

Hornsea Project Four: Environmental Statement (ES)

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Volume A6, Annex 3.2: Extended Phase 1 Target Note Tables

PreparedRoyal HaskoningDHV, July 2021CheckedAnt Sahota, Orsted, July 2021AcceptedThomas Watts, Orsted, August 2021ApprovedJulian Carolan, Orsted, September 2021

A6.3.2 Version B





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Glossary

Term	Definition		
Birds of Conservation	The 'red list' includes birds of the highest conservation concern in the UK,		
Concern (BoCC) 'Red List'	Channel Islands and Isle of Man needing urgent action.		
Commitment	A term used interchangeably with mitigation and enhancement measures.		
	The purpose of Commitments is to reduce and/or eliminate Likely Significant		
	Effects (LSEs), in EIA terms.		
	Primary (Design) or Tertiary (Inherent) are both embedded within the		
	assessment at the relevant point in the EIA (e.g. at Scoping, Preliminary		
	Environmental Information Report (PEIR) or ES).		
	Secondary commitments are incorporated to reduce LSE to environmentally		
	acceptable levels following initial assessment i.e. so that residual effects are		
	acceptable.		
Development Consent	An order made under the Planning Act 2008 granting development consent		
Order (DCO)	for one or more National Significant Infrastructure Projects (NSIP).		
Energy balancing	The onshore substation includes energy balancing Infrastructure. These		
infrastructure (EBI)	provide valuable services to the electrical grid, such as storing energy to		
	meet periods of peak demand and improving overall reliability.		
Environmental Statement	A document reporting the findings of the EIA and produced in accordance		
(ES)	with the EIA Directive as transposed into UK law by the EIA Regulations		
Export Cable Corridor (ECC)	The specific corridor of seabed (seaward of Mean High-Water Springs		
	(MHWS)) and land (landward of MHWS) from the Hornsea Project Four array		
	area to the Creyke Beck National Grid substation, within which the export		
	cables will be located.		
Hornsea Project Four	The term covers all elements of the project (i.e. both the offshore and		
Offshore Wind Farm	onshore). Hornsea Four infrastructure will include offshore generating		
	stations (wind turbines), electrical export cables to landfall, and connection		
	to the electricity transmission network. Hereafter referred to as Hornsea		
	Four.		



Term	Definition
Hornsea Project Four Offshore Wind Farm	The term covers all elements of the project (i.e. both the offshore and onshore). Hornsea Four infrastructure will include offshore generating stations (wind turbines), electrical export cables to landfall, and connection to the electricity transmission network. Hereafter referred to as Hornsea Four.
High Voltage Alternating Current (HVAC)	High voltage alternating current is the bulk transmission of electricity by alternating current (AC), whereby the flow of electric charge periodically reverses direction.
Landfall	The generic term applied to the entire landfall area between Mean Low Water Spring (MLWS) tide and the Transition Joint Bay (TJB) inclusive of all construction works, including the offshore and onshore ECC, intertidal working area and landfall compound. Where the offshore cables come ashore east of Fraisthorpe.
National Grid Electricity Transmission (NGET) substation	The grid connection location for Hornsea Four at Creyke Beck.
Onshore substation (OnSS)	Comprises a compound containing the electrical components for transforming the power supplied from Hornsea Project Four to 400 kV and to adjust the power quality and power factor, as required to meet the UK Grid Code for supply to the National Grid. If a HVDC system is used the OnSS will also house equipment to convert the power from HVDC to HVAC.
Order Limits	The limits within which Hornsea Project Four (the 'authorised project') may be carried out.
Orsted Hornsea Project Four Ltd.	The Applicant for the proposed Hornsea Project Four Offshore Wind Farm Development Consent Order (DCO).
Potential Roost Feature (PRF)	Potential bat roosts which can include visible cracks, holes, gaps or splits that allow access for roosting bats.

Acronyms

Acronym	Definition	
EP1HS	Extended Phase 1 Habitat Survey	
HVAC	High Voltage Direct Current	
HVDC	High Voltage Alternating Current	
JNCC	Joint Nature Conservation Committee	
MLWS	Mean Low Water Springs	
OnSS	Onshore Substation	
OS	Ordnance Survey	
PRF	Potential Roost Feature	
PRoW	Public Right of Way	
RSPB	Royal Society for the Protection of Birds	
TN	Target Note	





Units

Unit	Definition
ha	hectare
km	kilometre
kV	kilovolt
m	metre



1 Introduction

- 1.1.1.1 Orsted Hornsea Project Four Limited (the 'Applicant') is proposing to develop the Hornsea Project Four Offshore Wind Farm (hereafter 'Hornsea Four'). Hornsea Four will be located approximately 69 km offshore the East Riding of Yorkshire in the Southern North Sea and will be the fourth project to be developed in the former Hornsea Zone. Hornsea Four will include both offshore and onshore infrastructure including an offshore generating station (wind farm), export cables to landfall, and on to an onshore substation (OnSS) with energy balancing infrastructure (EBI), and connection to the electricity transmission network.
- 1.1.1.2 Royal HaskoningDHV was commissioned to undertake an updated Extended Phase 1 Habitat Survey (EP1HS) within and up to 50 m from the onshore Hornsea Four Order Limits. To inform the Scoping stages of the project, an initial habitat assessment was conducted, comprising a desktop review of high-resolution aerial imagery obtained in July 2018, followed by a ground-truthing exercise. This is reported in the Hornsea Four Scoping Report (Orsted 2018).
- 1.1.1.3 This technical annex has been produced to update the habitat information following the scoping stage survey and to characterise the baseline environment and identify the requirement for Phase 2 species-specific surveys to inform and support the ecological impact assessment in Volume A3, Chapter 3: Ecology and Nature Conservation of the Hornsea Four Environmental Statement (ES).
- 1.1.1.4 Due to the amount of data collated during the Hornsea Four EP1HS, this technical report has been split into two parts:
 - Annex 3.1: Extended Phase 1 Habitat Survey Report outlines the methodology, survey results, conclusions and mitigation; and
 - Annex 3.2: Extended Phase 1 Target Note Tables (this document) presents the target notes table.
- 1.1.1.5 Consequently, Table 1 below should be read in conjunction with Annex 3.1: Extended Phase 1 Habitat Survey Report as well as Figure 12 to Figure 42 within the aforementioned report. The 'ditch' and 'hedge' numbers in Table 1 are not identified on the figures in Annex 3.1 but instead has be found in the relevant Phase 2 technical annexes (Annex 3.3 to Annex 3.15).
- 1.1.1.6 As a result of the failure (and corruption) of one of the memory cards used to store photographs taken during the survey, a number of photographs were corrupted beyond recovery and as such are labelled as 'no photograph available' within **Table 1**. Should the stakeholders request additional photographs these can be obtained during the preconstruction surveys. All photographs were taken with an iPad 8-megapixel camera (*f*/2.4 aperture).
- 1.1.1.7 Ongoing consultation with landowners has been undertaken by The Applicant's land agents since 2019 and consequently access to the remaining 5 % unsurveyed in 2019 was granted





in 2021. The findings from this survey are provided in Appendix A of Annex 3.1: Extended Phase 1 Habitat Survey Report and Appendix A of this document.



Table 1: 2019 Hornsea Four Updated EP1HS Target Notes (TNs).

Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TNOOL	Sand martin nests in cliff face, known to use entire length of coastline.	N: 461455.60 E: 516926.72	
TN002	Species poor hedge with trees (JNCC: J2.3.2) consisting of hawthorn <i>Crataegus monogyna</i> and alder <i>Alnus glutinosa</i> . Low suitability for commuting and foraging bats. Hedge_H001	N: 461132.71 E: 516687.90	
TN003	Mostly dry watercourse with patches of standing water. Common reed Phragmites australis, nettle Urtica dioica, bramble Rubus fruticosus, common hogweed Heracleum sphondylium, reed canary grass Phalaris arundinacea L. Ditch_B02	N: 461098.75 E: 516493.15	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN004	 Wide watercourse with steep, overgrown banks. Arable fields on both sides. Vegetation including bramble, nettle, broad leaf dock <i>Rumex obtusifolius</i>, common hogweed and perennial rye grass <i>Lolium perenne</i>. Ditch_B01 	N: 461408.22 E: 516452.90	
ΤΝΟΟ5	Species poor defunct hedge (JNCC: J2.2.2) consisting of hawthorn, elder <i>Sambucus nigra</i> , bramble, thistle <i>Cirsium</i> <i>vulgare</i> . Fenced. Lower sections consist of scrub species. Moderate suitability for commuting and foraging bats. Hedge_H002	N: 461162.66 E: 516260.21	
TN006	Small, open barn with barn owl nest boxes. Managed by the Royal Society for the Protection of Birds RSPB. Barn owl observed on multiple occasions during the water vole and bat surveys. Negligible suitability for roosting bats.	N: 461098.24 E: 515931.51	
TN007	Species poor defunct hedge (JNCC: J2.2.2) consisting of hawthorn and elder.	N: 461009.23 E: 516214.82	
	Negligible suitability for commuting and foraging bats. Hedge_H003		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN008	 Broadleaved plantation woodland (JNCC: A1.1.2) consisting of oak Quercus robur ash Fraxinus excelsior, field maple Acer campestre, sycamore Acer pseudoplatanus. Low suitability for roosting bats. Moderate suitability for commuting and foraging bats. 	N: 460839.49 E: 516061.37	
TN009	Narrow watercourse with steep, heavily vegetated banks, dry in patches. Willowherb <i>Chamaenerion angustifolium</i> , thistle, nettle, reed canary grass. Ditch_B04	N: 460798.12 E: 515922.45	
TNO10	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn. Low suitability for commuting and foraging bats. Hedge_H004	N: 460398.43 E: 515539.02	
TNO11	Steep, heavily vegetated banks dominated by common reed. Nettle, bramble, cleavers <i>Galium aparine</i> , thistle and willowherb present.	N: 460112.84 E: 515629.19	No photograph available
	Ditch_B05		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN012	Species poor defunct hedge (JNCC: J2.2.2) consisting of hawthorn, lower sections consist of standalone shrubs, remainder of hedge has large gaps, dry ditch. Low suitability for commuting and foraging bats. Hedge_H005	N: 460112.20 E: 515642.99	
TN013	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn and blackthorn <i>Prunus spinosa</i> . Negligible suitability for commuting and foraging bats. Hedge_H006	N: 459529.01 E: 515326.58	No photograph available
TN014	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn. Negligible suitability for commuting and foraging bats. Hedge_H007	N: 459518.51 E: 515306.13	No photograph available
TN015	Improved grassland (JNCC: B4) potentially used for livestock grazing.	N: 459259.89 E: 514983.12	
TN016	Species poor defunct hedge (JNCC: J2.2.2) consisting of hawthorn, elder, blackthorn, willow <i>Salix spp</i> , Hedge very defunct, scattered shrubs.	N: 459227.13 E: 514937.63	No photograph available



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
	Negligible suitability for commuting and foraging bats.		
	Hedge_H008		
TN017	Species poor defunct hedge (JNCC: J2.2.2) consisting of	N: 458972.47	No photograph available
	hawthorn with large gaps.	E: 514709.02	
	Negligible suitability for commuting and foraging bats.		
	Hedge_H009		
TN018	Species poor defunct hedge (JNCC: J2.2.2) consisting of	N: 458640.11	
	hawthorn with eight scattered trees within survey area (oak,	E: 514534.02	
	ash, sycamore and elder). All semi-mature trees with		
	negligible bat roost suitability.		and an interest of
	Negligible suitability for commuting and foraging bats.		and the second
	reguigible suitability for commuting and foraging bats.		
	Hedge_H010		
TN019	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 458514.44	
	hawthorn and elder.	E: 514220.11	a contraction of the second
	Negligible suitability for commuting and foraging bats.		The set of the set of the
	Hedge_H011		
			and the second se



