab of camera location in 3DS Max software

3.5 Screen grab of calculated horizon line



3.6 Screen grab of camera matching to survey data



3.7 Screen grab of model matched to photograph

3.8 Final camera matched photomontage

4.0 Final verified photomontages

View 16a existing

Single frame image | Focal length 28.37mm | Camera height above survey point 1610mm | Nominal lens rise 0mm | Date 01.03.20 | Time 10:20

View 16a proposed

To achieve the optimum viewing distance of up to 500mm, we recommend printing this image edge to edge on A2 landscape and viewing it on site from a distance of 470mm. Please refer to section 2.8 on page 4 of this document for further information.

View 29 existing

Single frame image | Focal length 28.37mm | Camera height above survey point 1585mm | Nominal lens rise 0mm | Date 03.03.20 | Time 09:57

View 29 proposed

To achieve the optimum viewing distance of up to 500mm, we recommend printing this image edge to edge on A2 landscape and viewing it on site from a distance of 470mm. Please refer to section 2.8 on page 4 of this document for further information.

Realm Communications

The Workshop, Old Barn Cottage, Down Lane
Compton, Guildford GU3 1DQ

t +44 (0)1483 813888

w wearerealm.co.uk