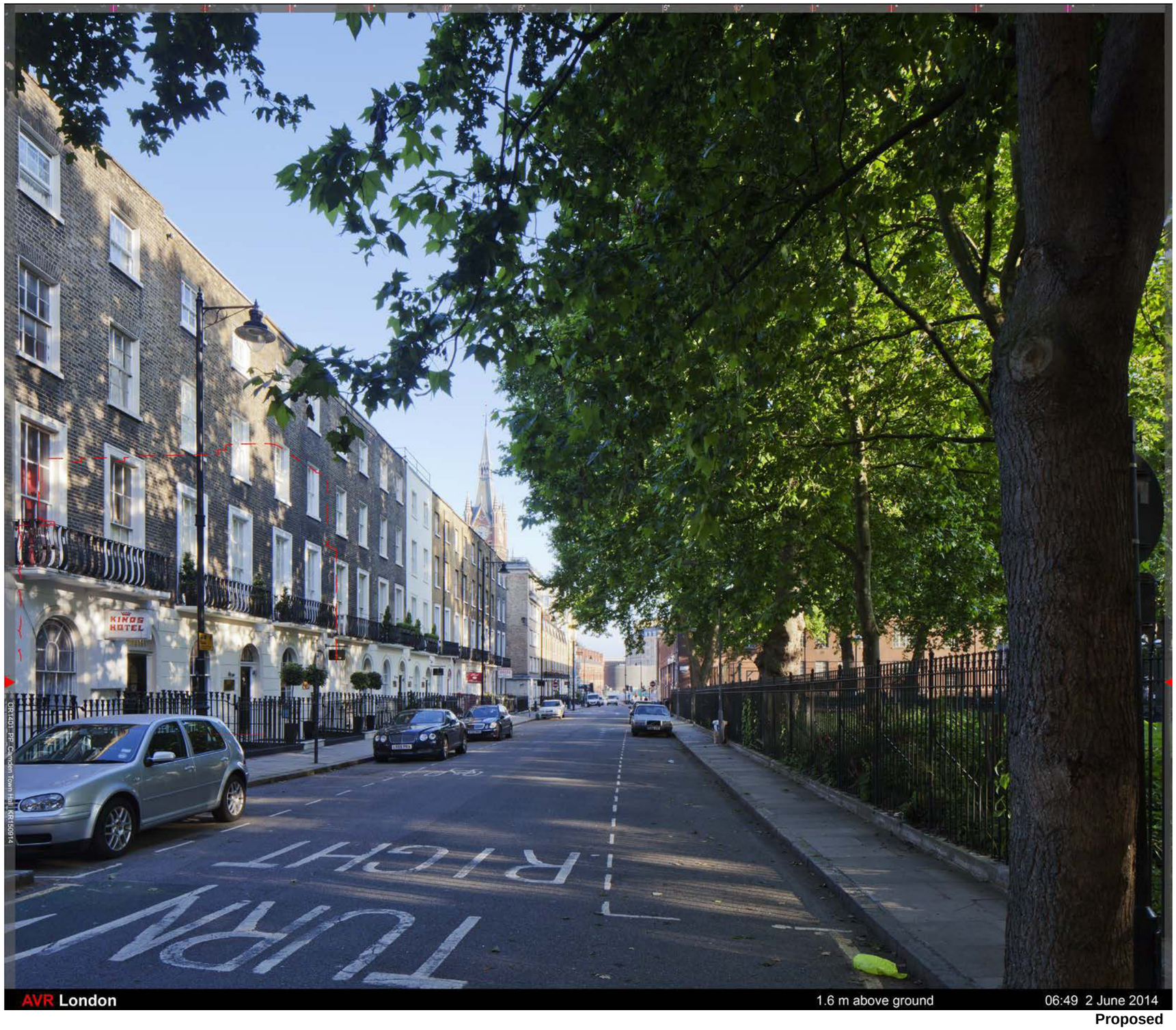

KINGS HOTEL
TURN RIGHT
AVR London
1.6 m above ground
06:49 2 June 2014

Proposed

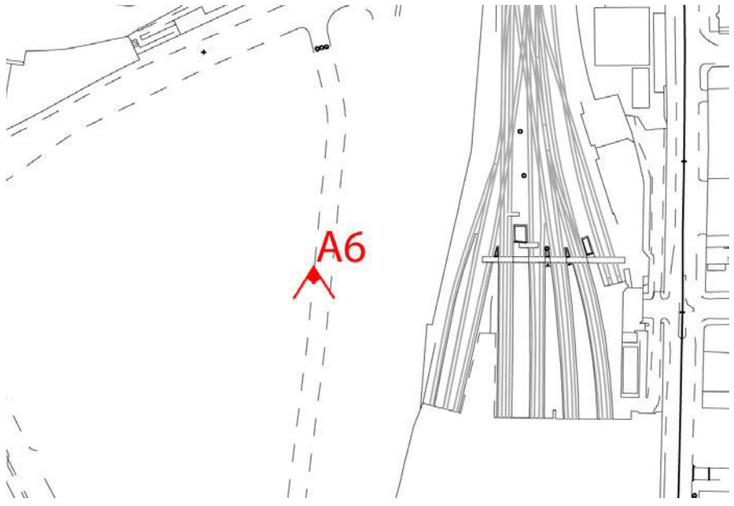
View A5 Euston Road, N pavement, junction with Churchway

