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Proposed Energy from Waste Combined Heat and Power Facility at Canford Resource Park

Appendix 8.2 BNG Calculations

Prepared by: The Environmental Dimension Partnership Ltd

On behalf of: MVV Environment Limited

June 2023

Report Reference edp7095_r012a

Headline Results Return to results menu TC	C1 Sc	enario
	Habitat units	40.60
On-site baseline	Hedgerow units	0.00
	River units	0.00
	Habitat units	36.43
On-site post-intervention	Hedgerow units	0.00
(Including habitat retention, creation & enhancement)	River units	0.00
	Habitat units	-10.26%
On-site net % change	Hedgerow units	0.00%
(Including habitat retention, creation & enhancement)	River units	0.00%
	Habitat units	0.00
Off-site baseline	Hedgerow units	0.00
	River units	0.00
	Habitat units	0.00
Off-site post-intervention	Hedgerow units	0.00
(Including habitat retention, creation & enhancement)	River units	0.00
	Habitat units	-4.17
Total net unit change	Hedgerow units	0.00
(including all on-site & off-site habitat retention, creation & enhancement)	River units	0.00
	Habitat units	-10.26%
Total on-site net % change plus off-site surplus	Hedgerow units	0.00%

(including all on-site & off-site habitat retention, creation & enhancement)

Trading rules Satisfied?

No - Check Trading Summary 🔺

0.00%

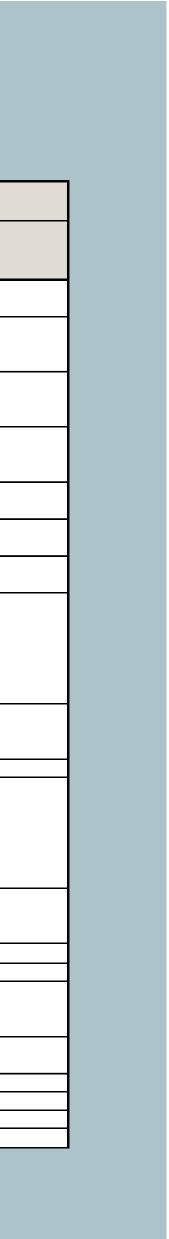
River units



		A-1 Site Habitat Baseline							
	Condense / Show Co		se / Show Rows						
	Main Menu	Ins	tructions						
		Habitats and areas			Distinctiveness	Condition	Strategic significance	Suggested estion to address	Ecological baseline
Ref	Broad Habitat	Habitat Type	(Area (hectares)	Distinctiveness	Condition	Strategic significance	Suggested action to address habitat losses	Total habitat units
1	Grassland	Modified grassland		0.0543	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.22
2	Grassland	Other neutral grasslan	d	1.9071	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	15.26
3	Woodland and forest	Other woodland; broadlea	aved	0.1492	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	1.19
4	Heathland and shrub	Mixed scrub		0.2691	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	2.15
5	Sparsely vegetated land	Ruderal/Ephemeral		0.2052	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.82
6	Urban	Developed land; sealed su	rface	1.497	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00
7	Urban	Vacant/derelict land/ bareg	round	1.6524	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	3.30
8	Woodland and forest	Other woodland; broadles	aved	0.1531	Medium	Moderate	Formally identified in local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	1.41
9	Urban	Sustainable urban drainage	feature	0.0276	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.06
10	Grassland	Modified grassland		2.402	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	4.80
12	Urban	Vacant/derelict land/ bareg	round	0.1516	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.30
13 14	Urban	Developed land; sealed su	rface	0.0974	V.Low	N/A - Other	Area/compensation not in tocal strategy/ no	Compensation Not Required	0.00
14	Grassland	Other neutral grasslan	d	1.3687	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	10.95
16 17	Urban	Vacant/derelict land/ bareg	round	0.0664	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.13
11 18 19									
20			Total habitat area	10.00					40.00
			Total habitat area	10.00					40.60

