



Rail Central

Preliminary Environmental Information Report (PEIR): Stage 1

PART 2

9 APPENDIX C - RELEVANT LEGISLATION

General

This section briefly describes the legal protection afforded to the protected species referred to in this report. It is for information only and is not intended to be comprehensive or to replace specialised legal advice. It is not intended to replace the text of the legislation, but summarises the salient points.

Badger

Meles meles (Badger) is protected in Britain under the *Protection of Badgers Act 1992* and *Schedule 6 of the Wildlife and Countryside Act 1981* (as amended).

The legislation affords protection to Badgers and Badger setts, and makes it a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a Badger sett; or
- to disturb a Badger when it is occupying a sett.

Bats

All species of British bat are protected by *The Wildlife and Countryside Act 1981* (as amended) extended by the *Countryside and Rights of Way Act 2000* (the CROW Act). This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat whilst it occupies a bat roost.

Bats are also European Protected Species listed on *The Conservation (Natural Habitats, & c.) Regulations 1994* (as amended). This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat, including in particular any disturbance which is likely (a) to impair their ability - (i) to survive, to breed or reproduce, or to rear or nurture their young; or (ii) hibernate or migrate, where relevant; or (b) to affect

significantly the local distribution or abundance of the species to which they belong.

- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present.

Birds

Birds General Protection

All species of bird are protected under *Section 1* of the *Wildlife and Countryside Act 1981* (as amended). The protection was extended by the CRow Act.

The legislation makes it an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

Birds (Specially Protected Species)

Certain species of bird are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981* (as amended) and receive protection under *Sections 1(4)* and *1(5)* of the Act. The protection was extended by the CRow Act. The legislation confers special penalties where the above mentioned offences are committed for any such bird and also make it an offence to intentionally or recklessly:

- disturb any such bird, whilst building its nest or it is in or near a nest containing dependant young; or
- disturb the dependant young of such a bird.

Common Reptiles

Lacerta vivipara (Common Lizard), *Natrix natrix* (Grass Snake), *Anguis fragilis* (Slow-worm), and *Vipera berus* (Adder) are listed under *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the *Countryside and Rights of Way Act 2000* (the CRow Act).

Under the above legislation it is an offence to:

intentionally or deliberately kill or injure any individual of such a species; or sell or attempt to sell any part of the species alive or dead.

Great Crested Newt

Triturus cristatus (Great Crested Newt) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receives full protection under *Section 9*. Great Crested Newts are also European Protected Species listed on The Conservation of Species and Habitats Regulations 2010 (as amended). This legislation makes it an offence to:

- deliberately capture, injure or kill a Great Crested Newt;
- deliberately disturb a Great Crested Newt (in such a way as to be likely to significantly affect, (i) the ability of a significant group of Great Crested Newt to survive, breed or rear/nurture their young; and (ii) the local distribution or abundance of the species concerned);
- deliberately take or destroys the eggs of such an animal;
- damage or destroy a breeding site or resting place of a Great Crested Newt; and
- possess, control, transport, sell, exchange a Great Crested Newt, or offer a Great Crested Newt for sale or exchange.

All resting and breeding places of Great Crested Newts receive legal protection even when Great Crested Newts are not present.

Otter

Lutra lutra (Otter) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receives full protection under *Section 9*. This species is also listed as a European Protected Species on *Schedule 2* of the *Conservation (Natural Habitats, etc.) Regulations 1994* which gives it full protection under *Regulation 39*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRoW Act).

Under the above legislation it is an offence to:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

The Otter is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP) and also as a species of principal importance for the conservation of biological diversity in England under *Section 74* of the CRoW Act.

The Otter is also protected under *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended). This protection relates specifically to trapping and direct pursuit of the species.

The European sub-species is also listed as globally threatened on the IUCN/WCMC RDL.

Water Vole

Arvicola amphibius (Water Vole) is fully protected under *Section 9* of *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended). Protection was extended by the *Countryside and Rights of Way Act 2000*.

Under this legislation, it is an offence to:

- intentionally kill, injure or take (capture) a Water Vole;
- possess or control a live or dead Water Vole, or any part of a Water Vole;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place which Water Voles use for shelter or protection, or to intentionally or recklessly disturb Water Voles while they are using such a place; or
- sell, offer for sale or advertise for live or dead Water Voles.

The Water Vole is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP).

10 APPENDIX D – NOTEWORTHY SPECIES RECORDS

Table 10.1 shows noteworthy species records from places within 2 km of the site boundary, extending to 5 km for bat records. These species records were obtained from Northamptonshire Biodiversity Records Centre. The Latin and common names for species are given as well as their level of designation. A glossary defining abbreviations used in the table is given in Appendix E. This table does not constitute a comprehensive list. If a species is not included in the table below it does not necessarily mean the species is absent from the search area, but rather that it has not been recorded in these locations.

Table 10.1. Noteworthy Species Records within 2 km, extending to 5 km for Bat Records

Latin Name	Common Name	Designation
Amphibians		
<i>Bufo bufo</i>	Common Toad	WCA5.9.5, UKBAP
<i>Triturus cristatus</i>	Great Crested Newt	EPS (Sch2), WCA5.9.1, UKBAP
Birds		
<i>Alcedo atthis</i>	Kingfisher	WCA1.1, Amber
<i>Anas platyrhynchos</i>	Mallard	Amber
<i>Falco columbarius</i>	Merlin	WCA1.1, Amber
<i>Falco subbuteo</i>	Hobby	WCA1.1
<i>Motacilla cinerea</i>	Grey Wagtail	Amber
<i>Muscicapa striata</i>	Spotted Flycatcher	Red, UKBAP
<i>Parus montanus</i>	Willow Tit	Red, UKBAP
<i>Picus viridis</i>	Green Woodpecker	Amber
<i>Pyrrhula pyrrhula</i>	Bullfinch	Amber, UKBAP
<i>Sterna hirundo</i>	Common Tern	Amber
<i>Sylvia communis</i>	Whitethroat	Amber
<i>Tyto alba</i>	Barn Owl	WCA1.1, Amber
Crustacean		
<i>Austropotamobius pallipes</i>	Freshwater Crayfish	WCA5.9.1, RDB (VU), UKBAP
Fish		
<i>Anguilla anguilla</i>	Eel	UKBAP
Invertebrates		
<i>Coenonympha pamphilus</i>	Small Heath	UKBAP
<i>Lasiommata megera</i>	Wall	UKBAP
<i>Leptidea sinapis</i>	Wood White	WCA5.9.5, UKBAP
<i>Abraxas sylvata</i>	Clouded Magpie	LR

