A46 Newark Bypass

TR010065/APP/6.3

6.3 Environmental Statement

Appendix 7.3 Key Visual Receptor Photographs and Photomontages

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Volume 6

March 2025

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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Development Consent Order 202[x]

ENVIRONMENTAL STATEMENT

APPENDIX 7.3 KEY VISUAL RECEPTOR PHOTOGRAPHS AND PHOTOMONTAGES

Regulation Number:	Regulation 5(2)(a)
Planning Inspectorate Scheme Reference	TR010065
Application Document Reference	TR010065/APP/6.3
Author:	A46 Newark Bypass Project Team, National Highways

Version	Date	Status of Version
Rev 1	February 2024	DCO Application
Rev 2	February 2025	Deadline 6
Rev 3	March 2025	Deadline 7: Viewpoint 18 - Label "Stanhope Power Station" changed to "Staythorpe Power Station"

Contents

1 Introduction

1.1.1 This appendix presents baseline photography and photomontages for key visual receptors assessed as part of the Chapter 7 (Landscape and Visual Effects) of the Environmental Statement (ES) [APP-051]. These should be viewed in conjunction with the following:

- Location of key visual receptors and photomontages presented in Figure 7.4 (Visual Receptor Location Plan) of the ES Figures [AS-040].
- A list of the receptors, including the type of receptor, their sensitivity to change and a description of the baseline view, presented in Appendix 7.2 (Visual Baseline and Impact Schedules) of the ES Appendices [AS-038].
- A summary of effects upon visual receptors presented in Chapter 7 (Landscape and Visual Effects) of the ES [APP-051].

1.1.2 Key visual receptors and photomontage locations have been chosen to show a representative sample of existing conditions and provide a visual representation of the scale of the proposed Scheme within its setting.

2 Key visual receptors

2.1 Methodology

2.1.1 Winter site photography was captured in February 2022 and March 2023. Summer site photography was captured in September 2022.

2.1.2 Camera – Canon EOS Mark II with fixed 50 millimetre lens.

2.1.3 Baseline photography is presented as a single frame photograph (approximately 39.7 degrees Horizontal field of view (HFoV)) at A3, as a 100% reference image, with panoramas (approximately 90 degrees HFoV) to provide context.

2.2 Photography

2.2.1 Key visual receptor locations are listed below. Locations of these receptors are depicted on Figure 7.4 (Visual Receptor Location Plan) of the ES Figures [AS-040].

Viewpoint 9

2.2.2 View south-east from Crees Lane representative of views for residents on Crees Lane.

Viewpoint 10

2.2.3 View from Public Rights of Way (PRoW) Newark BW2 (bridleway) representative of views for users of the footpath, residents on The Ivies, The Osiers, Mills Drive and The Weavers and recreational users of the River Trent waterway.

Viewpoint 11

2.2.4 View east from PRoW Farndon BW1 (bridleway) and Farndon FP4 representative of views for users of the footpaths Farndon BW1, FP4 and the eastern end of Newark FP1 and Newark BW2 west of the A46.

Viewpoint 18

2.2.5 View north-west from Newark Castle representative of views for visitors to the Castle and Gardens.

Viewpoint 31

2.2.6 View west from the footpath along the River Trent west of River View representative of views for residents and users of the footpath and Bridleway BW5.

Viewpoint 32

2.2.7 View north-west from PRoW Newark BW6 (Bridleway) representative of views for users of the footpath and the River Trent waterway.

Viewpoint 36

2.2.8 View north from Winthorpe Road representative of views for users of the Trent Valley Way long distance route and National Cycle Network Route 64.

