

BIODIVERSITY IMPACT ASSESSMENT

OAKENROD, ROCHDALE

DECEMBER 2022



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1.0 INTRODUCTION

Site Information

- 1.1 Rachel Hacking Ecology Limited was commissioned in 2022 by Hallmark Limited to undertake a Biodiversity Impact Assessment of land at the former Oakenrod School on Bury Road, in Rochdale. The site is situated to the south of Bury Road and to the north of the River Roch (O.S. grid reference: SD 887 131 – see Figure 1).
- 1.2 The proposed development site currently comprises a brownfield site, with areas of hardstanding, large piles of spoil being succeeded by tall ruderal herb and succession scrub. The site includes broadleaved woodland to the west and south, private dwellings to the west and north, the River Roch and associated weir to the south and businesses to the east. In the wider context the site is situated near the city centre of Rochdale.
- 1.3 A Biodiversity Impact Assessment was commissioned to provide an estimate of the likely changes in biodiversity units as a result of the proposed development on site, and to inform mitigation options.

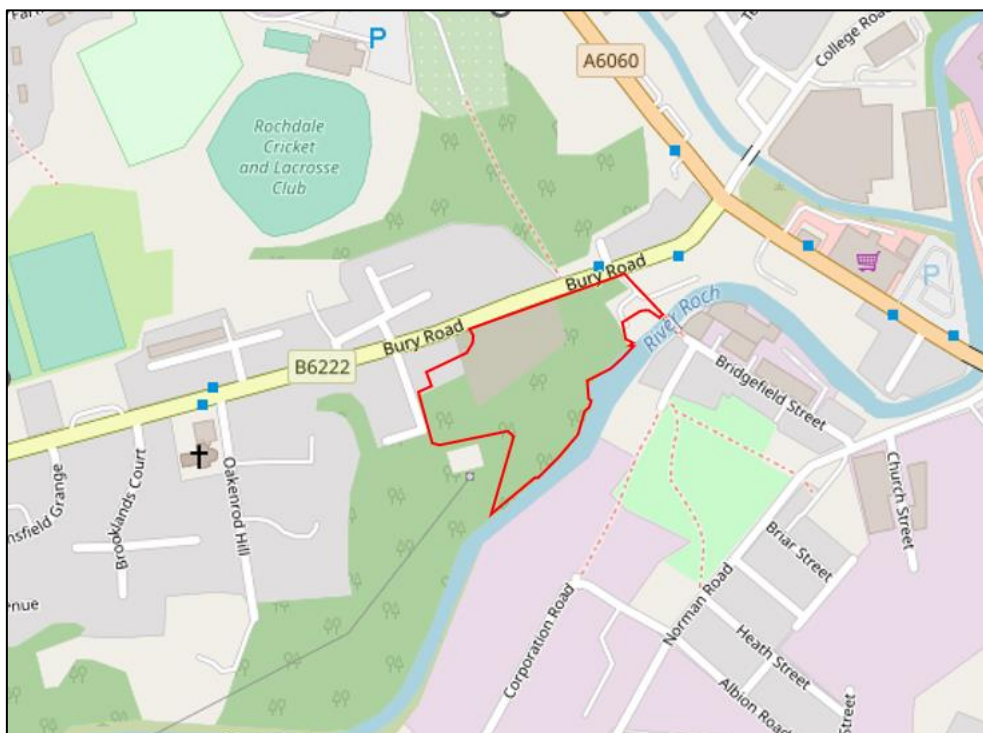


Figure 1 showing the redline boundary of the site

Description of Development

- 1.4 The site will be the subject of an outline planning application for the construction of a residential development including 26 private dwellings, landscaping, parking, amenity grassland and an Archimedes screw (see Appendix B).

Biodiversity in Planning

- 1.5 Biodiversity is a material consideration, and Local Planning Authorities (LPAs) have a requirement to consider biodiversity and protected species when determining planning

applications. Section 15 of the National Planning Policy Framework (July 2021) gives specific reference to minimising the impacts of development on biodiversity. Local and Neighbourhood plans also provide guidance towards protecting and enhancing biodiversity, including priority habitats and notable species.

2.0 METHODOLOGY

Phase 1 Habitat Survey

- 2.1 Joe Cooper (Senior Ecologist) carried out the Phase 1 Habitat Survey on 17th May 2022. The redline boundary was extended to include land to the south and east previously not included and a second site visit was commissioned to update the Extended Phase 1 Habitat survey and also carry out a Modular River Survey of the River Roch, which flows adjacent to the site. The second site visit was carried out by Joe Cooper and Kate Reed (Senior Ecologists) on 30th November 2022.

