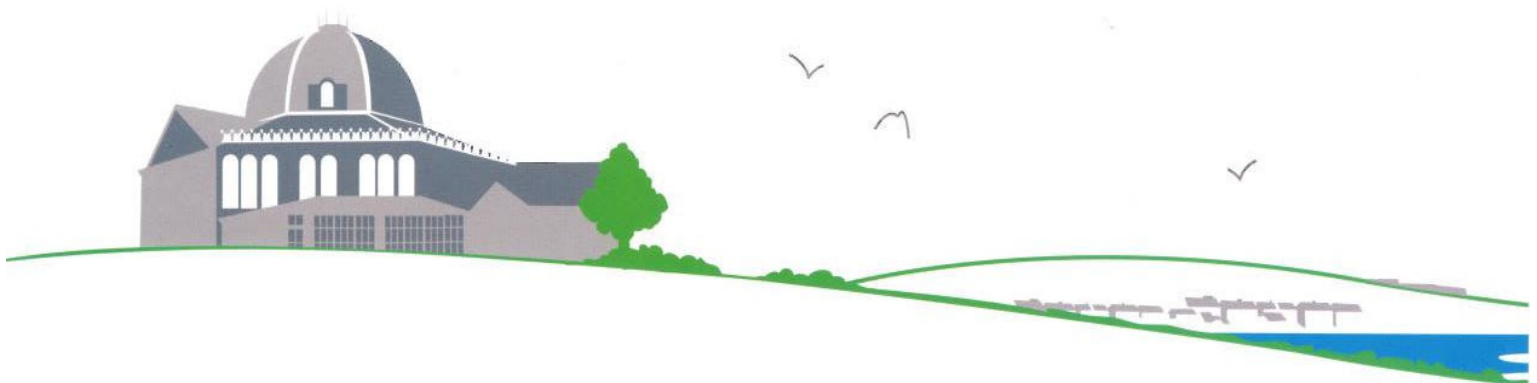




WILDE CONSULTING

MILLTOWN STREET FOOTBRIDGE
REPLACEMENT

EXTENDED PHASE 1 HABITAT SURVEY



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EXTENDED PHASE 1 HABITAT SURVEY

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October 2021

This project has been undertaken in accordance with PAA policies and procedures on quality assurance.

Signed: 

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1. INTRODUCTION

- 1.1 Penny Anderson Associates Ltd (PAA), consultant ecologists, were commissioned by Wilde Consulting to carry out a desk study and preliminary ecological assessment at the location of the Milltown Street Footbridge Replacement, Radcliffe, Bury, M26 2BY. The National Grid Reference is SD 79116 07189.

Proposals

- 1.2 A new footbridge across the River Irwell is proposed to replace an existing bridge which collapsed during the 2015 flooding. The new crossing point will be slightly altered from the previous bridge and will take pedestrian and cycle traffic.

Legislative Context

- 1.3 A range of international and national legislation has been established in the UK to protect important nature conservation sites and priority species. At the international level, European Union (EU) Directives require individual member states to implement their conservation provisions nationally for the benefit of Europe as a whole. These Directives have been transposed into UK law by the Conservation of Habitats and Species Regulations 2017 (amended); further details can be obtained from the Joint Nature Conservation Committee (JNCC) web site at www.jncc.defra.gov.uk.
- 1.4 Other international conventions include: the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979), which requires the maintenance of populations of wild flora and fauna, giving particular protection to endangered and vulnerable species; and the Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979), which requires the protection of migratory species throughout their entire range. The above conventions are implemented in England and Wales via the Wildlife and Countryside Act (WCA) (1981) (as amended) and Countryside and Rights of Way (CROW) Act 2000. This legislation also protects important habitats and sites such as Sites of Special Scientific Interest (SSSI).
- 1.5 At the national level, the UK Post-2010 Biodiversity Framework published in 2012 is the Government's response to the Convention on Biological Diversity (2010). It describes the UK's biological resources, commits a detailed plan for the protection of these resources within the UK's devolved framework across England, Wales, Scotland and Northern Ireland. The document identifies future priorities for nature conservation and adopts a more strategic approach, including ecosystem services and sustainability alongside biodiversity. Despite administrative changes following devolution, there is still an underlying objective of protecting and enhancing a range of priority species and habitats, often still based on the objectives and classifications of the original UK Biodiversity Action Plan (BAP). Biodiversity 2020 is England's national biodiversity strategy. Building on the Natural Environment White Paper published in 2011, this provides a means of delivering the international and EU commitments to biodiversity. Under Biodiversity 2020, Priority Species and Habitats referred to are those of 'Principal Importance' for the conservation of biodiversity in England listed on Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006.
- 1.6 Finally, the National Planning Policy Framework (NPPF 2021) provides guidance for local authorities on the content of the Local Plans and is a material consideration in determining planning applications. Briefly, with an overall focus on sustainable development, the NPPF states that developments should aim to engender positive outcomes for habitats and biodiversity, with a particular focus on the maintenance and creation of ecological networks.
- 1.7 The NPPF identifies the following principals that should be applied by local planning authorities when determining planning applications:

- a. if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b. development on land within or outside a SSSI, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSI;
- c. development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d. development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

1.8 The NPPF states that the planning system should contribute to and enhance the natural environment through a range of actions, including:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services; and
- minimising impacts on biodiversity and providing net gains for biodiversity including establishing coherent ecological networks that are more resilient to current and future pressures.

