

# A1 in Northumberland: Morpeth to Ellingham

**Scheme Number: TR010041**

## **5.2 Consultation Appendices 9 of 13**

Planning Act 2008

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

Regulations PA 2008 s37

Volume 5

June 2020

Infrastructure Planning

Planning Act 2008

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

**The A1 in Northumberland: Morpeth to Ellingham  
Development Consent Order 20[xx]**

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**CONSULTATION REPORT APPENDICES**

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<b>Regulation Reference:</b>	Regulations PA 2008 s37
<b>Planning Inspectorate Scheme Reference</b>	TR010041
<b>Application Document Reference</b>	TR010041/APP/5.2
<b>Author:</b>	A1 in Northumberland Project Team, Highways England

<b>Version</b>	<b>Date</b>	<b>Status of Version</b>
Rev 0	June 2020	Application Issue

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**Please note, continuation of Appendix L-N can be found in additional  
Consultation Appendices documents**

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- **Viewpoint Photography**
- **Visual Receptors**
- **Designated Heritage Assets within 1km of scheme**
- **Non-designated Heritage Assets within 500m of scheme**
- **Statutory European sites or Internationally Designated sites within 10km**
- **Non-Statutory European sites**
- **Phase 1 Habitat Survey**
- **Water Constraints Plans**

Properties at North  
Charlton



A1

Summer View

Winter View

**Representative Viewpoint No.1**

View looking south-east from North Charlton, representative of nearby properties

Grid Reference: NU 16798 22944

Focal Length: 50mm  
Horizontal Field of View: 90  
Vertical Field of View: 27  
Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd

Client



Project Title  
A1 in Northumberland: Alnwick to Ellingham Scheme

Drawing Title  
Viewpoint Photography  
Figure A12  
Page 1 of 20

Scale	Drawn	Checked	Approved	Authorised
NTS	PHM	SL	AF	AF
Original Size	Date	Date	Date	Date
A3	15/10/18	15/10/18	15/10/18	15/10/18

Drawing Status  
First Issue

Suitability  
S1

Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN -A2E-RP-LE-1638	WSP	WSP		70044137
Revision				P01
Location	Type	Role	Number	





Summer View

Winter View

**Representative Viewpoint No.2**  
 View looking east from West Linkhall, illustrative of nearby properties and travelling along PRow (Ref:112/008 and 112/009)  
 Grid Reference: NU 17752 29345

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd



Project Title  
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Scale	Drawn	Checked	Approved	Authorised
NTS	PHM	SL	AF	AF
Original Size	Date	Date	Date	Date
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Drawing Status  
 First Issue

Suitability  
 S1

Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN	-A2E-RP-LE-1638	WSP		70044137
Revision				P01
Location	Type	Role	Number	







Summer View

Winter View

**Representative Viewpoint No.4**  
 View looking north from Rock Lodge and Rock Nab, illustrative of nearby properties  
 Grid Reference: NU 17759 20294

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd

Client

Project Title  
 A1 in Northumberland: Alnwick to Ellingham Scheme

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Drawing Status  
 First Issue

Suitability  
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Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN	-A2E-RP-LE-1638	WSP		70044137
Revision				P01

Location Type Role Number







Summer View



Winter View

**Representative Viewpoint No.6**  
 View looking east from Heckley Fence, illustrative of nearby properties and walkers travelling along PRoW Ref: 110 / 019  
 Grid Reference: NU 18357 17778

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter): 05/02/19

Rev	Date	Description	By	Chk'd	App'd

Client

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Drawing Status  
 First Issue

Suitability  
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Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN	-A2E-RP-LE-1638	WSP		70044137
Revision				P01
Location	Type	Role	Number	





Summer View

Winter View

**Representative Viewpoint No.7**

View looking east from Heckley House, illustrative of nearby properties and walkers travelling along PRow Ref: 110 / 013

Grid Reference: NU 18812 16260

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd

Client



Project Title  
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Drawing Title  
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Drawing Status  
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Suitability  
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Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN -A2E-RP-LE-1638	WSP			70044137
Revision				P01

Location	Type	Role	Number

Public Right of Way Ref: 110/004    Properties at Broxfield    A1 (behind hedgerow)



Summer View

Winter View

**Representative Viewpoint No.8**

View looking north east along PRow Ref: 110 / 004 and illustrative of nearby residential properties

Grid Reference: NU 19204 15649

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd

Client



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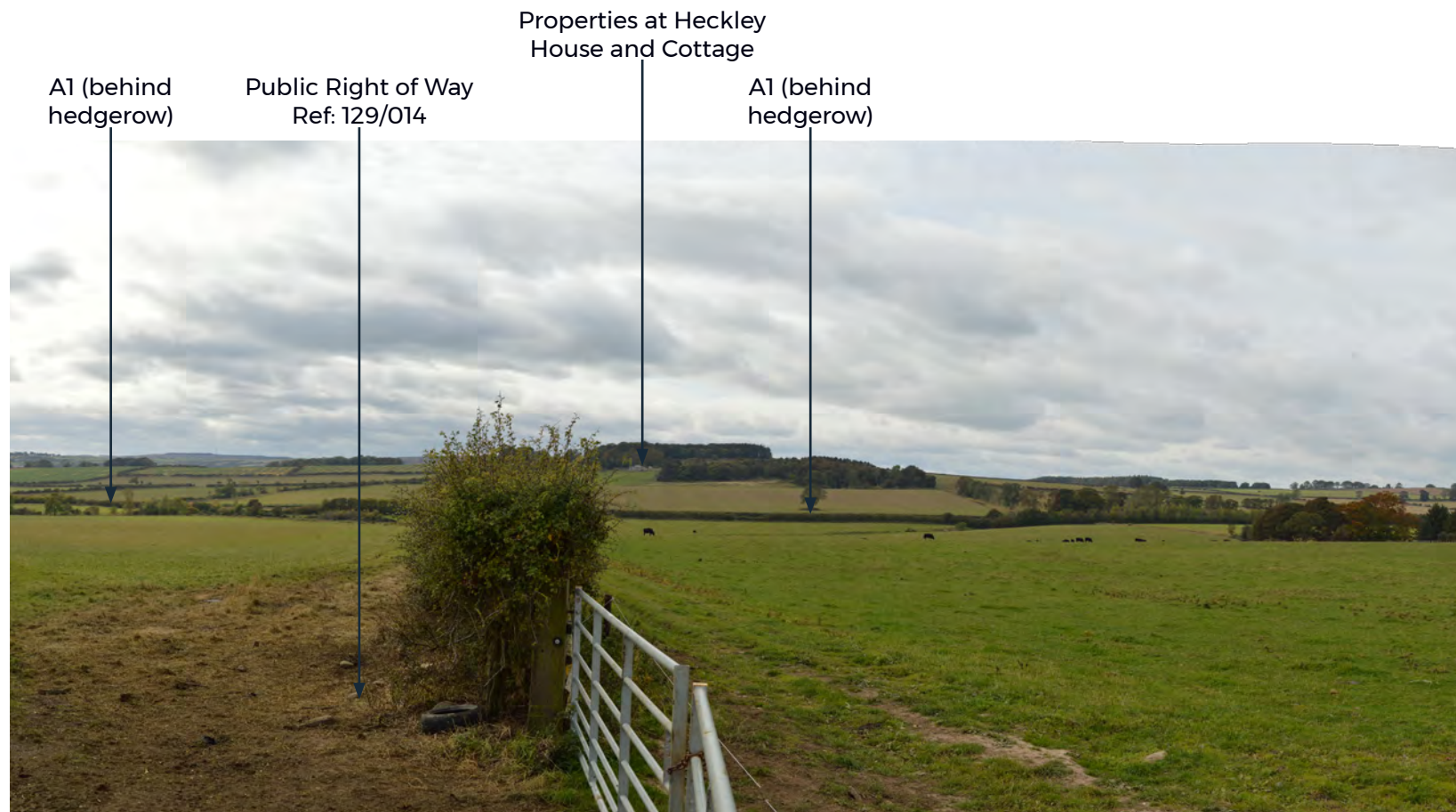
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Revision				P01

Location	Type	Role	Number





Summer View



Winter View

**Representative Viewpoint No.9**

View looking west along PRoW Ref: 110 / 013, illustrative of adjacent PRoW's (129 / 022 and 129 / 014) and close proximity residents at Broxfield an Silvermoor

Grid Reference: NU 19734 16663

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter): 05/02/19

Rev	Date	Description	By	Chk'd	App'd

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Drawing Status  
 First Issue

Suitability  
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Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN	-A2E-RP-LE-1638	WSP		70044137
				Revision
				P01

Location Type Role Number





Summer View

Winter View

**Representative Viewpoint No.10**

View looking west from PRow Ref: 129 / 009, illustrative of nearby properties at Rock South Farm

Grid Reference: NU 19404 18539

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd

Client



Project Title  
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Drawing Title  
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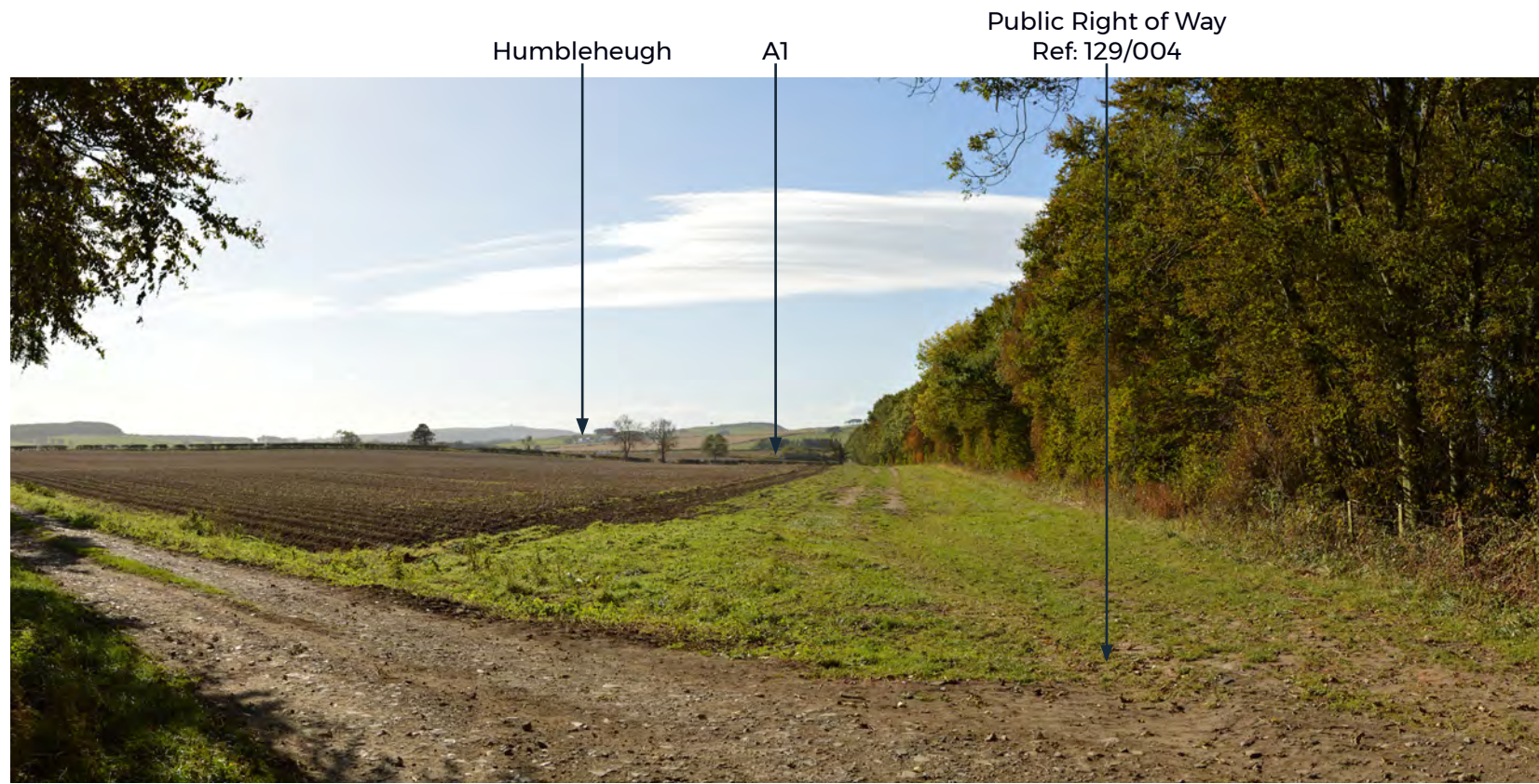
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Drawing Status  
 First Issue

Suitability  
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Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN -A2E-RP-LE-1638	WSP	WSP		70044137
Revision				P01

Location	Type	Role	Number



Summer View

Winter View

**Representative Viewpoint No.11**  
 View looking south west along PRow Ref: 129 / 004 and illustrative of close proximity residential properties at Rock Midstead  
 Grid Reference: NU 18304 20422

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd



Project Title  
 A1 in Northumberland: Alnwick to Ellingham Scheme

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Scale	Drawn	Checked	Approved	Authorised
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Original Size	Date	Date	Date	Date
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Drawing Status  
 First Issue

Suitability  
 S1

Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN	-A2E-RP-LE-1638	WSP		70044137
Revision				P01
Location	Type	Role	Number	





Summer View

Winter View

**Representative Viewpoint No.12**  
 View looking west, Charlton Mires from the B6347  
 Grid Reference: NU 17860 20616

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd



Project Title  
 A1 in Northumberland: Alnwick to Ellingham Scheme

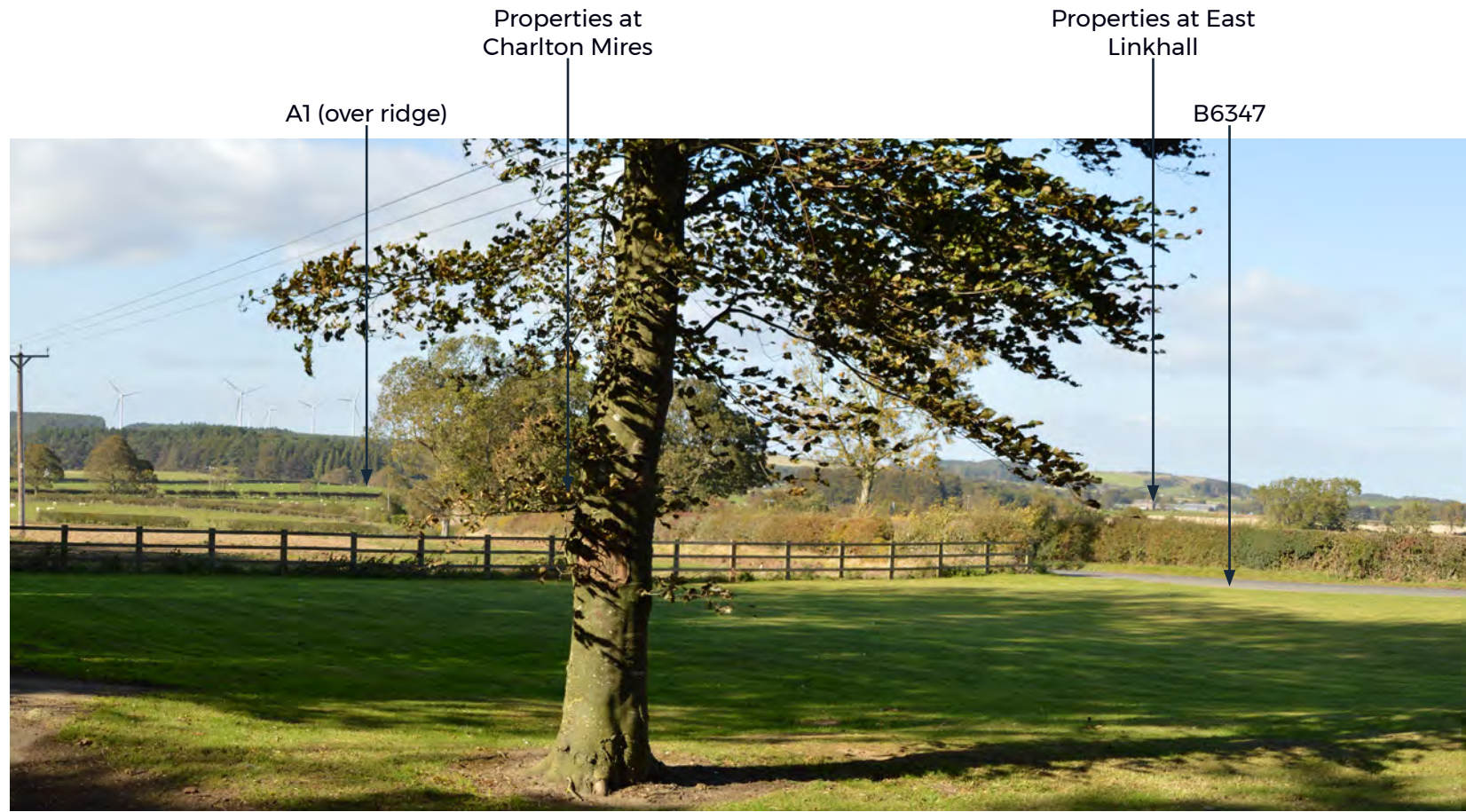
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Drawing Status  
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 Suitability  
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Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN -A2E-RP-LE-1638	WSP	WSP		70044137
Revision				P01

Location Type Role Number



Summer View

Winter View

**Representative Viewpoint No.13**  
 View looking north west from B6347, illustrative of nearby residents at Drythrople and Rock Moor House  
 Grid Reference: NU 18468 20551

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd



Project Title  
 A1 in Northumberland: Alnwick to Ellingham Scheme

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Scale	Drawn	Checked	Approved	Authorised
NTS	PHM	SL	AF	AF
Original Size	Date	Date	Date	Date
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Drawing Status  
 First Issue

Suitability  
 S1

Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN	-A2E-RP-LE-1638	WSP		70044137
Revision				P01
Location	Type	Role	Number	





Summer View

Winter View

**Representative Viewpoint No.14**  
 View west from Chipperton Bridge, illustrative of nearby residential receptors at Chipperton Bridge and East Linkhall  
 Grid Reference: NU 17202 21733

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd



Project Title  
 A1 in Northumberland: Alnwick to Ellingham Scheme

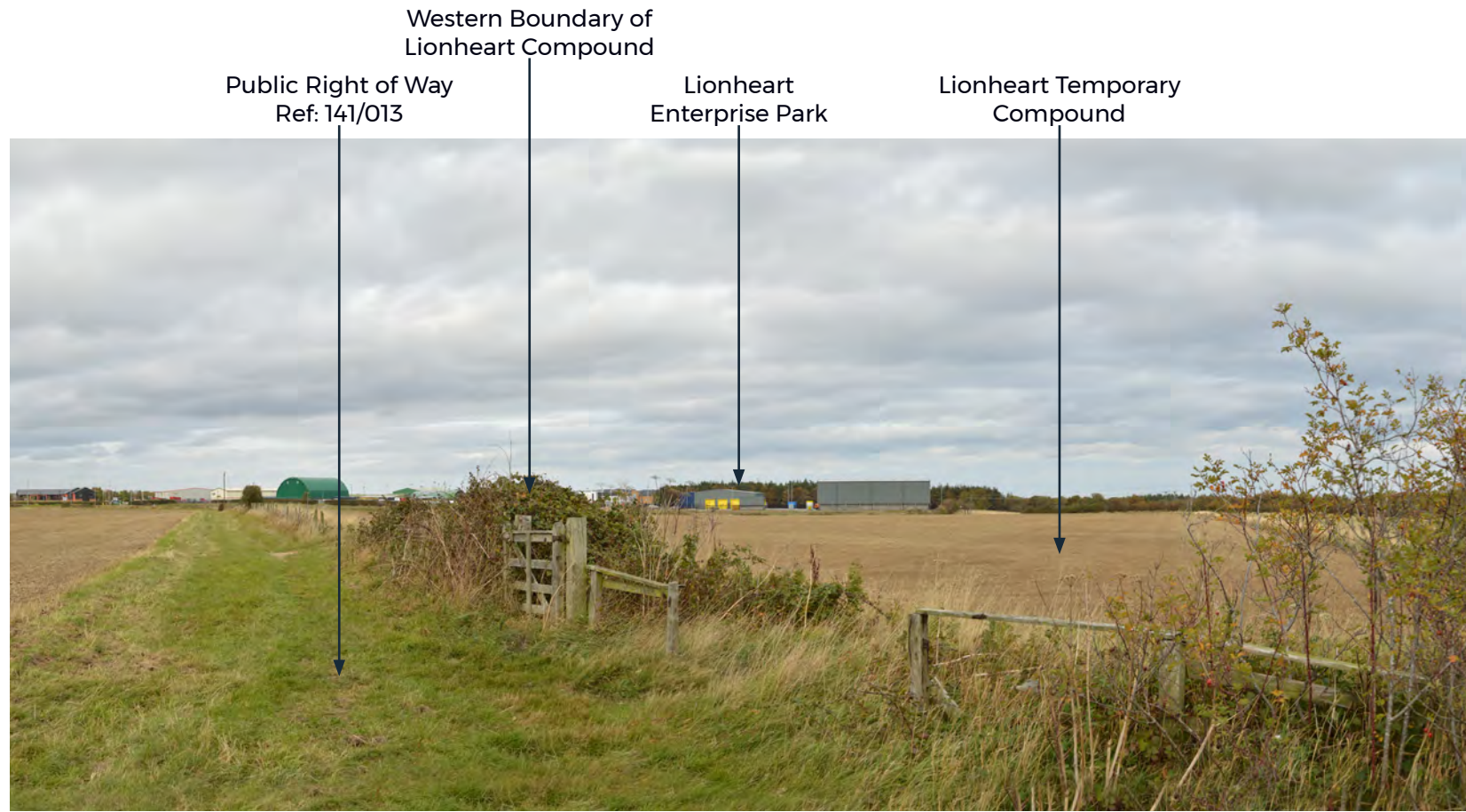
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Drawing Status  
 First Issue

Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN	-A2E-RP-LE-1638	WSP		70044137
Revision				P01
Location	Type	Role	Number	





Summer View

Winter View

**Representative Viewpoint No.15**  
View looking north along PRoW Ref: 141 /013  
Grid Reference: NU 19725 11052

Focal Length: 50mm  
Horizontal Field of View: 90  
Vertical Field of View: 27  
Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd



Project Title  
A1 in Northumberland: Alnwick to Ellingham Scheme

Drawing Title  
Viewpoint Photography  
Figure A12  
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Scale	Drawn	Checked	Approved	Authorised
NTS	PHM	SL	AF	AF
Original Size	Date	Date	Date	Date
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Drawing Status  
First Issue  
Suitability  
S1

Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459-WSP-EGN -A2E-RP-LE-1638	WSP	WSP		70044137
Revision				P01
Location	Type	Role	Number	







Summer View

Winter View

**Representative Viewpoint No.17**  
 View looking south from PRoW Ref: 129 / 005 and illustrative of adjacent PRoW (129 / 010, 129 / 012 and 129 / 025) and nearby residents at West Farm  
 Grid Reference: NU 20017 17635

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd



Project Title  
 A1 in Northumberland: Alnwick to Ellingham Scheme

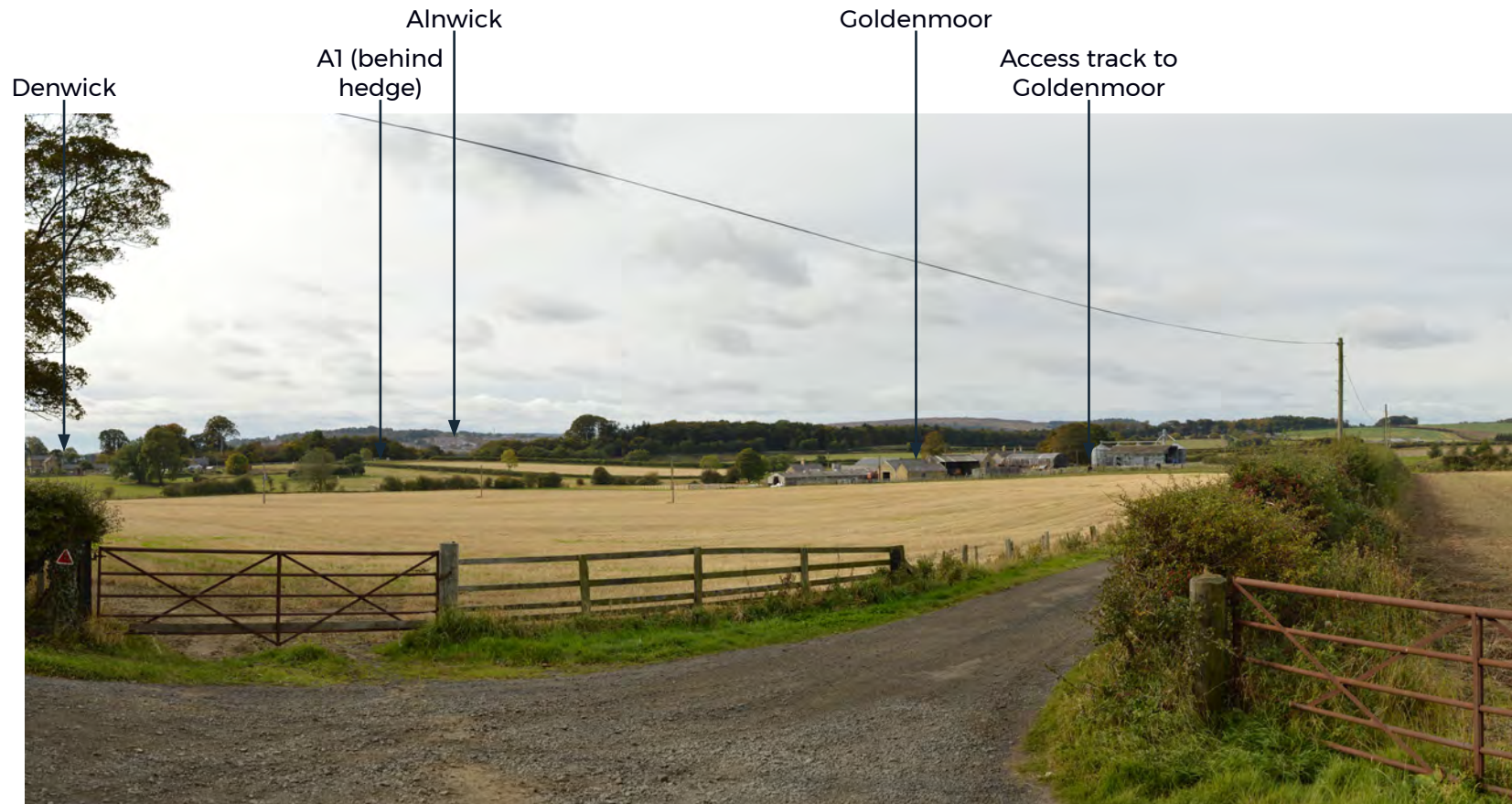
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Drawing Status  
 First Issue

Suitability  
 S1

Drawing Number	Project	Originator	Volume	Project Ref No.
HE551459- WSP-EGN	-A2E-RP-LE-1638	WSP		70044137
Revision				P01
Location	Type	Role	Number	



Summer View

Winter View

**Representative Viewpoint No.18**

View looking north west from B1340

Grid Reference: NU 20641 14692

Focal Length: 50mm  
 Horizontal Field of View: 90  
 Vertical Field of View: 27  
 Camera Height: 1.5m

Date Taken (Summer): 02/10/18  
 Date Taken (Winter):

Rev	Date	Description	By	Chk'd	App'd

Client



Project Title  
 A1 in Northumberland: Alnwick to Ellingham Scheme

Drawing Title  
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Scale	Drawn	Checked	Approved	Authorised
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Suitability  
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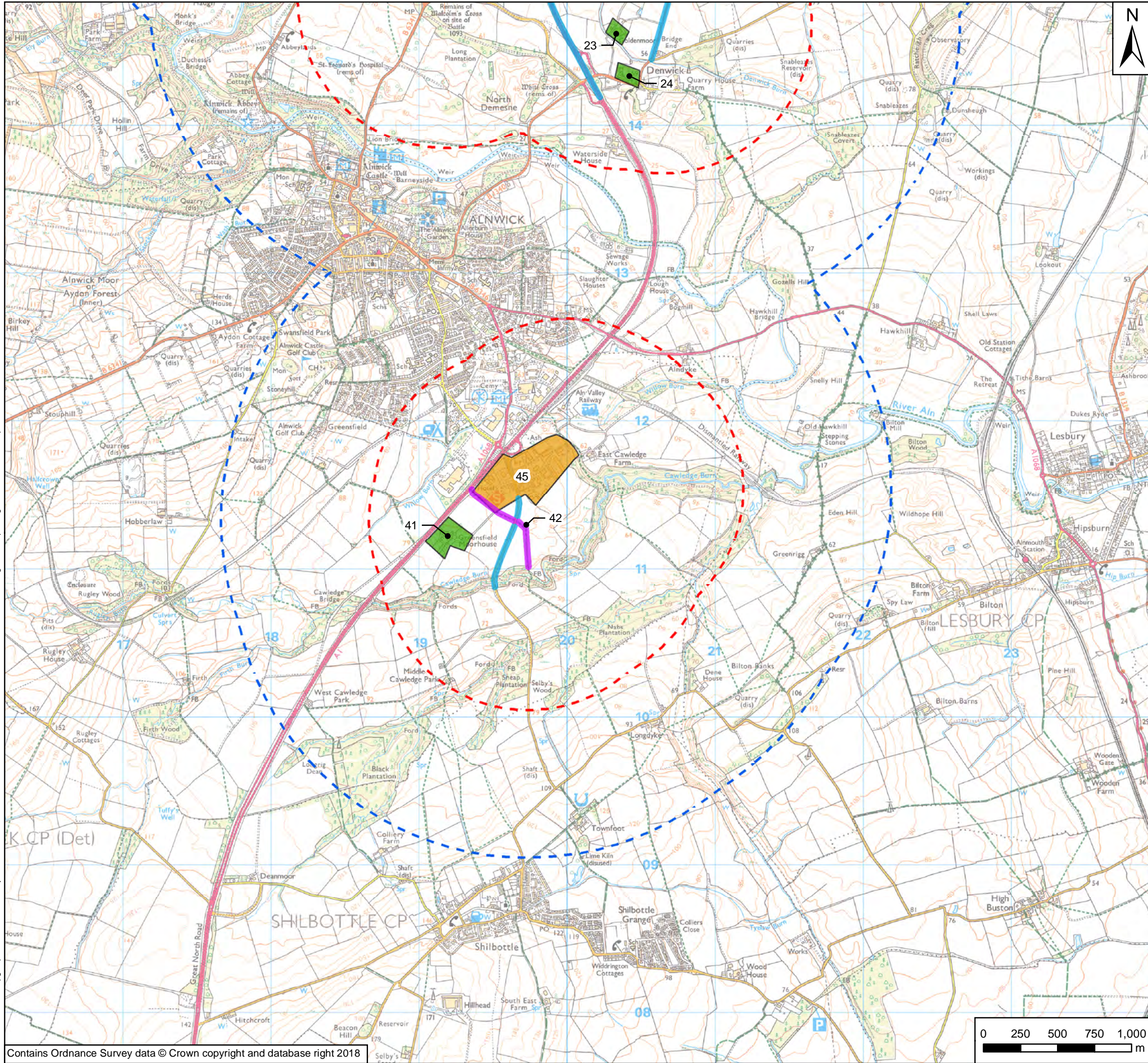
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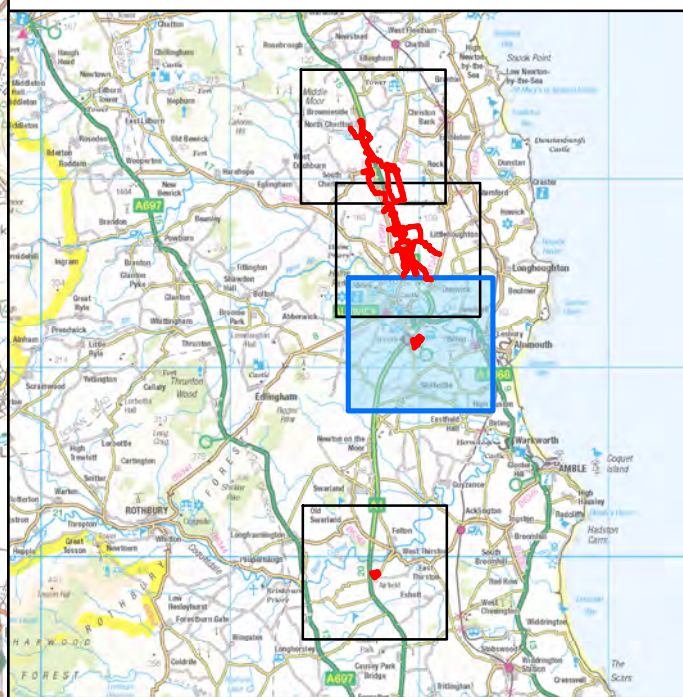








- Key**
- 1km Study Area
  - 2km Study Area
  - Commercial Receptors
  - Residential Receptors
  - Recreational Receptors
  - Recreational Receptors
  - Transport Receptors