DEFRA Biodiversity Metric 3.1 Calculation

- 2.2 Biodiversity net gain was calculated using Biodiversity Metric 3.1 Auditing and accounting for biodiversity Calculation tool.
- The onsite habitat baseline calculations are measured using MapInfo.
 - The Phase 1 habitat classifications are translated to UK Habitat Regulations using the translation tool in the Biodiversity Metric.
 - All habitat conditions are based on the condition assessments listed in the habitat condition sheets excel document.
 - The strategic significance is determined by deciding if the habitat is desirable within the location and seeing if it is identified within a local strategy.
 - The areas to be retained or enhanced habitats are calculated using the Site Layout Plan.
 - The site proposed habitats and associated scores are calculated using measurements made from the Site Layout Plan and Google Maps.
- 2.3 The predicted change in habitat units is assessed by calculating the difference between the baseline unit values and the post-development values. This is combined with any off-site gains or losses to give a final Biodiversity Unit Value for the scheme.

River Survey

- 2.4 The River Roch which flows adjacent to the southern boundary of the site, with the riparian habitat falling within the site boundary. The watercourse was the subject of a MoRPH5 survey (field survey) and River Type survey (desk study) to establish the baseline condition assessment of the River Roch.
- 2.5 Kate Reed (Senior Ecologist) carried out the MoRPH river survey on the 30th November 2022. 5 Contiguous MoRPH surveys (MoRPH5) were carried out on the section of the river that flows adjacent to the site. For each MoRPH survey a section of the river, including 10m of the riparian habitat on each bank, was assessed for hydrological, physical and vegetative features. These surveys were repeated 5 times to establish a MoRPH5 baseline. The MoRPH5 survey area covered at least 20% of the section of river flowing adjacent to the site boundary and therefore only one MoRPH5 survey is required for this site. For the River Type Survey (desk survey) a wider area (extended reach) is established by looking for points upstream and downstream from the proposed survey area for changes in the physical nature of the river such as a tributary (that would contribute 10% extra flow to the river), major weir or significant change in sinuosity.

Measurements of gradient, reach length and confinement are combined with the results of the field survey to establish a River Type and condition assessment. This final condition assessment figure can be reduced by 1 point if the river is considered by the surveyor to be over-deepened.

Personnel and Timing

- 2.6 Simon Holden MCIEEM (Associate Ecologist) carried out the calculations and assessment in October and December 2022, based on the results of the aforementioned Phase 1 Habitat Survey and the Landscape Strategy Plan. Simon is an experienced ecologist and trained in biodiversity impact assessment.

Limitations

- 2.7 Changes in habitat units were assessed based on the site layout plan. No detailed landscaping proposals were available. As such, the calculation should be considered indicative. Further assessment will be required at the detailed design stage.

3.0 RESULTS

Existing Habitats

- 3.1 The current Baseline habitat units on site provide 27.74 habitat units and 1.08 river units. See below for the condition assessment of each habitat and Appendix C for the full results of the Baseline Habitat units.

Baseline Habitat units

Tall Ruderal Herb

- 3.2 This habitat is widespread across the site, covering 1.63ha. This habitat is Sparsely Vegetated Land- Ruderal/Ephemeral in the UKHab classification. This is a habitat of low distinctiveness. It is of low strategic significance. The tall ruderal is assessed as being in poor condition as it passes 1 out of the 3 assessment criteria (see Table 1 below for the condition assessment). The tall ruderal scores 3.26 habitat units.

