REFERENCE
PL1822.1

PROJECT
GREAT GEORGE STREET TVIA

DOCUMENT
APPENDIX 1.4: VIEWS & PHOTOMONTAGES

CLIENT	STATUS	DATE
GREAT GEORGE STREET DEVELOPMENTS	**PLANNING**	**25/09/18**

DOCUMENT CONTROL

FILE NAME

PL1822.1-GREAT GEORGE STREET

PREPARED BY (INITIALS) **GW**	
CHECKED BY (INITIALS) **JW**	

Contents

1.1 Close and Mid-Range Viewpoints

The plans opposite and overleaf illustrate the proposed view locations and direction of view.

CLOSE RANGE

Viewpoint 3 – World Heritage Site Defined Vista - West Quay of Wapping Dock to Anglican Cathedral.

Viewpoint 4 - View south down Great George Street (Grade II listed former Congregational Chapel).

Viewpoint 5 - View north from junction of St James Street and Parliament Street with Great George Street. Grade II listed 'Wedding House'.

Viewpoint 6 - World Heritage Site Defined Vista - View north-west across the city from the Anglican Cathedral.

Viewpoint 7 – Liverpool Museum

Viewpoint 8 – St Thomas Memorial Garden

Viewpoint 9 – Junction of Sefton Street, Parliament Street and Chaloner Street.

Viewpoint 10 – Junction of Jamaica Street and Jordan Street.

Viewpoint 11 – Great George Square.

Viewpoint 12 – Albert Dock in the corner of Salthouse Quays.

Viewpoint 13 – St James' Church.

Viewpoint 14 - Junction of Jamaica Street and New Bird Street.

Viewpoint 15 - View south west from Liverpool Metropolitan Cathedral.

Viewpoint 16 - Albert Dock.

