PRELIMINARY DESK TOP ECOLOGICAL ASSESSMENTS

LANCASTER CITY COUNCIL POTENTIAL ALLOCATED SITES (EMPLOYMENT SITES) (May 2017, report formatting revised May 2018) (At Draft Local Plan Stage)

1 INTRODUCTION

The Greater Manchester Ecology Unit (GMEU) was commissioned by Lancaster City Council to under a desk study to identify possible ecological constraints that could affect the potential allocation of sites for development in the emerging Lancaster Local Plan.

1.1 SURVEY BRIEF

The work commission involved:

- Undertaking a desktop analysis of any potential ecological constraints on sites identified for potential allocation for future development in Lancaster City area and
- To make recommendations for sites where further (primary) ecological surveys would be required prior to formal allocation and
- To make recommendations for any sites that are considered unsuitable for allocation because they had been identified as having substantive ecological value.

1.2 PERSONNEL

The desk study was undertaken by Suzanne Waymont MCIEEM Senior Ecologist, Derek Richardson principal Ecologist and Mandy Elford MCIEEM Ecologist with support on the bird assessment being undertaken by Stephen Atkins, Local Record Centre Development Manager, all with the Greater Manchester Ecology Unit.

2 LEGISLATION AND POLICY

The following UK legislation was considered to be most relevant to the proposed site allocations:

The Conservation of Habitats and Species Regulations 2010 (as amended)

These Regulations designate sites considered to have an internationally importance for nature conservation. If a development is considered to have the potential to cause harm to the special interest on one or more of these international sites then the development must be subject to a formal Assessment under the terms of the Regulations. Such an Assessment is known as a Habitats Regulations Assessment (HRA).

The Wildlife and Countryside Act 1981 (as amended)

- The Natural Environment and Rural Communities (NERC) Act (2006)
- Countryside and Rights of Way (CROW) Act 2000
- Protection of Badgers Act 1992

The National Planning Policy Framework (NPPF) 2012 acts as guidance for local planning authorities and decision-takers, both in drawing up plans and making decisions about planning applications.

3 METHODOLOGY

3.1 GIS AND AERIAL PHOTOGRAPHY

The boundaries of potential sites for allocation were first digitised onto an Ordnance Survey Base Map on the Ecology Unit's GIS system to enable rapid appraisal of sites against available mapped habitat and species information.

Following the mapping exercise, aerial photography and 'streetview' assessments using freely available datasets (e.g. Google mapping, December 2016) were undertaken to appraise the context of the sites and, as far as possible, to identify the major habitats present.

3.2 Bird Study

Because of the dominating presence of the very large internationally important Morecambe Bay European protected nature conservation site (a site designated primarily for its importance in water and wading bird conservation) on Lancaster the sites were assessed for their potential bird interest by Stephen Atkins, an ornithologist with over 25 years' experience of bird ecology.

In particular the suitability of the sites for use by overwintering birds associated with the Morecambe Bay Special Protection Area (SPA) was assessed using the following factors:

- Habitats present
- Distance from the SPA
- Field size
- Surrounding habitats
- Proximity of factors likely to cause disturbance to birds (e.g. housing)
- Ecological knowledge of bird behaviour

The sites were then assigned a score based on the above criteria. The scoring system was:

- 1 Very low potential to support overwintering birds associated with Morecambe Bay
- 2 Low potential to support overwintering birds associated with Morecambe Bay
- 3 Medium potential to support overwintering birds associated with Morecambe Bay
- 4 High potential to support overwintering birds associated with Morecambe Bay
- 5 Very high potential to support overwintering birds associated with Morecambe Bay

3.3 National/International Designated Sites

To assess whether employment related development at each location would have an impact on any nationally or international designated site, Natural England's SSSI Impact Risk Zones (November 2016) were used. SSSI Impact Risk Zones (IRZs) are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks posed by development proposals to designated nature conservation sites including Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites. They define zones around each site which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impact (Natural England 2016).

The results of this appraisal can be found in Appendix 1

3.4 Biological Heritage Sites

Boundaries of Biological Heritage Sites (BHS), local wildlife sites for Lancashire, were obtained from LERN, the Local Environmental Record Centre for Lancashire. The potential impacts of development at each proposed site for allocation were assessed using the following factors:

- Habitats Present using aerial photography on Google Maps (December 2016)
- BHS features of interest
- Distance from BHS
- Potential pathways between site and BHS

3.5 Other factors

The habitats present on site were assessed for their potential to support specially protected species and priority habitats based on the information available from up-to-date aerial photographs, OS mapping and any existing ecological information known to the Ecology Unit.