Rev	Date	Description	By	Chk'd	App'd
P01	23/11/18	First Issue	GH	SL	KS



Project Title: A1 in Northumberland: Alnwick to Ellingham Scheme

Drawing Title: Figure A13 - Visual Receptors  
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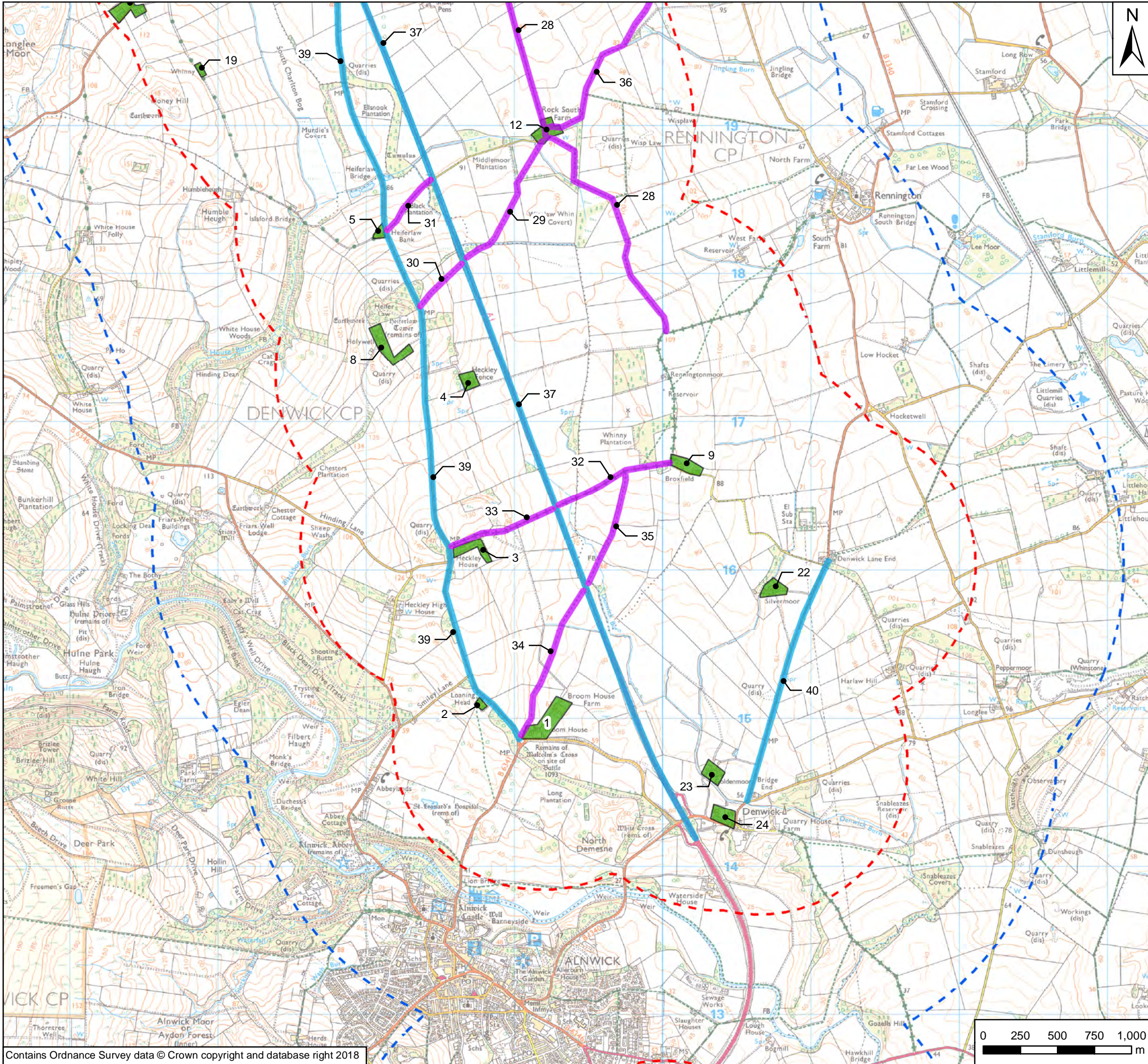
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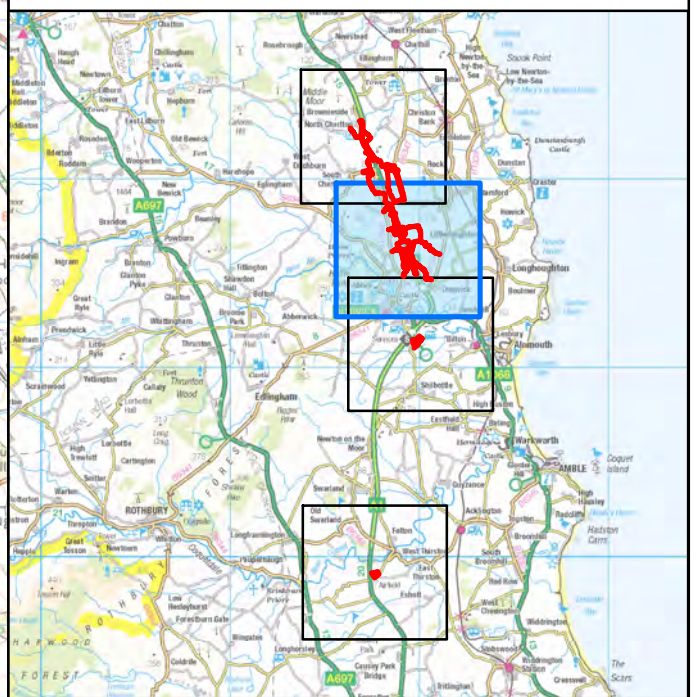






**Key**

- 1km Study Area
- 2km Study Area
- Commercial Receptors
- Residential Receptors
- Recreational Receptors
- Recreational Receptors
- Transport Receptors



PO1	23/11/18	First Issue	GH	SL	KS
Rev	Date	Description	By	Chk'd	App'd

Client

Project Title  
A1 in Northumberland: Alnwick to Ellingham Scheme

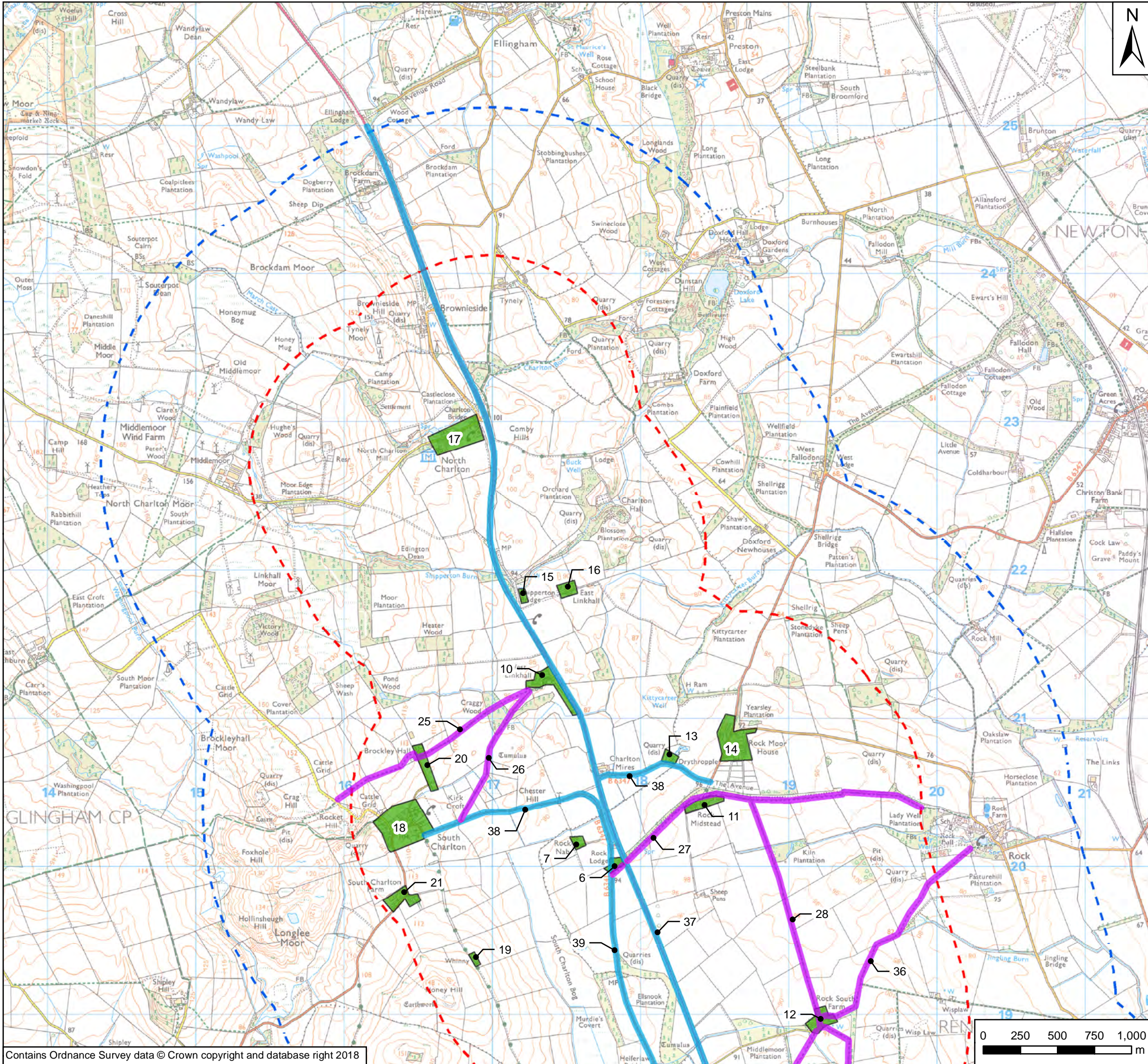
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Drawing Status									Suitability
For Information									S1

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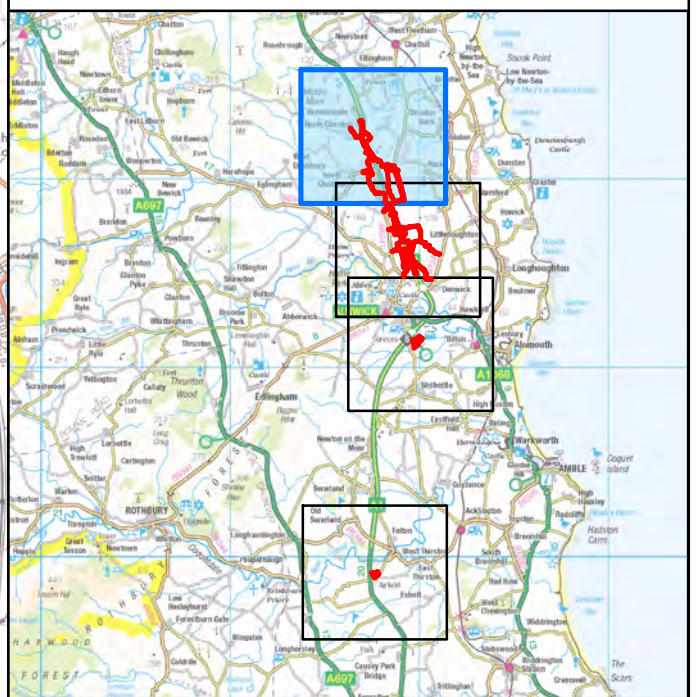






**Key**

- - - 1km Study Area
- - - 2km Study Area
- Commercial Receptors
- Residential Receptors
- Recreational Receptors
- Recreational Receptors
- Transport Receptors



PO1	23/11/18	First Issue	GH	SL	KS
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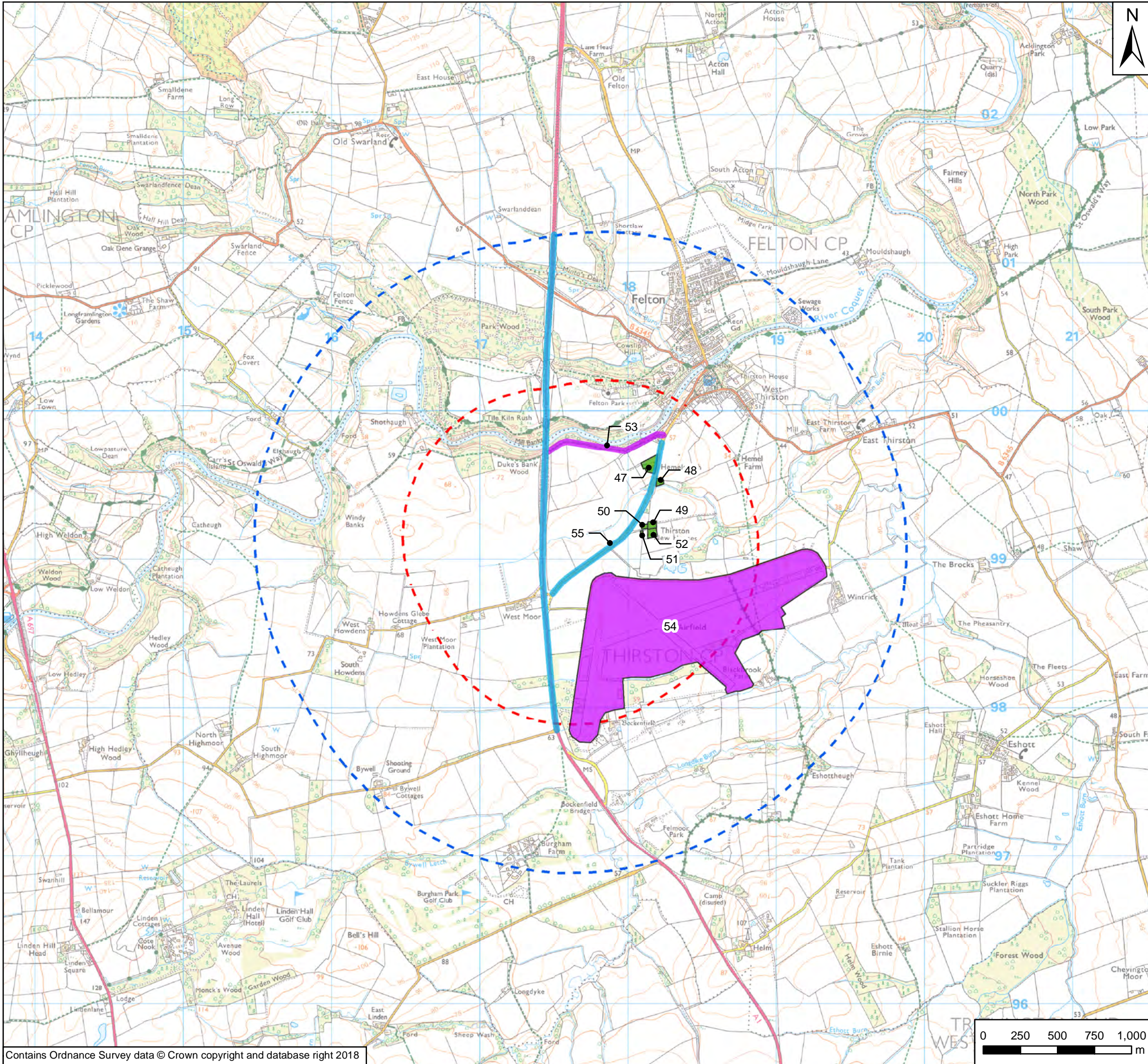
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For Information

Suitability  
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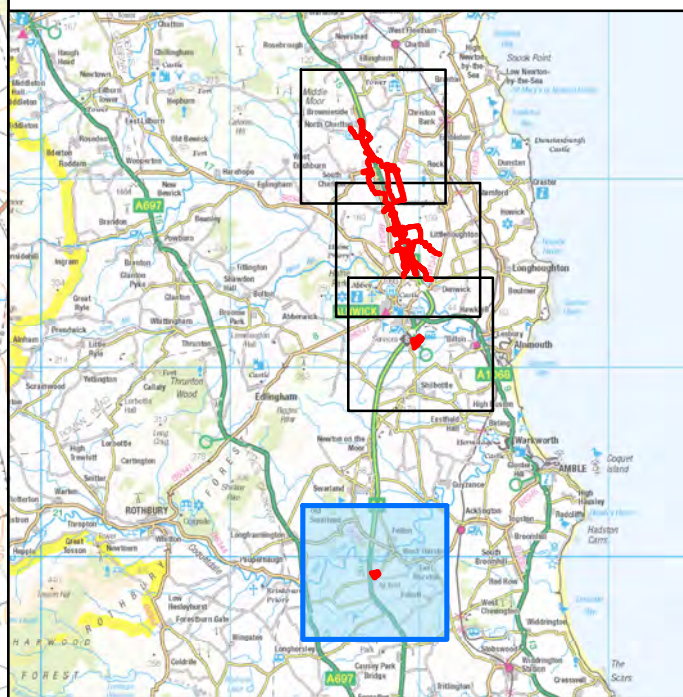
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	RP	LE	1638	P01







- Key**
- 1km Study Area
  - 2km Study Area
  - Commercial Receptors
  - Residential Receptors
  - Recreational Receptors
  - Recreational Receptors
  - Transport Receptors



Rev	Date	Description	By	Chk'd	App'd
P01	23/11/18	First Issue	GH	SL	KS



Project Title  
A1 in Northumberland: Alnwick to Ellingham Scheme

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Figure A13 - Visual Receptors  
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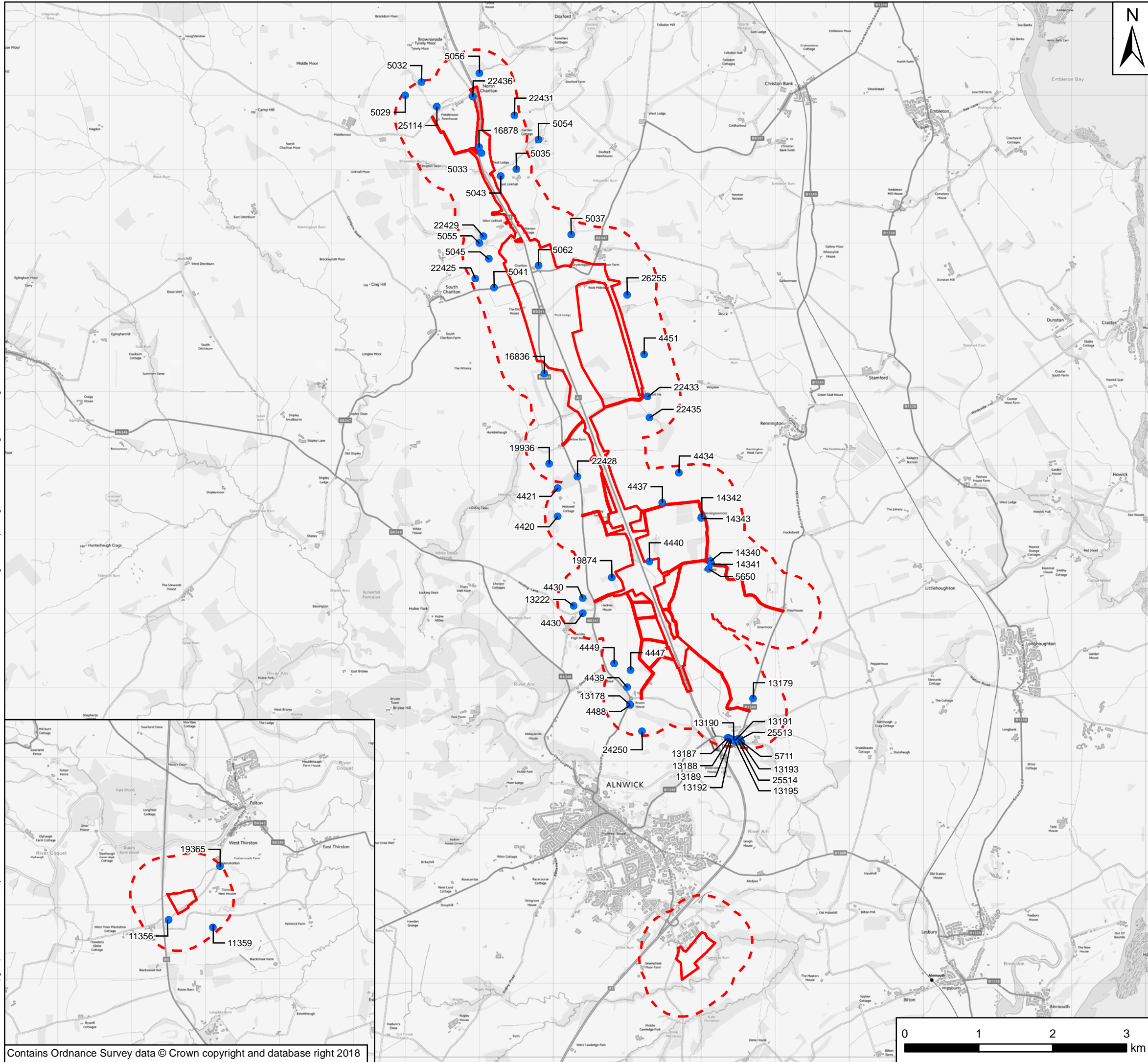
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For Information				S1
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Location	Type	Role	Number	Revision
A2E	RP	LE	1638	P01











- Key**
- Scheme Boundary
  - - - 500m Study Area
  - Non-Designated Heritage Assets

P01	05/12/18	First Issue	GH	LM	KS
Rev	Date	Description	By	Chk'd	App'd



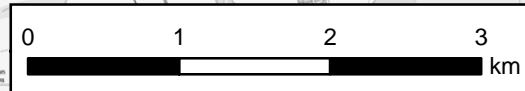
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**A1 in Northumberland: Alnwick to Ellingham Scheme**

Drawing Title  
**Figure A15 - Non-Designated Heritage Assets within 500m of the Scheme**

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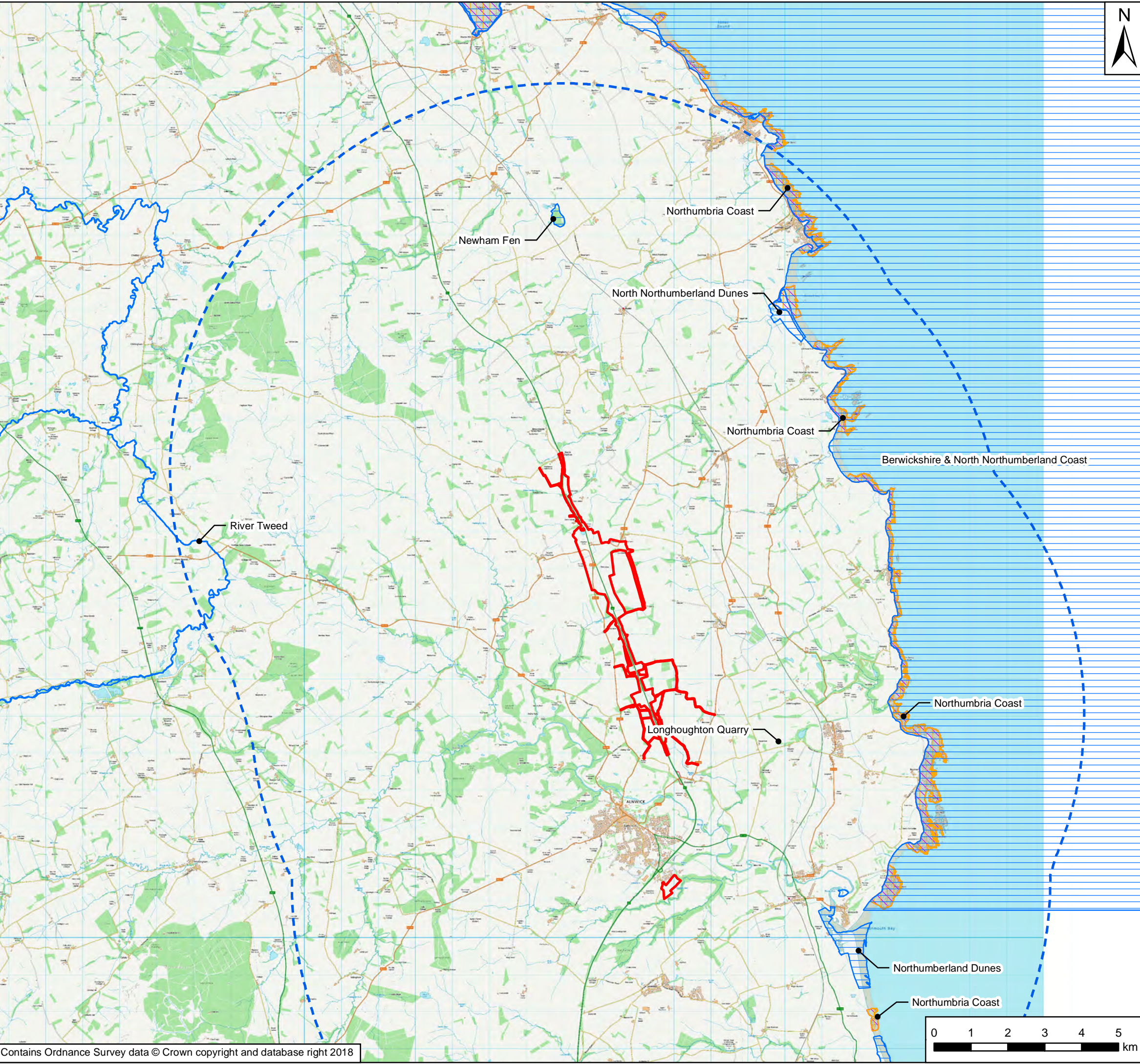
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Drawing Number	Project	Originator	Volume	Project Ref. No.
A2E	RP	LE	EGN	70044137
Location	Type	Role	Number	Revision
A2E	RP	LE	1638	P01

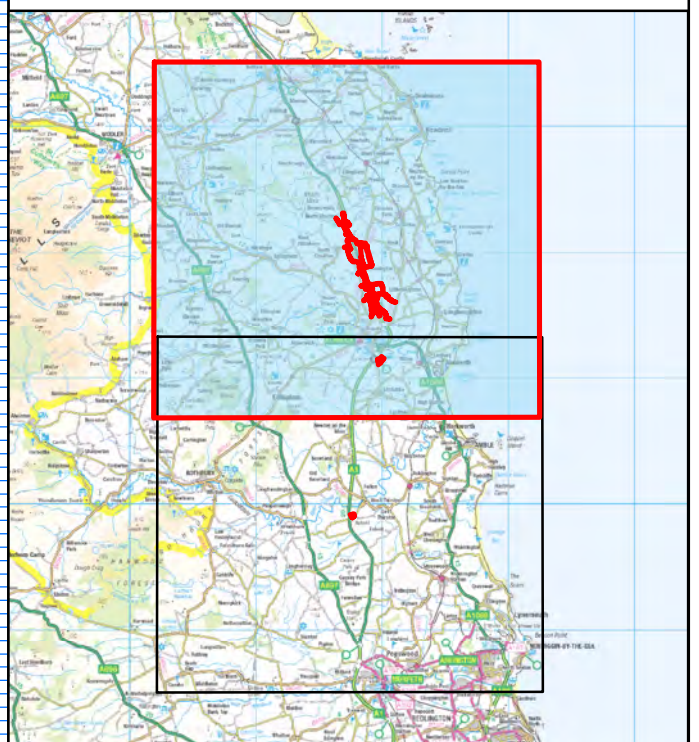




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Key	
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<span style="border: 1px solid lightblue; padding: 2px;"> </span>	Special Area of Conservation
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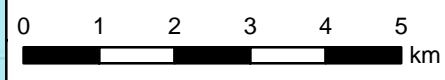


Rev	Date	Description	By	Chk'd	App'd
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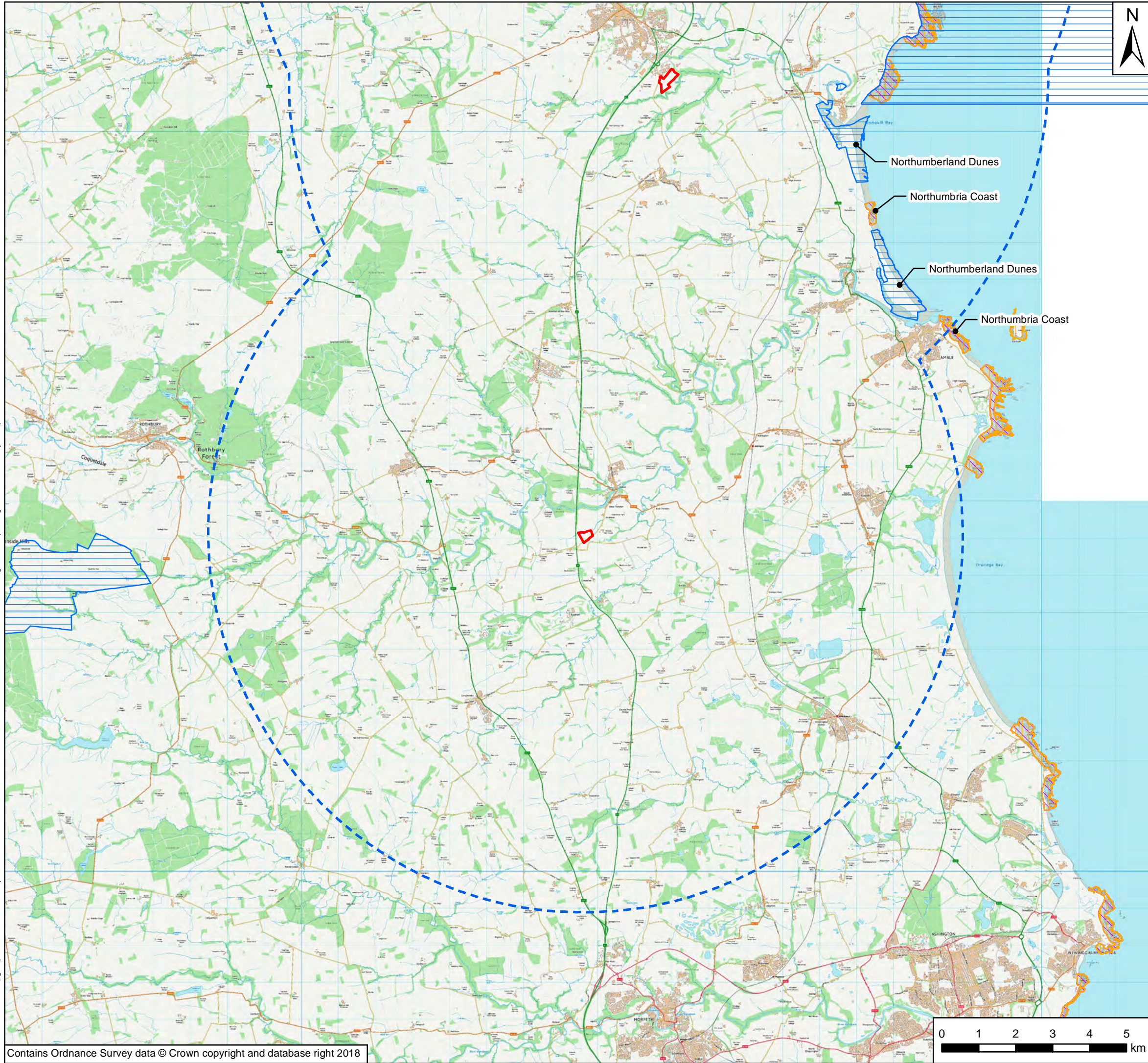


Project Title: A1 in Northumberland: Alnwick to Ellingham Scheme  
 Drawing Title: Figure A16 - Statutory European Sites or Internationally Designated Sites within 10km  
 Page 1 of 2

Scale	1:100,000	Drawn	GH	Checked	LM	Approved	KS	Authorised	DM
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Drawing Status	For Information							Suitability	S1
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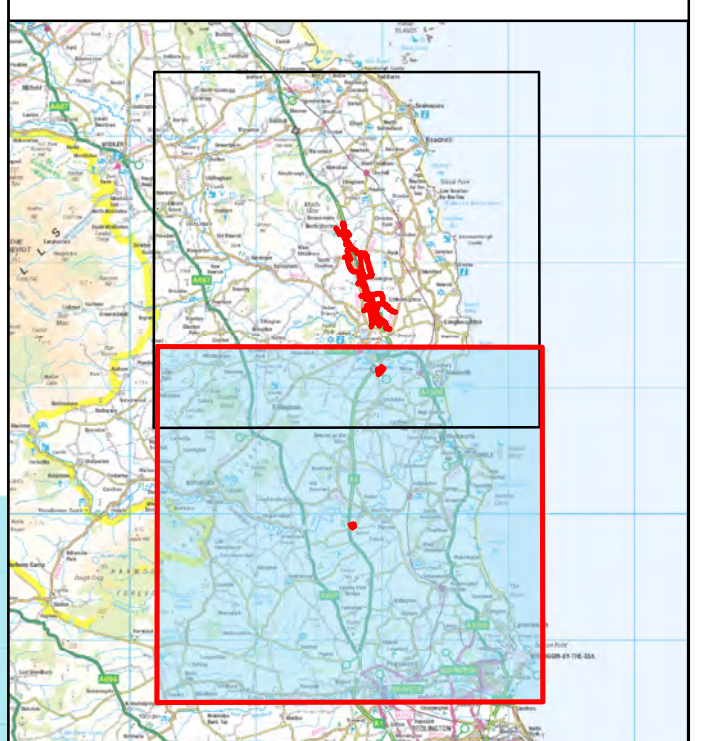






**Key**

- Scheme Boundary
- 10km Study Area
- Special Area of Conservation
- Special Protection Area
- Ramsar Site



Rev	Date	Description	By	Chk'd	App'd
P01	23/11/18	First Issue	GH	LM	KS

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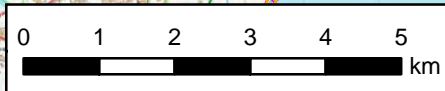
Project Title  
A1 in Northumberland: Alnwick to Ellingham Scheme

Drawing Title  
Figure A16 - Statutory European Sites or Internationally Designated Sites within 10km  
Page 2 of 2

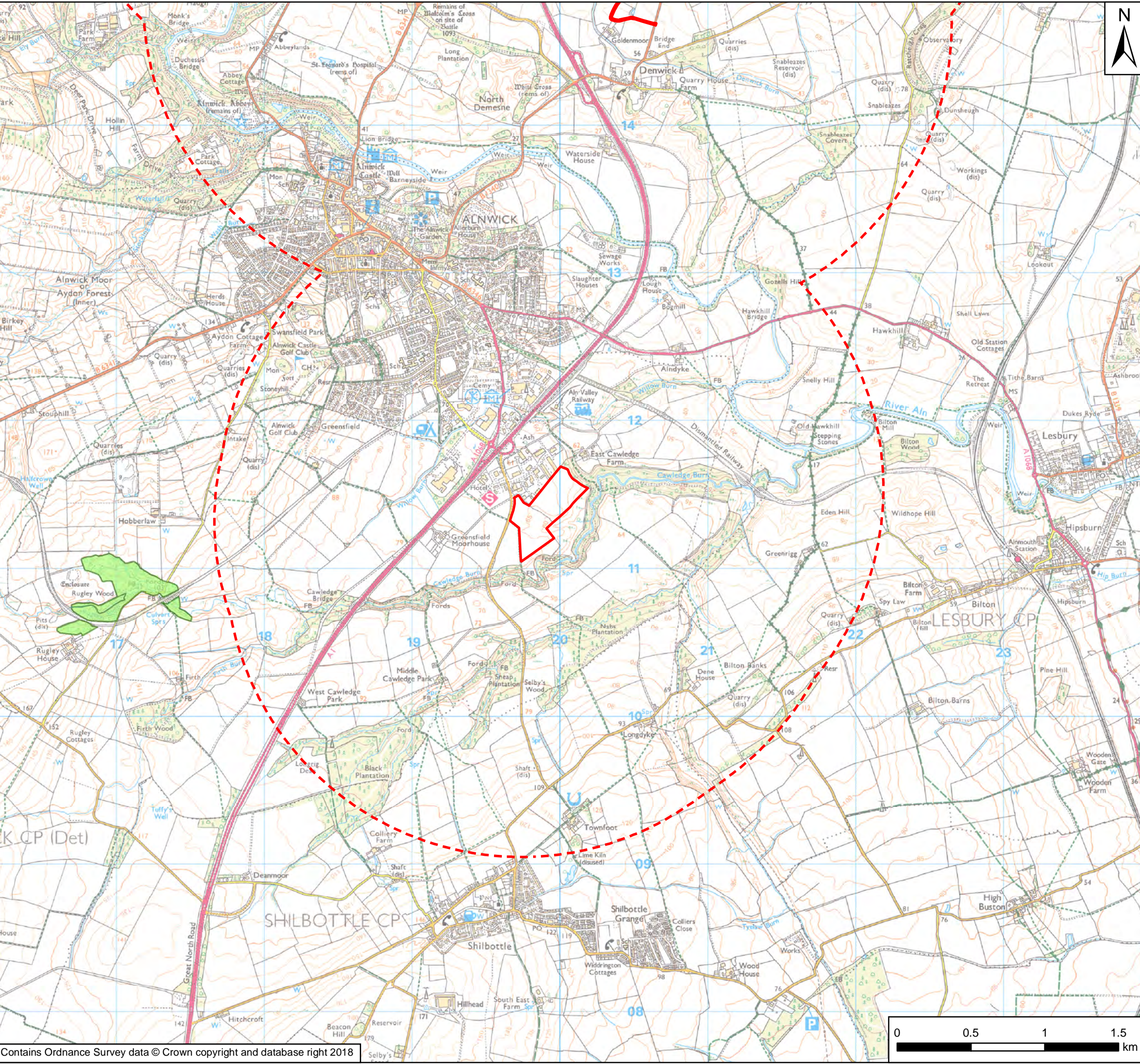
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A2E-RP-LE-1638	RP	LE	1638
Location	Type	Role	Number
			P01

