

**Neath Port Talbot County Borough Council**  
**Cyngor Bwrdeistref Sirol Castell-nedd**

**Democratic Services**  
**Gwasanaethau Democrataidd**

**Chief Executive:** K.Jones

**Date:** 26 July 2021

Dear Member,

**PLANNING COMMITTEE - TUESDAY, 27TH JULY, 2021**

Please find attached the following presentation for consideration at the next meeting of the **Planning Committee - Tuesday, 27th July, 2021.**

**Item**

- a) Presentation (Pages 3 - 36)

Yours sincerely

Tammie Davies

p.p Chief Executive

This page is intentionally left blank



Cyngor Castell-nedd Port Talbot  
Neath Port Talbot Council

Page 3

# Special Planning Committee

(Remote)

27<sup>th</sup> July 2021

Agenda Item 4a





**APPLICATION NO: P2021/0327**

**DATE: 29/3/2021**

<b>PROPOSAL:</b>	Development of a Global Centre of Rail Excellence, comprising of two test tracks of loop configuration being an electrified high speed rolling stock test track of 6.9km in length and an electrified low speed infrastructure test track of 4.5km, with overhead line equipment (OLE) and dual platform station test environment; together with operations and control offices (including staff accommodation and welfare), shunter cabins (2 no.), research and development, education and training, rolling stock storage sidings and maintenance/cleaning/decommissioning facilities; and associated, drainage, internal vehicular accesses, branch line rail connection, staff and visitor car parking, lighting, electrical infrastructure (including substations and lineside shore supplies and transformers), fencing(perimeter security, acoustic and stock proof), land reformation and hard and soft landscaping, together with demolition of existing buildings/structures (cross-boundary application affecting land within Neath Port Talbot and Powys County Council administrative boundaries) - see Powys CC Application ref. 21/0559/OUT)
<b>LOCATION:</b>	Land at and surrounding the Nant Helen Open Cast Coal Site, Powys, and Onllwyn Distribution Centre, Neath Port Talbot
<b>APPLICANT:</b>	The Welsh Ministers
<b>TYPE:</b>	Outline
<b>WARD:</b>	Onllwyn (also affecting Seven Sisters)





Page 6

- Legend**
- Redline Boundary
  - Earthworks Outline
  - Cuttings
  - Embankments

REV	DATE	BY	CHK	APP



**ARUP**

100 High Street  
 London EC2A 4PU  
 United Kingdom  
 T: +44 (0)20 7100 7000  
 F: +44 (0)20 7100 7001  
 www.arup.com

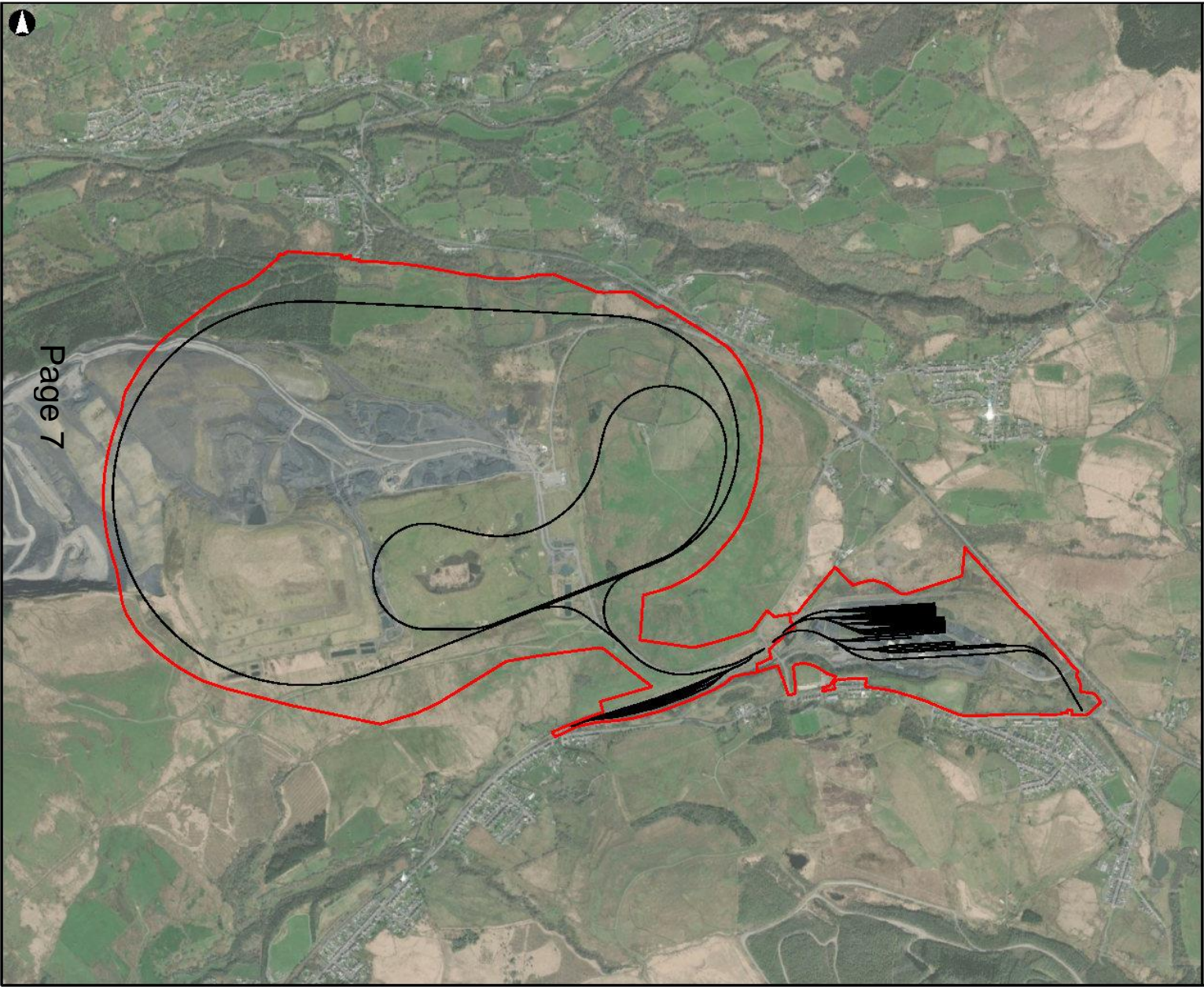
Client  
 Celtic Energy Ltd

Project  
 Nant Helen Complementary  
 Restoration Earthworks

Site Location

Scale	1:5,000
Drawn by	271968-DB
Checked by	7-1
Issue	For Issue
Sheet	F1

Basemap: Bing, DeLorme, GeoEye, IGN, AerIAL, GEBCO, IGNON, Esri, Swire, and other sources.



Page 7

- Legend**
- Planning Development Boundary
  - ▬ Site Layout Plan
  - ▬ Proposed Access Road

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

P01.3	2020-09-05	KD	CP	HH
Issue	Date	By	Checked	App'd



**ARUP**

4 Redwood Street  
 Cardiff CF10 4AG P  
 Tel +44 29 2047 3727 Fax +44 29 2047 2277  
 www.arup.com



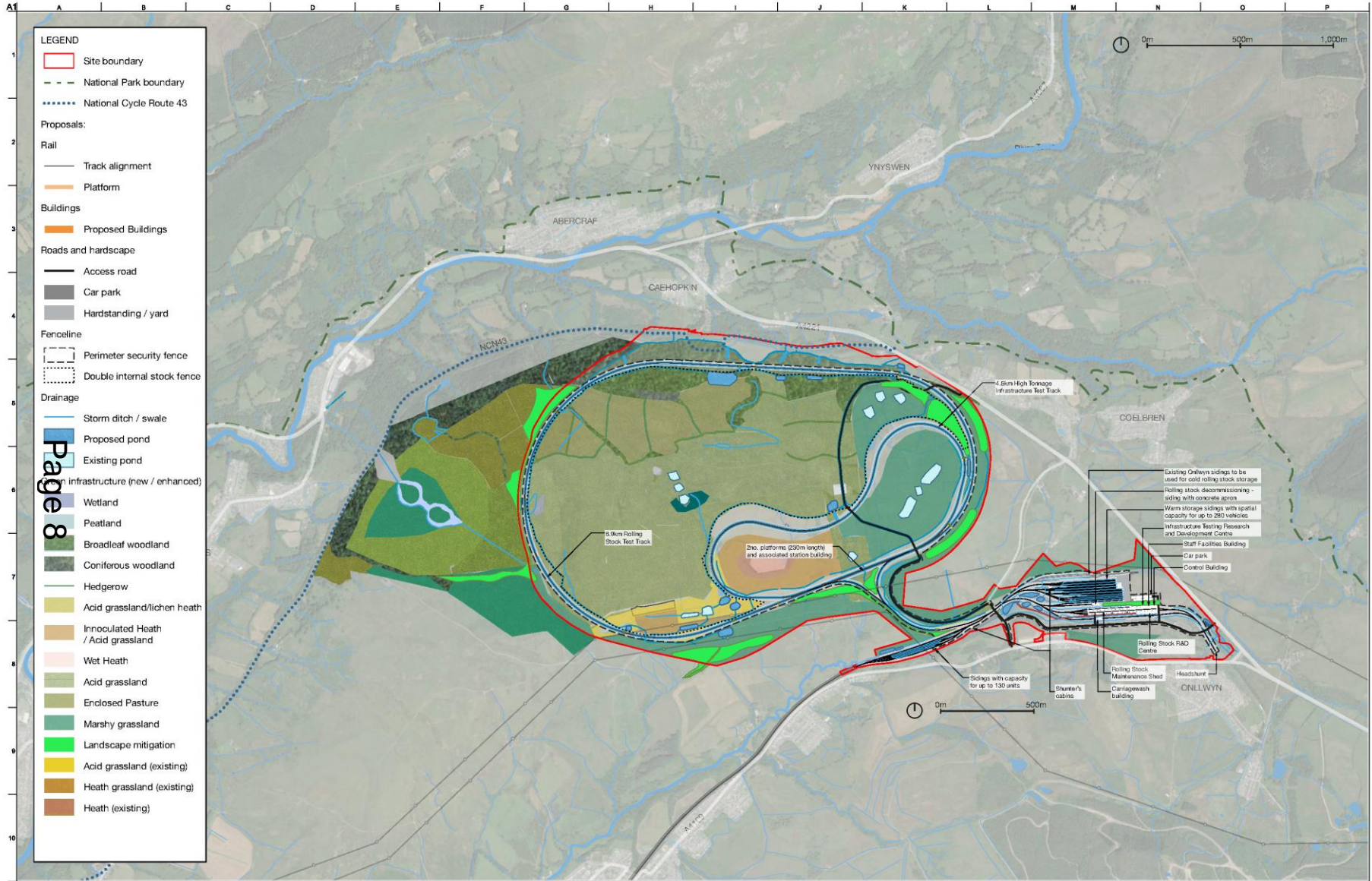
Job Title:  
**Global Centre of Rail Excellence**