	F	Retention ca	tegory biodiv	versity value		Bespoke compensation	Commen	its
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost	agreed for unacceptable losses	Assessor comments	Reviewer comments
0.0543	0	0.22	0.00	0.00	0.00		Two patches within road connecting to TCC1 - moderate condition as meets 5 of the 7 criteria	
0.246	1.293	1.97	10.34	0.37	2.94		DNC Area - grassland in moderate condition based on species list and meeting 4 of the 6 criteria	
0.1208	0	0.97	0.00	0.03	0.23		EfW Facility Site - strips of woodland along boundaries	
0	0	0.00	0.00	0.27	2.15		EfW Facility Site - area of scrub and tall ruderal mix, entered as scrub as this is the majority of the area	
0	0	0.00	0.00	0.21	0.82		EfW Facility Site - tall ruderal around the margin of the woodland	
1.3554	0	0.00	0.00	0.14	0.00		EfW Facility Site - exisitng road, structures and buildings	
0.1134	0	0.23	0.00	1.54	3.08		EfW Facility Site and CHP Connection - bareground tracks	
0.1531	0	1.41	0.00	0.00	0.00		CHP Connection - area of woodland entered as retained as the route will follow exisiting gaps in trees with sensitive digging methods to avoid damage to roots. Only one tree to be removed so would be desproportionate to say woodland is lost - see Arb Report for details.	
0.0276	0	0.06	0.00	0.00	0.00		DNC Area - recently created SuDs - poor condition due to it being newly created and failing most of the condition criteria	
0.6568	0	1.31	0.00	1.75	3.49		TCC1 area - area of grassland lost for the site office and will be reintated following completion of construction, remaining area is retained. Poor condition as area is regularly used for events (subject to trampling and areas of bare ground throughout the year) so fails most criteria	
0.0717	0	0.14	0.00	0.08	0.16		TCC1 area - area of track lost for the site office and will be reinstated following completion of construction remaining area is retained	
0.039	0	0.00	0.00	0.06	0.00		TCC1 area - area of hardstanding retained	
0	1.3687	0.00	10.95	0.00	0.00		TCC2 area - grassland to be enhanced, moderate condition based on species list and meeting 4 of the 6 criteria	
0.0664	0	0.13	0.00	0.00	0.00		TCC2 area - track to be retained	
2.90	2.66	6.43	21.29	4.43	12.87			

Total area lost (excluding area of Urban trees
and Green walls)4.43



Condense / Sh Main M																					
			Distinctiveness	Cor	ndition	Stratogia gignifi	22700		Post	development/ post :	intervention habitats					Difficulty multiplie				Com	nents
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness Score	Condition		Strategic signific Strategic significance	Strategic significance	Strategic position multiplier	Standard time to target condition/years	Habitat created II	hobitot	Temporal multiplier Standard or adjusted time to target condition	Final time to target condition/years	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty	Difficulty multiplier applied	Habitat units delivered		Reviewer comments
Grassland	Modified grassland	0.044	Low 2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	4	0	0	Standard time to target condition applied	4	0.867	Low	Standard difficulty applied	Low	1	0.15	Areas of grassland surrounding developed land	
Woodland and forest	Other woodland; broadleaved	0.0639	Medium 4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	15	0	0	Standard time to target condition applied	15	0.586	Low	Standard difficulty applied	Low	1	0.30	Planted woodland to the north of the EfW CHP Facility site	
Urban	Developed land; sealed surface	2.2411	V.Low 0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0	0	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Medium	0.67	0.00	EFW CHP Facility development infrastructure	
										0	0										
Urban	Vacant/derelict land/ bareground	0.0799	Low 2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	3	0	3	Check details- Delay in starting habitat in required condition? 🛆	6	0.808	Low	Standard difficulty applied	Low	1	0.26	TCC1 area - area of reinstated track following completion of construction (3 year delay in creation entered into the calculator)	
Grassland	Modified grassland	0.8726	Low 2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1	0	5	Check details- Delay in starting habitat in required condition? A	6	0.808	Low	Standard difficulty applied	Low	1	1.41	TCC1 area - area of reinstated grassland following completion of post-construction warranty period (5 year delay in creation entered into the calculator). Poor condition selected, same as baseline	
Grassland	Modified grassland	0.8726	Low 2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1	0	3	Check details- Delay in starting habitat in required condition? 🛆	4	0.867	Low	Standard difficulty applied	Low	1		TCC1 area - area of reinstated grassland following completion of construction (3 year delay in creation entered into the calculator). Poor condition selected, same as baseline	
Urban	Other green roof	0.046	Low 2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1	0	0	Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	0.09		
Urban	Biodiverse green roof	0.219	Medium 4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Medium	Standard difficulty applied	Medium	0.67	0.98		
	Total habitat area	4.44																Total Units	4.70		
[Site Area (Excluding area of Urban trees and Green wal	alls) 4.44																			

	A-3 Site Habita	t Enhancement		
Conder	nse / Show Columns	Condense / Show Rows		
	Main Menu	Instructions]	
	Ba	seline habitats	Propose	ed Habitat (Pre-populat
Baseline ref	Ва	seline habitat	Proposed Broad Habitat	
2	Grassland -	Other neutral grassland	Grassland	
15	Grassland -	Other neutral grassland	Grassland	

ulated but can be overridden)	Change in distinctiv	Post development/ post intervent veness and condition	ion habitats			Strategic significance	Temporal risk multip	blier	Difficulty risk multipliers		Com	ıments
Proposed habitat	Distinctiveness change	Condition change	Area (hectares)	Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition/years	Final difficulty of enhancement	Habitat units delivered	Assessor comments	Reviewer comments
Other neutral grassland	Medium - Medium	Moderate - Fairly Good	1.293	Medium	Fairly Good	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	8	Low	10.00	DNC Area - used as enhancement area, Good condition could likely be achieved however fairly good condition has been selected precautionarily	
Other neutral grassland	Medium - Medium	Moderate - Fairly Good	1.3687	Medium	Fairly Good	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	8	Low	13.01	TCC2 area - used as enhancement area, Good condition could likely be achieved however fairly good condition has been selected precautionarily	
												(
			2.66							25.30		