1.9 To protect and enhance biodiversity and geodiversity, plans should:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

1.10 Relevant protected species legislation summaries are presented as Appendix 1.

Invasive Species

1.11 Certain non-native species that have been introduced into the UK are regarded as being a threat to native biodiversity. Legislative measures have, therefore, been put in place to prevent the spread of these invasive species in the wild.

1.12 Under section 14 of the WCA, 1981 (as amended), it is illegal to introduce plants listed under Part II of Schedule 9 of the WCA into the wild or sell these species. Offences include causing the spread of viable plant material or neglecting to contain or appropriately manage non-native species.

- 1.13 Commonly introduced Schedule 9 plant species include non-native cotoneaster species, specifically, small-leaved cotoneaster¹ (*Cotoneaster microphylla*) and wall cotoneaster (*C. horizontalis*), Himalayan balsam (*Impatiens glandulifera*) and Japanese knotweed (*Reynoutria japonica*).

¹ Plant names follow Stace 2019

2. METHODS

Desk Study

- 2.1 A request for details of protected and notable species and locally designated sites within 1km of the centre of the site was made to Greater Manchester Local Records Centre (GMLRC), with data returned on 13th October 2021. Additionally, the Multi-Agency Geographic Information for the Countryside (MAGIC²) website was consulted for details of statutory designated sites and Priority Habitats within a 1km search area from the centre of the site.
- 2.2 It is important to note that the desk study results provide an indication of the species present in and around the site, and do not confirm current presence or absence of any species. Protected species are often under-recorded in county wildlife databases.

Extended Phase 1 Habitat Survey

- 2.3 An extended Phase 1 habitat survey was undertaken by Helen Hamilton MCIEEM³ on 30th September 2021, in wet weather.
- 2.4 The survey was carried out in accordance with the methodology in the *Handbook for Phase 1 Habitat Survey* (JNCC 2010) and for Preliminary Ecological Appraisal (CIEEM 2017). This entailed mapping, describing and collating plant species lists for habitats within the site boundary. The broad habitat types were mapped, with each habitat type coded according to the standard JNCC Phase 1 habitat survey procedure.
- 2.5 Each plant species was assigned abundance codes within each habitat. This was done using the 'DAFOR' scale (where: d = dominant; a = abundant; f = frequent; o = occasional; r = rare), which provides an indication of the relative abundance of each plant species present within a particular habitat. Common names and scientific names according to Stace (2019) are provided in the species list (Appendix 2) but common names only are referred to in the text.
- 2.6 The survey was 'extended' (Institute of Environmental Assessment 1995) to include notes on fauna and habitats which could potentially support protected or notable species. The presence of, or potential for, protected or notable species was noted on the field map and in the written target notes (TN) during the survey.

Limitations

- 2.7 Survey conditions were wet, and the river bank could not be accessed due to high water levels. The remaining footbridge structure and Building 1 could not be fully accessed, but were viewed from adjacent land. Otherwise, no limitations were encountered, and the survey findings are considered acceptable.

² <https://magic.defra.gov.uk/MagicMap.aspx> (last accessed 13th October 2021)

³ Full member of Chartered Institute of Ecology and Environmental Management (CIEEM)

3. RESULTS

Desk Study

- 3.1 The desk study utilised data obtained from GMLRC searching within a 1km radius of the site centre. The MAGIC search engine was also used to obtain additional data on European Protected Species (EPS) licences, as well as statutory and non-statutory sites and Priority Habitats.

Statutory Protected Sites

European Sites

- 3.2 European protected sites include Special Areas of Conservation (SAC), Special Protection Areas (SPA), RAMSAR wetland sites, possible SAC, potential SPA and proposed RAMSAR sites.
- 3.3 No European protected sites were returned in the search area.

Sites of Special Scientific Interest

- 3.4 SSSI represent a selection of this country's best wildlife and geological sites and cover approximately 7% of the terrestrial area of the country (with over 4,000 separate sites in England).
- 3.5 No SSSI were identified within the search area; however, three SSSI were located within the Impact Risk Zone⁴ (IRZ) of the site including:
- Ashclough SSSI;
 - Nob End SSSI; and;
 - Tonge River SSSI.
- 3.6 Further consultation with the search engine MAGIC revealed that within these SSSI IRZ, Natural England should be consulted on the following planning applications:
- Infrastructure: Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals;
 - Minerals, Oil and Gas: Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil and gas exploration/extraction;
 - Rural Residential: Any residential development of 100 or more houses outside existing settlements/urban areas;
 - Air Pollution: Livestock and poultry units with floorspace > 500m², slurry lagoons > 750m² and manure stores > 3500t;

⁴ The Impact Risk Zones are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI 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 impacts.

- Combustion: General combustion processes >50MW energy input. Including: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion;
- Waste: Landfill. Including: inert landfill, non-hazardous landfill, hazardous landfill; and
- Water Supply: Large infrastructure such as warehousing/industry where total net additional gross internal floorspace following development is 1,000m² or more.

National and Local Nature Reserves

- 3.7 No National Nature Reserves were identified within the search area.
- 3.8 Chapelfield Local Nature Reserve (LNR) lies within the 1km search area, located approximately 740m south of the central grid reference of the site. LNRs are a nationally recognised designation which places a value on these sites for nature, amenity, recreation and wellbeing. This LNR is notified for its central reservoir (listed as an SBI, below) and woodland areas supporting a range of bird species.

Non-Statutory Protected Sites

- 3.9 Four Sites of Biological Interest (SBI) were returned within the search area. These sites are presented in Table 1, along with their proximity to the site.

