

PHASE 1 HABITAT SURVEY REPORT



1.0 GENERAL DETAILS

Site Name	Harras Moor		
Job Number	5060.Eco.HarrasMoor	Doc. Ref	5060.Eco.HarrasMoor.007 V2
Site Location	Whitehaven, West Cumbria		
Date(s)	28/09/2017, 17/11/2017, 18/04/2018		
Surveyor(s)	Ian Holland (FISC Level 3), Phil Askew (FISC Level 3) and Lynsey Crellin (FISC Level 5)		
Survey Constraints	None, the survey was initially conducted during the recommended survey period for Phase 1 habitat surveys.		
Methods	JNCC Phase 1 habitat survey (2010)		
Drawing Ref:	G5060.Eco.HarrasMoorEcoandArb.004		
Target Notes:	Within this document		

	Written	Checked	Authorised
Initial	LAC	FBH	FBH

2.0 HABITAT SURVEY RESULTS:

Habitat Type	Protection / Status	Target Note(s)
Semi-natural broad-leaved woodland	Section 41	TN11
Description: Midgey Wood is a block of broadleaved semi-natural woodland adjacent to the western boundary of the site. This is designated as Ancient Woodland. A woodland NVC survey was carried out in April 2018 and is reported separately. This survey noted a number of ancient woodland indicator ground flora species, including native bluebell <i>Hyacinthoides non-scripta</i> and opposite-leaved golden saxifrage <i>Chrysosplenium oppositifolium</i> . The canopy is dominated by sycamore <i>Acer pseudoplatanus</i> with English oak <i>Quercus robur</i> .		
Habitat Type	Protection / Status	Target Note(s)
Plantation woodland	None	TN4
Description: Many of the fields have bands of mixed plantation woodland along their boundaries which act as shelter belts. Collectively, these woodlands form a valuable habitat network across the site and help link Midgey Wood to the wider landscape to the east. Species noted in this woodland include crack willow <i>Salix fragilis</i> , Pine species <i>Pinus</i> spp., hawthorn <i>Crataegus monogyna</i> , rowan <i>Sorbus aucuparia</i> , English oak <i>Quercus robur</i> , holly <i>Ilex aquifolium</i> , ash <i>Fraxinus excelsior</i> , hazel <i>Corylus avellana</i> , silver birch <i>Betula pendula</i> and sycamore <i>Acer pseudoplatanus</i> .		
Habitat Type	Protection / Status	Target Note(s)
Scattered Broadleaved Trees		TN17, 18
Description: Self-seeded young scattered trees are found in areas of unmanaged grassland, for example at TN17 and 18. The species found here are predominantly alder <i>Alnus glutinosa</i> , and willow <i>Salix</i> sp.		
Habitat Type	Protection / Status	Target Note(s)
Scrub	None	TN14, 17, 21, 20, 22
Description: Areas of dense scrub are found adjacent to the turning circle at the end of Caldbeck Road, around the margins of the former playing fields at TN14, and in the area of unmanaged marshy grassland at TN21. Scattered scrub is found across the site in unmanaged areas of grassland, for example at TN17, 20 and 22. The scrub is dominated by bramble <i>Rubus fruticosus</i> agg., but blackthorn <i>Prunus spinosa</i> , hawthorn, and willow species <i>Salix</i> sp. are also found frequently.		

Habitat Type	Protection / Status	Target Note(s)
Species-poor semi-improved neutral grassland	None	TN3, 8, 10, 13, 19
Description: The majority of the site is comprised of semi-improved grassland (SI), much of which is species-poor and heavily grazed by horses or sheep. These areas tend to be dominated by perennial ryegrass <i>Lolium perenne</i> , with a few other species including Yorkshire fog <i>Holcus lanatus</i> , Soft rush <i>Juncus effusus</i> and creeping buttercup <i>Ranunculus repens</i> . The field at TN8 slopes downwards to the west, and becomes more marshy towards the boundary at the bottom of the slope. It also becomes more diverse, with additional species such as oval sedge <i>Carex leporina</i> , crested dog's tail <i>Cynosurus cristatus</i> and blinks <i>Montia fontana</i> . <i>Galium aparine</i> , nettles and thistles <i>Cirsium</i> spp. Herb-Robert <i>Geranium robertianum</i> and Timothy were also present. This area does not appear to have been managed for some time and is becoming encroached by scrub.		
Habitat Type	Protection / Status	Target Note(s)