Table 1 Showing the condition assessment of the tall ruderal														
Species assemblage includes Ribwort Plantain <i>Plantago lanceolata</i> , Mare's-tail <i>Hippuris vulgaris</i> , Bramble <i>Rubus fruticosus</i> agg. Common Vetch <i>Vicia sativa</i> , Red Clover <i>Trifolium pratense</i> , Spear Thistle <i>Cirsium vulgare</i> , Creeping Thistle <i>Cirsium arvense</i> , Butterfly Bush <i>Buddleja davidii</i> , Common Nettle <i>Urtica dioica</i> , Rosebay willowherb <i>Chamaenerion angustifolium</i> , Broad-leaved Dock <i>Rumex obtusifolius</i> , Dandelion <i>Taraxacum officinale</i> agg, Cleavers <i>Galium aparine</i> , Groundsel <i>Senecio vulgaris</i> , Herb-Robert <i>Geranium robertianum</i> , Colt's-foot <i>Tussilago farfara</i> , Bracken <i>Pteridium aquilinum</i> , Garlic mustard <i>Alliaria petiolate</i> , Colt's-foot <i>Tussilago farfara</i> , Ground-elder <i>Aegopodium podagraria</i> and White Dead-nettle <i>Lamium album</i> , Poppy <i>Papaver sp.</i> , Foxglove <i>Digitalis purpurea</i> , Creeping Buttercup <i>Ranunculus repens</i> , Field Forget-me-not <i>Myosotis arvensis</i> , Cleavers <i>Galium aparine</i> , Wild strawberry <i>Fragaria vesca</i> , Bluebell <i>Hyacinthoides non-scripta</i> , Field Bindweed <i>Convolvulus arvensis</i> , Common Knapweed <i>Centaurea nigra</i> , Spurge <i>Euphorbia sp.</i> , Yellow Iris <i>Iris pseudacorus</i> , Cuckooflower <i>Cardamine pratensis</i> and Oxeye Daisy <i>Leucanthemum vulgare</i> . Grasses and rushes are also present within the tall ruderal herb vegetation and include Perennial Rye-grass <i>Lolium perenne</i> , Bread Wheat <i>Triticum aestivum</i> , Common Bent <i>Agrostis capillaris</i> , Soft-rush <i>Juncus effusus</i> and Yorkshire Fog <i>Holcus lanatus</i> . Shoots of Japanese Knotweed <i>Reynoutria japonica</i> and Himalayan Balsam <i>Impatiens glandulifera</i> are also present in this habitat.														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	F	P	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	N						Condition (Good/Moderate /Poor):		Poor					

Bare Ground

- 3.3 This habitat is widespread across the site, covering 1.03ha. This habitat is Urban-Vacant/Derelict/Bare Ground in the UKHab classification. This is a habitat of low

distinctiveness. It is of low strategic significance. The bare ground is assessed as being in poor condition as it passes none of the assessment criteria (see Table 2 below for the condition assessment). The bare ground scores 2.06 habitat units.

Table 2 Showing the condition assessment of the vacant/derelict land														
Bare ground is present to the southeast the site and encompasses the access road onto the site, footpath and layby.														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	F	F	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Are any criteria non-negotiable? (Y/N) If Yes are they passed?			N				Condition (Good/Moderate /Poor):			Poor				

Broadleaved Woodland

- 3.4 This habitat is widespread across the site, covering 0.91ha. This habitat is Woodland and Forest-Other Broadleaved Woodland in the UKHab classification. This is a habitat of medium distinctiveness. It is of low strategic significance. The woodland is assessed as being in moderate condition as it scores 27 points in the condition assessment. The woodland scores 7.28 habitat units.

Scrub

- 3.5 This habitat is widespread across the site, covering 0.43ha. This habitat is Heathland and shrub-Mixed scrub in the UKHab classification. This is a habitat of medium distinctiveness. It is of low strategic significance. The scrub is assessed as being in poor condition as it fails all the criteria in the condition assessment (see Table 3). The scrub scores 1.72 habitat units.

Table 3 Showing the condition assessment of the scrub														
Continuous and scattered scrub is present across the site with a focus on the piles of spoil and on the peripheries and understory of the scattered trees and broadleaved woodland. Species includes Bramble <i>Rubus ruticosus</i> agg., Cherry Laurel <i>Prunus laurocerasus</i> , Willow sp. <i>Salix</i> sp., Alder <i>Alnus glutinosa</i> , Butterfly Bush <i>Buddleja davidii</i> , Bearberry <i>Cotoneaster dammeri</i> , Dandelion <i>Taraxacum officinale</i> agg., Cleavers <i>Galium aparine</i> and Common Nettle <i>Urtica dioica</i> . Japanese Knotweed <i>Reynoutria japonica</i> and Himalayan Balsam <i>Impatiens glandulifera</i> is also present in a small scatterings and dense patches.														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	F	F	F	F	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
Are any criteria non-negotiable? (Y/N) If Yes are they passed?			N				Condition (Good/Moderate /Poor):			Poor				

Ephemeral/Short Perennial

- 3.6 This habitat is present along the pathway and spreading towards the centre of the site, covering 0.26ha. This habitat is Sparsely Vegetated Land-Ruderal/Ephemeral in the UKHab classification. This is a habitat of low distinctiveness. It is of low strategic significance. The habitat is assessed as being in moderate condition as it passes two of the three the criteria in the condition assessment (see Table 4). It scores 1.56 habitat units.

