Urban 3D

The Westbury Hotel

Visually Verified Views

Methodology Report

13th April 2021

Statement of Responsibility

The verified views contained within this report have been prepared based on survey data supplied by Warner Surveys and proposed drawings supplied by Morrison Design Architects. Whilst Urban 3D endeavour to create technically accurate imagery, it is essential to recognise that photographic images / photo-montages verified or unverified alone cannot capture or reflect the complexity underlying the visual experience, and should therefore be considered an highly accurate approximation of the three-dimensional visual experience that an observer would receive in the field.

As part of a technical process, impact assessment and considered judgements using photographs and /or photomontages can only be reached by way of a visit to the location from which the photographs were taken.

Contents

1.0 About Urban 3D

Urban 3D, established in 2003, is a multidisciplinary design and CGI company with offices in both Northern Ireland and London.

We work with independent House Builders, Estate Agents, Property Developers, Architects and Planning Consultants. Our enviable list of clients include Berkeley Group, Savills, Henry Boot, Acorn Property Group, HAB Housing, London Development Group, and a range of small boutique developers and architectural practices.

We deliver high quality, technically accurate computer generated images (CGI) and a range of associated services which include, 3D property animations, drone videography, photography, photo-montages and visually verified views (VVM).

Our in-house team are qualified in their respective fields to a minimum of degree level, and those working on visually verified montages have a relevant degree in Architecture and a minimum of 5 years experience working within the architectural field.

2.0 Visually Verified Montages

WHAT ARE VERIFIED VIEWS?
Also known as accurate visual representations (AVR), Verified images, visually verified montages (VVM) and verified photomontages, verified views are highly accurate photomontages which have been created using a methodology which is compliant with the Guidelines for Landscape and Visual Impact Assessment, third edition. A verified view is a photograph captured at a specific recorded location, and merged with a highly accurate 3D model of the proposed scheme and existing survey data of fixed structures within the photograph. The result is a verified photomontage showing the proposal in context with the existing environment, which can then be used to assess the visual impact of a proposed scheme or development. They have become central to the Irish & UK planning system.

THE NEED FOR VERIFIED VIEWS
Verified views eliminate the guesswork and artistic interpretation associated with photomontages. Using rigorous methodologies set out by the Landscape Institute and London Framework, the results give the actual impression of scale and magnitude of a proposed scheme or development.

VERIFIED VIEW COMPLIANCE
Our process for creating verified views is compliant with:
1. The Landscape Institute Guidelines for Landscape and Visual Impact Assessment: 3rd edition.

2. Photography and photomontage in landscape and visual impact assessment Landscape Institute Advice Note 01/11

3. London View Management Framework SPG (March 2012) - Appendix C: Accurate Visual Representations.

This document is intended to clearly convey the underlying principles and processes that are used in the production of Verified Views. The information presented in this document will allow a third party to verify the accuracy of the images produced.
The “London View Management Framework” has the following to say regarding Verified Views.
“By accurately combining an image of a proposed development with a representation of its existing context, verified views explain the location and massing of a proposed development. They may also illustrate additional properties including the degree of visibility, architectural form or choice of materials selected.”

For more information on these publications

- https://www.landscapeinstitute.org/technical/glvia3-panel/
- https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/migrated-legacy/LIPhotographyAdviceNote01-11.pdf
- https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/planning-guidance-and-practice-notes/london-view-management

3.0 Project Overview

This proposed re-development is situated on 37 Conduit St, Mayfair, London W1S 2YF.

We have been commissioned as an independent VVM consultant to produce a total of 14 visually verified views at the following locations.

The team responsible for the information requirements to produce the VVM's are as follows:

- *Architects - Morrison Design Architects*
- *Land Surveyor* - Warner Surveys
- *Photography & VVM - Urban 3D*

VIEW 1
Camera location - Berkeley Sq / Bruton St Junction.Distance from proposal - 200m (SW)

VIEW 2
Camera location - Bruton St
Distance from proposal - 110m (SW)

VIEW 3
Camera location - Bruton St
Distance from proposal - 80m (SW)

VIEW 4
Camera location - Bruton St
Distance from proposal - 20m (W)

VIEW 5
Camera location - New Bond St
Distance from proposal - 30m (NW)

VIEW 6
Camera location - New Bond St
Distance from proposal - 60m (NW)

VIEW 7
Camera location - New Bond St
Distance from proposal - 10m (S)

VIEW 8
Camera location - New Bond St
Distance from proposal - 40m (S)

VIEW 9
Camera location - St George St
Distance from proposal - 10m (N)

VIEW 10
Camera location - St George St
Distance from proposal - 60m (N)

VIEW 11
Camera location - St George St
Distance from proposal - 160m (N)

VIEW 12
Camera location - Conduit St
Distance from proposal - 30m (NE)