Habitat Type	Protection / Status	Target Note(s)
Species-poor modified neutral grassland ¹	None	TN2, 6, 14
Description: A small area in the centre of site (TN2) and a former playing field in the east (TN14) are composed of species poor modified neutral grassland. These areas appear to be unmanaged and are not currently grazed. TN2 is open to the public and is evidently well used by dog walkers. It is dominated by a few coarse grass species (cock's foot <i>Dactylis glomerata</i> and false-oat grass <i>Arrhenatherum elatius</i>), with some common forb species, such as creeping buttercup, creeping thistle <i>Cirsium arvense</i> and broadleaved dock <i>Rumex obtusifolius</i> . TN14 is a playing field which has fallen into disuse and is becoming encroached by scrub and tall ruderal herb around the margins. The ground is quite marshy and soft rush has colonised much of the field. The margins are more diverse than the centre and a species of orchid was noted here.		
Habitat Type	Protection / Status	Target Note(s)
Marshy Grassland	None	TN7, 15, 17, 18, 20, 24
Description: The land generally is very wet, and areas of marshy grassland dominated by soft rush are found frequently across the site. Tufted hair grass <i>Deschampsia caespitosa</i> is also common in these areas. These areas of grassland are most diverse where they are not grazed. Species recorded in the less disturbed areas (TN7, 15, 17, 18, 20, 24) include orchid species, hard rush <i>Juncus inflexus</i> , compact rush <i>Juncus conglomeratus</i> , hemp agrimony <i>Agrimonia eupatoria</i> , wild angelica <i>Angelica sylvestris</i> , knapweed <i>Centaurea nigra</i> and sedge species <i>Carex</i> sp. The band of marshy grassland at TN21, which separates a horse-grazed field from the existing housing estate is heavily used by dog walkers and contains a number of ornamental species, which are likely to have either been fly-tipped or escaped from adjacent gardens. Despite the heavily disturbed nature and relatively small size of this habitat, it supports a surprisingly diverse flora, including orchid species, and occasional clumps of heather, which are a possible relict from when the land was a heath. A small unmanaged area at TN20 is a mosaic of marshy grassland, swamp, tall ruderal herb and modified neutral grassland, with scattered trees and scrub. Tufted hair-grass <i>Deschampsia caespitosa</i> , great willowherb <i>Epilobium hirsutum</i> and soft rush were frequent here, with occasional reed canary-grass <i>Phalaris arundinacea</i> . Introduced species such as yellow looserife <i>Lysimachia vulgaris</i> and montbretia <i>Crocasmia x crocosmiiflora</i> .		
Habitat Type	Protection / Status	Target Note(s)
Marshy Grassland	None	TN7, 15, 17, 18, 20, 24
Description: A large patch of continuous bracken <i>Pteridium aquilinum</i> is found adjacent to the turning circle at the end of Caldbeck Road. Bracken is also found scattered occasionally throughout other habitats across the site.		
Habitat Type	Protection / Status	Target Note(s)
Tall ruderal herb	None	TN2, 6, 14, 20

¹ The neutral grassland categories detailed within the Phase 1 Habitat Survey Handbook are concentrated on grassland associated with rural situations (pastures and meadows), as such it was agreed with JNCC in 2005 (P. Gateley, pers. comm.) that neutral grassland habitats that don't easily fit within these categories, usually within urban or industrial areas, can be referred to as modified neutral grassland –

'Modified neutral grassland is not derived from agricultural grassland and the terms semi-improved and improved do not apply. Some modified neutral grassland may be species-rich but many swards are dense, coarse and species-poor. Modified neutral grassland naturally regenerates on disturbed ground and is unmanaged. It most commonly occurs in urban areas and on post-industrial land'.

Habitat Type	Protection / Status	Target Note(s)
Description: Tall ruderal herb is found as a mosaic with other habitats in unmanaged areas of the site, such as at TN2, 6, 20, and the margins of TN14. There is also a large patch of tall ruderal herb dominated by rosebay willowherb at the edge of the former playing fields.		

Habitat Type	Protection / Status	Target Note(s)
Standing water	Section 41	TN9, 18, 21, 22
Description: Although there are no permanent ponds on site, partially wet ditches are found in the west of the site at TN18, and small areas of shallow water are found at TN9, 21 and 22. These features do not appear to permanently hold water, and do not contain a diverse flora.		

