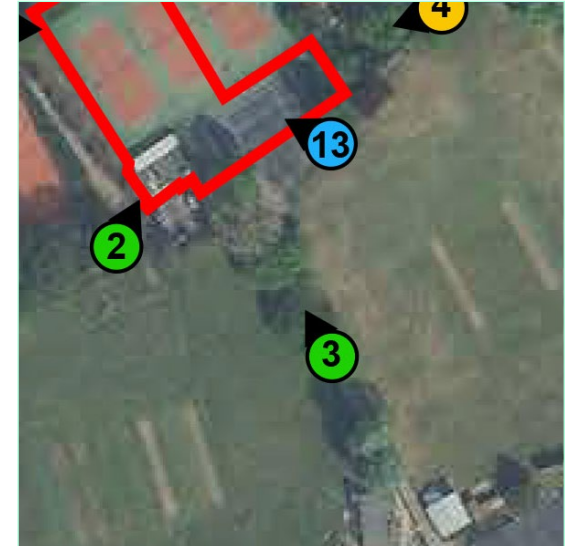




View03 Existing - Central Footpath

Date	28/10/25	HFOV	74°
Time	15:23	Easting	529326.312
Type	AVR01	Northing	188789.796
Camera	Canon EOS 5DS (35mm)	AOD	45.751
Lens	Canon TS-E 24mm F3.5L	Camera Height	1.6m



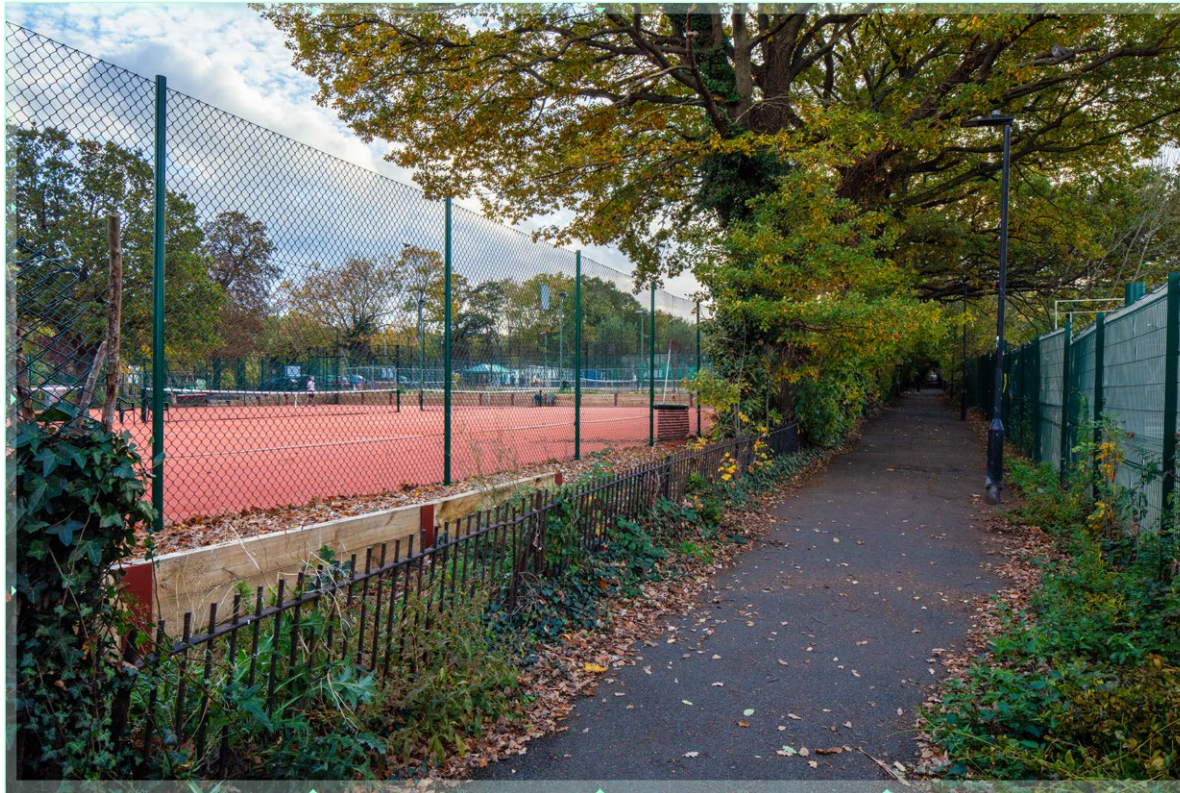
View03 Proposed (Wireline) - Central Footpath