Table 4 Showing the condition assessment of the ephemeral/short perennial														
Species of ephemeral short perennial are scattered along the pathway and spread into an area in the approximate centre of the site. Species include Common Chickweed <i>Stellaria media</i> , White Clover <i>Trifolium repens</i> , Bird's-foot Trefoil <i>Lotus corniculatus</i> , Ribbed Melilot <i>Melilotus officinalis</i> , Bramble <i>Rubus fruticosus</i> agg. Black Medick <i>Medicago lupulina</i> , Pineappleweed <i>Matricaria discoidea</i> , Scarlet Pimpernel <i>Lysimachia tenella</i> , Sticky Mouse-ear <i>Cerastium glomeratum</i> and Thyme-leaved Speedwell <i>Veronica serpyllifolia</i> .														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	F	P	P	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	N						Condition (Good/Moderate /Poor):			Moderate				

Spoil

- 3.7 Piles of spoil are spread across the site but focussed around historical demolition sites, covering 0.41ha. This habitat is Urban-Vacant/Derelict Land/Bare Ground in the UKHab classification. This is a habitat of low distinctiveness. It is of low strategic significance. The habitat is assessed as being in poor condition as it passes one of the three the criteria in the condition assessment (see Table 5). It scores 0.82 habitat units.

Table 5 Showing the condition assessment of the spoil mounds														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	F	F	P	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	N						Condition (Good/Moderate /Poor):			Poor				

Standing Water

- 3.8 Three ponds are present on the site, covering 0.27ha. This habitat is Lakes-Ponds (Non-Priority Habitat) in the UKHab classification. This is a habitat of medium distinctiveness. It is of low strategic significance. The ponds are assessed as being in moderate condition as they pass eight of the nine criteria in the condition assessment (see Tables 6 and 7). The ponds score 2.16 habitat units.

Table 6 Showing the condition assessment of Pond 1														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	P	F	P	P	P	P	P	P	N/A	N/A	N/A	N/A	N/A	8
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	Y (50% vegetation cover and <50% shade)					Condition (Good/Moderate /Poor):				Moderate				

Table 7 Showing the condition assessment of Ponds 2 and 3														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	F	P	P	P	P	P	P	P	N/A	N/A	N/A	N/A	N/A	8
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	Y (50% vegetation cover and <50% shade)					Condition (Good/Moderate /Poor):				Moderate				

Scattered Trees

- 3.9 Fourteen large and two medium sized trees are present, mainly along the boundaries. These are calculated using the definition Urban – Urban Trees in the UKHab classification, estimated to cover 1.14ha. This is a habitat of medium distinctiveness. It is of low strategic significance. The trees are assessed as being in moderate condition as they pass 4 out of the 6 assessment criteria (see Table 8). The scattered trees score 9.12 habitat units.

Table 8 Showing the condition assessment of the scattered trees														
A combination of young and mature trees are present scattered throughout the site, with a focus towards the middle and the north of the site. Species include Cherry plum <i>Prunus cerasifera</i> ., Willow <i>Salix</i> sp., Sycamore <i>Acer pseudoplatanus</i> , Silver Birch <i>Betula pendula</i> , Crack Willow <i>Salix euxina</i> and Copper Beech <i>Fagus sylvatica f. purpurea</i> .														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	P	P	F	P	F	P	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	N					Condition (Good/Moderate /Poor):				Moderate				

Baseline River Units

River - Other Rivers and Streams

- 3.10 The River Roch flows adjacent to the southern site boundary for 320m of the site and the riparian habitat on the northwestern bank falls within the site boundary. The river currently provides 1.44 river units to the site.

MoRPH Survey (field survey)

- 3.11 The average width of the watercourse is 12m and therefore the length of each MoRPH survey is 30m and the reach length is 150m, this covers at least 20% of the extent of the river adjacent the development area and therefore only 1 MoRPH5 survey is required for the site. The approximate location of each MoRPH (1-5) survey is shown on Figure 2 below.



