

PHOTOGRAPHY AND ACCURATE VISUAL REPRESENTATION METHODOLOGY

Photography by:
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Photomontage views produced by Robert Aspray Digital follows the guidance of Visual Representation of development Proposals by the Landscape Institute, Technical Guidance Note 06/19 17 September 2019. Please refer to these documents for detailed information.

The following equipment was used on site to carry out the photography.

Photographic Equipment

- Digital SLR Camera with full frame sensor: Canon EOS 5D Mk II
- Fixed focal length prime Lens: Canon EF 50mm - f/1.4 USM Lens
- Hoya 58mm Pro-1 Digital UV Screw in Filter
- Remote Shutter release
- Panoramic Head: Nodal Ninja 6
- Leveller: Nodal Ninja EZ Leveling Base
- Tripod: Manfrotto 190XDB/496RC2 Tripod

Other Equipment

- GPS locator
- Digital compact camera
- Tape measure
- Plumb Line
- Line spray and survey nails

Software

- PTGui
- 3DS Max
- Corona Renderer
- Affinity Photo
- Affinity Publisher

Site Photography

At each receptor survey station, the following procedure was carried out in sequence, during suitable day light hours:

- Set up the camera time and date and ensure setup to capture images in RAW format.
- Determine the best position for camera location in relation to the type of receptor (specific or representative).
- Determine the approximate angle of view to the nearest visible feature of the proposed new scheme using detailed scheme proposals overlaid on a detailed OS plan.
- Setup the tripod with a camera height of 1.6m above ground, using a tape measure.
- Level the camera on the horizontal plane using the tripod mounted levelling base and check level through 360 degrees.

- Set up first camera shot, centred on the nearest visible feature (as determined above) and set the fixed increments on the panoramic head to 10 degrees.
- Manually focus the camera to infinity and ensure all setting are set to manual mode.
- Take a full panoramic sequence of 36 shots (clockwise) at 10 degree fixed intervals, to give a full 360 degree sweep, using the remote shutter release to avoid accidental adjustment of the camera settings.
- Record GPS location of the camera.
- Mark the centre location of camera using a line spray. Take a photo of the camera setup and location using a compact camera to allow for reproduction.

Panoramic Stitching

- Composite 360 degree panoramic images were created by stitching and blending using cylindrical projection, all using the automated PT GUI photo-merge application.
- After stitching, the composite image was cropped top and bottom to maintain a vertical field of view.
- Using Affinity Photo the resulting 360 degree panoramic images were proportionally resized and cropped to produce a accurate 120 degree field of view.

Photomerge Methodology

- The camera view points, reference points from the Survey and a 3D model of the proposed structures were created in 3DS Max and digital wireframe 'snapshots' of each view were saved using a virtual 120 degree lens selected from within the software.
- The digital wireframe 'snapshots' for each viewpoint were then superimposed on top of the existing viewpoint panoramas in Affinity Photo and positioned accurately over the reference points.
- A rendered image using corona renderer plugin for each view was then created.
- The rendered images were then superimposed onto the photo using the previous correctly located wireframe. The rendered images were then masked out where existing topography or vegetation would appear in front of the proposals.