Table 1 Sites of Biological Interest

Site of Biological Interest	Distance from Central Grid Reference	Reason for Designation
Sailor's Brow & Springwater Park	238m south-east	A mosaic of habitats including broadleaved woodland, scrub, acid grassland and wetland habitats.
Wetland Near Radcliffe	690m north	Wetland
Manchester Bolton & Bury Canal (East)	758m north	Canal
Reservoirs At Chapel Field	914m south-west	Standing water

Priority Habitats

- 3.10 Several Priority Habitat deciduous woodlands were returned within the search area. The closest to the centre of the site is located approximately 250m south.
- 3.11 Several lowland fen Priority Habitats were also identified within the search area; the closest to the centre of the site is located approximately 570m south.

Protected and Notable Species

Granted European Protected Species Licence Applications

- 3.12 Two granted EPS licence applications for bats were returned within the search area, both pertaining to bats. The species of bat, the licence and proximity to the site are in Table 2.

Table 2 Bat European Protected Species Licences

Species	Licence to Allow	Date Licence Granted	Date Licence Expires	Distance from Central Grid Reference
Common pipistrelle (<i>Pipistrellus pipistrellus</i>)	Damage of breeding site and resting place. Destruction of a breeding site and a resting place.	15.09.2015	31.10.2015	301m north
Common pipistrelle	Destruction of a breeding site and a resting place.	03.02.2010	31.01.2012	400m south

Badger and Otter

- 3.13 No records of badger (*Meles meles*) or otter (*Lutra lutra*) were returned within the search area.

Water Vole

- 3.14 A single record for a water vole (*Arvicola amphibius*) was returned in the 1km data search. The record was dated April 2009 and located at Sailor's Brow and Spring Water Park SBI, approximately 980m south-east of the central grid reference.

Bats

- 3.15 Thirteen bat roosts recorded between 1996 and 2015 were identified in the search area. Two roosts were for unidentified bat species, four for common pipistrelle (*Pipistrellus pipistrellus*) species and seven for unidentified pipistrelle species. The closest roost to the site is for a common pipistrelle located approximately 445m south of the central grid reference.
- 3.16 In addition, a total of 47 records for other signs of bats were identified within the search area. Seven species of bats were recorded between 1997 and 2019. The Table 3 lists the species along with the distance of the closest bat record for each species to the site.

Table 3 Bat Records (Non-Roost)

Common Name	Scientific Name	No. of Records	Closest Record to Site (Approximate distance and direction from central grid reference)
Bat species	Chiroptera	2	447m south-west
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	30	370m north-east
Daubenton's bat	<i>Myotis daubentonii</i>	5	236m north
Myotis species	<i>Myotis</i> sp.	1	982m north
Noctule bat	<i>Nyctalus noctula</i>	4	238m north
Pipistrelle species	<i>Pipistrellus</i> sp.	3	237m north
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	1	937m north-east

Other Mammals

- 3.17 A total of seven records for hedgehog (*Erinaceus europaeus*) were returned in the search area. The records are dated between 2010 and 2019, and the closest to the site is located 530m south of the central grid reference.

Birds

- 3.18 All nesting birds, their nests and eggs are protected from harm under the WCA, 1981 (as amended). In addition, species listed under Schedule 1 of the WCA are further protected against disturbance when breeding.
- 3.19 A number of bird species are listed under Section 41 in the NERC Act (2006) as species 'of principal importance for the purpose of conserving biodiversity'. These species are often known as the 'S41 species'. There is a legal requirement for a public body to 'have regard to' these species in relation to maintaining biodiversity. The S41 list overlaps somewhat with the UK BAP species, with national or local targets to maintain and enhance populations.
- 3.20 Furthermore, the Birds of Conservation Concern (BoCC) report lists those bird species that are classed as being of High (Red listed) and Medium (Amber Listed) conservation concern based on population monitoring (Eaton *et al.* 2015). This Red and Amber classification helps guide the assessment of bird species of conservation interest on or near to a site, alongside legislative and policy requirements.
- 3.21 All Section 41 bird species recorded within the search area are listed in Table 4, along with their conservation status. Due to confidentiality of the records, Schedule 1 birds are not listed in this report.

Table 4 Bird Species of Principal Importance

Common Name	Scientific Name	Amber ⁵ Listed	Red Listed	Section 41 Priority Species ⁶
Bullfinch	<i>Pyrrhula pyrrhula</i>	x		x
Cuckoo	<i>Cuculus canorus</i>		x	x
Curlew	<i>Numenius arquata</i>		x	x
Dunnock	<i>Prunella modularis</i>	x		x
Grasshopper warbler	<i>Locustella naevia</i>		x	x
House sparrow	<i>Passer domesticus</i>		x	x
Lapwing	<i>Vanellus vanellus</i>		x	x
Lesser redpoll	<i>Acanthis caberet</i>		x	x
Linnet	<i>Linaria cannabina</i>			x
Reed bunting	<i>Emberiza schoeniclus</i>	x		x
Skylark	<i>Alauda arvensis</i>		x	x
Song thrush	<i>Turdus philomelos</i>		x	x
Starling	<i>Sturnus vulgaris</i>		x	x
Yellow wagtail	<i>Motacilla flava</i>		x	x

⁵ The UK's birds can be split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green.

⁶ Species of Principal Importance under Section 41 of the NERC Act 2006.

