Gatwick Airport Northern Runway Project

Environmental Statement
Appendix 9.9.2: Biodiversity Net Gain Statement

Book 5

VERSION: 1.0

DATE: JULY 2023

Application Document Ref: 5.3

PINS Reference Number: TR020005

APFP Regulations 5(2)(a) **Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009**

Table of Contents

1 Introduction 1

2 BNG Methodology 1

3 Baseline Conditions 2

4 Proposed Design 3

5 References 7

6 Glossary 7

Table

Table 3.2.1 Pre-development habitats in area impacted by Project 2

Table 4.2.1 Woodland condition criteria 5

Table 4.3.1 Areas of habitat to be created and target condition 6

Table 6.1.1 Glossary of terms 7

Annex

Annex 1 Defra Metric – Area Impacted

Annex 2 River Condition Assessment

Annex 3 Habitat areas lost and gained (ha)

Figure

Figure 2.1: Habitats lost 2024-2029

Figure 2.2: Habitats Created or Recreated 2024-2029

Figure 2.3: Habitats lost 2030-2032

Figure 2.4: Habitats Created or Recreated 2030-2032

Figure 2.5: Habitats lost 2033-2038

Figure 2.6: Habitats Created or Recreated 2033-2038

1 Introduction

1.1.1 This document forms **ES Appendix 9.9.2 Biodiversity Net Gain Statement** (Doc Ref. 5.3) of the Environmental Statement (ES) prepared on behalf of Gatwick Airport Limited (GAL). The ES presents the findings of the Environmental Impact Assessment (EIA) process for the proposal to make best use of Gatwick Airport's existing runways and infrastructure (referred to within this report a 'the Project'). The Project proposes alterations to the existing northern runway which, together with the lifting of the current restrictions on its use, would enable dual runway operations. The Project includes the development of a range of infrastructure and facilities which, with the alterations to the northern runway, would enable the airport passenger numbers and aircraft operations to increase. Further details regarding the components of the Project can be found **in ES Chapter 5: Project Description** (Doc Ref. 5.1).

1.1.2 This report provides details of the Biodiversity Net Gain (BNG) assessment completed with respect to the Project. The report should be read in conjunction with **ES Appendix 9.6.2 Ecology Survey Report** (Doc Ref. 5.3).

1.2 Project Site

1.2.1 The Project site has been subject to a range of ecology surveys, including a Phase 1 Habitat Survey in 2019/2020 (**ES Appendix 9.6.2 Ecology Survey Report** (Doc Ref. 5.3)). These found the Project site to comprise a number of distinct areas:

- the operational airport comprising mainly hard standing with grassland managed for aircraft safety;
- the River Mole corridor;
- the Gatwick Stream corridor;
- Riverside Garden Park;
- a number of woodland blocks; and
- areas of grazed grassland.

1.3 Relevant Legislation

The Environment Act 2021

1.3.1 The Environment Act 2021 included provisions applying certain BNG requirements to the nationally significant infrastructure projects (NSIPs) regime. A BNG requirement is proposed to be imposed on NSIP projects from November 2025, with the level of requirement detailed within a BNG statement(s) (subject to prior publication – currently expected to be November 2023, to allow a period of transition) and presently expected to be set at a minimum of 10%.

1.3.2 The consultation[1] sets out that projects which have been accepted for examination prior to the November 2025 date would not be required to deliver that minimum BNG target, but could choose to do so voluntarily. In this context, and noting the position remains subject to further confirmation from Government, whilst there is no legal requirement for the Project to deliver BNG, the design has been developed such that the extent of net gain possible has been maximised within the parameters of the Project and the safeguarding requirements associated with an operational airport.

2 BNG Methodology

2.1 BNG Approach

2.1.1 The approach to BNG adopted with respect to the Project is in accordance with British Standards: BS 8683 - Process for Designing and Implementing Biodiversity Net Gain (BSI 2021).

2.1.2 All calculations for BNG have been undertaken using the latest Defra Metric 4.0 (known as the Defra Metric) and associated technical guidance notes (NE 2023). This enables a comparison of the before development biodiversity units present on site and the post-development units to be created once the Project is complete.