VIEW 13
Camera location - Conduit St
Distance from proposal - 50m (NE)

VIEW 14
Camera location - Conduit St
Distance from proposal - 100m (NE)

VIEW 15
Camera location - Saville Row
Distance from proposal - 82m (E)

VIEW 16
Camera location - Old Burlington St
Distance from proposal - 50m (E)

VIEW 17
Camera location - Coach and Horses Yard
Distance from proposal - 25m (E)

VIEW 18
Camera location - Cork St
Distance from proposal - 100m (S)

VIEW 19
Camera location - Burlington Gardens
Distance from proposal - 200m (S)

4.0 Photography

EQUIPMENT

Camera

Canon 5D Mark iii

Lens

Canon EF 16-35mm f/4L IS USM

(Set at 35mm) (+50mm Prime)

Filter

Neutral Density Filter

Tripod

ALTA PRO 2 263AGH Alumini um Tripod kit

Plumb Bob & Line (Plummet)

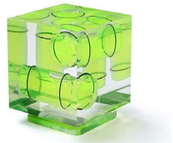
115mm body accurately machined point

Survey Paint

Semi-permanent with a tight spray

3-Axis Camera Level

Fotosnow Professional 3 Axis Bubble Spirit Level



4.1 Camera

We maintained the same camera and lens settings for all 5 VVM's to ensure continuity when comparing this proposal from the various vistas.

- Canon EOS 5D Mark iii
- Canon EF 16-35mm f/4L IS USM
- Image Width - 5760 pixels
- Image Height - 3840 pixels
- Bit depth - 24
- Focal Length - 16-35mm
- Horizontal FOV - Variable
- Vertical FOV - Variable
- Exposure - 1/250 sec | F10 | ISO 200
- Files - RAW + JPEG

4.2 Tripod & Level

As per The Landscape Institute Guidelines for Landscape and Visual Impact Assessment: 3rd edition it is critical that the camera lens is level on all axis. We need to achieve a setup that ensures zero tilting left or right and zero banking forward or backwards.

To achieve this we use a combination of 3 separate levels to ensure accuracy to within +/- 1 degree.

1. The Canon 5D Mark iii - inbuilt digital levelling system

2. The Vanguard tripod head bubble level

3. Fotosnow Professional 3 Axis Bubble Spirit Level hot-shoe mount

4.3 On-site

The following workflow was used to produce the final image set.

1. The viewpoint location is established and the tripod is set up.

2. The camera is mounted on the tripod head and levelled so that the lens axis is horizontal; this is achieved by a combination of 3 separate levels to ensure accuracy to within +/- 1 degree allowing the camera to be corrected for both roll and tilt.

3. The subject is then framed and camera settings dialled in.

4. Once the camera is level the plumb line is placed over the lens at the point of no parallax.

5. The plumb line length is set to 1.65m. (Average human eye level)

6. The tripod centre column is then raised until the plumb line makes contact with the surface below.

7. Documentation images are taken of the camera and setup for record and evidence if require.

8. The lens is manually focused so that the subject is at the plane of focus.

9. The aperture is set to F10 to create a large depth of field whilst retaining sharpness throughout the image.

10. Image capture button is remote to ensure no shake or movement within the lens and camera.

11. Images are captured in RAW format and JPEG so that the original data is preserved and no “automatic” changes are, made to the data.

12. The plumb line and bob are then used as pendulum and swung at the precise angle of the lens. This establishes the viewing angle which is then transferred to the ground using survey spray paint.

13. The cross point is the exact centre of the lens and the arrow is the exact angle of the lens, both of which will be surveyed at a later date.

14. This process is repeated for all 14 required verified views.

5.0 Topographical Survey

Equipment
Leica TS16 1 R500 Total Station
Leica Tripods, Poles, Prisims & Tapes

Survey team
Warner Surveys G.3 Bedford House,69-79 Fulham High Street,London, SW6 3JW.
Warner Surveys are a leading UK based survey company with over 40 years of experience.

Please see more information here
https://www.warnersurveys.com/

Process
Once on-site photography is complete we study each photograph and select fixed structural points, typically a minimum of 6 objects. These objects are surveyed and are later used to ensure the 3D model of the proposed building is placed within the existing photograph accurately.
To ensure accuracy at the photo-merge stage we typically require and number of fixed points within the foreground, mid-ground & background.
A number of points will also cross the y axis to establish height, some will cross the x axis to establish width and some will cross the z axis to establish depth within each of the VVM's.
The survey team document all required structural points relative to a datum point which also relates to the location and levels of the proposal.

Please see section 7 for more details.

6.0 Software

Photography - Photoshop

The photographs are captured as RAW images and are then processed in Photoshop.

Survey - AutoCad

The survey is supplied in AutoCad format.