Figure Title:  
**SITE LOCATION**

Scale of A3  
 1:15,000

Job No	Drawing Status
<b>264904</b>	<b>For Issue</b>

Drawing No	Issue
<b>Figure 7.1</b>	<b>P01.3</b>



- LEGEND**
- Site boundary
  - National Park boundary
  - National Cycle Route 43
- Proposals:**
- Rail**
    - Track alignment
    - Platform
  - Buildings**
    - Proposed Buildings
  - Roads and hardscape**
    - Access road
    - Car park
    - Hardstanding / yard
  - Fenceline**
    - Perimeter security fence
    - Double internal stock fence
  - Drainage**
    - Storm ditch / swale
    - Proposed pond
    - Existing pond
    - Infrastructure (new / enhanced)
    - Wetland
    - Peatland
    - Broadleaf woodland
    - Coniferous woodland
    - Hedgerow
    - Acid grassland/lichen heath
    - Innoculated Heath / Acid grassland
    - Wet Heath
    - Acid grassland
    - Enclosed Pasture
    - Marshy grassland
    - Landscape mitigation
    - Acid grassland (existing)
    - Heath grassland (existing)
    - Heath (existing)

Page 8

- Existing Orilew sidings to be used for cold rolling stock storage
- Rolling stock decommissioning siding with concrete apron
- Warm storage sidings with spatial capacity for up to 250 vehicles
- Infrastructure Testing, Research and Development Centre
- Staff Facilities Building
- Car park
- Control Building
- Rolling Stock R&D Centre
- Rolling Stock Maintenance Shed
- Headhunt
- Shunter's cabins
- Carriagewash building



00	25/05/21	BS	ER	DB
Issue	Date	By	Check	Appr

**ARUP**

4 Park Road, Chester, Wales, CH1 3JF  
 South: 01243 820000  
 North: 01243 820000  
 Fax: +44(0)1243 820000  
 www.arup.com

Client: Welsh Government

Job Title: Global Centre for Rail Excellence

Drawing Title: Illustrative Masterplan

Scale: 1:10,000

Discipline	Planning
Job No	264904-00
Drawing No	PLANNING
Issue	02



NCN43

A1221

Page 9

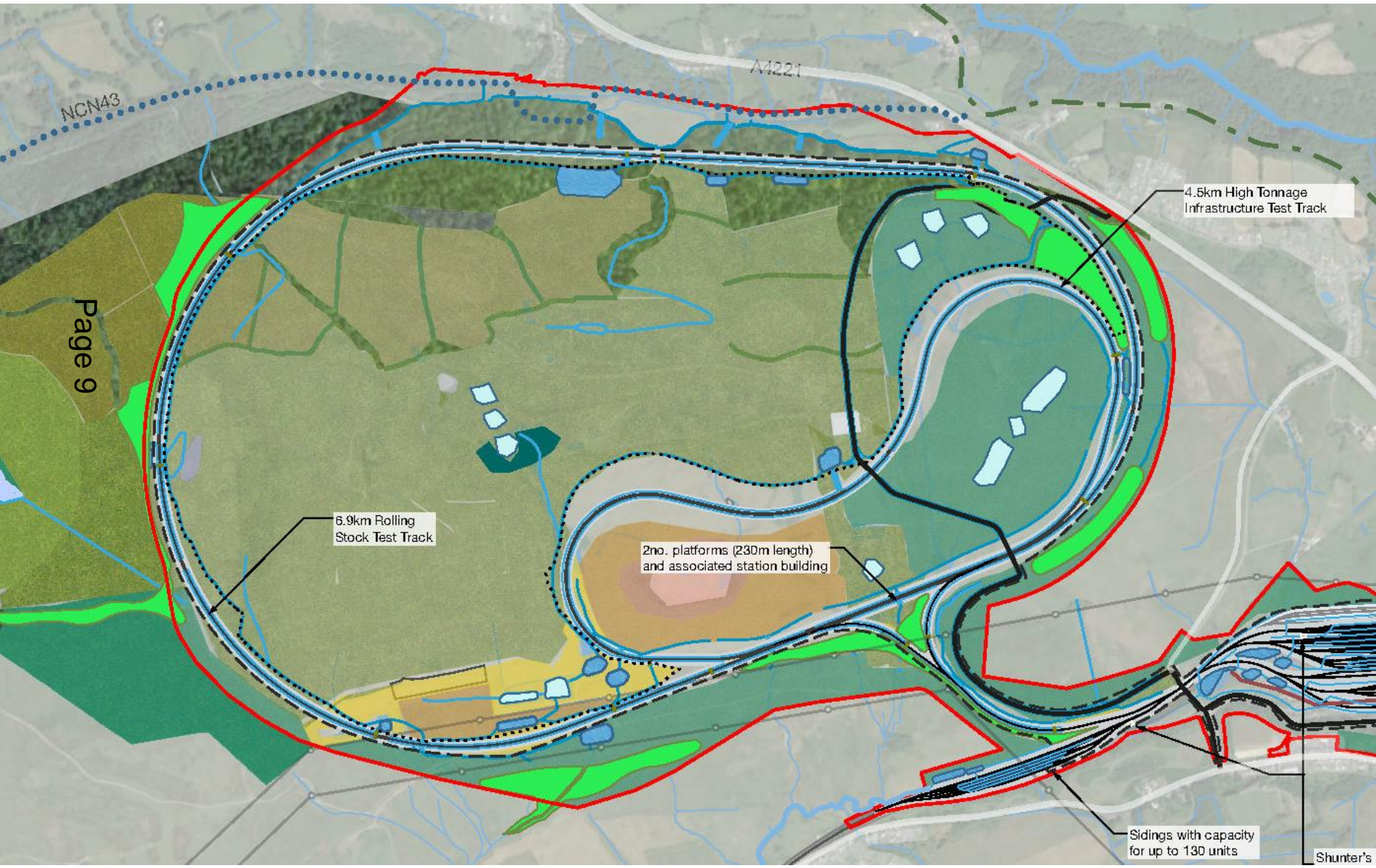
6.9km Rolling Stock Test Track

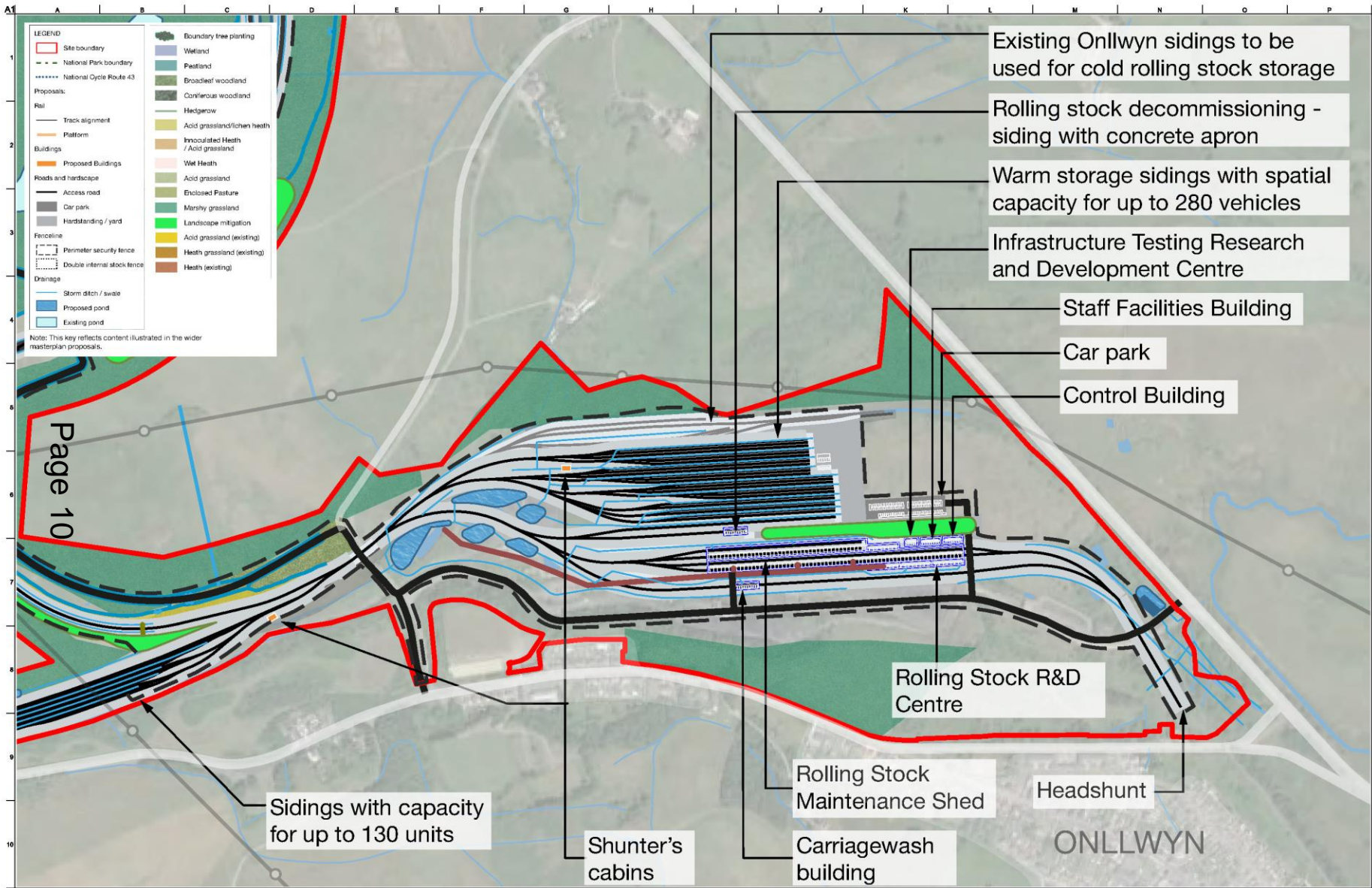
2no. platforms (230m length) and associated station building

4.5km High Tonnage Infrastructure Test Track

Sidings with capacity for up to 130 units

Shunter's





Page 10

**LEGEND**

- Site boundary
- National Park boundary
- National Cycle Route 43

**Proposals:**

- Rail**
  - Track alignment
  - Platform
- Buildings**
  - Proposed Buildings
- Roads and hardscape**
  - Access road
  - Car park
  - Hardstanding / yard
- Fence/line**
  - Perimeter security fence
  - Double internal stock fence
- Drainage**
  - Storm ditch / swale
  - Proposed pond
  - Existing pond

- Boundary tree planting
- Wetland
- Peatland
- Broadleaf woodland
- Coniferous woodland
- Hedgerow
- Acid grassland/ripen heath
- Innoculated Heath / Acid grassland
- Wet Heath
- Acid grassland
- Enclosed Pasture
- Marshy grassland
- Landscape mitigation
- Acid grassland (existing)
- Heath grassland (existing)
- Heath (existing)

Note: This key reflects content illustrated in the wider masterplan proposals.