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VISUAL BASELINE

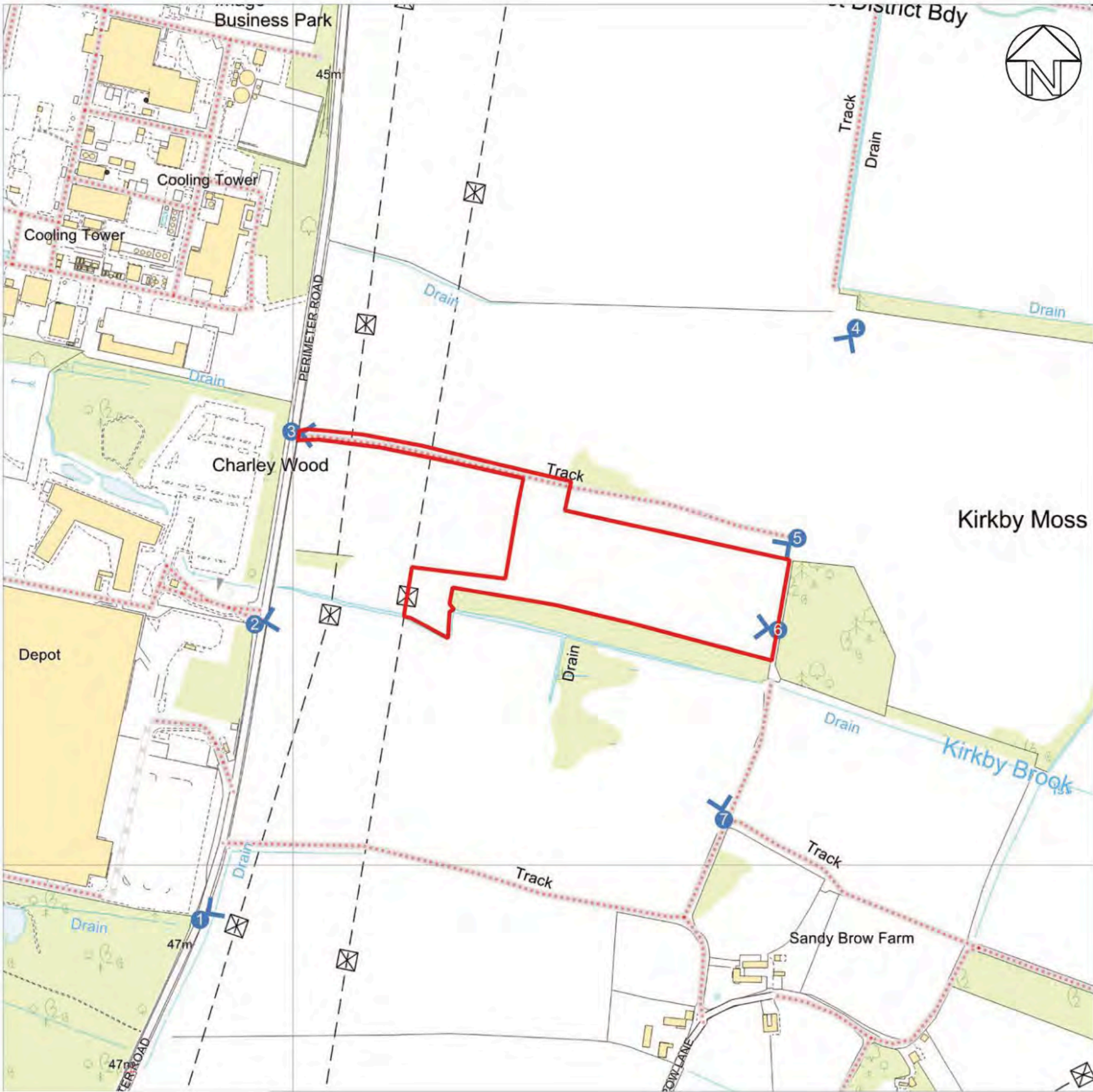


Figure 4.1 - Viewpoints - Close Range



Project	Sandy Brow BESS
Title	Verified Views



Project	Sandy Brow BESS
Title	View 2 - Existing
Visualisation Type	AVR Level 3 Type 4
Projection	Cylindrical
Date and Time	22/05/2025 11:25
Lens, FL, max aperture:	Canon EF 50mm f/1.4 USM
Camera:	Canon EOS 5D MkII
Panoramic Head:	Nodal Ninja 6
Height above ground:	1.62m
Horizontal field of view:	120 Degrees
Vertical field of view:	38 Degrees

OS X (Eastings)	343963.857
OS Y (Northings)	398232.06
OS Z (Height)	48.251
Distance to Site	150m
Direction of View	NE
Location	Perimeter Road