3D Model - Vectorworks

The 3D model of the surveyed points is created in Vectorworks for mm perfect precision.

Camera Match - Cinema 4D

We camera match the existing surveyed points and surveyed camera position to the virtual camera within Cinema 4D. All camera and lens parameters are transferred from real to virtual.

Lighting and materials - Corona Renderer

We add all materials, lighting, reflections etc using Corona Renderer.

Post-Production - Photoshop

Final correction and inspection of the images happens within Photoshop.

7.0 Method Explained

Plumb Line & Bob with yellow arrow + cross hairs transferring the centre of lens and viewing angle to the ground ready for surveying.

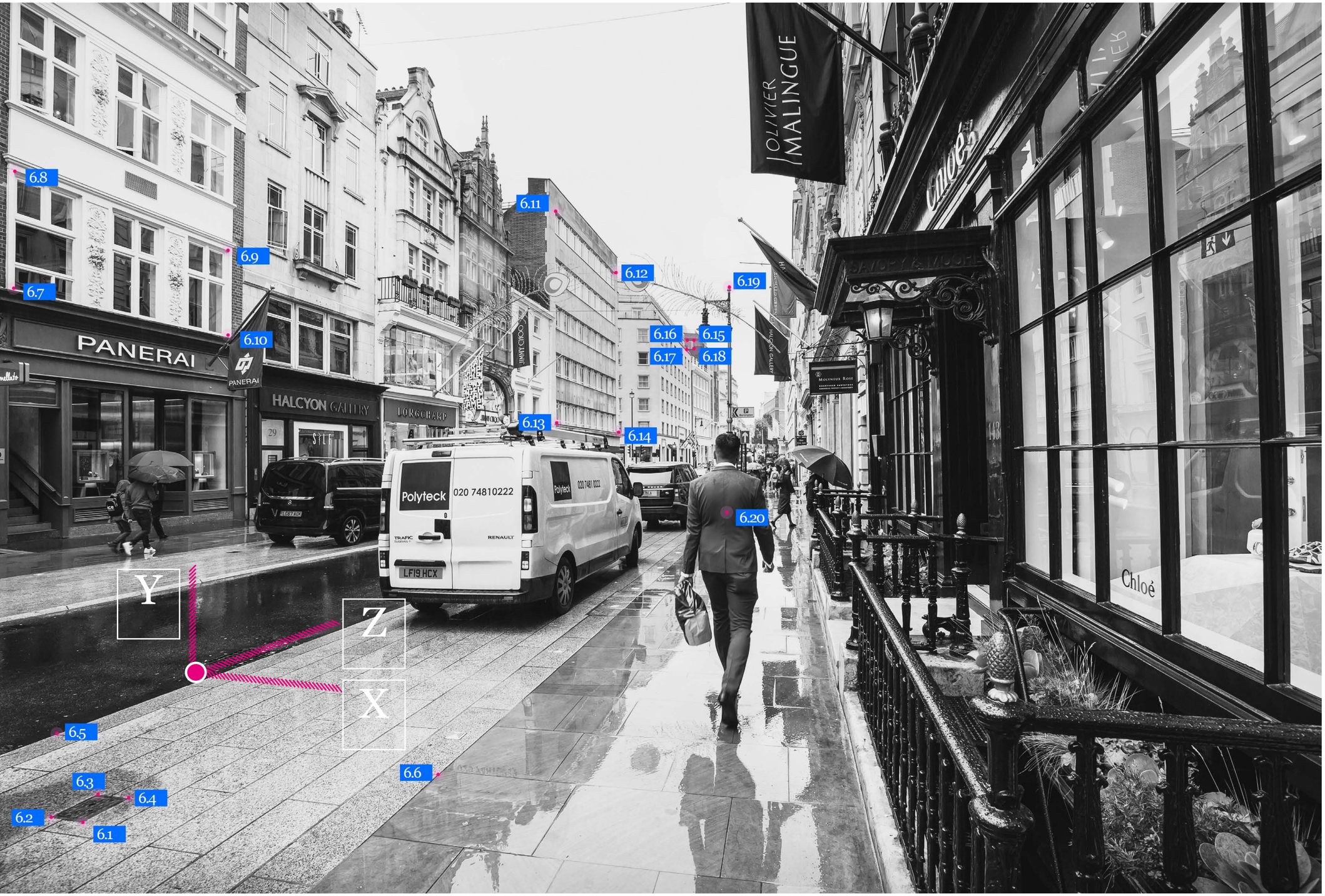
Canon 5D Electronic Level, balanced

Hot-shoe External Level, balanced

Stage 1. Photography

- Documented images showing camera setup with bank, tilt and roll corrected using levels as previously noted.
- The mid point of the lens is set to 1.65m above ground level (Average human eye level).
- Plummet (Bob & Line) set with string tied to zero parallax point on lens.
- Ground marked for survey with the intersection recording mid point of lens and the arrow recording the viewing angle.