Viewpoint 47

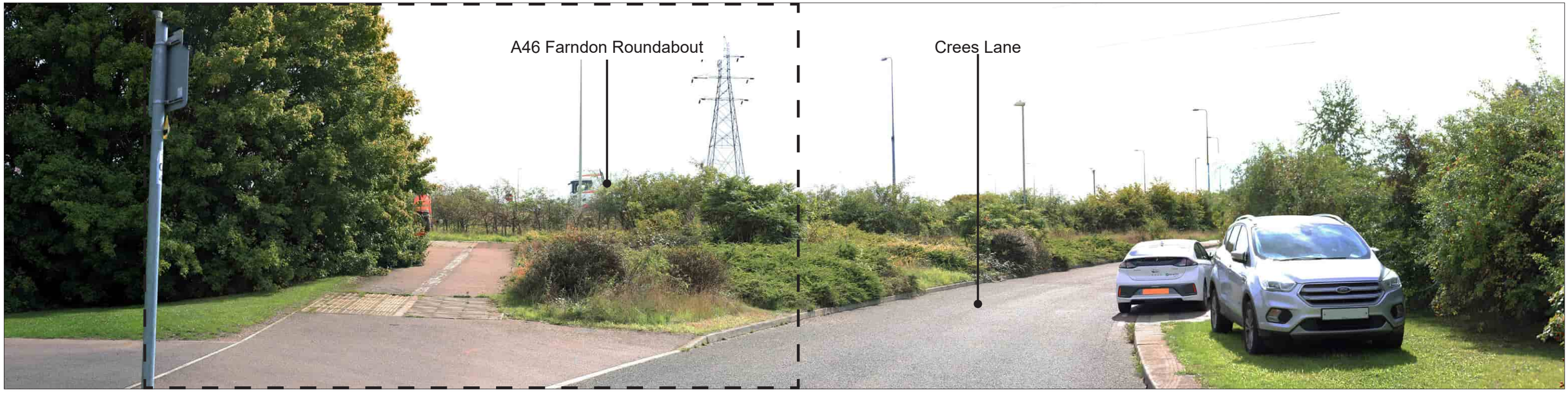
2.2.9 View south-east from Hargon Lane (west) representative of views residents on Hargon Lane.

Viewpoint 49

2.2.10 View west from Drove Lane representative of views for road users.

Viewpoint 9: Representative views for residents on Crees Lane looking south and east.

Viewpoint 9: Winter baseline



Viewpoint 9: Summer baseline

Viewpoint 9: Winter Baseline

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Viewpoint 9: Summer Baseline

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Viewpoint 10: View from PRoW Newark BW2 (bridleway) representative of views for users of the footpath, residents on The Ivies, The Osiers, Mills Drive and The Weavers and recreational users of the River Trent waterway.

Viewpoint 10: Winter baseline

Viewpoint 10: Summer baseline

Viewpoint 10: Winter Baseline
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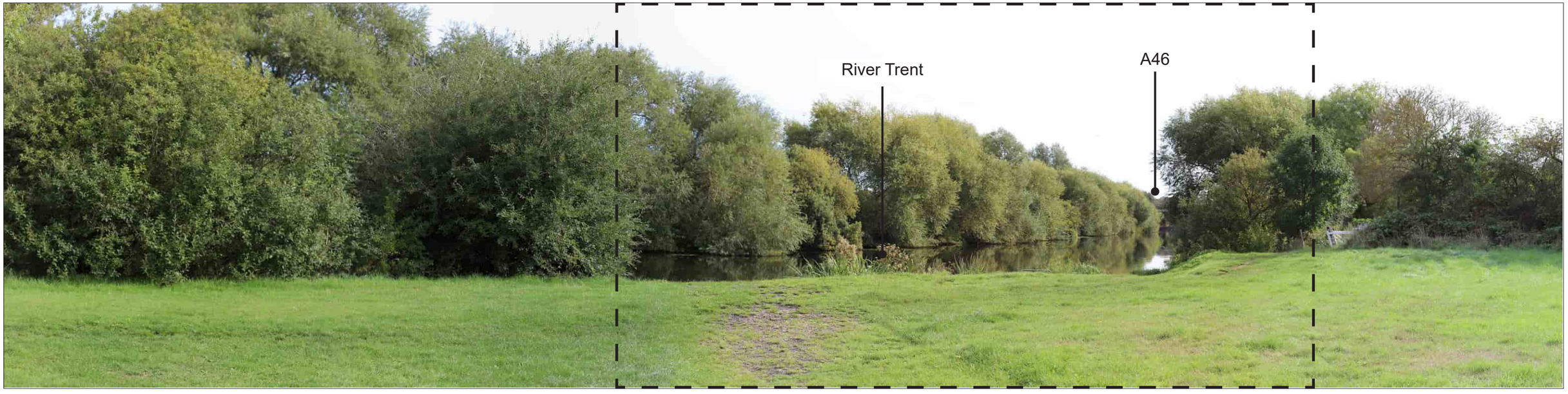
Viewpoint 10: Summer Baseline

A46 Newark Bypass Viewpoint Photography and Photomontages

Viewpoint 11: View east from PRoW Farndon BW1 (bridleway) and Farndon FP4 representative of views for users of the footpaths Farndon BW1, FP4 and the eastern end of Newark FP1 and Newark BW2 west of the A46.