View05 Existing - Public Right Of Way (ref: 27-28) East

Date	28/10/25	HFOV	74°
Time	15:34	Easting	529340.125
Type	AVR01	Northing	188922.421
Camera	Canon EOS 5DS (35mm)	AOD	43.002
Lens	Canon TS-E 24mm F3.5L	Camera Height	1.6m



View05 Proposed (Wireline) - Public Right Of Way (ref: 27-28) East





View13 Existing - Access Road (Central)

Date	28/10/25	HFOV	74°
Time	15:20	Easting	529329.186
Type	AVR03	Northing	188841.505
Camera	Canon EOS 5DS (35mm)	AOD	44.714
Lens	Canon TS-E 24mm F3.5L	Camera Height	1.6m



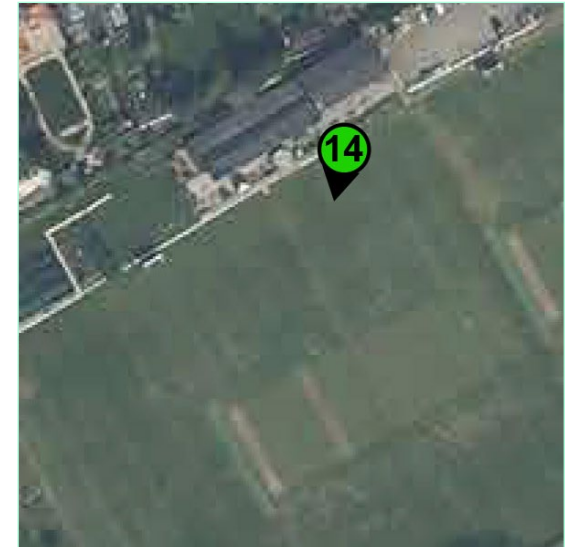
View13 Proposed (Rendered) - Access Road (Central)





View14 Existing - North Middlesex Cricket Club

Date	28/10/25	HFOV	74°
Time	15:41	Easting	529335.309
Type	AVR01	Northing	189051.676
Camera	Canon EOS 5DS (35mm)	AOD	43.229
Lens	Canon TS-E 24mm F3.5L	Camera Height	1.6m



View14 Proposed (Wireline) - North Middlesex Cricket Club





Methodology

1. Overview

1.01 These accurate visual representations were produced by White + White Studio Limited and Mark Glazier Architectural Illustration by combining high resolution photography with computer generated images of the Proposed Development.

1.02 Robust survey data, mapping and modelling ensures the accuracy of the final output. The positions were chosen around the site in conjunction with the townscape consultant and broader design team.

1.03 This method statement outlines in detail the steps which were taken to produce the final accurate visual representations. This is broken down to:

Photographic Capture + Processing
Survey Data Capture + Processing
3D Model + Camera Alignment
Rendering + Image Production

1.04 The method statement complies with, and follows guidance where relevant to this urban context, from the Landscape Institute Technical Guidance Note 06/19 for Visual Representation of Development Proposals (17 September 2019).

1.05 Whereby relevant to urban context local guidance should be followed, in this instance Appendix D of the London View Management Framework (LVMF): Revised Supplementary Planning Guidance (March 2012).

1.06 The broad classifications of AVR types are shown right (Figs. 1a, 1b, 1c, and 1d).



Fig. 1a Example of AVR Level 0 - Location and size of proposal



Fig. 1b Example of AVR Level 1- Location, size and degree of visibility of proposal



Fig. 1c Example of AVR Level 2- Level 1 + description of architectural form



Fig. 1d Example of AVR Level 3 - Level 2 + use of materials



Fig. 2a - Verified camera set up.

2. Photographic Capture And Processing

2.01 The baseline photography for this project was taken in accordance with the current London View Management Framework Guidance (Appendix C), as advised by the Landscape Institute Technical Guidance Note 06/19 for Visual Representation of Development Proposals (17 September 2019). (1.5.1 + 1.5.2).