Amphibians

- 3.22 No records for great crested newt (*Triturus cristatus*, GCN) were returned in the search area.
- 3.23 Consultation with Natural England's GCN Geoportal revealed no locations with confirmed presence of GCN within 1km of the central grid reference.
- 3.24 An Ordnance Survey map search revealed three ponds and a single ditch located within 500m of the centre of the site.
- 3.25 A total of 17 records were identified for common toad (*Bufo bufo*) within 1km of the site. The records are dated between 2004 and 2018, and the closest record is located approximately 190m south of the central grid reference.

Reptiles

- 3.26
- 3.27 A single record for common lizard (*Zootoca vivipara*) was identified 887m south of the central grid reference.

Invertebrates

- 3.28 Two records of Section 41 moths were identified in the search area. A cinnabar moth (*Tyria jacobaeae*) recorded in 2016 located approximately 563m south of the central grid reference and a dot moth (*Melanchra persicariae*) recorded in 2017 located 928m west of the central grid reference.

White-clawed Crayfish and Notable Fish

- 3.29 No records of white clawed crayfish (*Austropotamobius pallipes*) or notable fish were returned from the search area.

Notable Plant Species

- 3.30 No notable plant species were returned in the search area.

Phase 1 Habitat Survey

- 3.31 Figure 1 presents the habitat map and photographs are presented in Appendix 3.
- 3.32 The site is situated spanning the River Irwell, with areas surveyed on the north and south banks of the river. The surrounding area is urban residential to the north and urban industrial to the south. The immediate north bank is post-industrial waste-ground on both sides of the proposal site, which has self-colonised with typical ruderal and scrub vegetation.
- 3.33 The north bank was previously developed land, with scrub and neutral grassland the dominant habitats between areas of hardstanding and disturbed ground (Photo 1). A couple of young trees were present and a culvert beneath the access road flowed into the River Irwell.
- 3.34 On the south bank, trees line the river frontage (Photo 2), with an understorey of tall ruderal species, mainly Japanese knotweed, together forming an impenetrable thicket of vegetation. Access was not possible on the route of the former cycle path, but was possible into the industrial yard adjacent. Here, a waste transfer business was actively operating, but some scrub was present at the edges and two buildings.
- 3.35 Trees on site were mainly white poplar, willow species and sycamore.
- 3.36 Scrub on site was dominated by self-colonised native species of willow species and silver birch, with Italian alder and sycamore also present as well as the non-native shrub butterfly-bush. Little understory, deadwood or leaf litter was present with ground covered by herbaceous vegetation or bare.

- 3.37 Neutral grassland was diverse in its flora but rank and contained many tall herbs, such as common nettle, broad-leaved dock, thistles, common ragwort and mugwort. The area was unmanaged and the presence of bramble (Photo 3) suggests it is succeeding to scrub. Giant hogweed was also present but rare.
- 3.38 Tall ruderal vegetation was dominated by Japanese knotweed, with some giant hogweed, especially at the river bank toe. Himalayan balsam was also present on the south bank.
- 3.39 Hardstanding was largely free of vegetation, but occasional plants typical of the site's neutral grassland flora were present in cracks and at edges.
- 3.40 The bare ground area was recently scraped off and soil and vegetation spoil mounded adjacent (Photo 4). The spoil mound also had some existing scrub vegetation.
- 3.41 The River Irwell is a highly modified watercourse with stone/brick walled channel upstream of the site (Photo 5) and modifications such as bridge piers visible downstream (Photo 6).
- 3.42 Two buildings and some masonry walling were present. Building 1 was a single storey red-brick structure with double-pitched slate roof. No entry inside was possible, but the structure seemed intact and seemed to offer Low bat roost potential (Photo 7). Building 2 was a pre-fabricated temporary structure with no potential for bat roosting. The masonry abutment on the north bank of the river was constructed from brick and stone and found to lack suitable features for bat roosting – no potential.

Invasive Non-Native Species

- 3.43 Japanese knotweed, giant hogweed and Himalayan balsam were all present on site. All three species are listed on Schedule 9 of the WCA, 1981 (as amended) as species which it is illegal to introduce into the wild. Furthermore, giant hogweed is a hazardous plant.

Protected Species

- 3.44 No evidence of protected species was noted on site.
- 3.45 Low bat roost potential was assigned to Building 1, but other structures had no potential.
- 3.46 Birds are likely to breed in the tall ruderal, bramble, scrub and tree habitats in the spring and summer months (March to August inclusive). Hedgehog were noted in the desk study, and could also potentially use these habitats on site although overall habitats were judged sub-optimal for the species and any activity is most likely to be foraging rather than sheltering/nesting.
- 3.47 Mammal tracks in the neutral grassland were attributed to fox (*Vulpes vulpes*), or possibly dog as the area is used for dog walking.
- 3.48 The River Irwell has potential to support otter, but there was no potential for holts or lying-up sites on the proposal site.