Habitat Type	Protection / Status	Target Note(s)
Species-poor hedge	Section 41	TN6, 11, 12, 16
Description: There is an old defunct hedgerow along the northern border of the site (TN12) that is dominated by hawthorn <i>Crataegus monogyna</i> . There is a wall/bank along the base of the hedgerow, upon which species such as broad buckler fern <i>Dryopteris dilatata</i> and foxglove <i>Digitalis purpurea</i> were growing. Defunct hawthorn dominated hedgerows are also found along the boundary between the site and Midgey Wood (TN11), in the corner of the field at TN6, and along the boundary of the former playing field at TN16. A hedgerow assessment was carried out on 17th April 2018. No hedgerows were found to be species rich, or 'Important' under the ecology criteria of the Hedgerow Regulations (1997).		
Habitat Type	Protection / Status	Target Note(s)
Walls	None	TN10, 12, 16
Description: Stone walls define some of the boundaries on site, including the boundary along Harras Road, and the western boundary of the field at TN10. There are also banks reinforced with stone along the hedgerows at TN12 and TN16. Rabbit burrows were noted in these areas.		
Habitat Type	Protection / Status	Target Note(s)
Arable	None	N/A
Description: Caldbeck Road runs through the centre of the site. This area has no ecological value.		

3.0 ADDITIONAL NOTES:

Non-native invasive species (Wildlife and Countryside Act Schedule 9) are present within the survey area.

A species of cotoneaster was recorded on the site boundary in Midgey Wood. Due to the time of year it was not possible to establish the exact species because of a lack of identifying features. Many cotoneaster species are listed under Schedule 9 species of the Wildlife and Countryside Act. Therefore we would recommend that a precautionary approach should be taken and this should be treated as a Schedule 9 invasive species.

The Schedule 9 non-native species montbretia and Himalayan balsam *Impatiens glandulifera* were

recorded in areas around the site. See habitat survey drawing for locations.

Rhododendron *Rhododendron ponticum* dominates the understorey of Midgey Wood in places. This rhododendron is also a non-native species listed on Schedule 9 of the Wildlife and Countryside Act.

Native bluebell *Hyacinthoides non-scripta* was noted in Midgey Wood. No other protected (Schedule 8 of the Wildlife and Countryside Act 1981, as amended) plant species were noted during the survey.

4.0 PHOTOGRAPHIC RECORD:

	
<p>Area of marshy grassland with <i>Calluna vulgaris</i> (TN21 and TN22)</p>	<p>Species poor semi-improved grassland (TN3)</p>
	
<p>Band of mixed plantation woodland (TN4)</p>	<p>Unmanaged modified neutral grassland field (TN19)</p>
	
<p>Defunct hedgerow (TN6)</p>	<p>Unmanaged, tussocky grassland and stone wall (TN6)</p>

Harras Moor Phase 1 Habitat Survey – Target Notes

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare (within the target note area).

Target Note 1

Patch of dense scrub at edge of turning circle.

<i>Rubus fruticosus</i> agg.	Bramble	D
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Crocsmia x crocosmiiflora</i>	Montbretia	R

Target Note 2

Area of unmanged tussocky, modified neutral grassland and tall ruderal herb mosaic.

<i>Dactylis glomerata</i>	Cock's-foot	A
<i>Arrhenatherum elatius</i>	False Oat-grass	F
<i>Cirsium arvense</i>	Creeping Thistle	F
<i>Lolium perenne</i>	Perennial Ryegrass	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Rumex obtusifolius</i>	Broad-leaved Dock	F
<i>Urtica dioica</i>	Nettle	F
<i>Festuca rubra</i>	Red Fescue	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Taraxacum officinale</i> agg.	Dandelion	O
<i>Cerastium fontanum</i>	Common Mouse-ear	R
<i>Epilobium hirsutum</i>	Great Willowherb	R
<i>Juncus effusus</i>	Soft Rush	R
<i>Plantago major</i>	Greater Plantain	R
<i>Pteridium aquilinum</i>	Bracken	R
<i>Rumex acetosa</i>	Common Sorrel	R

Target Note 3

Species-poor heavily grazed semi improved neutral grassland with marshy tendencies. Mostly very short sward, apart from the marshiest areas.