2.02 The photographers aim was to capture the site and sufficient context to aid in the analysis of any change by the proposed development.

2.03 Photography Equipment

Canon EOS 5DS (Full Frame Sensor)
 Canon TS-E 24mm F/3.5L
 Innorel RT85C Carbon Fibre Legs
 Fanotec EZ-Leveller II
 Koolehaoda Pan 60 - Panoramic head
 Leftfoto - NNR-200 Nodal Slide
 Arca Swiss plate



Fig. 2b - Verified camera set up.

2.04 View positions are chosen in advance by the relevant townscape / heritage consultant. The photographer take the briefing and produces a shoot plan, this looks at times of day to shoot to avoid shooting in to the sun, access issues which can be averted in advance and general logistics.

2.05 At each view location the photographer uses the information in the brief to decide where to shoot from, this could match the briefing photograph exactly or it could mean slight adjustments to allow for street furniture or to avoid blocking paths.

2.06 Once the location has been found the photographer sets up the tripod over a point on the ground which is then marked using a survey pin. The nodal point of the lens is placed over this point with the aid of a plumb line and weight (Figs. 2a and 2b).



2.07 The camera is levelled and orientated towards the site, making sure to include revelation context. Where possible the photographer avoids large vehicles or anything which blocks the view.

2.08 The centre of the lens is set up at 1.6 meters above ground across all positions to match average eye height.

2.09 The camera settings are set to manual, aperture between f8/f11 (to ensure a wide depth of field) and the shutter speed set to allow for a slightly under exposed image. This technique ensures as much detail as possible is captured avoiding blown out highlights.

2.10 Consideration was taken for the selection of lens taking townscape context and proximity to site into account for each of the viewpoint locations. In this study all viewpoints have been photographed using a 24mm lens in order to capture the proposal within its urban setting.

2.11 The photographer will always shoot level and capture shifted images on site (capture more height). Whether shifted images are used will depend on the height of the proposal and this decision is made later. By capturing these on site it allows for any changes to the proposal at a later date.

2.12 The photographer then worked their way around the view positions capturing photography from each location.

2.13 The camera location is documented by the photographer to ensure the surveyor can find the position accurately. It also allows.

2.14 Once downloaded the files are prepared to match the conditions on site. This includes minor adjustments to colour balance, exposure and brightening shadows to match the human experience as closely as possible.

2.15 The table of views in this methodology includes meta data pulled from the raw files, such as time and date (Fig. 2c).

V	Description	Visualisation Type	Camera	Lens	Date	Time	Camera Height	HFoV	Easting	Northing	Level - AOD
1	Public rights of way (ref: 27-28) central	AVR01 - Wireline	Canon EOS 5DS (35mm)	Canon TS-E 24mm F3.5L	28/10/25	13:02	1.6m	74°	529245.060	188862.666	46.137
2	Access Road (west)	AVR01 - Wireline	Canon EOS 5DS (35mm)	Canon TS-E 24mm F3.5L	28/10/25	15:30	1.6m	74°	529281.908	188811.828	46.229
3	Central footpath	AVR01 - Wireline	Canon EOS 5DS (35mm)	Canon TS-E 24mm F3.5L	28/10/25	15:24	1.6m	74°	529326.312	188789.796	45.751
5	Public rights of way (ref: 27-28) east	AVR01 - Wireline	Canon EOS 5DS (35mm)	Canon TS-E 24mm F3.5L	28/10/25	15:35	1.6m	74°	529340.125	188922.421	43.002
13	Access Road (central)	AVR03 - Render	Canon EOS 5DS (35mm)	Canon TS-E 24mm F3.5L	28/10/25	15:20	1.6m	74°	529329.186	188841.505	44.714
14	North Middlesex Cricket Club (subject to access)	AVR01 - Wireline	Canon EOS 5DS (35mm)	Canon TS-E 24mm F3.5L	28/10/25	15:41	1.6m	74°	529335.309	189051.676	43.229

Fig. 2c - Summary table of views.



Fig. 3a - Example of a marked up view supplied to the surveyor.