4. DISCUSSION AND RECOMMENDATIONS

- 4.1 The Milltown Street Footbridge Replacement site is situated spanning the River Irwell, with areas on the north and south banks of the river. The surrounding land is urban residential to the north and urban industrial to the south. The immediate north bank is post-industrial waste-ground. The remains of the former footbridge could be seen on both banks with a broken pier in the river.
- 4.2 No European protected sites, SSSI or NNR were located within the 1km search area. The site is located within IRZ for three SSSI, but this application is not of a type that requires further consultation with Natural England as it will not affect the SSSIs. A single LNR and four SBIs were located within the search area but were not immediately adjacent and were considered unlikely to be affected in any way by the proposals. Similarly, priority habitats of broadleaved woodland and fen within the search area are unlikely to be affected.
- 4.3 Habitats on site were scrub, trees, neutral grassland, tall herb and ruderal, running water, bare ground and spoil - plus two buildings, masonry walling and areas of hardstanding. Habitats were generally typical of abandoned post-industrial land in urban settings and were vegetated by self-colonised species which are common and widespread on such unmanaged sites. The river banks were highly modified and characterised by stands of invasive non-native giant hogweed and Japanese knotweed (also both present elsewhere on site). No Priority Habitats were noted on site, but there was some potential for protected species.
- 4.4 A total of five bat species were reported for the locality, and bat roosting habitats were potentially present on site, in Building 1. Otherwise, structures within the site were unsuitable.
- 4.5 Water vole have been recorded within the search area, but the site itself was unsuitable for the species.
- 4.6 Hedgehog were noted in the desk study and could potentially use on site scrub and tall herb for foraging, although overall habitats were judged sub-optimal for sheltering/nesting. In addition, the areas of suitable habitat involved are small.
- 4.7 Badgers are not known from the vicinity and no evidence was noted, although they could utilise habitats present on site for foraging and commuting.
- 4.8 Otters are not known from the area, but the River Irwell potentially offers suitable commuting and foraging habitat, although the site would not be suitable for places of shelter such as holts. The proposals do not affect the river itself, as the bridge will span the watercourse.
- 4.9 There is potential on site for breeding birds – mainly in scrub and tree habitats, but also tall herb/ruderal and gaps in masonry.
- 4.10 In terms of amphibians, there are no known records for GCN in the search area, with only common toad recorded locally. The closest ponds potentially suitable for GCN breeding are:
- 300m to the northeast with unmanaged post-industrial scrub habitats in between; and
 - 250m to the southwest and 200m south, both separated from the site by the very busy industrial activities along Milltown Street.
- 4.11 Given the lack of GCN records and the distance from any potential breeding ponds to the site, the presence of this European protected species seems unlikely. Amphibians are not considered further.
- 4.12 Habitats on site are sub-optimal for reptiles, with suitable sheltered areas of scrub/tall herb adjacent to open vegetation-free basking sites very limited. Plus, the site is very disturbed by dog walkers. More extensive potential areas for reptiles lie in waste ground to the north-east of the site. Reptiles are not considered further.

4.13 Similarly, invertebrates are not considered likely to be impacted by the scheme and are not considered further.

4.14 Invasive non-native species were noted during the survey, namely giant hogweed, Japanese knotweed and Himalayan balsam.

Bats

4.15 Building 1 was assessed to have Low bat roost potential. Plans indicate that it will not be affected by the scheme. However, if Building 1 is directly affected then a full internal and external inspection should be undertaken and any follow-up bat activity surveys undertaken as required. Other structures – Building 2 and masonry – were not considered to have bat roost potential.

Breeding Birds

4.16 Clearance of habitats that would potentially be used by breeding birds should be carried out outside the bird breeding season (March to August inclusive). These habitats are tall ruderal, bramble, scrub and trees.

Hedgehog

4.17 On-site habitats are considered sub-optimal for hedgehog and are very limited in scale, and animals are considered highly unlikely to be sheltering or nesting on site. As such, no specific measures are required although if hedgehog are found, they should be carefully moved to suitable vegetation in adjacent land away from the works.

Invasive Non-native Species

4.18 Care must be taken to avoid the spread of Japanese knotweed, giant hogweed and Himalayan balsam to other sites. Care must be taken in handling/working near to giant hogweed as this is a hazardous plant that can cause severe skin irritation/blisters.

Biodiversity Enhancement Opportunities

4.19 The new bridge offers the opportunity for:

- Bat and bird boxes on bridge structure;
- Native species landscaping as required to restore land after the works; and
- control of invasive non-native plant species in locality of scheme.

4.20 Input from a suitably qualified ecologist is recommended for habitat creation (bat/bird boxes) and native planting.

4.21 Specialist weed control services are recommended for the management of Invasive Non-native Species (INNS) of plants.