Existing Onllwyn sidings to be used for cold rolling stock storage

Rolling stock decommissioning - siding with concrete apron

Warm storage sidings with spatial capacity for up to 280 vehicles

Infrastructure Testing Research and Development Centre

Staff Facilities Building

Car park

Control Building

Rolling Stock R&D Centre

Rolling Stock Maintenance Shed

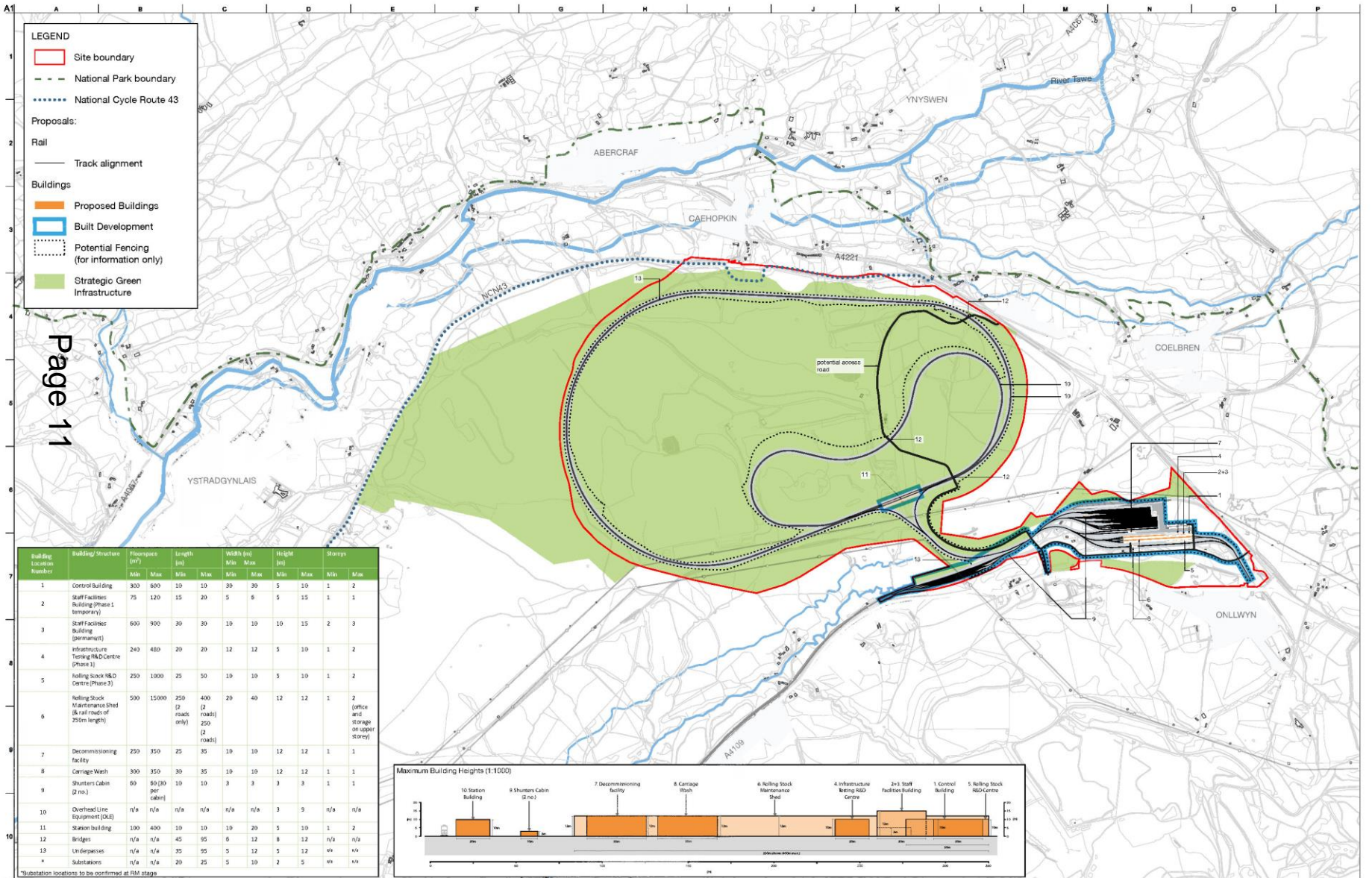
Headshunt

Sidings with capacity for up to 130 units

Shunter's cabins

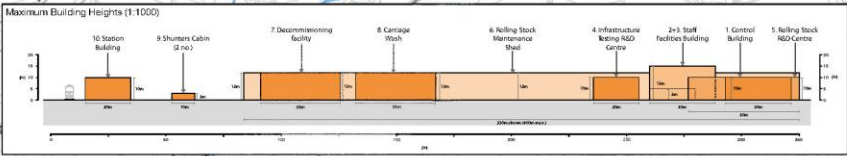
Carriagewash building

ONLLWYN



Page 11

Building Location Number	Building/Structure	Footprint (m <sup>2</sup> )		Length (m)		Width (m)		Height (m)		Storeys	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
1	Control Building	300	600	10	10	30	30	5	10	1	2
2	Staff Facilities Building (Phase 1 temporary)	75	120	15	20	5	6	5	15	1	1
3	Staff Facilities Building (Permanent)	600	900	30	30	10	10	10	15	2	3
4	Infrastructure Training & HQ Centre (Phase 1)	240	480	20	20	12	12	5	10	1	2
5	Rolling Stock & D Centre (Phase 2)	250	1000	25	50	10	10	5	10	1	2
6	Rolling Stock Maintenance Shed (8 rail roads of 250m length)	500	15000	250	400	20	40	12	12	1	2 (office and storage on upper storey)
7	Decommissioning facility	250	350	25	35	10	10	12	12	1	1
8	Carriage Wash	300	350	30	35	10	10	12	12	1	1
9	Shunters Cabin (2 nos)	60	30	10	10	3	3	3	3	1	1
10	Overhead Line Equipment (OLE)	n/a	n/a	n/a	n/a	n/a	n/a	3	9	n/a	n/a
11	Station Building	100	400	10	10	10	20	5	10	1	2
12	Buildings	n/a	n/a	45	95	6	12	8	12	n/a	n/a
13	Underpasses	n/a	n/a	35	35	5	12	5	12	n/a	n/a
*	Substations	n/a	n/a	20	25	5	10	2	5	n/a	n/a





Page 12

Drone Video of Nant Helen Site (Mid 2020)



Page 13

Drone Video of Washery Site (Mid 2020)







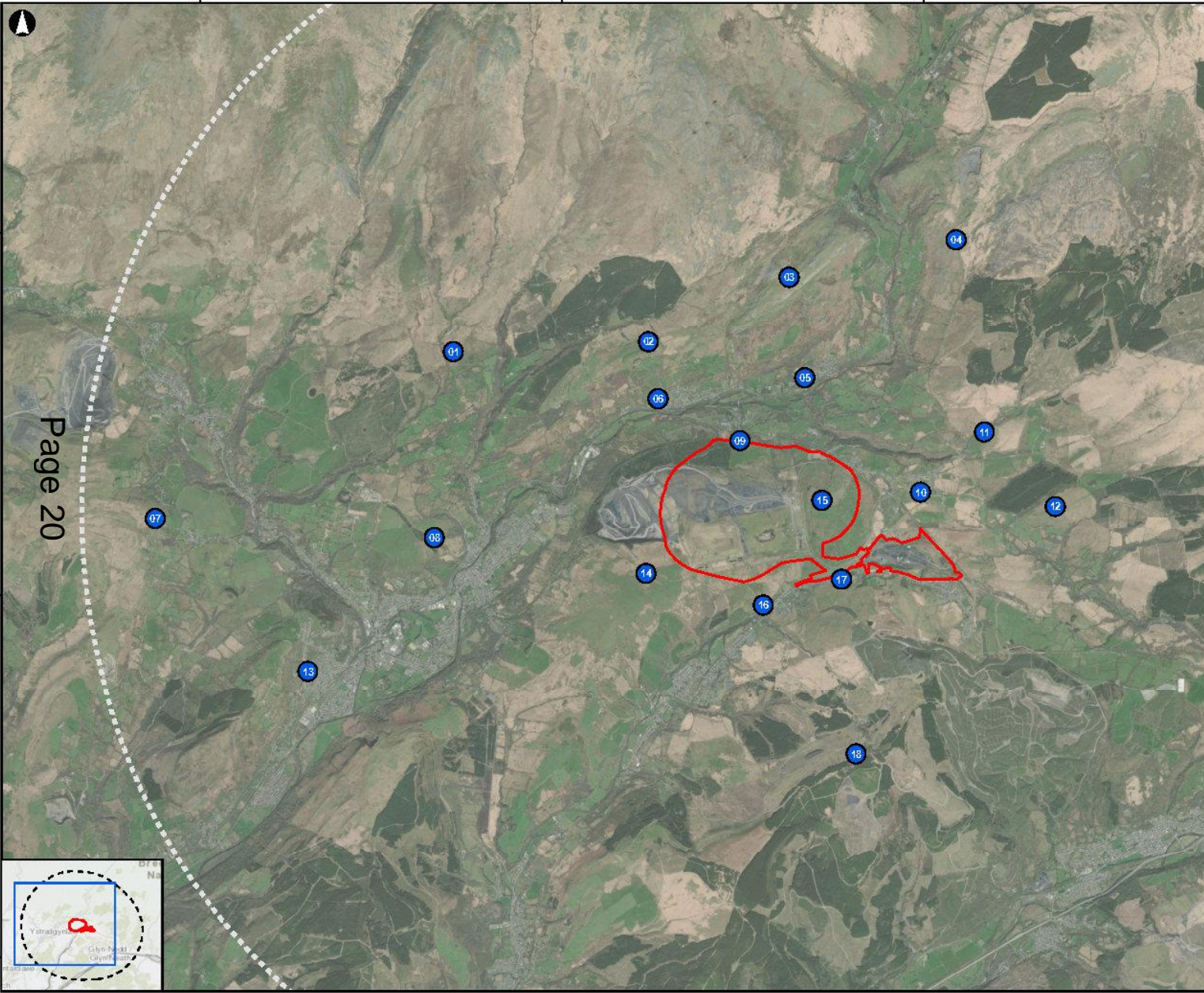






Page 18





Page 20

- Legend**
- Planning Development Boundary
  - Study Area - 8km Buffer
  - Viewpoint (VPXX)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community/Cartosat 3S 603 B Crown Copyright and © 2013