Existing species records from the sites and surrounds were also taken into account.

The summary results of all the above analyses were then combined to identify and describe any likely substantive ecological constraints on allocating the sites.

A precautionary approach has been taken when assessing all sites.

3.6 Study Limitations

An absence of records of species from a site does not imply that the species is absent; rather, it may reflect a lack of survey effort for the site concerned.

Because of the timescales involved in carrying out these appraisals species datasets from some local voluntary recording groups were not able to be obtained.

4 RESULTS

Site ref. no 737 (LPSA)
Site Name White Lund Industrial Estate
NGR (centre of Site) 4498 6285
Area (Ha) 100
Are there existing ecology assessments? Unknown
Will development of the site affect any statutory nature conservation sites?
Would a development proposal be likely to require a Habitats Regulations Assessment? No
Will the development of the site affect any Local Wildlife Sites? Unlikely
Does the Site have any potential to support specially protected species? Yes, although limited Bats
Badgers (open land on and close to the site)
Does the Site support, or have the potential to support, priority habitat types? No
Recommendations for further surveys that would be necessary to inform development plans Habitat surveys (of open land) Bat surveys Badger survey
Overall recommendations – are there any identified ecological considerations that would impose a significant constraints to future developments?
Unlikely

Site ref. no	732 (LPSA)
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Site Name Lancaster West Business Park

NGR (centre of Site) SD4233 5940

Area (Ha) 32 Ha

Are there existing ecology assessments?

Unknown

Will development of the site affect any statutory nature conservation sites?

No

Would a development proposal be likely to require a Habitats Regulations Assessment?

Yes – site is within 2km of Morecambe Bay SAC/SPA

Will the development of the site affect any Local Wildlife Sites?

Yes, Middleton Marsh is adjacent to the site

Does the Site have any potential to support specially protected species? Yes

Great crested newts

Bats

Badgers (woodland nearby)

Does the Site support, or have the potential to support, priority habitat types? Yes Site appears to support semi-natural grassland which may be a priority habitat dependent on the type and lowland broadleaved woodland

Recommendations for further surveys that would be necessary to inform development plans

Habitat surveys

Great crested newt surveys

Bat surveys

Badger survey

Overall recommendations – are there any identified ecological considerations that would impose a significant constraints to future developments?

Possible – protected species

Site ref. no 738 (LPSA)

Site Name Major Industrial Estate (Walkers Ind. Estate)

NGR (centre of Site) SD 4153 5945

Area (Ha) 13.6

Are there existing ecology assessments?

Unknown

Will development of the site affect any statutory nature conservation sites?

No

Would a development proposal be likely to require a Habitats Regulations Assessment?

Yes – site is within 2km of the Morecambe Bay SAC/SPA

Will the development of the site affect any Local Wildlife Sites?

Yes, site is adjacent to Middleton Former Refinery BHS

Does the Site have any potential to support specially protected species? Yes

Bats

Badgers (woodland)

Does the Site support, or have the potential to support, priority habitat types? Yes Site appears to support semi-natural grassland which may be a priority habitat dependent on the type, and scrub woodland

Recommendations for further surveys that would be necessary to inform development plans

Habitat surveys

Bat surveys

Badger survey

Overall recommendations – are there any identified ecological considerations that would impose a significant constraints to future developments?

Unlikely, although further surveys would be needed as part of any future applications

Site ref. no 735 (LPSA)

Site Name Heysham Industrial Estate

NGR (centre of Site) SD4162 5869

Area (Ha) 19.5

Are there existing ecology assessments?

Unknown

Will development of the site affect any statutory nature conservation sites?

Potentially – site is within 300m of Morecambe Bay SAC/SPA and there are direct habitat linkages

Would a development proposal be likely to require a Habitats Regulations Assessment?

Yes – the site is within 300m of Morecambe Bay SAC/SPA and there are direct habitat linkages

Will the development of the site affect any Local Wildlife Sites?

Yes – the site is adjacent to the Middleton Former refinery BHS and Carr Lane Meadows BHS

Does the Site have any potential to support specially protected species? Yes

Water Voles (drainage channel)

Does the Site support, or have the potential to support, priority habitat types?