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
τνο20	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn with bramble, nettle and cow parsley Anthriscus sylvestris. Negligible suitability for commuting and foraging bats. Hedge_H012	N: 458470.13 E: 514225.79	
TNO21	Species rich hedge with trees (JNCC: J2.3.1) consisting of hawthorn, aspen <i>Populus spp.</i> , horse chestnut <i>Aesculus</i> <i>hippocastanum</i> , field maple, sycamore, ash, elder. Majority of boundary formed of scattered trees. Low suitability for roosting bats. Low suitability for commuting and foraging bats. Hedge_H013	N: 458318.64 E: 513884.67	
TN022	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn. Low suitability for commuting and foraging bats. Hedge_H014	N: 458137.92 E: 513929.53	No photograph available
TN023	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn. Same hedge as Hedge_HO14 allowing for gap for driveway. Low suitability for commuting and foraging bats.	N: 457912.24 E: 513928.37	No photograph available
	Hedge_H015		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN024	Species rich intact hedge (JNCC: J2.1.1) consisting of hawthorn, field maple, dog rose Rosa canina, elm Ulmus procera, willow, Guelder rose Viburnum opulus, privet Ligustrum vulgare, holly Ilex aquifolium, and apple Malus domestica. Hedge_H016	N: 457657.74 E: 513814.09	
TN025	Species poor hedge with trees (JNCC: J2.3.2) consisting of hawthorn and ash. Hedge_H017	N: 457013.61 E: 513342.94	
TN026	Wide, static watercourse with vertical banks, recently trimmed, grass, common reed. No in channel vegetation, approximately 8-10 m wide, silted, poor water quality. Ditch_B08	N: 456760.28 E: 512964.71	
TN027	Narrow watercourse with steep/vertical vegetated banks. Choked with common reed, occasional hawthorn and small woodland present outside survey area. Reed canary grass, common hogweed, willowherb, thistle and broad leaf dock. Ditch_B07	N: 456743.97 E: 512684.96	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN028	Broadleaved plantation woodland (JNCC: A1.1.2) small isolated plantation copse consisting of sycamore, field maple and pines.	N: 456538.28 E: 512401.86	No photograph available
	Negligible suitability for roosting bats.		
TN029	Scrub (JNCC: A2.1) small patch of scrub between arable fields consisting of thistle, nettle and broad leaf dock	N: 456568.01 E: 512155.00	
TN030	Species rich hedge with trees (JNCC: J2.3.1) consisting of ash, sycamore, hawthorn, ivy, bramble and a dry ditch. Moderate suitability for commuting and foraging bats. Hedge_H019	N: 456412.02 E: 512011.41	
TNO31	Large ash tree situated in hedge with no visible holes. Negligible suitability for roosting bats.	N: 456420.87 E: 512007.16	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN032	Large ash tree situated in hedge, with several visible holes and broken limbs. Assessed as providing moderate suitability for roosting bats.	N: 456478.43 E: 512003.64	
TN033	Arable field (JNCC: J.1) – winter cover.	N: 456456.33 E: 511876.95	n/a
TNO34	Wide, static watercourse with vertical banks, recently trimmed, grass, common reed. No in channel vegetation, approximately 8-10 m wide, silted, poor water quality. Ditch_B08	N: 456608.67 E: 511865.76	
TN035	Arable field (JNCC: J.1) – winter cover.	N: 456658.40 E: 511707.70	n/a
TN036	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn and bramble. Hedge recently cut back. Low suitability for commuting and foraging bats. Hedge_H020	N: 456573.83 E: 511644.41	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TNO37	Small patch of semi-natural broadleaved woodland (JNCC: A1.1.1) consisting of horse chestnut, sycamore, hawthorn, bramble, ivy <i>Hedera helix</i> . Fallen branches and dead roots present.	N: 456639.71 E: 511609.20	
TN038	Species poor hedge with trees (JNCC J2.3.2) consisting of hawthorn, bramble, sycamore and ash. Assessed as providing moderate habitat suitability y for commuting and foraging bats. Hedge_H021	N: 456653.91 E: 511586.01	
TN039	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, bramble, ivy, nettle, thistle and cleavers. Dry ditch present.Assessed as providing moderate habitat suitability for commuting and foraging bats.Hedge_H022	N: 456631.62 E: 511584.37	
TN040	Large, ivy clad sycamore tree with limited potential roost features (PRFs) visible from ground. Opportunistic roosting potential only. Low suitability for roosting bats.	N: 456619.07 E: 511593.91	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN041	Horse chestnut tree situated in middle of improved grassland,	N: 456579.85	
	used for grazing, no visible cracks or holes disconnected from	E: 511497.36	
	wider habitat.		
	Assessed as providing negligible suitability for roosting bats.		and the second second
TN042	Large ash tree with holes and broken limbs.	N: 456584.57	
		E: 511403.81	
	Assessed as providing moderate suitability for roosting bats.		A States
			and the second second
TN043	Fallen tree offering potential reptile hibernation options.	N: 456536.41	A MARKEN AND AND AND AND AND AND AND AND AND AN
		E: 511422.67	
TN044	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 456527.45	
	hawthorn and bramble, fenced, thick dense scrub vegetation	E: 511436.01	
	in sections.		
	Assessed as providing moderate suitability for commuting		
	and foraging bats.		
	Hedge_H023		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	Ministration of the second
TN045	Poor semi-improved grassland (JNCC: B6) Habitat consisting	N: 456582.51	
	of ridge and furrow features throughout, large mature trees,	E: 511341.11	Reading .
	fallen branches and dense scrub sections with gorse and		
	bramble. Optimal reptile mosaic habitat with features for		
	basking, foraging and hibernating.		
TN046	Large ash tree with fallen limbs and cracks present.	N: 456508.51 E: 511342.44	
	Assessed as providing moderate suitability for roosting bats.		
TN047	Large sycamore with broken limbs and cracks.	N: 456484.20 E: 511359.76	
	Assessed as providing moderate suitability for roosting bats.		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TNO48	Scrub (JNCC: A2.1) consisting of gorse <i>Ulex europaeus,</i> bramble, nettle and hawthorn.	N: 456447.27 E: 511388.67	Alleran
TN049	Species poor hedge with trees (JNCC: J2.3.2) consisting of	N: 456485.09	
111049		E: 511297.58	
	hawthorn, beech Fagus sylvatica, bramble, common hogweed	E: 21172/.20	and the second sec
	and nettle. Moderate suitability for commuting and foraging bats.		
	Hedge_H024		A CONTRACT OF
TN050	Arable (JNCC: J1.1) – winter cover.	N: 456371.22	n/a
		E: 511062.24	
TN051	Species poor hedge with trees (JNCC: J2.3.2) consisting of	N: 456229.68	
	hawthorn, bramble, thistle and nettle	E: 510896.48	
	Hedge_H025		
TN052	Boundary removed (JNCC: J2.7) bramble, nettle and scattered	N: 456225.56	and the second se
	semi-mature trees remaining.	E: 510874.45	
			The second se
			- Elle



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN053	Species poor intact hedge (JNCC: J2.1.2) consisting of blackthorn, hawthorn, ash, sycamore. Recently trimmed. Low suitability for commuting and foraging bats. Hedge_H027	N: 456367.97 E: 510453.90	
TN054	Arable field (JNCC: J.1) potential set aside, some cropped corn, thistle and other ruderal species present.	N: 456392.41 E: 510342.98	n/a
TN055	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn and bramble, recently trimmed, fenced. Low suitability for commuting and foraging bats. Hedge_H028	N: 456376.72 E: 510259.11	
TN056	Improved grassland (JNCC: B4) potentially used for grazing.	N: 456248.79 E: 510288.36	No photograph available
TN057	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn. Recently trimmed. Low suitability for commuting and foraging bats. Hedge_H029	N: 456261.55 E: 510269.79	No photograph available
TN058	Arable (JNCC: J1.1) – winter cover, surveyed from adjacent land plots.	N: 456237.76 E: 509927.99	n/a



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN059	Narrow watercourse with heavily vegetated grassy banks, partially dry, common reed present. Ditch_B09	N: 456027.07 E: 509716.96	
TN060 (TN43)	Arable (JNCC: J1.1) – in crop at the time of the survey.	N: 455977.51 E: 509575.33	n/a
TN061	Skylark observed/heard in song flight over field.	N: 455924.99 E: 509516.33	n/a
TN062	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn with occasional field maple.	N: 455877.31 E: 509596.08	No photograph available
	Hedge_H030		
TN063	Partially dry watercourse with steep earth banks recently dug and cleared. Hedge removed along one bank. Ditch_B10	N: 455876.96 E: 509559.71	
TN064	Arable (JNCC: J1.1) – in crop at the time of the survey.	N: 455656.53 E: 509440.70	n/a



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN065	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, blackthorn, holly. Mostly newly planted approximately 1-2 seasons growth. Moderate suitability for commuting and foraging bats. Hedge_H031	N: 455656.03 E: 509432.82	
TN066	Wide watercourse, slow flowing with steep grassy banks in sections, silty, common reed present, defunct hawthorn hedge on one bank. Moderate suitability for commuting and foraging bats. Ditch_B11	N: 455449.24 E: 509131.66	
TN067	Species poor defunct hedgerow (JNCC: J2.2.2) consisting of hawthorn with large gaps. Low suitability for commuting and foraging bats. Hedge_H032	N: 455486.05 E: 509120.31	No photograph available
TN068	Arable (JNCC: J1.1) – winter cover.	N: 455381.15 E: 509046.36	n/a
TN069	Improved grassland (JNCC: B4) Horses grazing, electric fencing present.	N: 455524.01 E: 509003.25	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN070	Scrub (JNCC: A2.1) consisting of scattered trees, mostly semi	N: 455484.90	and the second
	mature, hawthorn and sycamore.	E: 508913.14	
TN071	Large, mature sycamore tree with holes visible.	N: 455480.82	A A A A A A A A A A A A A A A A A A A
		E: 508916.60	
	Moderate suitability for roosting bats.		
TN072	Sycamore tree on edge of access road, one small hole visible	N: 455430.45	
	from ground.	E: 508933.34	
	Low suitability for roosting bats.		
TN073	Large mature ash tree with limited visible PRFs.	N: 455397.13	
		E: 508943.11	
	Low suitability for roosting bats.		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	Section of the Section
TN074	Species poor hedge with trees (JNCC: J2.3.2) consisting of	N: 455376.52	All The second
	hawthorn, ash and sycamore trees. Hedge appeared to have	E: 508951.51	
	been part removed/cut back at the time of the survey.		
	Low suitability for commuting and foraging bats.		
	Low suitability for commuting and foraging bats.		
	Hedge_H033		
TN075	Arable (JNCC: J1.1) – part cropped, part winter cover with	N: 455352.03	n/a
	wide grassy margins.	E: 508781.79	
TN076	Narrow, heavily vegetated ditch with approx. 20 cm water.	N: 455414.44	
	Thistle, willowherb and nettle dominant.	E: 508613.52	
	Ditch_B12		
TN077	Wide watercourse with grassy banks, recently trimmed.	N: 455401.05 E: 508588.54	
	Ditch_B13	E: 500500.54	
	DIGUEDIS		
TN078	Watercourse approximately 3 m wide, 0.5 m deep with steep	N: 455301.76	
	grassy banks, moderate flow, silted, common reed and	E: 508624.49	
	glyceria, occasional hawthorn.		
	Ditch_B14		
			and the second sec



