

Ecological Summary Note for 'Land to the East of Leeds Road, Chidswell' and 'Heybeck Lane'

Scope of Surveys

Brooks Ecological were commissioned in February 2018 to undertake a suite of detailed ecological studies on the proposed development Site known as Land at Chidswell. At this stage, the Site was encapsulated within a single red line boundary, and as such, each of the detailed surveys were written into a single report, which covered the entire Site.

Since then, the area has been divided into two separate sites, known as the 'Heybeck Lane' site and the 'Land East of Leeds Road' site; with each site going forward with separate outline planning applications.

Both Sites support a similar range of habitats and faunal issues, and thus share roughly the same ecological constraints. The conclusions drawn and recommendations provided within each of the separate ecological reports will remain applicable to both sites. A summary of the survey and result for each Site is provided below:

Survey	Report Ref.	Key findings	
		Heybeck Lane	Land East of Leeds Road
Preliminary Ecological Appraisal	A054074*	Habitats on Site: <ul style="list-style-type: none"> • Arable land • Hedgerows 	Habitats on Site: <ul style="list-style-type: none"> • Arable land • Improved grass • Semi-improved grass • Hedgerows • Scattered trees • Woodland • Scrub • Tall ruderal • Watercourse • Wet & dry ditches • Hard standing • Buildings <p>Invasive Non-native species recorded on Site (Himalayan balsam)</p>
Great Crested Newt HSI Assessment	R-328-01	Likely absence confirmed	Likely absence confirmed
Barn Owl Survey	R-328-02	Likely absence confirmed	Likely absence confirmed
Breeding Bird Survey	R-328-03	Typical assemblage of farmland birds. <u>Limited</u> value for this group.	Breeding Bird assemblage of <u>District Level</u> importance. Skylark and Yellowhammer populations of particular note.

Survey	Report Ref.	Key findings	
		Heybeck Lane	Land East of Leeds Road
Bat Roost Suitability Assessment of Trees	R-328-05	Single tree with roost suitability	Nine trees with roost suitability
Bat Activity	R-328-06	Site of limited value to this group	Site of limited value to this group
Water vole	R-328-07	Likely absence confirmed	Likely absence confirmed
Reptile	R-328-08	Likely absence confirmed	Likely absence confirmed
Hedgerows	R-328-09	Single important hedgerow	Two important hedgerows
Bat Roost Suitability Assessment of Houses	R-328-10	Single building with Negligible roost suitability	Two properties with low roost suitability
Bat Emergence survey of Houses	R-328-11	-	Likely absence of roosting confirmed.

* Report by WYG Environment Planning Transport Ltd

The larger site 'Land East of Leeds Road' will be the subject of an ES Assessment, whilst the smaller site 'Heybeck Lane' will be the subject of an Ecological Impact Assessment (EclA). For both assessments, the ecological reports listed above remain relevant and will be attached as Technical Appendices.

In terms of mitigation, a Biodiversity Management Plan (BMP) and Construction Environmental Management Plan (CEMP: Biodiversity) will be recommended for both Sites, whilst an Invasive Weed Management Plan will also be recommended for the 'Land East of Leeds Road' Site.

Biodiversity Metric Calculations

Land to the East of Leeds Road, Chidswell

As the proposals are only in outline at present, finer detail on habitat creation has not been produced. The Biodiversity Metric Calculation has therefore been based on illustrative drawings, and the score is unlikely to be an accurate reflection of the Total Biodiversity Impact on on-Sites habitats.

The Score achieved at this stage is therefore purely indicative and is meant to illustrate a 'ball-park figure' for the Biodiversity Metric Calculations. The final figure is likely to increase once the Landscape Masterplan and Biodiversity Management Plan have been finalised.

At this stage, it is possible for the scheme to achieve an overall net gain in biodiversity.