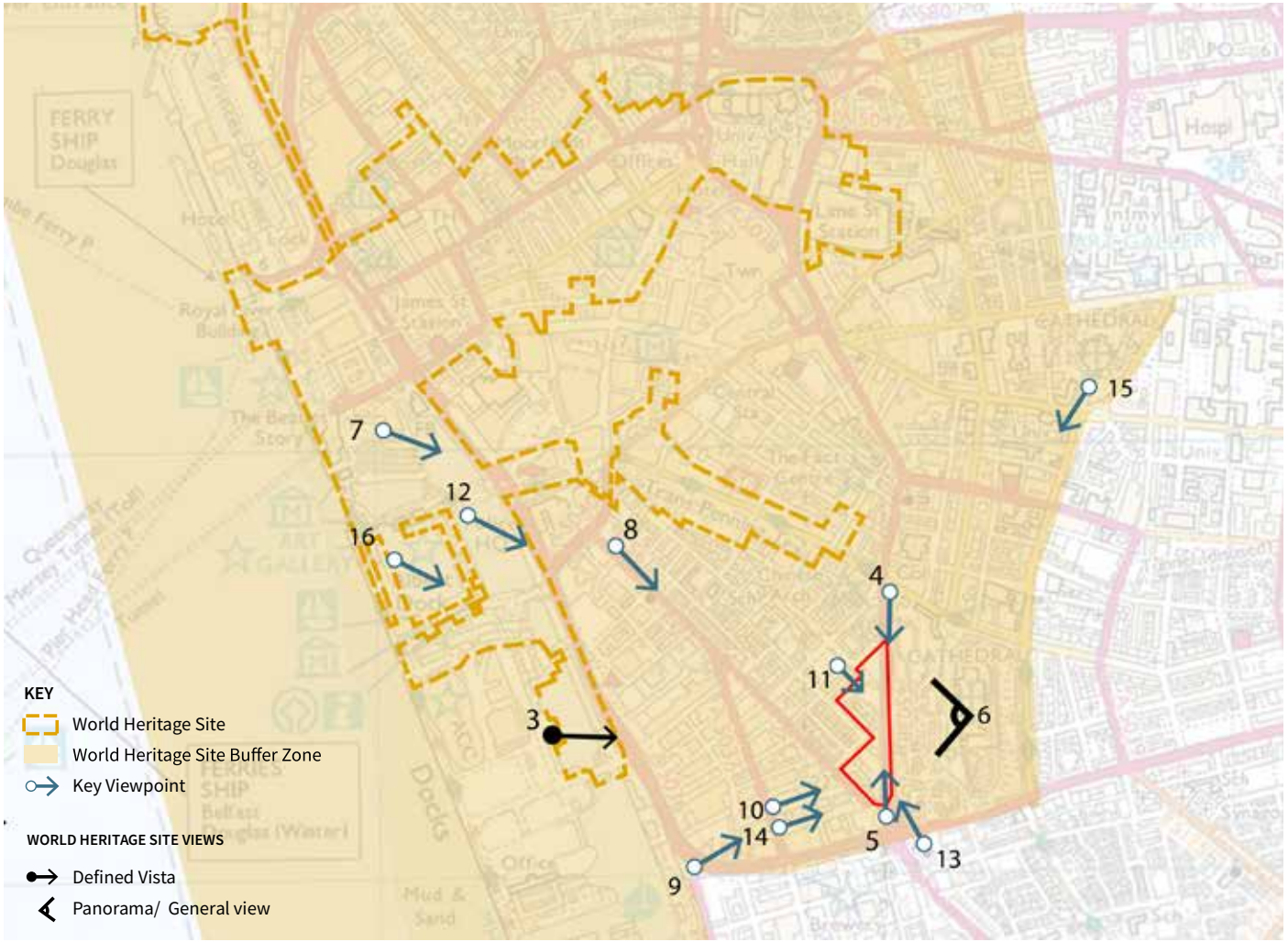


FIGURE 1: CLOSE AND MID-RANGE VIEWPOINTS

1.2 Long Range Viewpoints

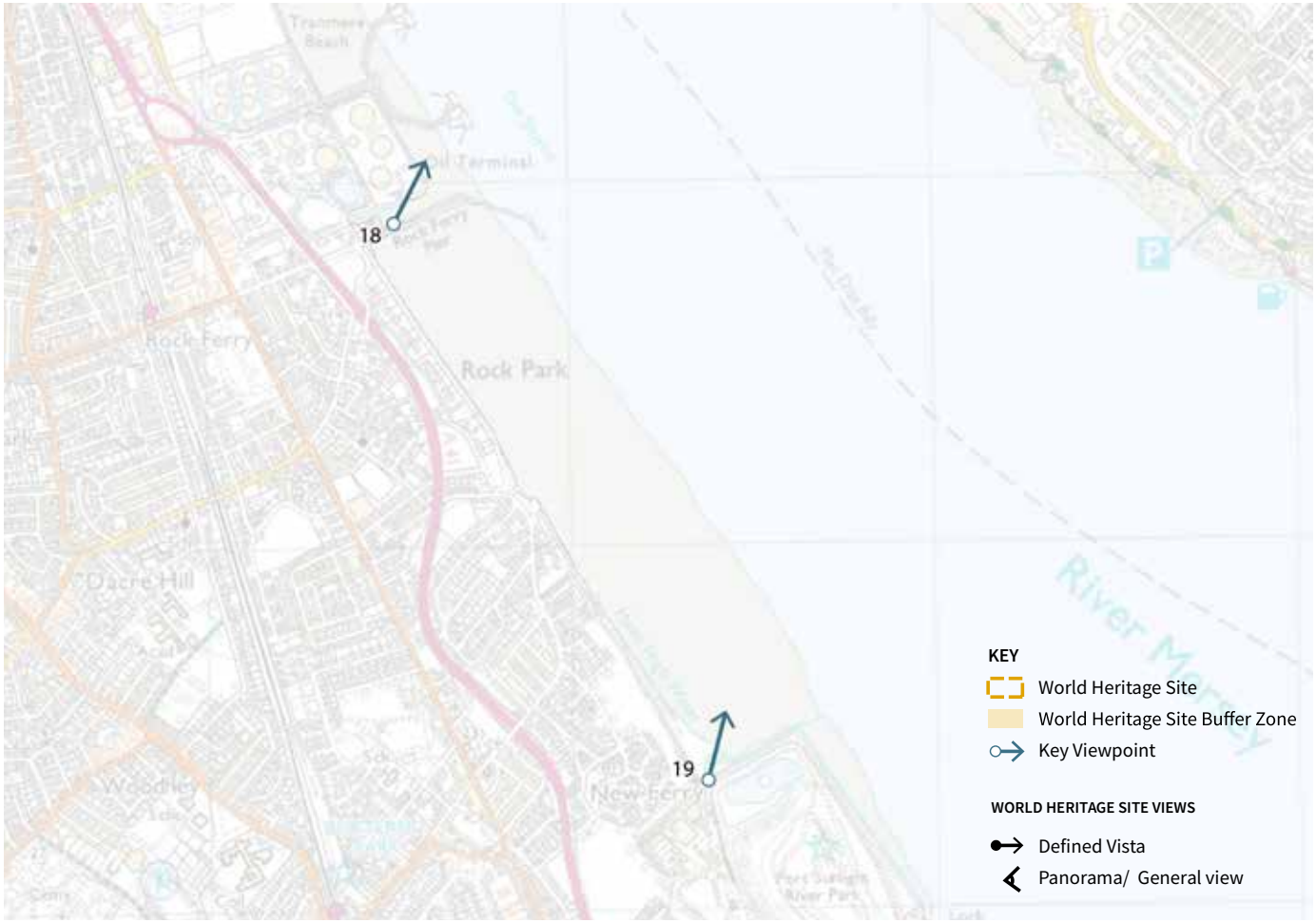
Viewpoint 1 – World Heritage Site general view/panorama - view to Liverpool City Centre from Wallasey Town Hall.

Viewpoint 2 - World Heritage Site general view/panorama - view to Liverpool City Centre from Woodside Ferry Terminal

Viewpoint 17 - World Heritage Site Defined Vista - Liverpool City Centre from the top of Holt Hill.

VIewpoint 18 - View to Liverpool City Centre from Rock Ferry Pier

Viewpoint 19 - View to Liverpool City Centre from Wirral Circular Trail at New Ferry



VIEWPOINT 1 | WORLD HERITAGE SITE GENERAL VIEW/PANORAMA - VIEW TO LIVERPOOL CITY CENTRE FROM WALLASEY TOWN HALL.

VIEWPOINT 1 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 1 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 2 | WORLD HERITAGE SITE GENERAL VIEW/PANORAMA - VIEW TO LIVERPOOL CITY CENTRE FROM WOODSIDE FERRY

VIEWPOINT 2 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 2 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 3 | WORLD HERITAGE SITE DEFINED VISTA - WEST QUAY OF WAPPING DOCK TO ANGLICAN CATHEDRAL.

VIEWPOINT 3 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 3 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 4 | VIEW SOUTH DOWN GREAT GEORGE STREET (GRADE II LISTED FORMER CONGREGATIONAL CHAPEL).