Viewpoint 11: Winter baseline



Viewpoint 11: Summer baseline

Viewpoint 11: Winter Baseline

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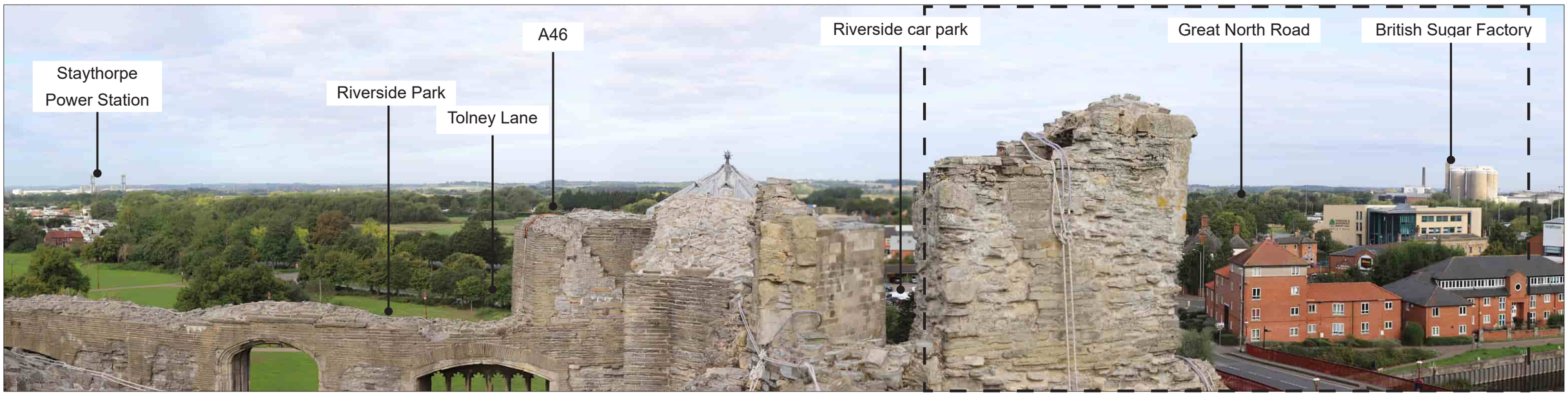
Viewpoint 11: Summer Baseline

A46 Newark Bypass Viewpoint Photography and Photomontages

Viewpoint 18: View north-west from Newark Castle representative of views for visitors to the castle and gardens.

Viewpoint 18: Winter baseline



Viewpoint 18: Summer baseline

Viewpoint 18: Winter Baseline

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Viewpoint 18: Summer Baseline

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Viewpoint 31: View west from footpath along River Trent west of River View, representative of views for residents and users of the footpath and Bridleway BW5.