Ecological Baseline – Habitat Units

Ref	Habitats and areas			Habitat distinctiveness	Habitat condition	Ecological connectivity	Strategic significance	Suggested action to address habitat losses	Ecological baseline Total habitat units
	Broad Habitat	Habitat type	Area (hectares)	Distinctiveness	Condition	Ecological connectivity	Strategic significance		
1	Cropland	Cropland - Cereal crops	102.25	Low	N/A - Agricultural	N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required	204.50
2	Grassland	Grassland - Modified grassland	1.78	Low	Poor	N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required	3.56
3	Heathland and shrub	Heathland and shrub - Mixed scrub	0.91	Medium	Fairly Poor	N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required	5.46
4	Woodland and forest	Woodland and forest - Other woodland; broadleaved	1.67	Medium	Fairly Poor	N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required	10.02
5	Woodland and forest	Woodland and forest - Other woodland; Young Trees planted	1.84	Medium	Poor	N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required	7.36
6	Urban	Urban - Developed land; sealed surface	0.06	V.Low	N/A - Other	N/A	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00
7	Urban	Urban - Vegetated garden	0.27	Low	Poor	N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required	0.54
8	Sparsely vegetated land	Sparsely vegetated land - Ruderal/Ephemeral	0.12	Low	Fairly Poor	N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required	0.36
9	Lakes	Lakes - Ditches	0.53	Medium	Poor	N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required	2.12
10									
11									
12									
13									
14									
Total site area ha			109.43					Total Site baseline	233.92

Ecological Baseline – Hedgerow Units

Baseline ref	UK Habitats - existing habitats			Habitat distinctiveness	Habitat condition	Ecological connectivity	Strategic significance	Suggested action to address habitat losses	Ecological baseline Total hedgerow units
	Hedge number	Hedgerow type	length KM	Distinctiveness	Condition	Ecological connectivity	Strategic significance		
1		Native Hedgerow	3.725	Low	Poor	Low	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	7.45
2									
3									
4									
5									
6									
Total Site length/KM			3.73					Total Site baseline	7.45

Ecological Baseline – River Units

Baseline ref	Existing river type		Habitat distinctiveness	Habitat condition	Strategic significance		Suggested action	Ecological baseline Total river units
	River type	length KM	Distinctiveness	Condition	Strategic significance	Strategic significance		
1	Rivers & Streams (Other)	0.88	Medium	Fairly Poor	Low potential/ action not identified in any plan.	Low Strategic Significance	Avoid	7.04
2								
3								
4								
5								
Total site length KM		0.88					Total Site	7.04

Potential Ecological Baseline (post-development) – Habitat Units (created)

Proposed habitat	Area (hectares)	Distinctiveness	Condition	Post development/ post intervention habitats				Habitat units delivered
				Ecological	Strategic significance	Temporal	Difficulty	
				Ecological connectivity	Strategic significance	Time to target condition/years	Difficulty of creation category	
Urban - Suburban/ mosaic of developed/ natural surface	42.3	Low	Poor	N/A	Area/compensation not in local strategy/ no local strategy	1	Low	81.64
Urban - Developed land; sealed surface	30	V.Low	N/A - Other	N/A	Area/compensation not in local strategy/ no local strategy	0	Low	0.00
Urban - Allotments	0.7	Medium	Moderate	N/A	Area/compensation not in local strategy/ no local strategy	1	Low	5.40
Urban - Sustainable urban drainage feature	3.6	Low	Moderate	N/A	Area/compensation not in local strategy/ no local strategy	3	Medium	8.67
Urban - Amenity grassland	20.4	Low	Moderate	N/A	Area/compensation not in local strategy/ no local strategy	3	Low	73.33
Grassland - Other neutral grassland	8.92	Medium	Moderate	N/A	Area/compensation not in local strategy/ no local strategy	10	Low	49.97
Totals	105.92							219.01

Potential Ecological Baseline (post-development) – Habitat Units (enhanced)