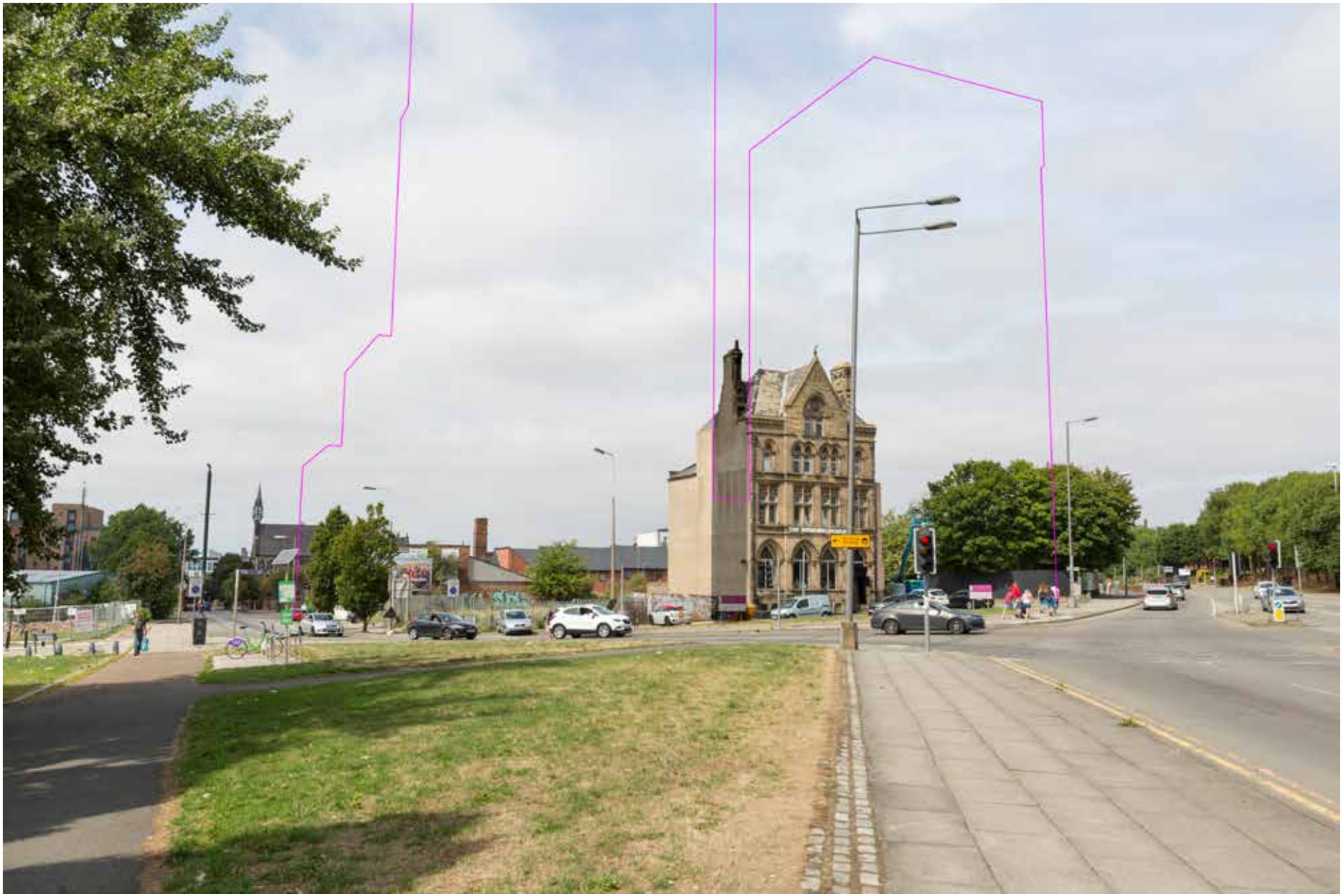
VIEWPOINT 4 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 4 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 5 | VIEW NORTH FROM JUNCTION OF ST JAMES STREET AND PARLIAMENT STREET WITH GREAT GEORGE STREET. GRADE II LISTED 'WEDDING HOUSE'.

VIEWPOINT 5 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 5 | PROPOSED DEVELOPMENT - WIRELINE



VIEWPOINT 6 | WORLD HERITAGE SITE DEFINED VISTA - VIEW NORTH-WEST ACROSS THE CITY FROM THE ANGLICAN CATHEDRAL.