Headline Results

Return to results menu

TCC2 Scenario

	Habitat units	35.55
On-site baseline	Hedgerow units	0.00
	River units	0.00
	Habitat units	27.76
On-site post-intervention	Hedgerow units	0.00
(Including habitat retention, creation & enhancement)	River units	0.00
	Habitat units	-21.90%
On-site net % change	Hedgerow units	0.00%
(Including habitat retention, creation & enhancement)	River units	0.00%
	Habitat units	0.00
Off-site baseline	Hedgerow units	0.00
	River units	0.00
	Habitat units	0.00
Off-site post-intervention	Hedgerow units	0.00
(Including habitat retention, creation & enhancement)	River units	0.00
	Habitat units	-7.78
Total net unit change	Hedgerow units	0.00
(including all on-site & off-site habitat retention, creation & enhancement)	River units	0.00
	Habitat units	-21.90%
Total on-site net % change plus off-site surplus	Hedgerow units	0.00%
(including all on-site & off-site habitat retention, creation & enhancement)	River units	0.00%

Trading rules Satisfied?

No - Check Trading Summary 🔺

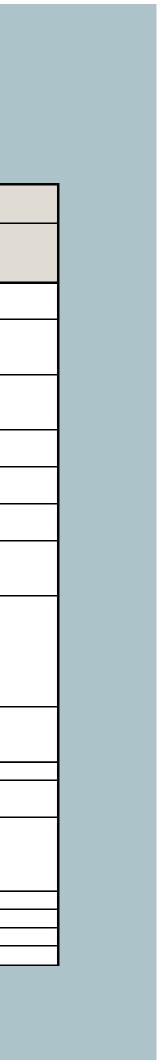


		A-1 Site Habi	itat Baseline													
	Condense / Show Co	blumns	Condense / Show Rows													
	Main Menu		Instructions													
			Habitats and areas			Distinctiveness	Condition	Strategic significance	Suggested action to address	Ecological baseline						
Ref	Broad Habitat		Habitat Type	Are (hecta		Distinctiveness	Condition	Strategic significance	habitat losses	Total habitat uni						
1	Grassland		Modified grassland	0.05	543	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.22						
2	Grassland		Other neutral grassland		Other neutral grassland		Other neutral grassland		Other neutral grassland		071	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	15.26
3	Heathland and shrub		Mixed scrub	0.26	91	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	2.15						
4	Sparsely vegetated land		Ruderal/Ephemeral	0.20)52	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.82						
5	Urban		Developed land; sealed surface	1.4	97	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00						
6	Urban	-	Vacant/derelict land/ bareground	1.65	524	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	3.30						
7	Woodland and forest		Other woodland; broadleaved	0.14	92	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	1.19						
8	Woodland and forest		Other woodland; broadleaved	0.15	531	Medium	Moderate	Formally identified in local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	1.41						
9	Urban	S	ustainable urban drainage feature	0.02	276	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.11						
10 11	Urban		Vacant/derelict land/ bareground	0.06	64	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.13						
12	Grassland		Other neutral grassland	1.36	87	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	10.95						
13 14																
15 16																
10			Total ha	abitat area 7.3	5					35.55						

	R	letention ca	tegory biodiv	versity value		Bespoke compensation	Comr	nents
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost	agreed for unacceptable losses	Assessor comments	Reviewer comments
0.0543	0	0.22	0.00	0.00	0.00		Two patches within road connecting to TCC1 - moderate condition as meets 5 of the 7 criteria	
0.246	1.293	1.97	10.34	0.37	2.94		DNC Area - grassland in moderate condition based on species list and meeting 4 of the 6 criteria	
0	0	0.00	0.00	0.27	2.15		EfW Facility Site - area of scrub and tall ruderal mix, entered as scrub as this is the majority of the area	
0	0	0.00	0.00	0.21	0.82		EfW Facility Site - tall ruderal around the margin of the woodland	
1.3554	0	0.00	0.00	0.14	0.00		EfW Facility Site - exisitng road, structures and buildings	
0.1134	0	0.23	0.00	1.54	3.08		EfW Facility Site and CHP Connection - bareground tracks	
0.1208	0	0.97	0.00	0.03	0.23		EfW Facility Site - strips of woodland along boundaries	
0.1531	0	1.41	0.00	0.00	0.00		CHP Connection - area of woodland entered as retained as the route will follow exisiting gaps in trees with sensitive digging methods to avoid damage to roots. Only one tree to be removed so would be desproportionate to say woodland is lost - see Arb Report for details.	
0.0276		0.11	0.00	0.00	0.00		DNC Area - recently created SuDs - poor condition due to it being newly created and failing most of the condition criteria	
0.0644	0	0.13	0.00	0.00	0.00		TCC2 area - track to be retained	
0	0	0.00	0.00	1.37	10.95		TCC2 area - area of grassland lost for the site office and will be reinstated and enhanced following completion of construction, moderate condition based on species list and meeting 4 of the 6 criteria	
							 	