Baseline ref	Baseline habitat	Proposed habitat (Pre-populated but can be overridden)	Change in distinctiveness and condition				Area (hectares)	Distinctiveness	Condition	Ecological connectivity	Strategic significance	Temporal multiplier	Difficulty of enhancement	Habitat units delivered
			Distinctiveness change	Condition change	Ecological connectivity	Strategic significance								
			Distinctiveness	Condition	Ecological connectivity	Strategic significance								
4	Woodland and forest - Other woodland, broadleaved	Woodland and forest - Other woodland, broadleaved	Medium - Medium	Fairly Poor - Moderate	1.07	Medium	Moderate	N/A	Area/compensation not in local strategy/ no local strategy	15	Medium	11.33		
5	Woodland and forest - Other woodland, Young Trees planted	Woodland and forest - Other woodland, mixed	Medium - Medium	Poor - Moderate	1.04	Medium	Moderate	N/A	Area/compensation not in local strategy/ no local strategy	10	Medium	10.01		
Total site area												3.51	Enhancement total	22.34

Potential Ecological Baseline (post-development) – Hedgerow Units (created)

Baseline ref	New hedge number	Proposed habitats	Habitat type	Length km	Habitat distinctiveness and condition				Multipliers			Hedge units delivered
					Distinctiveness	Condition	Ecological connectivity	Strategic significance	Spatial quality		Temporal multiplier	
					Distinctiveness	Condition	Ecological connectivity	Strategic significance	Ecological connectivity	Strategic significance	Time to target condition/years	
1		Native Species Rich Hedgerow		2	Medium	Moderate	Medium	Area/compensation not in local strategy/ no local strategy			5	9.87
2												
3												
4												
5												
Creation Length/KM				2.00								9.87

Potential Ecological Baseline (post-development) – Hedgerow Units (enhanced)

Baseline ref	Baseline habitat	Proposed	Change in distinctiveness and condition				Length km	Distinctiveness	Condition	Ecological connectivity	Strategic significance	Temporal multiplier	Difficulty of enhancement	Hedge units delivered
			Distinctiveness movement	Condition movement	Ecological connectivity	Strategic significance								
			Distinctiveness	Condition	Ecological connectivity	Strategic significance								
1	Native Hedgerow	Native Species Rich Hedgerow	Low - Medium	Lower Distinctiveness Habitat - Moderate	2.35	Medium	Moderate	Medium	Area/compensation not in local strategy/ no local strategy	5	Medium	13.07		
Total site length												2.35	13.07	

Potential Ecological Baseline (post-development) – River Units (enhanced)

Baseline ref	Baseline habitats		Post development/ post intervention habitats							Strategic significance	Temporal multiplier	Difficulty multiplier	Riparian encroachment	River units delivered
	Baseline habitat	Proposed (Pre-populated can be overridden)	Change in distinctiveness and condition		Length km	Distinctiveness	Condition	Strategic significance						
1	Rivers & Streams (Other)	Rivers & Streams (Other)	Medium-Medium	Fully/Poor - Moderate	0.8	Medium	Moderate	Delivers within Priority Habitats for Restoration	High strategic significance	1	Medium	0-2m	9.25	
													3.25	

Headline Results

On-site baseline	<i>Habitat units</i>	233.92
	<i>Hedgerow units</i>	7.45
	<i>River units</i>	7.04
On-site post-intervention (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	241.16
	<i>Hedgerow units</i>	23.73
	<i>River units</i>	9.25
Off-site baseline	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Off-site post-intervention (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net unit change (including all on-site & off-site habitat retention/creation)	<i>Habitat units</i>	7.24
	<i>Hedgerow units</i>	16.28
	<i>River units</i>	2.21
Total net % change (including all on-site & off-site habitat creation + retained habitats)	<i>Habitat units</i>	3.09%
	<i>Hedgerow units</i>	218.58%
	<i>River units</i>	31.43%

The above is provided simply to illustrate that the Site could achieve a net gain overall - this is based on parameter plans and illustrative masterplans provided. It will be at the Reserved Matters stage that an accurate Net Gain score will be calculated.