No

Recommendations for further surveys that would be necessary to inform development plans

Habitat surveys (if open ground is affected)

Bat surveys

Water Vole Survey (if development affects the main drainage channel)

Overall recommendations – are there any identified ecological considerations that would impose a significant constraints to future developments?

Unlikely, although the proximity to Morecambe Bay will need to be considered in any future applications and the presence of the BHS sites will be a consideration

Site ref. no	740 (LPSA)	
Site Name	Port of Heysham	
NGR (centre o	of Site) SD40436036	

Area (Ha) 33.6

Are there existing ecology assessments?

Unknown

Will development of the site affect any statutory nature conservation sites? Yes – site is adjacent to Morecambe Bay SAC/SPA and there are direct habitat linkages

Would a development proposal be likely to require a Habitats Regulations Assessment?

Yes – the site is adjacent to Morecambe Bay SAC/SPA and there are direct habitat linkages

Will the development of the site affect any Local Wildlife Sites?

Yes - the site is adjacent to the Heysham Nature Reserve BHS

Does the Site have any potential to support specially protected species?

Possible bird interest within the Harbour, but not on land

Does the Site support, or have the potential to support, priority habitat types?

Nο

Recommendations for further surveys that would be necessary to inform development plans

Bird surveys of the Harbour

Overall recommendations – are there any identified ecological considerations that would impose a significant constraints to future developments?

Unlikely given current land uses, although the proximity to Morecambe Bay will need to be considered in any future applications and the presence of the BHS site will be a consideration

Site ref. no	724 (LPSA)
Site Name	Carnforth Business Park
NGR (centre of	Site) SD50697028
Area (Ha) 8.4	
Are there existing Unknown	ng ecology assessments?
Will development	nt of the site affect any statutory nature conservation sites?
Assessment?	pment proposal be likely to require a Habitats Regulations
No	
Will the develop	oment of the site affect any Local Wildlife Sites?
Yes – the site is	adjacent to the Kellett Road Verges BHS
Does the Site ha	ave any potential to support specially protected species?
No	
Does the Site su	upport, or have the potential to support, priority habitat types?
Potential species	s-rich grassland present
Recommendation development pla	ons for further surveys that would be necessary to inform ans
Habitat (grasslan	nd) surveys (if open ground is affected)
	endations – are there any identified ecological considerations that significant constraints to future developments?
No	

Site ref. no	730 (LPSA)		
Site Name	Caton Road Industrial Estate		
NGR (centre d	of Site) SD48436343		
Area (Ha)	34.5		
Are there existing ecology assessments? Unknown			
Will development of the site affect any statutory nature conservation sites?			
Will developm	ment of the site affect any statutory mature conservation sites:		
Potentially – th	ne site is within 4km of Morecambe Bay SAC/SPA and there are direct es along the River Lune		

Potentially – the site is within 4km of Morecambe Bay SAC/SPA and there are direct habitat linkages along the River Lune

Will the development of the site affect any Local Wildlife Sites?

Yes – the site is adjacent to the River Lune and the Lancaster Canal BHS sites

Does the Site have any potential to support specially protected species? Yes

Bats

Does the Site support, or have the potential to support, priority habitat types?

No

Recommendations for further surveys that would be necessary to inform development plans

Bat surveys

Overall recommendations – are there any identified ecological considerations that would impose a significant constraints to future developments?

Unlikely, although the proximity and linkages to Morecambe Bay will need to be considered in any future applications and the presence of the BHS sites will be a consideration

Site ref. no 725 (LPSA)
Site Name Lancaster Business Park Caton Road
NGR (centre of Site) SD49196398
Area (Ha) 10.7
Are there existing ecology assessments? Unknown
Will development of the site affect any statutory nature conservation sites?
No
Would a development proposal be likely to require a Habitats Regulations Assessment?
No
Will the development of the site affect any Local Wildlife Sites?
No
Does the Site have any potential to support specially protected species? Yes
Bats Water Voles (?)
Does the Site support, or have the potential to support, priority habitat types?
Potential unimproved grassland
Recommendations for further surveys that would be necessary to inform development plans
Bat surveys Possible water voles
Overall recommendations – are there any identified ecological considerations that would impose a significant constraints to future developments?
No