Figure 2 showing the location of the MoRPH surveys on site

River Type Survey and Condition assessment

- 3.12 The River Roch has reinforced banks on the section that is adjacent to the site. The extended reach area is defined by the confluence with the Rover Spodden upstream and the joining of Sudden Brook downstream, which both contribute at least an additional 10% of flow to the River Spode. The two weirs within this section are not considered to cause a change in flow or sediment movement in the river so have been included within the extended reach.
- 3.13 The river falls under the category of 'Other Rivers and Streams' and the River Type survey of the River Roch categorises it as type G, (meandering with a cobble/gravel substrate) with a condition assessment of 'Fairly Poor'.

Baseline Watercourse encroachment

- 3.14 0.1373km of the riverbank face within the development area is re-enforced with mortared brick, a weir is also present on the site which extends the full width of the river.

This is a 'major' watercourse encroachment as over 20% of the bank length is engineered and the weir extends over more than 10% of the channel width.

Baseline Riparian encroachment

- 3.15 The existing level of encroachment by development is characterised within the baseline assessment by habitats of very low distinctiveness, for example hardstanding or buildings within the riparian zone (10m from the bank top), no such habitats exist on the site and therefore there is 'no encroachment' of the riparian habitat within the baseline assessment of the site.

Proposed Post Development Habitats

Retained and Enhanced Habitats

- 3.16 Habitats in the southwest of the site are retained and included within a Wildlife Area. This includes 0.18ha of scrub, 0.46ha of woodland, 0.13ha of tall ruderal and 0.03ha of ephemeral/short perennial. Ponds 2 and 3 are proposed to be enhanced through sensitive remodelling to provide and 0.26 of standing water.
- 3.17 Eleven of the sixteen scattered trees are to be retained.

On-Site Habitat Creation

- 3.18 The proposed development is predicted to deliver 13.99 habitat units and 1.08 river units. See below for a description and proposed final condition of each habitat and Appendix D for the full results of the predicted post-development habitat units.

Buildings and Hardstanding

- 3.19 Approximately 2.42ha of the site will be used for buildings, roads and pavements, which is Urban - Developed land; sealed surface in the UKHab classification. Condition assessment is N/A for this habitat, which is of very low distinctiveness and strategic significance. The developed land scores zero habitat units.

Trees

- 3.20 Twenty-three new trees are shown on the site layout plan. Using the street tree helper tool in the metric, this is calculated to cover 0.09ha. This habitat is of medium distinctiveness and low strategic significance. The proposed final condition of the trees is moderate which will take 27 years to achieve and scores 0.28 habitat units.

River

- 3.21 The proposed development includes construction of an Archimedes screw. This will result in the loss of habitat within 10m of the bank top calculated to cover 0.03ha. This reduces the condition of the river resulting in a post-development score of scores 1.08 river units.

Post-development Watercourse encroachment

- 3.22 The proposed hydro feature will impact the bank face on the existed engineered section, there will be no actual increase in the extent of the engineered features in-channel (the

bank facing and the within the water channel) as a result of the proposed scheme; the post-development watercourse encroachment remains as 'major'.

Post-development Riparian encroachment

- 3.23 The proposed changes to the habitats on the northwestern bank include retaining the existing habitats (broadleaved woodland, scrub, ephemeral/short perennial and tall ruderal herb) with a small area (0.03ha) cleared for the creation of an Archimedes screw (hydropower plant) which, under the UK Habs category is Urban; sealed surface. This is a habitat of very low distinctiveness and counts as development. The development will cover 9.4% of the riparian habitat that lies within the proposed development area and lies within 0-4m of the bank top and is therefore a 'major encroachment' of the riparian habitat.

Post-development River Units

- 3.24 The proposed scheme will result in the river providing 1.08 river units, this is a loss of - 0.36 river units or -25% unit loss. This is due to the loss of riparian habitats that currently exist (the woodland, continuous scrub, tall ruderal herb and ephemeral short perennial) and the creation of an Archimedes Screw.

4.0 ASSESSMENT

HABITAT UNITS

- 4.1 The baseline habitat units of the site are calculated to be 27.74. The proposed development as described above is estimated to provide 15.68 habitat units. The Biodiversity Impact Assessment predicts a net loss of 12.06 habitat units (-43.48%) as a result of the proposed development.

RIVER UNITS

- 4.2 The baseline river units of the site are calculated to be 1.44. The proposed development is estimated to provide 1.08 river units. The Biodiversity Impact Assessment predicts a net loss of -0.36 river units (-25%) as a result of the proposed development.