Project	Sandy Brow BESS
Title	View 2 - Year 1
Visualisation Type	AVR Level 3 Type 4
Projection	Cylindrical
Date and Time	22/05/2025 11:25
Lens, FL, max aperture:	Canon EF 50mm f/1.4 USM
Camera:	Canon EOS 5D MkII
Panoramic Head:	Nodal Ninja 6
Height above ground:	1.62m
Horizontal field of view:	120 Degrees
Vertical field of view:	38 Degrees

OS X (Eastings)	343963.857
OS Y (Northings)	398232.06
OS Z (Height)	48.251
Distance to Site	150m
Direction of View	NE
Location	Perimeter Road

Shrub Planting 1m Approx.
Tree Planting 4m Approx.





Project	Sandy Brow BESS
Title	View 2 - Year 10
Visualisation Type	AVR Level 3 Type 4
Projection	Cylindrical
Date and Time	22/05/2025 11:25
Lens, FL, max aperture:	Canon EF 50mm f/1.4 USM
Camera:	Canon EOS 5D MkII
Panoramic Head:	Nodal Ninja 6
Height above ground:	1.62m
Horizontal field of view:	120 Degrees
Vertical field of view:	38 Degrees

OS X (Eastings)	343963.857
OS Y (Northings)	398232.06
OS Z (Height)	48.251
Distance to Site	150m
Direction of View	NE
Location	Perimeter Road

Shrub Planting 3m Approx.
Tree Planting 6m Approx.





Project	Sandy Brow BESS
Title	View 2 - Survey Locations
Visualisation Type	AVR Level 3 Type 4
Projection	Cylindrical
Date and Time	22/05/2025 11:25
Lens, FL, max aperture:	Canon EF 50mm f/1.4 USM
Camera:	Canon EOS 5D MkII
Panoramic Head:	Nodal Ninja 6
Height above ground:	1.62m
Horizontal field of view:	120 Degrees
Vertical field of view:	38 Degrees