<i>Lolium perenne</i>	Perennial Ryegrass	D
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Juncus effusus</i>	Soft Rush	O
<i>Cynosurus cristatus</i>	Crested Dog's-tail	R
<i>Festuca rubra</i>	Red Fescue	R
<i>Holcus lanatus</i>	Yorkshire-fog	R
<i>Ranunculus acris</i>	Meadow Buttercup	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R
<i>Urtica dioica</i>	Nettle	R

Target Note 4

Shelter-belt planting of semi-mature mixed plantation woodland. Dense, scrubby understorey in places. Shelter belt along northern boundary of north-central semi-improved grassland field open and grazed by livestock - heavily impoverished ground flora (species poor semi-improved grassland).

<i>Fraxinus excelsior</i>	Ash	D
<i>Rubus fruticosus</i> agg.	Bramble	A
<i>Dryopteris dilatata</i>	Broad Buckler-fern	F
<i>Prunus spinosa</i>	Blackthorn	F
<i>Alnus glutinosa</i>	Alder	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Pinus sylvestris</i>	Scots Pine	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Salix fragilis</i>	Crack Willow	O

<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Hypericum androsaemum</i>	Tutsan	R
<i>Rosa canina</i> agg.	Dog Rose	R
<i>Silene dioica</i>	Red Campion	R
<i>Sorbus aucuparia</i>	Rowan	R
<i>Sorbus intermedia</i>	Swedish Whitebeam	R

Target Note 5

Marshy grassland in wetter area of semi-improved grassland field.

<i>Juncus effusus</i>	Soft Rush	D
<i>Ranunculus repens</i>	Creeping Buttercup	A
<i>Montia fontana</i>	Blinks	O
<i>Angelica sylvestris</i>	Wild Angelica	R
<i>Cardamine pratensis</i>	Cuckooflower	R
<i>Cirsium palustre</i>	Marsh Thistle	R
<i>Rumex acetosa</i>	Common Sorrel	R

Target Note 6

Tussocky, unmanaged area of modified neutral grassland. Very uneven ground, many hollows and bunds, does not appear to have been grazed. Similar species mix to TN2, plus an orchid species and yarrow.

Reptile potential.

Heavily defunct, remnant hawthorn hedge in the corner of the field.

Target Note 7

Marshy grassland with numerous small mammal runs and latrines.

<i>Juncus effusus</i>	Soft Rush	D
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	F
<i>Agrostis stolonifera</i>	Creeping Bent	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Rumex acetosa</i>	Common Sorrel	O

Target Note 8

Species-poor semi-improved grazed field, marshy tendencies.

<i>Lolium perenne</i>	Perennial Ryegrass	D
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Juncus effusus</i>	Soft Rush	O
<i>Cerastium fontanum</i>	Common Mouse-ear	R
<i>Glyceria fluitans</i>	Floating Sweet-grass	R
<i>Holcus lanatus</i>	Yorkshire-fog	R
<i>Poa annua</i>	Annual Meadow-grass	R
<i>Ranunculus acris</i>	Meadow Buttercup	R
<i>Trifolium repens</i>	White Clover	R

Target Note 9

Eutrophic wet flush, with areas of open, scummy water.

<i>Glyceria fluitans</i>	Floating Sweet-grass	D
<i>Ranunculus hederaceus</i>	Ivy-leaved Crowfoot	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Poa annua</i>	Annual Meadow-grass	O
<i>Veronica beccabunga</i>	Brooklime	O
<i>Callitriche</i> sp.	Water Starwort species	R

Target Note 10

TN8 becomes marshier further down the slope, with more soft rush and slightly higher

speciesdiversity.

<i>Lolium perenne</i>	Perennial Ryegrass	A
<i>Juncus effusus</i>	Soft Rush	F
<i>Alopecurus geniculatus</i>	Marsh Foxtail	O
<i>Cynosurus cristatus</i>	Crested Dog's-tail	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Glyceria fluitans</i>	Floating Sweet-grass	O
<i>Montia fontana</i>	Blinks	O
<i>Poa annua</i>	Annual Meadow-grass	O
<i>Trifolium repens</i>	White Clover	O
<i>Carex leporina</i>	Oval Sedge	R
<i>Holcus lanatus</i>	Yorkshire-fog	R

Target Note 11

Midgey Wood - viewed from boundary as no access. Trees appear mature but stunted, likely due to exposed conditions. Stone wall/bank along margin, with remnant hedge along and mostly dry ditches either side. Understorey appears diverse, even out of season.