P01.2	2020-07-24	KD	DW	CD
-------	------------	----	----	----

Issue	Date	By	Checked	Appd
-------	------	----	---------	------



# ARUP

4 Redwood Street  
 Cardiff CF10 4AP  
 Tel +44 29 2047 7727 Fax +44 29 2047 2277  
 www.arup.com

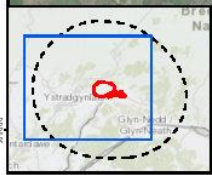


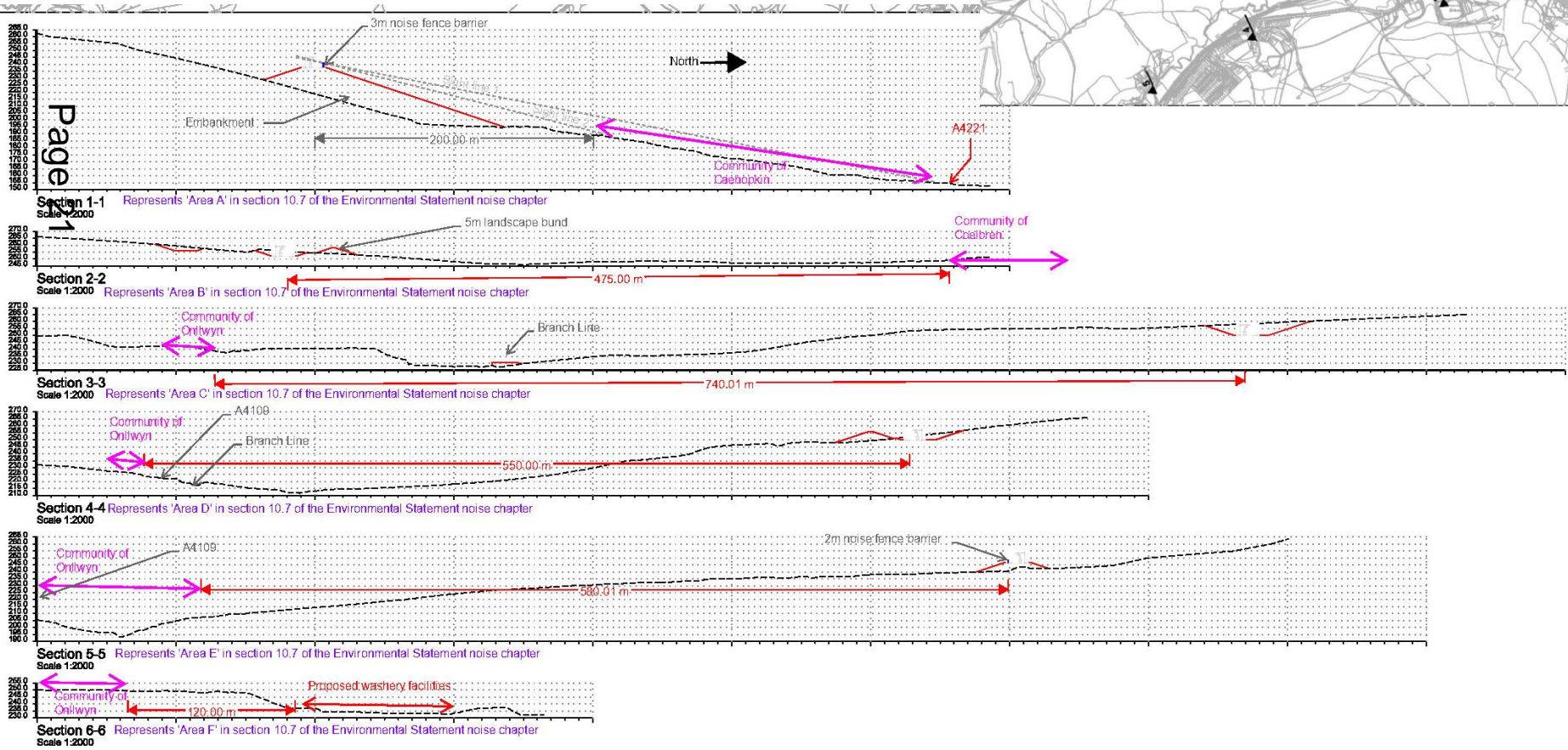
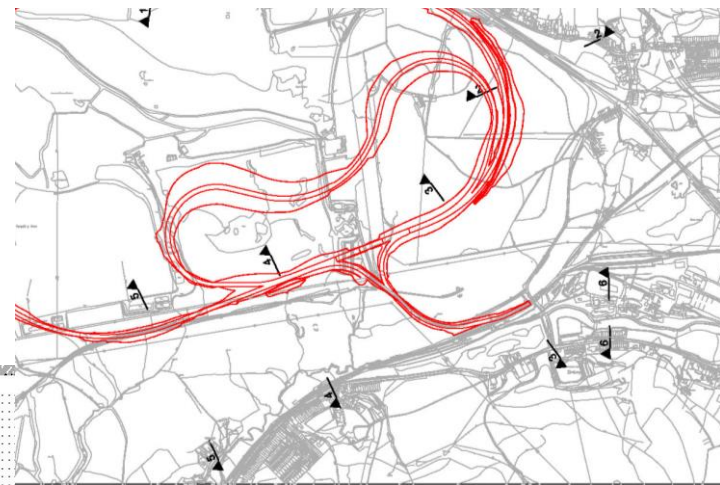
JobTitle  
Global Centre of Rail Excellence

Figure Title  
**VIEWPOINTS**

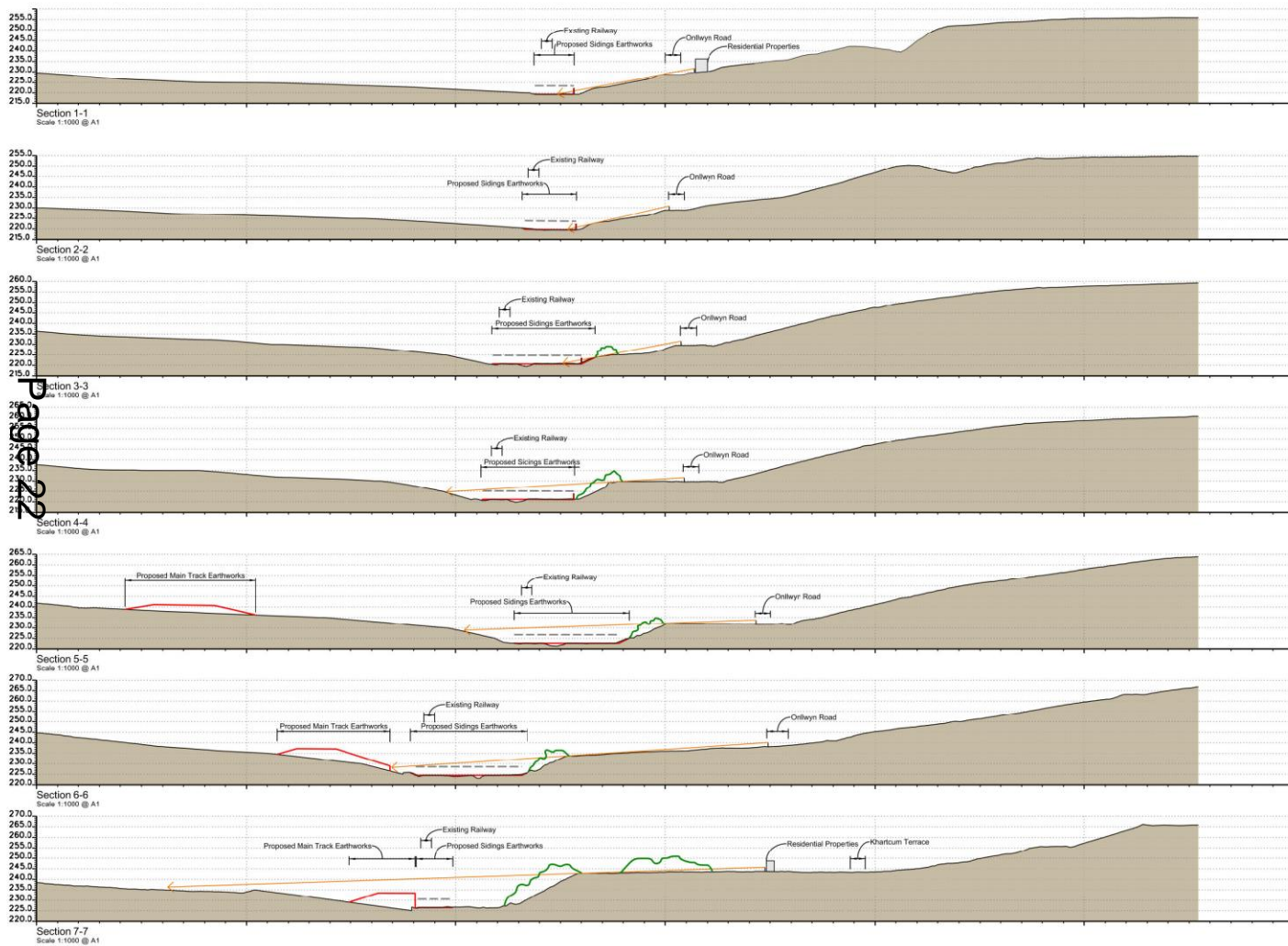
Scale at A3  
1:50,000

Job No <b>254904</b>	Drawing Status Final
Drawing No Figure 9.3	Issue P01.2



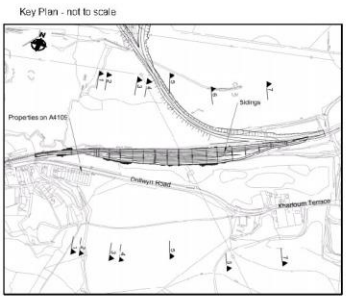


NB the cross-sections representing 'Area G' in section 10.7 of the Environmental Statement noise chapter are presented in Figure 9.17



**KEY**

- Existing Topography
- Proposed Sidings Earthworks
- 4.1m High Offset from Sidings Earthworks (max height of train)
- 3m High Acoustic Barrier
- Indicative Sight Line (from 2m high point)
- Existing Vegetation (Indicative)



Page 22

PD1	25/02/21	DW	MD	KW
Issue	Date	By	Chk'd	App'd

# ARUP

4 Parkhead Street  
 Cardiff CF10 4AD  
 Tel: +44 29 2047 3727 Fax: +44 29 2047 2277  
 www.arup.com



Job Title  
**Global Centre of Rail Excellence**

Figure Title  
**Additional Information Sidings Sections**

Scale at A1  
**1:1,000**

Job No <b>264904</b>	Drawing Status <b>For Issue</b>
Drawing No <b>Figure 9.17</b>	Issue <b>P01</b>