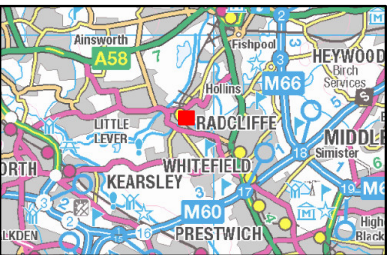
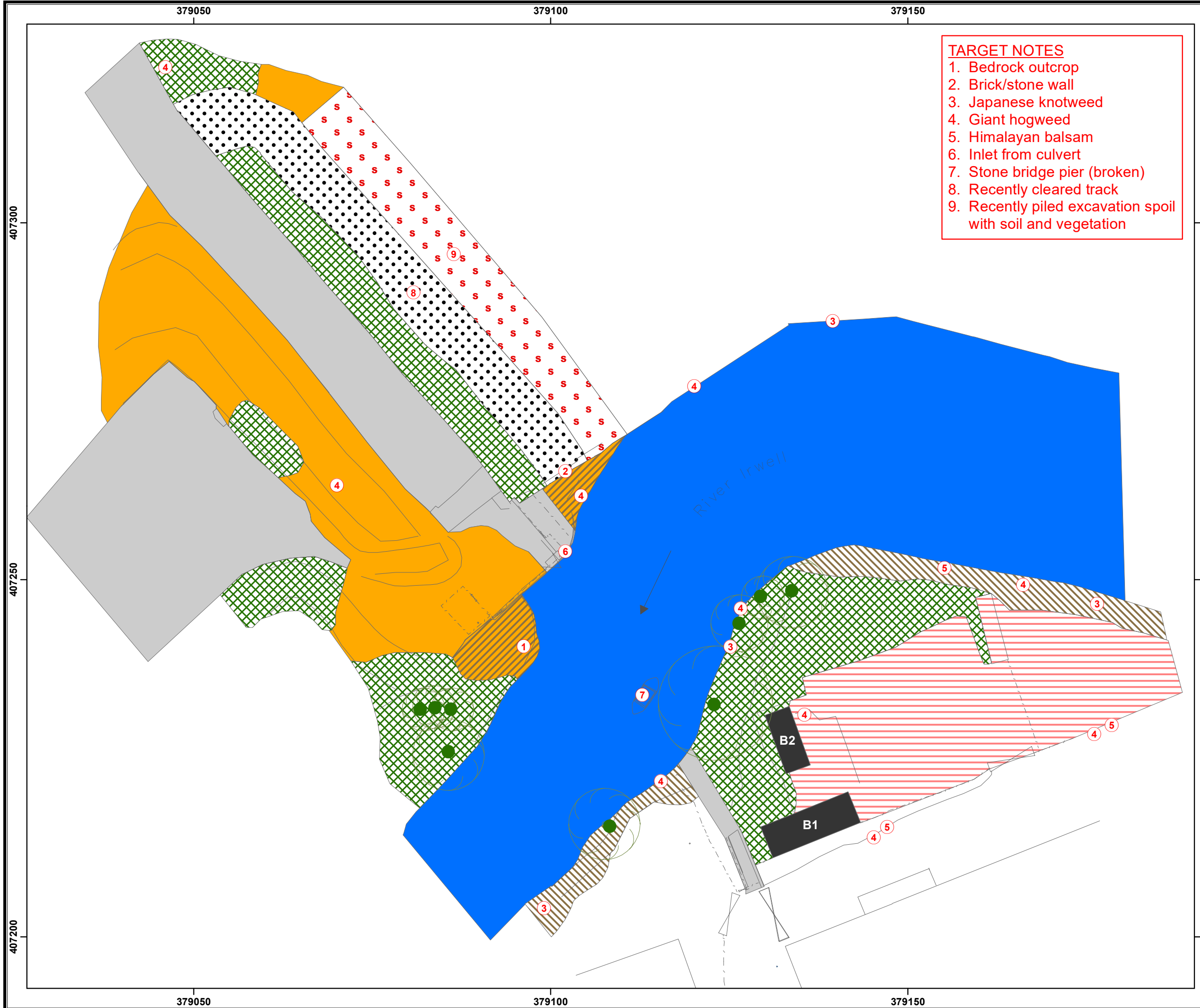
5. REFERENCES

- CIEEM, 2017. *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Technical Guidance Series. Chartered Institute of Ecology and Environmental Management.
- Eaton, M.A., Aebischer, N.J., Brown, A.F., Hearn, R.D., Lock, L., Musgrove, A.J., Noble, D.G., Stroud, D.A. and Gregory, R.D., 2015. Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man. *British Birds*, **108**, 708–746.
- Institute of Environmental Assessment, 1995. *Guidelines for Baseline Ecological Assessment*. E & F.N. Spon, an imprint of Chapman & Hall.
- JNCC, 2010. *Handbook for Phase 1 habitat survey: a technique for environmental audit*. Revised reprint, JNCC.
- NPPF, 2021. *National Planning Policy Framework, updated July 2021*. Ministry of Housing, Communities and Local Government
- Stace, C., 2019. *New Flora of the British Isles. Fourth Edition*. C & M Floristics.

6. ABBREVIATIONS

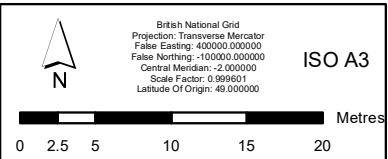
BAP	Biodiversity Action Plan(s)
BoCC	Birds of Conservation Concern
CIEEM	Chartered Institute of Ecology and Environmental Management
CRoW	Countryside and Rights of Way
EPS	European Protected Species
EU	European Union
GCN	Great Crested Newt(s)
GMLRC	Greater Manchester Local Records Centre
INNS	Invasive Non-native Species
IRZ	Impact Risk Zone(s)
JNCC	Joint Nature Conservation Committee
LNR	Local Nature Reserve(s)
MAGIC	Multi Agency Geographic Information for the Countryside
NERC	National Environment and Rural Communities
NPPF	National Planning Policy Framework
NNR	National Nature Reserve(s)
PAA	Penny Anderson Associates Ltd
ROMP	Review of Mineral Permissions
SAC	Special Area(s) of Conservation
SBI	Site(s) of Biological Importance
SPA	Special Protection Area(s)
SSSI	Site(s) of Special Scientific Interest
TN	Target Note(s)
WCA	Wildlife and Countryside Act

FIGURE



Legend

- Habitat
- Dense/continuous scrub
 - Neutral grassland
 - Neutral grass/tall herbs
 - Tall ruderal
 - Spoil
 - Running water
 - Building
 - Bare ground
 - Hardstanding
 - Industrial
 - Broadleaved tree
 - Target note



Wilde	
Penny Anderson Associates Ltd Parklea, 60 Park Road, Buxton, Derbyshire, SK17 6SN. Telephone 01298 27086	
Project Name Milltown Cycle Bridge	
Discipline Ecology	
Title: PHASE 1 HABITATS	
Scale 1:500	Drawing No. Figure 1
Drawn By CC	Originator HH
PAA Ref.	Date 07/10/2021
	Revision 1.0

APPENDICES

APPENDIX 1

Relevant Protected Species Legislation Summaries

SUMMARY OF THE LEGISLATION RELATING TO BATS

All wild species of bat are protected under the Wildlife and Countryside Act (WCA) 1981, which has also been amended by later legislation, including the Countryside and Rights of Way (CROW) Act 2000 and the Conservation of Habitats and Species Regulations 2017 (amended), and this legislation is applicable to England and Wales. Bats are listed on Schedule 5 of the WCA and are therefore subject to some the provisions of Section 9 which, with the amendments, make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection (S9:4b).
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat (S9:4c).