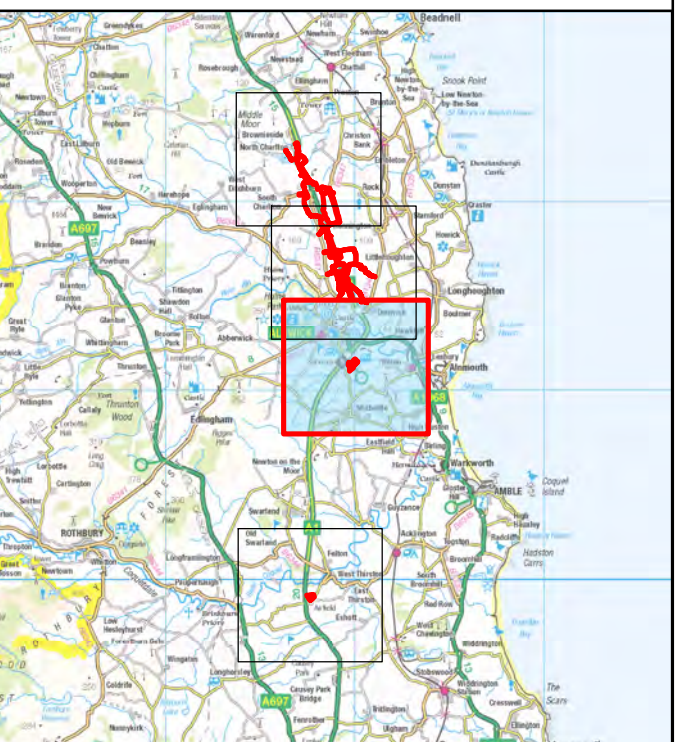






**Key**

- Scheme Boundary
- - - 2km Study Area
- / / / Site of Special Scientific Interest
- Local Nature Reserve
- Ancient Woodland Inventory
- ● ● National Nature Reserve



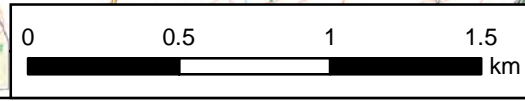
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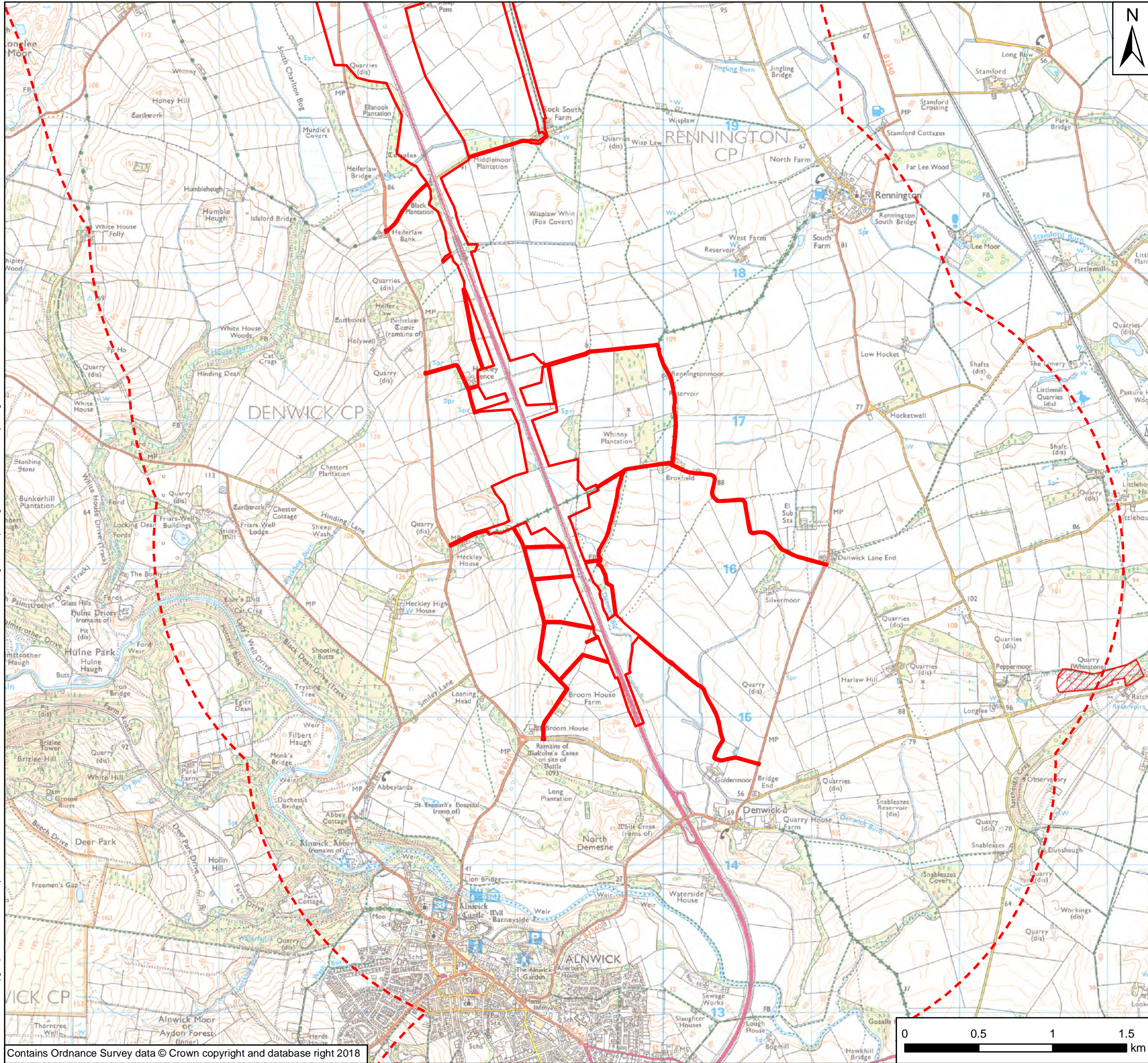
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A1 in Northumberland: Alnwick to Ellingham Scheme

Drawing Title  
Figure A17 - Non-Statutory European Sites  
Page 1 of 4

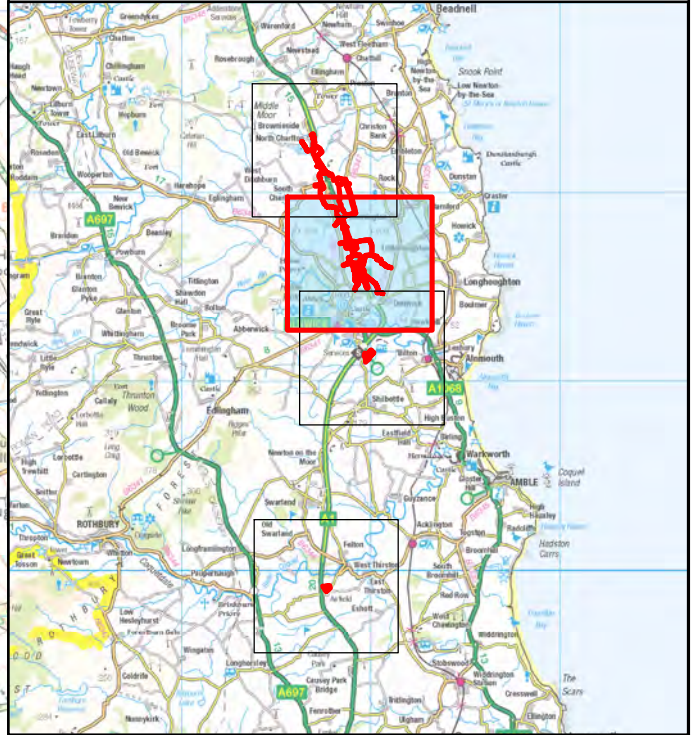
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Location	Type	Role	Number	Revision
A2E	RP	LE	1638	P01







- Key
- Scheme Boundary
  - 2km Study Area
  - Site of Special Scientific Interest
  - Local Nature Reserve
  - Ancient Woodland Inventory
  - National Nature Reserve



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Project Title  
A1 in Northumberland: Alnwick to Ellingham Scheme

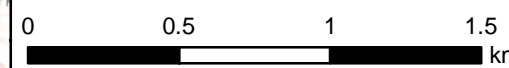
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Figure A17 - Non-Statutory European Sites  
Page 2 of 4

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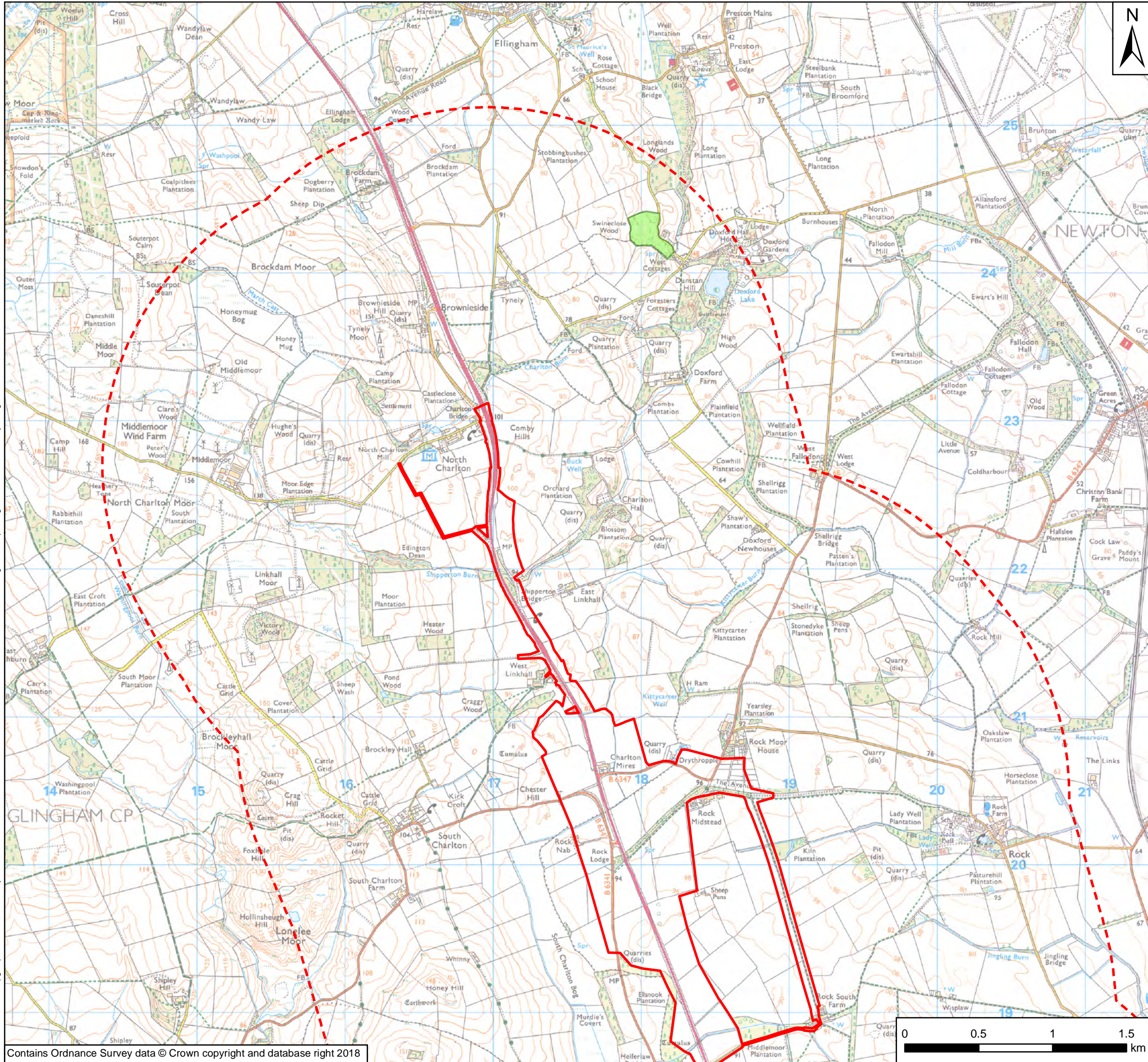
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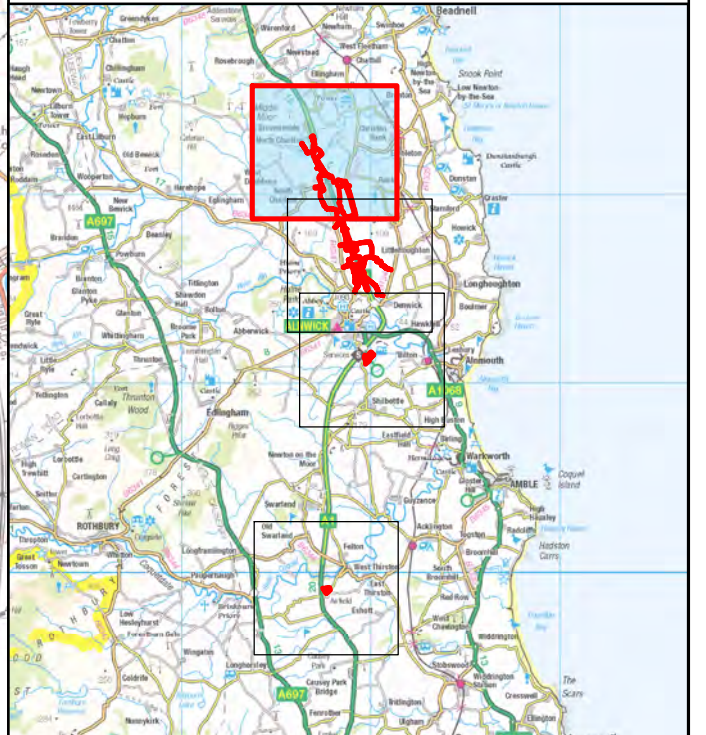






**Key**

- Scheme Boundary
- - - 2km Study Area
- Site of Special Scientific Interest
- Local Nature Reserve
- Ancient Woodland Inventory
- National Nature Reserve



PO1	23/11/18	First Issue	GH	LM	KS
Rev	Date	Description	By	Chk'd	App'd

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Project Title  
A1 in Northumberland: Alnwick to Ellingham Scheme

Drawing Title  
Figure A17 - Non-Statutory European Sites  
Page 3 of 4

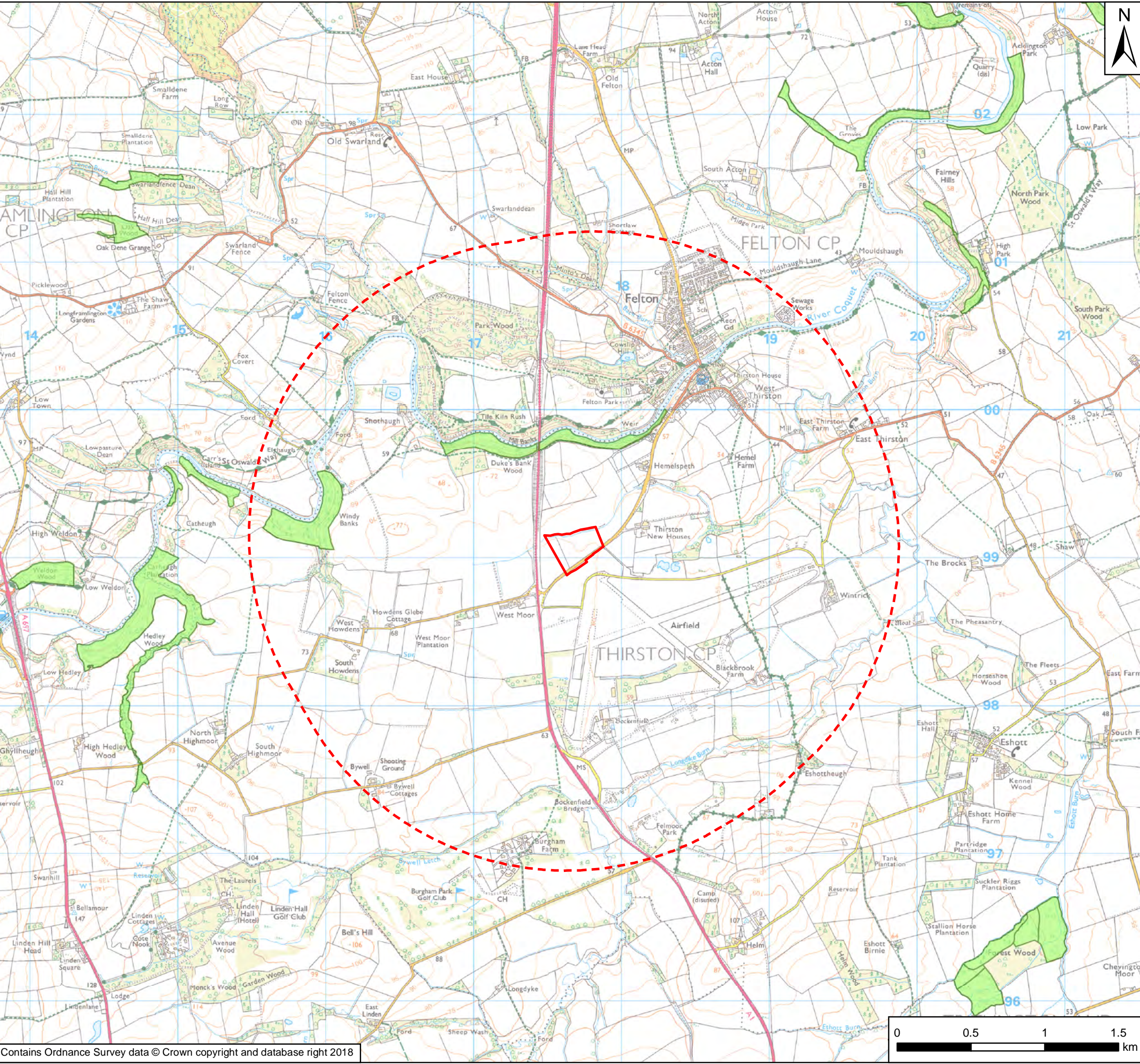
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Drawing Status  
For Information  
Suitability  
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Drawing Number	Project	Originator	Volume	Project Ref. No.
A2E-RP-LE-1638	HE551459-WSP-EGN-WSP	RP	EGN	70044137
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**Key**

- Scheme Boundary
- - - 2km Study Area
- Site of Special Scientific Interest
- Local Nature Reserve
- Ancient Woodland Inventory
- National Nature Reserve



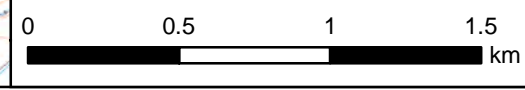
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Project Title  
**A1 in Northumberland: Alnwick to Ellingham Scheme**

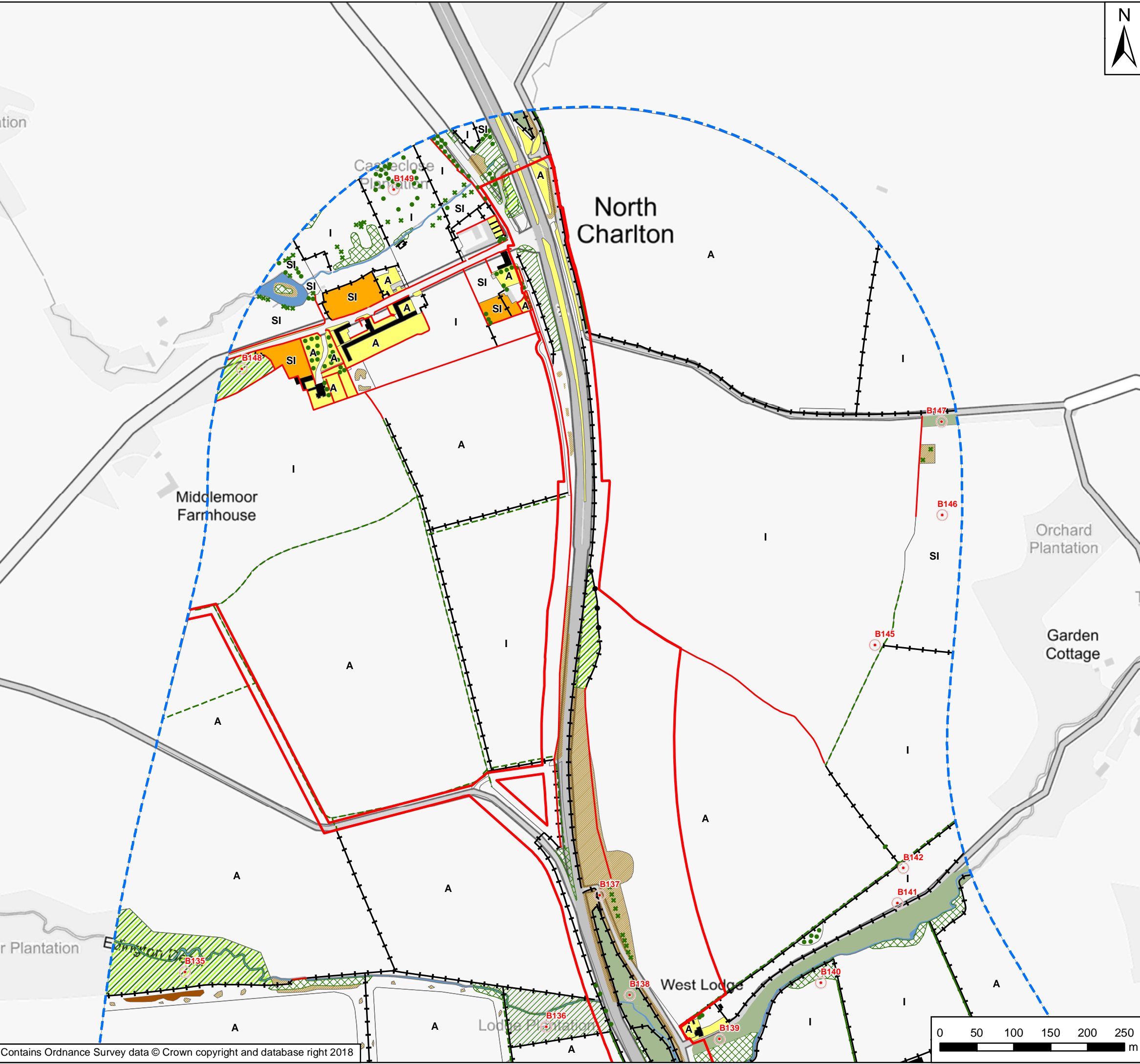
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**Figure A17 - Non-Statutory European Sites**  
 Page 4 of 4

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**Key**

- Scheme Boundary
- Survey Area
- Amenity Grassland
- Arable
- Bare Ground
- Bracken
- Broad-leaved Plantation Woodland
- Broad-leaved Semi-natural Woodland
- Building
- Coniferous Plantation Woodland
- Dense/Continuous Scrub
- Dry heath/acid grassland mosaic
- Improved Grassland
- Introduced Shrub
- Marshy Grassland
- Mixed Plantation Woodland
- Poor Semi-improved Grassland
- Scattered Scrub
- Semi-improved Neutral Grassland
- Spoil
- Standing Water
- Swamp
- Tall Ruderal
- Unimproved Neutral Grassland
- Earth Bank
- Fence
- www Inland Cliff
- www Native species-rich Intact Hedge
- Species-poor Defunct Hedge
- +--- Species-poor Hedge and Trees
- Species-poor Intact Hedge
- Running Water
- Dry Ditch
- Wall
- Target Note
- Broad-leaved Scattered Tree
- \* Scattered Scrub

Rev	Date	Description	By	Chk'd	App'd
P01	23/11/18	First Issue	GH	LM	KS



Project Title  
A1 in Northumberland: Alnwick to Ellingham Scheme

Drawing Title  
Figure A18 - Phase 1 Habitat Survey  
Page 1 of 12

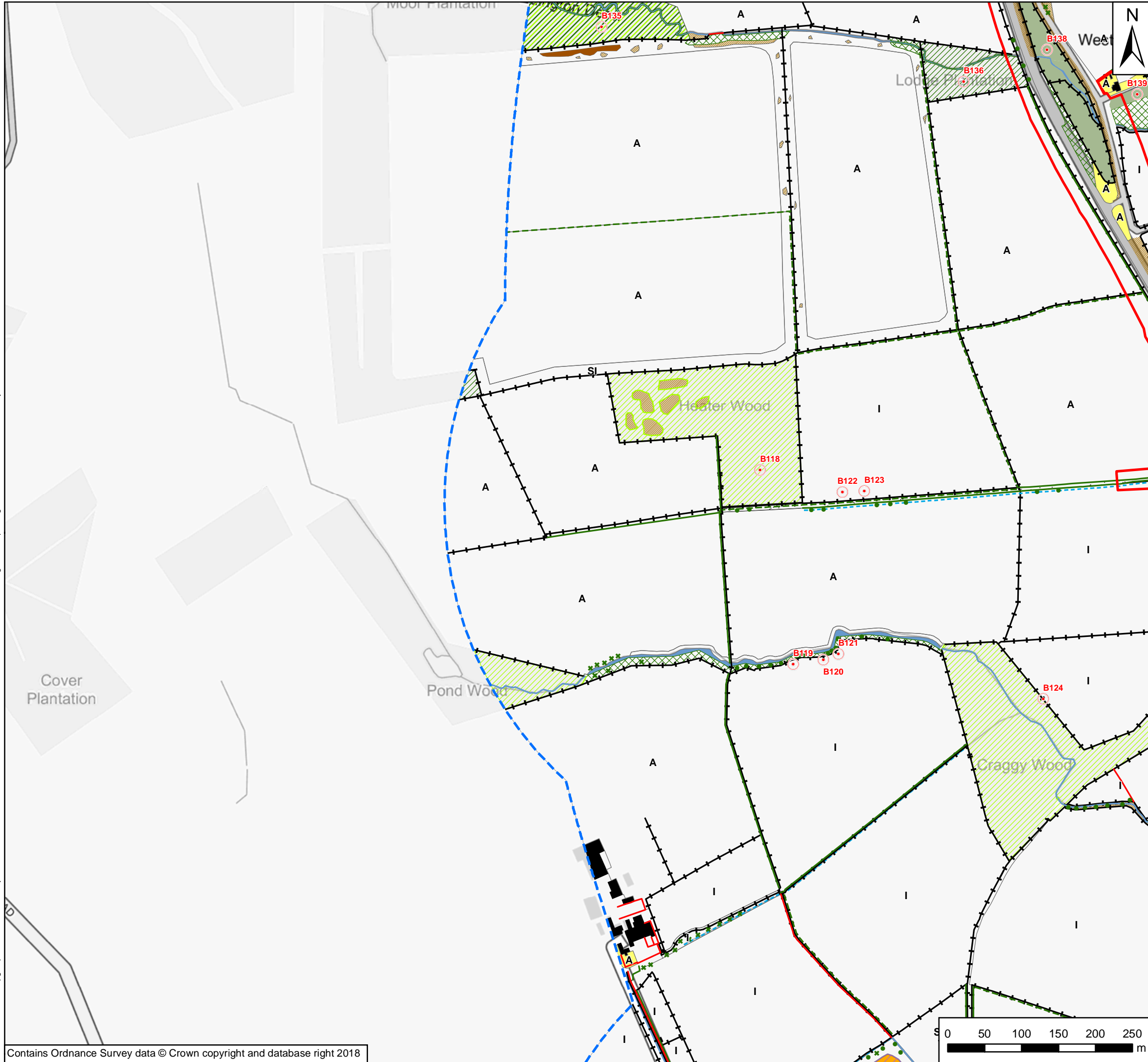
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For Information

Suitability  
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A2E-RP-LE-1638	RP	LE	1638
Location	Type	Role	Number
			P01





**Key**

- Scheme Boundary
- Survey Area
- Amenity Grassland
- Arable
- Bare Ground
- Bracken
- Broad-leaved Plantation Woodland
- Broad-leaved Semi-natural Woodland
- Building
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- Tall Ruderal
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- Fence
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- wvw Native species-rich Intact Hedge
- Species-poor Defunct Hedge
- +—+— Species-poor Hedge and Trees
- Species-poor Intact Hedge
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- Target Note
- Broad-leaved Scattered Tree
- \* Scattered Scrub

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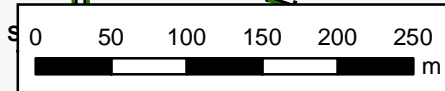
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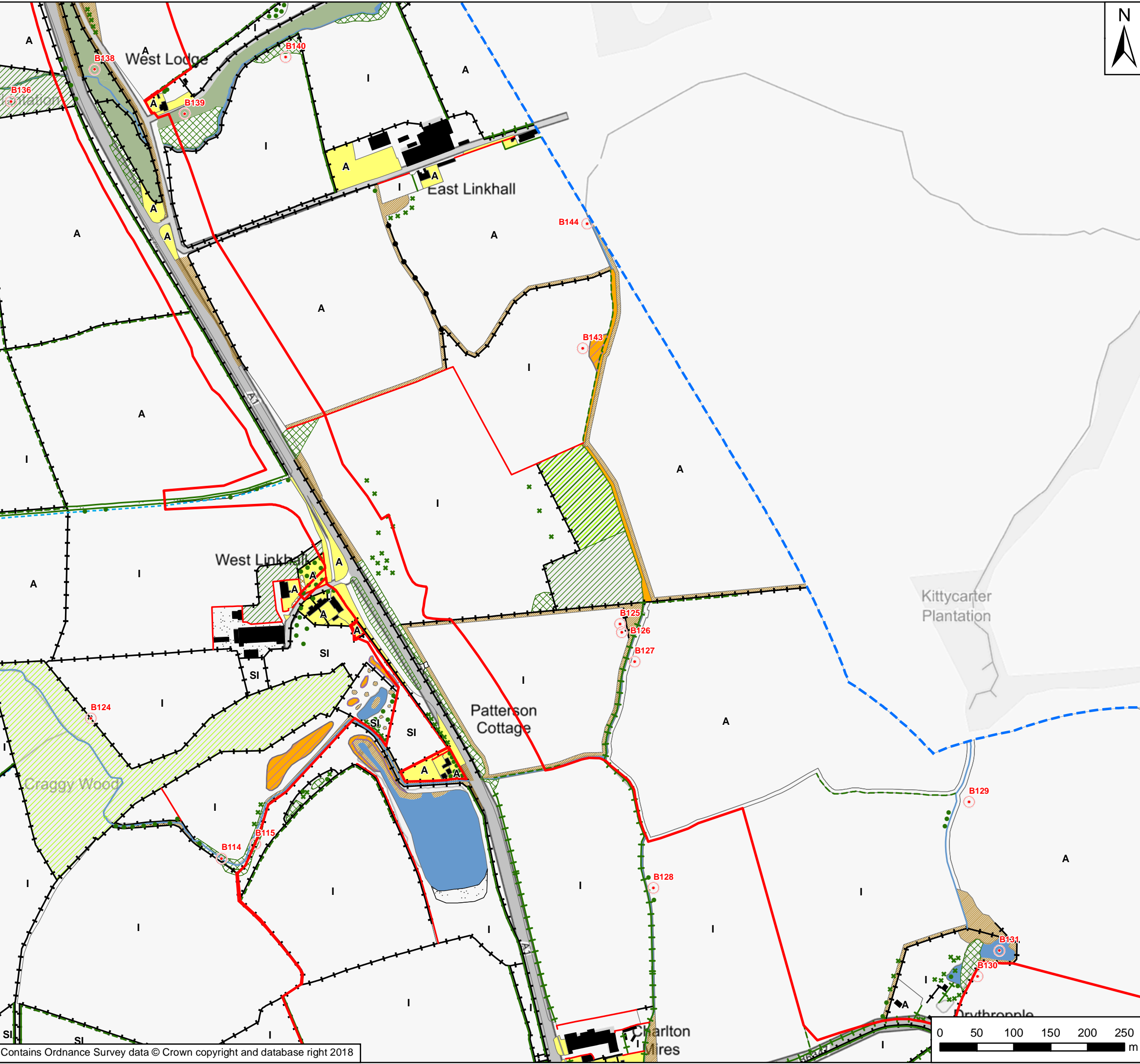
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Figure A18 - Phase 1 Habitat Survey  
Page 2 of 12

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Location RP	Type LE	Role 1638	Revision P01





Key	
	Scheme Boundary
	Survey Area
	Amenity Grassland
	Arable
	Bare Ground
	Bracken
	Broad-leaved Plantation Woodland
	Broad-leaved Semi-natural Woodland
	Building
	Coniferous Plantation Woodland
	Dense/Continuous Scrub
	Dry heath/acid grassland mosaic
	Improved Grassland
	Introduced Shrub
	Marshy Grassland
	Mixed Plantation Woodland
	Poor Semi-improved Grassland
	Scattered Scrub
	Semi-improved Neutral Grassland
	Spoil
	Standing Water
	Swamp
	Tall Ruderal
	Unimproved Neutral Grassland
	Earth Bank
	Fence
	Inland Cliff
	Native species-rich Intact Hedge
	Species-poor Defunct Hedge
	Species-poor Hedge and Trees
	Species-poor Intact Hedge
	Running Water
	Dry Ditch
	Wall
	Target Note
	Broad-leaved Scattered Tree
	Scattered Scrub

Rev	Date	Description	By	Chk'd	App'd
P01	23/11/18	First Issue	GH	LM	KS

Client

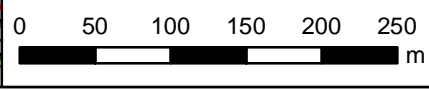
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A1 in Northumberland: Alnwick to Ellingham Scheme