Confidential



Stage 2. Identify required survey points

We identify fixed structural points within each photograph then label each point or object and instruct the survey team to proceed.

As noted it is best practice to have a varied range of fixed structural points between near, mid and far ground, and across the x,y,z axis.

Manhole
Point - 6.1,6.2,6.3,6.4
(Foreground / Z Axis)

Pavement
Point - 6.5,6.6
(Foreground / X Axis)

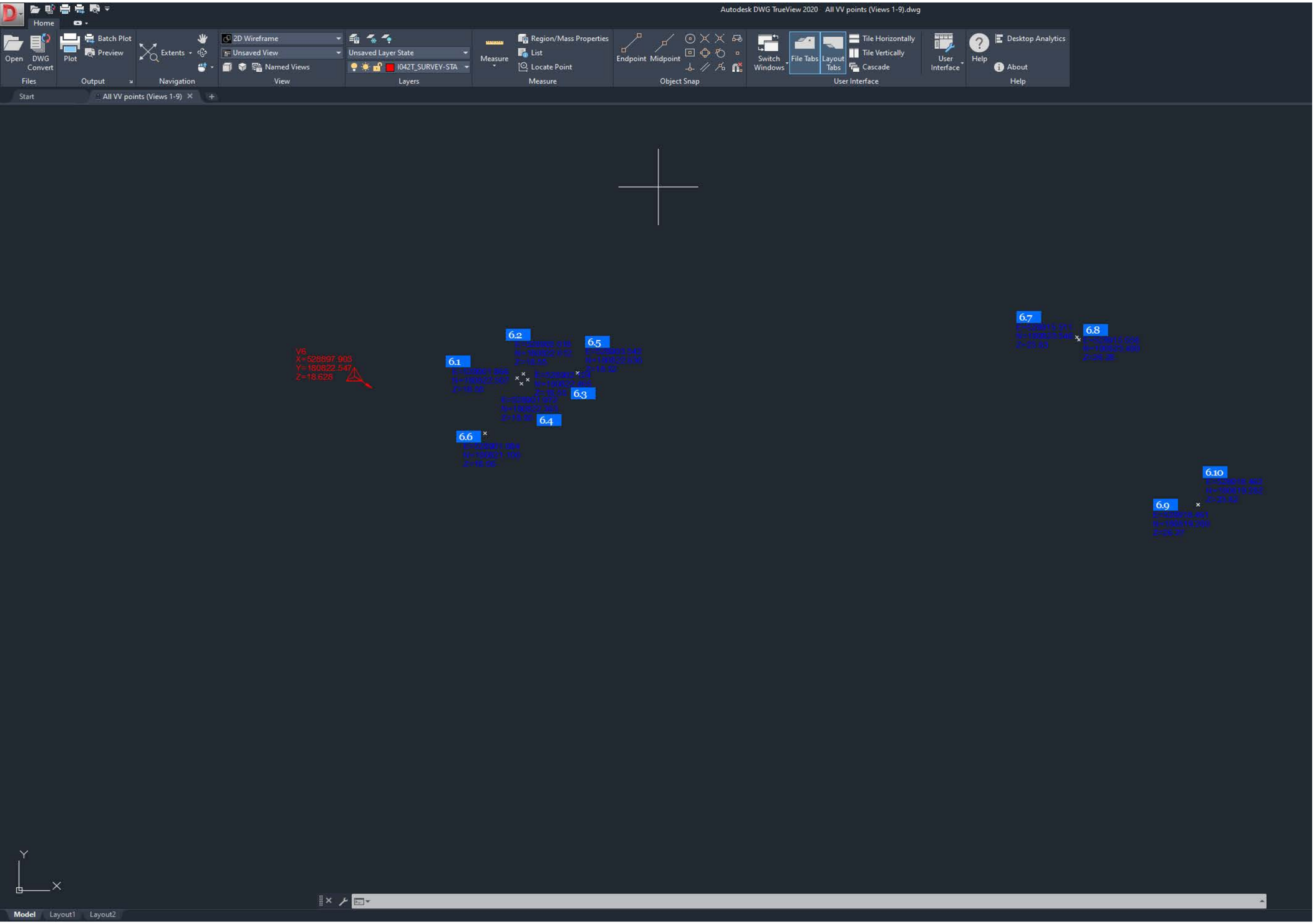
Window Group
Point - 6.7,6.8,6.9,6.10
(Foreground / Z Axis)

Window Group
Point - 6.11,6.12,6.13,6.14
(Midground / Y Axis)

Window Group
Point - 6.15,6.16,6.17,6.18
(Background / X Axis)

Lamp Post
Point - 6.19, 6.20
(Midground / Y Axis)

Confidential



Stage 3. Survey

Maintaining the same naming convention, the surveyor supplies us with the survey data in AutoCad format.

