

Site name: Leconfield Road, Nanpantan
 Planning reference number: P/20/2199/2

	Habitat Area (ha)	Hedgerow impact (km)	Connectivity Features (km)	Habitat Biodiversity Value	Hedgerow Biodiversity Value	Connectivity Biodiversity Value
Existing						
Onsite Biodiversity Impact	1.42	0.01	0.00	6.75	0.98	0.00
Indirect Biodiversity Impact	0.00	0.00	0.00	0.00	0.00	0.00
Total habitat / linear features impacted	1.42	0.01	0.00	6.75	0.98	0.00
Retained / Created / Enhanced						
Onsite biodiversity retained	0.28	0.10	0.00	1.51	0.00	0.00
Onsite Creation	1.46	0.43	0.00	2.39	0.72	0.00
Biodiversity retained and enhanced	0.03	0.00	0.00	0.20	0.00	0.00
Total biodiversity retained/enhanced	1.77	0.53	0.00	4.10	0.72	0.00
Trading Down	n/a	n/a	n/a	-2.18	-0.72	0.00
Biodiversity Impact	n/a	n/a	n/a	-4.83	-0.06	0.00

CAUTION - Destruction of habitats of high distinctiveness, e.g. lowland meadow or species-rich hedgerows, may be against local policy. Has the mitigation hierarchy been followed, can impact to these habitats be avoided?

Habitat Impacts	Loss	Gain	Impact	%age losses	Compensatory Unit loss	Indicative Offset (ha)	WCC Offset units	WCC Indicative Offset Contribution
Woodland Habitat	0.78	0.39	-0.39	11.64	-0.56	1.31	-0.56	£33,106
Grassland Habitat	4.25	1.29	-2.96	88.36	-4.27	6.41	-4.27	£143,699
Wetland Habitat	0.00	0.07	0.07					
Other Habitat (incl. Built Env)	0.12	0.75	0.63					
Total	5.15	2.50	-2.65	100.00	-4.83	7.72	-4.83	£176,805
		Trading down	-2.18					
			-4.83					

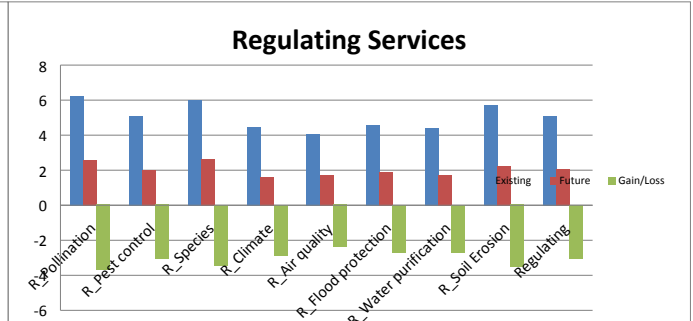
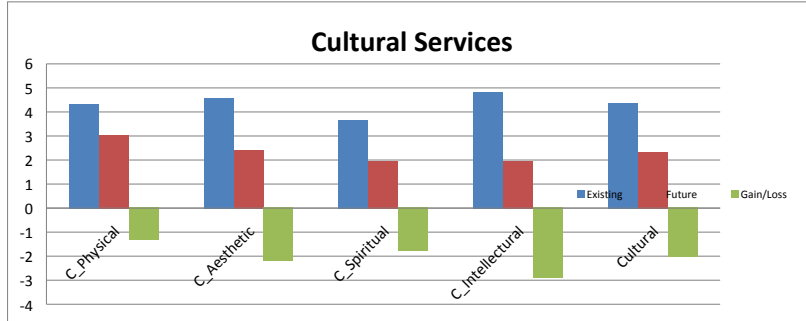
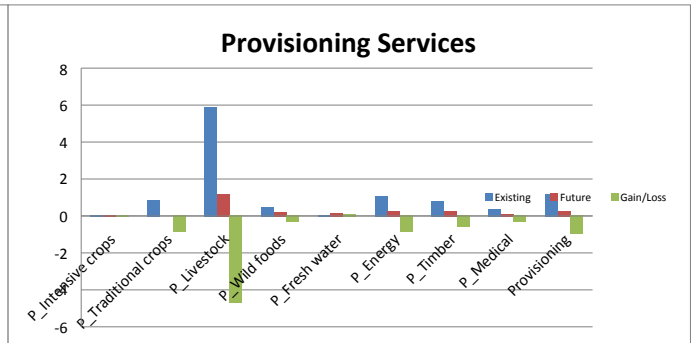
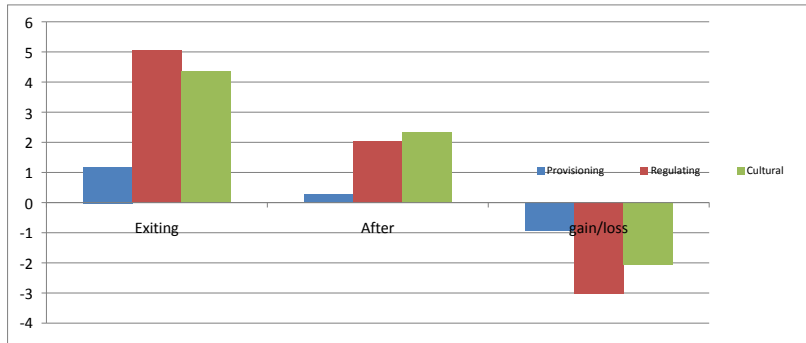
Hedgerow Impacts	Loss	Gain	Trading down	Impact	Unit loss	Indicative Offset (km)	WCC Offset units	WCC Offset Contribution
Hedgerow	0.06	0.72	-0.72	-0.06	-0.06	0.01	-0.06	£17,190