Latin Name	Common Name	Designation
<i>Acronicta rumicis</i>	Knot Grass	UKBAP
<i>Adscita statices</i>	Forester	UKBAP
<i>Atolmis rubricollis</i>	Red-necked Footman	LS, MP
<i>Entephria caesiata</i>	Grey Mountain Carpet	UKBAP
<i>Eupithecia valerianata</i>	Valerian Pug	LS
<i>Synanthedon myopaeformis</i>	Red-belted Clearwing	MP
<i>Xanthia gilvago</i>	Dusky-lemon Sallow	UKBAP
Mammals		
<i>Arvicola amphibius</i>	European Water Vole	WCA5.9.4a, UKBAP
<i>Erinaceus europaeus</i>	West European Hedgehog	UKBAP
<i>Lepus europaeus</i>	Brown Hare	UKBAP
<i>Lutra lutra</i>	European Otter	EPS (Sch2), WCA5.9.1, UKBAP
<i>Meles meles</i>	Eurasian Badger	BA
Reptiles		
<i>Natrix natrix</i>	Grass Snake	WCA5.9.1, UKBAP
Trees, Plants, Moss and Lichen		
<i>Pinus sylvestris</i>	Scots Pine	NS
<i>Bromus racemosus</i>	Smooth Brome	LS
<i>Hyacinthoides non-scripta</i>	Bluebell	WCA8
<i>Lactuca saligna</i>	Least Lettuce	WCA8, RDB (EN), UKBAP, NR
<i>Petroselinum segetum</i>	Corn Parsley	LS
<i>Potamogeton compressus</i>	Grass-Wrack Pondweed	RDB (EN), UKBAP, NS
<i>Potamogeton praelongus</i>	Long-Stalked Pondweed	LS, Red List
<i>Sagina nodosa</i>	Knotted Pearlwort	LS
<i>Verbascum lychnitis</i>	White Mullein	NS
<i>Syntrichia virescens</i>	Lesser Screw-moss	NS
<i>Cladonia chlorophaea</i>	Cladonia chlorophaea	NR

11 APPENDIX E – ABBREVIATIONS

Table A4 displays abbreviations of protected species legislation.

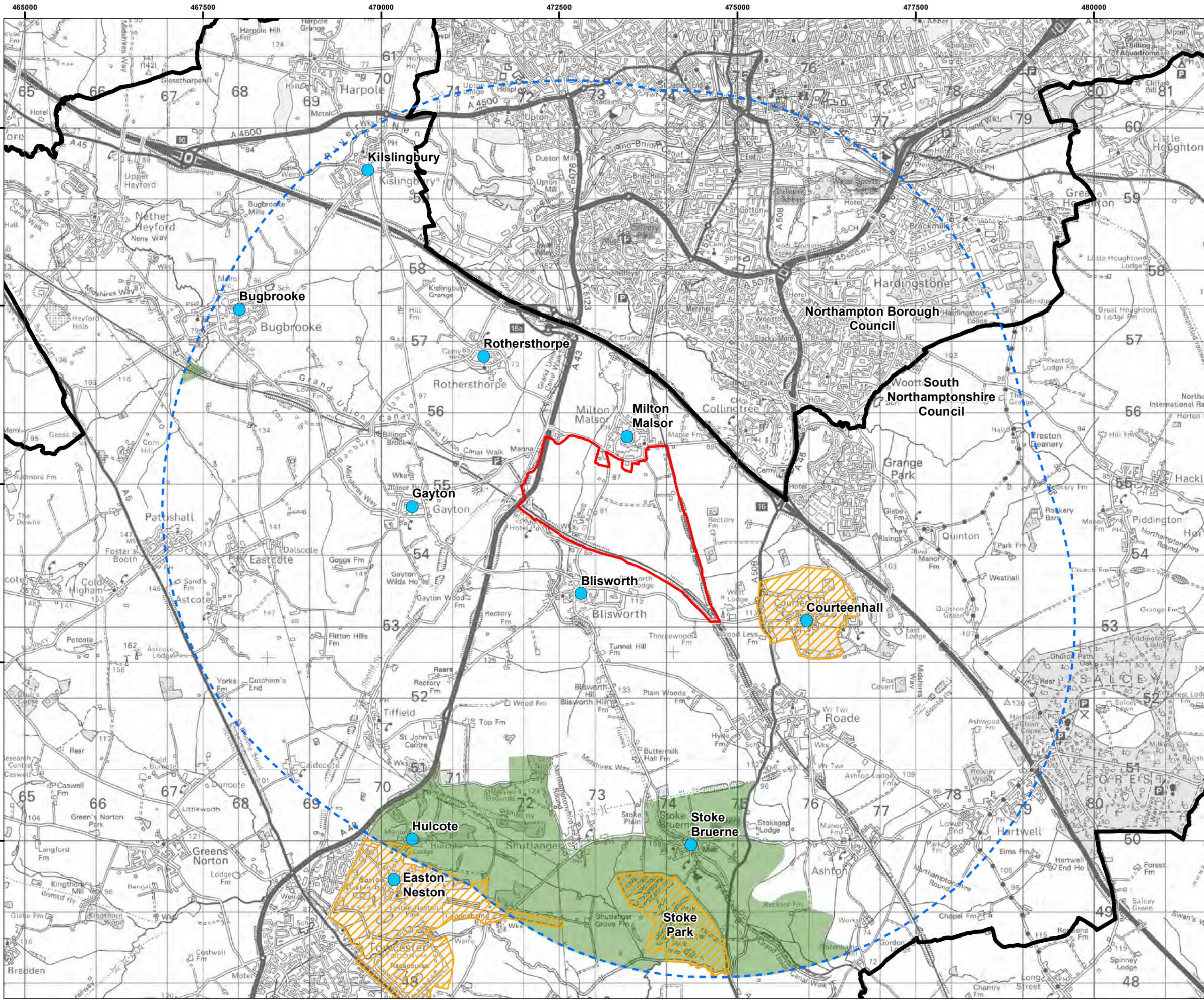
Table A4: Glossary of Abbreviations Used in this Report:

Code	Full Title	Explanation
Amber	Amber list	Amber listed species have a population status in the UK of medium conservation concern.
BA	The Protection of Badgers Act 1992	Legislation making it an offence to kill, injure or take a Badger, or to damage or interfere with a sett unless a licence is obtained from a statutory authority.
BAP	Biodiversity Action Plan	A plan that identifies threats to significantly important species and habitats, and sets out targets and actions to enhance or maintain biodiversity.
DA	The Deer Act 1991	All wild deer with the exception of Muntjac (<i>Muntiacus reevesi</i>) and Chinese Water deer (<i>Hydropotes inermis</i>) are protected by a closed season.
EPS (Sch 2)	European Protected Species (Schedule 2)	Animals protected on <i>Schedule 2</i> of the <i>Conservation (Natural Habitats &c.) Regulations 1994</i>
HAP	Habitat Action Plan	A plan that identifies threats to a priority habitat and sets out targets and actions to enhance or maintain that habitat.
IUCN	International Union for Conservation of Nature and Natural Resources	A worldwide partnership and conservation network to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.
LBAP	Local Biodiversity Action Plan	A plan that identifies threats to locally important species and habitats, and sets out targets and actions in Species Action Plans and Habitat Action Plans to enhance or maintain biodiversity at the county or regional level.
LHAP	Local Habitat Action Plan	A plan that identifies threats to a locally important priority habitat and sets out targets and actions to enhance or maintain that habitat.
LSAP	Local Species Action Plan	A plan that identifies threats to locally important species, and sets out targets and actions to prevent losing that species from the local area.
Notable	Scarce and threatened invertebrates	Invertebrate species which are estimated to occur within the range of 16 to 100 10km squares but subdivision into Notable A and Notable B categories is not possible as there is insufficient information available).
Notable:A	Scarce and	Taxa which do not fall within Red Data Book categories but