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN079	Species poor defunct hedge (JNCC: J2.2.2) consisting mainly of hawthorn with some blackthorn, large gaps present.	N: 455286.89 E: 508634.58	No photograph available
	Hedge_H034		
TN080	Species poor defunct hedge (JNCC: J2.2.2) consisting of hawthorn and scattered shrubs, large gaps present.	N: 455187.84 E: 508370.35	No photograph available
	Hedge_H035		
TN081	Species poor defunct hedge (JNCC: J2.2.2) consisting of hawthorn Hedge_H036	N: 455138.67 E: 508428.26	
TN082	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, well managed/maintained.	N: 455009.10 E: 508290.12	and the second
	Hedge_H037		
TN083	Watercourse with heavily vegetated banks, common reed dominant, bindweed <i>Convolvulus arvensis</i> , nettle and thistle.	N: 454995.10 E: 508266.50	
	Ditch_B15		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN084	Species poor hedge with trees (JNCC: J2.3.2) largely defunct hedge consisting of hawthorn and elder. Hedge_H038	N: 454915.18 E: 508071.28	No photograph available
TN085	Species rich hedge with trees (JNCC: J2.3.1) consisting of hawthorn, field maple, cherry <i>Prunus spp.</i> , oak, rowan Sorbus aucuparia, elder, holly and guelder rose. Hedge_H039	N: 454792.15 E: 507848.67	
TN086	Large area of made ground with several log piles offering reptile hibernacula.	N: 454696.07 E: 507939.96	
TN087	Owl box with chicks, heard during one of the evening bat survey visits.	N: 454659.73 E: 507996.75	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN088	Broadleaved plantation woodland (JNCC: A1.1.2) consisting of blackthorn, dogwood <i>Cornus spp.</i> , birch <i>Betula spp.</i> , oak, poplar, common hogweed, bramble, dog rose, elder, field maple, hawthorn, ash. Low suitability for roosting bats.	N: 454661.05 E: 508034.47	
TN089	Boundary formed of raised grass verge with bramble and nettle.	N: 454606.79 E: 507989.20	
ΤΝΟ9Ο	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn. Hedge_H041	N: 454570.50 E: 508076.64	
TN091	Species poor hedge with trees (JNCC: J2.3.2) consisting of hawthorn with scattered willow.	N: 454497.19 E: 507574.73	No photograph available
	Hedge_H042		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference TN092	Species poor defunct hedge (JNCC: J2.2.2) consisting of hawthorn shrubs scattered along river banks. Hedge_H043	Grid Coordinates N: 454454.05 E: 507393.79	
TN093	 Wide watercourse with sloping grassy banks, common reed, glyceria, occasional hawthorn. Approximately 15 m wide, slow flowing. Moderate suitability for commuting and foraging bats. Ditch_B19 	N: 454404.93 E: 507422.66	
TN094	Wide watercourse with steep grassy banks, slow flowing, sandy/silty bed. Approximately 8 m wide, 0.5 m depth. Ditch_B16	N: 454266.72 E: 507270.65	
TN095	Arable (JNCC: J1.1) – winter cover.	N: 454046.03 E: 507044.62	n/a



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN096	Dry watercourse with scattered hawthorn present. Ditch_B78	N: 453735.49 E: 506891.46	
TN097	Species poor defunct hedge (JNCC: J2.2.2) consisting of hawthorn, recently trimmed with large gaps. Low suitability for commuting/foraging bats	N: 453553.75 E: 506718.36	No photograph available
TN098	Hedge_H044 Arable (JNCC: J1.1) – winter cover.	N: 453519.80 E: 506701.29	n/a
TN099	Arable (JNCC: J1.1) – ploughed field.	N: 453493.29 E: 506838.73	n/a
TN100	Species poor defunct hedge (JNCC: J2.2.2) boundary formed of individual hawthorn. Negligible suitability for commuting and foraging habitats. Hedge_H045	N: 453386.09 E: 506771.23	
TN101	Arable (JNCC: J1.1) – winter cover.	N: 453213.97 E: 506636.66	n/a



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN102	Wide watercourse (approximately 5 m), trapezoid cross section with steep, heavily vegetated, grassy banks. Evidence of slumping. Ditch_B20	N: 452914.78 E: 506579.12	
TN103	Poor semi-improved grassland (JNCC: B6) grassland strip between river and arable fields, longer sward on river embankments with scrub vegetation present such as bramble, nettle and broad-leaved dock.	N: 452911.29 E: 506546.65	No photograph available
TN104	 Wide, slow flowing chalk watercourse, approximately 20 m wide with reed beds on both banks. Scattered hawthorn present and grassy embankments. Anecdotal evidence of otter use. High suitability for commuting and foraging bats. Ditch_B21 	N: 452892.11 E: 506623.42	
TN105	Watercourse approximately 2 m wide, heavily vegetated sloping banks, common reed, common hogweed, broad leaved dock and nettle. Ditch_B22	N: 452893.56 E: 506672.44	C:\Users\303934\Downloads\Photos\ID_7 4_attachment1.jpg



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN106	Poor semi-improved grassland (JNCC: B6) mostly short sward, sections of scrub with teasel <i>Dipsacus fullonum</i> , thistle, hawthorn and bramble.	N: 452878.36 E: 506554.43	
TN107	Shed made from prefabricated steel, lots of gaps but potentially too hot/cold for roosting bats. Negligible suitability for roosting bats.	N: 452875.73 E: 506542.55	
TN108	Arable (JNCC: J1.1) – winter cover.	N: 452537.42 E: 506494.08	n/a
TN109	Scrub (JNCC: A2.1) small area of scrub consisting of hawthorn, bramble and common hogweed.	N: 452071.60 E: 506250.71	No photograph available
TN110	Arable (JNCC: J1.1) – ploughed field	N: 452030.53 E: 506222.83	n/a
TN111	Scrub (JNCC: A2.1) Small area of scrub with hawthorn, bramble and common hogweed.	N: 452007.23 E: 506265.90	No photograph available
TN112	Dry watercourse with steep grassy banks 1-3 m wide, static 30 cm depth, water cress <i>Nasturtium officinale</i> present, common reed, occasional hawthorn, bramble. Ditch_B23	N: 451990.93 E: 506244.12	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN113	Species poor defunct hedge (JNCC: J2.2.2) consisting of	N: 451935.06	No photograph available
	scattered hawthorn and occasional elder.	E: 506304.72	
	Hedge_H046		
TN114	Arable field (JNCC: $J1.1$) – ploughed field at the time of the	N: 451776.26	n/a
	survey.	E: 506002.94	
TN115	Watercourse with steep grassy banks, approximately 3-5 m	N: 451627.86	
	wide and 0.5 m deep, sandy/silty bed, slow flow, no in	E: 506004.56	n'a la
	channel vegetation.		
	Moderate potential for commuting and foraging bats		
	Ditch_B24		
TN116	Species rich hedge with trees (JNCC: J2.3.1) Mainly consisting	N: 451624.81	a village
	of young goat willow, ash, bramble, hogweed, trees	E: 506008.14	
	immature, some newly planted.		and the second sec
	Low suitability for commuting and foraging bats.		~ (1)
	Hedge_H047		
TN117	Watercourse with steep earth banks, recently cleared, 3 m	N: 451541.69	
	wide, silty 30 cm water depth, slow flowing.	E: 505896.32	
	Ditch_B25		
TN118	Arable field (JNCC: J1.1) – part winter cover, part ploughed.	N: 451179.42	n/a
		E: 505950.61	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN119	Arable field (JNCC: J1.1) – in crop but cut back.	N: 450859.24	n/a
		E: 505607.01	
TN120	Species rich hedge with trees (JNCC: J2.3.1) boundary formed	N: 450833.67	
	of individual immature goat willow and ash with broad leaf	E: 505663.83	A Carlos Manager
	dock, thistle and common hogweed.		
			A Large During and
	Low suitability for commuting and foraging bats.		
	Hedge_H048		C:\Users\303934\Downloads\Photos\ID
			<u>1 attachment1.jpa</u>
TN121	Arable field (JNCC: J1.1) – part cropped but also used for	N: 450750.56	
INIZI	cattle grazing, electric fencing surrounding entire field.	E: 505560.70	1/4
TN122	Wide watercourse, approximately 5-10 m wide with steep	N: 450642.37	
	grassy banks. Slow flowing approximately 0.5-1 m deep.	E: 505526.39	
	Grass well established, some evidence of localised erosion.	2.000020.07	
	Bed consists of sand and silt, no in channel vegetation,		A CARLES AND A CAR
	occasional hawthorn on bank, common hogweed and cow		
	parsley also present.		All and a second second
	Moderate suitability for commuting and foraging bats.		
	Ditch_B26		
TN123	Species poor defunct hedge (JNCC: J2.2.2) consisting of	N: 450635.26	No photograph available
	hawthorn, mostly standalone shrubs.	E: 505581.89	
		2. 200001.07	
	Hedge_H049		
TN124	Arable field (JNCC: J1.1) – winter cover.	N: 450284.84	n/a
		E: 505543.91	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN125	Species poor defunct hedge (JNCC: J2.2.2) solely consisting of hawthorn. Negligible suitability for commuting and foraging bats.	N: 450189.98 E: 505392.34	No photograph available
	Hedge_H050		
TN126	Species poor defunct hedge (JNCC: J2.2.2) solely consisting of hawthorn.	N: 450027.91 E: 505364.69	n/a
	Negligible suitability for commuting and foraging bats.		
	Hedge_H051		
TN127	Steep sided watercourse bordering arable field and roadside. Recently managed with low levels of water, no bankside or in channel vegetation present. Defunct hawthorn hedge at one end outside of survey area. Ditch_B27	N: 449776.81 E: 505132.49	
TN128	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn with occasional elder. Recently flailed. Hedge_H053	N: 449729.26 E: 505125.05	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN129	Steep sided watercourse bordering arable field and roadside. Recently managed with low levels of water, no bankside or in channel vegetation present. Defunct hawthorn hedge at one end outside of survey area. Ditch_B28 (This feature was originally identified as a unique feature. However, once ground-truthed was found to be the same feature as TN127. This TN number has been retained for completeness only.)	N: 449669.49 E: 505139.73	
TN130	Small section of watercourse within survey area, steep sided, recently managed with no bankside or in-channel vegetation. Ditch_B29	N: 449639.21 E: 504908.98	
TN131	Culverted to Ditch_B31. Heavily vegetated, steep banks with small broadleaved woodland at eastern end. Scattered hawthorn, common hogweed and nettle present. Ditch_B30	N: 449554.25 E: 504837.16	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN132	Culverted to Ditch_B31. Heavily vegetated, steep banks with	N: 449538.15	
	small broadleaved woodland at eastern end. Scattered	E: 504677.42	
	hawthorn, common hogweed and nettle present.		
	Ditch_B31.		
	(This feature was originally identified as a unique feature.		
	However, once ground-truthed was found to be the same		CERCE A CERCERCE
	feature as TN131. This TN number has been retained for		
	completeness only.)		
TN133	Watercourse with steep, densely vegetated banks, bramble,	N: 448948.11	
	common reed, broad leaved dock, defunct hawthorn hedge	E: 504523.53	
	on one side, poor water quality, sandy silty bed, nearly dry.		and the second sec
	Ditch_B32		
TN134	Species poor defunct hedge (JNCC: J2.2.2) consisting of	N: 448942.53	
	hawthorn, one young ash with negligible bat roost suitability.	E: 504573.41	
	Large gaps with occasional hawthorn present.		
	Low suitability for commuting and foraging bats.		
	Hedge_H054		
TN135	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 448875.63	No photograph available
	hawthorn.	E: 504424.59	
	Hedge_H055		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN136	Poor semi-improved grassland (JNCC: B6) consisting of short sward grasses potentially used for grazing. White and red clover <i>Trifolium spp.</i> , thistle and dandelion <i>Taraxacum</i> <i>officinale</i> also present.	N: 448841.94 E: 504526.55	
TN137	Large, mature oak tree with limited visible PRFs. Low suitability for roosting bats.	N: 448736.06 E: 504396.63	
TN138	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn and one mature oak with negligible suitability for roosting bats. Hedge_H056	N: 448726.79 E: 504395.26	No photograph available
TN139	Scrub (JNCC: A2.1) small area of scrub, grasses and bramble adjacent to turbine and dyke.	N: 448724.83 E: 504392.25	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN140	Wide watercourse with steep grassy banks, glyceria present, silty approximately 5 m wide. Ditch_B33	N: 448711.42 E: 504539.86	
TN141	Boundary formed of scattered hawthorn with ash and willow along bank of watercourse.	N: 448499.79 E: 504165.93	
TN142	Watercourse with steep grassy banks, static flow with sandy bed, approximately 30 cm deep. No in-channel vegetation. Occasional bramble and hawthorn on one bank. Ditch_B35	N: 448381.52 E: 504120.30	
TN143	Watercourse with steep grassy banks, static flow with a sand and silt bed. Outfalls of field drains present, no in channel vegetation. Ditch_B36	N: 448388.54 E: 504007.57	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference TN144	Species poor intact hedge (JCC: J2.1.2) consisting of hawthorn, bramble and blackthorn. Moderate suitability for commuting and foraging bats. Hedge_H058	Grid Coordinates N: 448389.08 E: 503992.44	
TN145	Watercourse with steep grassy banks adjacent to road, potential for runoff pollution. Static flow with silty present, approximately 15 cm deep. Common reed and bramble present. Ditch_B37	N: 448381.60 E: 503975.72	
TN146	Arable field (JNCC: J1.1) – ploughed field.	N: 448160.68 E: 503905.79	n/a
TN147	Watercourse with steep, heavily vegetated banks; reedmace, common reed, willowherb, bramble and common hogweed present. Ditch_B38	N: 448010.97 E: 503763.64	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN148	Watercourse with steep, heavily vegetated banks, choked with vegetation. Reedmace <i>Typha latifolia</i> , common reed, willowherb, thistle and nettle present. Ditch_B39	N: 447793.60 E: 503598.56	
TN149	Species poor defunct hedge (JNCC: J2.2.2) consisting of hawthorn. Hedge_H059	N: 447711.98 E: 503502.75	No photograph available
TN150	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn. Hedge_H060	N: 447509.67 E: 503436.46	
TN151	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, hogweed, bramble, nettle, one young ash tree and a dry ditch. Hedge_H061	N: 447580.99 E: 503116.46	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN152	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 447470.58	THE REAL PROPERTY OF
	hawthorn.	E: 502923.37	
	Hedge_H063		A STATE
	. –		and the second
			Mary Constant
TN153	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 447605.38	
111100	hawthorn.	E: 502815.17	the growth of the second s
	nowcion.	1. 302013.17	Manual and
	Hedge_H062		Contraction of the second s
TN154	Scrub (JNCC: A2.1) along edges of railway embankment,	N: 447546.22	No photograph available
	consisting of hawthorn, blackthorn, bramble and nettle.	E: 502581.57	
TN155	Species poor defunct hedge (JNCC: 2.2.2) consisting of	N: 447439.29	No photograph available
	hawthorn, bramble and nettle.	E: 502586.44	
	Hedge_H064		
TN156	Species poor defunct hedge (JNCC: J2.2.2) consisting of	N: 447325.36	No photograph available
	hawthorn.	E: 502323.00	
	Hedge_H065		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN157	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn with one mature ash tree. Hedge_H066	N: 447246.16 E: 502202.45	
TN158	Arable field (JNCC: J1.1) – grass crop /pasture (mown, short sward)	N: 447208.79 E: 502273.82	n/a
TN159	Species poor hedge with trees (JNCC: J2.3.2) consisting of hawthorn, blackthorn, elder, ash, bramble and nettle. Hedge_H067	N: 447043.43 E: 502135.25	
TN160	Species poor hedge with trees (JNCC: J2.3.2) consisting of hawthorn, blackthorn, elder, bramble and nettle. Hedge_H068	N: 447020.66 E: 502015.20	No photograph available
TN161	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn. Hedge_H069	N: 446790.00 E: 501674.36	
TN162	Species poor hedge with trees (JNCC: J2.3.2) consisting of hawthorn and ash.	N: 446773.89 E: 501684.79	No photograph available