<i>Fraxinus excelsior</i>	Ash	D
<i>Dryopteris dilatata</i>	Broad Buckler-fern	F
<i>Hedera helix</i>	Ivy	F
<i>Rhododendron ponticum</i>	Rhododendron	F
<i>Alnus glutinosa</i>	Alder	O
<i>Ilex aquifolium</i>	Holly	O
<i>Lonicera periclymenum</i>	Honeysuckle	O
<i>Oxalis acetosella</i>	Wood Sorrel	O
<i>Quercus robur</i>	English Oak	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Salix species</i>	Willow species	O
<i>Silene dioica</i>	Red Campion	O
<i>Angelica sylvestris</i>	Wild Angelica	R
<i>Digitalis purpurea</i>	Foxglove	R
<i>Malus sylvestris</i>	Crab-apple	R
<i>Peltigera canina</i>	Dog Lichen	R
<i>Ulex europaeus</i>	Gorse	R

Target Note 12

Old defunct hedge along wall/bank. Numerous rabbit holes

<i>Crataegus monogyna</i>	Hawthorn	D
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Silene dioica</i>	Red Campion	O
<i>Digitalis purpurea</i>	Foxglove	R
<i>Dryopteris filix-mas</i>	Male-fern	R
<i>Ilex aquifolium</i>	Holly	R
<i>Quercus robur</i>	English Oak	R

Target Note 13

Tussocky, unmanaged semi-improved grassland.

<i>Holcus lanatus</i>	Yorkshire-fog	D
<i>Agrostis stolonifera</i>	Creeping Bent	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Cynosurus cristatus</i>	Crested Dog's-tail	O
<i>Lolium perenne</i>	Perennial Ryegrass	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Dactylis glomerata</i>	Cock's-foot	R

Target Note 14

Former playing fields. Now unmanaged modified neutral grassland. Margins are more diverse, and the grassland here has developed into a mosaic with bramble and tall ruderal herb. The field is very wet underfoot in places.

<i>Holcus lanatus</i>	Yorkshire-fog	D
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Agrostis stolonifera</i>	Creeping Bent	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Rumex acetosa</i>	Common Sorrel	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Senecio jacobaea</i>	Common Ragwort	O
<i>Tussilago farfara</i>	Colt's-foot	O
<i>Alnus glutinosa</i>	Alder	R
<i>Centaurea nigra</i>	Knapweed	R
<i>Dactylis glomerata</i>	Cock's-foot	R
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R
<i>Ranunculus acris</i>	Meadow Buttercup	R
<i>Silene dioica</i>	Red Campion	R

Target Note 15

Small area of marshy grassland encroached by scrub.

<i>Deschampsia cespitosa</i>	Tufted Hair-grass	D
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Juncus inflexus</i>	Hard Rush	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Silene dioica</i>	Red Campion	R
<i>Cirsium arvense</i>	Creeping Thistle	
<i>Rumex acetosa</i>	Common Sorrel	

Target Note 16

Old, defunct hedgerow on wall/bank.

<i>Crataegus monogyna</i>	Hawthorn	D
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Epilobium sp.</i>	Willowherb species	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Sambucus nigra</i>	Elder	O
<i>Digitalis purpurea</i>	Foxglove	R
<i>Silene dioica</i>	Red Campion	R

Target Note 17

Marshy grassland, modified neutral grassland, scrub and trees mosaic.

<i>Juncus effusus</i>	Soft Rush	D
<i>Festuca rubra</i>	Red Fescue	A
<i>Holcus lanatus</i>	Yorkshire-fog	A
<i>Agrostis stolonifera</i>	Creeping Bent	F
<i>Epilobium hirsutum</i>	Great Willowherb	F
<i>Alnus glutinosa</i>	Alder	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Centaurea nigra</i>	Knapweed	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Dactylis glomerata</i>	Cock's-foot	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Fraxinus excelsior</i>	Ash	O

<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Moss sp.</i>	Moss species	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Rumex acetosa</i>	Common Sorrel	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Tussilago farfara</i>	Colt's-foot	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R
<i>Crataegus monogyna</i>	Hawthorn	R
<i>Dryopteris filix-mas</i>	Male-fern	R
<i>Eupatorium cannabinum</i>	Hemp-agrimony	R
<i>Geranium robertianum</i>	Herb-Robert	R
<i>Heracleum sphondylium</i>	Hogweed	R
<i>Lolium perenne</i>	Perennial Ryegrass	R
<i>Plantago major</i>	Greater Plantain	R
<i>Potentilla reptans</i>	Creeping Cinquefoil	R
<i>Prunella vulgaris</i>	Selfheal	R
<i>Salix species</i>	Willow species	R
<i>Silene latifolia</i>	White Campion	R
<i>Trifolium pratense</i>	Red Clover	R

Target Note 18

Marshy grassland in fenced-off, unmanaged section of field, occasional scattered alder. Mosaic with modified neutral grassland.