Code	Full Title	Explanation
	threatened invertebrates	which are none-the-less uncommon in Great Britain and thought to occur in 30 or fewer 10km squares of the National Grid or, for less well-recorded groups, within seven or fewer vice-counties.
Notable: B	Scarce and threatened invertebrates	Taxa which do not fall within Red Data Book categories but which are none-the-less uncommon in Great Britain and thought to occur in between 31 and 100 10km squares of the National Grid or, for less-well recorded groups between eight and twenty vice-counties.
NN	Nationally Notable	Designation for invertebrate taxa that are thought to be notably important in the UK.
NR	Nationally Rare	Species in 15 or fewer hectads in Great Britain.
NS	National Scarce	Species in 16-100 hectads in Great Britain.
Red	Red List	Red listed species have a population status in the UK with high conservation concern.
RDB	Red Data Book Species	Species identified in one of the UK Red Data books.
RDB(CR)	Critically Endangered	An IUCN Red List designation for species at an extremely high risk of extinction.
RDB(EN)	Endangered	An IUCN Red List designation for species at a very high risk of extinction.
RDB(VU)	Vulnerable	An IUCN Red List designation for species at high risk of extinction.
SAP	Species Action Plan	A plan that identifies threats to significantly important species, and sets out targets and actions to prevent losing that species to extinction.
UKBAP	UK Biodiversity Action Plan	A plan that identifies threats to locally important species and habitats, and sets out targets and actions in Species Action Plans and Habitat Action Plans to enhance or maintain biodiversity in the UK.
UKSAP	UK Species Action Plan	A plan that identifies threats to nationally important species, and sets out targets and actions to prevent the decline or extinction of the species in the UK.
WCA	<i>The Wildlife and Countryside Act 1981</i> (as amended)	Containing 4 Parts and 17 Schedules, the Act covers protection of wildlife (birds, and some animals and plants), the countryside, National Parks, and the designation of protected areas, and public rights of way. All wild plants in Britain are protected from intentional uprooting by an unauthorized person, but land owners, land occupiers, persons authorized by either of these or persons authorized in writing by the Local Authority for the area are exempt. Protection for some species may be limited to certain Sections of the Act (e.g. S13(2)).
WCA1	Schedule 1 of <i>The Wildlife and</i>	This Schedule lists birds protected by special penalties at all times, but virtually all wild birds have some protection in law.

Code	Full Title	Explanation
	<i>Countryside Act 1981</i> (as amended)	<p>Acts which are prohibited for all wild birds (except derogated 'pest' species) include intentional killing, injuring or taking; taking, damaging or destroying nests in use or being built; taking or destroying eggs; possessing or having control of (with certain exceptions but including live for dead birds, parts or derivative); setting or permitting certain traps, weapons, decoys or poisons. Selling, offering or exposing for sale, possessing or transporting for sale any live wild bird, egg or part of an egg or advertising any of these for sale, or dead wild bird including parts or derivatives are also prohibited. Many birds must be formally registered and ringed if kept in captivity.</p> <p>Schedule I WCA birds are additionally protected from intentional or reckless disturbance while building a nest, or when such a bird is in, on or near a nest containing eggs or young, or intentional or reckless disturbance of dependent young.</p>
WCA5	Schedule 5 of <i>The Wildlife and Countryside Act 1981</i> (as amended)	Schedule 5 animals are protected from intentional killing, injuring or taking; possessing (including parts or derivatives); intentional or reckless damage, destruction or obstruction of any structure or place used for shelter or protection; selling, offering or exposing for sale, possessing or transporting for the purpose of sale (alive or dead, including parts or derivatives). Protection of some species is limited to certain Sections of the Act (e.g. S9(1), S9(4a), S9(4b), S9(5)).
WCA5.9.1	Section 9 (1) under Schedule 5 of <i>The Wildlife and Countryside Act 1981</i> (as amended)	Protection limited to intentional killing, injury or taking.
WCA5.9.4a	Section 9 (4a) under Schedule 5 of <i>The Wildlife and Countryside Act 1981</i> (as amended)	Protection limited to damaging, destroying, or obstructing access to, any structure or place used by the animal for shelter or protection.
WCA5.9.5	Section 9 (5) under Schedule 5 of <i>The Wildlife and Countryside Act 1981</i> (as amended)	<p>Protection limited to selling, offering for sale, possessing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from, such animal.</p> <p>Note that all cetaceans (whales and dolphins) and the Basking Shark (<i>Cetorhinus maximus</i>) are now protected from intentional or reckless disturbance.</p>
WCA8	Schedule 8 of <i>The Wildlife and Countryside Act 1981</i> (as amended)	Plants and fungi protected from intentional picking, uprooting, destroying, trading (including parts or derivatives), etc.

Figure 17.1



- Legend:**
- Site Boundary
 - 5km Study Area
 - Local Authority Boundary
 - Registered Park and Gardens
 - Conservation Areas
- South Northamptonshire Policy:**
- Tove Valley Special Landscape Area (Within 5km Study Area)

Notes:
 This map contains data from the following sources:
 Historic England (29-04-2015)
 Natural England (29-04-2015)
 South Northamptonshire Council
 Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter



Rev	Date	Description	Drn	Chk	App
02	26/04/2016	Updated Site Boundary	DR	JM	JM
01	10/03/2016	Text Changes	DR	JM	JM
00	06/05/2015	First Draft	DR	JM	CF