INDICATIVE EXTENT OF THE PROJECT

TURBINES ON HIRFYNYDD

MYNYDD MARCHYWEL



Title:	Viewpoint 15 View from Tawe-Uchaf Footpath 49	HFoV (°):	90	Visualisation type:	1	View direction:	South
Date, time:	3 December 2019, 09:42	Scale/ Enlargement factor:	96% at A1	Projection:	Cylindrical	Camera (lens):	Nikon D750, FFS (Nikon 50mm)

INDICATIVE EXTENT OF THE PROJECT



Title:	Viewpoint 16 View from properties on A4109	HFoV (°):	90	Visualisation type:	1	View direction:	North
Date, time:	3 December 2019, 11:31	Scale/ Enlargement factor:	96% at A1	Projection:	Cylindrical	Camera (lens):	Nikon D750, FFS (Nikon 50mm)

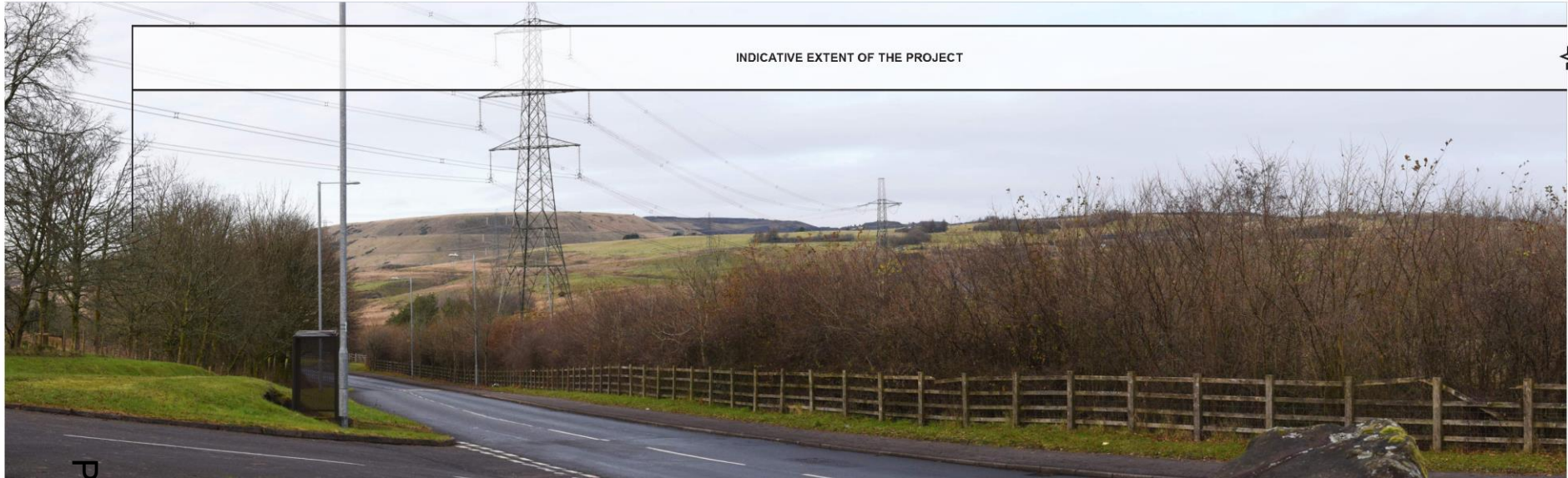
ARUP

Issue	Date	By	Chkd	Appd
PG1	03-09-2020	DM	DW	DS

Job No: 264904

Global Centre of Rail Excellence  
Figure 9.12  
Sheet 8 of 9

INDICATIVE EXTENT OF THE PROJECT



Title:	Viewpoint 17 View from Onllwyn Cemetery	HFoV (°):	90	Visualisation type:	1	View direction:	West
Date, time:	3 December 2019, 11:21	Scale/ Enlargement factor:	96% at A1	Projection:	Cylindrical	Camera (lens):	Nikon D750, FFS (Nikon 50mm)

INDICATIVE EXTENT OF THE PROJECT



Title:	Viewpoint 18 View from Sarn Helen Roman Road	HFoV (°):	90	Visualisation type:	1	View direction:	North
Date, time:	5 December 2019, 13:46	Scale/ Enlargement factor:	96% at A1	Projection:	Cylindrical	Camera (lens):	Nikon D750, FFS (Nikon 50mm)

Page 24

ARUP

Issue	Date	By	Chkd	Appd
P01	03-09-2020	DM	DW	DS

Job No: 264904

Global Centre of Rail Excellence  
Figure 9.13  
Sheet 9 of 9





Title:	Viewpoint 3 - Existing View	HFoV (°)	90	Visualisation type	1	View direction	South
Date, time:	5 December 2019, 11:31	Scale/ Enlargement factor	96% at A1	Projection	Cylindrical	Camera (lens)	Nikon D750, FFS (Nikon 50mm)



Title:	Viewpoint 3 - Photomontage	HFoV (°)	90	Visualisation type	3	View direction	South
Date, time:	n/a	Scale/ Enlargement factor	96% at A1	Projection	Cylindrical	Camera (lens)	Nikon D750, FFS (Nikon 50mm)



Issue	Date	By	Chkd	Appd
PG1	03-09-2020	AD	DW	DS

Job No: 264904



Title:	Viewpoint 16 - Existing View	HFoV (°)	90	Visualisation type	1	View direction	North
Date, time:	3 December 2019, 11:31	Scale/ Enlargement factor	96% at A1	Projection	Cylindrical	Camera (lens)	Nikon D750, FFS (Nikon 50mm)

Page 26



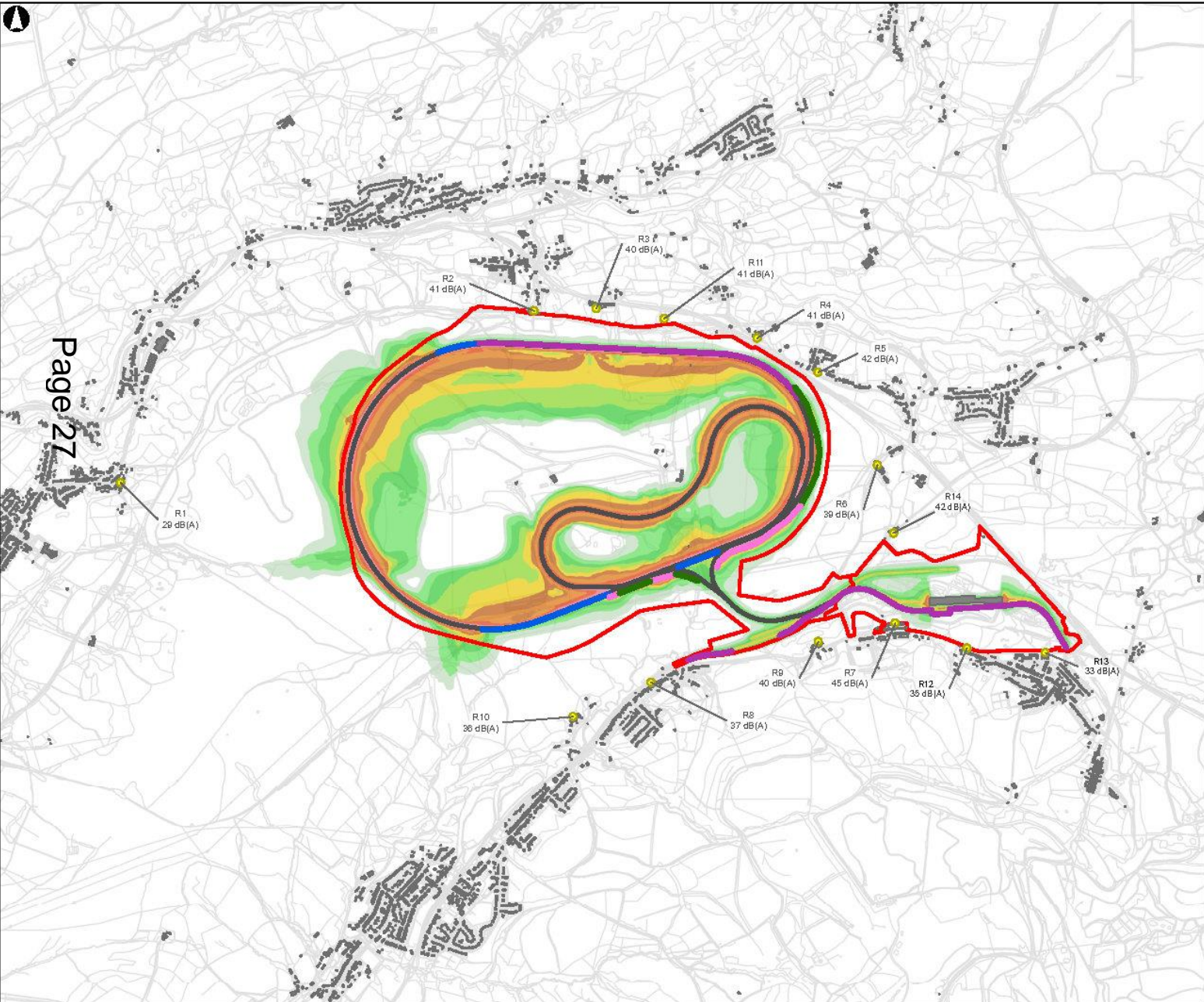
Title:	Viewpoint 16 - Photomontage	HFoV (°)	90	Visualisation type	3	View direction	North
Date, time:	n/a	Scale/ Enlargement factor	96% at A1	Projection	Cylindrical	Camera (lens)	Nikon D750, FFS (Nikon 50mm)

**ARUP**

Issue	Date	By	Chkd	Appd
P01	03-09-2020	AD	DW	DB

Job No: 264904

Global Centre of Rail Excellence  
Figure 9.16 - Photomontages  
Sheet 2 of 2



Page 27

- Legend**
- Planning Development Boundary
  - Assessment Location (First Floor)
  - Noise fence barrier of 2m height above rail
  - Noise fence barrier of 3m height above rail
  - Noise mitigation provided by landscaping bund
  - Engineering cutting providing noise mitigation
  - Track Alignment

**Rail Noise Level, dBL<sub>Aeq</sub> (at 4m above ground)**

< 47	65 - 68
47 - 50	68 - 71
50 - 53	71 - 74
53 - 56	74 - 77
56 - 59	77 - 80
59 - 62	80 - 83
62 - 65	> 83

Contains National Resources Wales information © National Resources Wales and Database Right. All rights reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number: 100019741. Crown Copyright and Database Right.