2.1.3 The Defra Metric uses the UKHabs classification system for each habitat present and assigns a distinctiveness score to each, depending on the rarity of the habitat. Users are required to then assign an ecological condition to each habitat parcel, using the condition assessment criteria provided by Natural England (NE 2023).

2.1.4 The Defra Metric then calculates a habitat unit score based on these factors with those of higher distinctiveness and better ecological condition scoring highest.

2.1.5 The post development calculations also include scaling factors to enable the difficulty to create a habitat and the time taken to establish it to be taken into account within the final scoring. It also accounts for planting taking place in advance of impacts occurring (resulting in a higher score) and when such planting is delayed (decreasing it).

2.1.6 The Project site is large and the scale of impacts to existing habitats relatively limited. In that context, the assessment compares the baseline conditions within the area of habitats to be lost (Figure 2.1) with the post-development score within those areas to get an overall net gain score for the Project. This is considered to be an appropriate approach, given that the majority of the Project site comprises airfield grassland that would not be impacted by the Project.

2.1.7 The Defra Metric for the area impacted is provided in Annex 1.

2.2 Terrestrial Habitat Survey

2.2.1 Habitats within the Project on site were initially recorded using the Phase 1 Habitat Survey methodology (JNCC 2010) as reported in **ES Appendix 9.6.2 Ecology Survey Report** (Doc Ref. 5.3).

2.2.2 These were then converted to UKHabs using the translation guidance in the Defra Metric.

2.3 Aquatic Habitat Survey

2.3.1 The River Mole was subject to appropriate surveys to classify the condition of the aquatic habitat present (Annex 2).

[1] The Consultation on Biodiversity Net Gain Regulations and Implementation; Consultation outcome Government response and summary of responses. Updated 21 February 2023 (defra.gov.uk).

2.4 Post Development Plans

2.4.1 The calculation of the post development habitat areas is based on the designs available at the time of submission. Given the nature of an NSIP application, these are currently at a draft stage with the degree of vegetation clearance in particular currently based on the worst-case assumption that all habitats would be cleared from within the construction boundary. The calculations presented here are therefore worst case with respect to vegetation loss/replacement.

2.5 Calculation of Habitat Areas

2.5.1 Areas of habitat were calculated from ArcGIS based on the Phase 1 Habitat plan and post development plans.

2.5.2 Areas were automatically calculated from the GIS using a custom macro and then converted to hectares at an accuracy of 0.001 ha. The rounding of habitat areas to this accuracy means that the before and after area calculations do not match exactly.

3 Baseline Conditions

3.1.1 Figure 2.1 shows the areas impacted by the Project (ie those areas where a change in habitat would occur).

3.1.2 The description below (Table 3.2.1) relates to each row in the baseline of the Defra Metric 4.0 for the areas impacted (Annex 1).