Armtrack

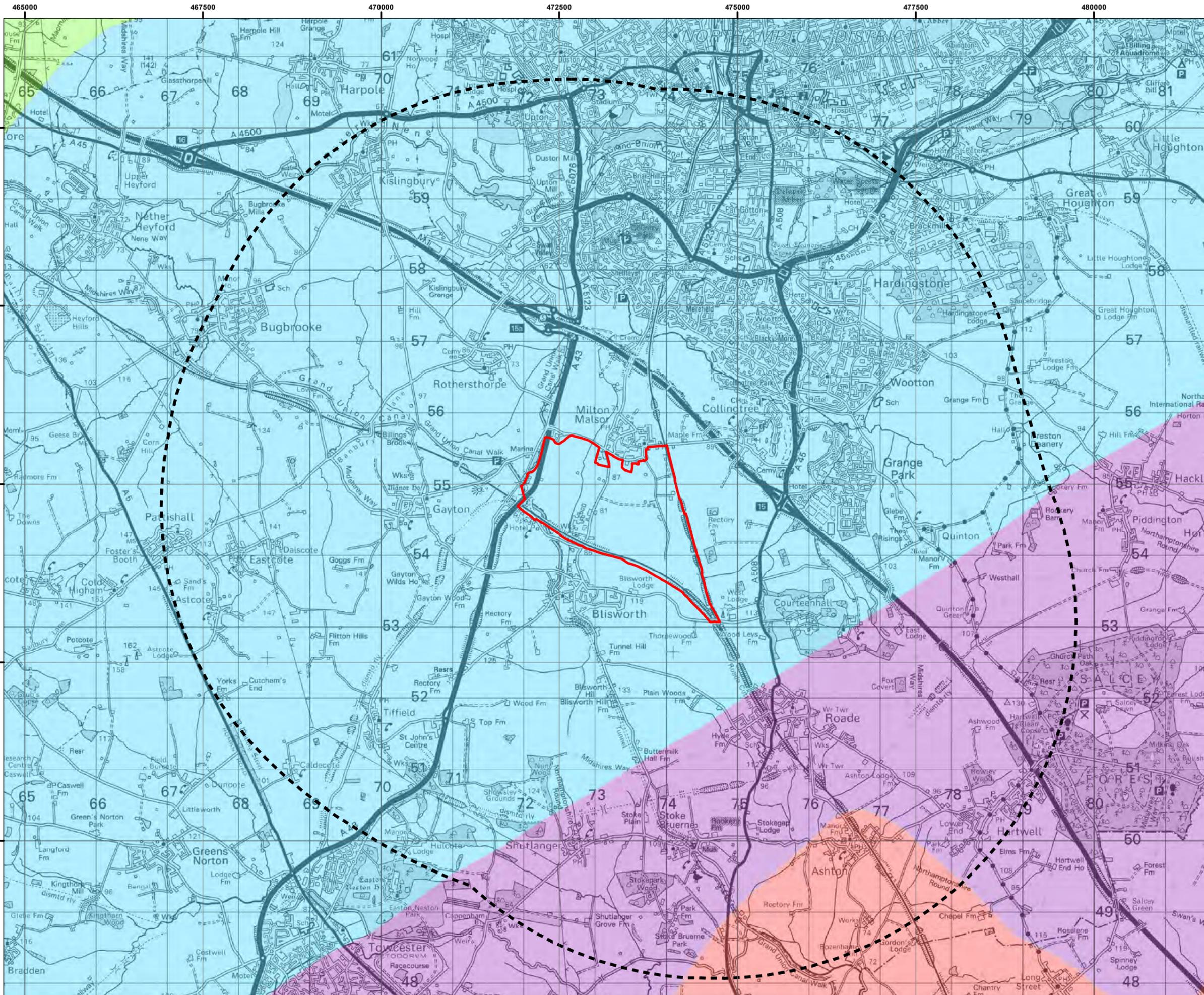
RSK

TITLE: Figure 17.1:
Landscape Policy and Designations

SCALE: 1:50,000 @ A3

REV 02

Figure 17.2



- Legend:**
- Site Boundary
 - 5km Study Area
- National Character Areas (Natural England):**
- 88: Bedfordshire and Cambridgeshire Claylands
 - 89: Northamptonshire Vales
 - 91: Yardley-Whittlewood Ridge
 - 95: Northamptonshire Uplands

Notes:-
 This map contains data from the following sources-
 Natural England (29-04-2015)
 Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter



Rev	Date	Description	Drn	Chk	App
01	26/04/2016	Updated Site Boundary	DR	JM	CF
00	19/12/2015	First Draft	DR	JM	CF



TITLE: Figure 17.2:
National Landscape Character

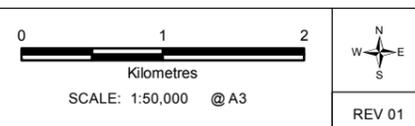
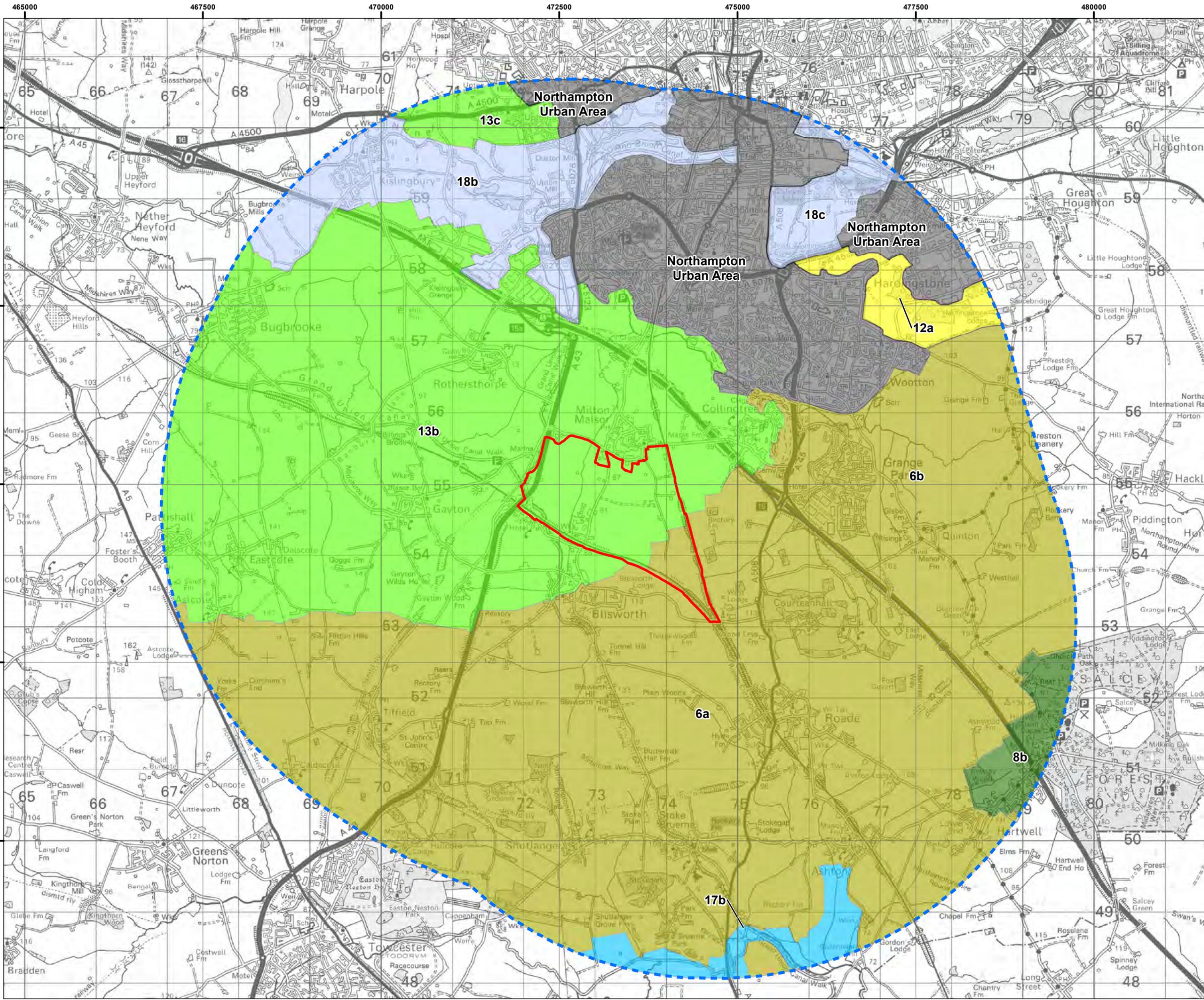


Figure 17.3



Legend:

- Site Boundary
- 5km Study Area

Local Character Areas (Northamptonshire County Council):

- Northampton Urban Area
- 6. Undulating Claylands
- 6a The Tove Catchment
- 6b Hackleton Claylands
- 8. Low Wooded Clay Ridge
- 8b Salcey Forest and Yardley Chase
- 12. Limestone Valley Slopes
- 12a Wollaston to Irchester
- 13. Undulating Hills and Valleys
- 13b Bugbrooke and Daventry
- 13c Long Buckby
- 17. River Valley Floodplain
- 17b River tove Floodplain
- 18. Broad River Valley Floodplain
- 18b The Nene - Weedon Bec to Duston Mill
- 18c The Nene - Duston Mill to Billing Wharf