PRJ 2	2021-02-22	SLC	PSM	GM
Rev	Date	By	Chkd	Appd

0 250 500 1 000

**ARUP**

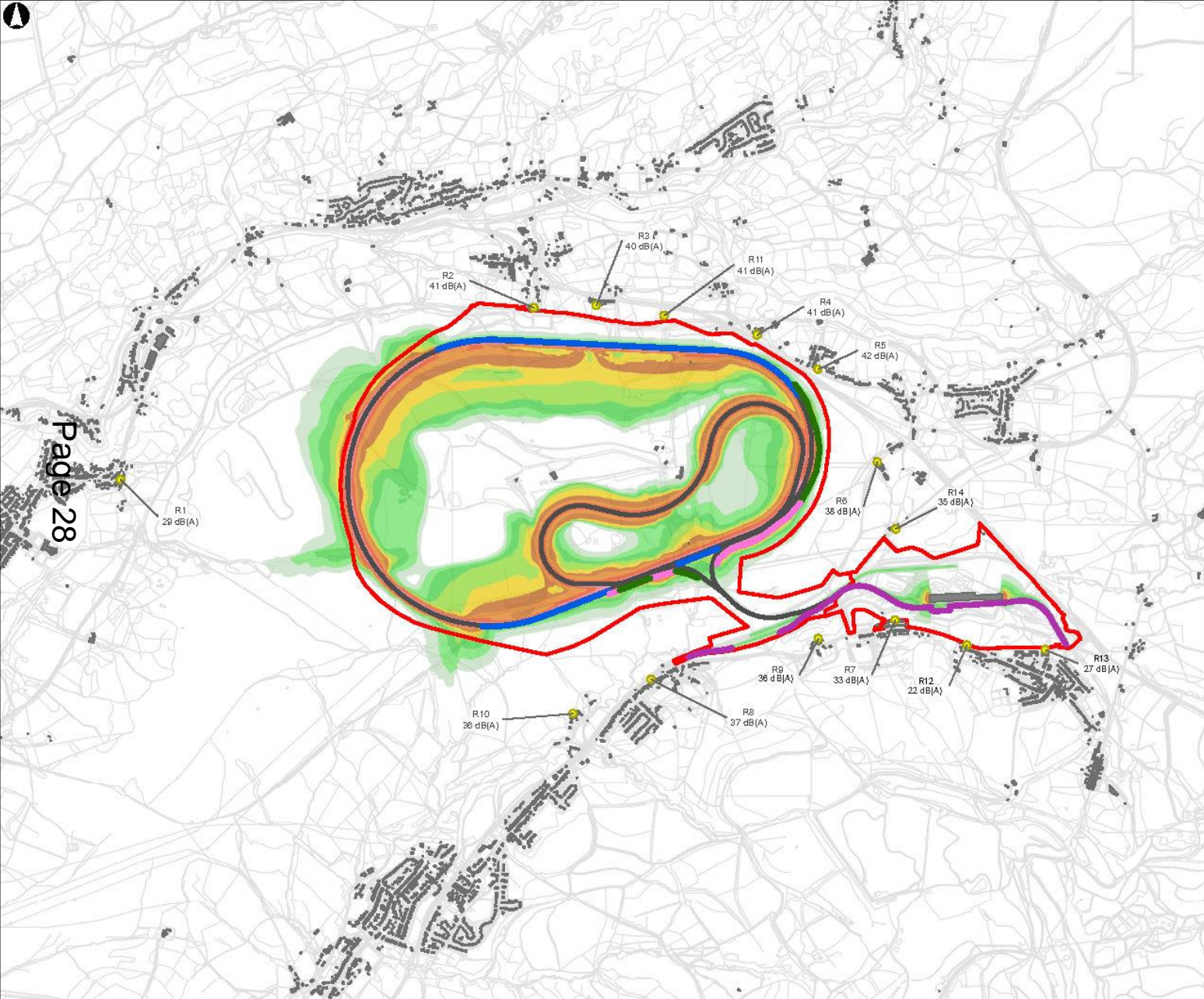
4 Sherwood Street  
Cardiff CF10 4DP  
Tel: +44 (0) 2020 73727 Fax: +44 (0) 2020 472277  
www.arup.com

Client: 

Job title: **Global Centre of Rail Excellence**

Figure title: **NOISE EMISSION FROM GCRE DAY TIME (07:00 - 19:00) WITH TRACKSIDE NOISE MITIGATION**

Scale at A3	1:20,000
Job No	264904
Status	ISSUE
Drawing No	Figure 10.1
Issue	P01.3



Page 28

- Legend**
- Planning Development Boundary
  - Assessment Location (First Floor)
  - Noise fence barrier of 2m height above rail
  - Noise fence barrier of 3m height above rail
  - Noise mitigation provided by landscaping bund
  - Engineering cutting providing noise mitigation
  - Track Alignment

**Rail Noise Level, dBL<sub>Aeq</sub> (at 4m above ground)**

< 47	65 - 68
47 - 50	68 - 71
50 - 53	71 - 74
53 - 56	74 - 77
56 - 59	77 - 80
59 - 62	80 - 83
62 - 65	> 83

Contains National Resources Wales information © National Resources Wales and Database Right. All rights reserved. Contains Ordnance Survey data. Ordnance Survey Licence number: 100019741. Crown Copyright and Database Right.

PRJ 2	2021-02-22	SLC	PSM	GM
Rev	Date	By	Chkd	Appd

0 250 500 1 000

**ARUP**

4 Shrewsbury Street  
Cardiff CF10 4DP  
Tel: +44 (0) 20 206 7 3727 Fax: +44 (0) 20 204 7 2277  
www.arup.com

---

Client

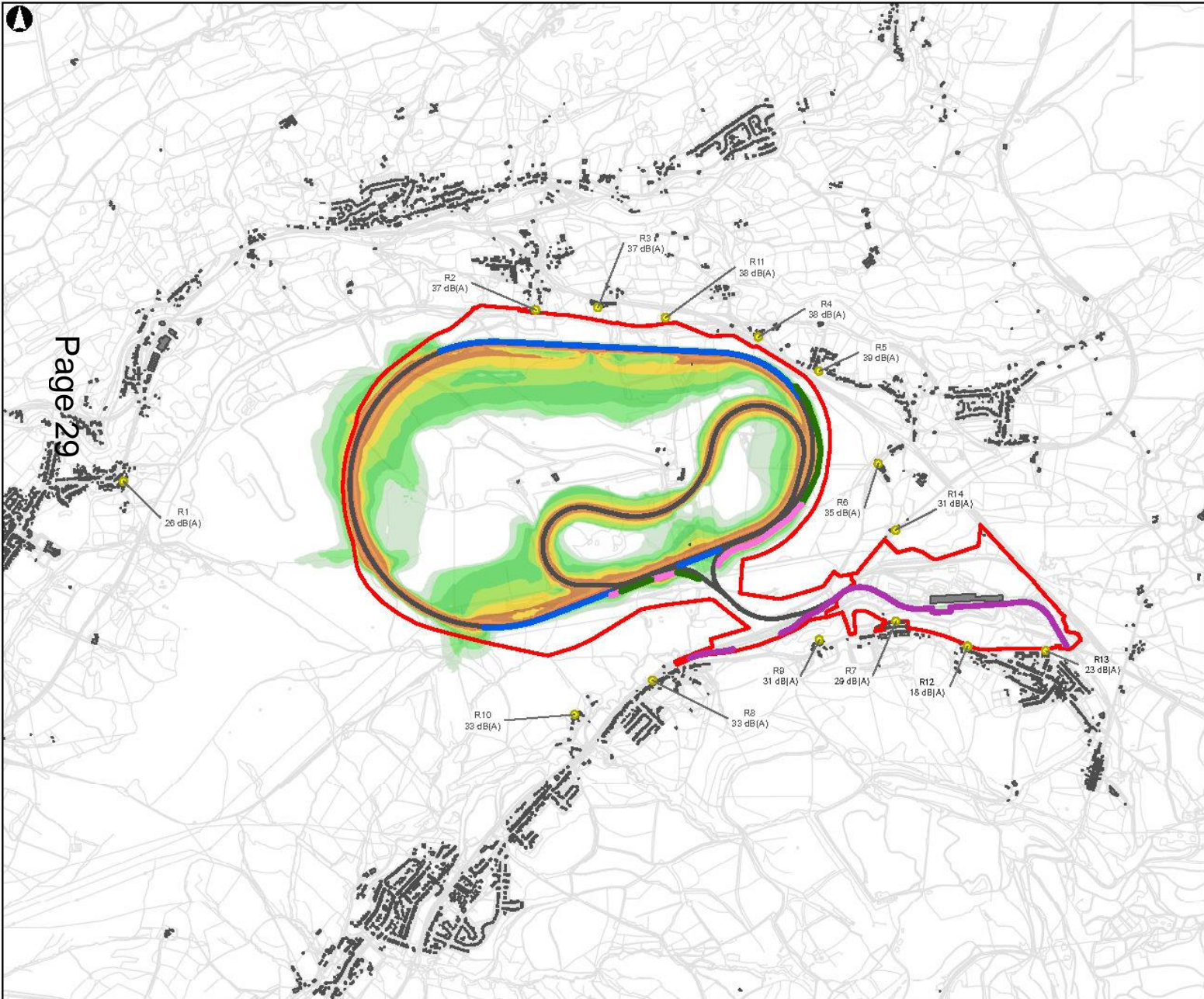


Llywodraeth Cymru  
Welsh Government

Job title  
**Global Centre of Rail Excellence**

Figure title  
**NOISE EMISSION FROM GCRE EVENING TIME (19:00 - 23:00) WITH TRACKSIDE NOISE MITIGATION**

<small>Scale as of</small>	<b>1:20,000</b>
<small>Job No</small>	<b>264904</b>
<small>Status</small>	<b>ISSUE</b>
<small>Drawing No</small>	<b>Figure 10.2</b>
<small>Issue</small>	<b>P01.3</b>



Page 29

- Legend**
- ▬ Planning Development Boundary
  - Assessment Location (First Floor)
  - ▬ Noise fence barrier of 2m height above rail
  - ▬ Noise fence barrier of 3m height above rail
  - ▬ Noise mitigation provided by landscaping bund
  - ▬ Engineering cutting providing noise mitigation
  - ▬ Track Alignment

**Rail Noise Level, dBL<sub>Aeq</sub> (at 4m above ground)**

< 47	65 - 68
47 - 50	68 - 71
50 - 53	71 - 74
53 - 56	74 - 77
56 - 59	77 - 80
59 - 62	80 - 83
62 - 65	> 83

Contains National Resources Wales information © National Resources Wales and Database Right. All rights reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number: 100019741. Crown Copyright and Database Right.