3.1.3 The total area which would be impacted is 230.99 ha (Table 3.2.1).

Table 3.2.1 Pre-development habitats in area impacted by Project

On-Site Habitat Baseline				
Existing area habitats		**Distinctiveness**	**Condition**	**Area**
Broad Habitat	**Habitat Type**			
Urban	Introduced shrub	Low	Condition Assessment N/A	3.440
Urban	Introduced shrub	Low	Condition Assessment N/A	0.002
Heathland and shrub	Mixed scrub	Medium	Good	0.002
Heathland and shrub	Mixed scrub	Medium	Good	0.006
Woodland and forest	Other woodland; broadleaved	Medium	Good	0.238
Grassland	Other neutral grassland	Medium	Moderate	4.871
Grassland	Other neutral grassland	Medium	Moderate	0.738
Heathland and shrub	Mixed scrub	Medium	Moderate	3.878
Heathland and shrub	Mixed scrub	Medium	Moderate	0.062
Lakes	Ponds (non-priority habitat)	Medium	Moderate	1.057
Lakes	Ponds (non-priority habitat)	Medium	Moderate	0.917
Sparsely vegetated land	Ruderal/Ephemeral	Low	Moderate	0.020
Sparsely vegetated land	Ruderal/Ephemeral	Low	Moderate	0.008
Wetland	Reedbeds	High	Moderate	0.071
Woodland and forest	Other woodland; broadleaved	Medium	Moderate	8.238
Woodland and forest	Other woodland; broadleaved	Medium	Moderate	0.356
Woodland and forest	Other woodland; broadleaved	Medium	Good	0.006
Urban	Artificial unvegetated, unsealed surface	V.Low	N/A - Other	1.680
Urban	Artificial unvegetated, unsealed surface	V.Low	N/A - Other	0.001
Urban	Built linear features	V.Low	N/A - Other	0.079
Urban	Developed land; sealed surface	V.Low	N/A - Other	137.430
Urban	Developed land; sealed surface	V.Low	N/A - Other	7.953
Urban	Developed land; sealed surface	V.Low	N/A - Other	0.012
Watercourse footprint	Watercourse footprint	V.low	N/A - Other	0.349
Urban	Developed land; sealed surface	V.Low	N/A - Other	0.610
Grassland	Modified grassland	Low	Poor	50.287
Grassland	Modified grassland	Low	Poor	3.533
Grassland	Modified grassland	Low	Poor	6.876
Grassland	Modified grassland	Low	Poor	0.356
Grassland	Other neutral grassland	Medium	Poor	0.384
Grassland	Other neutral grassland	Medium	Poor	0.171
Heathland and shrub	Mixed scrub	Medium	Poor	1.934
Heathland and shrub	Mixed scrub	Medium	Poor	0.017
Woodland and forest	Other woodland; broadleaved	Medium	Moderate	2.788

On-Site Habitat Baseline				
Existing area habitats		**Distinctiveness**	**Condition**	**Area**
Woodland and forest	Other woodland; broadleaved	Medium	Poor	0.100
Sparsely vegetated land	Ruderal/Ephemeral	Low	Poor	0.046
Woodland and forest	Other woodland; broadleaved	Medium	Poor	1.434
Sparsely vegetated land	Ruderal/Ephemeral	Low	Poor	0.006
Urban	Developed land; sealed surface	V.Low	N/A - Other	0.002

3.1.4 The largest habitat within the impacted area is the hard standing of the airport and associated infrastructure (137.430ha) with the next largest habitat being the modified grassland of the airfield (50.287ha).

3.1.5 The baseline habitats score for the area impacted (Annex 1) is therefore **332.48** units.

3.1.6 The River Mole was identified as being in moderate condition with no encroachment (Annex 2). This provided a baseline watercourse score of **4.20** units.

4 Proposed Design

4.1 Habitat Creation

4.1.1 The landscape for the Project has been designed, as far as practicable within the confines of an operational airport, to ensure an overall enhancement for biodiversity and to ensure that any impacts as a result of the Project are fully mitigated.

4.1.2 To this end, an Ecology Strategy for the site has been developed and is set out within **ES Appendix 8.8.1: Outline Landscape and Ecology Management Plan** (Doc Ref. 5.3). Broadly, this is based around linking with the existing GAL Biodiversity Areas (Land East of the Railway, LERL and North West Zone) through enhanced corridors of movement around the site, in particular both the River Mole and Gatwick Stream. Additional ecology 'nodes' are to be created to either expand the Biodiversity Areas, along the North West Zone, or create new ones (Longbridge Roundabout and former Car Park B).

4.1.3 In order to ensure that the Project delivers true net gain, areas of the Site that are currently subject to existing management with respect to ecology and would, therefore, already be managed to enhance them as part of GAL's Decade of Change ambitions, have been largely excluded from the Project site (ie all of the LERL and the majority of the North West Zone). As such, the Ecology Strategy seeks to augment these areas through physical expansion rather than claim any benefit for enhanced management that would already be happening.

4.2 Habitat condition for newly created habitats

4.2.1 For each habitat to be created, a target habitat condition at maturity needs to be chosen. An outline of the management to be applied for each habitat to ensure these targets are achieved is provided in the **ES Appendix 8.8.1: Outline Landscape and Ecology Management Plan** (Doc Ref. 5.3).