This data is now transferred to Vectorworks where the points are modelled in 3D space relative to the same datum point as the proposed building.

All base levels and heights of models created of the fixed structures, are set relative to the finished floor levels and ridge heights etc. of the proposal.

Manhole
Point - 6.1,6.2,6.3,6.4
(Foreground / Z Axis)

Pavement
Point - 6.5,6.6
(Foreground / X Axis)

Window Group
Point - 6.7,6.8,6.9,6.10
(Foreground / Z Axis)

Window Group
Point - 6.11,6.12,6.13,6.14
(Midground / Y Axis)

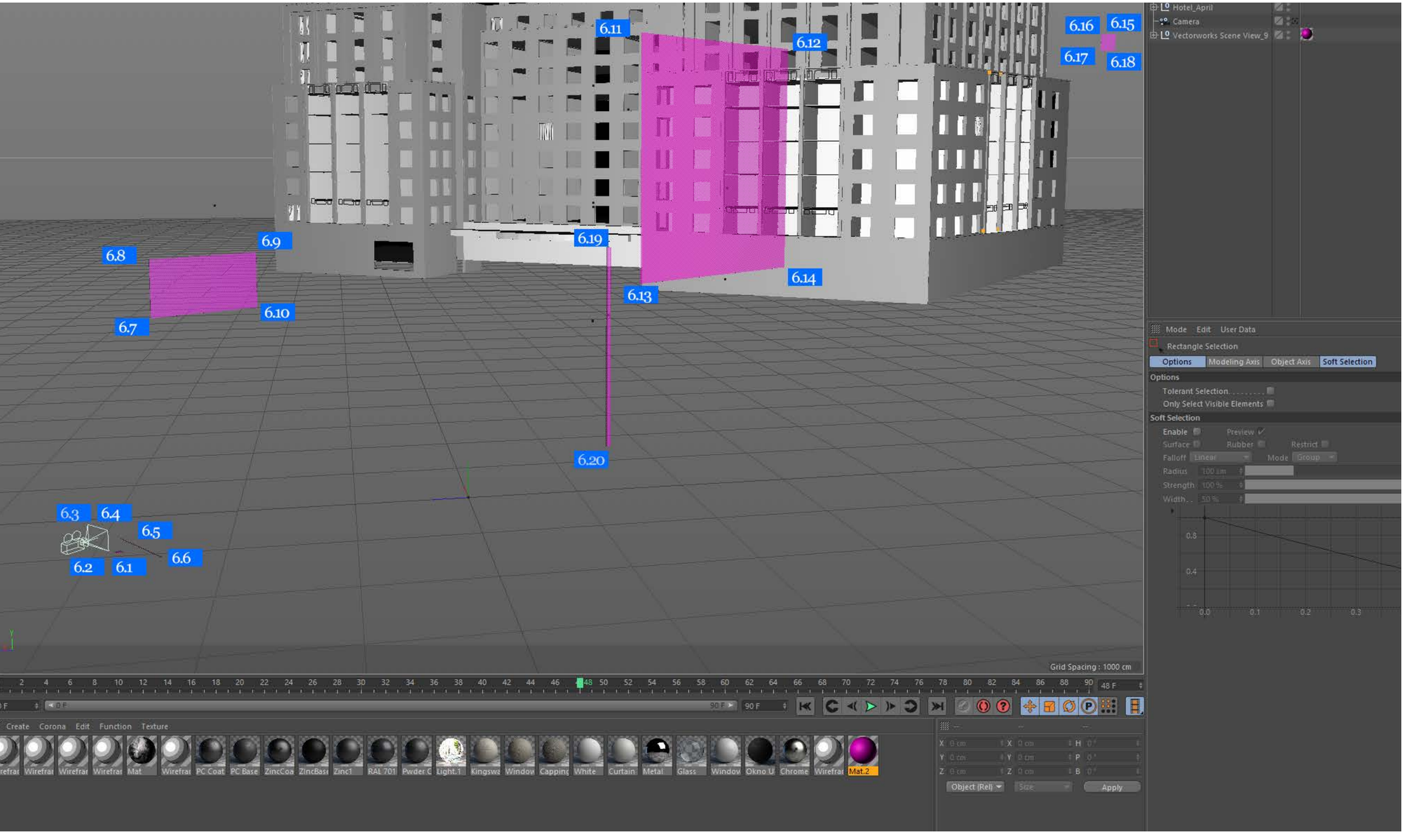
Window Group
Point - 6.15,6.16,6.17,6.18
(Background / X Axis)

Lamp Post
Point - 6.19, 6.20
(Midground / Y Axis)

Please download full survey data here if required.

https://www.dropbox.com/home/client%20folder/morrison_design/the%20westbury%20hotel/VVM/Survey

Confidential



Stage 4. 3D Model

All objects / points, camera position, height and viewing angle are now modelled in 3D space relative to the proposed building model / datum.