Existing

Proposed

View A6 Kings Boulevard

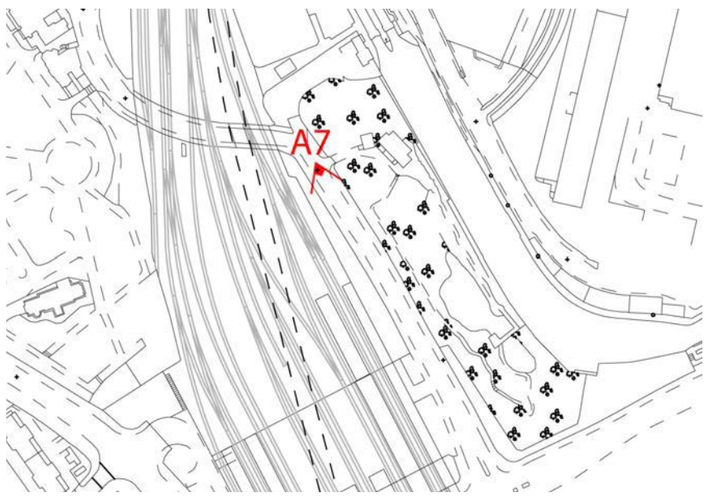
Existing



Proposed

View A7 Camley Street

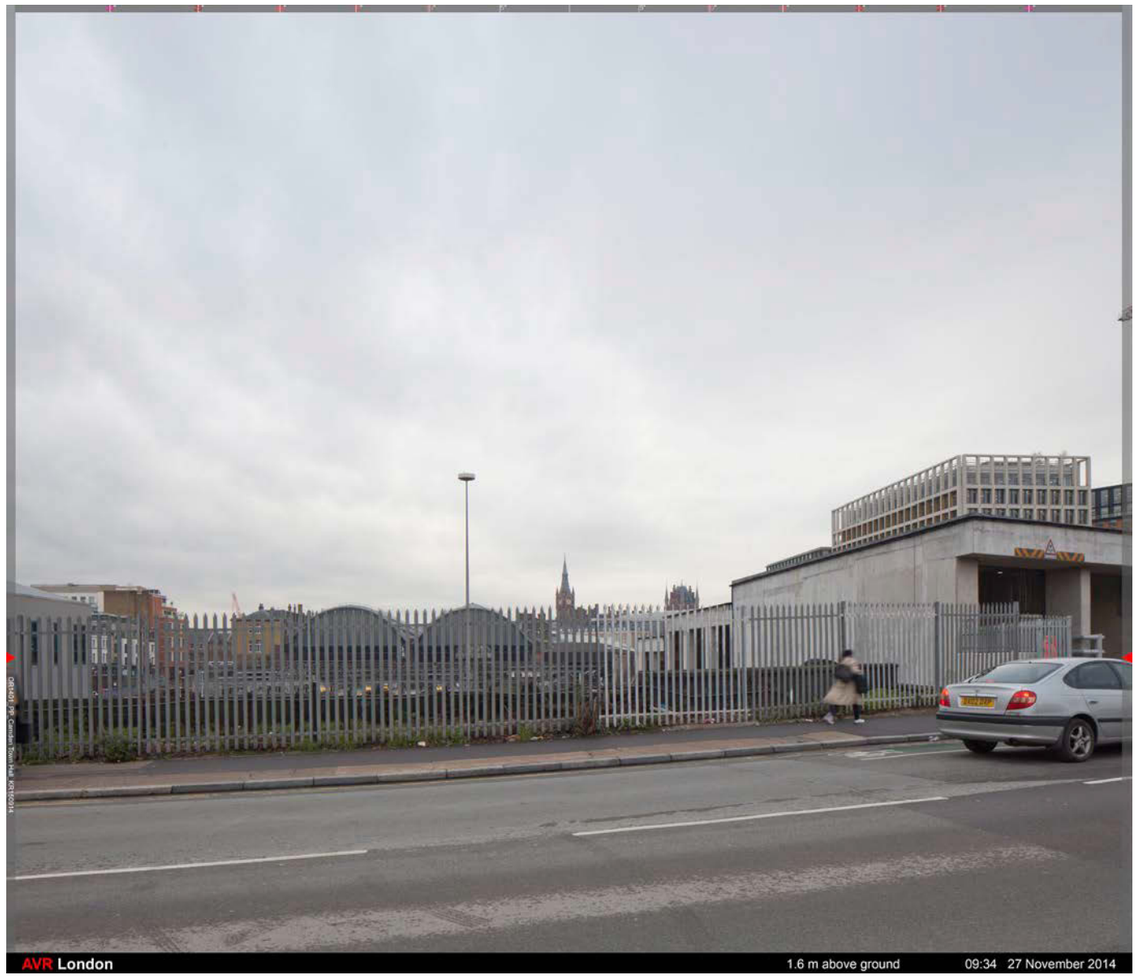
Existing



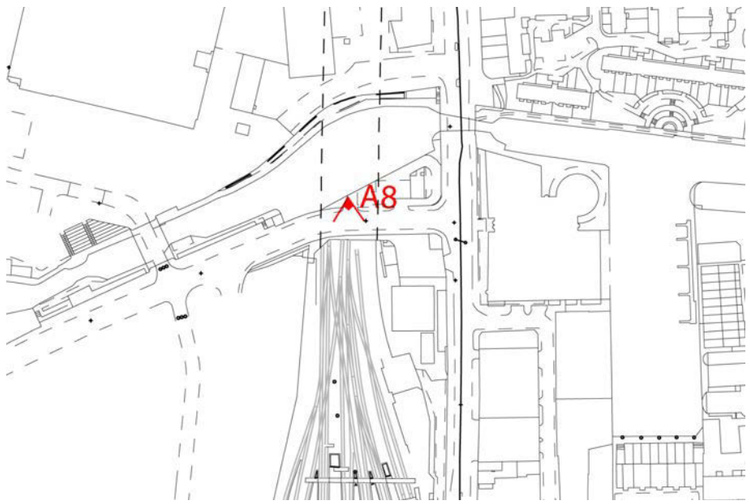

AVR London
Preliminary Alignment
1.6 m above ground
12:46 27 November 2014

Proposed

View A8 The Filling Station



Existing




AVR London
Preliminary Alignment
1.6 m above ground
12:59 27 November 2014

Proposed

View A9 Coram’s Fields

Existing


AVR London
Preliminary Alignment
1.6 m above ground
13:59 27 November 2014

Proposed

View A10 Wakefield Street, entrance to St George's Gardens

Existing


AVR London
Preliminary Alignment
1.6 m above ground
13:27 27 November 2014

Proposed

Appendix B: Verified View Methodology

AVR METHODOLOGY

AVR London were commissioned in 2014 to produce a number of verified images of the proposal known as Camden Town Hall Annex The positions were chosen from photography taken between the 14th of April and the 27th of November 2014 by AVR London.

2D plans, Ordnance Survey Mapping, and a 3D model were provided by the architects, these were used by AVR London to verify the proposal for the selected viewing positions.

Surveying

Control stations were established at each camera position and easily and clearly identifiable static points within the view were identified by the chartered land surveyor on site and marked as an overlay on the photograph from that position.