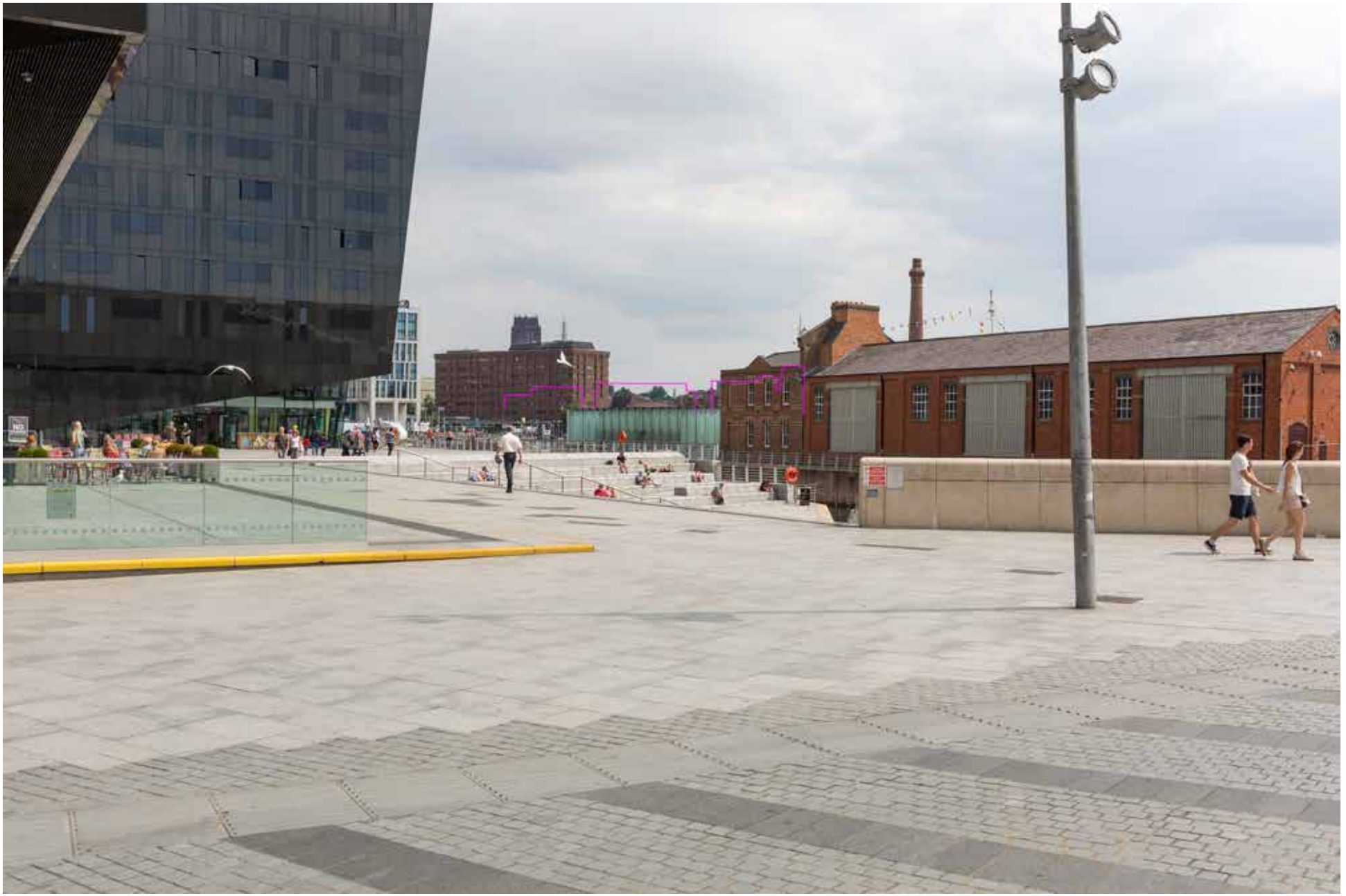
VIEWPOINT 6 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 6 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 7 | LIVERPOOL MUSEUM

VIEWPOINT 7 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 7 | LIVERPOOL MUSEUM - WIRELINE



VIEWPOINT 8 | ST THOMAS MEMORIAL GARDEN

VIEWPOINT 8 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 8 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 9 | JUNCTION OF SEFTON STREET, PARLIAMENT STREET AND CHALONER STREET.

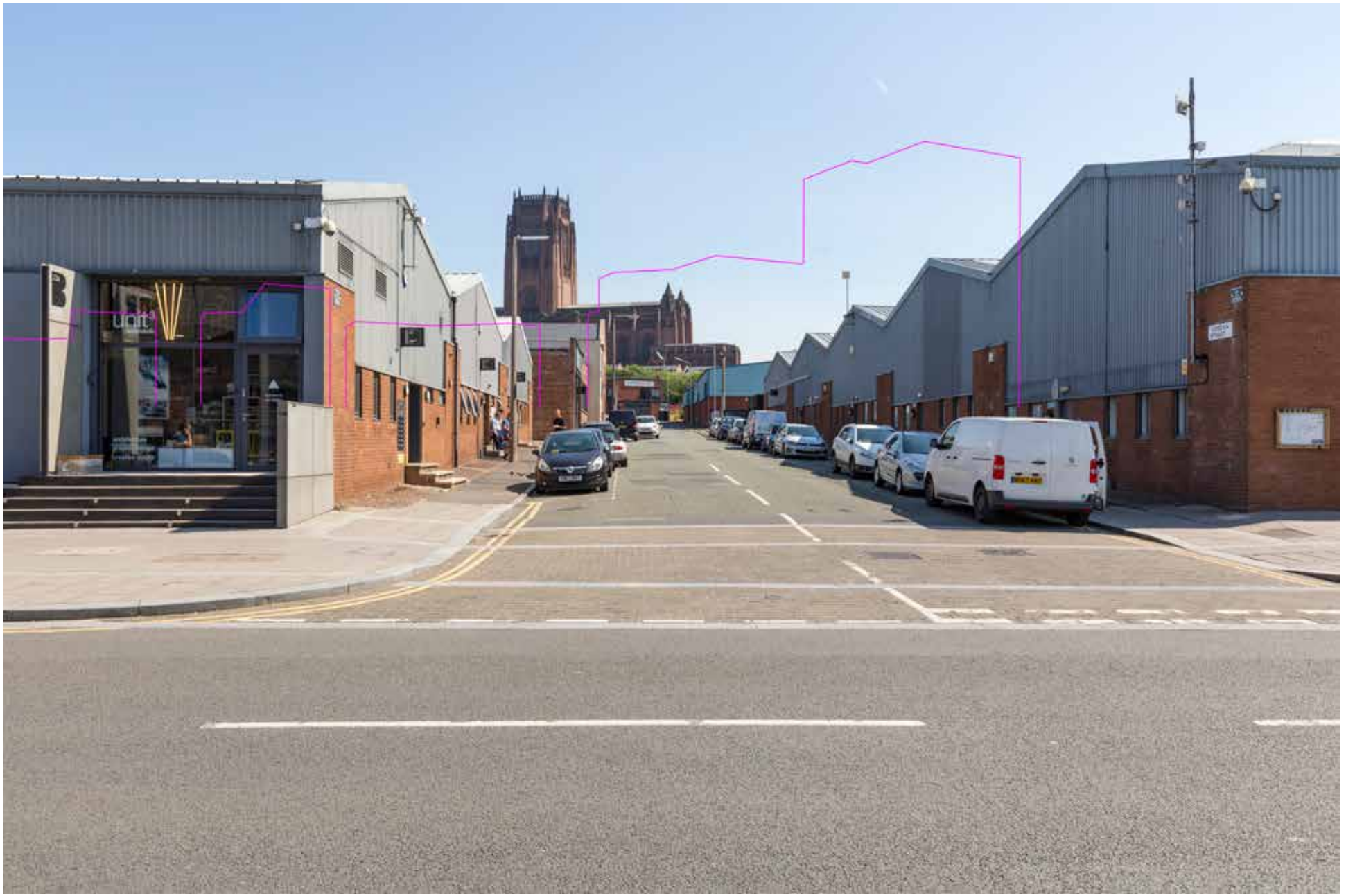
VIEWPOINT 9 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 9 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 10 | JUNCTION OF JAMAICA STREET AND JORDAN STREET.