Manhole
Point - 6.1,6.2,6.3,6.4
(Foreground / Z Axis)

Pavement
Point - 6.5,6.6
(Foreground / X Axis)

Window Group
Point - 6.7,6.8,6.9,6.10
(Foreground / Z Axis)

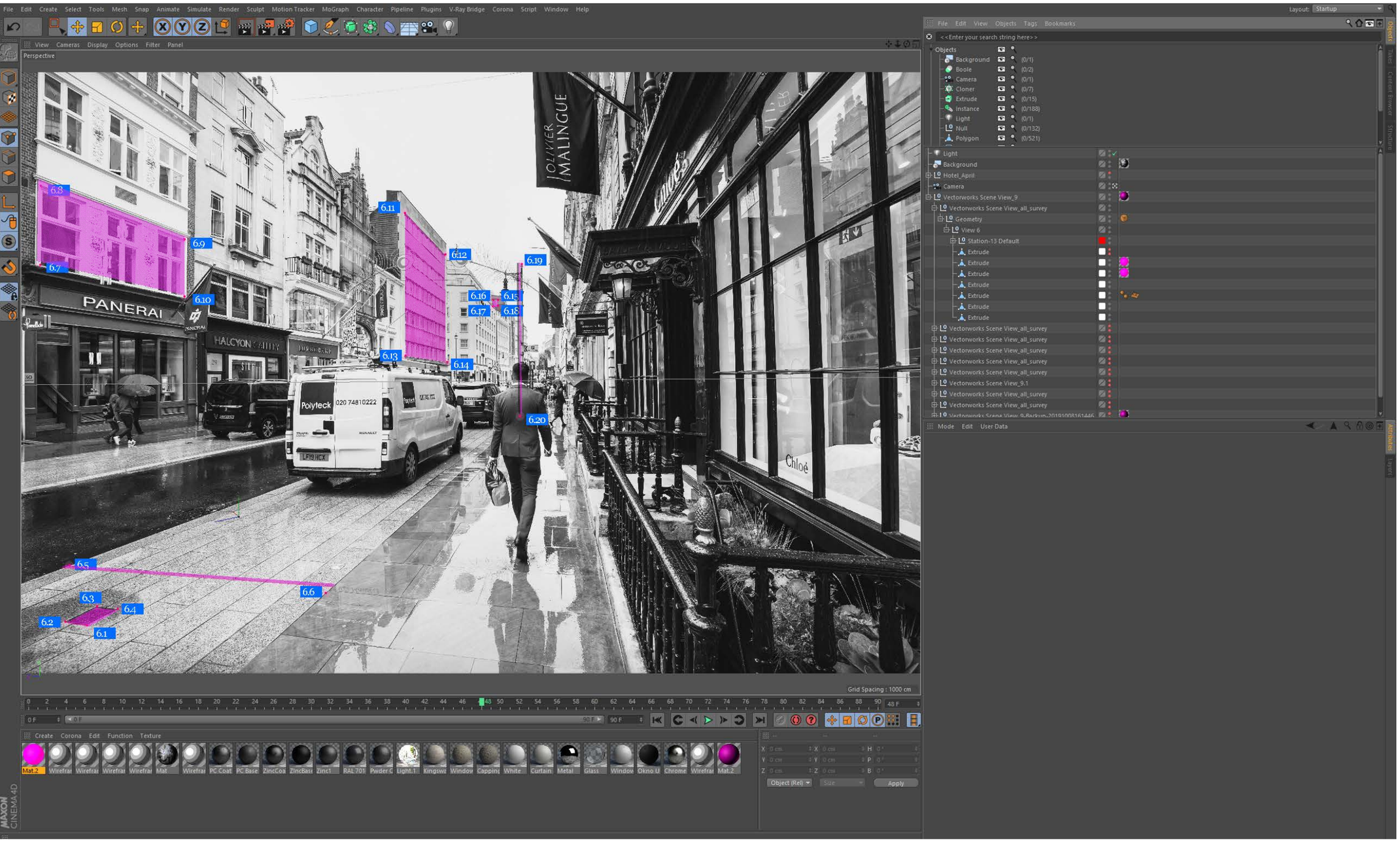
Window Group
Point - 6.11,6.12,6.13,6.14
(Midground / Y Axis)

Window Group
Point - 6.15,6.16,6.17,6.18
(Background / X Axis)

Lamp Post
Point - 6.19, 6.20
(Midground / Y Axis)

Please download full survey data here if required.

https://www.dropbox.com/home/client%20folder/morrison_design/the%20westbury%20hotel/VVM/Survey



Stage 4. Camera Match

We now match up the two cameras (Virtual & Physical) and the points should sit at the correct position within the photographs. If they align correctly this tells us that the proposal will also sit at the correct position and scale within the same view.