4.2.2 GAL has extensive experience of managing habitats for biodiversity benefit through the Gatwick Greenspace Partnership. As such, there is strong confidence that these conditions will be achieved.

4.2.3 The explanation below provides the criteria for each habitat type that will be targeted to demonstrate the targeted condition where that is moderate or good. It is assumed that any with a target of poor condition will occur without any management.

4.2.4 Note that the account below also does not include habitats that do not require condition assessment:

- Ground level planters;
- Introduced shrub;
- Artificial unvegetated, unsealed surface; and
- Urban and Developed land sealed surface.

Other Neutral Grassland – Targeted Condition: Good

4.2.5 Assumptions relating to the criteria for Other Neutral Grassland that would be targeted are:

a) *Criterion 1. The grassland is a good representation of the habitat type, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present.*

b) *Criterion 2. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.*

c) *Criterion 3. Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.*

d) *Criterion 4. Cover of bracken Pteridium aquilinum is less than 20% and cover of scrub (including bramble Rubus fruticosus agg.) is less than 5%.*

e) *Criterion 5. Combined cover of species indicative of sub-optimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species (as listed on Schedule 9 of WCA4) are present, this criterion is automatically failed.*

f) *Criterion 6. There are 10 or more vascular plant species per m^2 present, including forbs that are characteristic of the habitat type.*

Mixed Scrub – Targeted Condition: Moderate

4.2.6 Assumptions relating to the criteria for mixed scrub are:

a) *Criterion 1. "The scrub is a good representation of the habitat type it has been identified as, based on its UKHab description (where in its natural range). The appearance and composition of the vegetation closely matches the characteristics of the specific scrub type. At least 80% of scrub is native, and there are at least three native woody species, with no single species comprising more than 75% of the cover (except hazel Corylus avellana, common juniper Juniperus communis, sea buckthorn Hippophae rhamnoides or box Buxus sempervirens, which can be up to 100% cover).*

b) *Criterion 2. Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.*

c) *Criterion 3. There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA4) and species*

indicative of sub-optimal condition make up less than 5% of ground cover.

d) *Criterion 4. The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.*

Open Mosaic Habitats on Previously Developed Land – Target Condition: Good

4.2.7 Assumptions relating to the criteria for open mosaic habitats on previously developed land are:

a) *Criterion 1. Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.*

b) *Criterion 2. The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.*

c) *Criterion 3. "Invasive non-native plant species (listed on Schedule 9 of WCA1) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover)."*

d) *Additional Criteria (below) must be assessed for open mosaic habitat on previously developed land only:*

Criterion 4. The parcel shows spatial variation and forms a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.

e) *Criterion 5. The parcel contains pools of water such as permanent and ephemeral waterbodies.*

Modified grassland – Target Condition: Moderate

4.2.8 Note that this applies to modified grassland outwith the airfield as this would be managed according to CAA requirements.

Assumptions relating to the criteria for Grassland Modified grassland are:

a) *Criterion 1. There are 6-8 vascular plant species per m2 present, including at least 2 forbs (this may include those listed in Footnote 1).*

b) *Criterion 2. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.*

c) *Criterion 3. Some scattered scrub (including bramble Rubus fruticosus agg.) may be present, but scrub accounts for less than 20% of total grassland area.*

d) *Criterion 4. Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.*

e) *Criterion 5. Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).*

f) *Criterion 6. Cover of bracken Pteridium aquilinum is less than 20%.*

Individual trees and Urban tree – Target Condition: Moderate

4.2.9 Assumptions relating to the criteria for urban trees to achieve moderate condition are

a) *Criterion 1. The tree is a native species (or at least 70% within the block are native species).*

b) *Criterion 2. The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).*

c) *Criterion 3. The tree is mature (or more than 50% within the block are mature).*

d) *Criterion 4. There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.*

Lakes and Ponds (non-priority habitat) – Target Condition: Moderate

4.2.10 Assumptions relating to the criteria for Ponds (non-priority habitat non-woodland ponds) are:

a) *Criterion 1. The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.*

b) *Criterion 2. There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.*

c) *Criterion 3. Less than 10% of the water surface is covered with duckweed Lemna spp. or filamentous algae.*

d) *Criterion 5. Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams, pumps or pipework.*

e) *Criterion 6. There is an absence of listed non-native plant and animal species.*

f) *Criterion 7. The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.*

g) *Criterion 9. The pond surface* is no more than 50% shaded by adjacent trees and scrub.