<i>Juncus effusus</i>	Soft Rush	D
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Agrostis stolonifera</i>	Creeping Bent	O
<i>Alnus glutinosa</i>	Alder	O
<i>Angelica sylvestris</i>	Wild Angelica	O
<i>Cirsium palustre</i>	Marsh Thistle	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Dryopteris filix-mas</i>	Male-fern	O
<i>Galium aparine</i>	Cleavers	O
<i>Phleum pratense</i>	Timothy	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Salix species</i>	Willow species	O
<i>Urtica dioica</i>	Nettle	O
<i>Centaurea nigra</i>	Knapweed	R
<i>Cirsium arvense</i>	Creeping Thistle	R
<i>Equisetum sp.</i>	Horsetail species	R
<i>Fraxinus excelsior</i>	Ash	R
<i>Juncus conglomeratus</i>	Compact Rush	R
<i>Plantago lanceolata</i>	Ribwort Plantain	R
<i>Rubus fruticosus agg.</i>	Bramble	R
<i>Rumex acetosa</i>	Common Sorrel	R

Target Note 19

Unmanaged tussocky grassland with scattered trees and scrub. Some marshy areas.

<i>Holcus lanatus</i>	Yorkshire-fog	D
<i>Ranunculus repens</i>	Creeping Buttercup	A
<i>Rumex obtusifolius</i>	Broad-leaved Dock	A
<i>Juncus effusus</i>	Soft Rush	F
<i>Phleum pratense</i>	Timothy	F
<i>Agrostis stolonifera</i>	Creeping Bent	O
<i>Alnus glutinosa</i>	Alder	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Ranunculus acris</i>	Meadow Buttercup	O

<i>Carex hirta</i>	Hairy Sedge	R
<i>Centaurea nigra</i>	Knapweed	R
<i>Cerastium fontanum</i>	Common Mouse-ear	R
<i>Crataegus monogyna</i>	Hawthorn	R
<i>Crocoshmia x crocosmiiflora</i>	Montbretia	R
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R
<i>Equisetum arvense</i>	Field Horsetail	R
<i>Heracleum sphondylium</i>	Hogweed	R
<i>Iris pseudacorus</i>	Yellow Flag Iris	R
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	R
<i>Phalaris arundinacea</i>	Reed Canary-grass	R
<i>Rubus fruticosus</i> agg.	Bramble	R
<i>Rumex acetosa</i>	Common Sorrel	R
<i>Urtica dioica</i>	Nettle	R
<i>Vicia cracca</i>	Tufted Vetch	R

Target Note 20

Field of swamp/marshy grassland, modified neutral grassland and tall ruderal herb.

<i>Deschampsia cespitosa</i>	Tufted Hair-grass	F
<i>Elytrigia repens</i>	Common Couch	F
<i>Epilobium hirsutum</i>	Great Willowherb	F
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Juncus effusus</i>	Soft Rush	F
<i>Agrostis stolonifera</i>	Creeping Bent	O
<i>Centaurea nigra</i>	Knapweed	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Crocoshmia x crocosmiiflora</i>	Montbretia	O
<i>Equisetum arvense</i>	Field Horsetail	O
<i>Juncus inflexus</i>	Hard Rush	O
<i>Phalaris arundinacea</i>	Reed Canary-grass	O
<i>Phleum pratense</i>	Timothy	O
<i>Potentilla anserina</i>	Silverweed	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rubus fruticosus</i> agg.	Bramble	O
<i>Rumex acetosa</i>	Common Sorrel	O
<i>Urtica dioica</i>	Nettle	O
<i>Alnus glutinosa</i>	Alder	R
<i>Carex hirta</i>	Hairy Sedge	R
<i>Dactylis glomerata</i>	Cock's-foot	R
<i>Lolium perenne</i>	Perennial Ryegrass	R
<i>Lysimachia vulgaris</i>	Yellow Loosestrife	R
<i>Rumex crispus</i>	Curled Dock	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R
<i>Salix caprea</i>	Goat Willow	R

Target Note 21

Band of marshy grassland and swamp mosaic between housing estate and heavily grazed horse field. This area is obviously well-used by dog walkers, and there are occasional stands of ornamental species which have either been fly-tipped or escaped from the gardens which back onto the land.