VIEWPOINT 10 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 10 | PROPOSED DEVELOPMENT - WIRELINE



VIEWPOINT 11 | GREAT GEORGE SQUARE.

VIEWPOINT 11 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 11 | PROPOSED DEVELOPMENT - WIRELINE

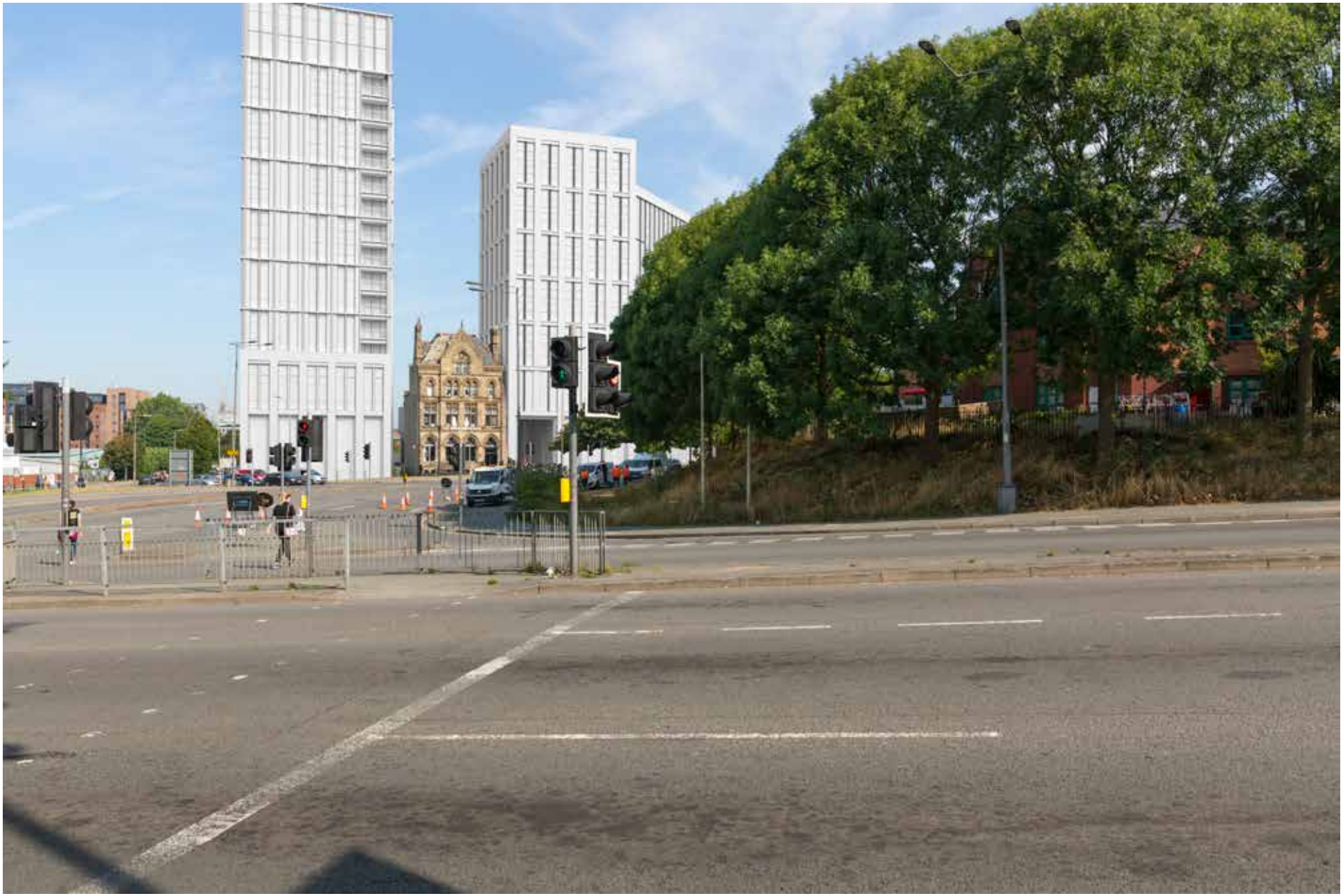
VIEWPOINT 12 | ALBERT DOCK IN THE CORNER OF SALTHOUSE QUAYS.