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
	Hedge_H070		
TN163	Vertical, sandy banks, fast flowing shallow water. Alder, common hogweed, willowherb, bramble and nettle present. Ditch_B40	N: 446214.41 E: 501068.58	
TN164	Scrub (JNCC: A2.1) consisting of dense bramble and nettle with scattered mature oak and ash trees. One mature oak tree with moderate suitability for roosting bats.	N: 446198.09 E: 501154.56	No photograph available
TN165	Species poor defunct hedge (JNCC: J2.2.2) consisting of hawthorn. Hedge_H071	N: 446085.66 E: 501045.69	No photograph available
TN166	Mature oak with visible cracks and splits. Moderate suitability for roosting bats	N: 445567 E: 500545	No photograph available



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN167	Mixed plantation woodland (JNCC: A1.3.2) consisting of a mixture of pines, oak, sycamore, and ash trees. Undergrowth consisting of dense bramble in places.	N: 445472.02 E: 500648.72	
TN168	Group of young trees within survey buffer are mostly young with no visible PRFs.	N: 445462.10 E: 500529.03	No photograph available
	Low suitability for roosting bats.		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN169	Very shaded watercourse running through broadleaved woodland with limited food sources. No in-channel vegetation, bare earth banks. Hawthorn, oak, ash and bramble present. Moderate suitability for commuting and foraging bats. Ditch_B41	N: 445468.64 E: 500455.65	
TN170	Mature oak tree with visible holes, situated adjacent to a stream, connected to woodland and scrub habitat. Moderate suitability for roosting bats.	N: 445451.12 E: 500410.48	
TN171	Scrub (JNCC: A2.1) consisting of dense bramble and hawthorn along stream banks with scattered trees.	N: 445425.17 E: 500372.29	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN172	Poor semi-improved grassland (JNCC: B6) with a small area of grassland adjacent to woodland and arable field. Relatively short sward, broad leaved dock and nettle present and small wet patches with <i>juncus spp</i> .	N: 445419.88 E: 500487.35	
TN173	Arable field (JNCC: J1.1) – ploughed field at the time of the survey.	N: 445228.90 E: 500377.28	n/a
TN174	Small ephemeral pond, potentially flooded/fed from field drain, surrounded by young ash and oak trees.	N: 445115.21 E: 500247.76	
TN175	Watercourse with steep sides, some sections with in channel vegetation, water cress, stagnant water c 15 cm depth. Limited backside vegetation present as recently cleared, bramble, nettle, common hogweed and grasses present. Ditch_B42	N: 445068.24 E: 500261.78	
TN176	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn and ivy, recently trimmed.	N: 445044.82 E: 500264.25	No photograph available



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
	Low suitability for commuting/foraging bats		
	Hedge_H073		
TN177	Arable field (JNCC: J1.1) – ploughed field at the time of the	N: 445017.50	n/a
	survey.	E: 500229.57	
TN178	Arable field (JNCC: J1.1) – ploughed field at the time of the	N: 444875.13	n/a
	survey.	E: 500340.26	
TN179	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 444800.89	
	hawthorn, dog rose, red dead nettle, bramble and common	E: 500331.13	
	hogweed. Recently trimmed.		D. of an in-
	Low suitability for commuting and foraging bats.		
	Hedge_H074		
TN180	Arable field (JNCC: $J1.1$) – ploughed field at the time of the	N: 444749.59	n/a
	survey.	E: 500243.79	
TN181	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 444615.52	No photograph available
	hawthorn and bramble.	E: 500292.63	
	Low suitability for commuting/foraging bats		
	Hedge_H075		
TN182	Semi-natural broadleaved woodland (JNCC: A1.1.1) Small	N: 444645.81	
	patch of woodland consisting of hawthorn and sycamore,	E: 500411.76	
	semi mature trees.		
	Negligible bat roost suitability.		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN183	Arable field (JNCC: J1.1) – winter cover at the time of the	N: 444574.39	n/a
	survey.	E: 500294.40	
TN184	Arable field (JNCC: J1.1) – ploughed field at the time of the	N: 444597.47	n/a
	survey.	E: 500448.68	
TN185	Species poor hedge with trees (JNCC: J2.3.2) consisting of oak,	N: 444509.22	No photograph available
	elderberry, hawthorn, bramble, recently trimmed.	E: 500483.19	
	Low suitability for commuting/foraging bats.		
	Hedge_H076		
TN186	Arable field (JNCC: J1.1) – winter cover at the time of the	N: 444310.62	n/a
	survey.	E: 500370.88	
TN187	Species poor hedge with trees (JNCC: J2.3.2) consisting of	N: 444093.42	
	alder, blackthorn and willow. Trees all semi mature, some	E: 500471.50	
	sections of hedge newly planted.		
	Negligible suitability for roosting bats.		
	Hedge_H077		
TN188	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 443656.22	No photograph available
	hawthorn and blackthorn with occasional hazel.	E: 500591.14	
	Hedge_H079		
TN189	Semi-mature oak disconnected from wider habitat with no	N: 442563.51	- Aller - Law
	visible PRFs.	E: 500322.40	
	Negligible suitability for roosting bats.		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN190	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 442561.67	
	hawthorn and ivy. Recently trimmed.	E: 500344.81	
	Low suitability for commuting and foraging bats.		
	Hedge_H080		
TN191	Arable field (JNCC: J1.1) – winter cover.	N: 442496.38	n/a
		E: 500411.44	
TN192	Bridge with some ivy cover, no visible cracks or holes in the	N: 442399.85	
	brickwork.	E: 500257.84	
	Negligible suitability for roosting bats.		A Real Decision
TN193	Mature, ivy clad sycamore tree with no visible PRFs situated	N: 442382.78	
	adjacent to road.	E: 500249.57	
	Low suitability for roosting bats.		
TN194	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 442385.41	
	hawthorn, dog rose, common hogweed and bramble. Steep	E: 500319.66	
	embankment to public right of way (PRoW).		
	Hedge_H081		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN195	Semi-natural broadleaved woodland (JNCC: A1.1.1) Scattered trees and scrub vegetation lining each side of footpath; hawthorn, sycamore, bramble and dog rose. Negligible suitability for roosting bats.	N: 442375.99 E: 500312.96	
	Moderate suitability for commuting and foraging bats.		
TN196	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, recently trimmed. Low suitability for commuting/foraging bats	N: 442384.38 E: 500393.02	No photograph available
TN197	Hedge_H082 Arable field (JNCC: J1.1) – in crop at the time of the survey.	N: 442373.83	n/a
TN198	Scrub (JNCC: A2.1) Patch of scrub adjacent to footpath and arable field, dense bramble throughout.	E: 500396.56 N: 442356.02 E: 500389.28	
TN199	Semi-natural broadleaved woodland (JNCC: A1.1.1)	N: 442359.02 E: 500357.98	No photograph available
TN200	Small copse of trees, some ivy clad, adjacent to road and arable field, limited PRFs visible from ground. Low suitability for roosting bats.	N: 442333.31 E: 500235.49	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN201	Arable field (JNCC: J1.1) – winter cover at the time of the	N: 442182.64	n/a
	survey.	E: 500251.75	
TN202	Steep sided, sluggish watercourse, banks recently cleared.	N: 442027.70	
	Bare earth on lower banks and bed, no in channel vegetation,	E: 500291.55	
	bed sandy and gravel, low water level approximately 5-10		and the second s
	cm. no evidence of pollution water clear, field drain outfalls		
	present.		
			and the second sec
	Ditch_B43		
TN203	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 441989.20	No photograph available
	hawthorn and ivy, recently trimmed.	E: 500146.61	
	Hedge_H083		
TN204	Small group of young and semi mature trees, no visible bat	N: 441927.04	Comments of the second se
	PRFs, disconnected from wider habitat.	E: 500190.88	and the second
	Negligible suitability for roosting bats.		
			A CONTRACT OF A
TN205	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 441699.29	
	hawthorn, recently trimmed.	E: 500409.75	
	Land Market Market Construction of Construction Land		
	Low suitability for commuting and foraging bats.		
	Hedge_H084		and the second se
TN206	Arable field (JNCC: J1.1) – winter cover at the time of the	N: 441691.86	D/g
111200		E: 500398.54	1//0
	survey.	L. JUUJ90.J4	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN207	Row of young cherry trees lining road.	N: 441516.76	
		E: 500658.74	and the second
	Low suitability for commuting and foraging bats.		
TN208	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 441462.59	
	hawthorn. Recently trimmed.	E: 500580.11	
	Low suitability for commuting and foraging bats. Hedge_H085		
TN209	Arable field (JNCC: J1.1) – winter cover at the time of the	N: 441364.55	n/a
	survey.	E: 500727.18	
TN210	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 441195.58	
	hawthorn. Recently trimmed.	E: 500626.21	
	Low suitability for commuting and foraging bats.		
	Hedge_H086		and the second second
TN211	Species poor defunct hedge (JNCC: J2.2.2) consisting of	N: 440318.55	No photograph available
	hawthorn. Recently trimmed.	E: 500318.50	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
	Low suitability for commuting and foraging bats		
	Hedge_H087		
TN212	Arable field (JNCC: J1.1) – winter cover at the time of the survey.	N: 440176.32 E: 500329.65	n/a
TN213	Arable field (JNCC: J1.1) – in crop at the time of the survey.	N: 439795.84 E: 500418.93	n/a
TN214	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, fenced, recently trimmed. Low suitability for commuting and foraging bats.	N: 439623.71 E: 500326.57	
	Hedge_H091		
TN215	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, recently trimmed.	N: 439665.74 E: 500376.12	
	Low suitability for commuting and foraging bats as adjacent to busy road. Hedge_H089		
TN216	Mature oak tree adjacent to busy road with limited PRFs. Low suitability for roosting bats.	N: 439677.40 E: 500425.81	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN217	Large mature ivy clad oak tree with multiple cracks and	N: 439656.29	
	holes, adjacent to busy road.	E: 500421.58	
	Low suitability for roosting bats.		
TN218	Species poor hedge with trees (JNCC: J2.3.2) consisting of	N: 439692.72	No photograph available
	young trees lining public footpath and road.	E: 500462.61	
	Negligible suitability for roosting bats.		
	Negligible suitability for commuting and foraging bats.		
	Hedge_H088		
TN219	Mature oak tree adjacent to busy road, limited visible PRFs.	N: 439695.81	
		E: 500472.56	
	Low suitability for roosting bats.		
TN220	Large mature oak, limited PRFs visible.	N: 439670.85	
	Low suitability for roosting bats.	E: 500464.17	
			Martin Barrison Contraction