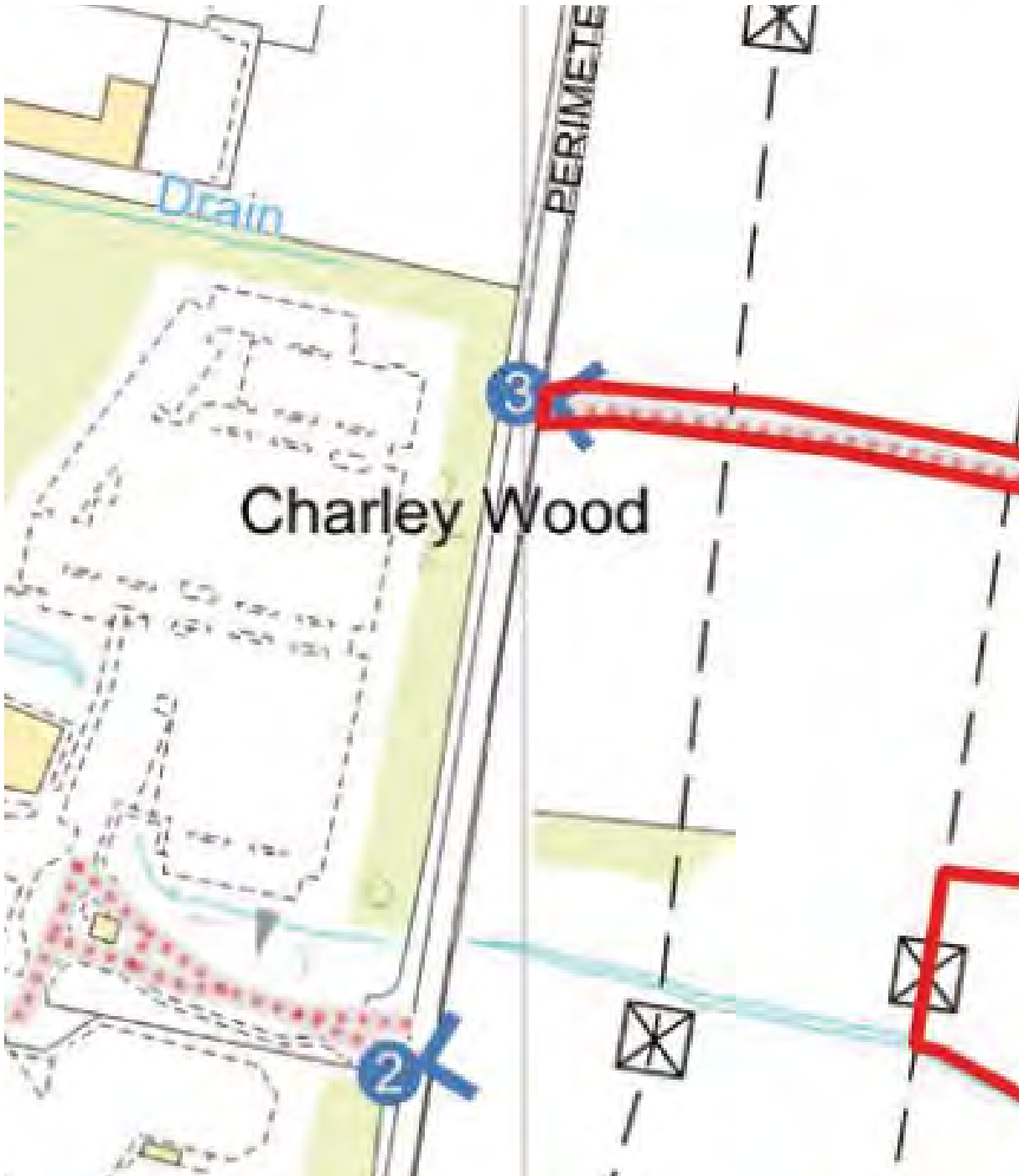
OS X (Easting)	343963.857
OS Y (Northings)	398232.06
OS Z (Height)	48.251
Distance to Site	150m
Direction of View	NE
Location	Perimeter Road





Project	Sandy Brow BESS
Title	View 3 - Existing
Visualisation Type	AVR Level 3 Type 4
Projection	Cylindrical
Date and Time	22/05/2025 11:31
Lens, FL, max aperture:	Canon EF 50mm f/1.4 USM
Camera:	Canon EOS 5D MkII
Panoramic Head:	Nodal Ninja 6
Height above ground:	1.62m
Horizontal field of view:	120 Degrees
Vertical field of view:	38 Degrees

OS X (Eastings)	343996.23
OS Y (Northings)	398421.053
OS Z (Height)	47.086
Distance to Site	8m
Direction of View	SE
Location	Perimeter Road