Drawing Title  
Figure A18 - Phase 1 Habitat Survey  
Page 3 of 12

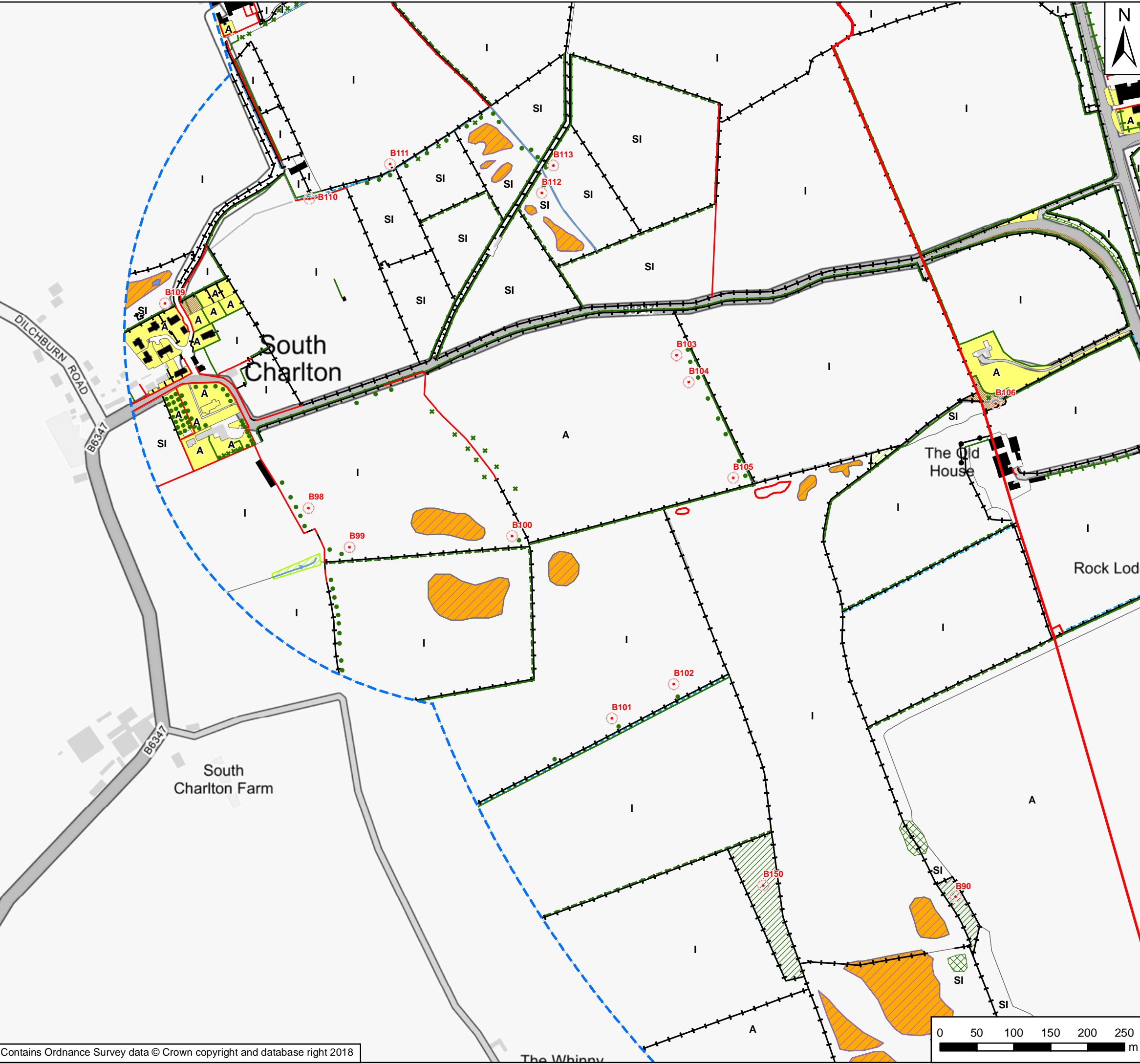
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Drawing Number Project HE551459-WSP-EGN- A2E-RP-LE-1638	Originator WSP	Volume EGN	Project Ref. No. 70044137
Location RP	Type LE	Number 1638	Revision P01







**Key**

- Scheme Boundary
- Survey Area
- Amenity Grassland
- Arable
- Bare Ground
- Bracken
- Broad-leaved Plantation Woodland
- Broad-leaved Semi-natural Woodland
- Building
- Coniferous Plantation Woodland
- Dense/Continuous Scrub
- Dry heath/acid grassland mosaic
- Improved Grassland
- Introduced Shrub
- Marshy Grassland
- Mixed Plantation Woodland
- Poor Semi-improved Grassland
- Scattered Scrub
- Semi-improved Neutral Grassland
- Spoil
- Standing Water
- Swamp
- Tall Ruderal
- Unimproved Neutral Grassland
- Earth Bank
- Fence
- www Inland Cliff
- www Native species-rich Intact Hedge
- Species-poor Defunct Hedge
- +— Species-poor Hedge and Trees
- Species-poor Intact Hedge
- Running Water
- Dry Ditch
- Wall
- Target Note
- Broad-leaved Scattered Tree
- \* Scattered Scrub

Rev	Date	Description	By	Chk'd	App'd
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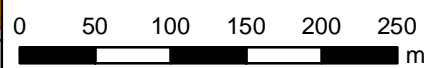
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Drawing Title  
Figure A18 - Phase 1 Habitat Survey  
Page 4 of 12

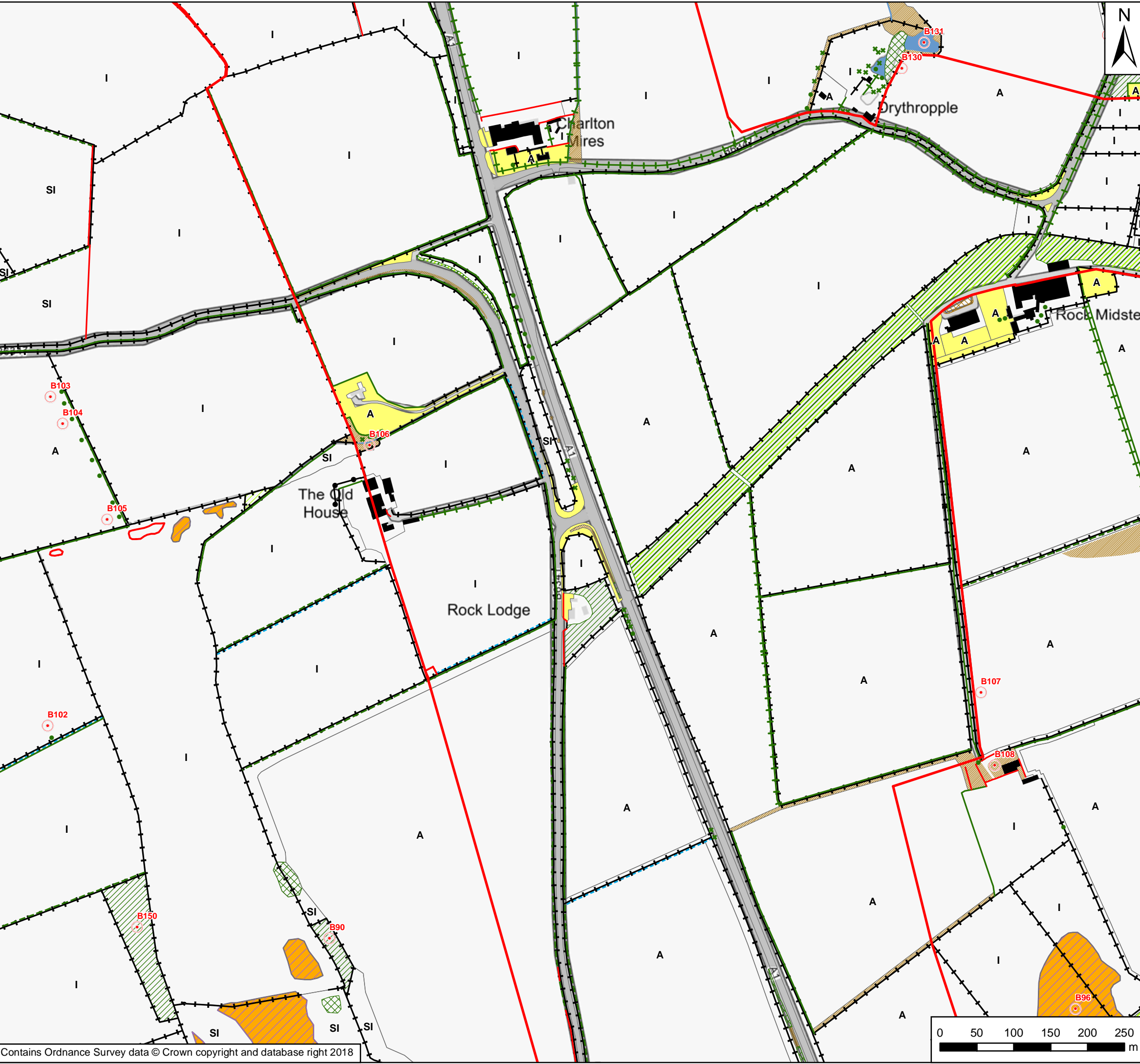
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**Key**

- Scheme Boundary
- Survey Area
- Amenity Grassland
- Arable
- Bare Ground
- Bracken
- Broad-leaved Plantation Woodland
- Broad-leaved Semi-natural Woodland
- Building
- Coniferous Plantation Woodland
- Dense/Continuous Scrub
- Dry heath/acid grassland mosaic
- Improved Grassland
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- Marshy Grassland
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- Species-poor Defunct Hedge
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- Running Water
- Dry Ditch
- Wall
- Target Note
- Broad-leaved Scattered Tree
- \* Scattered Scrub

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P01	23/11/18	First Issue	GH	LM	KS



Project Title  
A1 in Northumberland: Alnwick to Ellingham Scheme

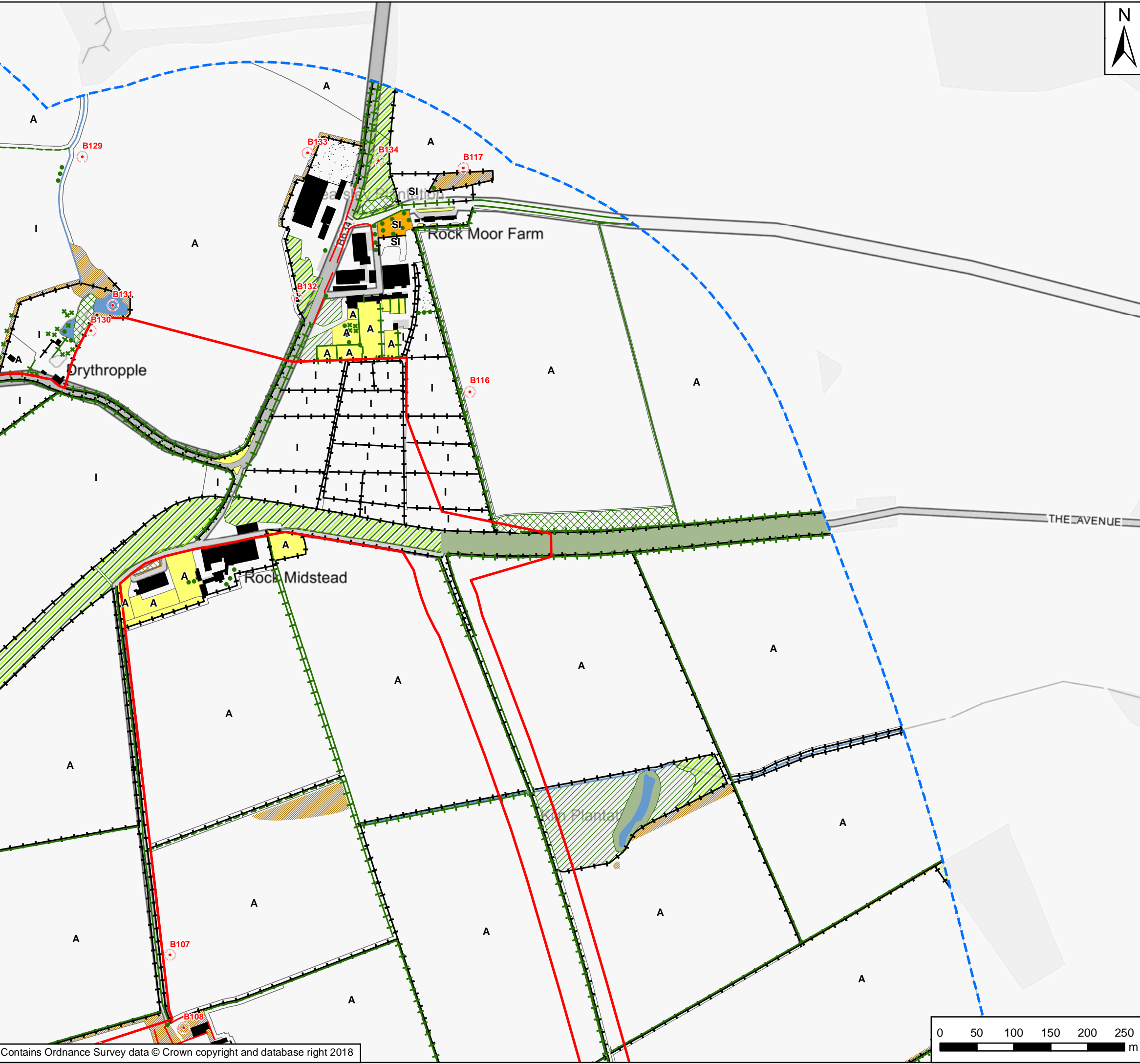
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Figure A18 - Phase 1 Habitat Survey  
Page 5 of 12

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RP	LE	1638	Revision P01
Type	Role	Number	





**Key**

- Scheme Boundary
- - - Survey Area
- Amenity Grassland
- Arable
- Bare Ground
- Bracken
- Broad-leaved Plantation Woodland
- Broad-leaved Semi-natural Woodland
- Building
- Coniferous Plantation Woodland
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- Swamp
- Tall Ruderal
- Unimproved Neutral Grassland
- Earth Bank
- Fence
- www Inland Cliff
- www Native species-rich Intact Hedge
- - - Species-poor Defunct Hedge
- + + + Species-poor Hedge and Trees
- Species-poor Intact Hedge
- Running Water
- - - Dry Ditch
- Wall
- Target Note
- Broad-leaved Scattered Tree
- \* Scattered Scrub

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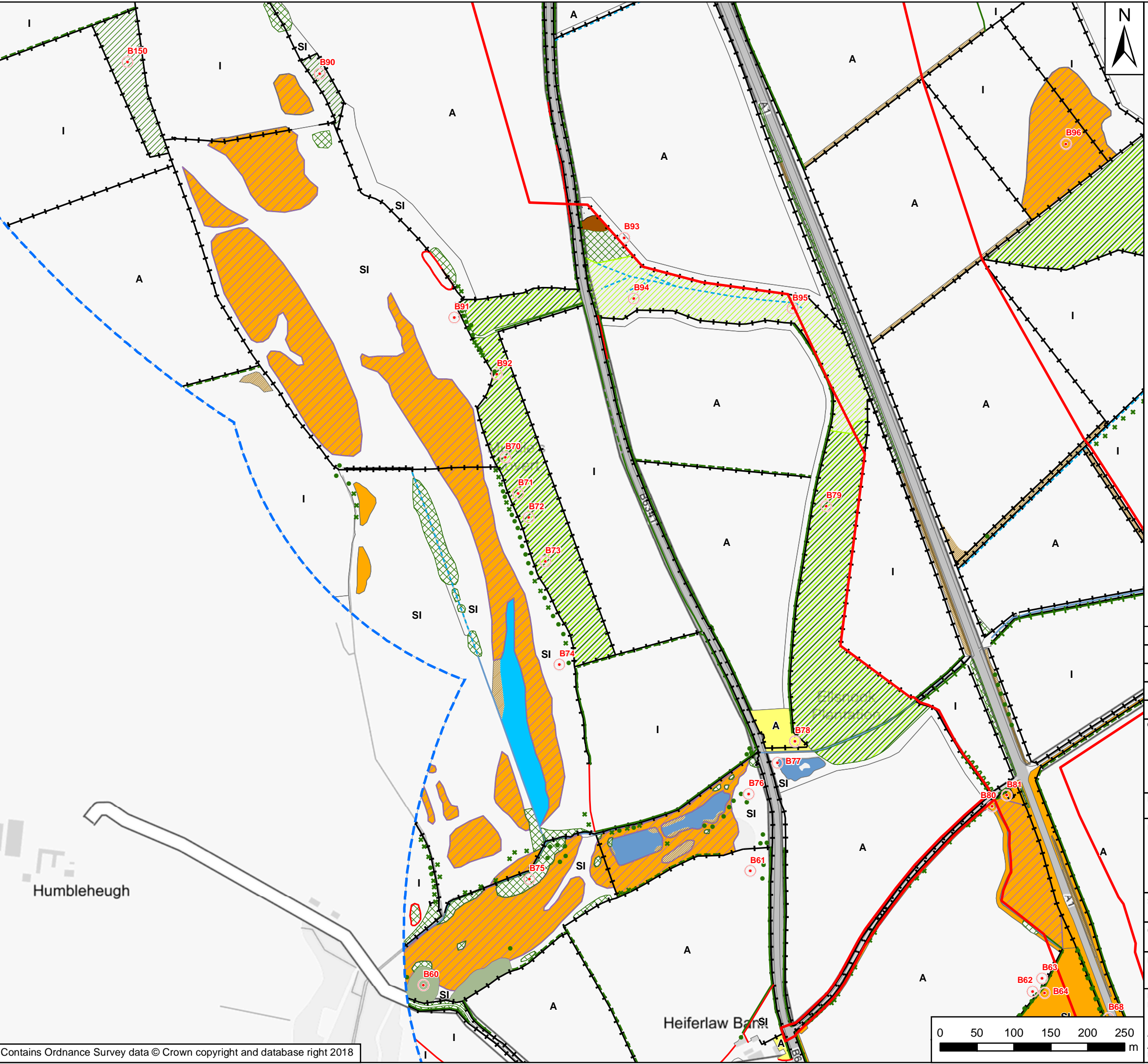
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A1 in Northumberland: Alnwick to Ellingham Scheme

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Figure A18 - Phase 1 Habitat Survey  
Page 6 of 12

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Location RP	Type LE	Role 1638	Number P01	Revision



**Key**

- Scheme Boundary
- Survey Area
- Amenity Grassland
- Arable
- Bare Ground
- Bracken
- Broad-leaved Plantation Woodland
- Broad-leaved Semi-natural Woodland
- Building
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- +--- Species-poor Hedge and Trees
- Species-poor Intact Hedge
- Running Water
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- Target Note
- Broad-leaved Scattered Tree
- \* Scattered Scrub

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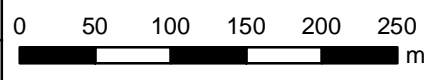
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Figure A18 - Phase 1 Habitat Survey  
Page 7 of 12

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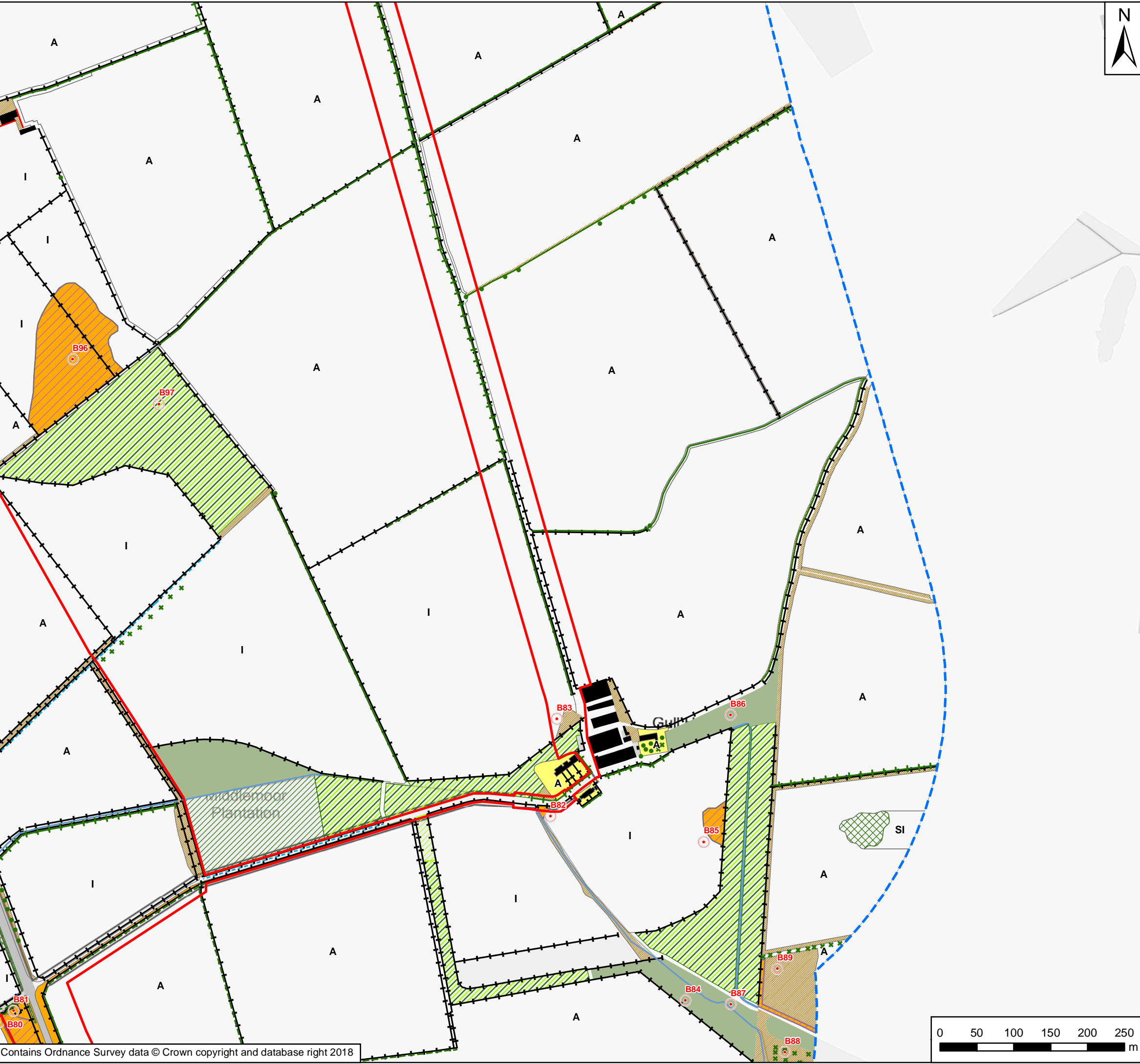
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<span style="background-color: white;"> </span>	Arable
<span style="background-color: lightgrey;"> </span>	Bare Ground
<span style="background-color: brown;"> </span>	Bracken
<span style="background-color: lightgreen;"> </span>	Broad-leaved Plantation Woodland
<span style="background-color: olive;"> </span>	Broad-leaved Semi-natural Woodland
<span style="background-color: black;"> </span>	Building
<span style="background-color: lightyellow;"> </span>	Coniferous Plantation Woodland
<span style="background-color: lightgreen;"> </span>	Dense/Continuous Scrub
<span style="background-color: orange;"> </span>	Dry heath/acid grassland mosaic
<span style="background-color: white;"> </span>	Improved Grassland
<span style="background-color: lightorange;"> </span>	Introduced Shrub
<span style="background-color: orange;"> </span>	Marshy Grassland
<span style="background-color: lightgreen;"> </span>	Mixed Plantation Woodland
<span style="background-color: white;"> </span>	Poor Semi-improved Grassland
<span style="background-color: lightgreen;"> </span>	Scattered Scrub
<span style="background-color: orange;"> </span>	Semi-improved Neutral Grassland
<span style="border: 1px solid red;"> </span>	Spoil
<span style="background-color: blue;"> </span>	Standing Water
<span style="background-color: cyan;"> </span>	Swamp
<span style="background-color: lightbrown;"> </span>	Tall Ruderal
<span style="background-color: orange;"> </span>	Unimproved Neutral Grassland
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<span style="border-bottom: 1px dashed black;"> </span>	Fence
<span style="color: red;">www</span>	Inland Cliff
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<span style="color: green;">- - -</span>	Species-poor Defunct Hedge
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<span style="color: green;">—</span>	Species-poor Intact Hedge
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<span style="color: blue;">- - -</span>	Dry Ditch
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Rev	Date	Description	By	Chk'd	App'd
P01	23/11/18	First Issue	GH	LM	KS



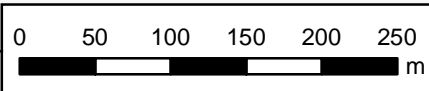
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Figure A18 - Phase 1 Habitat Survey  
Page 8 of 12

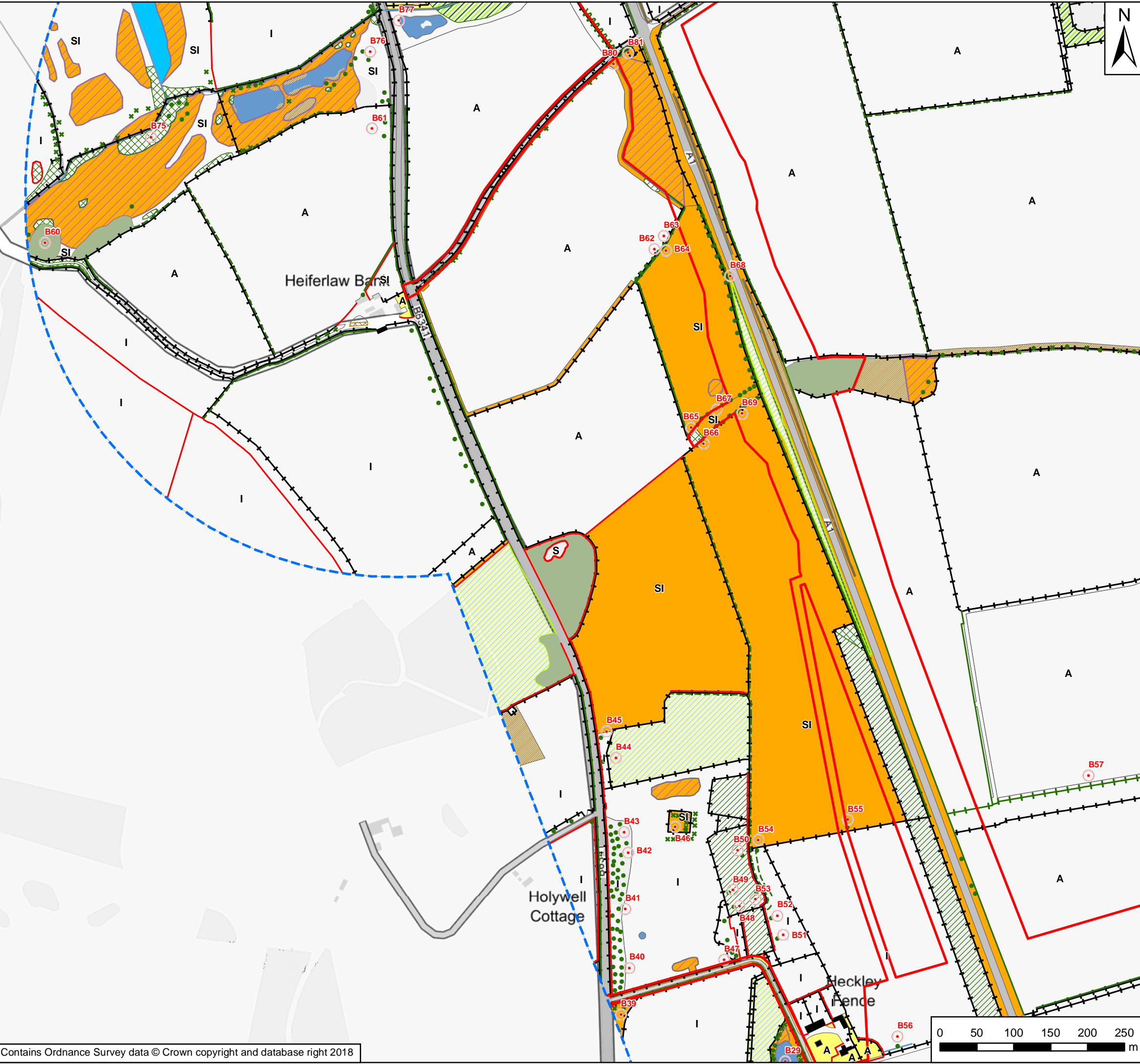
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Location	Type RP	Role LE	Number 1638	Revision P01







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- Scheme Boundary
- Survey Area
- Amenity Grassland
- Arable
- Bare Ground
- Bracken
- Broad-leaved Plantation Woodland
- Broad-leaved Semi-natural Woodland
- Building
- Coniferous Plantation Woodland
- Dense/Continuous Scrub
- Dry heath/acid grassland mosaic
- Improved Grassland
- Introduced Shrub
- Marshy Grassland
- Mixed Plantation Woodland
- Poor Semi-improved Grassland
- Scattered Scrub
- Semi-improved Neutral Grassland
- Spoil
- Standing Water
- Swamp
- Tall Ruderal
- Unimproved Neutral Grassland
- Earth Bank
- Fence
- www Inland Cliff
- www Native species-rich Intact Hedge
- Species-poor Defunct Hedge
- Species-poor Hedge and Trees
- Species-poor Intact Hedge
- Running Water
- Dry Ditch
- Wall
- Target Note
- Broad-leaved Scattered Tree
- \* Scattered Scrub

P01	23/11/18	First Issue	GH	LM	KS
Rev	Date	Description	By	Chk'd	App'd

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Project Title  
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Drawing Title  
Figure A18 - Phase 1 Habitat Survey  
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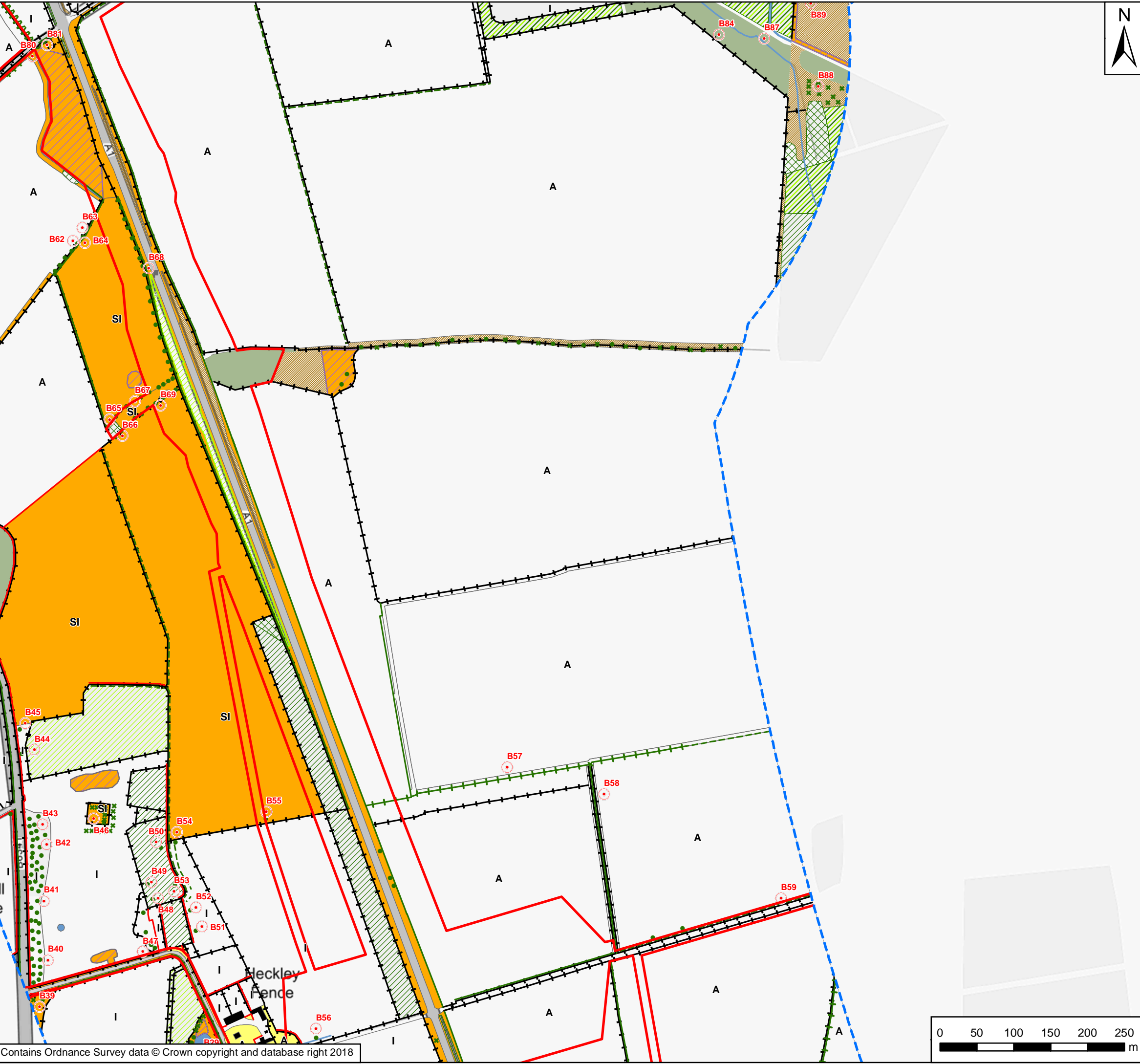
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Key	
	Scheme Boundary
	Survey Area
	Amenity Grassland
	Arable
	Bare Ground
	Bracken
	Broad-leaved Plantation Woodland
	Broad-leaved Semi-natural Woodland
	Building
	Coniferous Plantation Woodland
	Dense/Continuous Scrub
	Dry heath/acid grassland mosaic
	Improved Grassland
	Introduced Shrub
	Marshy Grassland
	Mixed Plantation Woodland
	Poor Semi-improved Grassland
	Scattered Scrub
	Semi-improved Neutral Grassland
	Spoil
	Standing Water
	Swamp
	Tall Ruderal
	Unimproved Neutral Grassland
	Earth Bank
	Fence
	Inland Cliff
	Native species-rich Intact Hedge
	Species-poor Defunct Hedge
	Species-poor Hedge and Trees
	Species-poor Intact Hedge
	Running Water
	Dry Ditch
	Wall
	Target Note
	Broad-leaved Scattered Tree
	Scattered Scrub