5.0 CONCLUSION

- 5.1 The proposed development is currently predicted to result in a net loss of habitat units and river units.
- 5.2 Detailed landscaping plans have not yet been developed. This may enable the overall level of net loss to be reduced. Approximately 1.88ha of woodland to the west of the site is within the developer's control. This may offer potential for habitat enhancement to further reduce the level of net loss. However, it is likely that the proposed development will still result in a net loss of units and that offsetting would be required in order to achieve a net gain.

APPENDIX A – SITE LAYOUT PLAN



SITE PLAN

Schedule of Accommodation		
	No	ft
Type A 1 Bed 2 Person Units	04	515/550
Type B 2 Bed 4 Person House	12	800
Type C 3 Bed 5 Person House	14	950
Type D 4 Bed 8 Person House	08	1200
Type E 3 Bed Split Level House	06	1189
Type F 3 Bed Split Level House	08	1292
	Total	52 Units

Rev	Date	Description
A	22.04.22	Road Layout Revised
B	05.05.22	Plot Substitutions
C	01.07.22	Plot Schedule Updated
D	26.07.22	Red line boundary updated around car park

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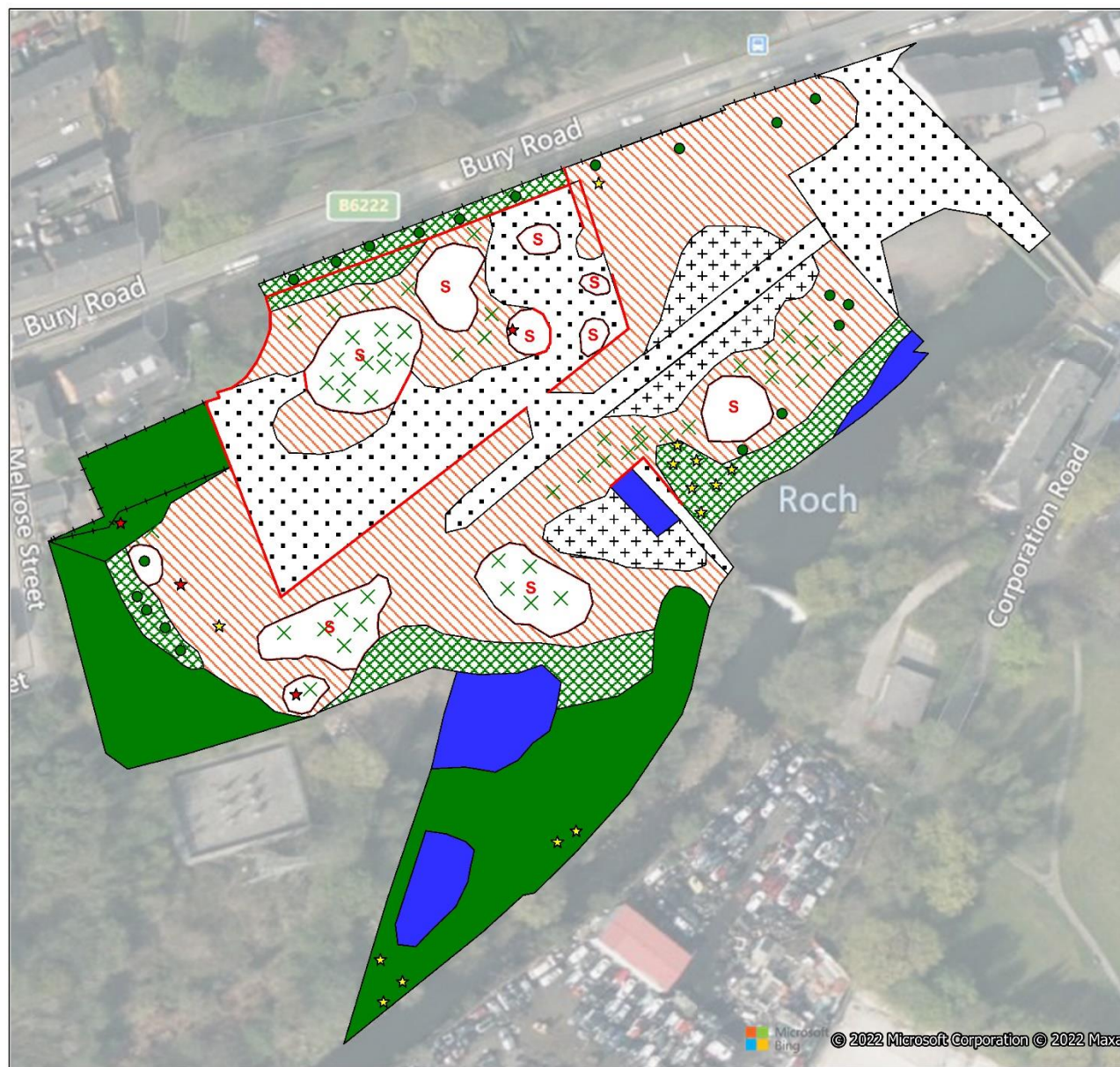
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Client <u>Hallmark Developments</u>			
Job <u>Oakwood, Rochdale</u>			
Drawing title <u>Site Layout</u>			
Project number	M4832	P(20)100	Rev D
Scale	As indicated @ A1		
Date	1/1/02/1		
Drawn by	<u>A.S</u>	Checked by	<u>GRF</u>