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN221	Species poor intact hedge (JNCC: J2.1.2) consisting of sections of newly planted hawthorn, blackthorn and bird cherry.	N: 439669.71 E: 500483.39	
	Low suitability for commuting and foraging bats.		1 Startes and a second
	Hedge_H090		
TN222	Two large mature oak trees with limited visible PRFs.	N: 439675.66 E: 500498.09	
	Low suitability for roosting bats.		
TN223	Arable field (JNCC: J1.1) – winter cover at the time of the survey.	N: 439644.69 E: 500539.32	n/a.
TN224	Large pile of vegetated woody debris, within hedge with wide grassy margins. Reptile hibernation feature connected to suitable reptile foraging habitat.	N: 439488.97 E: 500456.88	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN225	Scrub (JNCC: A2.1) - dense scrub with hawthorn, bramble, nettle and common hogweed.	N: 439488.77 E: 500469.70	
TN226	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn. Moderate suitability for commuting and foraging bats. Hedge_H092	N: 439440.52 E: 500586.50	No photograph available
TN227	Arable field (JNCC: J1.1) – winter cover.	N: 439026.92 E: 500650.39	n/a
TN228	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, adjacent to tree lined, steep scrub embankment. Low suitability for commuting and foraging bats. Hedge_H094	N: 438907.16 E: 500575.41	
TN229	Arable field (JNCC: J1.1) – winter cover.	N: 438884.03 E: 500534.70	n/a
TN230	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, fenced, recently trimmed. Low suitability for commuting and foraging bats.	N: 438877.51 E: 500629.23	
	Hedge_H093		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN231	Scrub (JNCC: A2.1) - scrub and tree lined steep embankment	N: 438663.01	No photograph available
	adjacent to road consisting of hawthorn, pines and oak.	E: 500689.10	
TN232	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 438555.36	
	hawthorn, recently trimmed.	E: 500650.78	
	Low suitability for commuting and foraging bats.		
	Hedge_H095		
TN233	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 438541.82	
	hawthorn, recently trimmed.	E: 500645.04	
	Low suitability for commuting and foraging bats.		And the second se
	Hedge_H096		
TN234	Arable field (JNCC: J1.1) – winter cover at the time of the	N: 438392.02	n/a
	survey.	E: 500704.17	
TN235	Dry ditch (JNCC: J2.6).	N: 438253.243588	
		E: 500753.081228	
	Ditch_B77		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN236	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 438258.37	
	hawthorn, recently trimmed.	E: 500808.20	
	Low suitability for commuting and foraging bats.		
	Hedge_H098		
TN237	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 438272.74	4
	hawthorn, recently trimmed.	E: 500885.59	NAME OF THE OWNER
	Low suitability for commuting and foraging bats.		
	Hedge_H097		
TN238	Scrub (JNCC: A2.1) - scrub and tree lined steep embankment	N: 438276.73	No photograph available
	adjacent to road consisting of hawthorn, pines and oak.	E: 500891.57	
TN239	Arable field (JNCC: J1.1) – winter cover at the time of the	N: 438112.23	n/a
	survey.	E: 500771.04	
TN240	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 437978.77	
	hawthorn, recently trimmed.	E: 500752.93	
	Low suitability for commuting and foraging bats.		
	Hedge_H099		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN241	Broad-leaved plantation woodland (JNCC: A1.1.2) consisting	N: 437985.44	
	of mostly young oak and hazel, fenced.	E: 500896.48	CARLAN THE S
	Negligible suitability for roosting bats.		
TN242	Poor semi-improved grassland (JNCC: B6) consisting of short	N: 437930.68	
	sward grasses and limited herb species, potentially used for grazing, fenced.	E: 500914.87	
TN243	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 437827.46	
	hawthorn, blackthorn and willow. Ivy, nettle and bramble	E: 500918.67	
	also present, situated adjacent to plantation woodland.		
	Fenced.		
	Moderate suitability for commuting and foraging bats.		
TN244	Hedge_H100 Arable field (JNCC: J1.1) – winter cover at the time of the	N: 437802.29	n/a
111244	survey.	E: 500814.76	1//4
TN245	Broad-leaved plantation woodland (JNCC: A1.1.2) consisting	N: 437797.01	No photograph available
	of mostly semi mature and young trees.	E: 500942.99	
	Negligible suitability for roosting bats.		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN246	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 437634.28	
	hawthorn and ivy, recently trimmed.	E: 500885.54	
	Low suitability for commuting and foraging bats.		1
	Hedge_H101		
TN247	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 437619.23	North Andrew Charles
	hawthorn, bramble and dog rose, fenced.	E: 500895.18	
	Low suitability for commuting and foraging bats.		
	Hedge_H102		
TN248	Species poor hedge with trees (JNCC: J2.3.2) consisting of	N: 437478.69	No photograph available
	hawthorn, oak and ivy, fenced.	E: 500998.89	
	Low suitability for commuting and foraging bats.		
	Hedge_H103		
TN249	Arable field (JNCC: J1.1) – in crop at the time of the survey.	N: 437410.10	n/a.
		E: 500915.94	20 Sector MPMM
TN250	Species poor hedge with trees (JNCC: J2.3.2) consisting of	N: 437316.28	- hereiter
	hawthorn, oak, bramble, thistle, broad leaved dock, common	E: 500994.36	
	hogweed, nettle and ivy. Fenced.		
	Negligible suitability for roosting bats.		
	Moderate suitability for commuting and foraging bats.		
	Hedge_H104		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN251	Steep sided watercourse with low levels of running water. Heavily vegetated banks, tree lined, dense bramble in sections, difficult to access. Ditch_B44	N: 437314.57 E: 501005.22	
TN252	Semi-natural broadleaved woodland (JNCC: A1.1.1) consisting mainly of oak trees, mostly open scrub within EP1HS survey buffer, i.e. not within the Hornsea Four Order Limits.	N: 437350.78 E: 501077.12	
TN253	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn and bramble, some sections newly planted, recently trimmed. Moderate suitability for commuting and foraging bats. Hedge_H105	N: 437060.06 E: 501108.81	
TN254	Arable field (JNCC: J1.1) – in crop at the time of the survey.	N: 437039.83 E: 501101.44	n/a.
TN255	Arable field (JNCC: J1.1) – winter cover at the time of the survey.	N: 437055.50 E: 501217.25	n/a.



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	Notes to a series
TN256	Semi-natural broadleaved woodland (JNCC: A1.1.1) consisting	N: 436787.05	
	mainly of oak with scattered pine, bramble and nettle.	E: 501309.94	SHULL SH
	Negligible suitability for roosting bats.		
TN257	Large mature oak with no visible cracks or holes.	N: 436790.00	
		E: 501250.49	
	Negligible suitability for roosting bats.		
TN258	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 436779.96	
	hawthorn, hazel, bramble, nettle and broad-leaved dock.	E: 501219.01	What when all a
	Moderate suitability for commuting and foraging bats.		
	Hedge_H107		
TN259	Species poor intact hedge (JNCC: J2.1.2) consisting of mainly	N: 436776.36	a).
	hawthorn with bramble and nettle, some sections newly	E: 501185.83	All Completes All
	planted.		
	Moderate suitability for commuting and foraging bats.		
	Hedge_H106		
TN260	Gas pipeline.	N: 436752.379904	No photograph available
		E: 501177.689213	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN261	Arable field (JNCC: J1.1) – in crop at the time of the survey.	N: 436640.56 E: 501171.05	n/a
TN262	Species rich hedge with trees (JNCC: J2.3.1) consisting of hawthorn, willow, hazel, ash and oak trees. Connected to woodland. Moderate suitability for commuting and foraging bats. Hedge_H108	N: 436572.37 E: 501108.48	
TN263	Mature oak tree in hedge with visible cracks and holes. Moderate suitability for roosting bats.	N: 436561.45 E: 501161.62	
TN264	Mature oak tree in hedge with splits and cracks. Moderate suitability for roosting bats.	N: 436563.27 E: 501235.26	No photograph available
TN265	Mature oak tree with split limbs, in hedge connected to woodland. Moderate suitability for roosting bats.	N: 436541.82 E: 501070.03	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN266	Dead ash tree in hedge, limited PRFs visible from ground. Low suitability for roosting bats.	N: 436478.77 E: 501041.19	
TN267	Species rich hedge with trees (JNCC: J2.3.1) consisting of hazel, bramble, blackthorn, ivy and elm. Moderate suitability for commuting and foraging bats. Hedge_H109	N: 436413.61 E: 501031.84	No photograph available
TN268	Arable field (JNCC: J1.1) – in crop at the time of the survey.	N: 436446.42 E: 501165.50	n/a
TN269	Species poor intact hedge (JNCC: J2.1.2) consisting of mainly hawthorn with some hazel, recently trimmed, connected to woodland. Moderate suitability for commuting and foraging bats. Hedge_H110	N: 436335.92 E: 501253.37	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference TN270	Species rich hedge with trees (JNCC: J2.3.1) consisting of hazel, hawthorn, willow, ivy, bramble and field maple trees. Rubbish present in sections with road layby. Moderate suitability for commuting and foraging bats. Hedge_H111	Grid Coordinates N: 436123.23 E: 501244.18	
TN271	Arable field (JNCC: J1.1) – ploughed field at the time of the survey.	N: 436110.07 E: 501321.32	n/a
TN272	Semi-natural broadleaved woodland (JNCC: A1.1.1) consisting of ash, oak, hawthorn and bramble.	N: 436067.98 E: 501402.85	
TN273	Large mature oak tree on edge of woodland, relic ivy branches and lots of visible cracks, holes and dead/broken limbs. High suitability for roosting bats.	N: 436026.08 E: 501380.24	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN274	Large mature ivy clad oak tree within hedge, close to woodland. High suitability for roosting bats.	N: 435994.38 E: 501276.64	
TN275	Three semi mature oak trees adjacent to hedge. Negligible suitability for roosting bats.	N: 435872.43 E: 501302.18	No photograph available
TN276	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn and ivy, recently trimmed. Low suitability for commuting and foraging bats. Hedge_H112	N: 435799.22 E: 501348.55	
TN277	Species poor intact hedge (JNCC: J2.1.2) consisting of mostly hawthorn, large sections newly planted (approximately 1-2 seasons growth). Low suitability for commuting and foraging bats. Hedge_H113	N: 435800.99 E: 501462.05	
TN278	Arable field (JNCC: J1.1) – winter cover at the time of the survey.	N: 435721.16 E: 501526.13	n/a