3. Survey

3.01 Before attending site, the photographer briefs the surveyor by supplying a map of the view locations, photographs from each position to be surveyed / marked up and photographs of the camera location, point on the ground (Fig. 3a)

3.02 Survey Equipment

Leica Total Station
Geomax GPS Antenna
Leica GST20-9 Wooden Tripod x 2

3.1 Work on site

3.11 Carried out as a two person team with a GPS unit and Total Station on foot from a nearby parked location.

3.12 Can only be carried out in/on public land; any locations on private land would have to be arranged with the owner's prior consent by others.

3.13 The surveyor sets up the Total Station over the marked up camera position or survey pin previously installed by the photographer. If this is not possible the camera position will



Fig. 3b - Surveyor on site.

be surveyed remotely by laser or with a prism.

3.14 At least 2 control stations will be occupied by the GPS Antenna (Realtime) to establish a baseline. If viable, several view locations will be linked together to form a survey network.

3.15 The surveyor measures 12-20 points per image. The points are chosen so they cross the width, height and depth of the image.



3.16 Reflectorless (laser) measurements to features identified on the supplied images (JPGs) are constrained by distance, surface type and to some extent by the weather.

A	B	C	D	
Point	Easting	Northing	Level	De
V1	529245.060	188862.666	46.137	Ca
101	529249.947	188864.991	47.057	To
102	529251.812	188865.543	45.891	Bo
103	529263.313	188871.449	46.396	To
104	529250.321	188862.554	47.078	To
105	529251.323	188861.532	47.391	Bo
106	529258.219	188857.994	48.395	To
107	529259.559	188856.192	49.415	To
108	529249.678	188862.401	47.571	To
109	529330.061	188916.903	43.280	Bo
110	529251.168	188861.634	46.723	Bo
111	529262.586	188852.166	47.154	Ce
112	529248.974	188861.004	46.015	Ri

Fig. 3c - Example of spreadsheet of coordinates.

3.2 Data Processing

3.21 A CAD DWG file is produced from the captured data, this includes camera locations and control points as vertical lines from zero to height.

3.22 A spreadsheet of coordinates of camera locations (ground height) and control points for the images together with a description of the feature located (Fig. 3c).

3.23 A PDF of each view with the survey points marked and a point number is produced. Ordnance Survey National Grid coordinates (in metres) will be used and it is assumed that these will be compatible with the design coordinate scheme.

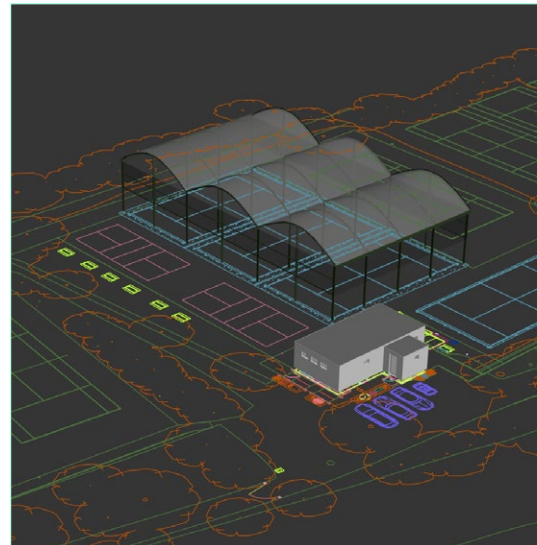


Fig. 4a - Screenshot of 3D model.

4. 3D Model

4.01 A 3D model of the proposed scheme is either supplied by the project team, or created from supplied drawings (Fig. 4a).

4.02 It is ensured that the model is correctly orientated to the Ordnance Survey National Grid. This is completed using drawn information supplied by the design team.

5. Verification - Overview

5.01 The photography, survey data and 3D model are now combined to produce each verified view.

5.02 The process for each view is the same up until the rendering of the classification of view required (AVR 0, 1, 2, or 3).

5.03 This is completed in 3D Studio MAX (the 3D software), where the photography is brought in as a background, the survey points are imported and represented as 3D objects (usually spheres), and the virtual camera is generated. This set of stages is called 'the alignment'.

5.04 The final view can then be rendered and composited to the required view type. Each view classification has different properties, in the way it appears and thus is produced - these are outlined in section 6.4.