Rev	Date	Description	By	Chk'd	App'd
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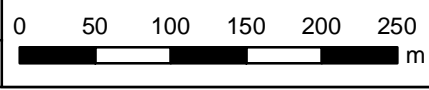
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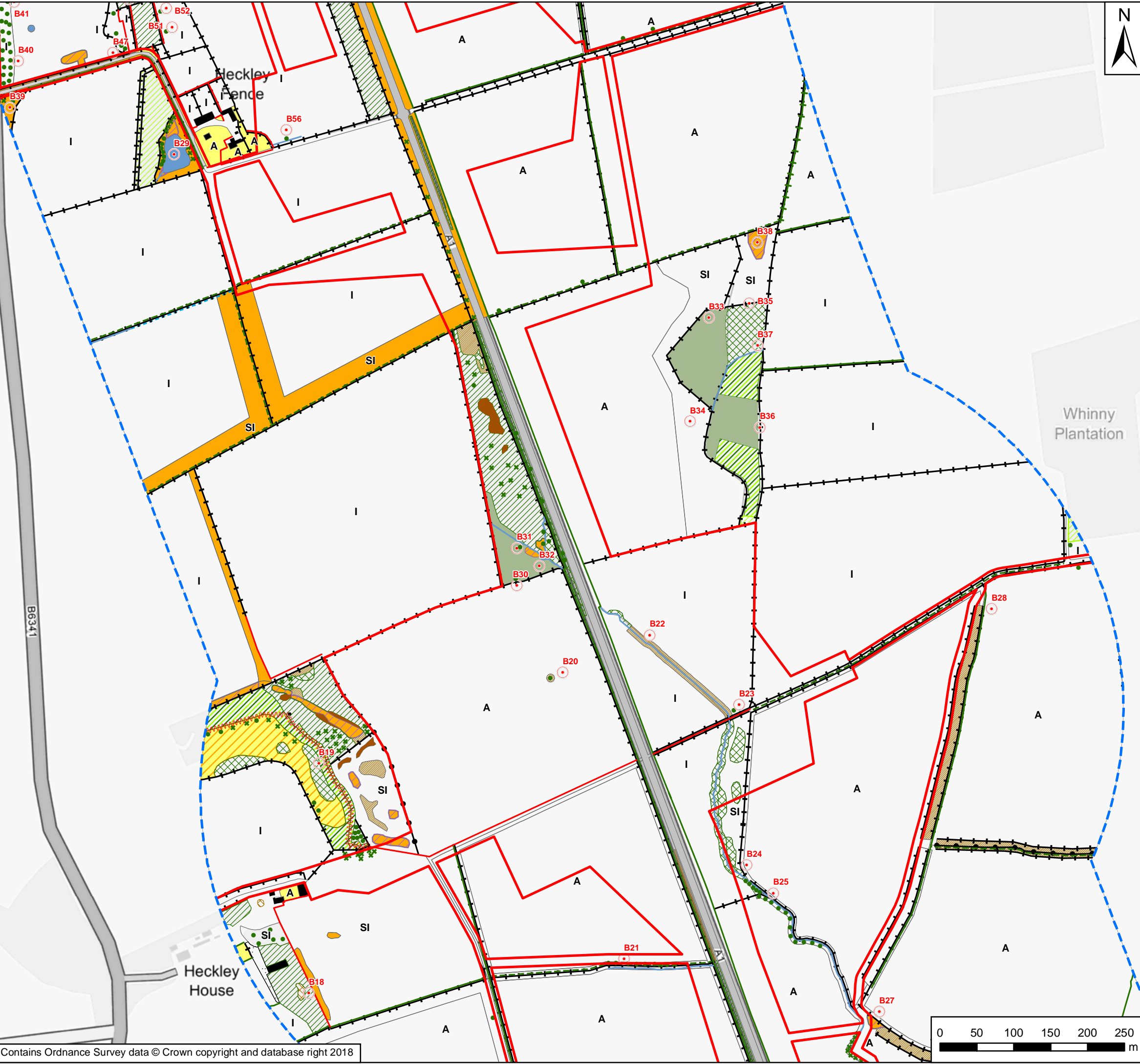
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Location	Type RP	Role LE	Number 1638
			Revision P01







**Key**

- Scheme Boundary
- Survey Area
- Amenity Grassland
- Arable
- Bare Ground
- Bracken
- Broad-leaved Plantation Woodland
- Broad-leaved Semi-natural Woodland
- Building
- Coniferous Plantation Woodland
- Dense/Continuous Scrub
- Dry heath/acid grassland mosaic
- Improved Grassland
- Introduced Shrub
- Marshy Grassland
- Mixed Plantation Woodland
- Poor Semi-improved Grassland
- Scattered Scrub
- Semi-improved Neutral Grassland
- Spoil
- Standing Water
- Swamp
- Tall Ruderal
- Unimproved Neutral Grassland
- Earth Bank
- Fence
- Inland Cliff
- Native species-rich Intact Hedge
- Species-poor Defunct Hedge
- Species-poor Hedge and Trees
- Species-poor Intact Hedge
- Running Water
- Dry Ditch
- Wall
- Target Note
- Broad-leaved Scattered Tree
- ✱ Scattered Scrub

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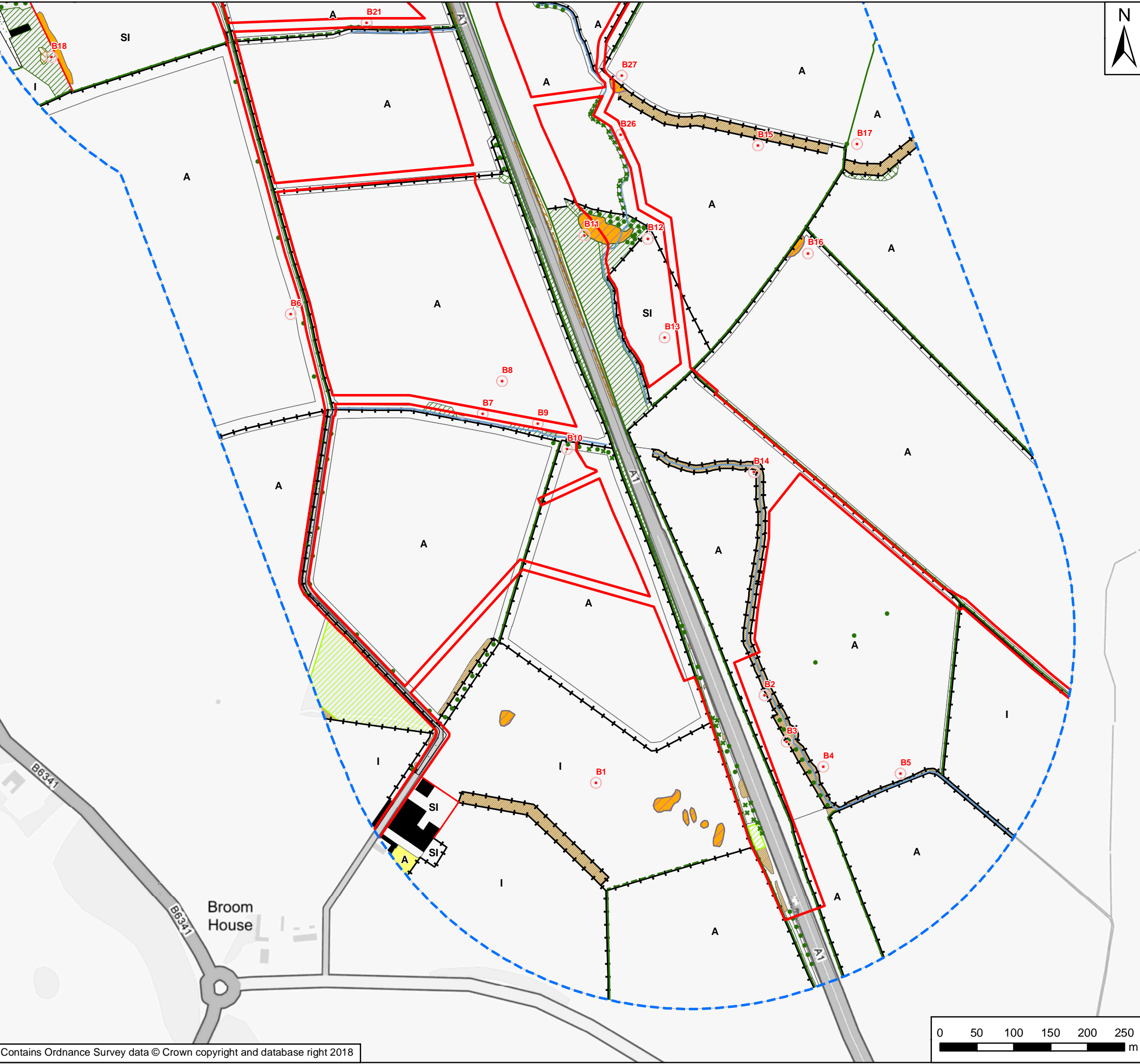
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Location RP	Type LE	Number 1638	Revision P01





Key	
	Scheme Boundary
	Survey Area
	Amenity Grassland
	Arable
	Bare Ground
	Bracken
	Broad-leaved Plantation Woodland
	Broad-leaved Semi-natural Woodland
	Building
	Coniferous Plantation Woodland
	Dense/Continuous Scrub
	Dry heath/acid grassland mosaic
	Improved Grassland
	Introduced Shrub
	Marshy Grassland
	Mixed Plantation Woodland
	Poor Semi-improved Grassland
	Scattered Scrub
	Semi-improved Neutral Grassland
	Spoil
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	Native species-rich Intact Hedge
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	Dry Ditch
	Wall
	Target Note
	Broad-leaved Scattered Tree
	Scattered Scrub

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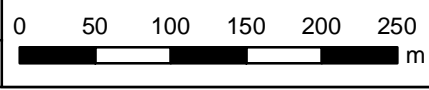
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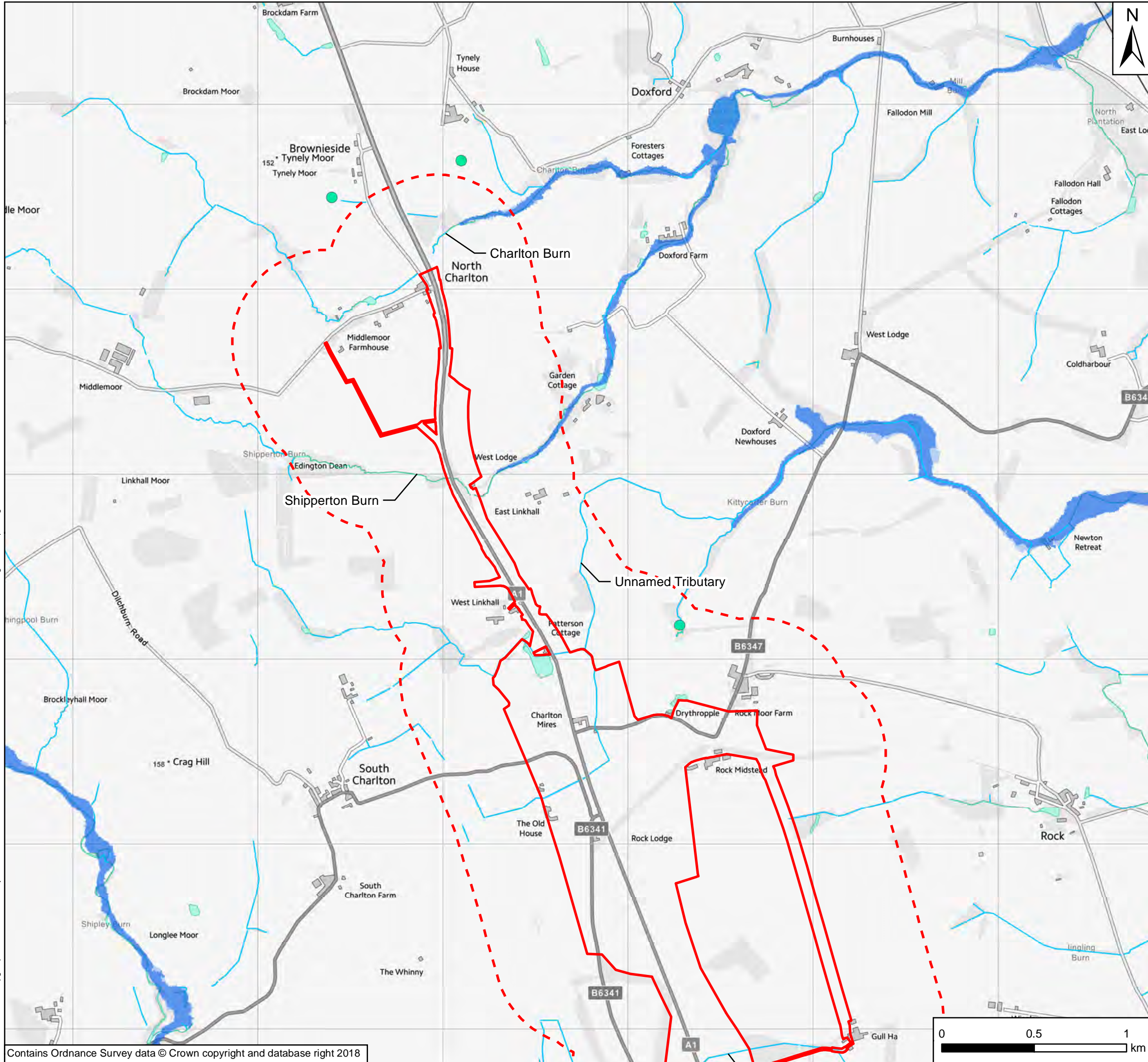
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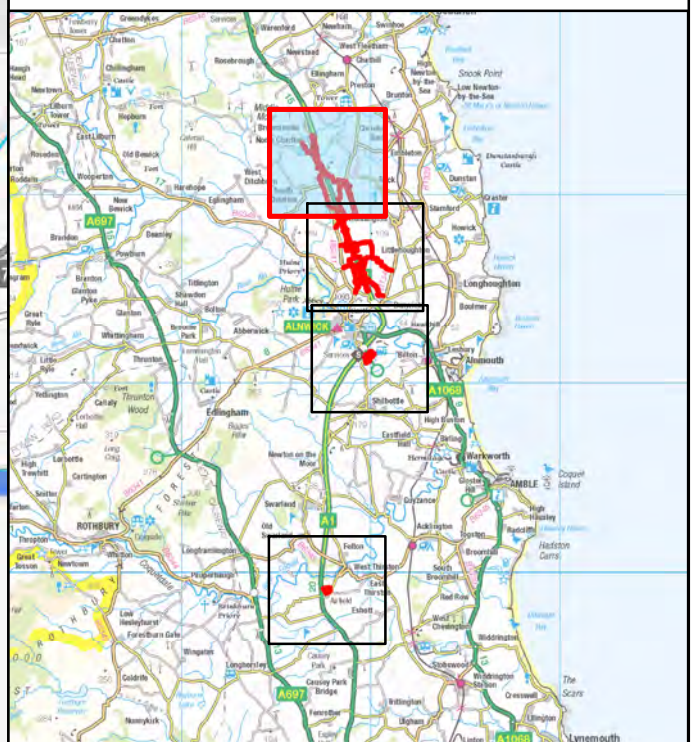
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Location RP	Type LE	Role 1638	Number P01	Revision







- Key**
- Scheme Boundary
  - - - 500m Study Area
  - Statutory Main Rivers
  - Ordinary Water Courses
- Groundwater Abstraction Points**
- Licenced
- Surface Water Bodies**
- Flood Zone 2
  - Flood Zone 3



Rev	Date	Description	By	Chk'd	App'd
P01	23/11/18	First Issue	GH	LM	KS

Client

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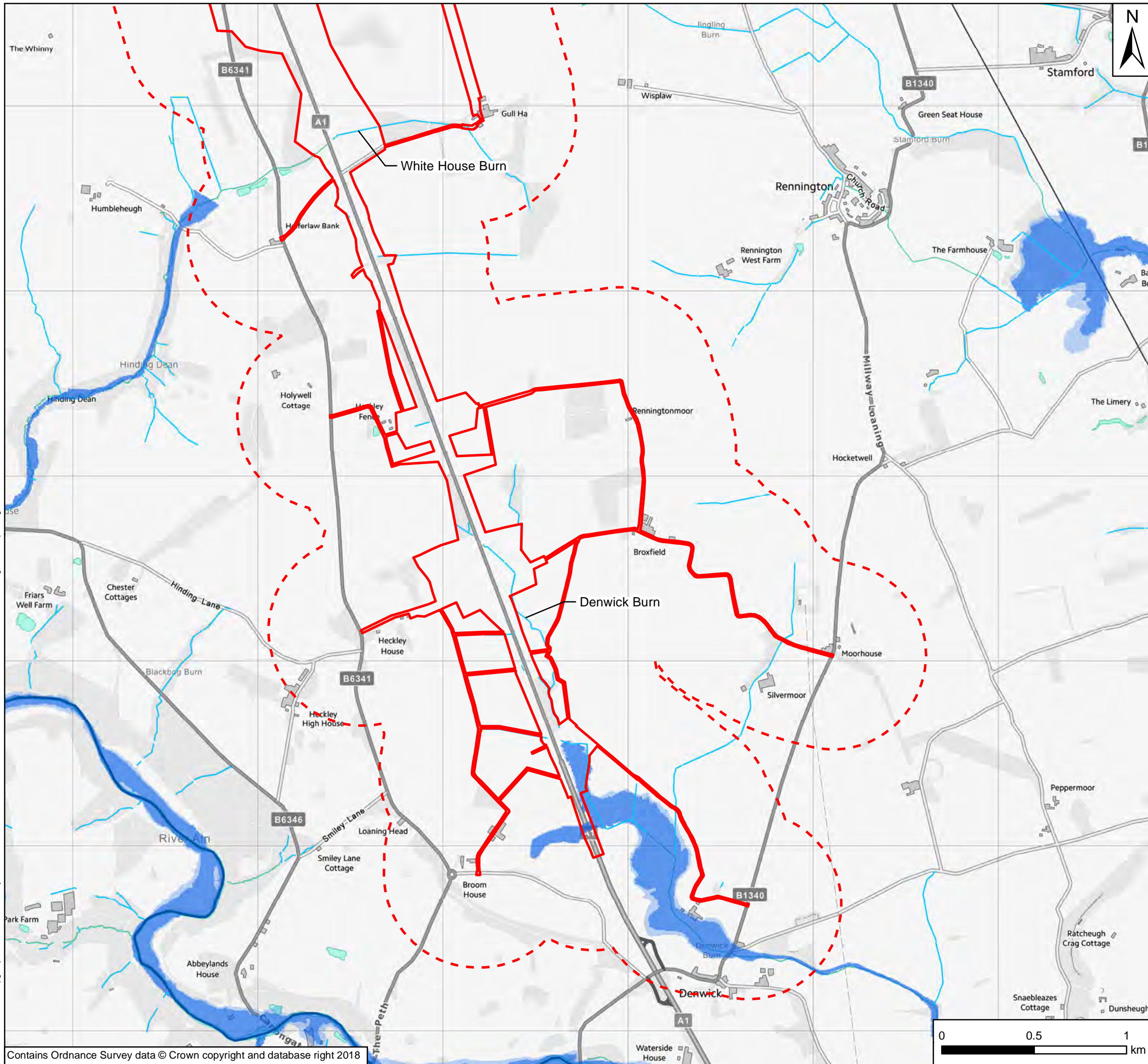
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			Revision <b>P01</b>



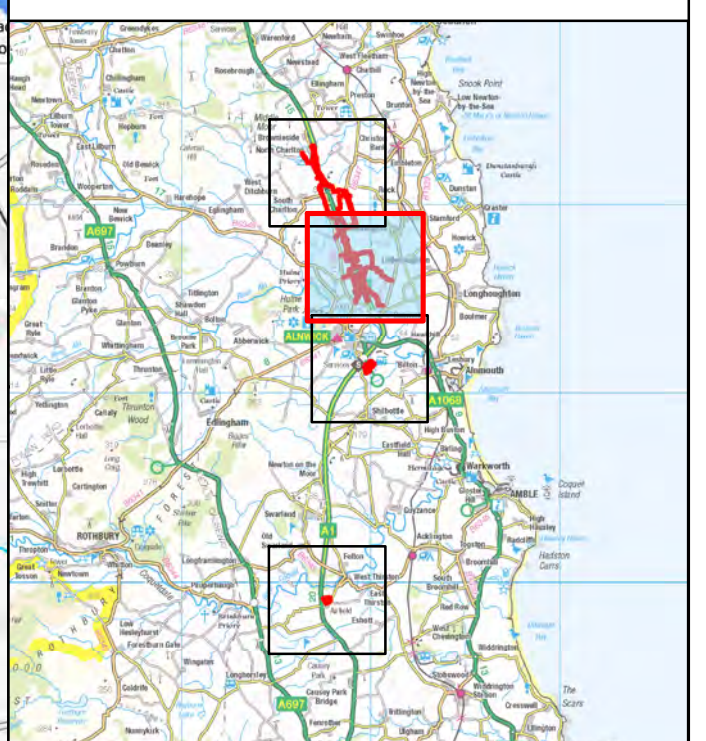


**Key**

- Scheme Boundary
- - - 500m Study Area
- Statutory Main Rivers
- Ordinary Water Courses

**Groundwater Abstraction Points**

- Licenced
- Surface Water Bodies
- Flood Zone 2
- Flood Zone 3



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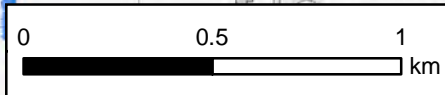
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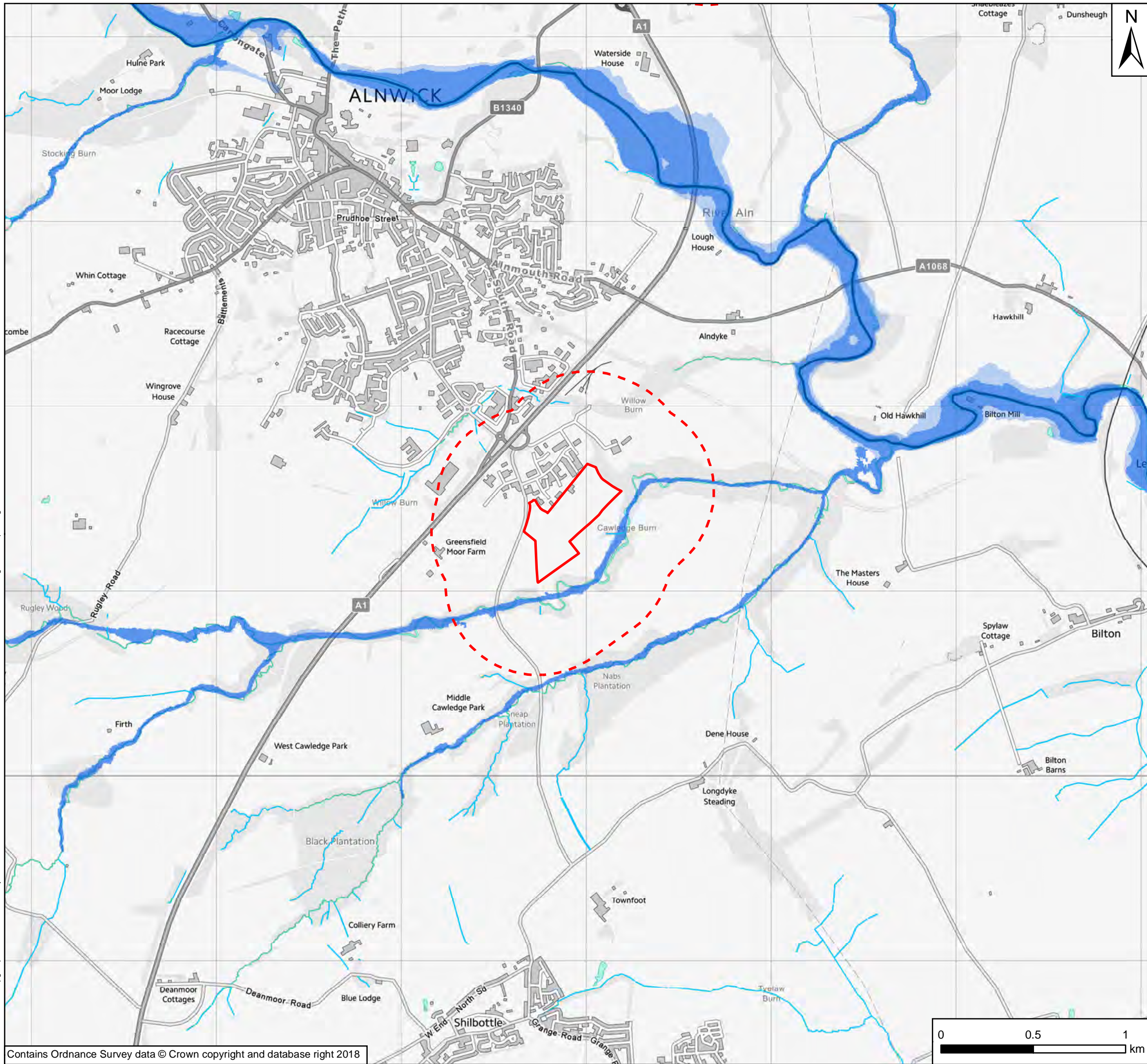
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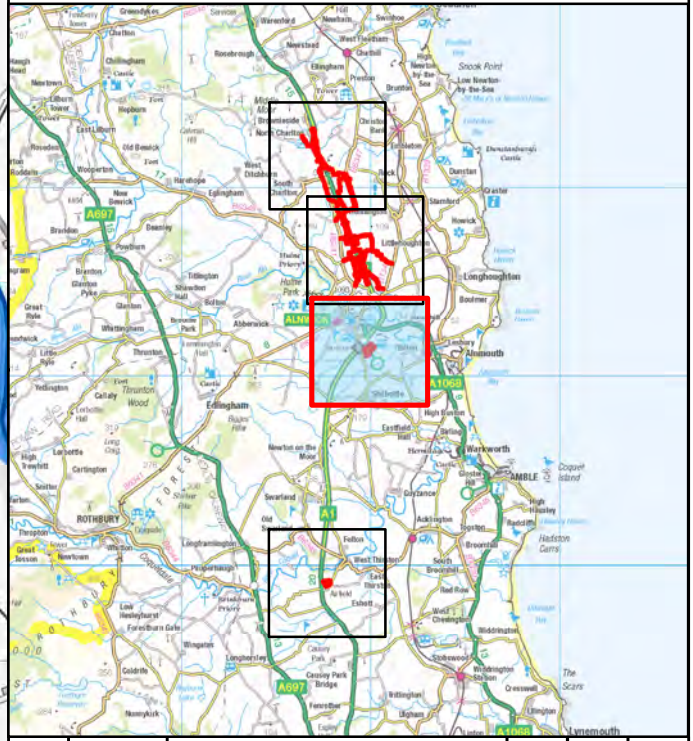
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Location	Type	Role	Number	Revision
	RP	LE	1638	P01







- Key**
- Scheme Boundary
  - - - 500m Study Area
  - Statutory Main Rivers
  - Ordinary Water Courses
- Groundwater Abstraction Points**
- Licenced
  - Surface Water Bodies
  - Flood Zone 2
  - Flood Zone 3



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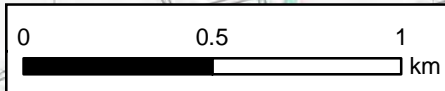
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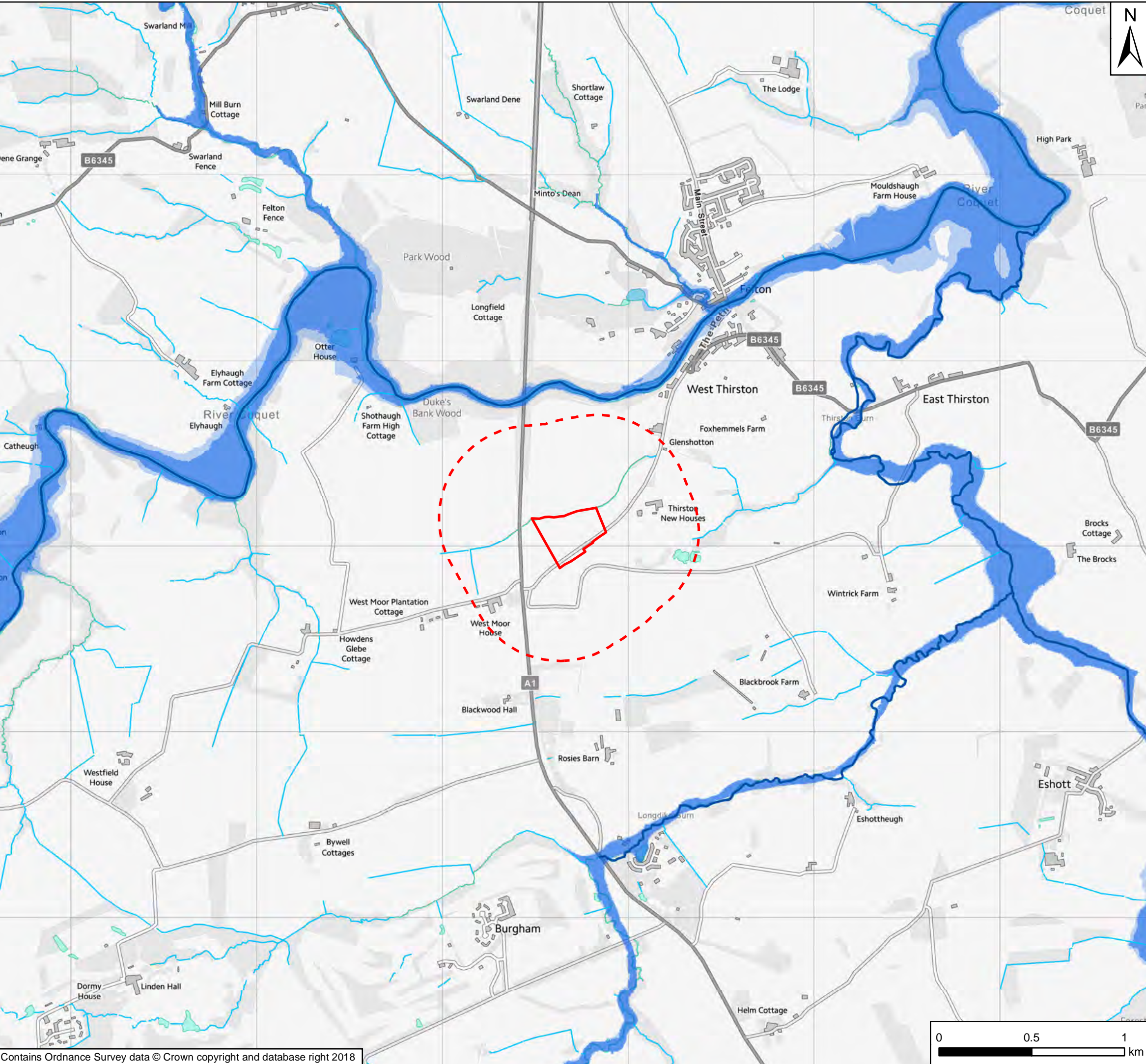
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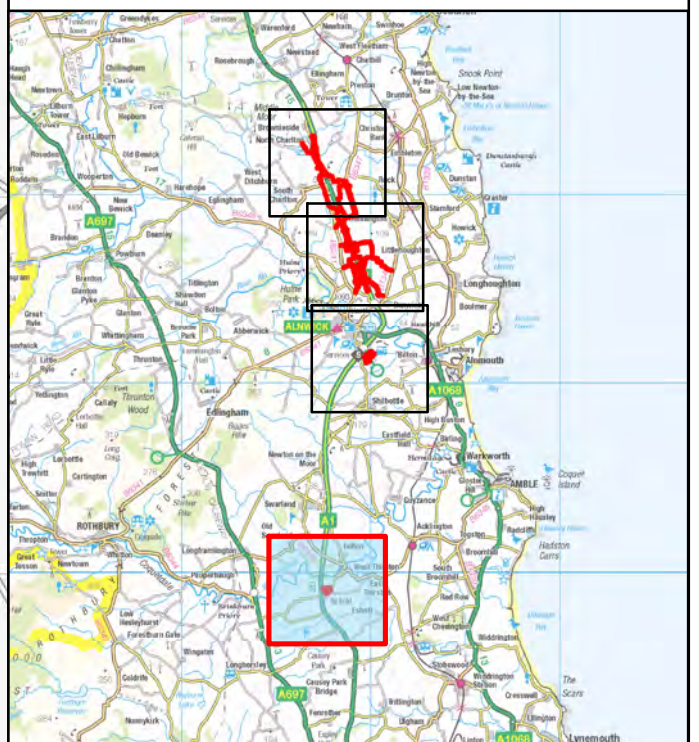
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A2E Location	RP Type	LE Role	1638 Number
			Revision P01







- Key**
- Scheme Boundary
  - - - 500m Study Area
  - Statutory Main Rivers
  - Ordinary Water Courses
- Groundwater Abstraction Points**
- Licenced
  - Surface Water Bodies
  - Flood Zone 2
  - Flood Zone 3



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Project Title  
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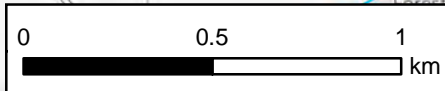
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Suitability  
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Location	Type	Role	Number	Revision
A2E	RP	LE	1638	P01





**A2E Preliminary Environmental Information Report Appendix B:** Schedule of  
Changes to Scheme Footprints



# Appendix B

SCHEDULE OF CHANGES TO  
SCHEME FOOTPRINT





Refer to Scheme Overview and General Arrangement Drawings for proposed scheme footprint.

Scheme Overview:

- HE551459-WSP-HGN-A2E-DR-CH-00003\_P04

General Arrangement Drawings:

- HE551459-WSP-HGN-A2ES09-DR-CH-00001 to 00003\_P04
- HE551459-WSP-HGN-A2ES10-DR-CH-00001 to 00004\_P04
- HE551459-WSP-HGN-A2ES11-DR-CH-00001 to 00003\_P04
- HE551459-WSP-HGN-A2ES12-DR-CH-00001 to 00003\_P04

Reference	Status	Description	Date
1	Removed	<b>A1 Southbound 52+800 to CH 53+150</b> Area removed from scheme footprint as no works are proposed in this area (beyond mainline tie-in with existing dual carriageway).	22/10/18
2	Removed	<b>A1 Northbound CH 54+400</b> Scheme footprint brought in as area not required, which has been determined through design development.	22/10/18
3	Removed	<b>A1 Southbound CH 57+140 to CH 57+900</b> Scheme footprint previously followed field boundaries. Footprint brought in to remove parts of fields not required (remaining area needed for planting mitigation).	02/11/18
4	Removed	<b>A1 Northbound CH 57+400 CH 58+560</b> Scheme footprint previously accounted for alternative designs of Charlton Mires Junction. Footprint reduced in-line with the design being taken forward for Statutory Consultation.	02/11/18
5	Removed	<b>B6347 West</b> Scheme footprint altered to accommodate updated design of Charlton Mires Junction	24/09/18
6	Removed	<b>A1 Southbound CH 60+350 to CH 60+880</b> Whole field previously included to allow for relocation of detention basin but this area is now deemed excessive. Scheme footprint reduced but large area of field kept within the extents to give some flexibility to relocate the pond at a later date, should this be required.	24/09/18



## **A2E Preliminary Environmental Information Report Appendix C: Major Accidents and Hazards**



# Appendix C

## MAJOR ACCIDENTS AND HAZARDS



## MAJOR ACCIDENTS AND HAZARDS

As required by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, the ES will:

- Consider the potential vulnerability of the Scheme to risks of major accidents and / or disasters that are relevant to the Scheme (referred to as major events).
- Identify major events and determine whether with the mitigation measures they are as low as reasonably practicable.