Notes:-
 This map contains data from the following sources-
 Historic England (29-04-2015)
 Natural England (29-04-2015)
 South Hampshire Council

Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter



Rev	Date	Description	Drn	Chk	App
01	26/04/2016	Updated Site Boundary	DR	JM	CF
00	19/12/2015	First Draft	DR	JM	CF



TITLE: Figure 17.3:
Local Landscape Character

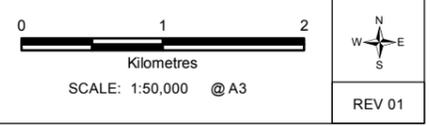
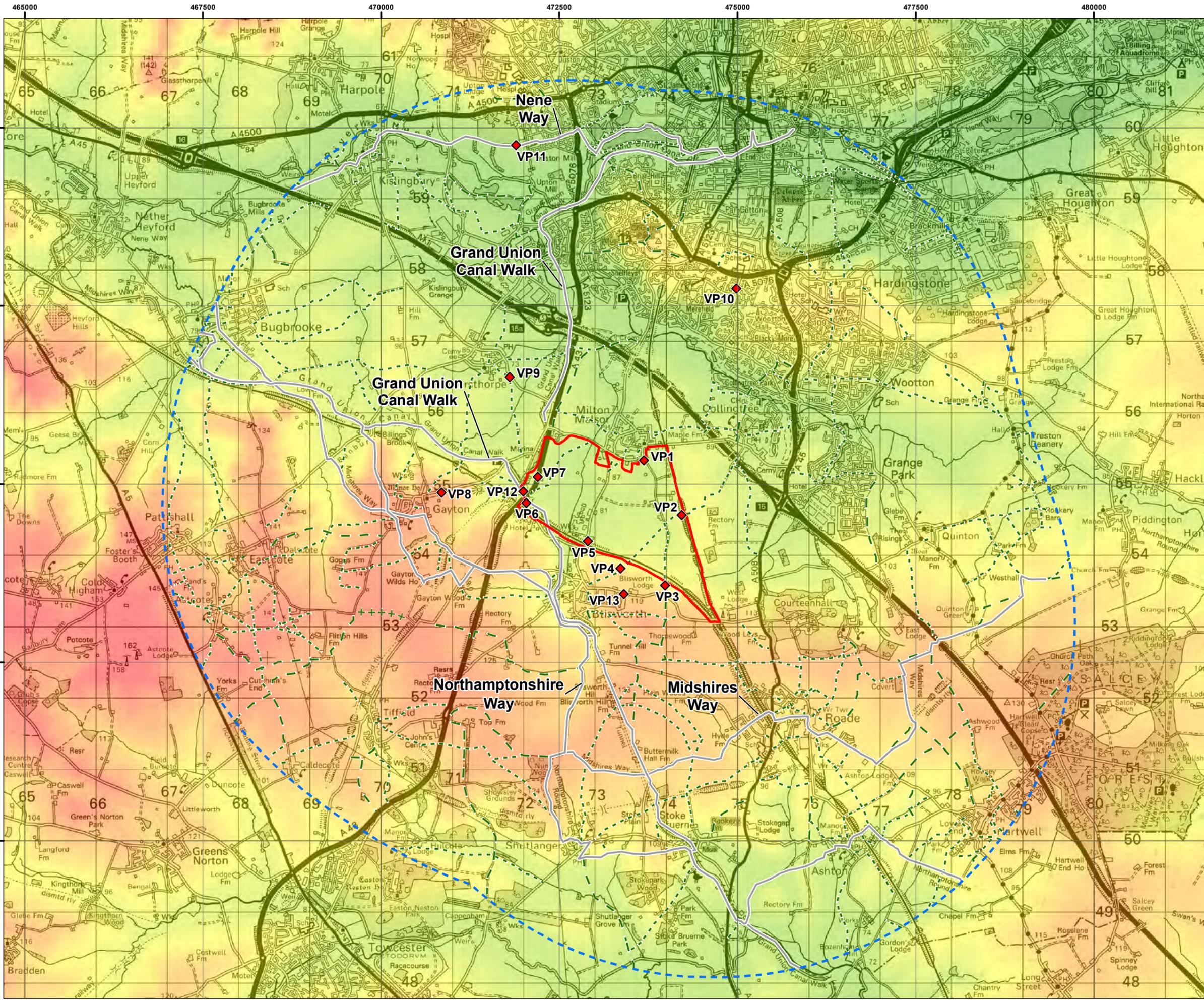


Figure 17.4



- Legend:**
- Site Boundary
 - 5km Study Area
 - ◆ Viewpoint Locations
 - National Trails/Long Distance Paths
- Height (m):**
- High : 162
 - Low : 50
- Public Right of Way:**
- Bridleway
 - ++ Byway
 - Footpaths

N.B. Long distance paths and public right of way are indicative only and are not exact locations.

Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter



Rev	Date	Description	Drn	Chk	App
02	26/04/2016	Updated Site Boundary	DR	JM	JM
01	10/03/2016	Additional Viewpoints	DR	JM	JM
00	06/05/2015	First Draft	DR	JM	CF



TITLE: Figure 17.4:
Visual Context

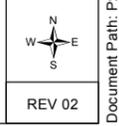
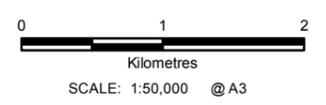
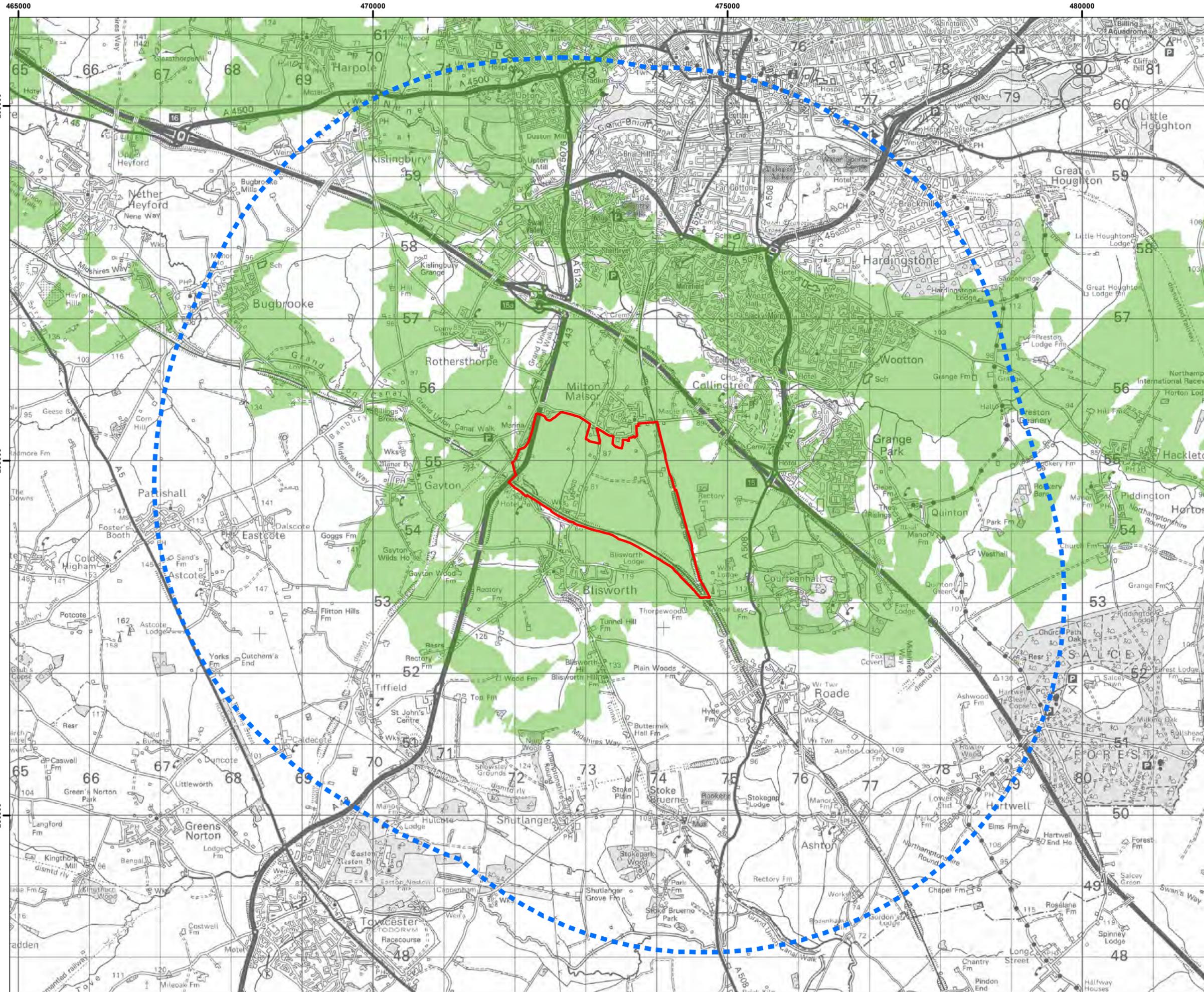