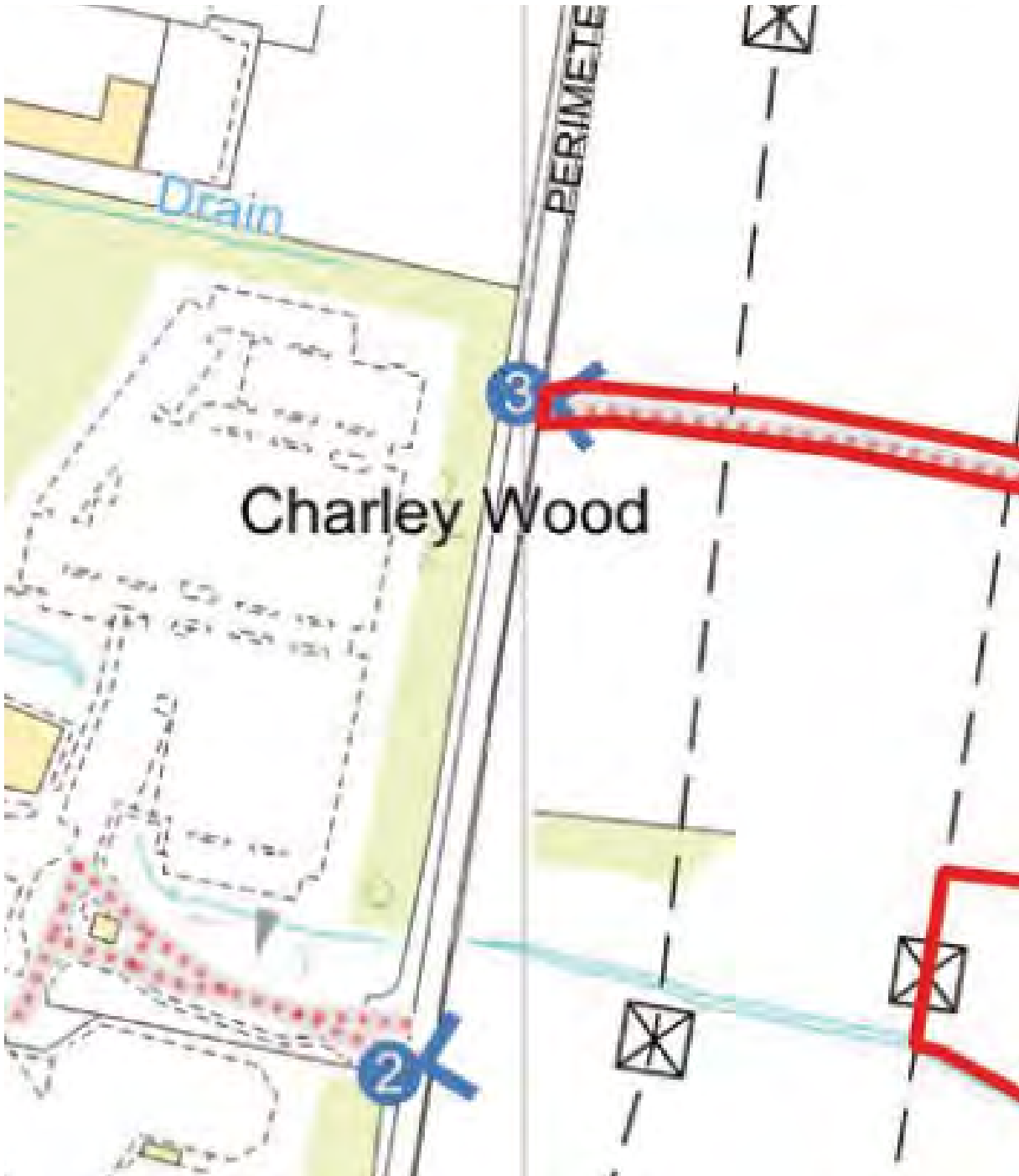




Project	Sandy Brow BESS
Title	View 3 - Year 1
Visualisation Type	AVR Level 3 Type 4
Projection	Cylindrical
Date and Time	22/05/2025 11:31
Lens, FL, max aperture:	Canon EF 50mm f/1.4 USM
Camera:	Canon EOS 5D MkII
Panoramic Head:	Nodal Ninja 6
Height above ground:	1.62m
Horizontal field of view:	120 Degrees
Vertical field of view:	38 Degrees

OS X (Easting)	343996.23
OS Y (Northings)	398421.053
OS Z (Height)	47.086
Distance to Site	8m
Direction of View	SE
Location	Perimeter Road

Shrub Planting 1m Approx.
Tree Planting 4m Approx.