APPENDIX B – *Phase 1 Habitat Survey Map*



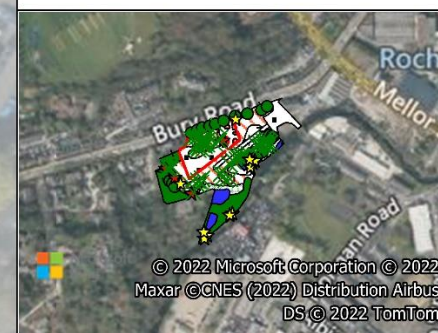
PHASE 1 HABITAT MAP

Former Oakendrod High School,
Bury Road, Rochdale

Drawn by: JC
Date: 08/12/2022

NOT TO SCALE

REV.A



Key

- Bare ground
- Broad-leaved woodland
- Continuous scrub
- Ephemeral
- Spoil
- Standing water
- Tall ruderal herb
- Fence
- Wall
- Scattered tree
- Scattered scrub
- Japanese knotweed
- Himalayan balsam

APPENDIX C – Baseline Habitat Units

Habitats and areas			Distinctiveness		Condition		Strategic significance			Suggested action to address habitat losses	Ecological baseline
Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic Significance multiplier		Total habitat units
Sparsely vegetated land	Ruderal/Ephemeral	1.63	Low	2	Poor	1	Area/compensation not in local strategy/ not in local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	3.26
Sparsely vegetated land	Ruderal/Ephemeral	0.26	Low	2	Good	3	Area/compensation not in local strategy/ not in local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	1.56
Urban	Vacant/derelict land/ bareground	1.03	Low	2	Poor	1	Area/compensation not in local strategy/ not in local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	2.06
Heathland and shrub	Mixed scrub	0.43	Medium	4	Poor	1	Area/compensation not in local strategy/ not in local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required	1.72
Woodland and forest	Other woodland; broadleaved	0.91	Medium	4	Moderate	2	Area/compensation not in local strategy/ not in local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required	7.28
Lakes	Ponds (Non- Priority Habitat)	0.23	Medium	4	Moderate	2	Area/compensation not in local strategy/ not in local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required	1.84
Urban	Urban Tree	1.14	Medium	4	Moderate	2	Area/compensation not in local strategy/ not in local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required	9.12
Urban	Vacant/derelict land/ bareground	0.45	Low	2	Poor	1	Area/compensation not in local strategy/ not in local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.90

APPENDIX D – Baseline River Units

Existing river type			Habitat distinctiveness		Habitat condition		Strategic significance			Watercourse encroachment		Riparian encroachment		Suggested action	Ecological baseline
Baseline ref	River type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Extent of encroachment	Multiplier	Extent of encroachment	Multiplier		Total river units
1	Other Rivers and Streams	0.32	High	6	Fairly Poor	1.5	Low potential/action not identified any plan	Low Strategic Significance	1	Major	0.5	No Encroachment	1	Restore	1.44

APPENDIX E – Headline Results

On-site base line	Habitat units	27.74
	Hedgerow units	0.00
	River units	1.44
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	15.68
	Hedgerow units	0.00
	River units	1.08
On-site net % change (Including habitat retention, creation & enhancement)	Habitat units	-43.48 %
	Hedgerow units	0.00 %
	River units	-25.00 %
Off-site base line	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-12.06
	Hedgerow units	0.00
	River units	-0.36
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-43.48 %
	Hedgerow units	0.00 %
	River units	-25.00 %