Figure 17.5



- Legend:**
- Site Boundary
 - 5km Buffer
 - Zone of Theoretical Visibility

N.B. The ZTV model has been produced using bare earth terrain only and is therefore a worst case with regards to visibility, i.e. no additional visual barriers have been added to the model such as vegetation and buildings. The ZTV has been produced using a provisional height of buildings, which has been taken as 18.5 m above ground level. This is assumed to be a reasonable estimation of height at this preliminary stage.

Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter



Rev	Date	Description	Drn	Chk	App
01	26/04/2016	Updated Site Boundary	DR	JM	JM
00	15/04/2016	First Draft	NH	JM	JM

Rail Central



TITLE: Figure 17.5:
 Zone of Theoretical Visibility – Based
 on Bare Earth Topography

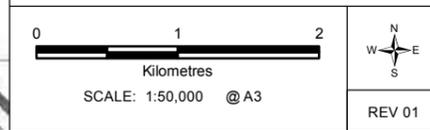
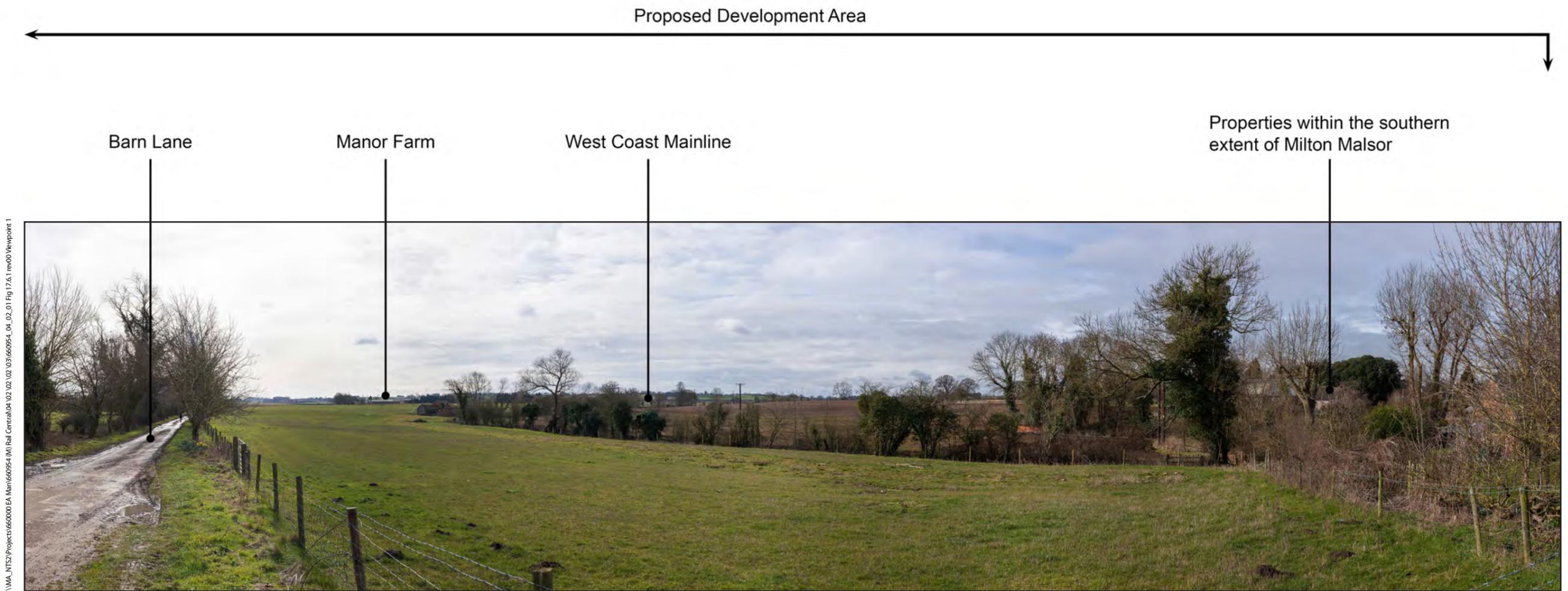