Site ref. no 726 (LPSA)
Site Name White Cross Business Park
NGR (centre of Site) 4810 6130
Area (Ha) 5.75
Are there existing ecology assessments? Unknown
Will development of the site affect any statutory nature conservation sites?
No
Would a development proposal be likely to require a Habitats Regulations Assessment?
No
Will the development of the site affect any Local Wildlife Sites?
Yes – the site is adjacent to the River Lune BHS
Does the Site have any potential to support specially protected species? Yes
Bats
Does the Site support, or have the potential to support, priority habitat types?
No
Recommendations for further surveys that would be necessary to inform development plans
Bat surveys
Overall recommendations – are there any identified ecological considerations that would impose a significant constraints to future developments?
No

Site ref. no 741 (LPSA)
Site Name Halton Mills
NGR (centre of Site) SD50776474
Area (Ha) 34.5
Are there existing ecology assessments? Unknown
Will development of the site affect any statutory nature conservation sites?
No
Would a development proposal be likely to require a Habitats Regulations Assessment?
No
Will the development of the site affect any Local Wildlife Sites?
Yes – the site is adjacent to the River Lune BHS
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Does the Site have any potential to support specially protected species?
No
Does the Site support, or have the potential to support, priority habitat types?
No
Recommendations for further surveys that would be necessary to inform development plans
None
Overall recommendations – are there any identified ecological considerations that would impose a significant constraints to future developments?
No, although any further developments will need to consider the protection of the adjacent River

Site ref. no 733 (LPSA)
Site Name Glasson Industrial Area
NGR (centre of Site) SD44335622
Area (Ha) 5.4
Are there existing ecology assessments? Unknown
Will development of the site affect any statutory nature conservation sites?
Potentially – the site is within 4km of Morecambe Bay SAC/SPA and there are direct habitat linkages along the River Lune
Would a development proposal be likely to require a Habitats Regulations Assessment?
Potentially – the site is adjacent to Morecambe Bay SAC/SPA
Will the development of the site affect any Local Wildlife Sites?
Potentially – the site is close to the Lancaster Canal (Glasson) BHS
Does the Site have any potential to support specially protected species? Yes
Bats (low potential)
Does the Site support, or have the potential to support, priority habitat types?
No
Recommendations for further surveys that would be necessary to inform development plans

Overall recommendations – are there any identified ecological considerations that would impose a significant constraints to future developments?

Bat surveys

Unlikely, although the proximity to Morecambe Bay will need to be considered in any future applications and the presence of the nearby BHS site will be a minor consideration

5.0 ECOLOGICAL CONSTRAINTS – IMPLICATIONS & RECOMMENDATIONS

Based on the results of the analysis undertaken above no sites have been ruled out as being unsuitable for allocation at this stage because of substantive ecological constraints.

However further surveys / assessments are recommended on a number of sites prior to their formal allocation and/or at application stage.

These sites are:

Site No. (LPSA)	Further Survey Required (Y/N)	Site name	Type of survey required prior to allocation / application	HRA likely to be required? (Y/N)	Wintering Birds potential score
737	Y	White Lund industrial Estate	Bat and Badger Surveys required at application stage. Phase 1 habitat surveys required	N	1
732	Y	Lancaster West Business Park	Great crested newts, badgers and bats at application stage. Phase 1 habitat survey	Y	3
738	Y	Major Industrial Estate	Habitats, Bat and Badger surveys required at application stage	Y	3
735	Y	Heysham Industrial Estate	Habitats, Bat and water Vole surveys potentially required at application stage	Y	3
740	Y	Port of Heysham	Bird surveys at application stage	Y	3
724	Y	Carnforth Business Park	Habitat survey (grassland) at application stage	N	1
730	Y	Caton Road Industrial Estate	Bat surveys required at application stage	Potentially, depending on scale and type of any future application	1
725	Y	Lancaster Business Park Caton Road	Bat and water vole surveys required at application stage	N	1
726	Y	White Cross Business Park	Bat surveys required at application stage	N	1
733	Υ	Glasson industrial Area	Bat surveys at application stage	Y	3

APPENDIX 1 ADDITIONAL LANCASTER EMPLOYMENT ALLOCATIONS – POTENTIAL RISKS OF DEVELOPMENT TO NATIONAL/INTERNATIONAL DESIGNATED SITES

Nb the following is based on the 'SSSI Impact Risk Zones as published by Natural England, although the type of development as described in the IRZs has been used to determine the likely sources of harm to protected sites