VIEWPOINT 12 | PROPOSED DEVELOPMENT - BLOCK MODEL

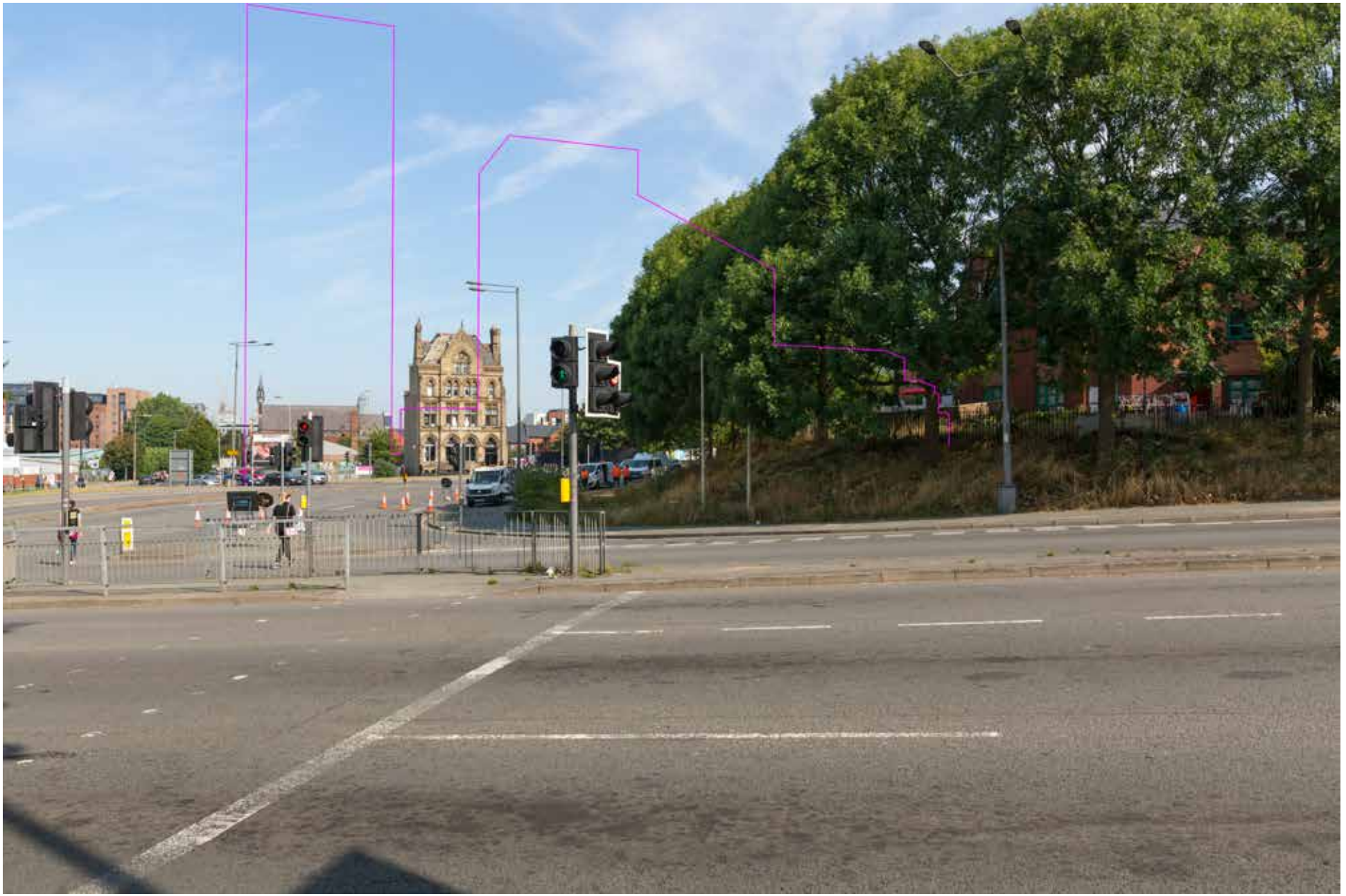
VIEWPOINT 12 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 13 | ST JAMES' CHURCH.