<i>Juncus effusus</i>	Soft Rush	D
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	F
<i>Elytrigia repens</i>	Common Couch	F
<i>Festuca rubra</i>	Red Fescue	F
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Lysimachia vulgaris</i>	Yellow Loosestrife	F
<i>Phalaris arundinacea</i>	Reed Canary-grass	F
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Crocoshmia x crocosmiiflora</i>	Montbretia	O
<i>Cynosurus cristatus</i>	Crested Dog's-tail	O
<i>Epilobium hirsutum</i>	Great Willowherb	O

<i>Moss sp.</i>	Moss species	O
<i>Phleum pratense</i>	Timothy	O
<i>Phragmites australis</i>	Reed	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Senecio jacobaea</i>	Common Ragwort	O
<i>Angelica sylvestris</i>	Wild Angelica	R
<i>Calluna vulgaris</i>	Heather	R
<i>Carex sp.</i>	Sedge species	R
<i>Odontites verna</i>	Red Bartsia	R
<i>Salix cinerea</i>	Grey Willow	R

Target Note 22

Small (approx. 10x20m) damp area with heather (7 clumps) and very small area of standing water (<1x1m).

<i>Juncus effusus</i>	Soft Rush	D
<i>Agrostis stolonifera</i>	Creeping Bent	F
<i>Carex flacca</i>	Glaucous Sedge	F
<i>Festuca rubra</i>	Red Fescue	F
<i>Moss sp.</i>	Moss species	F
<i>Calluna vulgaris</i>	Heather	O
<i>Carex leporina</i>	Oval Sedge	O
<i>Hypochaeris radicata</i>	Common Cat's-ear	O
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Prunella vulgaris</i>	Selfheal	O
<i>Centaurea nigra</i>	Knapweed	R
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R
<i>Polytrichum sp.</i>	Moss species	R
<i>Potentilla reptans</i>	Creeping Cinquefoil	R
<i>Rumex crispus</i>	Curled Dock	R
<i>Trifolium pratense</i>	Red Clover	R

Target Note 23

Patch of dense scrub and scattered trees.

<i>Prunus spinosa</i>	Blackthorn	A
<i>Rubus fruticosus agg.</i>	Bramble	A
<i>Alnus glutinosa</i>	Alder	F
<i>Salix species</i>	Willow species	F
<i>Crataegus monogyna</i>	Hawthorn	O