PRJ 2	2021-02-22	ELC	PSM	GM
Rev	Date	By	Chkd	Appd

0 250 500 1 000

# ARUP

4 Sherwood Street  
Cardiff CF10 4DP  
Tel: +44 (0) 2020 73727 Fax: +44 (0) 2020 472277  
www.arup.com

---

Client



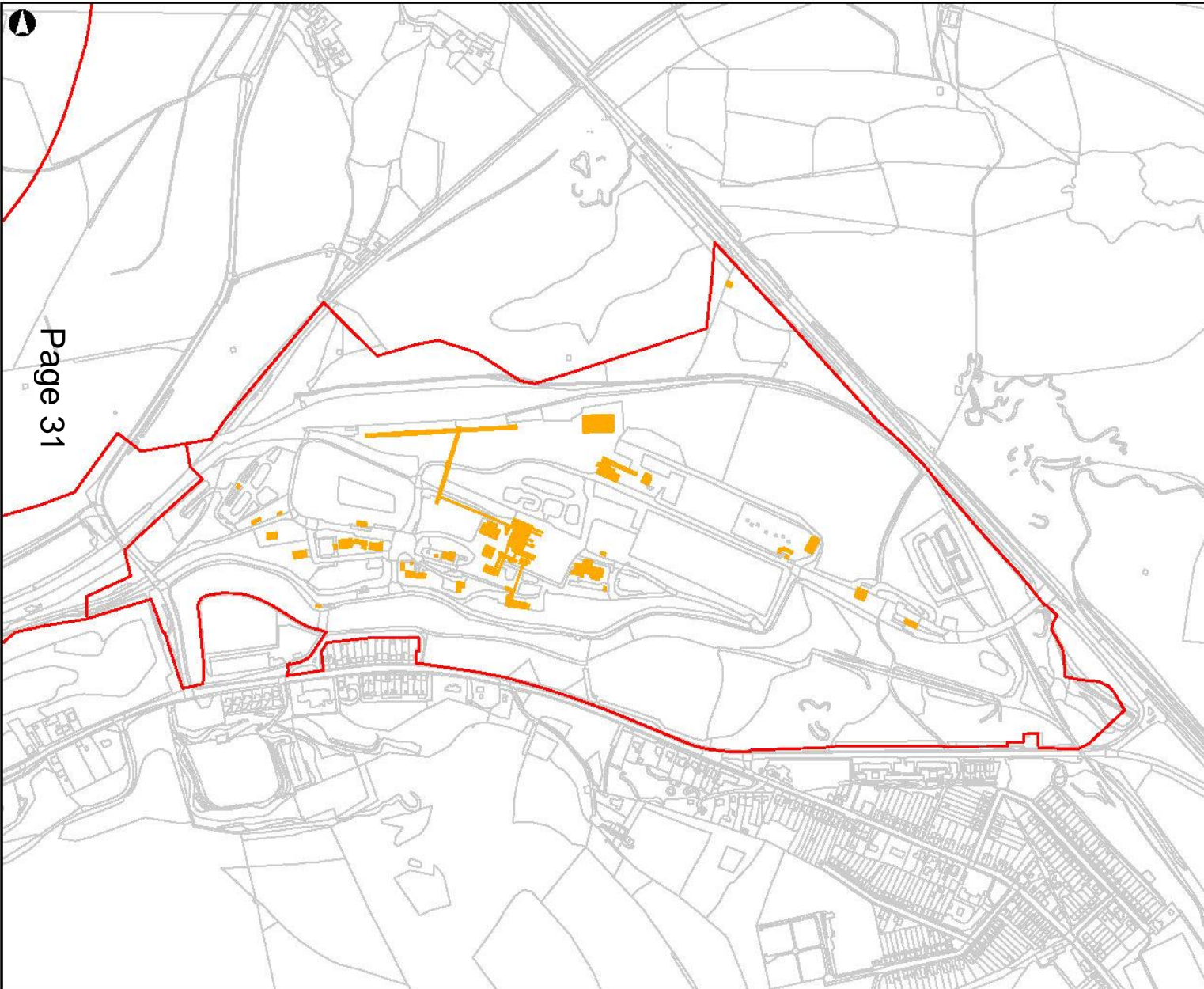
Llywodraeth Cymru  
Welsh Government

Job title  
**Global Centre of Rail Excellence**

Figure title  
**NOISE EMISSION FROM GCRE  
NIGHT TIME (23:00 - 07:00)  
WITH TRACKSIDE NOISE MITIGATION**

<small>Scale at A3</small> <b>1:20,000</b>
<small>Job No</small> <b>264904</b>
<small>Status</small> <b>ISSUE</b>
<small>Drawing No</small> <b>Figure 10.3</b>
<small>Issue</small> <b>P01.3</b>

Presentation Ends



Page 31

**Legend**  
 Planning Development Boundary  
 Proposed Demolished Building

Rev	Date	By	Check	Appd
P01.1	2020-05-18	KD	TK	RE



**ARUP**  
 4 Redwood Street  
 Cardiff CF10 4AP  
 Tel +44 29 2047 3727 Fax +44 29 2047 2277  
 www.arup.com



**Job Title**  
 Global Centre of Rail Excellence

**Figure Title**  
 PROPOSED DEMOLISHED BUILDINGS

**Scale at A3**  
 1:5,000

<b>Job No</b> 264904	<b>Drawing Status</b> Final
-------------------------	--------------------------------

<b>Drawing No</b> Figure 1.5	<b>Issue</b> P01.1
---------------------------------	-----------------------





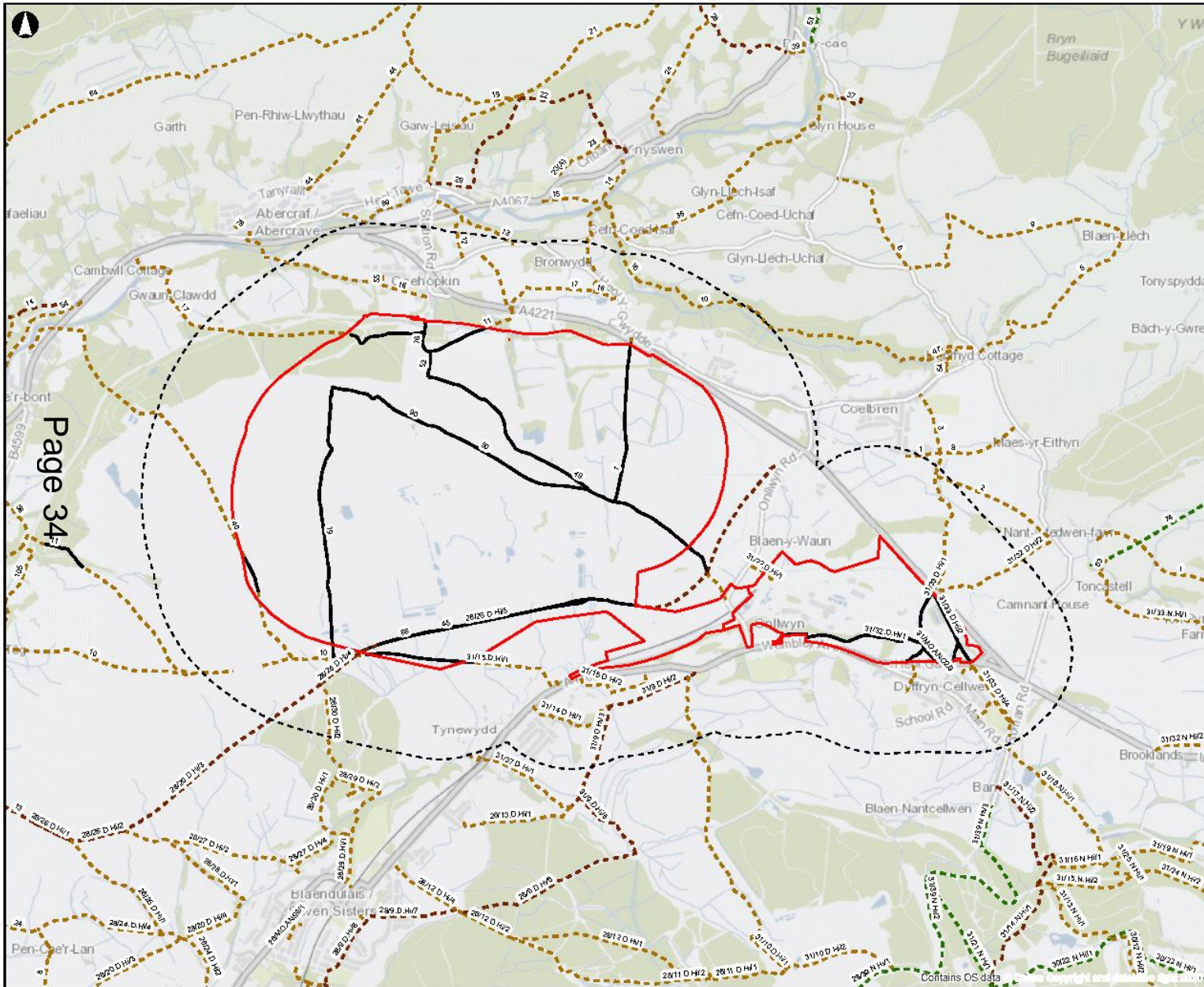
Application Site  
Rights of Way  
Footpath  
Bridleway

Page 33



Cyngor Castell-nedd Port Talbot  
Neath Port Talbot Council





Page 34

- Legend**
- Planning Development Boundary
  - Study Area - 500m Buffer
  - Rights of Way:**
  - Right of Way directly affected by the Proposed Development
  - Existing Right of Way unaffected
  - Existing Footpath unaffected
  - Existing Restricted Byway unaffected