Viewpoint 31: Winter baseline

Viewpoint 31: Summer baseline

Viewpoint 31: Winter Baseline

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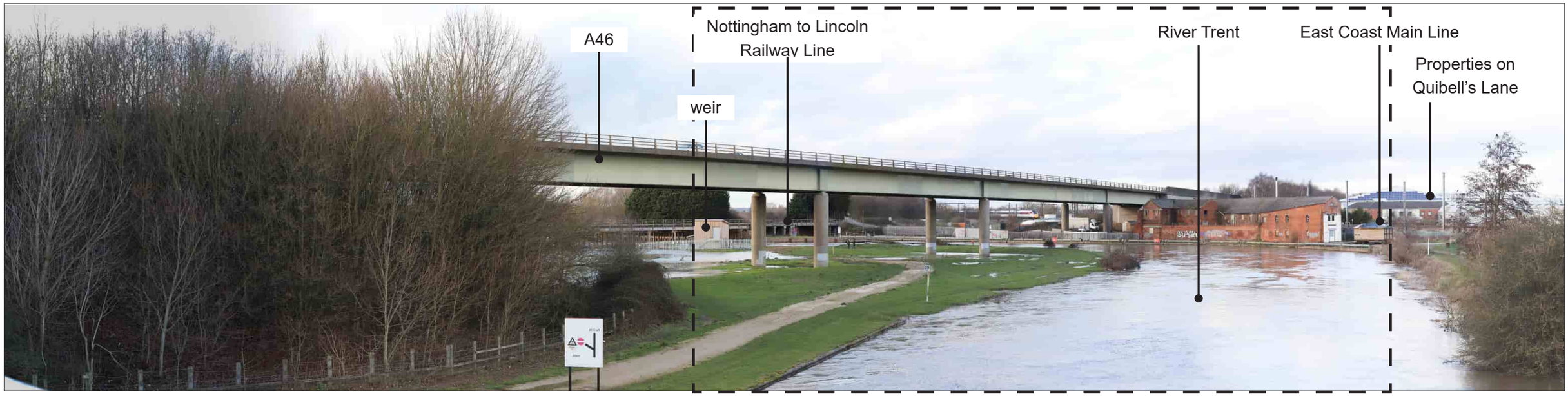
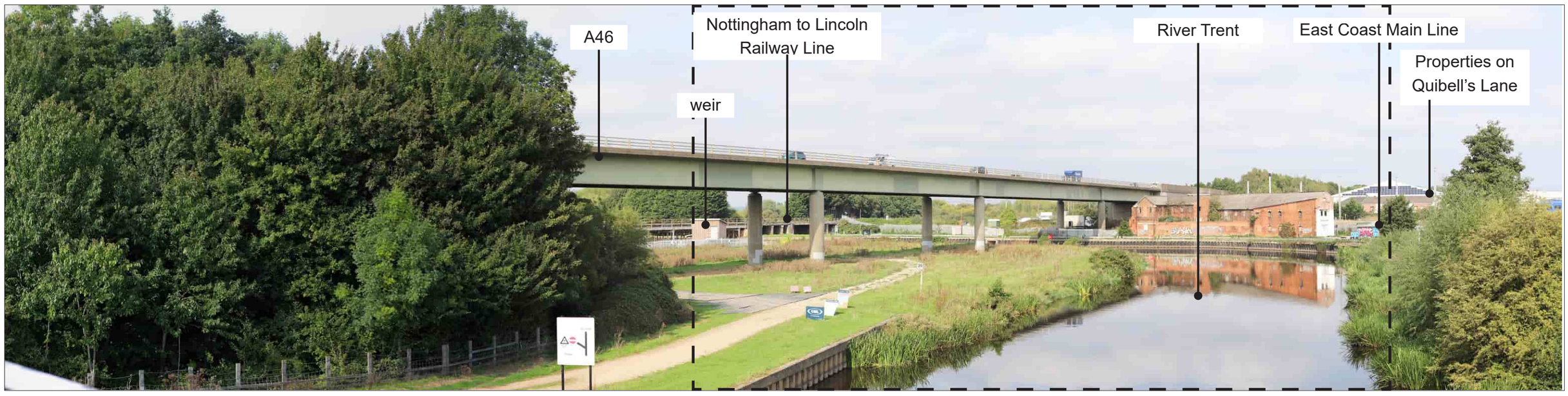
Viewpoint 31: Summer Baseline

A46 Newark Bypass Viewpoint Photography and Photomontages

Viewpoint 32: View north-west from PRoW Newark BW6 (Bridleway) representative of views for users of the footpath and the River Trent waterway



Viewpoint 32: Winter baseline



Viewpoint 32: Summer baseline

Viewpoint 32: Winter Baseline

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Viewpoint 32: Summer Baseline

A46 Newark Bypass Viewpoint Photography and Photomontages

Viewpoint 36: View north from Winthorpe Road representative of views for users of the Trent Valley Way long distance route and National Cycle Network Route 64