Site Ref	Site name	Nationally Designated Sites	International Sites	Potential Risks to designated sites Which would need to be assessed as part of a planning application
737	White Lund Industrial Estate	Lune Estuary SSSI	Morecambe Bay Duddon	Air Pollution
		Morecambe Bay SSSI	Estuary SAC/SPA/Ramsar	Water Pollution
740	Port of Heysham	Lune Estuary SSSI Morecambe Bay SSSI Cockerham Marsh SSSI	Morecambe Bay Duddon Estuary SAC/SPA/Ramsar	Direct disturbance to birds Air Pollution Water pollution
738	Major Industrial Estate	Lune Estuary SSSI Morecambe Bay SSSI	Morecambe Bay Duddon Estuary SAC/SPA/Ramsar	Direct disturbance to birds Air Pollution
		Cockerham Marsh SSSI		Water pollution
732	Lancaster West Business Park	Lune Estuary SSSI Morecambe Bay SSSI Cockerham Marsh SSSI	Morecambe Bay Duddon Estuary SAC/SPA/Ramsar	Direct disturbance to birds Air Pollution Water pollution
735	Heysham Industrial Estate	Lune Estuary SSSI Morecambe Bay SSSI Cockerham Marsh SSSI	Morecambe Bay Duddon Estuary SAC/SPA/Ramsar	Direct disturbance to birds Air Pollution Water pollution
726	White Cross Business Park	Lune Estuary SSSI Morecambe Bay SSSI	Morecambe Bay Duddon Estuary SAC/SPA/Ramsar	Air Pollution Water Pollution

733	Glasson Industrial Area	Istrial Area Lune Estuary SSSI	Morecambe Bay Duddon	Direct disturbance to birds
		Morecambe Bay SSSI	Estuary SAC/SPA/Ramsar	Air Pollution
		•		Water pollution
730	Caton Road Industrial Estate	Lune Estuary SSSI	Morecambe Bay Duddon	Air Pollution
		Morecambe Bay SSSI	Estuary SAC/SPA/Ramsar	Water Pollution
725	Lancaster Business Park Caton	Lune Estuary SSSI	Morecambe Bay Duddon	Air Pollution
	Road		Estuary SAC/SPA/Ramsar	Water Pollution
		Morecambe Bay SSSI		
741	Halton Mills	Lune Estuary SSSI	Morecambe Bay Duddon	Direct disturbance
		Morecambe Bay SSSI	Estuary SAC/SPA/Ramsar	Air Pollution
				Water Pollution
724	Carnforth Business Park	Morecambe Bay SSSI	Morecambe Bay Duddon	Air Pollution
			Estuary SAC/SPA/Ramsar	

APPENDIX 2 RISKS TO WINTERING BIRDS ASSOCIATED WITH EUROPEAN PROTECTED SITES

Site ref	Site name	Dominant habitats present	Distance from SPA (km)	Area (ha)	Importance for birds (score)	Comment
737	White Lund Industrial Estate	Dominated by existing built development	2.1	100	1	Little suitable habitat available
732	Lancaster West Business Park	Mixed; some built development, open rough grassland and scrub and hedgerows. Some wet grassland	1.1	32	3	Score based on proximity to the SPA and presence of some open land
738	Major Industrial Estate (Walkers)	Mix of existing built development and more open land to the south	1.3	13.6	3	Score based on proximity to the SPA with some suitable habitat to the south and west
735	Heysham Industrial Estate	Dominated by existing built development, although some fragmented open land present nearby	0.3	19.5	3	Score based primarily on proximity to the SPA
740	Port of Heysham	Built development and hard standing	Immediately adjacent	33.6	3	Score based primarily on proximity to the SPA
724	Carnforth Business Park	Existing built development; limited open land, immediately adjacent to the M6	1.8	8.4	1	Negligible available habitat for birds
730	Caton Road Industrial Estate	Dominated by existing built development but immediately adjacent to the River Lune	3.4	34.5	1	Negligible available habitat for wintering birds
725	Lancaster Business Park (Caton Road)	Dominated by existing built development but immediately adjacent to the River Lune	3.4	10.7	1	Negligible available habitat for wintering birds
726	White Cross Business Park	Dominated by existing built development	2.5	5.75	1	Negligible available habitat for birds

741	Halton Mills	Built development and limited open grassland	4.4	34.5	1	Negligible available habitat for birds. Long distance from SPA
733	Glasson Industrial	Built development and limited open		5.4	3	Immediately adjacent to
	Area	land, adjacent to SPA				SPA