VIEWPOINT 13 | PROPOSED DEVELOPMENT - BLOCK MODEL



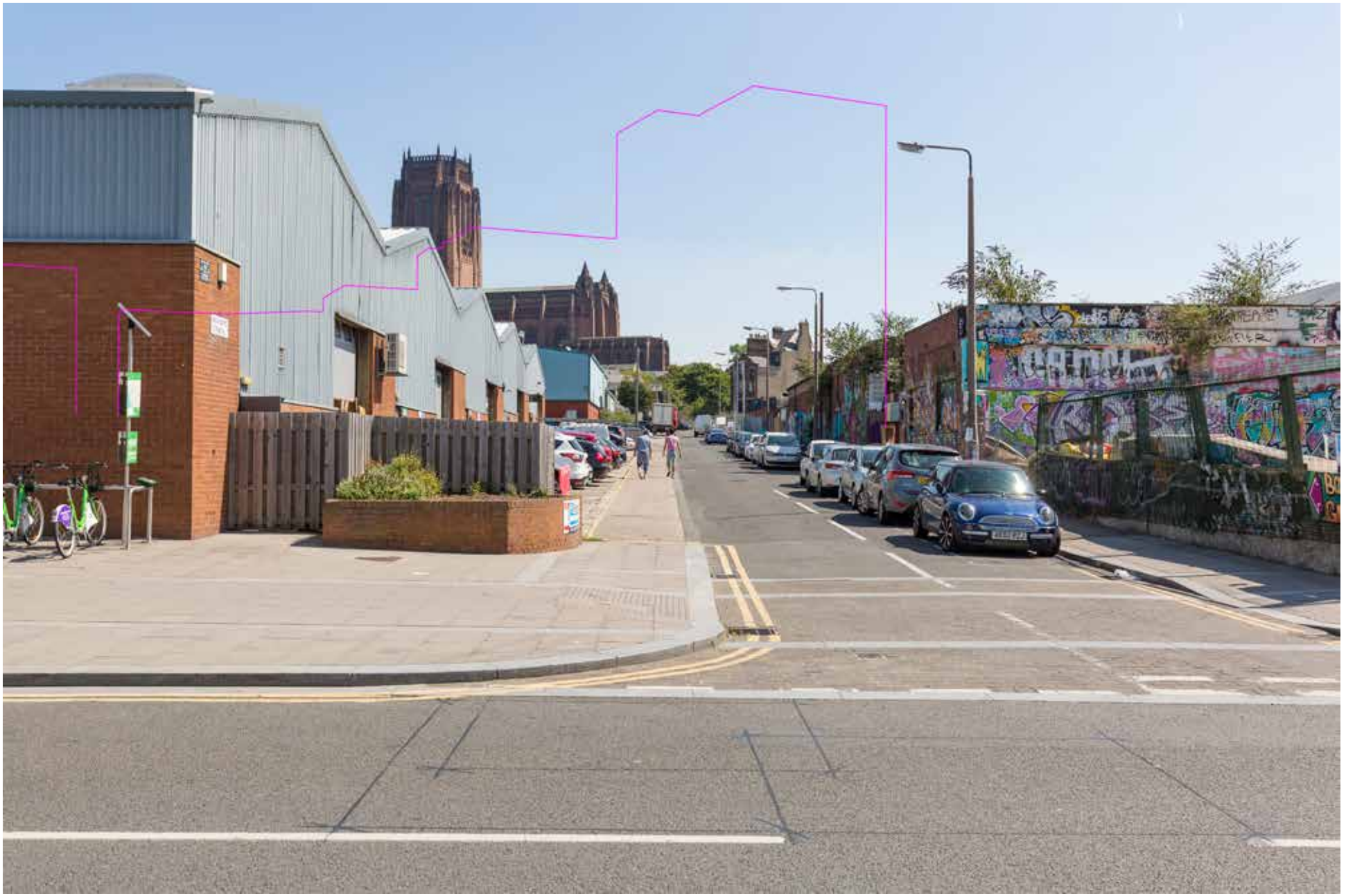
VIEWPOINT 13 | PROPOSED DEVELOPMENT - WIRELINE



VIEWPOINT 14 | JUNCTION OF JAMAICA STREET AND NEW BIRD STREET.

VIEWPOINT 14 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 14 | PROPOSED DEVELOPMENT - WIRELINE



VIEWPOINT 15 | VIEW SOUTH WEST FROM LIVERPOOL METROPOLITAN CATHEDRAL.

VIEWPOINT 15 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 15 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 16 | ALBERT DOCK.

VIEWPOINT 16 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 16 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 17 | WORLD HERITAGE SITE DEFINED VISTA - LIVERPOOL CITY CENTRE FROM THE TOP OF HOLT HILL.

VIEWPOINT 17 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 17 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 18 | VIEW TO LIVERPOOL CITY CENTRE FROM ROCK FERRY PIER

VIEWPOINT 18 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 18 | PROPOSED DEVELOPMENT - WIRELINE

VIEWPOINT 19 | VIEW TO LIVERPOOL CITY CENTRE FROM WIRRAL CIRCULAR TRAIL AT NEW FERRY

VIEWPOINT 19 | PROPOSED DEVELOPMENT - BLOCK MODEL

VIEWPOINT 19 | PROPOSED DEVELOPMENT - WIRELINE

1.3 Verified Views Methodology

PHOTOGRAPHY

Virtual Planit commissioned Gary Beal at Vantage Point Photos for all of the photography. Gary has worked on many verified projects and has over 25 years of professional experience. The aim with the photography is to create an image similar to that perceived by the human eye. The lens and camera configuration can affect this perception but it is critical to maintain data accuracy especially if the proposed development is a considerable distance from the view position.

The equipment used in this instance was: Canon EOS 5D Mark III. The angle of view in landscape orientation is 70 degrees. Each scene was photographed using a survey pin or suitable marker to accurately identify the view location. A plumb line was used to ensure that the centre of the camera lens was directly over the surveyed viewing position at a height of 1.65-1.7 metres. The metadata of each image records the exact time and date of each image allowing accurate lighting conditions to be recreated in the computer model as required. Further information is also recorded such as the camera, lens, and exposure and aperture settings. All camera data is recorded in a spreadsheet for reference.

Each scene was photographed using a survey pin or suitable marker to accurately identify the view location. A plumb line was used to ensure that the centre of the cam-era lens was directly over the surveyed viewing position at a height of 1.65-1.7m.

SURVEY

Virtual Planit have a long standing relationship with Powers and Tiltman, experienced RICS surveyors, who are familiar and experienced with verified work.

In preparation for the surveys, a series of key points were identified in each of the photographs used to verify the shots, particularly on the clearly visible corners of buildings. Care is taken to ensure a good spread of points including points close to the camera, points near the target development, together with points at ground and roof level, and points across the width of the image. A wide spread enables a more thorough and accurate analysis. The surveyor would then add a further series of additional reference points, in order to provide a comprehensive range of point reference across the photograph. It is these 2d points on the photograph that are surveyed to give each a 3 dimensional co-ordinate value.

The points were surveyed by a professional survey team using GPS. The survey points are related back to the Ordnance Survey National Grid - selected as it is the most widely used and also allows captured data to be incorporated into other digital products.

3D MODEL AND CAMERA MATCHING.