Viewpoint 36: Winter baseline

Viewpoint 36: Summer baseline

Viewpoint 36: Winter Baseline

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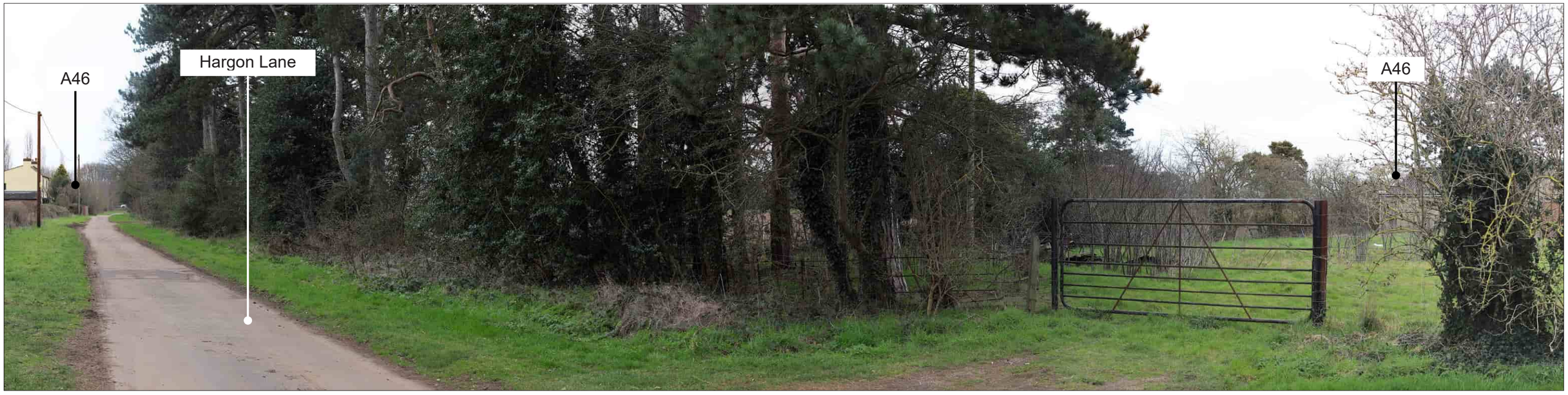
Viewpoint 36: Summer Baseline

A46 Newark Bypass Viewpoint Photography and Photomontages

Viewpoint 47: View south-east from Hargon Lane (west) representative of views residents on Hargon Lane



Viewpoint 47: Winter baseline

Viewpoint 47: Summer baseline

Viewpoint 47: Winter Baseline

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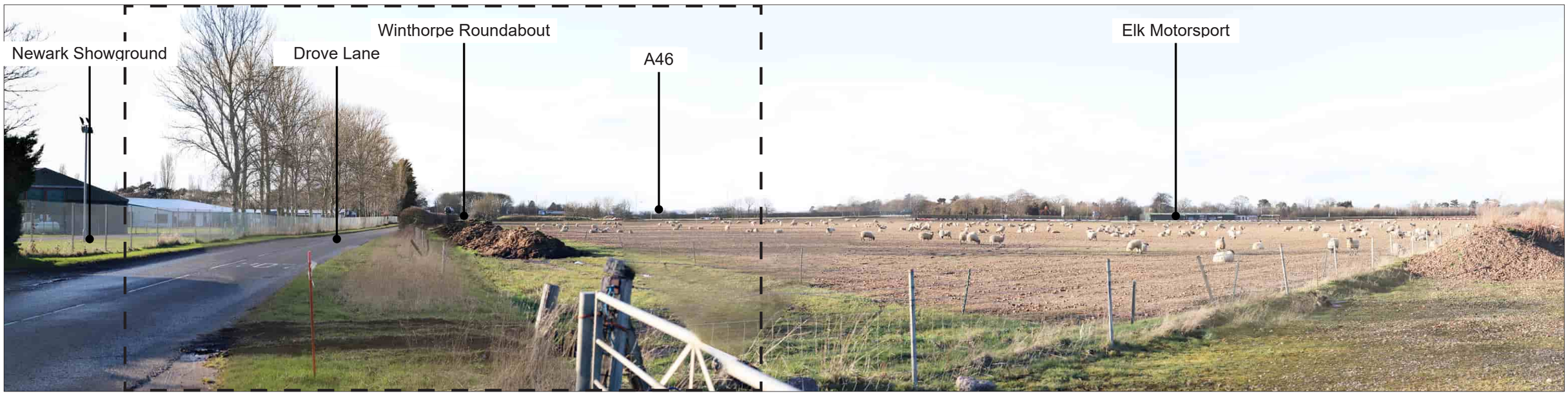
Viewpoint 47: Summer Baseline

A46 Newark Bypass Viewpoint Photography and Photomontages

Viewpoint 49: View west from Drove Lane representative of views for road users

Viewpoint 49: Winter baseline



Viewpoint 49: Summer baseline

Viewpoint 49: Winter Baseline

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Viewpoint 49: Summer Baseline

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Viewpoint 3: View south-east from Marsh Lane representative of views from residential properties to the north-east of Farndon and users of Public Rights of Way (PRoW) Farndon FP5 (footpath)