Major events can be natural or man-made and may include:

- Severe weather e.g. floods; earthquakes, hurricanes, storms, drought, tsunamis, extremes of temperature – hot and cold;
- Transport accidents e.g. rail accidents, motorway pileups, plane crash;
- Industrial e.g. explosions, pollution, fire;
- Terrorism;
- Disease outbreaks; and
- Electricity, gas, water supply or sewerage system failures.

### Guidance

There is currently no published guidance on the assessment of major events within the context of EIA. However, the assessment will take account of existing good practice and guidance such as Defra (2011) 'Guidelines for Environmental Risk Assessment and Management'<sup>13</sup> and the Cabinet Office's 'National Risk Register of Civil Emergencies'<sup>14</sup>.

### Sensitive Receptors

The following receptors are likely to be considered, but could change as the EIA progresses:

- Members of the public and local communities;
- Infrastructure and the built environment;
- The natural environment, including ecosystems, land and soil quality, air quality, surface and groundwater resources and landscape;
- The historic environment, including archaeology and built heritage; and
- The interaction between the factors above.

### Assessment Methodology

The assessment will consider the construction and operation (including maintenance) of the Scheme.

The potential for identified relevant major accident and / or disaster events to result in a significant adverse environmental effect will be evaluated using a risk based approach. The approach will consider the environmental consequences of a Risk Event, the likelihood of these consequences

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<sup>13</sup> Defra (2011), Guidelines for Environmental Risk Assessment and Management: Green Leaves III, Cranfield University and Department for Environment, Food and Rural Affairs, November 2011.

<sup>14</sup> Cabinet Office, National Risk Register of Civil Emergencies, 2017 Edition.



occurring, taking into account planned design and embedded mitigation, and the acceptability of the subsequent risk to the environment. The process to be followed will include:

- identifying risks;
- screening these risks;
- defining the impact;
- assessing the likelihood; and
- then assessing the risk.

In order to define the sensitive receptors and the Scheme's vulnerability to a major event, baseline data will be collated from other relevant environmental topics within the ES, in particular Climate, Population and Health, Biodiversity, Health, Geology and Soils and Road Drainage and the Water Environment. Furthermore, a review of risk registers for the Scheme will be undertaken to inform the baseline. The baseline will comprise:

- Features external to the Scheme that contribute a potential source of hazard to the Scheme (for example flood risk areas).
- Sensitive environmental receptors at risk of significant effect.
- Current (without the Scheme) major accident and disaster risks (for example flooding and traffic collision risks).

The methodology will include three main stages, as follows:

- **Stage 1:** Develop a long list of all possible major events within a 5 km study area (based upon professional judgement). This list will draw upon a variety of sources, including the UK Government's Risk Register of Civil Emergencies. This stage will also include an initial review of potential sensitive receptors. This long list will be developed based upon professional judgement in consultation with Highways England, together with the site location, study area, nature of the Scheme, likelihood of occurrence, surrounding land uses and Scheme risk registers.
- **Stage 2:** Undertake a screening exercise to review the long list of major events and to 'screen out' any major event not relevant to the Scheme. All major events that do not have a source<sup>15</sup>: pathway<sup>16</sup>; receptor<sup>17</sup> will be screened out. Those screened in will be taken forward for further assessment as a short list of major events.
- **Stage 3:** Consider mitigation and design measures that could reduce the vulnerability of the Scheme to major events. Where mitigation is unable to remove the potential interaction between a major event and a specific environmental topic, the relevant topic specific ES chapter will identify the potential consequence for receptors covered by the topic, and give a qualitative evaluation of the significance of effect as a result of a major event.

The significance of effects will be based upon professional judgement and will consider:

- Geographic extent of the effects.

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<sup>15</sup> the original cause of the hazard, which has the potential to cause harm

<sup>16</sup> the route by which the source can reach the receptor

<sup>17</sup> the element of the environment that could be adversely affected, if the source reaches it





- Duration of the effects (effects which are permanent (i.e. irreversible) or long lasting will be considered significant).
- Severity of the effects in terms of number, degree of harm to those affected and the response effort required (effects that trigger the mobilisation of substantial civil emergency response effort are likely to be considered significant).
- Sensitivity of the identified receptors.
- Effort required to restore the affected environment (effects requiring substantial clean-up or restoration efforts are likely to be considered significant).

All major events identified at Option Selection will be included on the Scheme Risk Register, unless closed out through design.



## **A2E Preliminary Environmental Information Report Appendix D: Transboundary Effects**



# Appendix D

## TRANSBOUNDARY EFFECTS



Criteria	Relevant Considerations
<p>Characteristics of the development</p>	<p>The Scheme includes approximately 8 km of online widening between the single carriageway north of Denwick to the dual carriageway south of Brownieside to create a dual carriageway, which would comprise:</p> <ul style="list-style-type: none"> <li>• Approximately 8 km of online widening;</li> <li>• Junction improvement at South Charlton;</li> <li>• An accommodation bridge near Broxfield;</li> <li>• Private Means of Access;</li> <li>• Drainage works;</li> <li>• Additional culverts within watercourses and extension of existing culverts;</li> <li>• Statutory Diversions;</li> <li>• Signage;</li> <li>• Lighting;</li> <li>• Temporary diversions of Public Rights of Way during construction and permanently during operation;</li> <li>• Temporary site construction compounds;</li> <li>• Traffic Management Systems during construction; and</li> <li>• Soil storage areas,</li> </ul> <p>Some of the resources required for the construction of the Scheme are likely to be obtained from the global market, e.g. steel, but it is likely that materials would be obtained locally wherever possible.</p> <p>No waste, nuisances or accidents are likely that would extend beyond the border of the UK. No novel technologies are proposed that have potential for transboundary impacts.</p>
<p>Geographical area</p>	<p>It is not anticipated that any impacts are likely to extend beyond the jurisdiction of the UK, with the exception of the potential release of greenhouse gas emissions (as discussed in Chapter 15 of this Scoping Report).</p>
<p>Location of the development</p>	<p>The Scheme is located in Northumberland, North East England, crossing predominantly rural existing land uses. The Scheme is located wholly within the UK. The Scheme is not part of the Trans-European transport network.</p> <p>The closest EAA state is Ireland, approximately 350 km west of the Scheme.</p>
<p>Cumulative Impacts</p>	<p>Chapter 16 of the Scoping Report identifies a number of cumulative developments proposed in the area surrounding the Scheme. Additionally, the Highways England A1 in Northumberland: Morpeth to Felton project is located approximately 12 km south of the Scheme.</p> <p>The traffic model developed to assess impacts for the Scheme includes assumptions on traffic generation from proposed development in the area. The potential cumulative effect upon transport emissions from the Scheme and proposed development will therefore be accounted for in the Scheme Environmental Impact Assessment. However, it is not anticipated that there is potential for cumulative transboundary effects from these developments other than greenhouse gas emissions.</p>



Carrier	Impacts arising from greenhouse gas emissions would be carried by air.
Environmental importance	<p>Chapter 8 of the Scoping Report reports that there are areas of high landscape value in the vicinity of the Scheme. However, it is not anticipated that the Scheme would have a significant effect on landscape during both the construction and operation of the Scheme.</p> <p>As described in Chapter 10, five designated sites of European or International importance are located within 10 km of the main areas of works. It is anticipated that the Scheme would have no significant effects on the designated statutory and non-statutory site of importance.</p> <p>As reported in Chapter 11, seven watercourses and/or tributaries within 500 m of the Scheme (permanent area of works, Main Compound and Lionheart Enterprise Park Compound) are assessed by the Environment Agency in accordance with the objectives of the Water Framework Directive. It is anticipated that the Scheme could have significant effects on the surface water features.</p> <p>No environmental values of other EEA states would likely be impacted.</p>
Extent	The only pathway of potential effect to another EEA Member State would be the release of greenhouse gas emissions. With the consideration of the design measures built into the Scheme and the implementation of mitigation measures and best practice (in line with regulatory body requirements), it is not anticipated that the release of greenhouse gas emissions would have a significant impact on another EEA Member State.
Magnitude	The likely magnitude of change to greenhouse gas emissions would be negligible, on the basis that the UK's construction industry emits approximately 101.1 m tonnes of carbon dioxide equivalent gases (2011 data, ONS) and the UK as a whole emitted 634.8 m tonnes of carbon dioxide equivalent. The Scheme would make a negligible contribution to the overall amount. It is proposed to calculate the likely greenhouse gas emissions as part of the EIA.
Probability	The probability of the Scheme to contribute to greenhouse gas emissions is likely and would occur as a consequence of the construction processes and typical operating conditions of such a Scheme.
Duration	The impact of greenhouse gas emissions is likely to occur during both construction and operation of the Scheme and be a long-term negligible impact.





Frequency	The frequency of impact is likely to be constant.
Reversibility	The impact is considered irreversible within human lifetimes.



## **A2E Preliminary Environmental Information Report Appendix E: Summary of Baseline Noise Survey Weather Conditions**

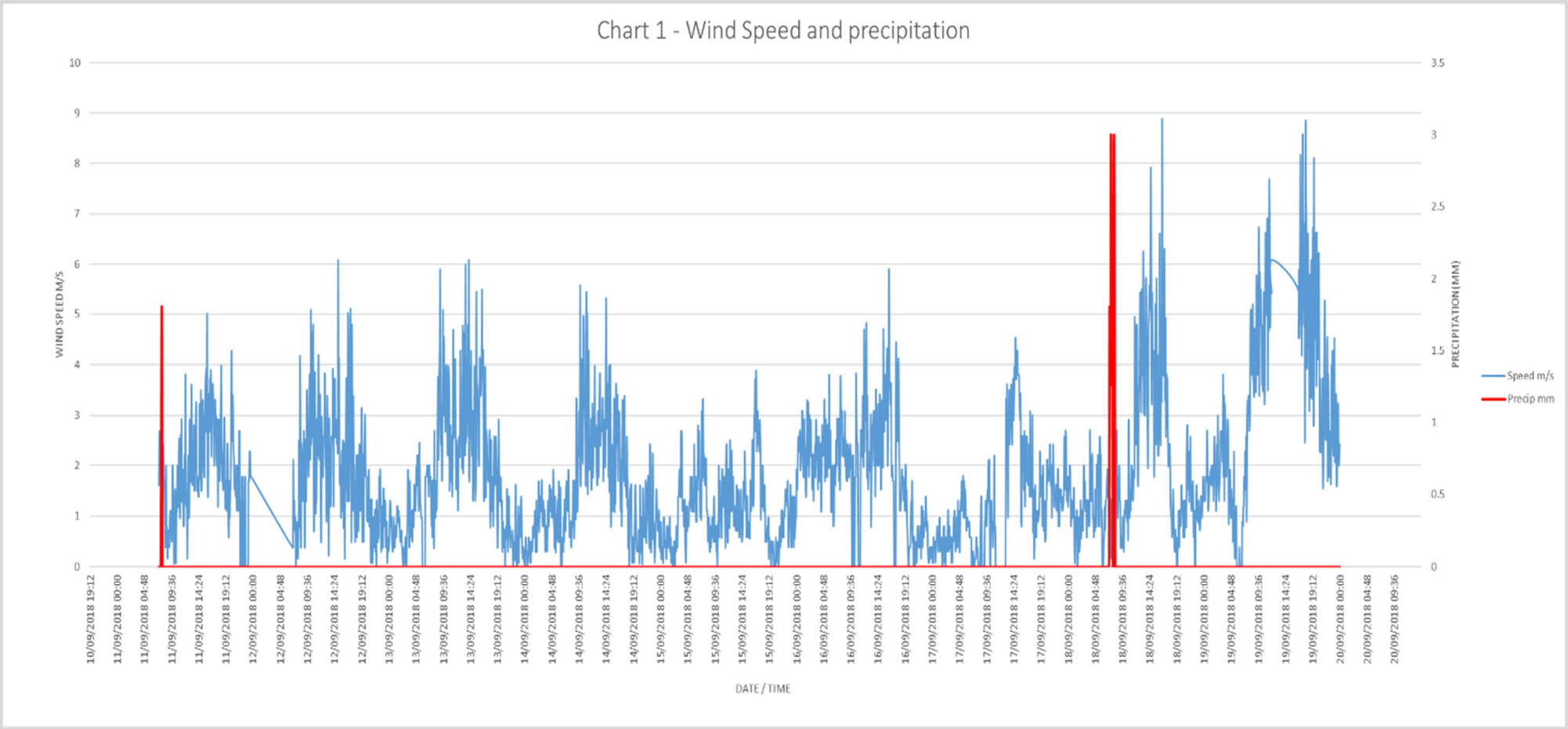


# Appendix E

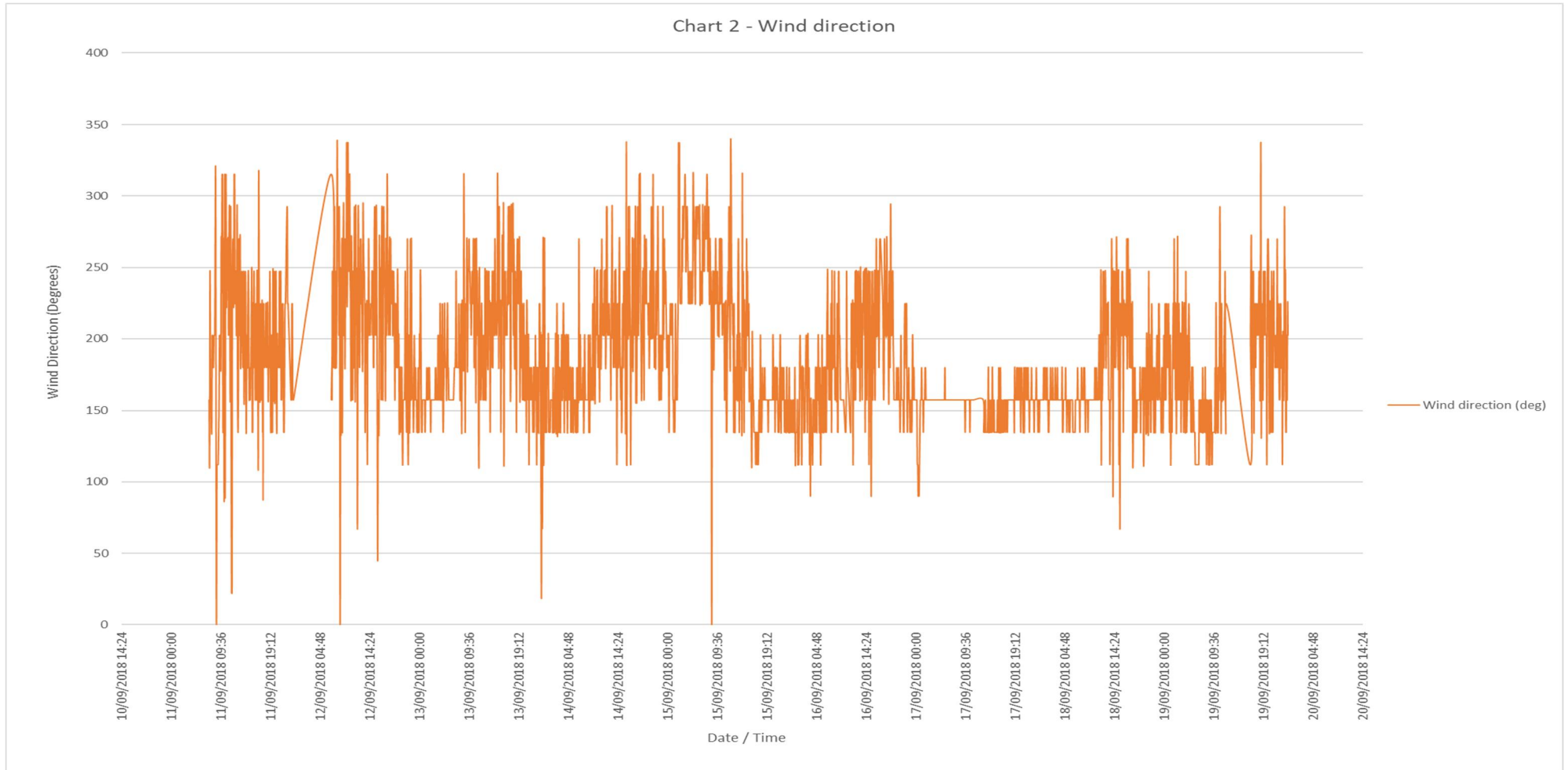
SUMMARY OF BASELINE NOISE  
SURVEY WEATHER CONDITIONS



Chart 1 - Wind Speed and precipitation









## **A2E Preliminary Environmental Information Report Appendix F: Summary of Baseline Noise Survey Measurement Data**



# Appendix F

SUMMARY OF BASELINE NOISE  
MEASUREMENT DATA



**Table D.1 – Measurement Location ST1 – Tabulated hourly results, Free-field, dB**

<b>Measurement Start</b>	<b>Measurement duration (hh:mm:ss)</b>	<b>L<sub>Aeq,1h</sub></b>	<b>L<sub>A10, 1h</sub></b>	<b>L<sub>A90, 1h</sub></b>
12/09/2018 12:00	01:00::00	63.9	68.2	51.5
12/09/2018 13:00	01:00::00	63.4	67.6	51.0
12/09/2018 14:00	01:00::00	64.4	68.5	51.9
12/09/2018 15:00	01:00::00	64.9	68.7	53.1
12/09/2018 16:00	01:00::00	65.0	68.6	52.5
12/09/2018 17:00	01:00::00	64.8	68.8	52.2
12/09/2018 18:00	01:00::00	62.6	66.9	48.8
12/09/2018 19:00	01:00::00	61.8	66.2	47.5
12/09/2018 20:00	01:00::00	59.9	63.7	43.2
12/09/2018 21:00	01:00::00	59.6	63.9	42.1
12/09/2018 22:00	01:00::00	56.5	57.8	36.5
12/09/2018 23:00	01:00::00	52.4	50.3	34.6
13/09/2018 00:00	01:00::00	50.8	45.6	28.0
13/09/2018 01:00	01:00::00	44.1	41.9	27.7
13/09/2018 02:00	01:00::00	47.4	43.3	27.4
13/09/2018 03:00	01:00::00	43.6	41.4	29.5
13/09/2018 04:00	01:00::00	46.3	44.5	30.3
13/09/2018 05:00	01:00::00	53.7	52.7	37.1
13/09/2018 06:00	01:00::00	59.1	62.1	44.6
13/09/2018 07:00	01:00::00	64.2	67.9	47.2



Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
13/09/2018 08:00	01:00::00	66.3	69.1	52.8
13/09/2018 09:00	01:00::00	64.5	68.3	55.7
13/09/2018 10:00	01:00::00	64.2	68.0	55.2
13/09/2018 11:00	01:00::00	64.3	68.1	53.1

**Table D.2 – Measurement Location ST2 – Tabulated hourly results, Free-field, dB**

Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
12/09/2018 11:00	01:00::00	54.7	56.9	78.9
12/09/2018 12:00	01:00::00	55.8	58.2	78.6
12/09/2018 13:00	01:00::00	54.0	56.4	74.6
12/09/2018 14:00	01:00::00	55.5	58.2	75.5
12/09/2018 15:00	01:00::00	56.8	61.1	74.2
12/09/2018 16:00	01:00::00	57.5	61.3	78.1
12/09/2018 17:00	01:00::00	57.1	60.9	77.5
12/09/2018 18:00	01:00::00	61.2	59.5	88.8
12/09/2018 19:00	01:00::00	55.4	56.4	83.3
12/09/2018 20:00	01:00::00	52.3	53.0	74.2
12/09/2018 21:00	01:00::00	49.0	45.6	73.0
12/09/2018 22:00	01:00::00	46.1	40.0	72.6



Measurement Start	Measurement duration (hh:mm:ss)	$L_{Aeq,1h}$	$L_{A10, 1h}$	$L_{A90, 1h}$
12/09/2018 23:00	01:00::00	49.1	41.0	76.1
13/09/2018 00:00	01:00::00	48.3	35.0	75.2
13/09/2018 01:00	01:00::00	47.5	41.2	76.7
13/09/2018 02:00	01:00::00	40.3	40.4	75.4
13/09/2018 03:00	01:00::00	30.2	32.5	54.1
13/09/2018 04:00	01:00::00	39.4	34.3	72.8
13/09/2018 05:00	01:00::00	48.7	36.3	77.9
13/09/2018 06:00	01:00::00	50.3	46.8	74.9
13/09/2018 07:00	01:00::00	54.2	55.9	76.4
13/09/2018 08:00	01:00::00	56.4	59.1	77.2
13/09/2018 09:00	01:00::00	56.2	58.5	77.6
13/09/2018 10:00	01:00::00	56.4	58.1	84.8
13/09/2018 11:00	01:00::00	55.4	58.3	73.8

**Table D.3 – Measurement Location ST3 – Tabulated hourly results, Free-field, dB**

Measurement Start	Measurement duration (hh:mm:ss)	$L_{Aeq,T}$	$L_{A10, T}$	$L_{A90, T}$
12/09/2018 13:20	01:00:00	75.2	79.5	53.5
12/09/2018 14:20	01:00:00	75.7	80.0	54.2
12/09/2018 15:20	01:00:00	75.9	80.2	54.4



Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,T</sub>	L <sub>A10, T</sub>	L <sub>A90, T</sub>
13/09/2018 01:22	00:15:00	68.6	65.6	25.7
13/09/2018 01:37	00:15:00	69.0	65.3	26.6
13/09/2018 03:54	00:15:00	65.8	58.8	28.7
13/09/2018 04:09	00:15:00	67.3	64.0	30.8

**Table D.4– Measurement Location ST4 – Tabulated hourly results, Free-field, dB**

Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,T</sub>	L <sub>A10, T</sub>	L <sub>A90, T</sub>
13/09/2018 00:36	00:15:00	52.9	55.3	48.3
13/09/2018 00:51	00:15:00	52.3	53.5	50.1
13/09/2018 03:15	00:15:00	54.3	53.6	28.3
13/09/2018 03:30	00:15:00	57.1	51.5	28.0

**Table D.5– Measurement Location ST5 – Tabulated hourly results, Free-field, dB**

Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,T</sub>	L <sub>A10, T</sub>	L <sub>A90, T</sub>
13/09/2018 02:08	00:15:00	36.7	39.3	29.8
13/09/2018 02:23	00:15:00	35.5	39.8	26.8
13/09/2018 04:39	00:15:00	38.5	41.3	31.3
13/09/2018 04:54	00:15:00	38.6	41.4	32.8



**Table D.6 – Measurement Location LT1 – Tabulated hourly results, Free-field, dB**

<b>Measurement Start</b>	<b>Measurement duration (hh:mm:ss)</b>	<b>L<sub>Aeq,1h</sub></b>	<b>L<sub>A10, 1h</sub></b>	<b>L<sub>A90, 1h</sub></b>
11/09/2018 15:00	01:00::00	62.6	65.2	50.7
11/09/2018 16:00	01:00::00	62.5	65.0	46.3
11/09/2018 17:00	01:00::00	62.4	65.7	47.6
11/09/2018 18:00	01:00::00	60.3	62.2	43.1
11/09/2018 19:00	01:00::00	59.4	59.6	41.7
11/09/2018 20:00	01:00::00	56.8	50.0	39.7
11/09/2018 21:00	01:00::00	54.2	47.0	30.4
11/09/2018 22:00	01:00::00	54.9	50.1	32.6
11/09/2018 23:00	01:00::00	52.5	49.7	36.8
12/09/2018 00:00	01:00::00	53.4	55.5	35.9
12/09/2018 01:00	01:00::00	54.4	57.2	45.3
12/09/2018 02:00	01:00::00	58.0	61.3	51.1
12/09/2018 03:00	01:00::00	50.5	53.9	32.4
12/09/2018 04:00	01:00::00	42.8	31.4	23.2
12/09/2018 05:00	01:00::00	50.6	40.2	25.4
12/09/2018 06:00	01:00::00	56.7	48.0	29.0
12/09/2018 07:00	01:00::00	63.8	64.2	37.8
12/09/2018 08:00	01:00::00	62.6	65.3	41.8
12/09/2018 09:00	01:00::00	61.1	63.1	40.2
12/09/2018 10:00	01:00::00	62.4	65.1	42.9





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
12/09/2018 11:00	01:00::00	61.2	64.0	45.2
12/09/2018 12:00	01:00::00	61.0	62.2	43.1
12/09/2018 13:00	01:00::00	60.1	62.5	43.5
12/09/2018 14:00	01:00::00	61.4	63.3	43.5
12/09/2018 15:00	01:00::00	62.2	65.3	43.2
12/09/2018 16:00	01:00::00	63.5	66.2	42.7
12/09/2018 17:00	01:00::00	62.4	65.0	40.4
12/09/2018 18:00	01:00::00	60.8	62.9	33.9
12/09/2018 19:00	01:00::00	60.0	60.7	36.6
12/09/2018 20:00	01:00::00	58.3	55.4	34.0
12/09/2018 21:00	01:00::00	54.9	46.2	34.0
12/09/2018 22:00	01:00::00	53.8	38.5	26.0
12/09/2018 23:00	01:00::00	53.9	40.3	24.3
13/09/2018 00:00	01:00::00	46.7	32.2	20.5
13/09/2018 01:00	01:00::00	48.9	32.2	19.8
13/09/2018 02:00	01:00::00	47.5	30.9	19.8
13/09/2018 03:00	01:00::00	38.3	28.9	21.3
13/09/2018 04:00	01:00::00	43.5	35.6	23.1
13/09/2018 05:00	01:00::00	53.8	41.6	31.2
13/09/2018 06:00	01:00::00	55.1	47.7	31.4





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
13/09/2018 07:00	01:00::00	60.9	62.3	38.9
13/09/2018 08:00	01:00::00	63.1	65.3	45.4
13/09/2018 09:00	01:00::00	64.4	66.5	51.6
13/09/2018 10:00	01:00::00	64.4	64.9	49.8
13/09/2018 11:00	01:00::00	61.5	63.8	47.0
13/09/2018 12:00	01:00::00	62.6	65.3	45.5
13/09/2018 17:00	01:00::00	62.6	65.3	36.2
13/09/2018 18:00	01:00::00	61.4	63.8	35.5
13/09/2018 19:00	01:00::00	58.7	59.3	35.4
13/09/2018 20:00	01:00::00	57.0	51.5	32.0
13/09/2018 21:00	01:00::00	59.2	48.1	30.2
13/09/2018 22:00	01:00::00	53.3	51.7	36.2
13/09/2018 23:00	01:00::00	53.4	50.4	38.1
14/09/2018 00:00	01:00::00	48.6	37.6	27.4
14/09/2018 01:00	01:00::00	47.2	33.8	24.0
14/09/2018 02:00	01:00::00	44.3	38.5	31.9
14/09/2018 03:00	01:00::00	33.4	36.7	26.8
14/09/2018 04:00	01:00::00	44.2	43.2	36.0
14/09/2018 05:00	01:00::00	51.2	47.2	39.1
14/09/2018 06:00	01:00::00	55.4	48.9	37.2





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
14/09/2018 07:00	01:00::00	60.7	62.4	38.3
14/09/2018 08:00	01:00::00	62.5	65.5	40.6
14/09/2018 15:00	01:00::00	63.0	65.2	42.1
14/09/2018 16:00	01:00::00	62.8	66.6	43.8
14/09/2018 17:00	01:00::00	62.8	65.5	43.9
14/09/2018 18:00	01:00::00	62.1	65.1	36.4
14/09/2018 19:00	01:00::00	59.6	59.8	33.3
14/09/2018 20:00	01:00::00	58.8	57.0	26.5
14/09/2018 21:00	01:00::00	57.6	48.3	24.5
14/09/2018 22:00	01:00::00	57.8	54.1	25.3
14/09/2018 23:00	01:00::00	55.0	41.4	23.7
15/09/2018 00:00	01:00::00	55.6	44.5	22.5
15/09/2018 01:00	01:00::00	48.2	34.0	23.6
15/09/2018 02:00	01:00::00	40.4	30.5	22.9
15/09/2018 03:00	01:00::00	46.4	29.5	23.3
15/09/2018 04:00	01:00::00	38.0	34.4	27.0
15/09/2018 05:00	01:00::00	47.2	37.4	27.0
15/09/2018 06:00	01:00::00	55.9	47.1	31.9
15/09/2018 07:00	01:00::00	61.3	59.4	34.3
15/09/2018 08:00	01:00::00	61.2	62.9	36.5





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
15/09/2018 09:00	01:00::00	61.4	63.4	35.1
15/09/2018 10:00	01:00::00	63.1	66.0	36.5
15/09/2018 11:00	01:00::00	62.5	65.7	35.6
15/09/2018 12:00	01:00::00	62.8	65.4	37.0
15/09/2018 13:00	01:00::00	60.7	62.6	33.5
15/09/2018 14:00	01:00::00	61.0	63.9	33.4
15/09/2018 15:00	01:00::00	60.8	63.4	34.0
15/09/2018 16:00	01:00::00	61.5	64.4	32.8
15/09/2018 17:00	01:00::00	61.1	62.9	35.4
15/09/2018 18:00	01:00::00	60.4	61.7	32.6
15/09/2018 19:00	01:00::00	60.2	58.8	28.9
15/09/2018 20:00	01:00::00	56.8	50.7	26.4
15/09/2018 21:00	01:00::00	54.6	42.6	27.1
15/09/2018 22:00	01:00::00	52.5	38.1	26.8
15/09/2018 23:00	01:00::00	52.8	36.1	28.2
16/09/2018 00:00	01:00::00	52.8	39.0	27.5
16/09/2018 01:00	01:00::00	51.8	44.3	31.8
16/09/2018 02:00	01:00::00	48.6	43.9	33.3
16/09/2018 03:00	01:00::00	50.8	40.2	29.9
16/09/2018 04:00	01:00::00	42.9	38.9	30.5





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
16/09/2018 05:00	01:00::00	47.4	41.3	33.4
16/09/2018 06:00	01:00::00	50.2	48.5	35.6
16/09/2018 07:00	01:00::00	54.6	51.7	44.2
16/09/2018 08:00	01:00::00	60.6	52.6	44.0
16/09/2018 09:00	01:00::00	58.8	59.0	43.2
16/09/2018 10:00	01:00::00	61.6	64.0	49.7
16/09/2018 11:00	01:00::00	61.2	63.3	48.1
16/09/2018 12:00	01:00::00	60.5	62.8	44.7
16/09/2018 13:00	01:00::00	60.6	63.4	41.7
16/09/2018 14:00	01:00::00	60.5	63.1	40.6
16/09/2018 15:00	01:00::00	60.7	63.4	42.9
16/09/2018 16:00	01:00::00	59.4	62.4	38.8
16/09/2018 17:00	01:00::00	59.5	59.4	39.2
16/09/2018 18:00	01:00::00	58.9	58.2	33.5
16/09/2018 19:00	01:00::00	56.6	52.3	29.5
16/09/2018 20:00	01:00::00	53.9	44.1	26.3
16/09/2018 21:00	01:00::00	52.7	40.9	27.1
16/09/2018 22:00	01:00::00	49.9	33.9	26.9
16/09/2018 23:00	01:00::00	50.2	33.0	20.9
17/09/2018 00:00	01:00::00	43.0	32.0	19.4



Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
17/09/2018 01:00	01:00::00	48.0	35.1	20.3
17/09/2018 02:00	01:00::00	45.4	35.1	19.7
17/09/2018 03:00	01:00::00	32.8	37.1	20.0
17/09/2018 04:00	01:00::00	50.6	35.5	25.0
17/09/2018 05:00	01:00::00	53.8	37.4	26.9
17/09/2018 06:00	01:00::00	57.1	51.5	32.2
17/09/2018 07:00	01:00::00	63.6	63.5	37.1
17/09/2018 08:00	01:00::00	62.3	64.7	36.1
17/09/2018 09:00	01:00::00	61.6	64.0	36.8
17/09/2018 10:00	01:00::00	62.2	65.1	35.2
17/09/2018 11:00	01:00::00	63.0	65.8	35.7
17/09/2018 12:00	01:00::00	61.1	63.2	35.8
17/09/2018 13:00	01:00::00	60.5	63.3	38.3
17/09/2018 14:00	01:00::00	68.8	64.8	37.1
17/09/2018 15:00	01:00::00	62.4	65.1	37.4
17/09/2018 16:00	01:00::00	62.1	65.5	39.1
17/09/2018 17:00	01:00::00	62.3	65.6	37.3
17/09/2018 18:00	01:00::00	60.2	62.3	32.0
17/09/2018 19:00	01:00::00	59.1	57.7	30.2
17/09/2018 20:00	01:00::00	58.7	52.5	29.6





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
17/09/2018 21:00	01:00::00	53.5	41.0	30.4
17/09/2018 22:00	01:00::00	54.8	38.7	26.4
17/09/2018 23:00	01:00::00	48.2	36.4	26.9
18/09/2018 00:00	01:00::00	44.5	35.0	26.8
18/09/2018 01:00	01:00::00	46.6	38.9	26.0
18/09/2018 02:00	01:00::00	45.6	32.1	21.0
18/09/2018 03:00	01:00::00	30.8	34.5	21.5
18/09/2018 04:00	01:00::00	37.2	35.5	24.8
18/09/2018 05:00	01:00::00	51.4	37.3	29.6
18/09/2018 06:00	01:00::00	57.0	48.3	32.7
18/09/2018 10:00	01:00::00	62.4	65.9	35.0
18/09/2018 11:00	01:00::00	61.9	64.0	35.9
18/09/2018 18:00	01:00::00	59.3	60.3	34.3
18/09/2018 19:00	01:00::00	59.6	60.1	32.0
18/09/2018 20:00	01:00::00	56.5	51.9	34.2
18/09/2018 21:00	01:00::00	53.8	50.5	39.4
18/09/2018 22:00	01:00::00	52.1	45.7	25.7
18/09/2018 23:00	01:00::00	52.9	36.3	27.2
19/09/2018 00:00	01:00::00	48.6	44.4	37.2
19/09/2018 01:00	01:00::00	48.8	46.4	41.0

Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
19/09/2018 02:00	01:00::00	43.5	45.8	40.0
19/09/2018 03:00	01:00::00	53.6	55.8	47.7
19/09/2018 04:00	01:00::00	51.4	54.0	45.8
19/09/2018 05:00	01:00::00	52.6	44.1	28.4
19/09/2018 06:00	01:00::00	57.8	55.7	33.6

**Table D.7 – Measurement Location LT2 – Tabulated hourly results, Free-field, dB**

Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
11/09/2018 16:00	01:00::00	50.9	52.9	47.0
11/09/2018 17:00	01:00::00	51.3	53.6	47.4
11/09/2018 18:00	01:00::00	48.8	51.0	45.3
11/09/2018 19:00	01:00::00	47.5	49.9	42.4
11/09/2018 20:00	01:00::00	45.0	48.1	38.8
11/09/2018 21:00	01:00::00	40.2	43.3	32.6
11/09/2018 22:00	01:00::00	43.6	42.6	30.7
11/09/2018 23:00	01:00::00	43.1	45.7	35.9
12/09/2018 00:00	01:00::00	40.9	43.3	34.8
12/09/2018 01:00	01:00::00	46.1	48.5	41.4
12/09/2018 02:00	01:00::00	47.6	50.0	43.2
12/09/2018 03:00	01:00::00	39.9	43.2	29.8