Virtual Planit were supplied with a digital 3D model of the proposed scheme by the architect. The model is related back to the Ordnance Survey grid and absolute (AOD) heights.

The same 3D model is used as the basis for each of the photographs, and was certified as being correct by the architect.

This 3D model was precisely aligned to the survey information using proprietary 3D modelling and rendering software, using the following information for each of the views.

- Specific details of the camera and lens used.
- The photograph, rotated if necessary to ensure the horizon line is level

- The surveyed viewpoint co-ordinates.
- The surveyed co-ordinates of points on existing buildings or immovable objects within the photograph.
- The 3D model of the proposed scheme.

The information listed above is used to situate the virtual camera in each case, such that the 3D model, survey points and model align exactly with the photograph.

WIRELINES AND RENDERING

A render is a technical term referring to the process of creating a two-dimensional output image from a 3D model. Using the virtual camera described previously, the 3D modelling and rendering software produces a render of the proposed building.

Where the required output is a wireline view and not a fully rendered image, the wireline is created by utilising a basic render; devoid of material, texture and lighting information; but fully representative of the building form, and using tools within the compositing software package (in this case Adobe Photoshop) placing a thin coloured line at the exact edge of the rendered building, defining the building envelope.

Where the required output is fully rendered, the output image from the modelling and rendering software displays the predetermined materials, textures and lighting. All materials specifications, textures and daylighting are applied to model prior to rendering. After rendering the fully rendered building is combined with the photograph in proprietary digital 'paint' software (again Adobe Photoshop) to produce the photomontage image.

In order to achieve the most photorealistic result, colour correction adjustments may be made to the rendered image. For example hue, saturation and brightness values of the rendered image may be adjusted to better match the colour tones of the photograph. For example, poor air quality at the time of photography may necessitate the rendered image to be 'degraded' to ensure that it behaves visually as the other buildings within the photograph. This is an iterative process and is reliant on the skill of the artist and good communication between the artist and the architect to ensure their vision for the material and texture qualities is maintained. The design team then signed off on the appearance of the scheme in the views.

'Masks' are created where the line of sight to the proposed scheme is interrupted by foreground buildings or elements such as lampposts, vehicles and street furniture.

PHOTOGRAPHY METADATA

	VIEW 1	VIEW 2	VIEW 3	VIEW 4	VIEW 5	VIEW 6
DATE:	25th July 2018	25th July 2018	26th July 2018	26th July 2018	4th August 2018	26th July 2018
TIME:	14.00pm	14.38pm	12.32pm	8.35am	10.41am	10.26am
FOCAL LENGTH:	50mm	35mm	35mm	35mm	28mm	35mm
F/STOP:	f/8	f/8	f/8	f/8	f/8	f/8
EXPOSURE:	1/1000 sec	1/800 sec	1/500 sec	1/400 sec	1/640 sec	1/400 sec
GRID REFERENCE:	53°24’58”N 3°31’21”W	53°23’45”N 3°0’34”W	53°23’47”N 2°59’17”W	53°23’59”N 2°58’34”W	53°23’41”N 2°58’35”W	53°23’51”N 2°58’25”W
GROUND LEVEL:	33ft	73ft	22ft	106ft	85ft	136ft

	VIEW 7	VIEW 8	VIEW 9	VIEW 10	VIEW 11	VIEW 12
DATE:	26th July 2018	4th August 2018	26th July 2018	26th July 2018	26th July 2018	26th July 2018
TIME:	14.08pm	14.48pm	12.05pm	11.52am	15.39pm	14.20pm
FOCAL LENGTH:	35mm	28mm	35mm	28mm	24mm	35mm
F/STOP:	f/8	f/8	f/8	f/8	f/8	f/8
EXPOSURE:	1/640 sec	1/400 sec	1/640 sec	1/500 sec	1/400 sec	1/640 sec
GRID REFERENCE:	53°24’12”N 2°59’40”W	53°24’4”N 2°59’10”W	53°23’38”N 2°28’59”W	53°23’43”N 2°58501”W	53°23’54”N 2°58’41”W	53°24’5”N 2°59’30”W
GROUND LEVEL:	77ft	33ft	43ft	65ft	77ft	21ft

	VIEW 13	VIEW 14	VIEW 15	VIEW 16	VIEW 17	VIEW 18
DATE:	26th July 2018	26th July 2018	26th July 2018	26th July 2018	27th July 2018	25th July 2018
TIME:	9.42am	11.45am	7.50am	13.33pm	13.15pm	15.17pm
FOCAL LENGTH:	28mm	35mm	35mm	35mm	50mm	50mm
F/STOP:	f/8	f/8	f/8	f/8	f/9	f/9
EXPOSURE:	1/500 sec	1/500 sec	1/400 sec	1/500 sec	1/640 sec	1/640 sec
GRID REFERENCE:	53°23’40”N 2°58’31”W	53°23’42”N 2°58’50”W	53°24’15”N 2°58’7”W	53°24’4”N 2°59’38”W	53°23’1”N 3°1’22”W	53°22’25”N 3°0’5”W
GROUND LEVEL:	95ft	62ft	159ft	72ft	128ft	16ft

	VIEW 19
DATE:	25th July 2018
TIME:	15.51pm
FOCAL LENGTH:	50mm
F/STOP:	f/8
EXPOSURE:	1/800 sec
GRID REFERENCE:	53°23’54”N 2°58’19”W
GROUND LEVEL:	19ft

MANCHESTER STUDIO

2 Back Grafton Street
Altrincham, WA14 1DY

+44 (0)161 928 9281
info@planit-ie.com

LONDON STUDIO

Waterside, 44-48 Wharf Road
London, N1 7UX

+44 (0)207 253 5678
www.planit-ie.com