The survey control stations are resected from the OS base mapping and wherever possible, linked together to form a survey network. This means that survey information is accurate to tolerances quoted by GPS survey methods in plan and commensurate with this in level.
Horizontal and vertical angle observations from the control stations allow the previously identified points within the view to be surveyed using line of sight surveying and the accurate coordination of these points determined using an intersection program. These points are then related back to the Ordnance Survey grid and provided in a spreadsheet format.

The required horizon line within the image is established using the horizontal collimation of the theodolite (set to 1.60m above the ground) to identify 3 or 4 features that fall along the horizon line.

Surveying equipment used:
Wild/Leica TC1000 electronic theodolite which has 3” angle measuring accuracy and 3mm + 2ppm distance measuring accuracy.
Wild/Leica NAK2 automatic level which a standard deviation of +/- 0.7mm/km

Photography

Each scene was photographed using a plumb line over a survey pin to accurately position the view location. The centre of the camera lens was positioned at a height of 1.60 metres above the ground to simulate average viewing height. Each view was taken with a lens that gave approximately a 68 degree field of view, either in landscape or portrait format, a standard which has emerged for verified architectural photography. The nature of digital photography means that a record of the time and date of each photograph is embedded within the file; this metadata allows accurate lighting timings to be recreated within the computer model.

In professional architectural photography, having the camera horizontal is desirable in order to prevent any 3-point perspective being introduced to the image and ensure the verticals within the photographed scene remain parallel. Within architectural photography this is standard practice and more realistically reflects the viewing experience. The camera used by the photographer has the ability to shift the digital capture chip with respect to the centre of the camera lens, allowing for the horizon in the image to be above, below or centrally within the image whilst maintaining the parallel nature of verticals previously mentioned.

Using the surveyed horizon points as a guide, each photograph is checked and rotated, if necessary, in proprietary digital image manipulation software to ensure that the horizon line on the photograph is level and coincident with the information received from the surveyor.

AVR03	530255.64	182996.20	16.65
1	530257.97	182988.38	19.80
2	530256.71	182987.24	16.86
3	530256.23	182969.31	19.84
4	530227.83	182877.31	39.08
5	530242.61	182940.61	19.77
6	530201.17	182859.15	48.86
7	530251.75	182987.35	16.88
8	530232.02	182946.21	22.40
9	530165.60	182832.60	55.43
10	530160.36	182829.45	55.44
11	530141.31	182814.33	40.73
12	530196.66	182911.17	23.63
13	530249.29	182988.58	16.85
14	530187.45	182919.32	98.52

Accurate Visual Representation Production Process

The 3D computer model was supplied aligned on the Ordnance Survey coordinate grid system and approved by the architects.

Within the 3D software a virtual camera was set up using the coordinates provided by the surveyor along with the previously identified points within the scene. The virtual camera was verified by matching the contextual surveyed points with matching points within the overlaid photograph. As all the surveyed points, virtual camera and 3D model all relate to the same 3-Dimensional coordinate system then there is only one position, viewing direction and field of view where all these points coincide with the actual photograph from site. The virtual camera is now verified against the site photograph.

For the fully rendered views a lighting simulation (using accurate latitude, longitude and time) was established within the proprietary 3D modeling software matching that of the actual site photograph. Along with the virtual sunlight, virtual materials were applied to the 3D model to match those advised by the architects. The proprietary 3D modeling software then uses the verified virtual camera, 3D digital model, lighting and material setup to produce a computer generated render of the proposed building.
The proposal was masked where it would be obscured behind built form or street furniture.

Using the surveyed information and verification process described above, the scale and position of a proposal with a scene can be objectively calculated. However, using proprietary software currently available the exact response of proposed materials to their environment is subjective so the exact portrayal of a proposal is a collaboration between illustrator and architect. The final computer generated image of the proposed building is achieved by combining the computer generated render and the site photography within proprietary digital compositing software.

Camden Town Hall, King's Cross - View Verifications

Camera	Easting	Northing	Ground Level	Horizon Level
1	530035.89	182785.26	19.67	21.27
2a	530292.29	182737.54	20.35	21.95
3	530255.64	182996.20	16.65	18.25
5	530109.92	183116.92	16.72	18.32
6	530366.39	183001.97	16.19	17.79
9b	530384.81	182764.99	20.03	21.63
11	530180.63	183414.86	25.05	26.65
12	530348.22	182755.69	20.00	21.60