Manhole
Point - 6.1,6.2,6.3,6.4
(Foreground / Z Axis)

Pavement
Point - 6.5,6.6
(Foreground / X Axis)

Window Group
Point - 6.7,6.8,6.9,6.10
(Foreground / Z Axis)

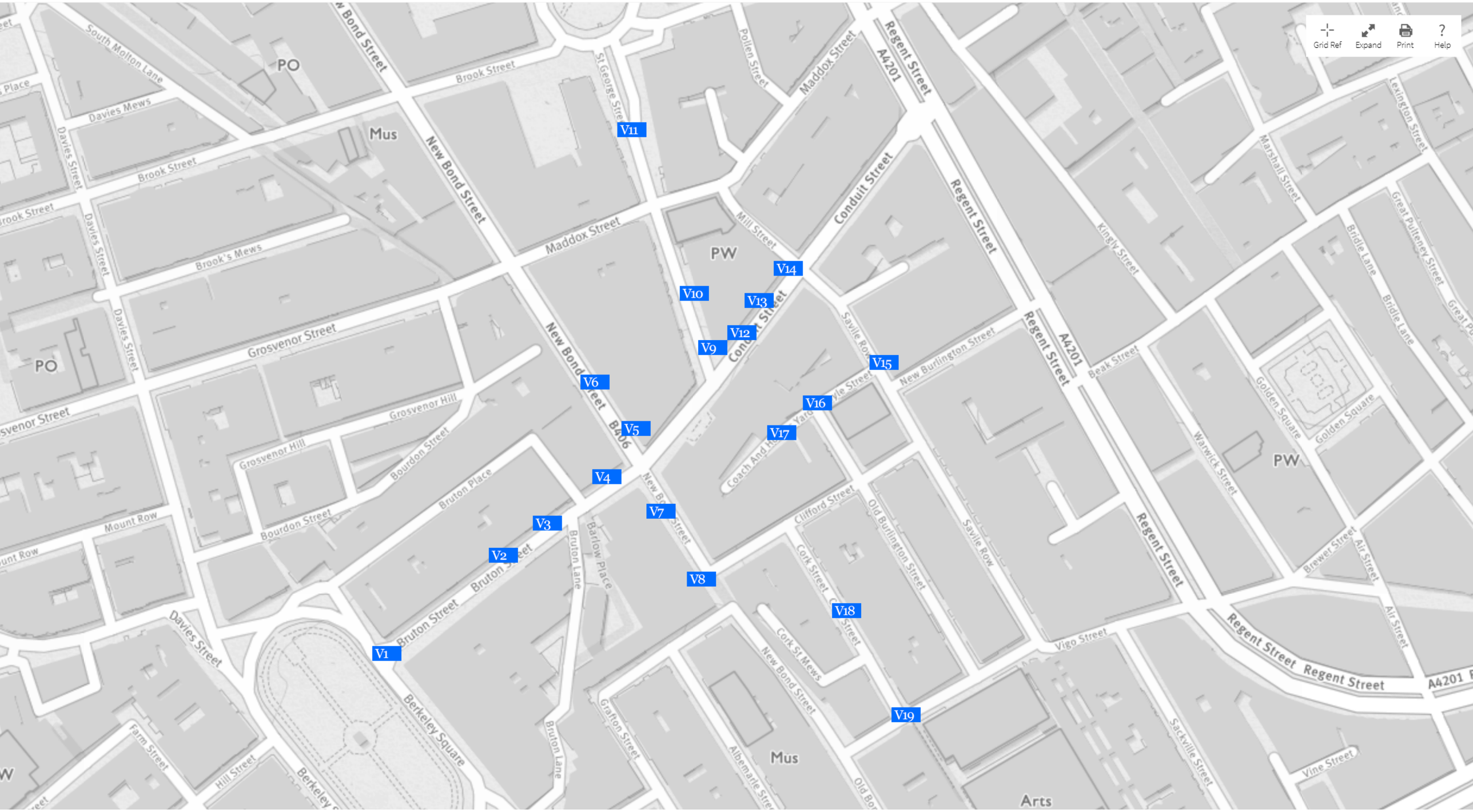
Window Group
Point - 6.11,6.12,6.13,6.14
(Midground / Y Axis)

Window Group
Point - 6.15,6.16,6.17,6.18
(Background / X Axis)

Lamp Post
Point - 6.19, 6.20
(Midground / Y Axis)

We then repeat this method & procedure for each of the verified views on the following pages.