SUMMARY

This development will result in -4.83 Habitat Biodiversity Units loss; -0.06 Hedgerow Units loss and 0 Connectivity Biodiversity Units loss

This loss will need to be compensated for, either through a condition or an obligation, via a 'Biodiversity Offsetting Scheme' that compensates for the each habitat and their respective units. The Biodiversity Offsetting Scheme can be one arranged by you or by a financial contribution to Warwickshire County Council indicatively of £193995.

ECOSYSTEM SERVICES ANALYSIS



For any questions with regard to biodiversity impact and this development please contact Warwickshire County Council Ecological Services: email: planningecology@warwickshire.gov.uk or telephone 01926 418060

Warwickshire, Coventry & Solihull - Habitat Impact Assessment Calculator

KEY	
 	No action required
 	Enter value
 	Drop-down menu
 	Calculation
 	Automatic lookup
 	Automatic Condition setting
 	Result

Local Planning Authority:	Other
Site name:	Leconfield Road, Nantpantan
Planning application reference number:	P/20/2199/2
Assessor:	Oliver Ramm; Lauri Leivers
Date:	09/11/2021

Please fill in both tables

Please do not edit the formulae or structure

To condense the form for display hide vacant rows, do not delete them

If additional rows are required, or to provide feedback on the calculator please contact WCC Ecological Services 01926 418060

Existing habitats on site Please enter all habitats within the site boundary			Habitat distinctiveness		Habitat condition		Habitats to be retained with no change within development		Habitat Biodiversity Value		Habitats to be lost within development		Comment	
T. Note	code	Phase 1 habitat description	Habitat area (ha)	Distinctiveness	Score	Condition	Score	Area (ha)	Existing value	Area (ha)	Existing value	Area (ha)		Existing value
Direct Impacts and retained habitats			A	B	C	D	E	F	G	H				
			A	B	C	D	E	F	G	H				
B6		Grassland: Poor semi-improved grassland	1.00	Medium-Low	3	Poor	1	0.00	0.00	0.00	0.00	1.00	3.00	Poor Semi-Improved Grassland. Additional information including details of the condition assessment are available
B6		Grassland: Poor semi-improved grassland	0.03	Medium-Low	3	Poor	1	0.00	0.03	0.03	0.09			Poor Semi-Improved Grassland. Additional information including details of the condition assessment are available
B6		Grassland: Poor semi-improved grassland	0.01	Medium-Low	3	Poor	1	0.01	0.03	0.00				Area of grassland near the road outside main gates of site.
A21		Woodland: Dense continuous scrub	0.35	Medium-Low	3	Moderate	2	0.22	1.32	0.00		0.13	0.78	Dense continuous scrub, present throughout the site. Additional information including details of the condition ass
C31		Other: Tall ruderal	0.04	Medium-Low	3	Poor	1	0.00	0.00	0.00	0.04	0.12		Tall ruderal habitat. Additional information including details of the condition assessment are available within the s
n/a		Built Environment: Buildings/hardstanding	0.03	none	0	Poor	1	0.03	0.00	0.00				Hardstanding road
A3		Woodland: Scattered trees	0.02	Medium	4	Moderate	2	0.02	0.16					Scattered trees on site.
B12		Grassland: Semi-improved acidic grassland	0.25	Medium-High	5	Poor	1	0.00				0.25	1.25	
Total			1.73					0.28	1.51	0.03	0.09	1.42	5.15	J
										Site habitat biodiversity value		ΣD + ΣF + ΣH		6.75
Indirect Negative Impacts Including off site habitats			K					Value of loss from indirect impacts K x A x B = Li, Lii						
Before/after impact														
Before														
After														
Before														
After														
Before														
After														
Before														
After														
Before														
After														
Total			0.00						0.00	M			HIS = J + M	
										Habitat Impact Score (HIS)		5.15		