APPENDIX 3 ADDITIONAL LANCASTER EMPLOYMENT ALLOCATIONS – POTENTIAL RISKS OF DEVELOPMENT TO LOCALLY DESIGNATED SITES

Site ref	Name	BHS concerned	BHS ID	Approximate distance (m)	Habitat Interest
737	White Lund Industrial Estate	Oxcliffe Marsh, Heaton-with- Oxcliffe	46SE01	150	Co1, Ff4a, Ff4b
		River Lune	LSRLU	520	Av, Br, Ff, Fi, Ma, Mo, Ri
		Oxcliffe Road Lake, Heaton- with-Oxcliffe	46SW06	420	Po1
732	Lancaster West Business Park	Heysham Moss	46SW05	320	Av8i, Ff2, Hm1, Wd5
		Middleton Former Refinery Site, Middleton	45NW02	220	Ar1, Av8, Ff4a, Gr3, Hm1, Od5
		Heysham Golf Course Reedbed	45NW01	800	Fe1
		Carr Lane Meadows, Middleton	45NW03	590	Gr1
738	Major Industrial Estate (Walkers)	Middleton Former Refinery Site, Middleton	45NW02	10	Ar1, Av8, Ff4a, Gr3, Hm1, Od5
		Carr Lane Meadows, Middleton	45NW03	100	Gr1
		Heysham Golf Course Reedbed	45NW01	180	Fe1

735	Heysham Industrial Estate	Middleton Former Refinery Site, Middleton	45NW02	10	Ar1, Av8, Ff4a, Gr3, Hm1, Od5
		Carr Lane Meadows, Middleton	45NW03	10	Gr1
		Heysham Golf Course Reedbed	45NW01	600	Fe1
740	De de fille de co	Harabara Oliffa a all Haralla al	4500402	450	D-2 C-2 C-4 F(2 F(4) 1'2
740	Port of Heysham	Heysham Cliffs and Headland	46SW02	150	Br3, Co2, Co4, Ff3, Ff4b, Li3
		Higher Heysham Knoll	46SW07	150	Ar1, Wd5c
		Heysham Nature Reserve	46SW01	150	Av10, Hm1
		Heyham Golf Course Reedbed	45NW01	671	Fe1
724	Carnforth Business Park	Kellet Road Verges	57SW01	10	Ar2, Ff4
		Lancaster Canal	LSCLA	90	Ar1, Ff3, Ff4
730	Caton Road Industrial Estate	River Lune	LSRLU	10	Av, Br, Ff, Fi, Ma, Mo, Ri
		Lancaster Canal	LSCLA	10	Ar1, Ff3, Ff4
		Long Bank Wood, Quernmore	46SE05	50	Wd1
		Newton Beck Valley	46SE02	140	Gr3
725	Lancaster Business Park (Caton Road)	River Lune	LSRLU	10	Av, Br, Ff, Fi, Ma, Mo, Ri
		Lancaster Canal	LSCLA	10	Ar1, Ff3, Ff4

		Long Bank Wood, Quernmore	46SE05	50	Wd1
		Newton Beck Valley	46SE02	140	Gr3
726	White Cross Business Park	Lancaster Canal	LSCLA	50	Ar1, Ff3, Ff4
741	Halton Mills	River Lune	LSRLU	50	Av, Br, Ff, Fi, Ma, Mo, Ri
733	Glasson Industrial Area	Lancaster Canal	LSCLA	50	Ar1, Ff3, Ff4

Summary risks to BHS sites

Site Name	Biological Heritage Site	Potential Risk Arising from development
Glasson Industrial Area	Lancaster Canal (Glasson)	Water Pollution
Halton Mills	River Lune	Water Pollution
White Cross Business Park	River Lune	Water Pollution
Carnforth Business Park	Kellet Road Verges	Loss or inappropriate management of grassland
Caton Road Industrial Estate	River Lune Lancaster Canal	Water pollution
Heysham Industrial Estate	Middleton Former Refinery Carr Lane Meadows	Potential risk to amphibian habitats Direct disturbance
	Glasson Industrial Area Halton Mills White Cross Business Park Carnforth Business Park Caton Road Industrial Estate	Glasson Industrial Area Lancaster Canal (Glasson) Halton Mills River Lune White Cross Business Park River Lune Carnforth Business Park Kellet Road Verges Caton Road Industrial Estate River Lune Lancaster Canal Heysham Industrial Estate Middleton Former Refinery

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