Target Note 24

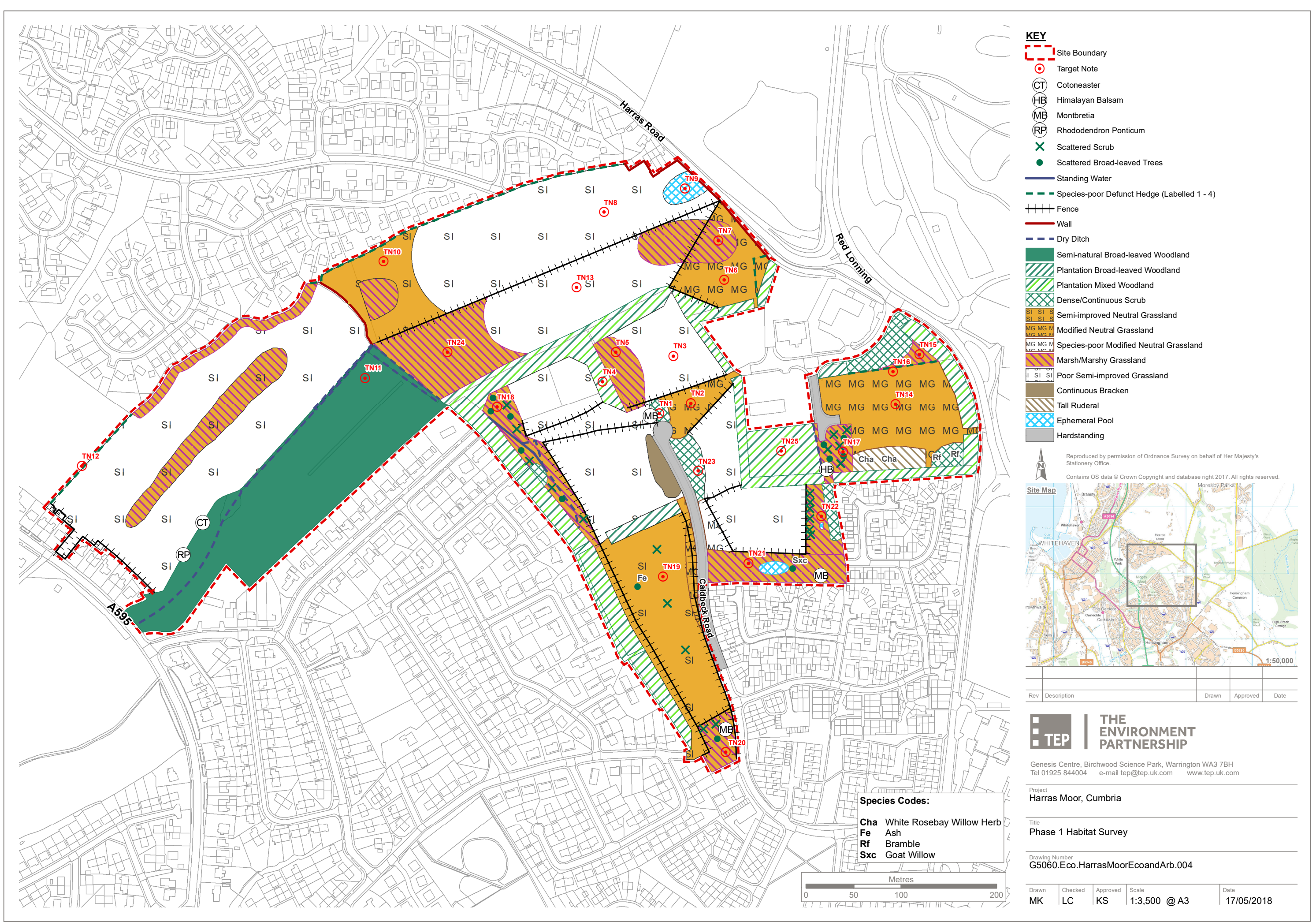
Marshy grassland in unmanaged field.

<i>Juncus effusus</i>	Soft Rush	D
<i>Agrostis stolonifera</i>	Creeping Bent	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Angelica sylvestris</i>	Wild Angelica	O
<i>Cirsium palustre</i>	Marsh Thistle	O
<i>Cynosurus cristatus</i>	Crested Dog's-tail	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Glyceria fluitans</i>	Floating Sweet-grass	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Montia fontana</i>	Blinks	O
<i>Epilobium palustre</i>	Marsh Willowherb	R
<i>Senecio aquaticus</i>	Marsh Ragwort	R

Target Note 25

Area of woodland shown on Magic Map as Section 41 priority deciduous woodland, but does not appear significantly different from woodland in the rest of the site. Contains a number of ornamental species.

<i>Ulmus glabra</i>	Wych Elm	A
<i>Prunus spinosa</i>	Blackthorn	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Dryopteris filix-mas</i>	Male-fern	O
<i>Fagus sylvatica</i>	Beech	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Pinus sylvestris</i>	Scots Pine	O



KEY

- Site Boundary
- Target Note
- Cotoneaster
- Himalayan Balsam
- Montbretia
- Rhododendron Ponticum
- Scattered Scrub
- Scattered Broad-leaved Trees
- Standing Water
- Species-poor Defunct Hedge (Labelled 1 - 4)
- Fence
- Wall
- Dry Ditch
- Semi-natural Broad-leaved Woodland
- Plantation Broad-leaved Woodland
- Plantation Mixed Woodland
- Dense/Continuous Scrub
- Semi-improved Neutral Grassland
- Modified Neutral Grassland
- Species-poor Modified Neutral Grassland
- Marsh/Marshy Grassland
- Poor Semi-improved Grassland
- Continuous Bracken
- Tall Ruderal
- Ephemeral Pool
- Hardstanding

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Site Map

Rev	Description	Drawn	Approved	Date

THE ENVIRONMENT PARTNERSHIP

Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
Harras Moor, Cumbria

Title
Phase 1 Habitat Survey

Drawing Number
G5060.Eco.HarrasMoorEcoandArb.004

Drawn	Checked	Approved	Scale	Date
MK	LC	KS	1:3,500 @ A3	17/05/2018

Species Codes:
Cha White Rosebay Willow Herb
Fe Ash
Rf Bramble
Sxc Goat Willow