Visualisation type	Type 4	Type 4
Projection	Cylindrical	Planar
Enlargement factor	96% @ A1	100% @ A3
Date and time of capture	24.01.23 12:24	24.01.23 12:24
Make and model of camera, sensor format	Sony A7RIV	Sony A7RIV
Make, focal length of lens	Sigma 35mm	Sigma 35mm
Horizontal field of view	90	39.6
Vertical field of view	27	27
Direction of view	East	East
OS coordinates of lens	477750.894, 352568.621	477750.894, 352568.621
Lens height mAOD	14.283	14.283
Ground height mAOD	12.633	12.633
Distance to nearest Draft Order Limits	231m	231m
Height of camera lens above ground	1.650	1.650

Viewpoint location plan (NTS)

Photomontage 3: Existing view (cylindrical projection, field of view 90 degrees x 27 degrees, to be viewed at A1)

3 Photomontages

3.1 Methodology

3.1.1 The photomontages have been prepared following the Landscape Institute Technical Guidance Note 06/19: Visual Representation of Development Proposals (September 2019).

Camera equipment

3.1.2 Camera – Sony A7rIV with Sigma 35mm lens.

3.1.3 Panoramic mount - custom engineered to rotate the camera in a flat plane within 0.015 degrees to the horizon.

Image capture

3.1.4 The camera was mounted on a tripod 1.65 metres above the ground and high quality architectural photographic practice was used to capture the view in two-point perspective. For panoramic images the camera was placed on a rotating mount and a sequence of images sharing the same point of perspective and orientation with respect to the horizon were captured using a fixed 35mm lens. Images were captured in RAW format and a photograph taken of the camera in its location. Reasonable effort was made to capture images in the best weather and at the best times of day with regards to the angle of the sun.

Survey

3.1.5 A Leica total station was used to record a set of 15-25 3D coordinates within the view. These coordinates were aligned to Ordnance Survey (OS) using a Leica Viva Global Navigation Satellite System (GNSS). Where a view was in a rural location with no fixed survey points, temporary survey targets were placed and the survey undertaken at the same time as the photography.

Image processing

3.1.6 The RAW image was processed into a tiff image which was remapped to remove all lens distortion to ensure a perfect fit with the 3D data. For panoramic images, the individual frames were stitched together in specialist software to create a seamless image to the specified field of view (FOV) in an equirectangular projection. The image was then placed into a larger background and positioned so that the calculated

position of the image's optical axis was aligned with the centre of the background to compensate for any lens shift.

Camera Alignment

3.1.7 The OS coordinate and orientation of the camera was calculated using the 3D OS survey coordinates and their corresponding 2D coordinates on the image. The values obtained by this process along with the OS coordinates were moved to a local point of origin to reduce their numerical size and entered into the 3ds Max Physical camera controls and the survey points rendered out over the background image to verify the alignment.

Output package

3.1.8 The output package include the following:

- A high resolution layered tiff file with marked survey points and corresponding rendered objects as separate layers.
- Information describing the physical parameters of the camera and the time and date of the image capture.
- 3ds Max Physical camera aligned to survey.
- A spreadsheet and DXF of survey points and camera coordinates in original OS and local coordinates.
- A photographic record of the camera in its position.
- In year 15, mitigation planting is shown between 5 - 7.5 metres high for woodland, 7.5 – 10 metres high for trees and 2 – 3 metres high for hedgerows. Heights vary depending on the location of planting. Year 1, mitigation planting is shown at planting size.

3.2 Photomontage locations

3.2.1 Four photomontages have been produced as part of the Scheme assessment from Visual Receptors 3, 24, 41 and 43. Locations of these receptors are depicted on Figure 7.4 (visual Receptor Location Plan) of the ES Figures [AS-040].

Photomontage 3

3.2.2 View south-east from Marsh Lane representative of views from residential properties to the north-east of Farndon and users of Public Rights of Way (PRoW) Farndon FP5 (footpath).

Photomontage 24

3.2.3 View north from Sandhills Park representative of views for residents.

Photomontage 41

3.2.4 View south from the northern end of Winthorpe Road representative of views for residents, workers and visitors of Bridge House Boarding Kennels.