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN279	Two dead ash trees with large holes and crevices visible. Moderate suitability for roosting bats.	N: 435614.93 E: 501503.51	
TN280	Watercourse approximately 1 m wide with sloping banks consisting of grasses. Algae present, silty/sandy bed, woody debris, stagnant water c20 cm deep, no in channel vegetation. Potentially dry over summer months. Ditch_B45	N: 435625.76 E: 501560.16	
TN281	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn and a single mature oak tree. Hedge recently trimmed. Low suitability for commuting and foraging bats. Hedge_H114	N: 435622.98 E: 501559.67	
TN282	Mature oak tree, ivy clad, limited PRFs visible. Low suitability for roosting bats.	N: 435633.33 E: 501593.26	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN283	Poor semi-improved grassland (JNCC: B6) - small area of	N: 435584.49	
	grassland within arable field, with section of tall ruderal	E: 501498.07	
	vegetation adjacent to PRoW, broad leaved dock dominant.		
TN284	Arable field (JNCC: J1.1) – ploughed field at the time of the	N: 435482.39	n/a
	survey.	E: 501627.98	
TN285	Semi-natural broadleaved woodland (JNCC: A1.1.1) - small	N: 435550.00	CONTRACTOR OF
	area of woodland with mostly young oak and ash, signs of fly	E: 501759.85	
	tipping and beehives (x2).		
TN286	Species poor defunct hedge (JNCC: J2.2.2) consisting of	N: 435473.37	
	hawthorn, ash, ivy, bramble, large gaps in places.	E: 501779.68	
	Low suitability for commuting and foraging bats.		
	Hedge_H116		
TN287	Species rich intact hedge (JNCC: J2.1.1) consisting of	N: 435464.02	No photograph available
	hawthorn, bramble, hazel, blackthorn, holly and gorse.	E: 501763.77	
	Low suitability for commuting and foraging bats.		
	Hedge_H115		
TN288	Arable field (JNCC: J1.1) – ploughed field at the time of the	N: 435473.89	n/a
	survey.	E: 501983.01	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN289	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 435438.56	in the second second
	hawthorn, situated adjacent to major road.	E: 502157.78	
	Negligible suitability for commuting and foraging bats.		
	Hedge_H117		1 and a start of the
TN290	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 435408.15	ANNE COMPANY
	hawthorn and bramble, adjacent to busy road.	E: 502164.32	
	Low suitability for commuting and foraging bats.		
	Hedge_H118		
TN291	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 435151.09	
	hawthorn, recently trimmed.	E: 502295.88	
	Moderate suitability for commuting and foraging bats.		
	Hedge_H119		
TN292	Arable field (JNCC: J1.1) – in crop at the time of the survey.	N: 435134.76	n/a
		E: 502293.52	
TN293	Semi-natural broadleaved woodland (JNCC: A1.1.1) consisting	N: 435239.47	No photograph available
	of hawthorn, field maple, oak, ash, bramble and ivy. Public	E: 502395.32	
	footpath runs through the middle of this area.		
	Moderate suitability for commuting and foraging bats.		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN294	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 435156.43	
	hawthorn, recently trimmed.	E: 502448.17	
	Moderate suitability for commuting and foraging bats.		
	Hedge_H120		
TN295	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 435019.59	
	hawthorn with some ivy, recently trimmed.	E: 502320.92	
	Moderate suitability for commuting and foraging bats.		Contraction of the second s
	Hedge_H121		
TN296	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 434987.82	No photograph available
	hawthorn, recently trimmed.	E: 502483.01	
	Moderate suitability for commuting and foraging bats.		
	Hedge_H122		
TN297	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 434922.89	
	hawthorn, recently trimmed.	E: 502541.73	the second se
	Moderate suitability for commuting and foraging bats.		
	Hedge_H123		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN298	Scrub (JNCC: A2.1) – consisting of hawthorn and blackthorn, dense bramble, nettle, broad leaved dock and thistle. Fenced.	N: 434878.84 E: 502383.64	
TN299	Mature oak tree with no visible cracks and holes. Low suitability for roosting bats.	N: 434856.44 E: 502454.06	
TN300	Two oak trees with limited visible PRFs. Low suitability for roosting bats.	N: 434794.38 E: 502458.16	
TN301	Species poor hedge with trees (JNCC: J2.3.2) consisting of hawthorn, oak and bramble with some small gaps. Moderate suitability for commuting and foraging bats. Hedge_H124	N: 434762.27 E: 502465.76	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference TN302	Two mature oak trees that are isolated from wider habitat as situated in middle of field. Low suitability for roosting bats.	Grid Coordinates N: 434756.37 E: 502557.06	
TN303	Arable field (JNCC: J1.1) – ploughed field at the time of the survey.	N: 434759.43 E: 502621.54	n/a
TN304	Species poor hedge with trees (JNCC: J2.3.2) consisting of oak, crab apple and bramble, large gaps. Negligible suitability for roosting bats. Moderate suitability for commuting and foraging bats. Hedge_H125	N: 434829.06 E: 502702.87	
TN305	Oak tree with large holes due to broken limbs, holes look to have smaller cavities further in. Moderate suitability for roosting bats.	N: 434719.85 E: 502705.57	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN306	Species rich hedge with trees (JNCC: J2.3.1) consisting of	N: 434657.83	
	hawthorn, ash, ivy, willow, hazel, bramble, nettle and holly.	E: 503034.70	
	Moderate suitability for commuting and foraging bats.		
	Hedge_H126		
TN307	Soil heaps, woody debris and domestic waste piles.	N: 434656.60 E: 503075.35	No photograph available
TN308	Species poor hedge with trees (JNCC: J2.3.2) consisting of oak,	N: 434807.85	A the set
	ash, hawthorn, blackthorn, bramble. Some large gaps.	E: 503052.46	Non a life
	Negligible suitability for roosting bats.		A AB
	Moderate suitability for commuting and foraging bats.		Carlo Martin Carlos
	······································		
	Hedge_H127		
TN309	Semi dry ditch, with no bankside or in channel vegetation.	N: 434811.66	
	Some silty standing water in places.	E: 503053.02	
			10 m m
	Ditch_B60		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN310	Arable field (JNCC: J1.1) – ploughed field at the time of the survey.	N: 435029.85 E: 502967.20	n/a.
TN311	Gas pipeline.	N: 435049.29 E: 502988.41	No photograph available
TN312	Species poor hedge with trees (JNCC: J2.3.2) consisting of hawthorn, ash, oak and bramble. Moderate suitability for commuting and foraging bats.	N: 435052.97 E: 502987.88	No photograph available
TN313	Hedge_H128 Arable field (JNCC: J1.1) – winter cover at the time of the survey.	N: 435101.50 E: 503110.89	n/a
TN314	Mature, partly ivy clad, oak tree with splits and cracks. Moderate suitability for roosting bats.	N: 435089.59 E: 503161.66	
TN315	Mature oak tree with splits and cracks. Moderate suitability for roosting bats.	N: 435123.43 E: 503264.75	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN316	Species poor hedge with trees (JNCC: J2.3.2) consisting of hawthorn and oak. Fenced in places with some gaps and sections of just bramble. Moderate suitability for commuting and foraging bats. Hedge_H131	N: 435167.69 E: 503278.48	
TN317	Semi-natural broadleaved woodland (JNCC: A1.1.1) – small patch of woodland, mostly open scrub with scattered mature trees, one dead, adjacent to ditch and arable fields. Thistle, broad leaved dock, bramble, hawthorn, nettle and oak present.	N: 435131.95 E: 503291.63	
TN318	Dead oak tree with split limbs and visible cracks. Moderate suitability for roosting bats.	N: 435143.51 E: 503302.66	
TN319	Species poor hedge with trees (JNCC: J2.3.2) consisting of hawthorn and oak. Moderate suitability for commuting and foraging bats. Hedge_H129	N: 435157.91 E: 503301.00	No photograph available



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN320	Watercourse with steep banks, silted, no in channel vegetation. Ditch_B59	N: 435148.30 E: 503308.81	
TN321	Mature oak tree with visible cracks and splits. Moderate suitability for roosting bats.	N: 435147.10 E: 503327.62	
TN322	Mature oak tree with visible splits and cracks. Moderate suitability for roosting bats.	N: 435152.37 E: 503350.95	
TN323	Large mature oak tree with visible cracks and holes set within hedge. Moderate suitability for roosting bats.	N: 435181.00 E: 503465.17	
TN324	Arable field (JNCC: J1.1) – ploughed field at the time of the survey.	N: 435702.71 E: 503459.86	n/a



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN325	Three semi mature oak trees adjacent to hedge.	N: 436031.84 E: 503524.31	No photograph available
TN326	Negligible suitability for roosting bats. Arable field (JNCC: J1.1) – winter cover at the time of the survey.	N: 436157.43 E: 503535.94	n/a
TN327	Species poor hedge with trees (JNCC: J2.3.2) consisting of hawthorn and elder. Hedge_H135	N: 436311.12 E: 503459.84	
TN328	Arable field (JNCC: J1.1) – in crop at the time of the survey.	N: 436411.30 E: 503153.01	n/a
TN329	Scrub (JNCC: A2.1) with small open areas of rank grassland. Nettle, bramble, thistle, white clover present. Reptile mats (which are not part of Hornsea Four) also present during survey.	N: 436490.87 E: 503160.95	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN330	Watercourse with vertical banks, recently cleared, suspended sediments, no in channel veg, silty/sandy bed, slow flowing, 30 cm deep. Ditch_B58	N: 435314.48 E: 503646.23	
TN331	Pond (pond reference A63).	N: 435289.25 E: 503660.60	
TN332	Scrub (JNCC: A2.1) - small patch of scrub with scattered semi- mature trees adjacent to arable fields and PRoW. Negligible suitability for roosting bats Moderate suitability for commuting and foraging bats.	N: 435285.68 E: 503662.87	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN333	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 435307.41	
	hawthorn, ivy and bramble.	E: 503705.06	and the state of the second
	Moderate suitability for commuting and foraging bats.		
	Hedge_H134		
TN334	Semi dry pond (pond reference A64) with bulrush present.	N: 435277.17	No photograph available
		E: 503701.50	
TN335	Mature oak tree within scrub adjacent to stream, ivy clad with	N: 435252.27	
	broken branches. Moderate suitability for roosting bats.	E: 503716.22	
TN336	Oak tree with peeling bark, limited spaces for bat access.	N: 435200.43	
	Low suitability for roosting bats.	E: 503745.70	
TN337	Arable field (JNCC: J1.1) – ploughed field at the time of	N: 435329.30	n/a
	survey.	E: 503868.67	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN338	Group of mature and semi mature trees within scrub, one	N: 435283.70	
	mature oak tree with moderate bat roost potential.	E: 503895.50	
	Moderate suitability for roosting bats.		
TN339	Scrub (JNCC: A2.1) - area of scrub between arable fields, mainly bramble, common hogweed, nettle, cleavers and several ivy clad trees.	N: 435265.35 E: 503942.04	
	Arable field (JNCC: $J1.1$) – ploughed field at the of survey.	N: 435329.69	n/a