CAUTION - Destruction of habitats of high distinctiveness, e.g. lowland meadow or ancient woodland, may be against local policy. Has the mitigation hierarchy been followed, can impact to these habitats be avoided?
Any unavoidable loss of habitats of high distinctiveness must be replaced like-for-like.

Proposed habitats on site (Onsite mitigation)			Target habitat distinctiveness		Target habitat condition		Time till target condition		Difficulty of creation / restoration		Habitat biodiversity value	Comment	
T. Note	code	Phase 1 habitat description	Area (ha)	Distinctiveness	Score	Condition	Score	Time (years)	Score	Difficulty	Score		(N x O x P) / Q / R
Habitat Creation			N	O	P	Q	R						
			N	O	P	Q	R						
J12		Grassland: Amenity grassland	0.15	Low	2	Poor	1	3 Years	1.1	Low	1	0.27	This area is to be planted with Naturescapes N14 Flowering lawn mix (or similar). This contains a mix of native g
B22		Grassland: Semi-improved neutral grassland	0.24	Medium	4	Moderate	2	10 years	1.4	Medium	1.5	0.91	This is to be planted with a grassland wildflower mix such as naturescapes N4 summer flowering butterfly and be
A21		Woodland: Dense continuous scrub	0.07	Medium-Low	3	Moderate	2	15 years	1.7	Low	1	0.25	Mixed scrub will be managed twice per year and planted with a mix of scrub species: Hawthorn, Hazel, Blacktho
n/a		Built Environment: Buildings/hardstanding	0.54	none	0	Poor	1	3 Years	1.1	Low	1	0.00	This area comprises houses and roads
G1		Wetland: Standing water	0.02	High	6	Poor	1	3 Years	1.1	Medium	1.5	0.07	This is the area within the proposed SUDS, likely to be standing water for much of the year and in periods of hea
n/a		Built Environment: Gardens (lawn and planting)	0.41	Low	2	Poor	1	3 Years	1.1	Low	1	0.75	This area comprises vegetated garden
A3		Woodland: Scattered trees	0.03	Medium	4	Moderate	2	15 years	1.7	Low	1	0.14	Scattered trees planted throughout the site. Trees planted along the western and south-western edges of the site
Total			1.46	ERROR - Total area of habitats created must equal total area of habitats lost									
Habitat Enhancement							Existing value S (= F)				(N x O x P) - S / Q / R		
B	B22	Grassland: Semi-improved neutral grassland	0.03	Medium	4	Moderate	2	10 years	1.4	Low	1	0.11	Area to be retained and enhanced. This section will be planted with nature scapes N10 Woodland meadow mixtu
Total			0.03										
										Trading down correction value		-2.18	
										Habitat Mitigation Score (HMS)		0.32	
										HBIS = HMS - HIS			
										Habitat Biodiversity Impact Score		-4.83	Loss
										Percentage of biodiversity impact loss		93.79	

	Loss	Gain	Impact
Woodland Habitat	0.78	0.39	-0.39
Grassland Habitat	4.25	1.29	-2.96
Wetland Habitat	0.00	0.07	0.07
Other Habitat (including Built Environment)	0.12	0.75	0.63
Total	5.15	2.50	-2.65
		Trading down	-2.18
			-4.83

Warwickshire, Coventry & Solihull - Hedge Impact Assessment Calculator

KEY	
No action required	
Enter value	
Drop-down menu	
Calculation	
Automatic lookup	
Result	

This sheet calculates the impacts to hedges and lines of trees in and around the site.

These units are not transferrable as compensation for either the Habitat or Connectivity Impact Assessment scores.