Figure 17.6.1



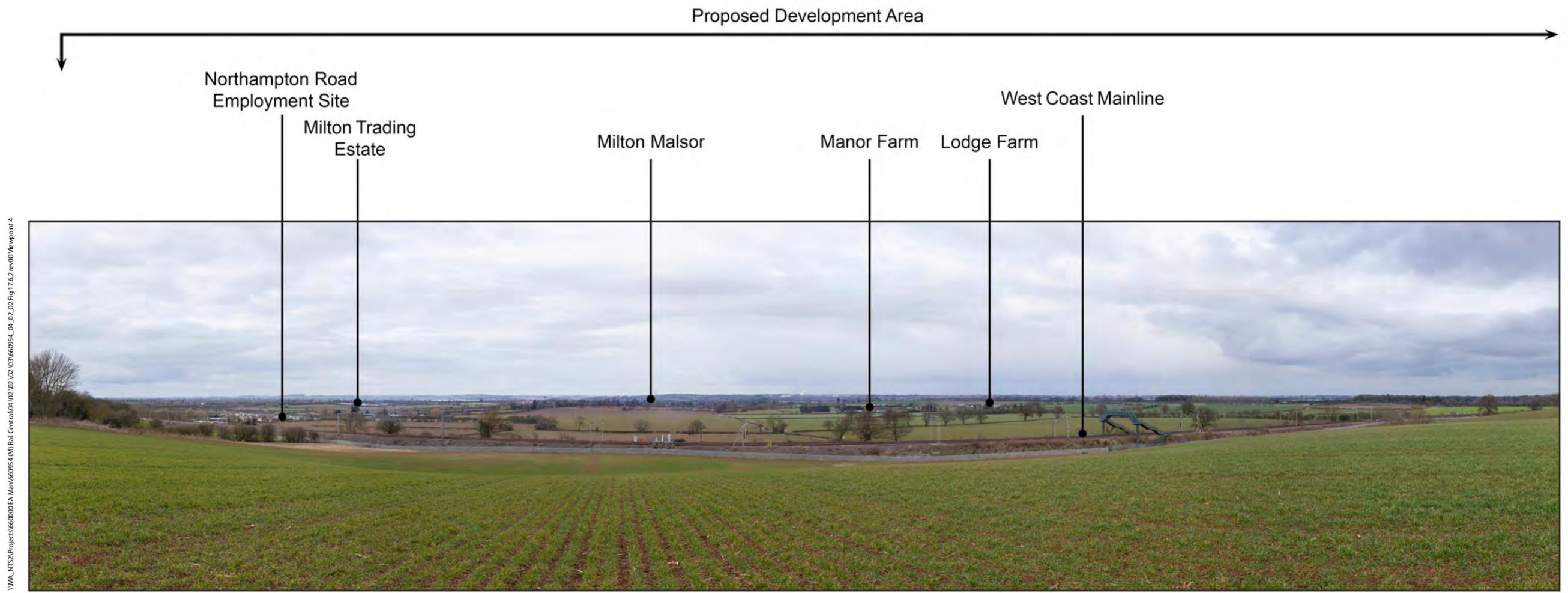
\\WA_NT52\Projects\660000 EA Main\660954 (M) Rail Central\04_02_02_03\660954_04_02_01 Fig 17.6.1 rev00 Viewpoint 1

Viewpoint 1: Barn Lane, Milton Malsor Distance and direction from the nearest part of the site: 0.0 km N OS grid location: 473686, 255336 Extent of horizontal field of view: 160°

Figure 17.6.1



Figure 17.6.2



\WA_INTS2\Projects\660000 EA Man\660954 (M) Rail Central\04_02_02_03\660954_04_02_02\Fig 17.6.2 rev001\Viewpoint 4

Viewpoint 4: Footpath RD1, Blisworth Distance and direction from the nearest part of the site: 0.2 km S OS grid location: 473337, 253799 Extent of horizontal field of view: 160°

Figure 17.6.2



Figure 17.6.3

Proposed Development Area

Earth bunds located directly adjacent to the Grand Union Canal

Milton Malsor

Northampton Road employment site



\\WA_INTS2\Projects\660000 EA Main\660954 (M)\Rail Central\04_02_02_02_03\660954_04_02_03\Fig 17.6.3 rev00\Viewpoint 6

Viewpoint 6: Footpath KX16

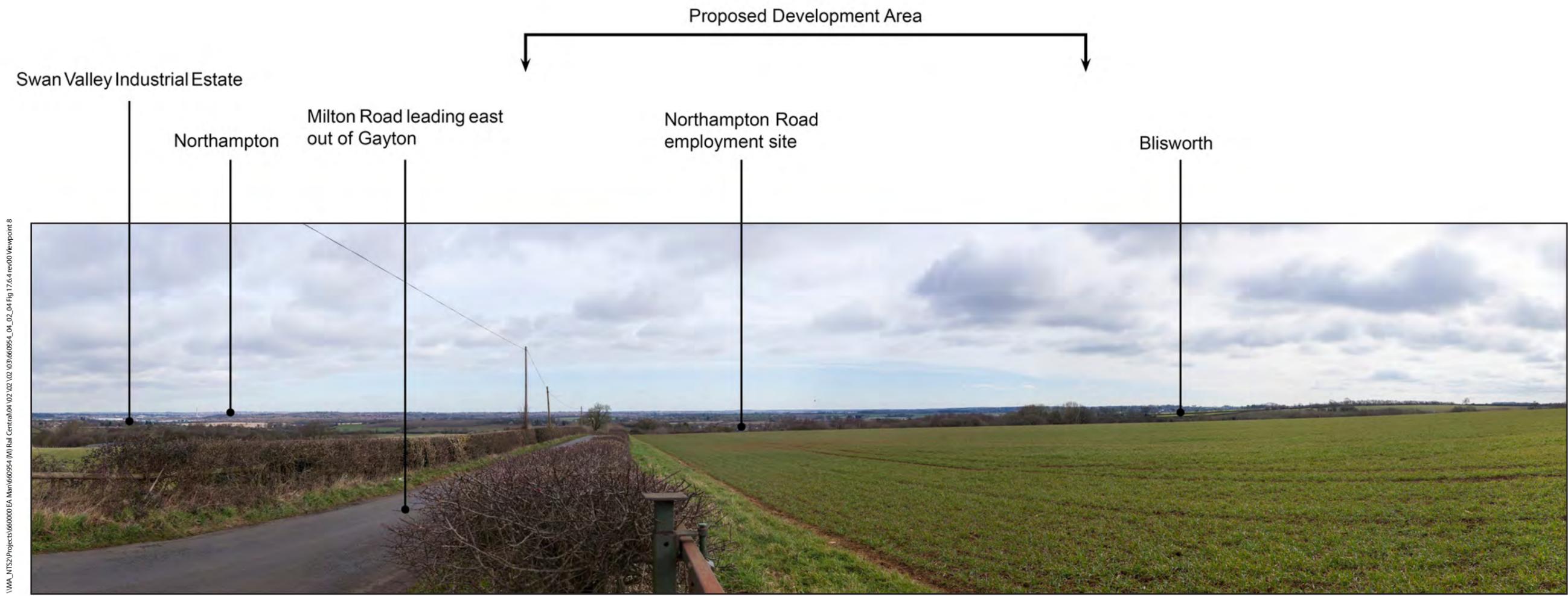
Distance and direction from the nearest part of the site: 0.0 km SW

OS grid location: 472078, 254768

Extent of horizontal field of view: 160°

Figure 17.6.3

Figure 17.6.4



\\WA_NT52\Projects\660000 EA Mem\660954 (M) Rail Central\04_02_02_03\660954_04_02_04\Fig 17.6.4 rev00 Viewpoint 8

Viewpoint 8: Milton Road, Gayton Distance and direction from the nearest part of the site: 1.0 km W OS grid location: 471041, 254909 Extent of horizontal field of view: 160°

Figure 17.6.5

Proposed Development Area



Grand Union Canal

A43 Road



\\WA_NT52\Projects\660000 EA Mem\660954 (M)\Rail Central\04_02_02_03\660954_04_02_05\Fig 17.6.5 re001 Viewpoint 12