F1	2024-09-02	DR	ER	DR
----	------------	----	----	----

Issue	Date	By	Checked	Appd
-------	------	----	---------	------



# ARUP



Client: Llywodraeth Cymru Welsh Government

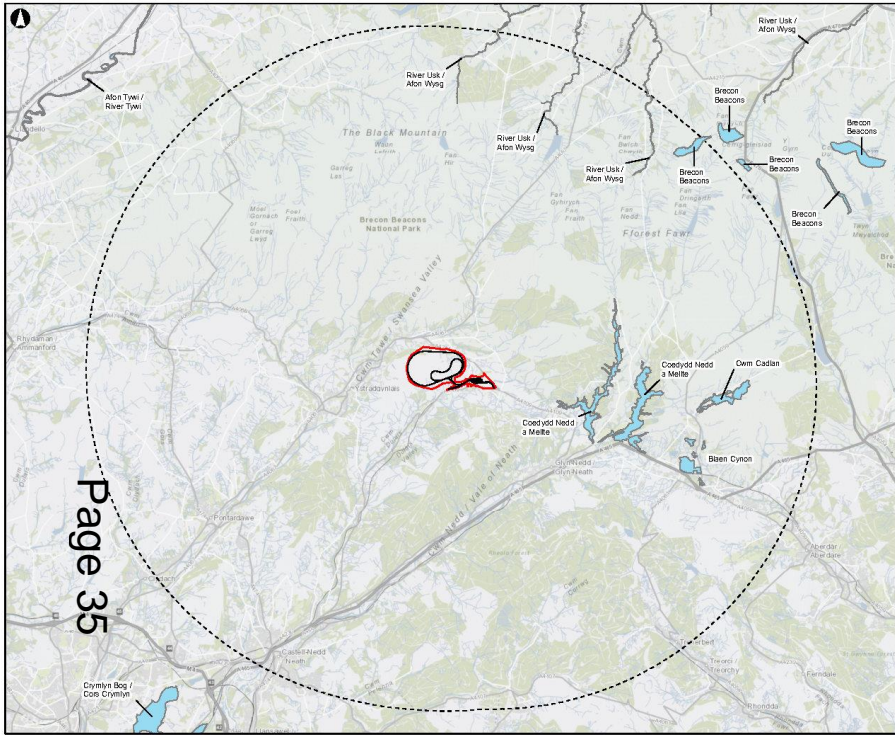
Job Title: Global Centre of Rail Excellence

Figure Title: PUBLIC RIGHTS OF WAY (PROW) DIRECT & INDIRECT EFFECTS

Scale at A3: 1:20,000

Job No: 2648-04-00	Drawing Status: For Issue
--------------------	---------------------------

Drawing No: Figure 12.4	Issue: F1
-------------------------	-----------



**Legend**

- Planning Development Boundary
- Site Layout Plan
- Proposed Access Road
- Study Area - 15km Buffer
- Special Area of Conservation (SAC)

© Crown Copyright and the Controller of Her Majesty's Stationery Office 2020  
 Ordnance Survey is a registered trademark of Ordnance Survey Limited

NO	DESCRIPTION	NO	DATE	BY
1	Issue for Information	10/01/2024	AM	AM

Scale: 1:125,000

**ARUP**

4 Redwood Street  
 Cardiff CF10 2DF  
 Tel: +44 (0)202 247 2277 Fax: +44 (0)202 247 2277  
 www.arup.com

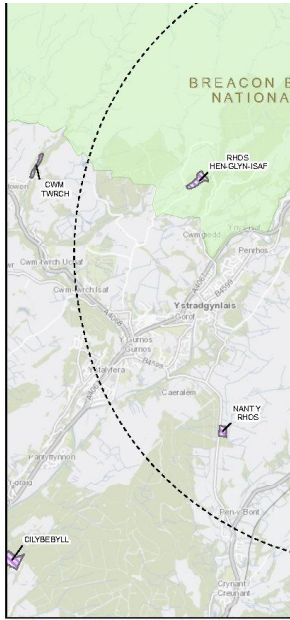
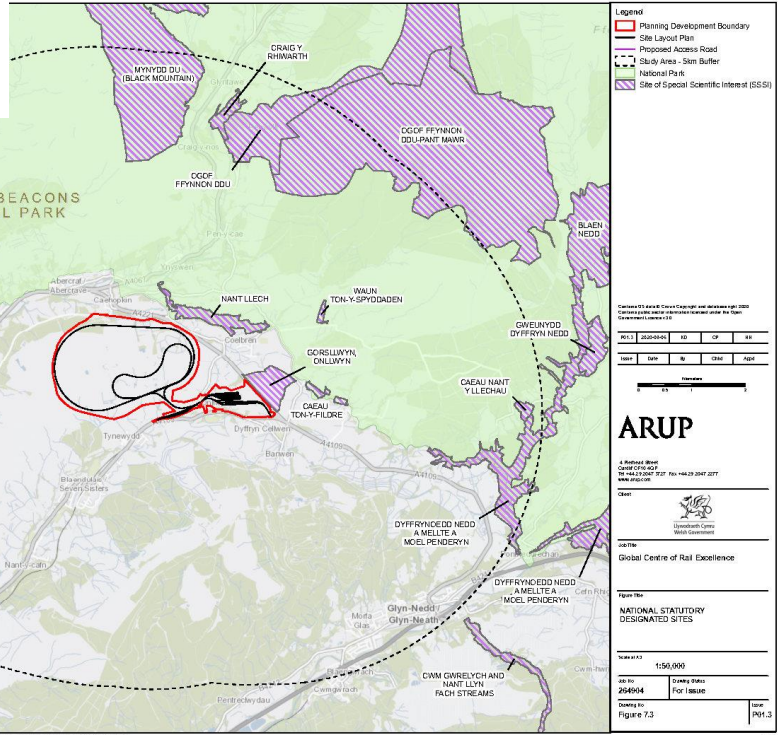
Client: Global Centre of Rail Excellence

Project No: INTERNATIONAL STATUTORY DESIGNATED SITES

Scale: 1:125,000

Job No:	264904	Drawing Status:	For Issue
Drawing No:	Figure 7.2	Scale:	1:125,000

Page 35



**Legend**

- Planning Development Boundary
- Site Layout Plan
- Proposed Access Road
- Study Area - 15km Buffer
- National Park
- Site of Special Scientific Interest (SSSI)

© Crown Copyright and the Controller of Her Majesty's Stationery Office 2020  
 Ordnance Survey is a registered trademark of Ordnance Survey Limited

NO	DESCRIPTION	NO	DATE	BY
1	Issue for Information	10/01/2024	AM	AM

Scale: 1:150,000

**ARUP**

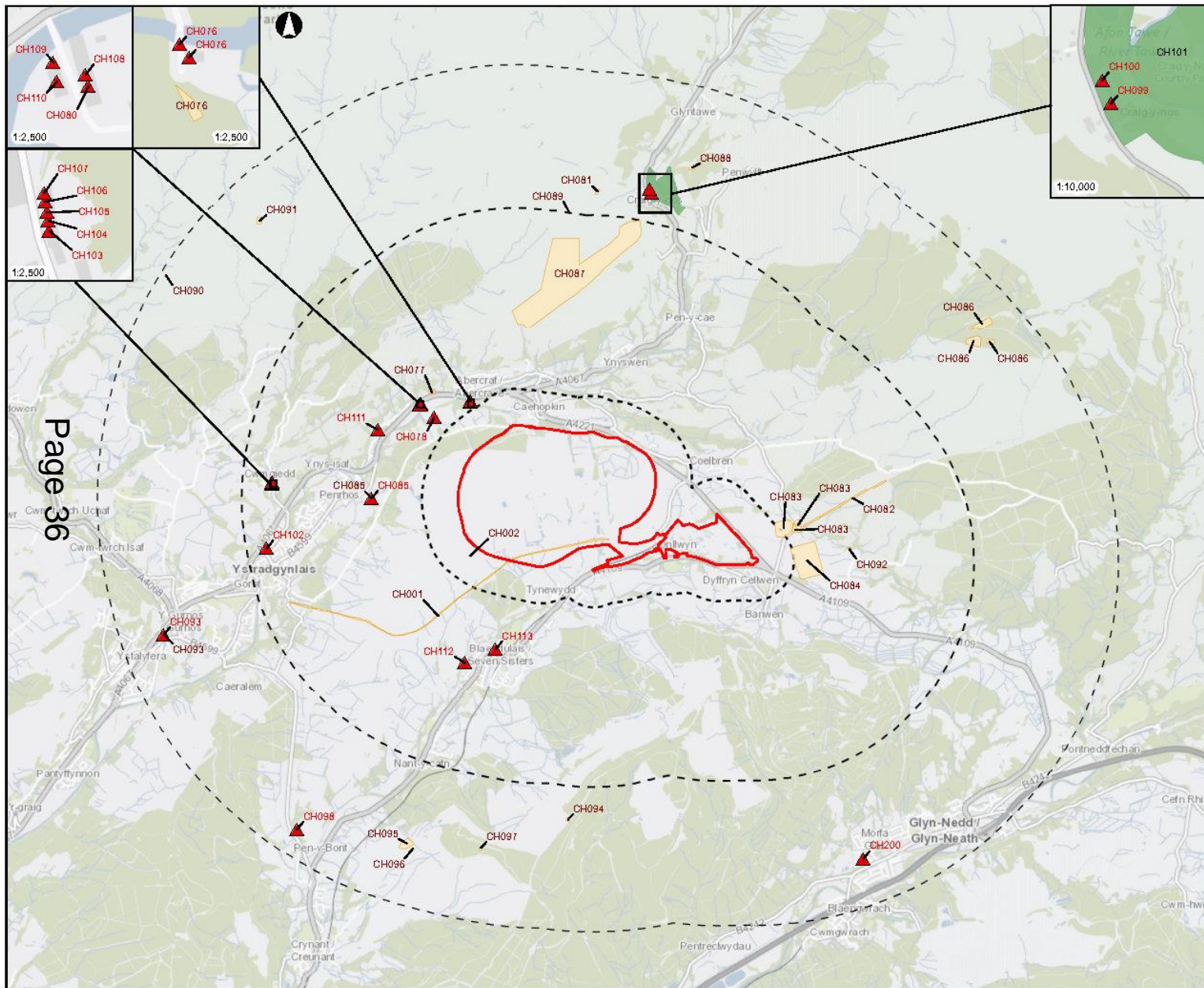
4 Redwood Street  
 Cardiff CF10 2DF  
 Tel: +44 (0)202 247 2277 Fax: +44 (0)202 247 2277  
 www.arup.com

Client: Global Centre of Rail Excellence

Project No: NATIONAL STATUTORY DESIGNATED SITES

Scale: 1:150,000

Job No:	264904	Drawing Status:	For Issue
Drawing No:	Figure 7.3	Scale:	1:150,000



**Legend**

- Planning Development Boundary
- Study Area - 500m Buffer
- Study Area - 3km Buffer
- Study Area - 5km Buffer
- Registered Park and Garden
- Scheduled Monument
- Listed Building (Grade I & Grade II\* within 5km, within Grade II within 3km)

Contains OS data © Crown Copyright and database right 2020  
Contains public sector information licensed under the Open Government Licence v2.0

Rev	Date	By	Check	Appr



**ARUP**

4 Redwood Street  
Cardiff CF10 4DP  
Tel: +44 29 2047 7272 Fax: +44 29 2047 2277  
www.arup.com

Client:

Job Title  
**Global Centre of Rail Excellence**

Figure Title  
**DESIGNATED HERITAGE ASSETS**

Scale at AS  
**1:50,000**

Job no <b>264904</b>	Drawing Status <b>Final</b>
Drawing no <b>Figure 8.1</b>	Issue <b>P01.3</b>

Page 36