Please fill in both tables

Please do not edit the formulae or structure
To condense the form for display hide vacant rows, do not delete them.
If additional rows are required, or to provide feedback on the calculator please contact WCC Ecological Services

Existing Hedgerow features on site		Hedgerow distinctiveness		Hedgerow condition assessments										Hedgerow features to be retained with no change within development		Hedgerow Biodiversity Value Hedgerow features to be retained and enhanced within development		Hedgerow features to be lost within development		Comment		
T. Note	code	Hedgerow habitat description	Feature length (km)	Distinctiveness	Score	A1	A2	B1	B2	C1	C2	D1	D2	Condition Score	Length (km)	Existing value	Length (km)	Existing value	Length (km)		Existing value	
														C	A x B x C = D	E	A x B x E = F	G	A x B x G = H			
Direct Impacts and retained features																						
H1	n/a	Hedges: species rich hedge with trees	0.03	High	6	Pass	Fail	Fail	Pass	Fail	Fail	Pass	Fail	1	0.02	0.12	0.00	0.00	0.01	0.06	Hedge 3. Additional information including details of the condition assessment are available within the appen	
H2	n/a	Hedges: species rich hedge with trees	0.06	High	6	Pass	Pass	Fail	Pass	Fail	Fail	Pass	Fail	2	0.06	0.72	0.00	0.00	0.01	0.06	Hedge 1. Additional information including details of the condition assessment are available within the appen	
H3	n/a	Hedges: non_species rich hedge	0.02	Low	2	Pass	Pass	Fail	Pass	Fail	Fail	Pass	Fail	2	0.02	0.08	0.00	0.00	0.01	0.06	Hedge 2. Additional information including details of the condition assessment are available within the appen	
Total			0.11												Totals	0.10	0.92	0.00	0.00	0.01	0.06	
Indirect Negative Impacts																						
Before/after Impact			K												Value of loss from indirect impacts K x A x B = L, Lii	LI - Lii				Site Hedge Biodiversity Value	ZD + ΣF + ΣH	
Before																						
After																						
Before																						
After																						
Before																						
After																						
Before																						
After																						
Total			0.00													0.00 M					HIS = J + M	0.06

CAUTION - Destruction of features high distinctiveness may be against local policy. Has the mitigation hierarchy been followed, can impact to these habitats be avoided? Any unavoidable loss of valuable habitats must be replaced like-for-like. All newly planted hedges should be native species-rich hedgerows idelly with trees.

Proposed hedge features on site (Onsite mitigation)		Target hedge distinctiveness		Hedgerow condition assessments										Time till target condition		Difficulty of creation / restoration		Linear biodiversity value (N x O x P) / Q / R	Comment			
T. Note	code	Phase 1 habitat description	Length (km)	Distinctiveness	Score	A1	A2	B1	B2	C1	C2	D1	D2	Condition Score	Time (years)	Score	Difficulty			Score		
														Q	R							
Hedgerow Creation																						
n/a		Hedges: non_species rich hedge	0.07	Low	2	Fail	Fail	Pass	Pass	Fail	Fail	Pass	Pass	1	5 years	1.2	Low	1	0.12	Introduced planting throughout gardens. Likely to be heavily managed to poor condition is assumed.		
n/a		Hedges: non_species rich hedge	0.36	Low	2	Fail	Fail	Pass	Pass	Fail	Fail	Pass	Pass	1	5 years	1.2	Low	1	0.60	Garden hedges planted bordering gardens throughout the site. Poor condition assumed as likely to be heavy		
Total			0.43																			
Hedgerow Enhancement																						
														Existing value S (= F)								
Total			0.00																			
																			Trading down correction value	-0.72		
																			Hedge Mitigation Score (HMS)	0.00		

Hedge Biodiversity Impact Score	0.06	Loss
Percentage of linear impact loss	100.00	

KEY	
No action required	
Action required	
Drop-down menu	
Calculation	
Automatic lookup	
Overall Gain	
Overall Loss	

VALUE

	Distinctiveness	Area	Value	Woodland					Grassland					Wetland					Other (including Built Gardens)					Built Environment					
				High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	
B6 Grassland: Poor semi-improved grassland	Medium-Low	1.00	3.00									3.00																	
B6 Grassland: Poor semi-improved grassland	Medium-Low	0.03																											
B6 Grassland: Poor semi-improved grassland	Medium-Low	0.01																											
A21 Woodland: Dense continuous scrub	Medium-Low	0.35	0.78				0.78																						
C31 Other: Tall ruderal	Medium-Low	0.04	0.12																										
n/a Built Environment: Buildings/hardstanding	none	0.03																											
A3 Woodland: Scattered trees	Medium	0.02																											
B12 Grassland: Semi-improved acidic grassland	Medium-High	0.25	1.25									1.25																	
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Index Link 3.61% 1.752242
 Insurance Fund 10.00%
 Management Cost 20.00%

Biodiversity Impact Score	Primary habitat required in offset	Target habitat distinctiveness		Target habitat condition		Time till target condition		Difficulty of creation		Non-strategic area	Hectares of habitat required
		Distinctiveness	Score	Condition	Score	Time (years)	Score	Difficulty	Score		
-0.56	Woodland: Broad-leaved semi-natural woodland	High	6	Moderate	2	30	2.8	Medium	1.5	2	1.31

