

A46 Newark Bypass

TR010065/APP/6.3

6.3 Environmental Statement

Appendix 7.3 Key Visual Receptor Photographs and Photomontages Part 2

APFP Regulation 5(2)(a)

Planning Act 2008

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

Volume 6

April 2024

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 - PART 2**

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	April 2024	DCO Application

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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 3.1.7The 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 (TR010065/APP/6.2).

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)

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)

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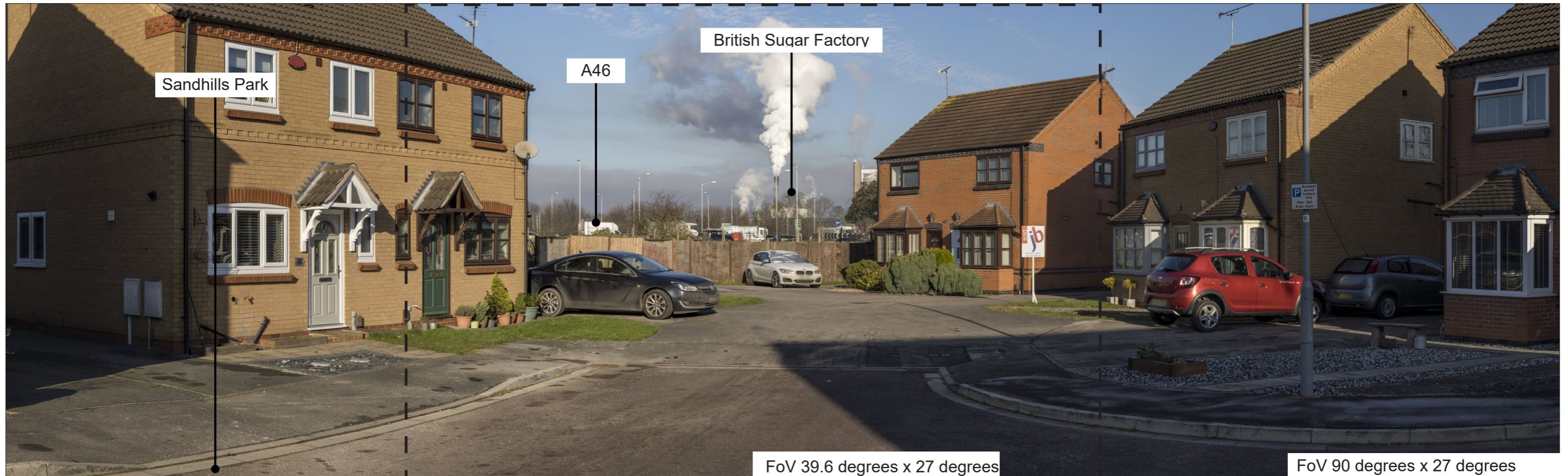
Photomontage 3: Year 15 in operation (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)
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Viewpoint 24: View north from Sandhills Park representative of views for residents.

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)

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Viewpoint 24: View north from Sandhills Park representative 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)
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Photomontage 24: 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 24: 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 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)
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Photomontage 41: 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 41: 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 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)
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Photomontage 43: 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 43: Year 15 in operation (planar projection, field of view 39.6 degrees x 27 degrees, to be viewed at A3)
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4 References

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