7.0 Requested Verified View Locations


Grid Ref
Expand
Print
Help
V1
V2
V3
V4
V5
V6
V7
V8
V9
V10
V11
V12
V13
V14
V15
V16
V17
V18
V19
Bruton Street
Bruton Lane
Berkeley Square
Davies Street
Grosvenor Street
Grosvenor Hill
Bourdon Street
Bruton Place
Mount Row
Farm Street
Hill Street
Barlow Place
New Bond Street
Brook Street
Brook's Mews
Davies Mews
South Molton Lane
Maddox Street
Mill Street
Conduit Street
Regent Street
A4201
Pollen Street
St George Street
Graton Street
Albemarle Street
Cork Street
Cork St Mews
Clifford Street
Old Burlington Street
Savile Row
New Burlington Street
Vigo Street
Beak Street
Kingly Street
Marshall Street
Lexington Street
Great Pulteney Street
Bridle Lane
Golden Square
Warwick Street
Brewer Street
Air Street
Sackville Street
Vine Street
PO
Mus
PW
Arts

9.0 - Verified View 1

Photograph

Verified Photomontage

10

10 - Verified View 2

Photograph

Verified Photomontage

11

11 - Verified View 3


HOLLAND & HOLLAND
LONDON 1835
Clyma
BURBERRY
GREENE KING
COACH & HORSES
LT61 VTF
LT67 KSX
Y22 CCL

Photograph

Verified Photomontage

12

12 - Verified View 4

Photograph

Verified Photomontage

13

13 - Verified View 5


27
To Let
020 7734 3443
PUBLIC NOTICE
Russell Bromley
148
THE FINE ART SOCIETY
ESTABLISHED 1876
RICHARD GREEN

Photograph

Verified Photomontage

14

14 - Verified View 6

Photograph

Verified Photomontage

15

15 - Verified View 7

Photograph

Verified Photomontage

16

16 - Verified View 8

Confidential

Photograph

Verified Photomontage

17

17 - Verified View 9


SAINT GEORGE STREET W1
CITY OF WESTMINSTER
THE WESTBURY
PRADA
BURBERRY
TIME & LIFE BUILDING
COFFEE BAR
COFFEE BAR
GALLERY 1&2 COFFEE BAR
Sotheby's
KF14 DZJ
BN17 WYD

Photograph

Verified Photomontage

18

18 - Verified View 10


Antiquarian Maps
SCAFFOLDING
Warning
Men working
overhead
Danger
Men working
overhead
Sotheby's
ENTRANCE
CYCLES
St. George Street
Santander

Photograph

Verified Photomontage

19

19 - Verified View 11

Photograph

Verified Photomontage

20

20 - Verified View 12


FRIEZE
LONDON
NEIL
BARRETT
X
UNIT
LONDON
PRESENT
ANTHONY
JAMES
SAINT GEORGE
STREET W1

Photograph

Verified Photomontage

21

21 - Verified View 13


SCAFFOLDING
Warning
Men working
overhead
Berluti
Berluti
Berluti
Berluti
Berluti
Berluti
FABIANA FILIPPI
44
WARNING
CCTV
RECORDING
HV13 EOX
www.restonwaste.co.uk
RESTON WASTE
DAF
LN15 KOH
BURBERRY

Photograph

Verified Photomontage

22

22 - Verified View 14

Photograph

Verified Photomontage

22 - Verified View 15

23

Photograph

Verified Photomontage

24

22 - Verified View 16


OLD BURLINGTON STREET W1
CITY OF WESTMINSTER
UPSTAIRS DINING

Photograph

Verified Photomontage

25

22 - Verified View 17


14
CLEAN
DAF
All drivers and visitors must report to site office

Photograph

Verified Photomontage

26

22 - Verified View 18


RK14 EOV
MF12 REU
scotech
Voice & Data Cabling
Fibre Optic Cabling
Network Design
Wireless Install
AV & CCTV
CITROEN
Warning

Photograph

Verified Photomontage

27

22 - Verified View 19


CORK STREET W1
RALPH LAUREN
NOW BREWING ON BOND STREET
A CUP OF Ralph's COFFEE
E SEE US FOR A COFFEE
PREMIER
0800 389 3920
U-DRIVE
MW67 HZA
anteo
YN12 JUV
BRUNELLO CUCINELLI
BRUNELLO CUCINELLI

Photograph

Verified Photomontage

Urban 3D

Angel Court | Bank | London

10-12 Artillery Street
City of Derry, N.Ireland, BT48 6RG
Tel: +44 (0) 197 822 6343

Email: paul@urban3d.net
Web: www.urban3d.net

Urban 3D

- End -

Urban 3D

Angel Court | Bank | London

10-12 Artillery Street
City of Derry, N.Ireland, BT48 6RG
Tel: +44 (0) 197 822 6343

Email: paul@urban3d.net
Web: www.urban3d.net