Photomontage 43

3.2.5 View south from PRoW Winthorpe FP2 (footpath) representative of views for users of the footpath.

Viewpoint 3: View south-east from Marsh Lane representative of views from residential properties to the north-east of Farndon and users of Public Rights of Way (PRoW) Farndon FP5 (footpath)

Photomontage 3: Year 1 operation

Photomontage 3: Year 15 operation

Photomontage 3: Existing view (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

Photomontage 3: Year 1 in operation (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)
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Photomontage 3: Year 15 in operation (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)
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Viewpoint 24: View north from Sandhills Park representitive of views for residents.

Visualisation type	Type 4	Type 4
Projection	Cylindrical	Planar
Enlargement factor	96% @ A1	100% @ A3
Date and time of capture	24.01.23 11:57	24.01.23 11:57
Make and model of camera, sensor format	Sony A7RII	Sony A7RII
Make, focal length of lens	Sigma 35mm	Sigma 35mm
Horizontal field of view	90	39.6
Vertical field of view	27	27
Direction of view	North	North
OS coordinates of lens	479314.806, 354491.708	479314.806, 354491.708
Lens height mAOD	12.802	12.802
Ground height mAOD	11.152	11.152
Distance to nearest Draft Order Limits	49.2m	49.2m
Height of camera lens above ground	1.650	1.650

Viewpoint location plan (NTS)

Photomontage 24: Existing view (cylindrical projection, field of view 90 degrees x 27 degrees, to be viewed at A1)

Viewpoint 24: View north from Sandhills Park representitive of views for residents.

Photomontage 24: Year 1 operation

Photomontage 24: Year 15 operation

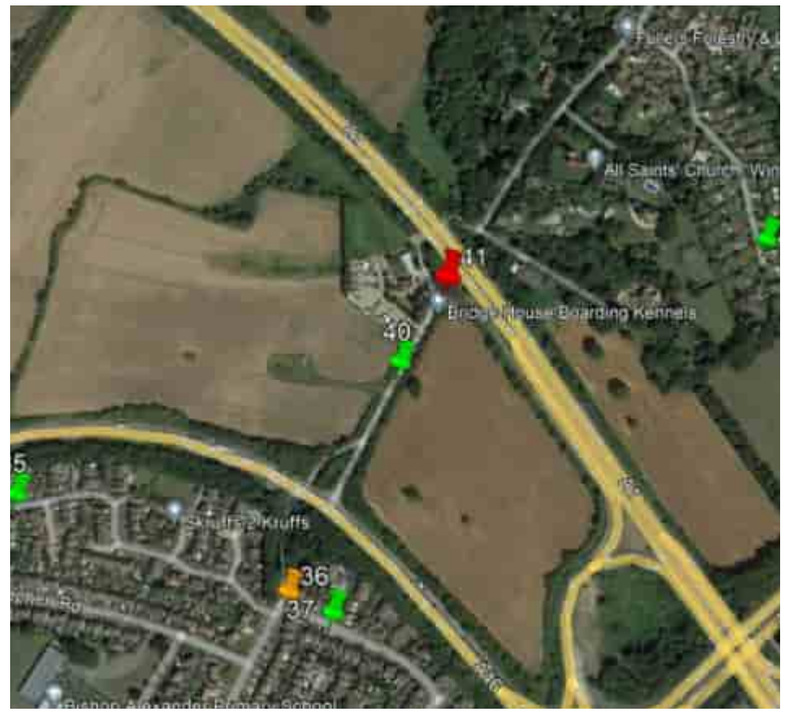
Photomontage 24: Existing view (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

Photomontage 24: Year 1 in operation (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

Photomontage 24: Year 15 in operation (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

Viewpoint 41: View south from the northern end of Winthorpe Road representative of views for residents, workers and visitors of Bridge House Boarding Kennels

Visualisation type	Type 4	Type 4
Projection	Cylindrical	Planar
Enlargement factor	96% @ A1	100% @ A3
Date and time of capture	24.01.23 11:16	24.01.23 11:16
Make and model of camera, sensor format	Sony A7RIV	Sony A7RIV
Make, focal length of lens	Sigma 35mm	Sigma 35mm
Horizontal field of view	90	39.6
Vertical field of view	27	27
Direction of view	South	South
OS coordinates of lens	481063.74, 356211.955	481063.74, 356211.955
Lens height mAOD	11.872	11.872
Ground height mAOD	10.222	10.222
Distance to nearest Draft Order Limits	10.8m	10.8m
Height of camera lens above ground	1.650	1.650



Viewpoint location plan (NTS)

Photomontage 41: Existing view (cylindrical projection, field of view 90 degrees x 27 degrees, to be viewed at A1)