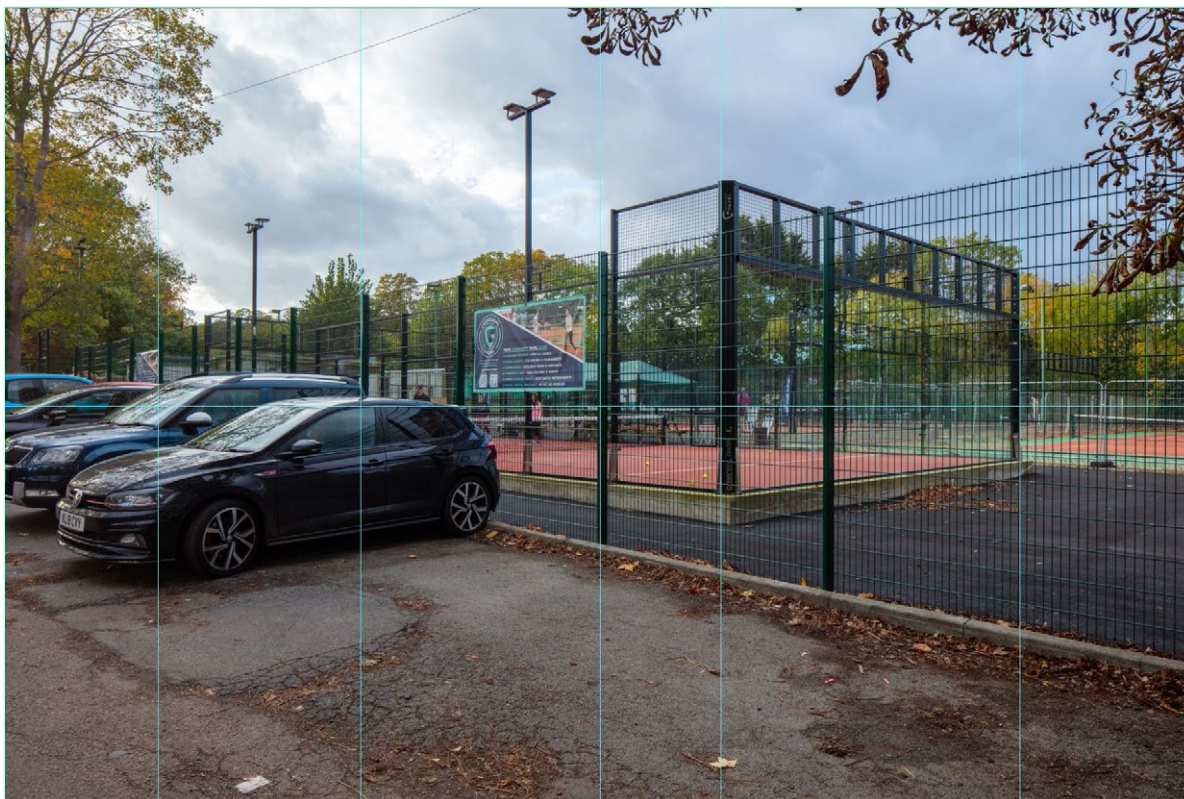


Fig. 6a - Screenshot of the backplate in image editing software.

6. Alignments

6.01 There are 4 stages to each alignment, and these are as follows:

- Preparing and importing the photography for each view as a background or backplate.
- Preparing and importing the survey data.
- Creating and aligning the virtual camera.
- Refining the alignment.

6.1 Preparing and importing the photography

6.11 The photography is opened in image editing software (i.e. Photoshop).

6.12 The RAW properties of the supplied file format are utilised to make any adjustments necessary to ensure the image is tonally balanced. This does not affect the accuracy of the physical relationship of the proposed scheme and the photograph.

6.13 Vertical guides are placed over the major vertical lines within the image e.g.

corners of buildings, vertical facade elements etc. These are used to check if there is any rotation (or 'roll') on the photography. A further vertical is placed in the centre of the image - i.e. the optical axis (Fig. 6a).

6.14 A single horizontal guide is placed on the horizon of the image. WAW will have levelled the camera so that it is 'horizontal' - for every viewpoint, a baseline image is captured where no 'shift' has been applied. This means the horizon guide is in the centre of the image.