Ruderal/Ephemeral – Target Condition: Moderate

4.2.11 Assumptions relating to the criteria for Sparsely vegetated land Ruderal/Ephemeral are:

a) *Criterion 1. Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.*

b) *Criterion 2. The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.*

c) *Criterion 3. Invasive non-native plant species (listed on Schedule 9 of WCA1) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area (criterion passed). To achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).*

Reedbeds – Target Condition: Moderate

4.2.12 Assumptions relating to the criteria for Reedbeds are

a) *Criterion 2. The parcel is a good representation of the wetland habitat type it has been identified as, based on its UKHab description - as in, the appearance and composition of the vegetation closely matches the characteristics of the specific habitat type. Indicator species for the specific wetland habitat type1 listed by UKHab are consistently present..*

b) *Criterion 4. Cover of scrub and scattered trees are less than 10%.*

c) *Criterion 5. Cover of bare ground is less than 5%.*

d) *Criterion 6. There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA3) and species indicative of sub-optimal condition make up less than 5% of ground cover.*

e) *Criterion 7. The reedbed has a diverse structure with between 60 and 80% reeds Phragmites australis. Other areas may include open water (at least 10%), species-rich fen and or wet woodland.*

Woodland (both broadleaved and wet) – Target Condition: Moderate

4.2.13 Assumptions relating to the criteria for woodland to achieve moderate condition are set out in Table 4.2.1

Table 4.2.1 Woodland condition criteria

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
A	Age distribution of trees	Three age-classes present.	Two age-classes present.	One age-class present.	2
B	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in 40% or less of whole woodland.	Evidence of significant browsing pressure is present in 40% or more of whole woodland.	3
C	Invasive plant species	No invasive species present in woodland.	*Rhododendron ponticum or* cherry laurel *Prunus laurocerasus* not present, other invasive species <10% cover.	Rhododendron or cherry laurel present, or other invasive species >10% cover.	3
D	Number of native tree species	Five or more native tree or shrub species found across woodland parcel.	Three to four native tree or shrub species found across woodland parcel.	Two or less native tree or shrub species across woodland parcel.	3
E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native.	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native.	<50% of canopy trees and <50% of understory shrubs are native.	2
F	Open space within woodland	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	21 - 40% of woodland has areas of temporary open space.	<10% or >40% of woodland has areas of temporary open space. But if woodland <10ha has <10% temporary open space, please see Good category.	2
G	Woodland regeneration	All three classes present in woodland; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland.	No classes or coppice regrowth present in woodland.	2

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
H	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback.	11% to 25% mortality and/or crown dieback or low-risk pest or disease present.	Greater than 25% tree mortality and or any high-risk pest or disease present.	3
I	Vegetation and ground flora	Recognisable NVC plant community at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community at ground layer present.	No recognisable woodland NVC plant community at ground layer present.	2
J	Woodland vertical structure	Three or more storeys across all survey plots or a complex woodland.	Two storeys across all survey plots.	One or less storey across all survey plots.	2
K	Veteran trees	Two or more veteran trees per hectare.	One veteran tree per hectare.	No veteran trees present in woodland.	1
L	Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities.	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities.	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities.	2
M	Woodland disturbance	No nutrient enrichment or damaged ground evident.	Less than 1 hectare in total of nutrient enrichment across woodland area and or less than 20% of woodland area has damaged ground.	More than 1 hectare of nutrient enrichment and or more than 20% of woodland area has damaged ground.	2
Total Score (out of a possible 39)					**29**

4.2.14 On this basis this habitat would result in a total score of 29 and would result in the habitat achieving moderate condition (Moderate score are between 26-32).