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN341	Dry ditch (JNCC: J2.6).	N: 435248.87 E: 504042.84	and the second se
	Ditch_B74	2.004042.04	
TN342	Arable field (JNCC: J1.1) – ploughed field at the time of	N: 435201.09	n/a
	survey.	E: 504183.00	
TN343	Dry ditch (JNCC: J2.6) – stagnant water in places.	N: 435140.98	
		E: 504049.89	
	Ditch_B57		
TN344	Species poor hedge with trees (JNCC: J2.3.2) consisting of	N: 435138.71	A MARINA CON
	hawthorn, oak, bramble and willow.	E: 504042.83	
	Moderate suitability for commuting and foraging bats.		
	Hedge_H136		
TN345	Improved grassland (JNCC: B4) – horses present.	N: 435067.90	
		E: 504233.97	and the second second
			- He -
			and the second
			and the second sec



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN346	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, nettle, bramble, common hogweed and thistle. Fenced, rabbit holes present. Moderate suitability for commuting and foraging bats. Hedge_H137	N: 435017.74 E: 504260.63	
TN347	Arable field (JNCC: J1.1) – ploughed field at the time of survey.	N: 434965.75 E: 503322.54	n/a
TN348	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, holly, ivy, elderberry and bramble. Moderate suitability for commuting and foraging bats. Hedge_H130	N: 434804.67 E: 503386.21	
TN349	Watercourse with steep banks, low water levels and no in channel vegetation. Slow flowing, silted water. Bankside vegetation consisting of bramble, nettle and broad-leaved dock. Ditch_B61	N: 434639.57 E: 503441.57	
TN350	Arable field (JNCC: J1.1) – ploughed field at the time of survey.	N: 434737.56 E: 503559.37	n/a



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN351	Barns adjacent to house, some with tiled roofs with potentially accessible areas. Moderate suitability for roosting bats.	N: 434985.01 E: 503576.90	
TN352	Species poor hedge with trees (JNCC: J2.3.2) consisting of elderberry, blackthorn, ivy, oak, bramble, hogweed, nettle and cow parsley. Moderate suitability for commuting and foraging bats. Hedge_H132	N: 435107.74 E: 503654.50	
TN353	Mature, ivy clad oak tree in hedge, limited view from ground however some cracks present. Moderate suitability for roosting bats.	N: 435057.40 E: 503600.19	
TN354	Pond (pond reference – A71).	N: 434959.01 E: 503608.39	No photograph available
TN355	Improved grassland (JNCC: B4) - house, gardens and paddocks, used for grazing, electric fences and livestock shelters present.	N: 434922.48 E: 503641.36	No photograph available



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN356	Group of six mature oak trees, smooth bark, limited PRFs. Low suitability for roosting bats.	N: 434820.61 E: 503636.28	
TN357	Watercourse with steep banks and low levels of water, overgrown with dense bramble. Ditch_B62	N: 434696.58 E: 503656.05	
TN358	Dry ditch (JNCC: J2.6). Ditch_B75	N: 434678.12 E: 503797.11	
TN359	Arable field (JNCC: J1.1) – ploughed field at the time of survey.	N: 434749.89 E: 503768.62	n/a
TN360	Scrub (JNCC: A2.1) – scrub with scattered trees, negligible bat roost throughout, several passerine bird calls heard (carrion crow).	N: 434812.89 E: 503787.17	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN361	Small section of scrub with tree stumps present for potential	N: 434818.97	No photograph available
	reptile hibernacula and pond (pond A72).	E: 503793.46	
TN362	Pond (pond reference – A72).	N: 434810.58 E: 503800.01	
TN363	Three mature trees (oak and ash) in hedgerow, ivy clad, some PRFs visible. Moderate suitability for roosting bats.	N: 434847.70 E: 503809.08	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN364	Species poor hedge with trees (JNCC: J2.3.2) consisting of	N: 434866.40	235
	blackthorn, hawthorn, holly and oak, defunct in places.	E: 503848.95	
	Low suitability for commuting and foraging bats.		
	Hedge_H133		
TN365	Watercourse with steep banks, slow flowing with no in	N: 434872.58	
	channel vegetation and low water levels, silted.	E: 503862.77	
	Ditch_B63		
TN366	Arable field (JNCC: J1.1) – in crop at the time of survey.	N: 434805.55	n/a
		E: 503941.62	
TN367	Arable field (JNCC: J1.1) – winter cover at the time of survey.	N: 435033.19	n/a
		E: 503877.47	
TN368	Dead oak tree with multiple cracks, holes and dead branches.	N: 434967.72	
		E: 504168.26	
	High suitability for roosting bats.		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN369	Two ivy clad field maple trees with limited visible PRFs. Opportunistic roosting potential only. Low suitability for roosting bats.	N: 434949.70 E: 504166.90	
TN370	Willow tree with no visible PRFs. Negligible suitability for roosting bats.	N: 434946.82 E: 504162.47	
TN371	Mature, ivy clad sycamore tree with limited visible PRFs. Opportunistic potential only. Low suitability for roosting bats.	N: 434911.63 E: 504123.27	



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN372	Scrub (JNCC: A2.1) – small area of scrub between hedge, arable field and substation, includes access road for existing substation.	N: 434958.46 E: 504331.02	
TN373	Species poor intact hedge (JNCC: J2.1.2) consisting of hawthorn, fenced. Moderate suitability for commuting and foraging bats. Hedge_H138	N: 434960.70 E: 504301.79	
TN374	Arable field (JNCC: J1.1) – winter cover at the time of survey.	N: 434886.70 E: 504210.96	n/a
TN375	Narrow watercourse between arable fields with low water levels and steep grassy banks. Partly overgrown with bramble and common hogweed, duckweed present. Rubbish present in places. Ditch_B64	N: 434795.72 E: 504161.89	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN376	Arable field (JNCC: J1.1) – in crop at the time of survey.	N: 434734.68	n/a
		E: 504201.07	
TN377	Arable field (JNCC: J1.1) – winter cover at the time of survey.	N: 434808.30	n/a
		E: 504296.08	
TN378	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 434864.46	
	hawthorn, fenced.	E: 504371.07	The second s
	Low suitability for commuting and foraging bats.		
	Hedge_H139		
TN379	Species poor hedge with trees (JNCC: J2.3.2) largely defunct	N: 434672.16	with a v
11(0)	hedge consisting of hawthorn, field maple and ash trees.	E: 504535.03	
	······································		
	Hedge_H1140		State
TN380	Scrub (JNCC: A2.1) adjacent to woodland and Creyke Beck	N: 434972.27	*
	power station. Hawthorn, bramble and nettle present.	E: 504651.86	Asso all
			a second second second
TN381	Group of semi-mature and mature trees, consisting of oak and	N: 434897	No photograph available
	ash trees.	E: 504672	
	One mature oak tree with moderate suitability for roosting		
	bats		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN382	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 456664.98	No photograph available
	hawthorn and blackthorn.	E: 512746.71	
	Hedge_H018		
TN383	Dry ditch (JNCC: J2.6)	N:456269.50	No photograph available
		E: 510644.74	
	Ditch_B86		
TN384	Dry ditch (JNCC: J2.6)	N:446950.66	No photograph available
		E: 501856.44	
	Ditch_B87		
TN386	Species poor intact hedge (JNCC: J2.1.2)	N: 445896.24	No photograph available
		E: 500786.15	
	Hedge_H147		
TN387	Species poor intact hedge (JNCC: J2.1.2)	N: 441158.65	No photograph available
		E: 500623.89	
	Hedge_H148		
TN388	Species poor intact hedge (JNCC: J2.1.2)	N: 440867.42	No photograph available
		E: 500599.60	
	Hedge_H149		
TN389	Species poor intact hedge (JNCC: J2.1.2)	N: 440754.31	No photograph available
		E: 500628.71	
	Hedge_H150		
TN390	Species poor intact hedge (JNCC: J2.1.2)	N: 440478.34	No photograph available
		E: 500276.45	
	Hedge_H151		



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN391	Narrow ditch, v shaped, low water levels, steep banks, bed vegetated with bramble, hogweed, potentially dry in summer months. Ditch_B49	N: 435632.09 E: 503337.38	
TN392	Arable field (JNCC: J1.1) – winter cover at the time of survey.	N: 435405.35 E: 503273.20	n/a
TN393	Mature oak with dead limbs and plenty of cracks and holes visible Moderate suitability for roosting bats	N: 435319.13 E: 503308.56	
TN394	Large mature oak with limited bat roost potential, no visible cracks or holes. Low suitability for roosting bats	N: 435246.99 E: 503242.29	
TN395	gas pipeline	N: 435178.41 E: 503269.94	No photograph available



Target Note (TN) Reference	Description	British National Grid Coordinates	Photograph Thumbnail
TN396	Mixed plantation woodland (JNCC: A1.3.2) consisting of sycamore, sweet chestnut, oak and pine. Limited undergrowth, leaf litter, bramble and pheasant feeders present.	N: 435607.02 E: 503301.65	
TN397	Mostly dry ditch with patches of standing water. Common reed, nettle, bramble, common hogweed, reed canary grass Ditch_B03	N: 460872.53 E: 516616.97	No photograph available
TN398	Dry ditch (JNCC: J2.6) Ditch_B65	N: 434721.67 E: 504327.29	No photograph available
TN399	Dry ditch (JNCC: J2.6) Ditch_B66	N: 434635.95 E: 504449.53	No photograph available
TN400	Dry ditch (JNCC: J2.6) Ditch_B67	N: 434605.79 E: 504490.28	No photograph available
TN401	Dry ditch (JNCC: J2.6) Ditch_B69	N: 434697.08 E: 504683.31	No photograph available



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN402	Dry ditch (JNCC: J2.6)	N: 434830.43	No photograph available
		E: 504687.54	
	Ditch_B70		
TN403	Dry ditch (JNCC: J2.6)	N: 434888.52	No photograph available
		E: 504694.23	
	Ditch_B71		
TN404	Dry ditch (JNCC: J2.6)	N: 435027.91	No photograph available
		E: 502994.39	
	Ditch_B76		
TN405	Dry ditch (JNCC: J2.6)	N: 458817.26	No photograph available
		E: 514720.99	
	Ditch_B79		
TN406	Dry ditch (JNCC: J2.6)	N: 455196.88	No photograph available
		E: 508357.92	
	Ditch_B80		
TN407	Dry ditch (JNCC: J2.6)	N: 447177.53	No photograph available
		E: 502235.84	
	Ditch_B81		
TN408	Dry ditch (JNCC: J2.6)	N: 447238.53	No photograph available
		E: 502163.59	
	Ditch_B82		
TN409	Dry ditch (JNCC: J2.6)	N: 445940.86	No photograph available
		E: 501061.30	
	Ditch_B83		
TN410	Dry ditch (JNCC: J2.6)	N: 442936.11	No photograph available
		E: 500284.10	
	Ditch_B84		
TN411	Dry ditch (JNCC: J2.6)	N: 456625.14	No photograph available
		E: 512739.14	
	Ditch_B85		