Viewpoint 12: Grand Union Canal Towpath

Distance and direction from the nearest part of the site: 0.0 km SW

OS grid location: 471985, 254923

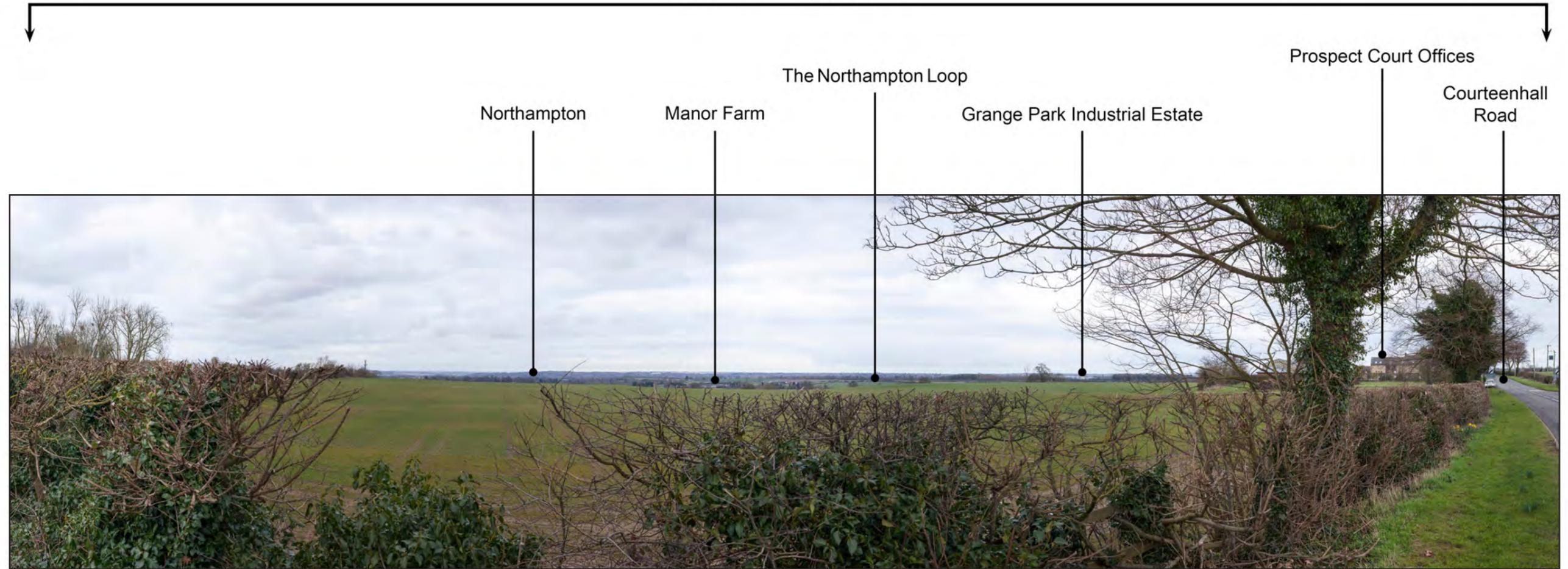
Extent of horizontal field of view: 160°

Figure 17.6.5



Figure 17.6.6

Proposed Development Area



\\WA_NT52\Projects\660000 EA_Mem\660954 (M)\Rail_Central\04_02_02_03\660954_04_02_06\Fig 17.6.e rev00 Viewpoint 13

Viewpoint 13: Courteenhall Road, Blisworth

Distance and direction from the nearest part of the site: 0.5 km S

OS grid location: 473352, 253466

Extent of horizontal field of view: 160°

Figure 17.6.6



Figure 18.1



NML 1 and WML 1:
Barn Lane, on Lodge Farm



NML 2 and WML 2:
Rectory Farm (Courteenhall Shooting School)



NML 3 and VML 1:
Courteenhall Road, on Courteenhall West Lodge Farm



NML 4:
Courteenhall Road, Blisworth



NML 5:
Northampton Road



NML 6:
Station Road, Blisworth



NML 7:
Arm Farm, Blisworth



NML 8:
Gayton Road, Milton Malsor

Figure 18.2

Central tendencies for location NML 1: Lodge Farm

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	52	43	71	51
Mean	53	46	71	53
Mean - 1 s.d.	48	42	-	-
Log Average	55	-	-	-

Table 1: Daytime period (07:00 to 19:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	49	45	58	52
Mean	51	47	64	52
Mean - 1 s.d.	47	43	-	-
Log Average	53	-	-	-

Table 2: Evening period (19:00 to 23:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	50	48	53	51
Mean	48	44	59	49
Mean - 1 s.d.	43	40	-	-
Log Average	51	-	-	-

Table 3: Night-time period (23:00 to 07:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	50	45	61	51
Mean	48	44	60	49
Mean - 1 s.d.	44	40	-	-
Log Average	49	-	-	-

Table 4: Sensitive (going to sleep) night-time period (23:00 to 01:00)

Central tendencies for location NML 5: Northampton Road

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	70	50	83	75
Mean	70	51	84	75
Mean - 1 s.d.	68	47	-	-
Log Average	71	-	-	-

Table 1: Daytime period (07:00 to 19:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	66	50/47	82	74
Mean	66	46	84	69
Mean - 1 s.d.	64	43	-	-
Log Average	67	-	-	-

Table 2: Evening period (19:00 to 23:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	60	41	81	49
Mean	58	43	79	55
Mean - 1 s.d.	52	37	-	-
Log Average	62	-	-	-

Table 3: Night-time period (23:00 to 07:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	62/63	41	81	63/62
Mean	60	42	81	57
Mean - 1 s.d.	56	38	-	-
Log Average	61	-	-	-

Table 4: Sensitive (going to sleep) night-time period (23:00 to 01:00)

Central tendencies for location NML 7: Arm Farm

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	67	63	73	69
Mean	66	62	73	68
Mean - 1 s.d.	63	59	-	-
Log Average	67	-	-	-

Table 1: Daytime period (07:00 to 19:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	64	59	71	67
Mean	63	57	71	66
Mean - 1 s.d.	61	53	-	-
Log Average	64	-	-	-

Table 2: Evening period (19:00 to 23:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	57	45	70	63
Mean	59	47	69	63
Mean - 1 s.d.	55	41	-	-
Log Average	60	-	-	-

Table 3: Night-time period (23:00 to 07:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)	L_{A10} (dB)
Modes	60	49	70	64
Mean	59	48	69	63
Mean - 1 s.d.	57	44	-	-
Log Average	59	-	-	-

Table 4: Sensitive (going to sleep) night-time period (23:00 to 01:00)

Central tendencies for location NML 8: Gayton Road

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)
Modes	62	53	80
Mean	63	53	81
Mean - 1 s.d.	61	49	-
Log Average	64	-	-

Table 1: Daytime period (07:00 to 19:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)
Modes	59	50	78
Mean	58	51	78
Mean - 1 s.d.	56	48	-
Log Average	59	-	-

Table 2: Evening period (19:00 to 23:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)
Modes	52	47	79
Mean	53	47	73
Mean - 1 s.d.	49	42	-
Log Average	55	-	-

Table 3: Night-time period (23:00 to 07:00)

Measure of central tendency	L_{Aeq} (dB)	L_{A90} (dB)	L_{AFMax} (dB)
Modes	55	47	78
Mean	54	46	75
Mean - 1 s.d.	51	43	-
Log Average	54	-	-

Table 4: Sensitive (going to sleep) night-time period (23:00 to 01:00)



More information

For further information please visit:
www.railcentral.com

You can also e-mail us via railcentral@camargue.uk
or telephone our information line (Monday to Friday,
9am to 5.30pm) on 0845 543 8967 (please note calls
are charged at local rates).

There is further information on the planning process
on the National Infrastructure Planning website at:
www.infrastructure.planninginspectorate.gov.uk

April 2016