There are additional offences in relation to buying and selling (S9:5) any live or dead animal of this species or anything derived from them.

Bat species are also listed under Annexes IIa and IVa of the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, also known as the 'Habitats Directive'. Inclusion on Annex IVa means they are consequently identified as European Protected Species (EPS) and protected under the Conservation of Habitats and Species Regulations 2017 (amended).

The Conservation of Habitats and Species Regulations 2017 (amended) state that a person commits an offence if they:

- (a) deliberately capture, injure or kill any wild animal of a European protected species,
- (b) deliberately disturb wild animals of any such species, in such a way as –
 - (i) to impair their ability to survive, to breed or reproduce, or to rear their young, or
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate, or
 - (iii) to affect significantly the local distribution or abundance of the species to which they belong;
- (c) deliberately take or destroy the eggs of such an animal, or
- (d) damage or destroy a breeding site or resting place of such an animal.

Under these Regulations it is an offence to damage or destroy a breeding site or resting place whether the animal is in occupation or not, and protection extends to all life stages of the animal in question. There are additional offences relating to possession, control and sale of a live or dead bat or part of such an animal.

In addition, seven native British bat species, including the soprano pipistrelle (*Pipistrellus pygmaeus*) and the brown long-eared bat (*Plecotus auritus*), that are frequently found in buildings, are listed as a 'Priority Species' under the 2011 biodiversity strategy for England, *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*, under the 2012 UK Post-2010 UK Biodiversity Framework. These Priority Species are also referred to as 'species of principal importance' for the conservation of biodiversity in England and Wales within Section 74 of the CROW Act 2000, and Sections 41 (England) and 42 (Wales) of the Natural Environment and Rural Communities (NERC) Act 2006.

In addition, the National Planning Policy Framework (NPPF 2019) has an overall focus on sustainable development, and states that developments should aim to engender positive outcomes for habitats and biodiversity, with a particular focus on the maintenance and creation of ecological networks. Furthermore, the NPPF also states that any planning proposals for which significant negative impacts on biodiversity cannot be avoided, mitigated or compensated for should be refused. Reference is made to Circular 06/2005 *Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System* in respect of statutory obligations for biodiversity and geodiversity conservation.

The commitment to preserving, restoring or enhancing biodiversity is further emphasised for England and Wales in Section 40 of the NERC Act 2006.

Please note: the above text provides a brief summary of the legislation in relation to bats in England and Wales and the original Acts, Regulations and any amendments should be referred to for the precise wording.

SUMMARY OF THE LEGISLATION RELATING TO BREEDING BIRDS

All wild species of breeding birds and their nests are protected under Part 1 of the Wildlife and Countryside Act (WCA) 1981, as amended by later legislation including the Countryside and Rights of Way (CROW) Act 2000. This legislation applies in England and Wales.

Part 1 (Section 1:1) of the WCA states that:

'If any person intentionally,

- (a) kills, injures or takes any wild bird;
- (b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- (c) takes or destroys an egg of any wild bird,

he shall be guilty of an offence.'

Part 1 (Section 1:5) of the WCA (amended by the CROW Act 2000) refers to specific birds listed on Schedule 1 of the WCA, and states that:

'If any person intentionally or recklessly,

- (a) disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
- (b) disturbs dependent young of such a bird,

he shall be guilty of an offence and liable to a special penalty.'

Schedule 1 includes birds such as Western barn owl (*Tyto alba*), black redstart (*Phoenicurus ochrurus*), woodlark (*Lullula arborea*) and Cetti's warbler (*Cettia cetti*). Please refer to the WCA for a complete list of Schedule 1 species.

Some provisions are made to allow the killing and taking of certain species under certain circumstances, as follows:

- Birds listed on Schedule 2 (Part 1) of the Act may be taken or killed outside of the 'close season' for each individual species (the 'close season' is defined by the Act). This includes various wild duck and geese species.
- Birds listed on Schedule 2 (Part 2) of the Act may be killed or taken by authorised persons at all times. This includes species such as carrion crow (*Corvus corone*), Eurasian magpie (*Pica pica*), feral pigeon¹ (*Columba livia*) and greater Canada goose (*Branta canadensis*). An 'authorised person' is defined as a person who has written authorisation to undertake the act from the relevant statutory authority. The written authority is in the form of a licence, either a general licence which covers a number of the more typical 'pest' species, or an individual licence for other individual species. In England these licences are issued by Natural England and in Wales by the Welsh Assembly Government.

Please note: the above text provides a brief summary of the legislation in relation to breeding birds in England and Wales and the original Act and any amendments should be referred to for the precise wording.