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
TN412	Dry ditch (JNCC: J2.6)	N: 456533.17	No photograph available
		E: 512005.17	
	Ditch_B88		
TN413	Dry ditch (JNCC: J2.6)	N: 459329.54	No photograph available
		E: 514934.67	
	Ditch_B89		
TN414	Dry ditch (JNCC: J2.6)	N: 456556.28	No photograph available
		E: 511634.46	
	Ditch_B90		
TN415	Dry ditch (JNCC: J2.6)	N: 456572.41	No photograph available
		E: 511415.31	
	Ditch_B91		
TN416	Dry ditch (JNCC: J2.6)	N: 447500.87	No photograph available
		E: 503131.47	
	Ditch_B92		
TN417	Species poor defunct hedge (JNCC: 2.1.2), mostly standalone	N: 449853.70	No photograph available
	shrubs of hawthorn with scattered scrub.	E: 505137.80	
	Hedge_H052		
TN418	Species poor intact hedge (JNCC: J2.1.2) consisting of	N: 443817.61	No photograph available
	hawthorn and blackthorn with occasional hazel	E: 500512.82	
	Hedge_H078		
TN419	Species poor intact hedge (JNCC: J2.1.2) with some sections	N: 439628.96	No photograph available
	newly planted, hawthorn, blackthorn, bird cherry	E: 500375.48	
	Linder Li001		
TN 420	Hedge_H091		
TN420	Lapsed hedge, predominantly Ash with Hawthorn, Elder,	N: 446754.25	No photograph available
	Rose, Some gaps. No visible defects	E: 501363.11	



Target Note (TN)	Description	British National	Photograph Thumbnail
Reference		Grid Coordinates	
	Hedge_H142		
TN421	Species poor defunct hedge (JNCC: 2.2.2)	N: 446714.03	No photograph available
		E: 501447.78	
	Hedge_H144		
TN422	Species poor defunct hedge (JNCC: 2.2.2) consisting of Ash,	N: 446619.84	No photograph available
	hawthorn, elder, elm and rose.	E: 501477.41	
	Hedge_H145		
TN423	Species poor defunct hedge (JNCC: 2.2.2) consisting of	N: 446641.01	No photograph available
	hawthorn.	E: 501518.68	
	Hedge_H146		
TN424	Standing water (JNCC: G1)	N: 459028.03	No photograph available
		E: 514609.80	
	Ditch_B06		
TN425	Dry ditch (JNCC: J2.6)	N: 448677.55	No photograph available
		E: 504299.62	
	Ditch_B34		
TN426	Dry ditch (JNCC: J2.6)	N: 436163.05	No photograph available
		E: 503599.78	
	Ditch_B55		
TN427	Dry ditch (JNCC: J2.6)	N: 435330.70	No photograph available
		E: 503915.93	
	Ditch_B56		



2 References

Institute of Environmental Assessment (1995). Guidelines for Baseline Ecological Assessment.

Joint Nature Conservation Committee (JNCC) (2010) Handbook for Phase 1 habitat survey: A technique for environmental audit.

Orsted (2018). Hornsea Four Environmental Impact Assessment: Scoping Report (EN010098-000021-EN010098)





Appendix A 2021 Survey Addendum



Hornsea Project Four: Environmental Statement (ES)

Volume A6, Annex 3.2: Extended Phase 1 Target Note Tables – 2021 Survey Addendum

PreparedRoyal HaskoningDHV, July 2021CheckedRoyal HaskoningDHV, July 2021AcceptedThomas Watts, Orsted, August 2021ApprovedJulian Carolan, Orsted, September 2021

A6.3.2 Addendum Version A





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Table 1: 2021 Hornsea Four Updated EP1HS Target Notes (TNs)





Glossary

Term	Definition	
Birds of Conservation	The 'red list' includes birds of the highest conservation concern in the UK,	
Concern (BoCC) 'Red List'	Channel Islands and Isle of Man needing urgent action.	
Commitment	A term used interchangeably with mitigation and enhancement measures. The purpose of Commitments is to reduce and/or eliminate Likely Significant Effects (LSEs), in EIA terms.	
	Primary (Design) or Tertiary (Inherent) are both embedded within the assessment at the relevant point in the EIA (e.g. at Scoping, Preliminary Environmental Information Report (PEIR) or ES). Secondary commitments are incorporated to reduce LSE to environmentally	
	acceptable levels following initial assessment i.e. so that residual effects are acceptable.	
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more National Significant Infrastructure Projects (NSIP).	
Energy balancing infrastructure (EBI)	The onshore substation includes energy balancing Infrastructure. These provide valuable services to the electrical grid, such as storing energy to meet periods of peak demand and improving overall reliability.	
Environmental Statement (ES)	A document reporting the findings of the EIA and produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations	
Export Cable Corridor (ECC)	The specific corridor of seabed (seaward of Mean High-Water Springs (MHWS)) and land (landward of MHWS) from the Hornsea Project Four array area to the Creyke Beck National Grid substation, within which the export cables will be located.	
Hornsea Project Four Offshore Wind Farm	The term covers all elements of the project (i.e. both the offshore and onshore). Hornsea Four infrastructure will include offshore generating stations (wind turbines), electrical export cables to landfall, and connection to the electricity transmission network. Hereafter referred to as Hornsea Four.	
High Voltage Alternating Current (HVAC)	High voltage alternating current is the bulk transmission of electricity by alternating current (AC), whereby the flow of electric charge periodically reverses direction.	
Landfall	The generic term applied to the entire landfall area between Mean Low Water Spring (MLWS) tide and the Transition Joint Bay (TJB) inclusive of all construction works, including the offshore and onshore ECC, intertidal working area and landfall compound. Where the offshore cables come ashore east of Fraisthorpe.	
National Grid Electricity Transmission (NGET) substation	The grid connection location for Hornsea Four at Creyke Beck.	
Onshore substation (OnSS)	Comprises a compound containing the electrical components for transforming the power supplied from Hornsea Project Four to 400 kV and to adjust the power quality and power factor, as required to meet the UK Grid	





Term	Definition	
	Code for supply to the National Grid. If a HVDC system is used the OnSS will	
	also house equipment to convert the power from HVDC to HVAC.	
Order Limits	The limits within which Hornsea Project Four (the 'authorised project') may be	
	carried out.	
Orsted Hornsea Project Four	The Applicant for the proposed Hornsea Project Four Offshore Wind Farm	
Ltd.	Development Consent Order (DCO).	
Potential Roost Feature	Potential bat roosts which can include visible cracks, holes, gaps or splits	
(PRF)	that allow access for roosting bats.	

Acronyms

Acronym	Definition	
EP1HS	Extended Phase 1 Habitat Survey	
HVAC	High Voltage Direct Current	
HVDC	High Voltage Alternating Current	
JNCC	Joint Nature Conservation Committee	
MLWS	Mean Low Water Springs	
OnSS	Onshore Substation	
OS	Ordnance Survey	
PRF	Potential Roost Feature	
PRoW	Public Right of Way	
RSPB	Royal Society for the Protection of Birds	
TN	Target Note	

Units

Unit	Definition
ha	hectare
km	kilometre
kV	kilovolt
m	metre



1 Introduction

- 1.1.1.1 Orsted Hornsea Project Four Limited (the 'Applicant') is proposing to develop the Hornsea Project Four Offshore Wind Farm (hereafter 'Hornsea Four'). Hornsea Four will be located approximately 69 km offshore the East Riding of Yorkshire in the Southern North Sea and will be the fourth project to be developed in the former Hornsea Zone. Hornsea Four will include both offshore and onshore infrastructure including an offshore generating station (wind farm), export cables to landfall, and on to an onshore substation (OnSS) with energy balancing infrastructure (EBI), and connection to the electricity transmission network.
- 1.1.1.2 Royal HaskoningDHV was commissioned to undertake an updated Extended Phase 1 Habitat Survey (EP1HS) within and up to 50 m from the onshore Hornsea Four Order Limits. To inform the Scoping stages of the project, an initial habitat assessment was conducted, comprising a desktop review of high-resolution aerial imagery obtained in July 2018, followed by a ground-truthing exercise. This is reported in the Hornsea Four Scoping Report (Orsted 2018).
- 1.1.1.3 An Extended Phase 1 Habitat Survey (EP1HS) was undertaken between 6th and 15th February 2019 and between the 4th and 13th September 2019 to record the habitats within the Hornsea Four EP1HS survey area and to identify the presence or likely presence of legally protected and notable species. The findings of this survey are provided in Annex 3.1: Extended Phase 1 Habitat Survey Report and Annex 3.2: Extended Phase 1 Target Note Tables.
- 1.1.1.4 Due to refinements of the onshore Hornsea Four Order Limits since the 2019 EP1HS survey, in combination with landowner access not being granted for 5 % of the Hornsea Four Order Limits in 2019, a further EP1HS of these areas was undertaken in June 2021. Ongoing consultation with landowners has been undertaken by The Applicant's land agents and consequently access to those areas previously unsurveyed in 2019 was granted in June 2021. This addendum has been produced to present the findings from the 2021 survey effort and should be read in conjunction with Annex 3.1: Extended Phase 1 Habitat Survey Report and Annex 3.2: Extended Phase 1 Target Note Tables.
- 1.1.1.5 This addendum, in combination with Annex 3.1: Extended Phase 1 Habitat Survey Report and Annex 3.2: Extended Phase 1 Target Note Tables, have been produced to update the habitat information following the scoping stage survey and to characterise the baseline environment and identify the requirement for Phase 2 species-specific surveys to inform and support the ecological impact assessment in Volume A3, Chapter 3: Ecology and Nature Conservation of the Hornsea Four Environmental Statement (ES).
- 1.1.1.6 Due to the amount of data collated during the Hornsea Four EP1HS, the technical report has been split into two parts:
 - Annex 3.1: Extended Phase 1 Habitat Survey Report 2021 Addendum outlines the methodology, survey results, conclusions and mitigation; and
 - Annex 3.2: Extended Phase 1 Target Note Tables 2021 Addendum (this document) –presents the target notes table.





1.1.1.7 The 2021 survey addendum has also been split into two parts to accompany the respective technical annexes listed above. Consequently, Table 1 below should be read in conjunction with Annex 3.1: Extended Phase 1 Habitat Survey Report – 2021 Survey Addendum as well as Figure 2 to Figure 5 within the aforementioned report. All photographs were taken with an iPad 8-megapixel camera (f/2.4 aperture).



Table 1: 2021 Hornsea Four Updated EP1HS Target Notes (TNs).

Target Note (TN)	Description	Photograph Thumbnail
Reference TN433	Badger field sign – one sett entrance with potential mammal pathway	
TN434	Badger field sign – potential mammal pathway into adjacent hedgerow	



Target Note (TN) Reference	Description	Photograph Thumbnail
TN435	Badger field sign – evidence of recent excavation	
TN436	Badger field sign – evidence of recent excavation but not a confirmed sett entrance as it does not extend below ground level.	



Target Note (TN) Reference	Description	Photograph Thumbnail
TN437	Three sett entrances (outliers) with one spoil pile and the remaining two entrances at ground level with exposed tunnels evident. No evidence (e.g. footprints, discarded bedding, latrines) noted to confirm current use by badgers.	



Target Note (TN) Reference	Description	Photograph Thumbnail
TN438	Disused barn building currently used by a breeding pair of barn owls.	



Target Note (TN) Reference	Description	Photograph Thumbnail
TN439	Species-poor hedgerow (hawthorn)	
TN440	Species-poor hedgerow (hawthorn) adjacent to arable field	



Target Note (TN) Reference	Description	Photograph Thumbnail
TN441	Arable field	
TN442	Species-poor hedgerow (hawthorn)	



Target Note (TN) Reference	Description	Photograph Thumbnail
TN443	Species-poor hedgerow (hawthorn)	
TN444	Area of scrub and semi-natural broadleaved woodland adjacent to cycle way and footpath	



Target Note (TN) Reference	Description	Photograph Thumbnail
TN445	Area of scrub and tall ruderals adjacent to cycle way and public footpath	
TN446	Stand of scrub and tall ruderals adjacent to cycle way and public footpath	



Target Note (TN) Reference	Description	Photograph Thumbnail
TN447	Area of dense scrub	
TN448	Cycle way and public footpath with adjacent areas of tall ruderals and scrub	



2 References

Institute of Environmental Assessment (1995). Guidelines for Baseline Ecological Assessment.

Joint Nature Conservation Committee (JNCC) (2010) Handbook for Phase 1 habitat survey: A technique for environmental audit.

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