Provider Agreement Set-up costs	Average Woodland creation cost per ha	Woodland maintenance cost per ha for 30 years	30 yrs Maintenance Cost plus inflation at	Estimated cost of offset	Insurance Contribution (index linked)	Management Cost (index linked)	Total Cost of Offset Contribution
H	I	£184 x 30 = J	J x 1.75 = K	H + I + K = L	M	N	L + M + N
£7,000	£1,584	£5,520	3.61%		10%	20%	
£7,000	£2,069.76	£7,212.80	£12,638.57	£21,708.33	£3,798.96	£7,597.92	£33,106.00
Cost per ha of habitat created							£25,336.22
Cost per unit							£59,117.86

Biodiversity Impact Score	Primary habitat required in offset	Target habitat distinctiveness		Target habitat condition		Time till target condition		Difficulty of creation		Non-strategic area	Hectares of habitat required
		Distinctiveness	Score	Condition	Score	Time (years)	Score	Difficulty	Score		
-4.27	Grassland: Semi-improved neutral grassland	Medium	4	Good	3	25	2.4	Medium	1.5	2	6.41

Provider Agreement Set-up costs	Average Meadow creation cost per ha	Meadow maintenance cost per ha for 30 years	30 yrs Maintenance Cost plus inflation at	Estimated cost of offset	Insurance Contribution (index linked)	Management Cost (index linked)	Total Cost of Offset Contribution
H	I	£227 x 30 = J	J x 1.75 = K	H + I + K = L	M	N	L + M + N
£7,000	£1,686	£6,810	3.61%		10%	20%	
£7,000	£10,798.83	£43,618.05	£76,429.38	£94,228.21	£16,489.94	£32,979.87	£143,699.00
Cost per ha of habitat created							£22,435.44
Cost per unit							£33,653.16

Pond Cluster size 4

Biodiversity Impact Score	Primary habitat required in offset	Target habitat distinctiveness		Target habitat condition		Time till target condition		Difficulty of creation		Strategic area	Hectares of habitat required
		Distinctiveness	Score	Condition	Score	Time (years)	Score	Difficulty	Score		
0.00	Wetland: Standing Water	High	6	Moderate	2	10	1.4	Medium	1.5	2	0.00

Number of Ponds to be created	Number of Pond clusters to be created	Provider Agreement Set-up costs	Average Pond creation cost per pond	Pond maintenance cost per pond for 30 years	30 yrs Maintenance Cost plus inflation at	Estimated cost of offset	Insurance Contribution (index linked)	Management Cost (index linked)	Total Cost of Offset Contribution
H	I	J	K	£70 x 30 = L	L x 1.75 = M	I + J + L = N	O	P	N + O + P
L / 0.017ha (av. Pond size)		£7000 per pond cluster	£1,212	£2,100	3.61%		10%	20%	
0	0.00	£0	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00
Cost per pond cluster created									£0.00
Cost per unit									£0.00

	m2	ha	Plus grassland (x2)
Average HS2 pond	167	0.017	0.034
Stoneleigh otter	200	0.02	
Burton Green	100	0.01	
Burton Green	100	0.01	
Finham Brook ponds	300	0.03	
Finham Brook ponds	200	0.02	
Finham Brook ponds	100	0.01	

Biodiversity Impact Score	Primary habitat required in offset	Target habitat distinctiveness		Target habitat condition		Time till target condition		Difficulty of creation		Strategic Area	Km of habitat required
		Distinctiveness	Score	Condition	Score	Time (years)	Score	Difficulty	Score		
-0.06	species rich hedge with trees	Medium-high	5	Good	3	20	2	Low	1	1	0.01

Provider Agreement Set-up costs	Average Hedgerow creation cost per km	Hedgerow maintenance cost per km for 30 years	30 yrs Maintenance Cost plus inflation at	Estimated cost of offset	Insurance Contribution (index linked)	Management Cost (index linked)	Total Cost of Offset Contribution
H	I	£7270 x 30 = J	J x 1.75 = K	H + I + K = L	M	N	L + M + N
£7,000	£9,400	£218,100	3.61%		10%	20%	
£7,000	£102.55	£2,379.27	£4,169.06	£11,271.61	£1,972.53	£3,945.06	£17,190.00
Cost per ha of habitat created							£1,575,750.00
Cost per unit							£286,500.00

10.91 metres

£9.40 per metre £7.27 per metre