



A358 Taunton to Southfields

Preliminary Ecological Appraisal (PEA)
Appendices F-G

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Highways England

Mott MacDonald Sweco



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Appendix F. Habitat Suitability Index

TN18b

Habit	Habitat Suitability Index				
				SI value	
SI1.	Map location	A/B/C	А	1.00	
SI2.	Surface area	rectangle/ellipse/irregular	ellipse		
		length (m)	15		
		width (m)	6		
		OR estimate (m ²) if irregular			
		area (m²) =	70.65	0.14	
SI3.	Dessication rate	never/rarely/sometimes/frequently	rarely	1.00	
SI4.	Water quality	good/moderate/poor/bad	moderate	0.67	
SI5.	Shade	% of margin shaded 1m from bank	30	1.00	
SI6.	Waterfowl	absent/minor/major	absent	1.00	
SI7.	Fish population	absent/possible/minor/major	absent	1.00	
SI8.	Pond density	number of ponds within 1km	10	1.00	
SI9.	Terrestrial habitat	good/moderate/poor/isolated	moderate	0.67	
SI10.	Macrophyte cover	%	20	0.51	
Note: Guidance in undertaking the HSI is available at www.narrs.org.uk. HSI score =				0.71	
HSI calculation formulae adapted from Rob Oldham Pond suitability =			good		

TN34

Habit.	Habitat Suitability Index				
Паріс	at Suitability liluex			SI value	
SI1.	Map location	A/B/C	Α	1.00	
SI2.	Surface area	rectangle/ellipse/irregular	ellipse		
		length (m)	20		
		width (m)	10		
		OR estimate (m ²) if irregular			
		area (m^2) =	157	0.31	
SI3.	Dessication rate	never/rarely/sometimes/frequently	rarely	1.00	
SI4.	Water quality	good/moderate/poor/bad	good	1.00	
SI5.	Shade	% of margin shaded 1m from bank	80	0.60	
SI6.	Waterfowl	absent/minor/major	absent	1.00	
SI7.	Fish population	absent/possible/minor/major	absent	1.00	
SI8.	Pond density	number of ponds within 1km	3	1.00	
SI9.	Terrestrial habitat	good/moderate/poor/isolated	moderate	0.67	
SI10.	Macrophyte cover	%	30	0.61	
Note: Guidance in undertaking the HSI is available at www.narrs.org.uk. HSI score =				0.77	
HSI calculation formulae adapted from Rob Oldham Pond suitability =			good		

TN108

Habit	Habitat Suitability Index				
	,			SI value	
SI1.	Map location	A/B/C	А	1.00	
SI2.	Surface area	rectangle/ellipse/irregular	ellipse		
		length (m)	10		
		width (m)	20		
		OR estimate (m ²) if irregular			
		area (m²)	= 157	0.31	
SI3.	Dessication rate	never/rarely/sometimes/frequently	sometimes	0.50	
SI4.	Water quality	good/moderate/poor/bad	moderate	0.67	
SI5.	Shade	% of margin shaded 1m from bank	95	0.30	
SI6.	Waterfowl	absent/minor/major	absent	1.00	
SI7.	Fish population	absent/possible/minor/major	absent	1.00	
SI8.	Pond density	number of ponds within 1km	20	1.00	
SI9.	Terrestrial habitat	good/moderate/poor/isolated	good	1.00	
SI10.	Macrophyte cover	%	5	0.36	
Note: Guidance in undertaking the HSI is available at www.narrs.org.uk. HSI score =				0.64	
HSI calculation formulae adapted from Rob Oldham Pond suitability =				average	

TN110

Hahit	Habitat Suitability Index				
labit	at Suitability liluex			SI value	
SI1.	Map location	A/B/C	Α	1.00	
SI2.	Surface area	rectangle/ellipse/irregular	ellipse		
		length (m)	20		
		width (m)	40		
		OR estimate (m ²) if irregular			
		area (m^2) =	628	1.00	
SI3.	Dessication rate	never/rarely/sometimes/frequently	sometimes	0.50	
SI4.	Water quality	good/moderate/poor/bad	moderate	0.67	
SI5.	Shade	% of margin shaded 1m from bank	90	0.40	
SI6.	Waterfowl	absent/minor/major	absent	1.00	
SI7.	Fish population	absent/possible/minor/major	absent	1.00	
SI8.	Pond density	number of ponds within 1km	20	1.00	
SI9.	Terrestrial habitat	good/moderate/poor/isolated	moderate	0.67	
SI10.	Macrophyte cover	%	5	0.36	
Note: Guidance in undertaking the HSI is available at www.narrs.org.uk. HSI score =				0.71	
HSI calculation formulae adapted from Rob Oldham Pond suitability =			good		

Appendix G. Guidance on Determining Conservation Value

Conservation value	Criteria	Examples	
Very high	High importance and rarity, international scale and limited potential for substitution	Internationally designated sites	
High	High importance and rarity, national	Nationally designated sites	
	scale, or regional scale w ith limited potential for substitution	Regionally important sites with limited potential for substitution	
		Species protected by European Legislation.	
Medium	High or medium importance and rarity, local or regional scale, and limited potential for substitution	Regionally important sites with potential for substitution	
		Locally designated sites	
		Species protected by National Legislation.	
Low	Low or medium importance and rarity, local scale	Undesignated sites of some local biodiversity and earth heritage interest	
Negligible	Very low importance and rarity, local scale	Other sites w ith little or no local biodiversity and earth heritage interest	