4.3 Habitat creation

4.3.1 The areas of habitat to be created within the area of the Project site which would be impacted and associated target conditions are shown in Table 4.3.1 below.

Table 4.3.1 Areas of habitat to be created and target condition

Area of Habitats to be created		Area	Distinctiveness	Condition
Broad Habitat	**Habitat Type**			
Urban	Introduced shrub	1.264	Low	Condition Assessment N/A
Grassland	Other neutral grassland	5.539	Medium	Good
Heathland and shrub	Mixed scrub	3.629	Medium	Good
Urban	Open mosaic habitats on previously developed land	0.708	High	Good
Heathland and shrub	Mixed scrub	0.006	Medium	Good
Grassland	Other neutral grassland	3.485	Medium	Moderate
Grassland	Modified grassland	0.022	Low	Moderate
Grassland	Other neutral grassland	17.456	Medium	Moderate
Heathland and shrub	Mixed scrub	5.980	Medium	Moderate
Individual trees	Urban tree	0.361	Medium	Moderate
Lakes	Ponds (non-priority habitat)	0.917	Medium	Moderate

Area of Habitats to be created		Area	Distinctiveness	Condition
Sparsely vegetated land	Ruderal/ Ephemeral	0.008	Low	Moderate
Urban	Ground level planters	0.034	Low	Condition Assessment N/A
Wetland	Reedbeds	0.236	High	Moderate
Woodland and forest	Other woodland; broadleaved	7.163	Medium	Moderate
Woodland and forest	Wet woodland	0.302	High	Moderate
Urban	Artificial unvegetated, unsealed surface	0.001	V.Low	N/A - Other
Urban	Developed land; sealed surface	157.376	V.Low	N/A - Other
Watercourse footprint	Watercourse footprint	1.548	V.low	N/A - Other
Grassland	Modified grassland	26.372	Low	Poor
Grassland	Other neutral grassland	0.171	Medium	Poor
Individual trees	Urban tree	0.100	Medium	Poor
Grassland	Other neutral grassland	0.012	Medium	Moderate
Grassland	Modified grassland	0.018	Low	Poor

4.3.2 Post intervention, therefore, the above habitat creation scores **407.30** habitat units (Annex 1).

4.3.3 Given that detailed design of the river has not yet been undertaken, it is assumed that the watercourse will be in moderate condition. The proposed diversion of the River Mole delivers an additional 200 m of water course compared to the baseline. The increased length of river will therefore deliver circa **4.90** watercourse units (Annex 1).

4.4 Biodiversity Net Gain calculation

4.4.1 The total area of broad habitat types lost and gained as a result of the Project are provided in Annex 3 together with the value of these habitats based on the Defra metric.

4.4.2 The area of habitat impacted by the Project had a before development score of **332.48** habitat units. Post development, the same area scores **407.30** units, a net gain of **74.81** units or **22.50%.**

4.4.3 Pre development, the River Mole scored **4.20** watercourse units. Post development, the newly-created areas of the River Mole will deliver circa **4.90** watercourse units, a net gain of **0.70** watercourse units or **16.70%** (see Annex 1 Metric).

4.5 Habitat Trading

4.5.1 It should be noted that in Annex 1 the calculation does not pass the habitat trading rules. These are set to prevent a net gain being delivered through the incorporation of large areas of low value habitat at the expense of higher value habitats. In the case of the Project, this is driven by the loss of woodland not being replaced.

4.5.2 During consultation with GAL's Safeguarding Team, it became clear that planting extensive areas of new woodland within the project would not be possible because of the nature of an operational airport and the requirements with respect to aircraft safeguarding. As such, every effort has been made to ensure that as much woodland planting is incorporated into the Project where it is safe to do so (principally along the highways improvements). However, like for like replacement has not been possible.

4.5.3 Notwithstanding this, the Project still delivers a substantial overall net gain with respect to biodiversity.

5 References

Joint Nature Conservation Committee (JNCC) (2010). Handbook for Phase 1 habitat survey – a technique for environmental audit.