6.15 Where it has been established that using shift is required (to capture the proposed scheme in an appropriate manner), these photographs are combined with the baseline image to produce a taller backplate.

6.16 In this scenario, the horizon is maintained in the centre of the backplate by adding a blank area to the 'canvas'.

6.17 The completed backplate is then saved as a JPG, and set as a background within the 3D software.

6.2 Preparing and importing the survey data.

6.21 For each view, the supplied spreadsheet of survey data is reformatted so that it is appropriate for use with the 3D software.

6.22 This creates a file containing the verification feature point coordinates, together with the coordinate data for the camera.

6.23 Within the 3D software, a script is used to import the points and produce reference objects (usually spheres) at each coordinate.



6.24 The 3D software has an accuracy bias whereby objects further from the 'world' origin (i.e. 0,0,0) are more likely to be prone to dimensional error.

6.25 As such, an offset is applied to the coordinates of the points to the data set close to the world origin. The same offset is applied to the camera and 3D model ensuring all the data is correctly coordinated.

6.3 Creating and aligning the virtual camera.

6.31 The virtual camera is created using the same script as the surveyed reference points.

6.32 It is given the appropriate FOV value to match the lens used by the photographer (typically 24mm).

6.33 The camera's 'target' (the point towards which the camera 'looks') is placed as close to the optical axis of the backplate as is achievable. The guide placed in the image editing software and the supplied site plan drawing are used to assist this action, where appropriate.

6.34 The 3D software is now used to produce an image or 'render' of the surveyed reference point objects against the backplate, showing the alignment of the camera to the photography.

6.35 Incremental refinements are made to the position of the camera's target, whilst reducing the physical size (but not altering the location of) the surveyed reference point objects.

6.36 This produces a highly accurate alignment of the camera to the backplate.

6.4 Producing the final view.

6.41 The alignments stage is repeated for all the view positions, producing a set of verified alignments for each of the locations.

6.42 The 'render' for the classification of each view is then produced. These renders are brought into the image editing software and overlaid onto the source photography.

6.43 For AVR Type 0, a basic render is produced, and the render's area is given an outline and semi-transparent shaded infill (within the pixel area of the proposal).

6.44 For AVR Type 1, similar to AVR Type 0, the render's area is also given an outline. Additional linework is added to give the required level of articulation to the proposal. Both of these are then 'masked' such that they appear behind any foreground elements of the photograph.

6.45 Supplemental models, drawings and photography, as well as using Google Streetview/Earth are used to establish what elements are between the camera position and the proposal.

6.46 For AVR Type 2, the render is used directly in the preparation of the final view. Similarly to AVR Type 1, it is 'masked' to appear behind any foreground elements of the photograph.

6.47 For AVR Type 3, greater preparation of the render is required. The 3D model is given materiality as defined by the design team and lighting is set up for each view using the 3D software's inbuilt 'Daylight' system. This allows MGAI to input the date and time of the photograph, providing an accurate basis to replicate the sunlight in the photography.

6.48 Additional lighting is added, where required, to enhance the realism of the final view. This may include additional environmental lighting, artificial exterior and internal lighting.

6.49 Where the lighting of the scheme is influenced by the proposal's context, (e.g. a shadow is cast across the proposal by a neighbouring building etc) or the scheme affects the lighting of the photograph, additional 3D content is added, as accurately as possible, to reproduce the conditions at the proposal's site.

6.410 Once the render is complete, it is opened in the image editing software and overlaid on the background photography. Similarly to AVR Types 1 and 2, it is 'masked' to appear behind any foreground elements of the photograph.

6.411 Whilst the render that the 3D software provides and the constituents of it (e.g. material representation etc) are of a high quality, the software is not capable of completely replicating the real world environment. Real world conditions such as reflected light and climatic conditions are not possible to be accurately simulated within the technology available to be used to create the views.

As such, using subjective judgement, the aesthetic aspects of the render are adjusted so that the proposal is realistically represented in each view. This does not affect the relative scale of the proposal to its context.

6.412 The completed 'composite' of the aesthetically adjusted render and backplate are signed off with the design team, ensuring the representation of the proposal is as intended.



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Thankyou



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