Viewpoint 41: View south from the northern end of Winthorpe Road representative of views for residents, workers and visitors of Bridge House Boarding Kennels

Photomontage 41: Year 1 operation

Photomontage 41: Year 15 operation

Photomontage 41: Existing view (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

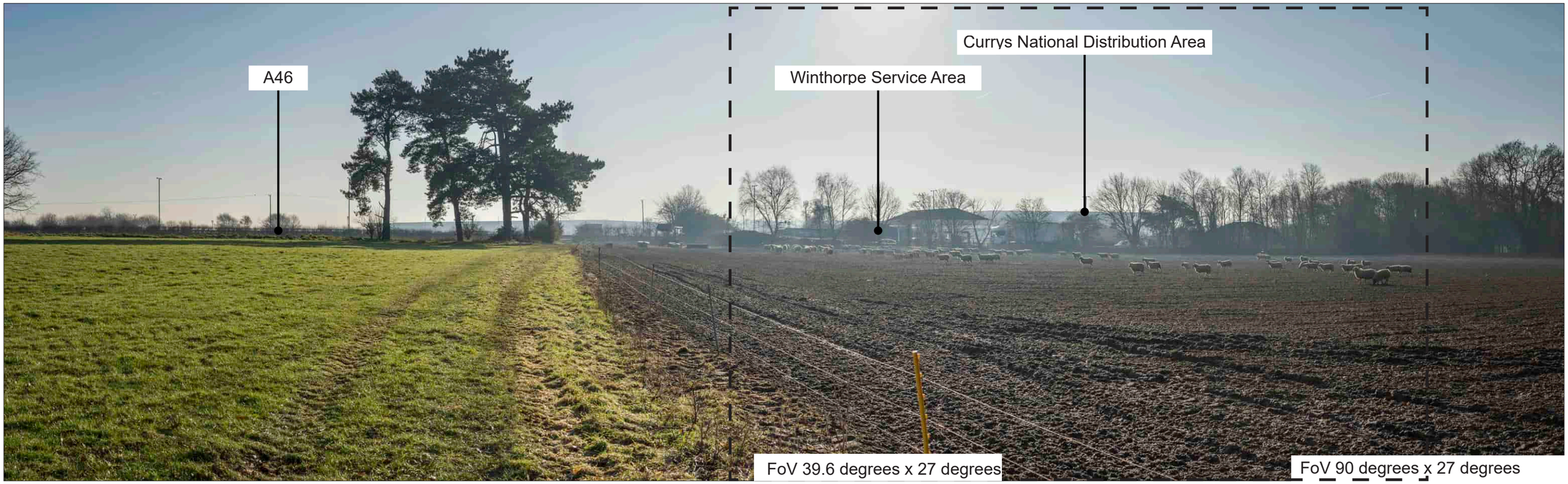
Photomontage 41: Year 1 in operation (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

Photomontage 41: Year 15 in operation (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

Viewpoint 43: View south from PRoW Winthorpe FP2 (footpath) representative of views for users of the footpath

Visualisation type	Type 4	Type 4
Projection	Cylindrical	Planar
Enlargement factor	96% @ A1	100% @ A3
Date and time of capture	24.01.23 10:46	24.01.23 10:46
Make and model of camera, sensor format	Sony A7RII	Sony A7RII
Make, focal length of lens	Sigma 35mm	Sigma 35mm
Horizontal field of view	90	39.6
Vertical field of view	27	27
Direction of view	South	South
OS coordinates of lens	481550.597, 356331.116	481550.597, 356331.116
Lens height mAOD	17.367	17.367
Ground height mAOD	15.717	15.717
Distance to nearest Draft Order Limits	93.3m	93.3m
Height of camera lens above ground	1.650	1.650

Viewpoint location plan (NTS)



Photomontage 43: Existing view (cylindrical projection, field of view 90 degrees x 27 degrees, to be viewed at A1)

Viewpoint 43: View south from PRoW Winthorpe FP2 (footpath) representative of views for users of the footpath

Photomontage 43: Year 1 operation

Photomontage 43: Year 15 operation

Photomontage 43: Existing view (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

Photomontage 43: Year 1 in operation (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

Photomontage 43: Year 15 in operation (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)

4 References

[1] Landscape Institute (September 2019) Technical Guidance Note, Visual Representation of Development Proposals [online] available at: Visualisation of development | Landscape Institute (last accessed December 2023).