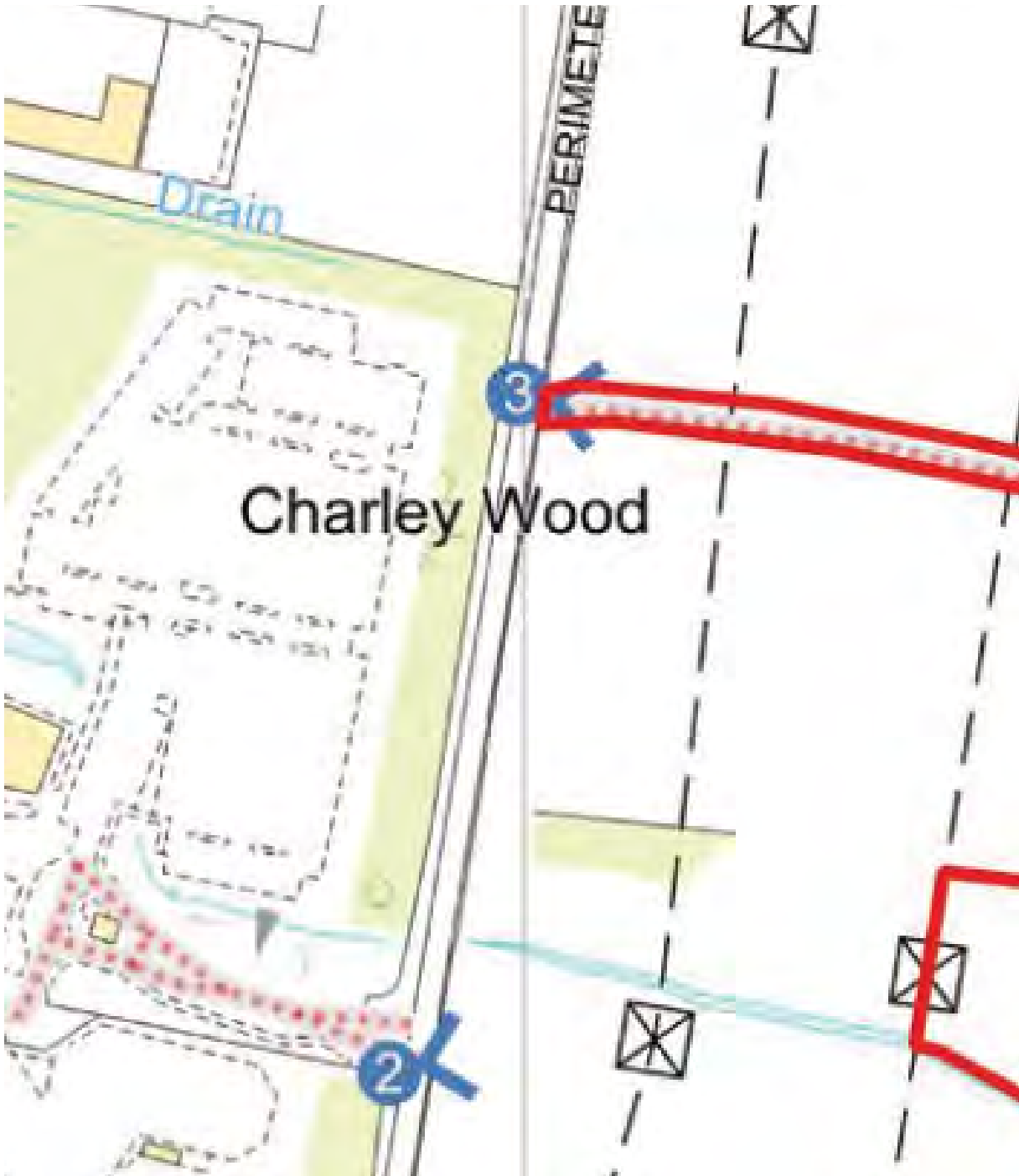




Project	Sandy Brow BESS
Title	View 3 - Year 10
Visualisation Type	AVR Level 3 Type 4
Projection	Cylindrical
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Lens, FL, max aperture:	Canon EF 50mm f/1.4 USM
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OS Z (Height)	47.086
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Location	Perimeter Road

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Projection	Cylindrical
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