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
12/09/2018 04:00	01:00::00	41.4	44.6	25.8
12/09/2018 05:00	01:00::00	38.2	41.6	29.2
12/09/2018 06:00	01:00::00	44.1	47.2	35.6
12/09/2018 07:00	01:00::00	45.4	48.2	39.6
12/09/2018 08:00	01:00::00	44.0	46.8	38.2
12/09/2018 09:00	01:00::00	45.1	47.6	39.5
12/09/2018 10:00	01:00::00	50.9	48.5	41.5
12/09/2018 11:00	01:00::00	46.0	48.1	41.8
12/09/2018 12:00	01:00::00	46.1	48.4	41.3
12/09/2018 13:00	01:00::00	46.4	49.0	40.4
12/09/2018 14:00	01:00::00	47.8	50.0	41.8
12/09/2018 15:00	01:00::00	46.3	48.4	42.6
12/09/2018 16:00	01:00::00	50.1	50.0	42.7
12/09/2018 17:00	01:00::00	47.4	48.5	40.1
12/09/2018 18:00	01:00::00	49.8	46.4	38.4
12/09/2018 19:00	01:00::00	43.6	46.2	38.4
12/09/2018 20:00	01:00::00	42.7	45.7	36.1
12/09/2018 21:00	01:00::00	40.7	43.4	34.0
12/09/2018 22:00	01:00::00	46.0	50.3	29.6
12/09/2018 23:00	01:00::00	50.4	50.9	29.1

Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
13/09/2018 00:00	01:00::00	52.0	50.2	22.9
13/09/2018 01:00	01:00::00	50.2	55.4	22.0
13/09/2018 02:00	01:00::00	50.6	55.3	22.6
13/09/2018 03:00	01:00::00	43.9	48.5	21.6
13/09/2018 04:00	01:00::00	37.9	40.8	25.7
13/09/2018 05:00	01:00::00	40.6	42.9	33.3
13/09/2018 06:00	01:00::00	46.5	50.1	39.9
13/09/2018 07:00	01:00::00	47.3	50.1	41.8
13/09/2018 08:00	01:00::00	47.5	50.2	42.8
13/09/2018 09:00	01:00::00	51.7	54.4	45.8
13/09/2018 10:00	01:00::00	53.7	54.5	47.7
13/09/2018 11:00	01:00::00	51.3	53.6	47.1
13/09/2018 12:00	01:00::00	49.8	52.1	45.9
13/09/2018 17:00	01:00::00	44.5	46.9	40.1
13/09/2018 18:00	01:00::00	49.2	52.3	41.0
13/09/2018 19:00	01:00::00	45.9	48.9	40.0
13/09/2018 20:00	01:00::00	43.2	46.8	36.0
13/09/2018 21:00	01:00::00	44.7	48.5	34.3
13/09/2018 22:00	01:00::00	44.3	47.6	34.9
13/09/2018 23:00	01:00::00	40.2	43.8	31.0





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
14/09/2018 00:00	01:00::00	39.7	43.4	25.0
14/09/2018 01:00	01:00::00	43.4	47.8	24.7
14/09/2018 02:00	01:00::00	42.9	46.4	27.4
14/09/2018 03:00	01:00::00	43.3	47.7	28.0
14/09/2018 04:00	01:00::00	42.1	45.5	33.5
14/09/2018 05:00	01:00::00	41.2	44.7	33.7
14/09/2018 06:00	01:00::00	48.3	51.9	40.4
14/09/2018 07:00	01:00::00	53.0	54.9	45.9
14/09/2018 08:00	01:00::00	50.8	53.5	46.4
14/09/2018 15:00	01:00::00	48.0	50.0	43.1
14/09/2018 16:00	01:00::00	48.8	51.1	45.2
14/09/2018 17:00	01:00::00	48.2	50.4	44.5
14/09/2018 18:00	01:00::00	46.7	49.0	42.0
14/09/2018 19:00	01:00::00	46.9	50.3	40.8
14/09/2018 20:00	01:00::00	53.0	56.6	38.9
14/09/2018 21:00	01:00::00	50.5	54.4	33.7
14/09/2018 22:00	01:00::00	48.3	52.9	31.9
14/09/2018 23:00	01:00::00	47.2	51.9	27.1
15/09/2018 00:00	01:00::00	47.3	52.3	24.9
15/09/2018 01:00	01:00::00	43.9	48.3	25.5



Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
15/09/2018 02:00	01:00::00	34.7	38.8	23.5
15/09/2018 03:00	01:00::00	34.9	38.5	24.8
15/09/2018 04:00	01:00::00	35.9	39.6	28.3
15/09/2018 05:00	01:00::00	36.2	39.7	28.5
15/09/2018 06:00	01:00::00	41.9	45.0	33.1
15/09/2018 07:00	01:00::00	49.6	49.8	38.2
15/09/2018 08:00	01:00::00	43.2	46.0	37.3
15/09/2018 09:00	01:00::00	42.8	45.3	37.6
15/09/2018 10:00	01:00::00	45.7	46.5	39.8
15/09/2018 11:00	01:00::00	45.2	47.5	39.7
15/09/2018 12:00	01:00::00	45.0	47.0	39.0
15/09/2018 13:00	01:00::00	43.7	46.2	38.0
15/09/2018 14:00	01:00::00	44.5	45.8	38.6
15/09/2018 15:00	01:00::00	44.7	46.3	38.4
15/09/2018 16:00	01:00::00	49.2	51.1	41.7
15/09/2018 17:00	01:00::00	57.3	60.6	50.6
15/09/2018 18:00	01:00::00	54.5	57.6	46.0
15/09/2018 19:00	01:00::00	54.2	58.0	43.5
15/09/2018 20:00	01:00::00	50.8	54.6	38.2
15/09/2018 21:00	01:00::00	51.5	56.0	37.2





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
15/09/2018 22:00	01:00::00	52.1	56.8	30.7
15/09/2018 23:00	01:00::00	50.5	55.2	29.0
16/09/2018 00:00	01:00::00	49.9	54.6	30.2
16/09/2018 01:00	01:00::00	47.3	51.5	32.6
16/09/2018 02:00	01:00::00	46.8	50.4	38.6
16/09/2018 03:00	01:00::00	46.8	51.2	34.9
16/09/2018 04:00	01:00::00	46.3	50.2	34.8
16/09/2018 05:00	01:00::00	46.9	50.9	36.1
16/09/2018 06:00	01:00::00	49.0	52.6	40.8
16/09/2018 07:00	01:00::00	49.9	53.2	43.3
16/09/2018 08:00	01:00::00	51.2	54.3	44.6
16/09/2018 09:00	01:00::00	50.7	53.6	45.4
16/09/2018 10:00	01:00::00	50.9	53.1	46.9
16/09/2018 11:00	01:00::00	48.9	50.9	45.2
16/09/2018 12:00	01:00::00	48.6	50.9	44.5
16/09/2018 13:00	01:00::00	47.5	49.9	42.6
16/09/2018 14:00	01:00::00	47.1	49.2	43.3
16/09/2018 15:00	01:00::00	48.3	50.3	44.6
16/09/2018 16:00	01:00::00	47.2	49.6	43.0
16/09/2018 17:00	01:00::00	45.7	47.9	41.4



Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
16/09/2018 18:00	01:00::00	43.9	46.1	38.6
16/09/2018 19:00	01:00::00	46.5	49.5	40.6
16/09/2018 20:00	01:00::00	46.1	49.6	37.4
16/09/2018 21:00	01:00::00	44.9	48.5	36.1
16/09/2018 22:00	01:00::00	46.7	50.8	31.6
16/09/2018 23:00	01:00::00	49.9	54.2	25.3
17/09/2018 00:00	01:00::00	50.2	55.3	22.1
17/09/2018 01:00	01:00::00	50.1	54.8	21.3
17/09/2018 02:00	01:00::00	51.2	56.1	24.2
17/09/2018 03:00	01:00::00	50.5	55.1	22.8
17/09/2018 04:00	01:00::00	53.2	57.9	34.2
17/09/2018 05:00	01:00::00	53.3	57.2	40.4
17/09/2018 06:00	01:00::00	55.3	59.0	45.2
17/09/2018 07:00	01:00::00	56.7	60.0	49.4
17/09/2018 08:00	01:00::00	55.0	56.4	45.4
17/09/2018 09:00	01:00::00	51.1	54.3	45.1
17/09/2018 10:00	01:00::00	56.0	59.1	49.8
17/09/2018 11:00	01:00::00	67.0	59.7	50.9
17/09/2018 12:00	01:00::00	57.1	59.8	50.8
17/09/2018 13:00	01:00::00	59.5	61.9	53.2



Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
17/09/2018 14:00	01:00::00	58.9	61.6	52.7
17/09/2018 15:00	01:00::00	58.3	60.9	52.0
17/09/2018 16:00	01:00::00	57.7	60.5	51.8
17/09/2018 17:00	01:00::00	57.3	60.3	50.5
17/09/2018 18:00	01:00::00	53.8	57.0	46.1
17/09/2018 19:00	01:00::00	55.6	58.2	44.4
17/09/2018 20:00	01:00::00	51.8	56.0	38.2
17/09/2018 21:00	01:00::00	50.4	54.3	38.4
17/09/2018 22:00	01:00::00	50.2	54.8	31.9
17/09/2018 23:00	01:00::00	48.7	53.5	34.5
18/09/2018 00:00	01:00::00	48.5	52.7	35.1
18/09/2018 01:00	01:00::00	47.3	51.4	36.4
18/09/2018 02:00	01:00::00	47.6	51.7	26.0
18/09/2018 03:00	01:00::00	50.1	54.9	26.4
18/09/2018 04:00	01:00::00	50.3	55.2	29.2
18/09/2018 05:00	01:00::00	52.6	57.2	36.2
18/09/2018 06:00	01:00::00	56.1	60.0	42.7
18/09/2018 10:00	01:00::00	53.9	56.2	48.2
18/09/2018 11:00	01:00::00	50.2	54.0	43.1

Note - Baseline noise measurements at LT3 are to be repeated and reported within the Noise and Vibration ES chapter

**Table D.8 – Measurement Location LT4 – Tabulated hourly results, Free-field, dB**

<b>Measurement Start</b>	<b>Measurement duration (hh:mm:ss)</b>	<b>L<sub>Aeq,1h</sub></b>	<b>L<sub>A10, 1h</sub></b>	<b>L<sub>A90, 1h</sub></b>
11/09/2018 16:00	01:00::00	56.2	58.5	51.2
11/09/2018 17:00	01:00::00	56.4	59.2	50.7
11/09/2018 18:00	01:00::00	55.6	58.5	49.3
11/09/2018 19:00	01:00::00	53.8	57.0	45.8
11/09/2018 20:00	01:00::00	50.8	54.4	41.3
11/09/2018 21:00	01:00::00	48.9	52.5	40.3
11/09/2018 22:00	01:00::00	49.0	52.6	38.7
11/09/2018 23:00	01:00::00	48.1	51.8	40.5
12/09/2018 00:00	01:00::00	48.7	52.9	40.1
12/09/2018 01:00	01:00::00	49.8	53.2	43.1
12/09/2018 02:00	01:00::00	48.3	51.5	41.6
12/09/2018 03:00	01:00::00	46.1	50.3	35.7
12/09/2018 04:00	01:00::00	45.8	50.2	35.4
12/09/2018 05:00	01:00::00	48.6	52.9	32.8
12/09/2018 06:00	01:00::00	53.6	56.1	44.0
12/09/2018 07:00	01:00::00	54.1	56.9	48.2
12/09/2018 08:00	01:00::00	53.7	56.6	46.4
12/09/2018 09:00	01:00::00	52.5	54.9	47.0
12/09/2018 10:00	01:00::00	53.0	55.5	48.4
12/09/2018 11:00	01:00::00	53.2	55.5	47.4





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
12/09/2018 12:00	01:00::00	52.8	55.5	47.8
12/09/2018 13:00	01:00::00	52.4	55.0	46.6
12/09/2018 14:00	01:00::00	53.2	55.2	47.8
12/09/2018 15:00	01:00::00	53.9	56.5	49.1
12/09/2018 16:00	01:00::00	54.0	56.4	49.5
12/09/2018 17:00	01:00::00	54.0	56.4	49.0
12/09/2018 18:00	01:00::00	51.9	55.1	45.0
12/09/2018 19:00	01:00::00	52.0	55.0	45.0
12/09/2018 20:00	01:00::00	49.6	53.2	39.7
12/09/2018 21:00	01:00::00	49.0	53.0	38.8
12/09/2018 22:00	01:00::00	48.2	52.3	34.9
12/09/2018 23:00	01:00::00	48.9	53.1	33.1
13/09/2018 00:00	01:00::00	52.4	52.9	28.6
13/09/2018 01:00	01:00::00	47.3	51.9	30.1
13/09/2018 02:00	01:00::00	46.6	51.1	28.2
13/09/2018 03:00	01:00::00	45.0	49.6	28.9
13/09/2018 04:00	01:00::00	47.1	51.3	33.0
13/09/2018 05:00	01:00::00	51.0	54.8	38.0
13/09/2018 06:00	01:00::00	54.1	57.5	44.9
13/09/2018 07:00	01:00::00	55.2	57.8	49.2



Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
13/09/2018 08:00	01:00::00	55.8	58.3	50.6
13/09/2018 09:00	01:00::00	56.5	59.1	51.3
13/09/2018 10:00	01:00::00	71.5	72.8	54.9
13/09/2018 11:00	01:00::00	56.7	59.1	52.2
13/09/2018 12:00	01:00::00	56.4	59.2	50.9
13/09/2018 17:00	01:00::00	53.7	56.2	47.8
13/09/2018 18:00	01:00::00	53.3	56.4	47.0
13/09/2018 19:00	01:00::00	53.1	55.9	46.0
13/09/2018 20:00	01:00::00	50.9	54.5	39.3
13/09/2018 21:00	01:00::00	49.6	53.5	35.4
13/09/2018 22:00	01:00::00	47.8	51.4	34.8
13/09/2018 23:00	01:00::00	46.9	51.6	30.8
14/09/2018 00:00	01:00::00	43.3	48.3	27.2
14/09/2018 01:00	01:00::00	47.5	52.0	30.4
14/09/2018 02:00	01:00::00	47.3	51.8	32.8
14/09/2018 03:00	01:00::00	48.7	53.0	32.3
14/09/2018 04:00	01:00::00	48.1	52.5	32.5
14/09/2018 05:00	01:00::00	51.7	55.6	39.0
14/09/2018 06:00	01:00::00	52.5	55.7	42.9
14/09/2018 07:00	01:00::00	54.9	57.9	48.6





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
14/09/2018 08:00	01:00::00	55.8	58.5	50.5
14/09/2018 15:00	01:00::00	55.7	57.6	50.8
14/09/2018 16:00	01:00::00	56.9	57.9	51.1
14/09/2018 17:00	01:00::00	55.5	57.7	51.9
14/09/2018 18:00	01:00::00	54.1	56.2	50.7
14/09/2018 19:00	01:00::00	52.9	55.5	47.9
14/09/2018 20:00	01:00::00	51.5	54.7	41.8
14/09/2018 21:00	01:00::00	52.8	56.5	39.2
14/09/2018 22:00	01:00::00	51.3	55.3	38.2
14/09/2018 23:00	01:00::00	49.1	53.3	37.5
15/09/2018 00:00	01:00::00	49.0	53.4	37.3
15/09/2018 01:00	01:00::00	49.2	53.6	35.4
15/09/2018 02:00	01:00::00	48.0	52.1	33.8
15/09/2018 03:00	01:00::00	46.9	51.8	33.2
15/09/2018 04:00	01:00::00	48.7	53.1	34.9
15/09/2018 05:00	01:00::00	49.0	53.2	36.0
15/09/2018 06:00	01:00::00	51.7	54.9	41.2
15/09/2018 07:00	01:00::00	53.8	56.5	46.4
15/09/2018 08:00	01:00::00	53.8	56.5	46.1
15/09/2018 09:00	01:00::00	53.9	56.3	49.0



Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
15/09/2018 10:00	01:00::00	52.7	55.1	47.0
15/09/2018 11:00	01:00::00	54.1	56.1	47.4
15/09/2018 12:00	01:00::00	53.1	56.1	46.4
15/09/2018 13:00	01:00::00	52.9	55.6	47.4
15/09/2018 14:00	01:00::00	51.7	54.3	45.8
15/09/2018 15:00	01:00::00	52.1	54.8	46.6
15/09/2018 16:00	01:00::00	53.1	55.6	47.6
15/09/2018 17:00	01:00::00	53.5	56.1	48.7
15/09/2018 18:00	01:00::00	52.8	55.4	47.1
15/09/2018 19:00	01:00::00	52.5	55.6	45.2
15/09/2018 20:00	01:00::00	51.8	55.4	42.4
15/09/2018 21:00	01:00::00	50.6	54.6	38.4
15/09/2018 22:00	01:00::00	49.8	53.8	38.8
15/09/2018 23:00	01:00::00	47.1	51.3	34.0
16/09/2018 00:00	01:00::00	47.6	51.3	38.7
16/09/2018 01:00	01:00::00	47.9	51.6	40.8
16/09/2018 02:00	01:00::00	48.0	50.5	41.2
16/09/2018 03:00	01:00::00	50.2	53.0	43.1
16/09/2018 04:00	01:00::00	49.7	52.8	43.4
16/09/2018 05:00	01:00::00	50.9	54.0	44.2





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
16/09/2018 06:00	01:00::00	52.7	56.3	44.9
16/09/2018 07:00	01:00::00	53.6	56.9	45.7
16/09/2018 08:00	01:00::00	54.4	57.3	46.2
16/09/2018 09:00	01:00::00	55.0	58.0	47.5
16/09/2018 10:00	01:00::00	56.5	59.2	51.7
16/09/2018 11:00	01:00::00	56.6	58.7	50.7
16/09/2018 12:00	01:00::00	53.1	55.3	47.8
16/09/2018 13:00	01:00::00	54.8	57.3	49.7
16/09/2018 14:00	01:00::00	54.6	57.1	49.5
16/09/2018 15:00	01:00::00	55.9	58.5	51.0
16/09/2018 16:00	01:00::00	53.6	56.1	48.7
16/09/2018 17:00	01:00::00	53.3	56.0	47.5
16/09/2018 18:00	01:00::00	50.8	53.3	44.2
16/09/2018 19:00	01:00::00	51.8	55.1	44.4
16/09/2018 20:00	01:00::00	50.7	54.2	43.4
16/09/2018 21:00	01:00::00	47.8	51.1	39.5
16/09/2018 22:00	01:00::00	49.6	53.7	37.5
16/09/2018 23:00	01:00::00	45.4	49.7	28.1
17/09/2018 00:00	01:00::00	46.3	51.0	24.7
17/09/2018 01:00	01:00::00	46.6	51.1	26.1



Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
17/09/2018 02:00	01:00::00	47.5	51.9	31.6
17/09/2018 03:00	01:00::00	46.8	51.5	26.7
17/09/2018 04:00	01:00::00	50.9	54.9	37.9
17/09/2018 05:00	01:00::00	53.6	57.1	42.0
17/09/2018 06:00	01:00::00	54.8	57.9	47.2
17/09/2018 07:00	01:00::00	55.2	58.3	48.3
17/09/2018 08:00	01:00::00	54.0	56.5	48.9
17/09/2018 09:00	01:00::00	54.5	56.9	49.1
17/09/2018 10:00	01:00::00	55.3	57.7	51.2
17/09/2018 11:00	01:00::00	66.3	57.4	50.7
17/09/2018 12:00	01:00::00	55.3	58.1	49.8
17/09/2018 13:00	01:00::00	55.6	58.2	51.1
17/09/2018 14:00	01:00::00	54.4	56.6	50.5
17/09/2018 15:00	01:00::00	53.8	56.1	49.8
17/09/2018 16:00	01:00::00	54.3	56.4	50.4
17/09/2018 17:00	01:00::00	55.4	57.9	50.2
17/09/2018 18:00	01:00::00	54.8	58.0	47.8
17/09/2018 19:00	01:00::00	54.1	57.2	47.0
17/09/2018 20:00	01:00::00	53.3	56.6	46.7
17/09/2018 21:00	01:00::00	53.1	56.7	45.3





Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
17/09/2018 22:00	01:00::00	49.7	53.9	38.4
17/09/2018 23:00	01:00::00	48.1	52.6	36.6
18/09/2018 00:00	01:00::00	47.1	51.5	33.6
18/09/2018 01:00	01:00::00	46.4	51.0	32.4
18/09/2018 02:00	01:00::00	48.3	52.1	39.5
18/09/2018 03:00	01:00::00	48.6	53.0	37.0
18/09/2018 04:00	01:00::00	50.2	54.4	36.5
18/09/2018 05:00	01:00::00	52.0	55.9	38.4
18/09/2018 06:00	01:00::00	53.8	57.0	45.3
18/09/2018 10:00	01:00::00	57.4	59.1	51.2
18/09/2018 11:00	01:00::00	55.6	58.1	50.2
18/09/2018 18:00	01:00::00	52.0	54.8	46.2
18/09/2018 19:00	01:00::00	50.7	53.6	44.0
18/09/2018 20:00	01:00::00	49.6	53.0	42.3
18/09/2018 21:00	01:00::00	49.4	53.1	40.0
18/09/2018 22:00	01:00::00	46.6	51.0	35.1
18/09/2018 23:00	01:00::00	43.9	48.2	32.7
19/09/2018 00:00	01:00::00	45.7	50.0	35.2
19/09/2018 01:00	01:00::00	45.0	48.5	35.8
19/09/2018 02:00	01:00::00	45.6	49.1	35.9

Measurement Start	Measurement duration (hh:mm:ss)	L <sub>Aeq,1h</sub>	L <sub>A10, 1h</sub>	L <sub>A90, 1h</sub>
19/09/2018 03:00	01:00::00	45.8	50.0	36.4
19/09/2018 04:00	01:00::00	46.0	50.2	35.0
19/09/2018 05:00	01:00::00	47.4	51.2	36.4
19/09/2018 06:00	01:00::00	51.0	54.1	43.0
19/09/2018 07:00	01:00::00	53.1	55.1	48.4



## **A2E Preliminary Environmental Information Report Appendix G: Landscape Character**

# Appendix G

## LANDSCAPE CHARACTER



## National Character Areas

The key characteristics of NCA2 (**Ref 8.10**) as set out in the Natural England National Character Area Profile (**Ref 8.8**) are:

- *“Arc of sandstone hills forming distinctive skyline features including the iconic monolith of Simonside, characterised by generally level tops, north-west facing scarp slopes and craggy outcrops.*
- *Exceptional panoramic views of the coast and across the lowland Cheviot Fringe to the Cheviots and Scotland.*
- *Heather and grass moorland provides rough grazing on the upper slopes and broad tops of the ridges, interrupted by large geometric conifer plantations, giving way to improved pasture and cropping on lower slopes and valley bottoms.*
- *A mixture of piecemeal and regular enclosure, bounded by drystone walls but often broken up by coniferous shelterbelts and blocks, especially in areas of regular enclosure.*
- *Wide valleys of the Coquet and Aln rivers pierce the arc of hills, containing remnant native woodland and a patchwork of wet pastures and arable fields, often with steep-sided bluffs and fed by incised tributaries.*
- *Wet peaty flushes, mires, loughs, lakes and small reservoirs occur throughout the area.*
- *Broadleaved woodland is associated with rivers, burns, loughs, scarp slopes and country house estates.*
- *Nationally and internationally important species including Atlantic salmon, brook and river lamprey, otter, water crowfoot, hen harrier, peregrine, merlin, ring ouzel, black grouse, whinchat, golden plover, dunlin, curlew, nightjar and red squirrel.*
- *A number of large country houses set in extensive gardens and parklands with associated broadleaved woodland fringe the lower slopes.*
- *Important and complex archaeological landscape, with prehistoric ‘cup and ring’ marked rocks, bronze-age burial cists, earthwork remains of later iron-age hill fort systems, standing stones, enclosures and cairns, extensive medieval remains, bastles and castles such as Alnwick Castle, and evidence of quarrying.*
- *Scattered pattern of individual isolated farmsteads and small hamlets, served by the main market town of Alnwick and smaller service centre of Rothbury. Buildings constructed from locally quarried dressed or rubble sandstone, with slate roofs.*
- *Tranquil, rural landscape with low population and a few strategic major roads but with increasing numbers of vertical structures such as communications masts and wind turbines prominent on the skyline.*
- *Moorlands, forests and sandstone outcrops provide important recreational opportunities for activities such as walking, biking, climbing and wildlife watching.”*

The key characteristics of NCA 1 (**Ref 8.9**) as set out in the Natural England National Character Area Profile (**Ref 8.8**) are:

- *“Narrow, low-lying coastal plain with wide views east of the coast and out to sea, and west to the Northumberland Sandstone Hills and Cheviots.*
- *Carboniferous sandstones, limestones and shales characterise much of the area with Whin Sill intrusions producing dramatic landscape features such as the coastal cliffs at Bamburgh and the Farne Islands and distinctive inland local landmarks, and supporting rare, semi natural Whin grasslands.*

- *Diverse coastal scenery with the ‘hard’ coast of spectacular high cliffs, offshore islands and rocky headlands contrasting with the ‘soft’ coast of sweeping sandy bays, sand dunes, mudflats and salt marsh.*
- *The rivers Tweed, Aln and Coquet, as well as numerous smaller watercourses, meander across the coastal plain to the sea.*
- *Farmed landscape of predominantly large, open arable fields and permanent pasture, with some remnant semi-natural grassland in the valleys and coastal fringes. Fields are bounded by low, often fragmented hedgerows, grey sandstone walls and post-and-wire fences.*
- *Limited woodland cover confined to small but prominent blocks and shelterbelts adjacent to farmsteads and settlements, with larger areas of mixed broadleaved woodland in the river valleys and around the Howick estate.*
- *Holy Island, the Farne Islands and stretches of coast including the estuaries support internationally important habitats, bird populations and grey seals.*
- *Prominent and distinctive medieval castles, fortifications and religious buildings reflect the historic importance of ecclesiastical influences and the strategic defence of the coast and Anglo-Scottish border.*
- *Long history of mineral extraction including whinstone, sandstone and limestone quarrying, and open cast coal mining to the south-west of Berwick-upon-Tweed.*
- *Dispersed pattern of isolated large-scale farmsteads, small nucleated villages, fishing villages and small coastal resort towns, with buildings often single storey and commonly constructed from local sandstone with roofs of blue slate or red clay pantiles.*
- *Coastal trails, wildlife and historic sites attract large numbers of visitors to this popular area of coast, with access provided by the A1 and East Coast Main Line.”*

### **Regional Landscape Character Areas**

The key characteristics of Farmed Coastal Plain LCT are given as:

- *“Open, coastal location, although sea views are not always possible.*
- *Gently rolling or almost flat farmland, dominated by large arable fields.*
- *Generally low-lying, with some small hills and raised plateaux.*
- *Intensive farmland, often with weak field boundary pattern.*
- *Occasional wooded estates.*
- *Large farmsteads comprising traditional and modern buildings.*
- *Belts of coniferous shelterbelts and deciduous woodland.”*

The character of 3c Rock LCA are described in further detail:

- *“This area is similar to 3b, but is generally more wooded. The transition is gradual, but this area is characterised by coniferous shelterbelts and deciduous woodland strips. Hedgerows are more common, although their condition remains variable. Belts of Scots pine are a distinctive feature. Estate influences occur at Rock House and Howick Hall, resulting in a more intimate landscape experience.”*

The key characteristics of Outcrop Hills and Escarpments LCT are given as:

- *“Flat-topped elongated ridges and rounded sandstone hills.*
- *Distinctive steep scarp faces forming stepped, often dark, skyline silhouettes.*
- *Open plateau and gentle dip slopes clothed in heather moorland, acidic grassland mosaic, coniferous forestry and peat bog/mires.*



- Steeper slopes and craggy outcrops with bracken, heather and broadleaved woodland.
- Wet pastures and semi-improved pastures on lower slopes.
- Rich muted colours and textures.
- Little or no habitation but significant archaeological remains.
- Water bodies including natural loughs and reservoirs.
- Extensive pasture grazed by sheep and cattle.
- Landscape is very open, broken up by small conifer plantations.”

The character of 8c Charlton Ridge LCA are described in further detail:

*“A large tract of open upland landscape. Although plateau like, the landform is never flat. It is gently rolling at the north-west and becomes more dramatically undulating towards the south-east where there is an accompanying reduction in landscape scale. Predominant land use is extensive pasture grazed by sheep and cattle. Enclosure is infrequent and often consists only of wire fences. Consequently, the landscape is very open, broken up only by numerous, relatively small and generally rectilinear conifer plantations. The area is crossed by a small number of single track roads and footpaths.”*

The key characteristics of Lowland Rolling Farmland LCT are given as:

- *“Undulating agricultural landscape with rich soils under predominantly arable cultivation.*
- *Generally little tree cover, with occasional small-scale woodlands and plantations.*
- *Medium-scale parliamentary enclosure landscape.*
- *Field enclosure by hedgerows, with frequent hedgerow trees, has become fragmented in many places.*
- *Trunk roads and prominent road alignments exert a strong influence.*
- *Locally important estate influences, with woodland, and estate villages.”*

The character of 38a Longframlington are described in further detail:

*“This character area occupies undulating, relatively high ground bordering the coastal plain between the AIn and Coquet valleys. Rectilinear field units are bounded by hedgerows originating from the parliamentary enclosures. Sizeable coniferous plantations can be found around Swarland and north of Shilbottle. Although the last colliery closed in the late 1990s, coal mining was formerly a significant presence in this landscape, with collieries at Shilbottle, Whittle and Longframlington. Although full restoration is yet to have been completed, there is little physical evidence of this industry now. Other former industrial activity included lime and tile manufacturing.”*

The characteristics of 38b Longhorsley are described in further detail:

*“This area has a strong enclosure pattern and an intricate network of small settlements, farmsteads, hedgerow trees and woodlands. Around Longhorsley, field sizes are smaller and patterns are less regular, indicating that they are older, possibly medieval. The fertile farmland of the area is cut by two major roads, the A1 and A697, which exert a significant influence on the landscape through severance and visual and aural intrusion.”*

The key characteristics of Coastal Incised Valley LCT are given as:

- *“Shallow valleys cutting through the coastal plain, with meandering rivers.*
- *More sheltered than the surrounding coastal plain, with restricted views.*
- *Arable farming, with pasture and woodland in steeper areas.*
- *Villages and larger settlements, as well as farmsteads and cottages*

- *Transport links and infrastructure, such as the East Coast Main Line, pass through.*
- *Long history of settlement, and good access links.”*

*The character of 2a Lower Aln is described in further detail as:*

*“This valley is relatively deep and broad, and is steep-sided in places, such as below Denwick. There are significant blocks of coniferous forestry at Bilton Wood and along the Cawledge Burn. The urban edge of Alnwick is often prominent in views, although the large industrial buildings adjacent to the A1 are well screened. The modern settlement of Hipsburn is also unobtrusive in the landscape. The A1 and A1068 create the impression of a busy landscape, which combined with the settlements offers little tranquillity. The disused railway is used as a footpath, although unofficially as there are plans to reopen the line. The Alnwick Castle Registered Park and Garden extends into the west of the area.”*

### **Local Landscape Character Areas**

LCA 6 – North East Farmed Coastal Plain is described as:

*“This is an intensively farmed landscape of predominantly open, mixed arable land with limited tree and woodland cover. Farms are typically large with a rectilinear enclosure pattern defined by gappy, close cropped hedgerows with wire fences. Grey sandstone walls provide local variation. A more wooded and intimate enclosed landscape is experienced locally around Embleton and the Howick estate. The A1 and the east coast mainline railway run through this character area, roughly parallel to the coast although these are not prominent due to screening landform and vegetation. Topography slopes gradually from west to east and the area enjoys views to both the sea and the fell sandstone uplands. Occasional but distinctive mature shelterbelts of beech or pine are important local features in this open landscape. The settlement pattern consists of mainly dispersed farmsteads and small nucleated settlements such as Longhoughton, Embleton, North Charlton and Rennington.”*

The key characteristics of LCA6 – North East Farmed Coastal Plain are given as:

- *“Open, gently undulating mixed arable farmland with occasional small woodlands and shelterbelts;*
- *Dispersed farmsteads and compact villages; and*
- *Relatively large fields with weak enclosure.”*

LCA 11 – Charlton Ridge is described as:

*“A large tract of open upland landscape. Although plateau like, the landform is never flat. It is gently rolling at the north-west and becomes more dramatically undulating towards the south east where there is an accompanying reduction in landscape scale. Predominant land use is extensive pasture grazed by sheep and cattle. Enclosure is infrequent and often consists only of wire fences. Consequently, the landscape is very open, broken up only by numerous, relatively small and generally rectilinear conifer plantations. The area is crossed by a small number of single track roads and footpaths. The influence of woodland near Alnwick gives an increasing sense of enclosure. Settlement within this landscape is limited to scattered farmsteads. There are long distance views across to the Cheviot Hills in the west.”*

They key characteristics of LCA 11 – Charlton Ridge are given as:



- *“Open large-scale upland sandstone ridge, which becomes more complex and smaller scale undulating landform in the south east;*
- *Moorland and rough pasture with little enclosure; and*
- *Simple composition fragmented by blocky coniferous plantations.”*

The following landscape character area is also present within the 5km study area:

LCA 7 – Low Aln Valley is described as:

*“This is a fertile valley landscape with human influences dating back to pre-historic times. The landscape is influenced by the extensive ownership of the Duke of Northumberland including the distinctive townscape of Alnwick and Alnwick castle, both of which stand on rising ground to the south of the river. The wider estate influence includes both the extensive walled grounds of Hulne Park and large tracts of farmland with estate farms and villages such as Denwick. Hulne Park includes parkland designed in part by Capability Brown, as well as woodland and heather moorland at higher elevations. From the outside, the miles of tall stone walled enclosure around Hulne Park are a highly visible statement of the control exerted by the estate over the land and are both a dominant and a distinctive feature. Further to the east beyond the A1 and recently developed area, the broad and gently sloping valley is predominantly cultivated for arable crops, with some significant blocks of deciduous woodland and hedgerow trees, but with an evident decline in the integrity of hedgerows. The Eastern part of this area is intersected by several elements of key infrastructure including some of the main transport routes through the area, electricity pylons and the East Coast mainline railway.”*

The key characteristics of LCA 7 – Low Aln Valley are given as

- *“Enclosed and often small-scale landscape due to incised valley;*
- *Broadly meandering river Aln; and*
- *Adjacent, historic settlement of Alnwick with prominent castle and the walled grounds of Hulne Park”*

LCA18 Longframlington / Shibottle Rolling Farmland LCA is described as:

*“This character area occupies undulating relatively high ground on the coastal plain between the Aln and Coquet valleys. The dominant influence is agriculture, characterised in the main by regular and rectilinear field units bounded by hedgerows and hedgerow trees originating from the parliamentary enclosures. Agriculture is mixed, though arable is predominant, particularly towards the east. Sizeable coniferous plantations can be found around Swarland and north of Shibottle. Ancient woodland is also found around Rugley and Swarland”.*

*“Intensification of agriculture is causing an ongoing decline in hedgerow condition, particularly around arable crops where functional enclosure is not required. Although the last colliery closed in the late 1990’s, coal mining was formerly a significant presence in this landscape, with collieries at Shibottle, Whittle and Longframlington. Although full restoration is yet to have been completed, there is little physical evidence of this industry now. Other former industrial activity included lime and tile manufacture. The character area is bisected by the A1 trunk road, East Coast Mainline Railway and electricity pylons. Settlement in this character area comprises numerous scattered farmhouses and clusters of settlements including the villages of Longframlington, Swarland, Newton on the Moor and Shibottle.”*



The key characteristics of 18 Longframlington / Shilbottle Rolling Farmland LCA are given as:

- *“Medium scale parliamentary enclosure landscape bisected by the A1;*
- *Undulating high ground between the AIn and Coquet valleys; and*
- *Predominantly arable with declining hedgerow condition.”*



## **A2E Preliminary Environmental Information Report Appendix H: Landscape and Visual Amenity Sensitive Receptors**

# Appendix H

LANDSCAPE AND VISUAL AMENITY  
SENSITIVE RECEPTORS



## SENSITIVE RECEPTORS

The following are the sensitive receptors which will be assessed as part of the Landscape and Visual Amenity assessment:

### Landscape

Landscape Character Receptor Name	Representative Viewpoint Number	Sensitivity
A) 8c Charlton Ridge LCA	Viewpoint 1, 5, 6 and 7	<p>This LCA has a number of characteristic landscape features including: gently rolling landscape, land use comprises of sheep and arable pasture. Heiferlaw Tower is present within this LCA and acts as a navigational reference point for road and PRow users. This LCA falls within the locally designated Area of High Landscape Value and is bordered by Alnwick Registered Park and Garden to the south west. Overall in terms of Value/Quality, this LCA is considered Good.</p> <p>This LCA is influenced by a number of detracting urban features including; to the north, the existing wind turbines at Middlemoor Windfarm and Wandylaw Windfarm, to the east the current alignment of the A1. Overall in terms of Susceptibility this LCA is considered Medium.</p> <p>Overall sensitivity is considered <b>Moderate</b>.</p>
B) 3c Rock LCA	Viewpoint 2, 3, 4, 8, 9, 10, 11, 12, 13, 14, 17, 18 and 19	<p>This LCA has a number of characteristic landscape features including: shelterbelts, woodland tree planting and hedgerows and the estate influences of Rock House. Rock Conservation Area is present within the 2km study area. This eastern section of this LCA falls within the Northumberland AONB, to the north this LCA falls within the locally designated Kyloe Hills and Glendale Area of High Landscape Value and Intermediate Area of Landscape Value. Overall in terms of Value/Quality, this LCA is considered Very Attractive.</p> <p>This LCA is influenced by a number of detracting urban features including; to the west, the A1 running north to south through the LCA. The setting of this LCA is influenced by proximity wind turbines at Middlemoor Windfarm and Wandylaw Windfarm to the north west. Overall in terms of Susceptibility this LCA is considered Medium.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
C) 38a Longframlington LCA	Viewpoint 15 and 16	<p>This LCA has many characteristic landscape features including: hedgerow field boundaries and rectilinear fields. Overall in terms of Value/Quality, this LCA is considered Ordinary.</p> <p>This LCA is influenced by many detracting urban features including; to the north east, the existing large scale commercial buildings at Lionheart Industrial Estate and the A1. Overall in terms of Susceptibility this LCA is considered Medium.</p>

Landscape Character Receptor Name	Representative Viewpoint Number	Sensitivity
		Overall sensitivity is considered <b>Moderate</b> .
D) 2a Lower Aln LCA	No Viewpoint	<p>This LCA has a number of characteristic landscape features including: the present of the A1 and A1608, urbanising influence of Alnwick. Alnwick Registered Park and Garden extends into the west of this LCA. Overall in terms of Value/Quality, this LCA is considered Ordinary.</p> <p>There are a number of urbanising features within this LCA as highlighted above. Overall in terms of Susceptibility this LCA is considered Medium.</p> <p>Overall sensitivity is considered <b>Low</b>.</p>
E) 38b Longhorsley	No Viewpoint	<p>This LCA has a number of characteristic landscape features including a strong sense of enclosure created by the settlement and vegetation disrupted by the A1 and A697. Overall in terms of Value/Quality, this LCA is considered Ordinary.</p> <p>The A1 and A697 cut through the farm landscape. In terms of Susceptibility this LCA is considered Medium.</p> <p>Overall sensitivity is considered <b>Moderate</b>.</p>

## Visual Receptors

Visual Receptor Name	Representative Viewpoint Number	Sensitivity
<b>Residential Receptors</b>		
<b>Visual Receptor Group Reference – A) People living in properties with north east facing views</b>		
1. Broom House (5 properties)	Viewpoint 8	<p>The outlook from these properties consists of <i>broad view across open rolling countryside</i>. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>The southern section of the Scheme would be visible from upper and lower storeys beyond intervening ridgelines and field boundary vegetation. Visible features include existing road signage and glimpses of the A1 where gaps in the roadside tree and shrub planting allow. Susceptibility is considered High as residents within these properties would experience direct and oblique middle-distance views from upper and lower storeys above ridgelines and where gaps in vegetation allow. Lower floors are considered to be occupied during daylight hours and therefore considered more susceptible than upper floors.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
2. Loaning Head (1 property)	Viewpoint 8	



Visual Receptor Name	Representative Viewpoint Number	Sensitivity
<b>Visual Receptor Group Reference – B) People living in properties with eastern facing views</b>		
3. Heckley House and Heckley Cottage (2 properties)	Viewpoint 7	<p>The outlook from these properties consists of a broad view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>The Scheme would be visible from upper and lower storeys beyond intervening ridgelines and field boundary vegetation. Visible features include existing road signage and traffic along the A1 where gaps in the roadside tree and shrub planting allow. Susceptibility is considered High as residents within these properties would experience direct and oblique middle-distance views from upper and lower storeys above ridgelines and where gaps in vegetation allow. Lower floors are considered to be occupied during daylight hours and therefore considered more susceptible than upper floors.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
4. Heckley Fence (1 property)	No Viewpoint (Closest Viewpoint 6)	
5. Heiferlaw Bank (1 property)	Viewpoint 5	
8. Holywell Cottage, Holywell (4 properties)	No Viewpoint (Closest Viewpoint 6)	
<b>Visual Receptor Group Reference – C) People living in properties with close proximity to eastern facing views</b>		
6. Rock Lodge (1 property)	Viewpoint 4	<p>The outlook from these properties consists of a view over the A1 to open countryside beyond. As a result, the value of this view is considered Low.</p> <p>The Scheme would be visible from upper and lower storeys beyond the existing boundary post and rail fence along the A1 unfiltered by vegetation or ridgelines. Visible features include existing road signage and traffic, roadside boundary treatments including fencing and vegetation. Susceptibility is considered High as residents within these properties would experience direct and oblique close proximity views from upper and lower storeys above ridgelines and boundary treatments. Lower floors are considered to be occupied during daylight hours and therefore considered more susceptible than upper floors.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
7. Rock Nab (1 property)	Viewpoint 4	
10. West Linkhall Farmhouse and surrounding properties including Patterson Cottage and properties to the west	Viewpoint 2	
<b>Visual Receptor Group Reference – D) People living in properties with western facing views</b>		
9. Broxfield and surrounding properties (2 properties)	Viewpoint 9	<p>The outlook from these properties consists of a broad view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium,</p> <p>. The Scheme would be visible from upper and lower storeys beyond intervening ridgelines and vegetation. Visible features include existing road signage and roadside tree and shrub planting. Susceptibility is considered High as residents within these properties</p>

Visual Receptor Name	Representative Viewpoint Number	Sensitivity
		would experience direct and oblique middle distance west facing views from upper and lower storeys above intervening ridgelines. Lower floors are considered to be occupied during daylight hours and therefore considered more susceptible than upper floors.  Overall sensitivity is considered <b>High</b> .
<b>Visual Receptor Group Reference – E) People living in properties with filtered western facing views</b>		
11. Rock Midstead Cottages and Rock Midstead Farmhouse (6 properties)	Viewpoint 11	The outlook from these properties consists of a view across countryside lined with vegetation. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.
14. Rock Moor House (1 property)	No Viewpoint (Closest Viewpoint 13)	The Scheme would be visible from upper and lower storeys at close proximity beyond the immediate garden vegetation. Visible features include local access tracks, roadside vegetation including tree and hedgerow planting. Susceptibility is considered High as residents within these properties would experience direct and oblique close proximity views from upper and lower storeys beyond immediate garden vegetation. Lower floors are considered to be occupied during daylight hours and therefore considered more susceptible than upper floors.  Overall sensitivity is considered <b>High</b> .
<b>Visual Receptor Group Reference – F) People living in properties with close proximity western facing views</b>		
12. Rock South Farm (7 properties)	No Viewpoint (Closest Viewpoint 10 and 19)	The outlook from these properties consists of a view across countryside lined with vegetation. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.  The Scheme would be visible from upper and lower storeys at close proximity beyond the property boundaries. Visible features include existing access tracks, roadside vegetation including tree and hedgerow planting. Susceptibility is considered High as residents within these properties would experience direct and oblique close proximity views from upper and lower storeys beyond the immediate garden boundaries. Lower floors are considered to be occupied during daylight hours and therefore considered more susceptible than upper floors.  Overall sensitivity is considered <b>High</b> .
<b>Visual Receptor Group Reference – G) People living in properties with close proximity western facing views</b>		
13. Drythroppe (1 property)	Viewpoint 12	The outlook from these properties consists of a view towards the A1 and adjacent agricultural fields to open



Visual Receptor Name	Representative Viewpoint Number	Sensitivity
		<p><i>countryside beyond</i>. As a result, the value of this view is considered Low.</p> <p>The Scheme would be visible from upper and lower storeys at close proximity above intervening field boundary treatments and where gaps in vegetation and built form allow. Visible features include existing road signage and roadside vegetation. Susceptibility is considered High as residents within these properties would experience direct and oblique close proximity views from upper and lower storeys above and where gaps in vegetation allow. Lower floors are considered to be occupied during daylight hours and therefore considered more susceptible than upper floors.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
<p><b>Visual Receptor Group Reference – H) People living in properties with close proximity south western facing views</b></p>		
15. West Lodge	Viewpoint 14	<p>The outlook from these properties consists of a view over the A1 to open countryside and wind turbines beyond. As a result, the value of this view is considered Low.</p>
16. Properties at East Linkhall (2 properties)	Viewpoint 14	<p>The Scheme would be visible from upper and lower storeys at close proximity where gaps in vegetation allow. Visible features include existing road signage and surface treatments and roadside tree planting. Susceptibility is considered High as residents within these properties would experience direct and oblique close proximity views from upper and lower storeys beyond the existing road boundary. Lower floors are considered to be occupied during daylight hours and therefore considered more susceptible than upper floors.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
<p><b>Visual Receptor Group Reference – I) People living in properties with south eastern facing views</b></p>		
17. Properties at North Charlton	Viewpoint 1	<p>The outlook from these properties consists of a view towards the A1 and adjacent agricultural fields. As a result, the value of this view is considered Low.</p> <p>The Scheme would be visible from upper and lower storeys from properties located on the southern end of North Charlton. Views would be available in the middle distance and visible features include existing road signage, surface treatments, small embankment and roadside tree planting to the east of the existing alignment. Susceptibility is considered High as residents within these properties would experience direct and oblique middle-distance views from upper and lower storeys. Lower floors are considered to be</p>

Visual Receptor Name	Representative Viewpoint Number	Sensitivity
		occupied during daylight hours and therefore considered more susceptible than upper floors. Overall sensitivity is considered <b>High</b> .
<b>Visual Receptor Group Reference – J) People living in properties with long distance eastern facing views</b>		
18. Properties at South Charlton	No Viewpoint (Closest Viewpoint 3)	The outlook from these properties consists of a view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.
19. Whinny	No Viewpoint (Closest Viewpoint 3)	Views of the Scheme would be available from predominantly upper stories above intervening structures and vegetation. Views of existing features are available in the long distance, visible features include: roadside vegetation and signage. Susceptibility is considered Medium as long-distance views are predominantly available from upper storeys. Upper floors are considered to be unoccupied during daylight hours and therefore considered less susceptible than lower floors. Overall sensitivity is considered <b>Medium</b> .
20. Brockley Hall Cottages and Brockley Hall	No Viewpoint (Closest Viewpoint 2 and 3)	
21. South Charlton Farm	No Viewpoint (Closest Viewpoint 3)	
<b>Visual Receptor Group Reference – K) People living in properties with south eastern facing views</b>		
22. Silvermoor	No Viewpoint (Closest Viewpoint 18)	The outlook from these properties consists of a view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.  Views of the Scheme would be available from predominantly upper stories above intervening structures and garden and field boundary vegetation. Views of existing features are available in the long distance, visible features include: roadside vegetation and signage. Susceptibility is considered Medium as long-distance views are predominantly available from upper storeys. Upper floors are considered to be unoccupied during daylight hours and therefore considered less susceptible than lower floors. Overall sensitivity is considered <b>Medium</b> .
<b>Visual Receptor Group Reference – L) People living in properties with south eastern facing views</b>		
23. Goldenmoor	Viewpoint 18	The outlook from these properties consists of a view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.  Views of the Scheme would be available from predominantly upper stories above intervening built form, ridgelines, garden and field boundary vegetation. Views of existing features are available in the middle distance, visible features include: roadside vegetation
24. Properties at Denwick	Viewpoint 18	



Visual Receptor Name	Representative Viewpoint Number	Sensitivity	
		<p>and signage. Susceptibility is considered Medium as middle-distance views are predominantly available from upper storeys. Upper floors are considered to be unoccupied during daylight hours and therefore considered less susceptible than lower floors.</p> <p>Overall sensitivity is considered <b>Medium</b>.</p>	
<b>Visual Receptor Group Reference – M) People living in properties with views of the Lionheart Compound</b>			
41. Greensfield Moor Farm	Viewpoint 16	<p>The outlook from these properties consists of a view across open agricultural fields towards the existing industrial estate. As a result, the value of this view is considered Low.</p> <p>Views of the Scheme would be available from predominantly upper stories above intervening field boundary vegetation and road signage. Views of existing features are available in the long distance, visible features include: field boundary vegetation. Susceptibility is considered Medium as long-distance views are predominantly available from upper storeys. Upper floors are considered to be unoccupied during daylight hours and therefore considered less susceptible than lower floors.</p> <p>Overall sensitivity is considered <b>Medium</b>.</p>	
<b>Visual Receptor Group Reference – N) People living in properties with views of the M2F Compound</b>			
46. The Boarding House (6 Properties)	No viewpoint	<p>The outlook from these properties consists of a view across open agricultural fields. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p>	
47. Hemelspeth (8 Properties)		<p>The Scheme would be visible from upper and lower storeys from properties located near the M2F Compound. Views would be available in the middle distance and visible features include existing field boundary vegetation. Susceptibility is considered High as residents within these properties would experience direct and oblique middle distance views from upper and lower storeys. Lower floors are considered to be occupied during daylight hours and therefore considered more susceptible than upper floors.</p>	
48. Glenshotton		<p>Overall sensitivity is considered <b>High</b>.</p>	
49. Cahore Cottage (3 Properties)			
50. Tithemans Cottage (2 Properties)			
51. Thirston New Houses			
52. Thirston New House			
<b>Recreational Receptors</b>			
<b>Visual Receptor Group Reference – O) People travelling along Public Rights of Way Ref: 112/008 and 112/009</b>			

Visual Receptor Name	Representative Viewpoint Number	Sensitivity
25. Public Right of Way Ref: 112/008	Viewpoint 2	The outlook from these routes consists of a view over the A1 to open countryside beyond. As a result, the value of this view is considered Low.
26. Public Right of Way Ref: 112/009	Viewpoint 2	<p>The northern section of the Scheme would be visible from sections of these routes at close proximity, where gaps in vegetation and the built form at West Linkhall allow. The existing alignment of the A1 is visible filtered by the mature roadside vegetation at close proximity. Susceptibility is considered High as people travelling along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
<b>Visual Receptor Group Reference – P) People travelling along Public Rights of Way Ref: 129/044</b>		
27. Public Right of Way Ref: 129/004	Viewpoint 11	<p>The outlook from this route consists of a view across countryside lined with vegetation. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>The Scheme would be visible from sections of this route at close proximity, where gaps in vegetation allow. The existing alignment of the A1 where gaps in vegetation allow at close proximity. Susceptibility is considered High as people travelling along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
<b>Visual Receptor Group Reference – Q) People travelling along Public Rights of Way Ref: 129/005</b>		
28. Public Right of Way Ref: 129/005	No Viewpoint (Closest Viewpoint 19)	<p>The outlook from this route consists of a view across countryside lined with vegetation. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>Clear direct views of the Scheme would be available at close proximity at limited locations on this route. Susceptibility is considered High as people travelling along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
<b>Visual Receptor Group Reference – R) People travelling along Public Rights of Way Ref: 129/110/003</b>		
29. Public Right of Way Ref: 129/009 and 110/003	Viewpoint 10	<p>The outlook from this route consists of a view across countryside lined with vegetation. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>Clear direct views of the Scheme would be available at close proximity at limited locations on this route. Susceptibility is considered High as people travelling</p>



Visual Receptor Name	Representative Viewpoint Number	Sensitivity
		<p>along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
<p><b>Visual Receptor Group Reference – S) People travelling along Public Rights of Way Ref: 110/003</b></p>		
<p>30. Public Right of Way Ref: 110/019</p>	<p>Viewpoint 6</p>	<p>The outlook from this route consists of wide view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>Clear direct views of the Scheme would be available at close proximity at limited locations on this route and middle-distance views are available on areas of higher ground and where gaps in vegetation allow. Susceptibility is considered High as people travelling along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
<p><b>Visual Receptor Group Reference – T) People travelling along Public Rights of Way Ref: 110/010</b></p>		
<p>31. Public Right of Way Ref: 110/010</p>	<p>Viewpoint 5</p>	<p>The outlook from this route consists of broad view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>Clear direct views of the Scheme would be available at close proximity at limited locations on this route and middle-distance views are available on areas of higher ground and where gaps in vegetation allow. Susceptibility is considered High as people travelling along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
<p><b>Visual Receptor Group Reference – U) People travelling along Public Rights of Way Ref: 129/022 and 129/014</b></p>		
<p>32. Public Right of Way Ref: 129/022</p> <p>35. Public Right of Way Ref: 129/014</p>	<p>Viewpoint 9</p>	<p>The outlook from these routes consists of broad view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>Clear direct views of the Scheme would be available at close proximity at limited locations on this route and middle-distance views are available on areas of higher ground and where gaps in vegetation allow. Susceptibility is considered High as people travelling along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b>.</p>

Visual Receptor Name	Representative Viewpoint Number	Sensitivity
<b>Visual Receptor Group Reference – V) People travelling along Public Rights of Way Ref: 110/013</b>		
33. Public Right of Way Ref: 110/013	Viewpoint 7	<p>The outlook from this route consists of a wide view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>Clear direct views of the Scheme would be available at close proximity and where ground levels and gaps in vegetation allow middle distance views would be available. Susceptibility is considered High as people travelling along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
<b>Visual Receptor Group Reference – W) People travelling along Public Rights of Way Ref: 110/004</b>		
34. Public Right of Way Ref: 110/004	Viewpoint 8	<p>The outlook from this route consists of a wide view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>Filtered views of the Scheme would be available at limited locations along this route. Susceptibility is considered High as people travelling along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b>.</p>
<b>Visual Receptor Group Reference – X) People travelling along Public Rights of Way Ref: 129/006</b>		
36. Public Right of Way Ref: 129/006	Viewpoint 19	<p>The outlook from this route consists of a broad view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>Clear direct views of the Scheme would be available at limited locations on this route within the short and middle distance. Susceptibility is considered High as people travelling along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b></p>
<b>Visual Receptor Group Reference – Y) People travelling along Public Rights of Way Ref: 141/013 and 141/002</b>		
42. Public Right of Way Ref: 141/013	Viewpoint 15	<p>The outlook from these routes consist of a view across open agricultural fields towards the existing industrial estate. As a result, the value of this view is considered Low.</p>
43. Public Right of Way Ref: 141/022	No Viewpoint	



Visual Receptor Name	Representative Viewpoint Number	Sensitivity
	(Closest Viewpoint 16)	<p>Clear direct views of the Scheme would be available at close proximity for walkers approaching the site. Susceptibility is considered High as people travelling along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b></p>
<b>Visual Receptor Group Reference - Z) People travelling along Public Right of Way Ref: 422/020</b>		
53. Public Right of Way Ref: 422/020	No Viewpoint	<p>The outlook from this route consists of a view across open agricultural fields. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>Filtered views of the Scheme would be available at limited locations on this route within the middle distance where gaps in intervening field boundary vegetation allow. Susceptibility is considered High as people travelling along these routes are likely to be travelling for recreational purposes focussed on the landscape.</p> <p>Overall sensitivity is considered <b>High</b></p>
<b>Visual Receptor Group Reference - AA) People visiting or working at Eshott Airfields</b>		
54. People visiting or working at Eshott Airfield	No Viewpoint	<p>The outlook from this location consists of a view across open agricultural fields. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>Views of the Scheme would be available at limited locations for recreational users within the middle distance above and where gaps in intervening field boundary vegetation allow. Susceptibility is considered Medium as recreational users are likely to be focussed on their activities rather than views of the wider landscape.</p> <p>Overall sensitivity is considered <b>Medium</b></p>
<b>Transport Receptors</b>		
<b>Visual Receptor Group Reference – BB) People travelling along main roads</b>		
37. Road users travelling along the A1	No Viewpoint (Closest Viewpoint 1, 2, 4 and 12)	<p>The outlook from this road consists of a broad view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>The length of the Scheme would be visible for road users travelling along this route unfiltered by vegetation or built form at close proximity. Susceptibility is considered Medium as people travelling along this</p>

Visual Receptor Name	Representative Viewpoint Number	Sensitivity
		<p>route would be travelling at speed, yet their journey is influenced by the wider view.</p> <p>Overall sensitivity is considered <b>Moderate</b>.</p>
<p><b>Visual Receptor Group Reference – CC) People travelling along local roads with views of the Main Scheme Area</b></p>		
38. Road users travelling along the B6347	Viewpoint 12	<p>The outlook from these roads consist of a broad view across open rolling countryside, where gaps in roadside vegetation allow. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p>
39. Road users travelling along the B6341	Viewpoint 4, 5 and 6	<p>Views of the Scheme would be available from limited locations along these routes where gaps in vegetation and built form allow. or built form at close proximity. Susceptibility is considered Low as people travelling along these routes would be travelling at speed and focussed on their route and traffic conditions with intermittent views of the wider landscape.</p> <p>Overall sensitivity is considered <b>Moderate</b>.</p>
40. Road users travelling along the B1340	Viewpoint 19	<p>Overall sensitivity is considered <b>Moderate</b>.</p>
<p><b>Visual Receptor Group Reference – DD) People travelling along local roads with views of the Lionheart Compound</b></p>		
44. Road users travelling along the unnamed road	Viewpoint 16	<p>The value of views from this road are considered Low with no important or recognised views for the receptors to focus on. Views of the Scheme would be available from limited locations along this route on approach to the Compound and Lionheart Enterprise Park where gaps in vegetation and built form allow. Susceptibility is considered Low as people travelling along these routes would be travelling at speed and focussed on their route and traffic conditions rather than views of the wider landscape.</p> <p>Overall sensitivity is considered <b>Low</b>.</p>
<p><b>Visual Receptor Group Reference – EE) People travelling along local roads with views of the M2F Compound</b></p>		
55. Road users travelling along the unnamed local road	No Viewpoint	<p>The outlook from this route consists of a wide view across open rolling countryside. It is likely that the view is valued by the receptors. As a result, the value of this view is considered Medium.</p> <p>Views of the Scheme would be available above intervening southern boundary vegetation. Susceptibility is considered Low as people travelling along this route would be travelling at speed and focussed on their route and traffic conditions rather than views of the wider landscape.</p> <p>Overall sensitivity is considered <b>Moderate</b>.</p>



Visual Receptor Name	Representative Viewpoint Number	Sensitivity
<b>Commercial Receptors</b>		
<b>Visual Receptor Group Reference – FF) People working or visiting Lionheart Industrial Estate</b>		
45. Lionheart Industrial Estate	Viewpoint 16	<p>The outlook from these commercial premises consist of a view across open agricultural fields towards the existing industrial estate. As a result, the value of this view is considered Low.</p> <p>Views of the Scheme would be available where gaps in the immediate built form and vegetation allow. Susceptibility is considered Low as people working within this Industrial Estate are likely to focused on their work and indoor facing activities rather than views of the wider landscape.</p> <p>Overall sensitivity is considered <b>Low</b>.</p>

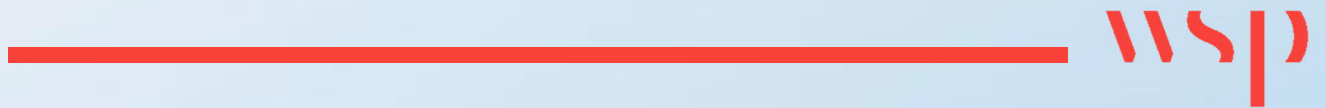
The location of the above visual receptors is shown on **Figure A13: Visual Receptor Plan in Appendix A**.

## **A2E Preliminary Environmental Information Report Appendix I: Full Gazetteer of Heritage Assets**



# Appendix I

FULL GAZETTEER OF HERITAGE  
ASSETS



### Designated Heritage Assets within the Scheme Area

NHLE ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity / Importance
1018499	Prehistoric Burial Mound, 420m north-west of East Linkhall	Scheduled Monument	Below-Ground	Prehistoric	High	1018499
1371021	Milepost approximately 55 Metres south-west of Thirston New Houses Farmhouse	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1371021

### Designated Heritage Assets within 1km of the Scheme Area

NHLE ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity / Importance
N/A	Rock	Conservation Area	Built Heritage	Early Medieval	Medium	N/A
1001041	Alnwick Castle	Grade I Registered Park and Garden	Built Heritage	Post-Medieval	High	1001041
1018348	North Charlton medieval village and open field system	Scheduled Monument	Below-Ground	Late Medieval	High	1018348
1006500	Camp at West Linkhall	Scheduled Monument	Below-Ground	Unknown	High	1006500
1017955	Iron Age defended settlement in	Scheduled Monument	Below-Ground	Iron Age	High	1017955



NHLE ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity / Importance
	Camp Plantation, 350m north west of North Charlton Mill					
1006564	Ellsnook round barrow, 175m north east of Heiferlaw Bridge	Scheduled Monument	Below-Ground	Prehistoric	High	1006564
1014061	Heiferlaw tower house, 230m north east of Holywell	Scheduled Monument	Below-Ground	Late Medieval	High	1014061
1014080	Heiferlaw defended settlement and Second World War Zero Station, 100m north of Holywell	Scheduled Monument	Below-Ground	Iron Age - Modern	High	1014080
1304282	Heiferlaw Tower	Grade I Listed Building	Built Heritage	Late Medieval	High	1304282
1042002	Charlton Hall	Grade II* Listed Building	Built Heritage	Post-Medieval	High	1042002
1154561	Greenhouse 120 Metres east of Felton Park with Potting Shed at Rear	Grade II* Listed Building	Built Heritage	Post-Medieval	High	1154561
1041756	Rennington Moor Farmhouse and Attached Farm building	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1041756

NHLE ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity / Importance
1154641	Yard Walls to South of Farm buildings	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1154641
1371080	Patterson Cottage	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1371080
1045880	Cross on North Side of B6347 120 metres West of A1 Junction	Grade II Listed Building	Built Heritage	Late Medieval	Medium	1045880
1298856	West Linkhall Farmhouse	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1298856
1154647	Limekiln South of Kiln Plantation 700 metres south-east of Rock Midstead	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1154647
1304291	Milepost 420 metres north of Track to Heckley Fence	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1304291
1371059	Dovecote to East of Heckley Fence Farmhouse with Attached Wall	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1371059
1041755	Barn and Engine House on North Side of Main Farmbuilding Group	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1041755
1303729	Smithy at South East Corner of Main	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1303729



NHLE ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity / Importance
	Farmbuilding Group					
1041754	Milepost 300 metres North of Denwick Lane End	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1041754
1153486	Milepost 40 metres north of Entrance to Heckley House	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1153486
1042044	Heckley House	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042044
1153391	Milepost 380 metres north of Denwick Bridge End	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1153391
1042041	Milepost 80 metres south of Broom House Roundabout	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042041
1153333	Malcolm's Cross and Remains of Older Cross on West	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1153333
1153547	1, 3 and 5, Denwick Village	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1153547
1042046	7 and 9, Denwick Village	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042046
1304233	11 and 13, Denwick Village	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1304233

NHLE ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity / Importance
1304237	21 and 23, Denwick Village	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1304237
1042047	17 and 19, Denwick Village	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042047
1433767	Denwick War Memorial	Grade II Listed Building	Built Heritage	Modern	Medium	1433767
1042048	Front Walls and Gatepiers to Numbers 1-23 (Odd)	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042048
1042050	Pant and Adjacent Walls 30 metres South West of Road Junction in Centre of Village	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042050
1067776	Pant 50 metres East of Village Hall	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1067776
1042049	Denwick House	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042049
1042019	Greensfield Moor Farmhouse	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042019
1156136	Thirston New Houses Farmhouse	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1156136
1186919	Stable and Coach House Range, with Attached Walls 50 metres	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1186919



NHLE ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity / Importance
	north-west of Charlton Hall					
1042003	Attached Outbuilding Range and Garden Wall to north-west of Charlton Hall	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042003
1371104	Brockley Hall Farmhouse	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1371104
1439802	South Charlton War Memorial	Grade II Listed Building	Built Heritage	Modern	Medium	1439802
1045887	Church of St James	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1045887
1371105	Outbuilding and Yard Wall to North of Grovewood House	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1371105
1045853	Grovewood House	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1045853
1042018	Islaford Bridge Carrying Humbleheugh Track Over White House Burn	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042018
1041757	Covered Reservoir 100 Metres North of Rennington West Farmhouse	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1041757
1153931	Old Limekiln at Harlaw Hill Waste Disposal Site	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1153931

NHLE ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity / Importance
1067717	Heckley High House Farmhouse with Adjacent Outbuilding to West	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1067717
1371058	Ruins of St Leonard's Hospital	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1371058
1042042	Remains of White Cross 400 Metres North East of Denwick Bridge	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042042
1237596	North Chapel at Alnwick Cemetery	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1237596
1372336	Lodge and Gates at Alnwick Cemetery	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1372336
1052194	South Chapel at Alnwick Cemetery	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1052194
1041874	Garden Wall to East of Felton Park	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1041874
1303774	Felton Park	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1303774
1371126	Roman Catholic Church of St Mary	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1371126
1041885	Felton Mill	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1041885



NHLE ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity / Importance
1156133	Farmbuildings At Hemelspeth	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1156133
1042133	Old Farmhouse at Hemelspeth With Yard Walls and Outhouses On North	Grade II Listed Building	Built Heritage	Post-Medieval	Medium	1042133

### Non-Designated Heritage Assets within the scheme

HER ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity / Importance
16878	Milepost north of Shipperton Bridge (A1) with inscription details for Alnwick (6 miles) and Belford (8 miles).	Non-Designated	Built Heritage	Post-Medieval	Low	16878
5033	Stone Cists and Tumulus identified in the late 1800's.	Non-Designated	Monument	Prehistoric	High	5033
5062	Two flint flakes from Charlton Mires which is likely to be from the Neolithic or Early Bronze Age period.	Non-Designated	Findspot	Prehistoric	Low	5062

## Non-designated Heritage Assets within 500m of the scheme

HER ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity /Importance
11356	West Moor Farm, Thirston, Mesolithic flints	Non-Designated	Findspot	Mesolithic	Medium	11356
11359	Cropmark of double ditched rectilinear enclosure	Non-Designated	Monument	Unknown	Low	11359
19365	Felshott	Non-Designated	Built Heritage	Post-Medieval	Medium	19365
5032	Stone Cists were found during the early 1800's. An inhumation was present along with a riveted knife-dagger.	Non-Designated	Findspot	Prehistoric	High	5032
25114	North Charlton Mill is an estate watermill, typical of Northumberland. It was finished with stonework and a range of related Built Heritages. The earliest documentary evidence of this is 1295AD.	Non-Designated	Built Heritage	Post-Medieval	Medium	25114
22431	Buck Well marked on the 1st edition OS map.	Non-Designated	Built Heritage	Post-Medieval	Low	22431
5035	Kitty Carter Well was present on a 1599 map.	Non-Designated	Built Heritage	Post-Medieval	Low	5035



HER ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity /Importance
22429	Well, marked on the 1st edition OS map.	Non-Designated	Built Heritage	Post-Medieval	Low	22429
22425	Well, marked on the 1st edition OS map.	Non-Designated	Built Heritage	Post-Medieval	Low	22425
16836	Milepost near Ellsnook Plantation. It is inscribed with the distances to Alnwick (4 miles) and Belford (10 miles).	Non-Designated	Built Heritage	Post-Medieval	Low	16836
22433	Well, marked on the 1st edition OS map.	Non-Designated	Built Heritage	Post-Medieval	Low	22433
22435	Well, marked on the 1st edition OS map.	Non-Designated	Built Heritage	Post-Medieval	Low	22435
19936	Polygonal lozenge-shaped pillbox, Heiferlaw.	Non-Designated	Built Heritage	Post-Medieval	Low	19936
22428	Traveller's Rest Public House marked on the 1st edition OS map.	Non-Designated	Built Heritage	Post-Medieval	Low	22428
14340	Barn and engine house on north side of main farm Built Heritage group, Broxfield. Building the mid-19th century as part of a planned farm Built Heritages complex.	Non-Designated	Built Heritage	Post-Medieval	Low	14340

HER ref	Site Name	Designation	Type	Date	Inside or Outside	Sensitivity /Importance
19874	Polygonal lozenge-shaped pillbox north-east of Heckley House.	Non-Designated	Built Heritage	Modern	Medium	19874
4447	Pillbox at Loaning Head in a polygonal shape.	Non-Designated	Built Heritage	Modern	Medium	4447
4439	Broomhouse Farm, collared, decorated urn.	Non-Designated	Findspot	Unknown	Medium	4439
25513	Church at Denwick from the 19th century which was built in response to Denwick villagers needs.	Non-Designated	Built Heritage	Post-Medieval	Medium	25513
25514	Denwick war memorial is located opposite the church. It commemorates those who died in the first World War.	Non-Designated	Built Heritage	Modern	Medium	25514





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