¹ Also known as rock dove

APPENDIX 2
Botanical Species List

Appendix 2 Botanical Species List

Common Name	Scientific Name	Trees and Scrub	Neutral Grassland and Tall Herb
Woody Species			
Bramble	<i>Rubus fruticosus</i> agg.	F	R-LD
Butterfly-bush	<i>Buddleja davidii</i>	F	
Crack willow	<i>Salix fragilis</i>	O	
Dog rose	<i>Rosa canina</i>	R	
Goat willow	<i>Salix caprea</i>	F	
Gorse	<i>Ulex europaeus</i>	R	
Grey willow	<i>Salix cinerea</i>	F	
Italian alder	<i>Alnus viridis</i>	R	
Pedunculate oak	<i>Quercus robur</i>		R (seedling)
Silver birch	<i>Betula pendula</i>	F	
Sycamore	<i>Acer pseudoplatanus</i>	O	
White poplar	<i>Populus alba</i>	O	
Herbs, Grasses and Ferns			
Annual meadow-grass	<i>Poa annua</i>		R
Black medick	<i>Medicago lupulina</i>		R
Broad-leaved dock	<i>Rumex obtusifolius</i>		O
Broad-leaved willowherb	<i>Epilobium montanum</i>		LO
Cat's ear	<i>Hypochaeris radicata</i>		R
Cock's-foot	<i>Dactylis glomerata</i>		F
Colt's-foot	<i>Tussilago farfara</i>		R
Common couch	<i>Elymus repens</i>		O
Common nettle	<i>Urtica dioica</i>		O
Common ragwort	<i>Jacobaea vulgaris</i>		O
Creeping bent	<i>Agrostis stolonifera</i>		LO
Creeping buttercup	<i>Ranunculus repens</i>		O
Creeping thistle	<i>Cirsium arvense</i>		F
Cut-leaved crane's-bill	<i>Geranium dissectum</i>		LO
Dandelion	<i>Taraxacum officinale</i> agg.		O
Dove's-foot crane's-bill	<i>Geranium molle</i>		R
False oat-grass	<i>Arrhenatherum elatius</i>		A-D
Field bindweed	<i>Convolvulus arvensis</i>		R-LO
Field horsetail	<i>Equisetum arvense</i>		F
Giant hogweed	<i>Heracleum mantegazzianum</i>		R
Greater plantain	<i>Plantago major</i>		LO
Hairy tare	<i>Ervilla hirsuta</i>		O
Hard rush	<i>Juncus inflexus</i>		R
Hedge mustard	<i>Sisymbrium officinale</i>		R
Hemp-agrimony	<i>Eupatorium cannabinum</i>		O
Herb-Robert	<i>Geranium robertianum</i>		O
Himalayan balsam	<i>Impatiens glandulifera</i>		LF
Japanese knotweed	<i>Reynoutria japonica</i>		O-LD
Meadow buttercup	<i>Ranunculus acris</i>		R
Meadow vetchling	<i>Lathyrus pratensis</i>		R
Mouse-ear hawkweed	<i>Pilosella officinarum</i>		LO
Mugwort	<i>Artemisia vulgaris</i>		R
Perennial rye-grass	<i>Lolium perenne</i>		O
Red clover	<i>Trifolium pratense</i>		R
Red fescue	<i>Festuca rubra</i>		F
Ribbed melilot	<i>Melilotus officinalis</i>		R
Ribwort plantain	<i>Plantago lanceolata</i>		O
Rosebay willowherb	<i>Chamaenerion angustifolium</i>		O
Sea aster	<i>Tripolium pannonicum</i>		R
Spear thistle	<i>Cirsium vulgare</i>		R-F
Timothy	<i>Phleum pratense</i>		R
Tufted vetch	<i>Vicia cracca</i>		O
Wavy hair-grass	<i>Avenella flexuosa</i>		R
White clover	<i>Trifolium repens</i>		LO
Yorkshire-fog	<i>Holcus lanatus</i>		O
Mosses			
Pointed spear-moss	<i>Calliergonella cuspidata</i>		R-LF

KEY

D-Dominant, A-Abundant, F-Frequent, O-Occasional, R-Rare, L-Locally

APPENDIX 3

Photographs



Photo 1
Hardstanding, north bank, with
scrub habitat to the left and
neutral grassland to the right

Photo 2
Trees and scrub on the south bank



Photo 3
Bramble within neutral grassland

Photo 4
Photo 4 bare ground and spoil,
looking south





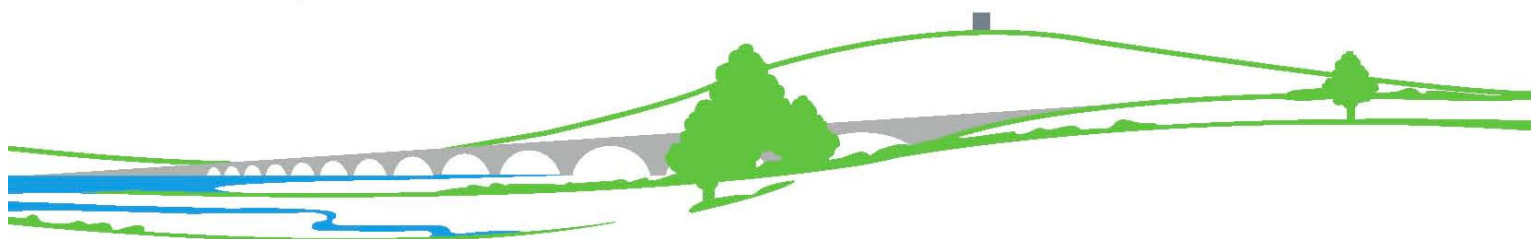
Photo 5
River Irwell looking upstream

Photo 6
River Irwell looking downstream



Photo 7
Building 1

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