'								
2.14	1.29	5.03	10.34	3.92	20.18			

Total area lost (excluding area of Urban trees and Green walls)

3.92



	A Q Cita Habitat Creation	-																
Condense / Sl Main I	A-2 Site Habitat Creation Chow Columns Menu Menu Condense / Show Rows Instructions																	
										Post d	levelopment/ post i	ntervention habitats						
			Distinctiv	reness	Cor	ndition	Strategic signific	ance					Temporal multiplier				Difficulty multiplie	ers
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard time to target condition/years	Habitat created in advance/years	Delay in starting habitat creation/years	Standard or adjusted time to target condition	Final time to target F condition/years tar	ïnal time to get multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final diffic of creati
Grassland	Modified grassland	0.044	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	4	0	0	Standard time to target condition applied	4	0.867	Low	Standard difficulty applied	Low
Woodland and forest	Other woodland; broadleaved	0.0639	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	15	0	0	Standard time to target condition applied	15	0.586	Low	Standard difficulty applied	Low
Urban	Developed land; sealed surface	2.1811	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0	0	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Mediu
Grassland	Other neutral grassland	1.3687	Medium	4	Fairly Good	2.5	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	7	0	5	Check details- Delay in starting habitat in required condition? 🛆	12	0.652	Low	Standard difficulty applied	Low
Urban	Other green roof	0.046	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1	0	0	Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low
Urban	Biodiverse green roof	0.219	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Medium	Standard difficulty applied	Mediur
	Total habitat area	3.92										1						
	Site Area (Excluding area of Urban trees and Green wal																	

			-	
ifficulty eation	Difficulty multiplier applied	Habitat units delivered	Cor Assessor comments	nments Reviewer comments
WC	1	0.15	Areas of grassland surrounding developed land	
w	1	0.30	Planted woodland to the north of the EfW CHP Facility Site	
dium	0.67	0.00	EfW CHP Facility development infrastructure	
wc	1	8.93	TCC2 area - area to be used as site office during construction then used as enhancement area (5 year delay is habitat creation selected)	
WC	1	0.09		
dium	0.67	0.98		
	Total Units	10.45		

		nent ense / Show Rows nstructions																			
				Baseline habitats				Proposed F	labitat (Pre-populated but can be overridden)	Change in distinctiv	reness and condition			ost development/ post intervention habitats Strategic signifi	icance	Tempora	l risk multiplier	Difficulty risk multipliers	TT-bit-t	Comm	nts
Baseline ref	Baseline habitat	Total habitat area (hectares)	aseline Baseline activeness distinctivene band score	ess condition category Baseline	Baseline strategic core significance category	Baseline strategic Baseline I significance score unit	habitat Suggested action to address ts habitat losses	Proposed Broad Habitat	Proposed habitat	Distinctiveness change	Area Condition change	es) Distinctiveness	Score Condition Sc	ore Strategic significance	Strategic Strategic Standard position to targ multiplier condition		Standard or adjusted time to target conditionFinal time to target condition/yearsFinal time to target multiplier	Standard difficulty of enhancementApplied difficulty multiplierFinal difficulty of enhancementDifficulty multiplier applied	delivered	Assessor comments	Reviewer comments
2	Grassland - Other neutral grassland	1.9071 N	ledium 4	Moderate 2	Low Strategic Significance	1 15.2	Same broad habitat or a higher distinctiveness habitat required (≥)	Grassland	Other neutral grassland	Medium - Medium	Moderate - Fairly Good 1.293	Medium	4 Fairly Good 2	.5 Area/compensation not in local strategy/ no local strategy	Low Strategic Significance 1 8	0 0	Standard time to target condition applied 8 0.752	Low Standard difficulty applied Low 1	12.20	DNC Area - used as enhancement area, Good condition could likely be achieved however fairly good condition has been selected precautionarily	
								<u> </u>													
											1.00								10.00		
											1.29								12.29		



e environmental mension partnership

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