Natural England (2023) Technical Annex 1 – Condition Assessment Sheets and Methodology. Available online at https://publications.naturalengland.org.uk/publication/6049804846366720

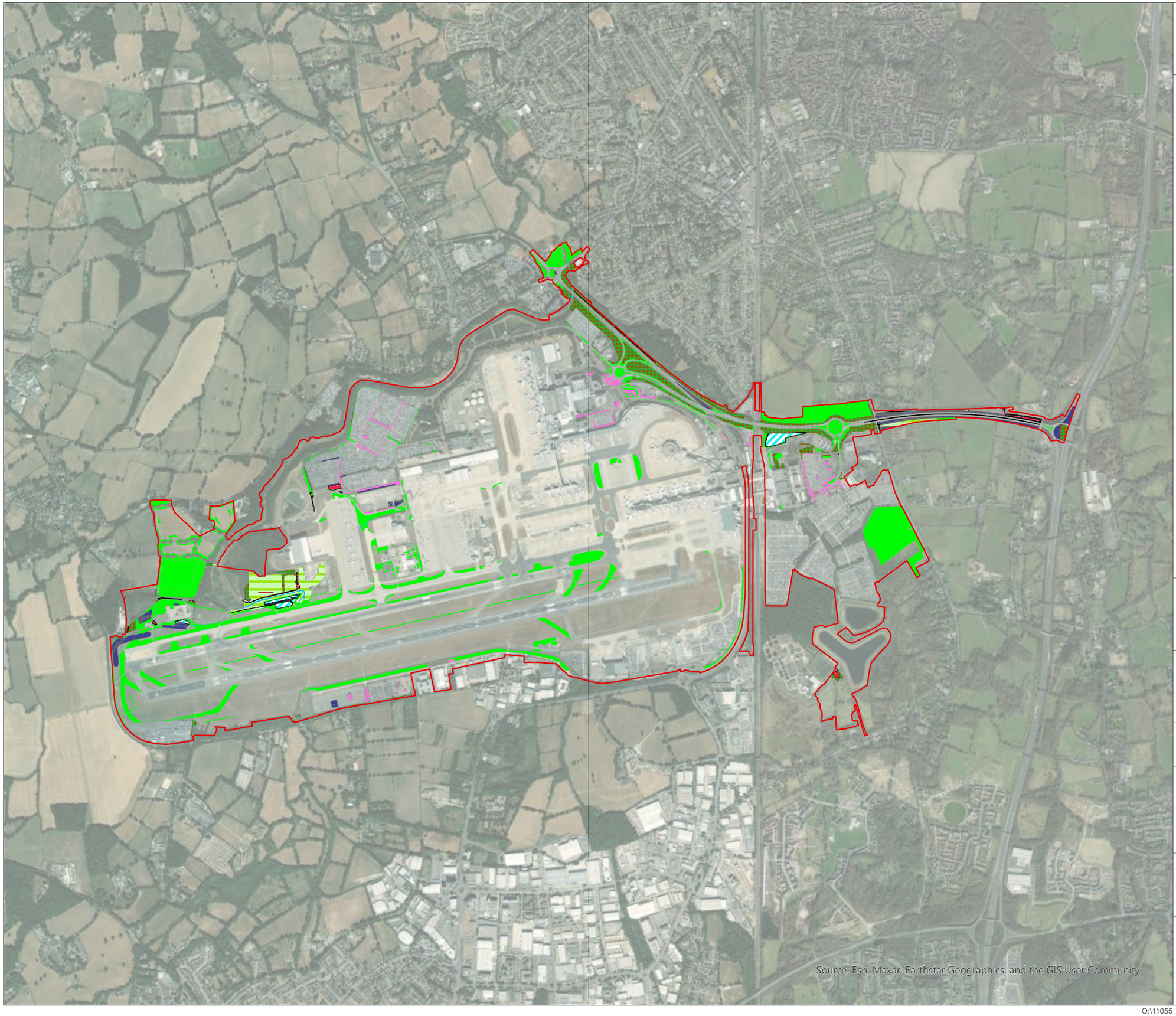
The British Standards Institution (2021) BS 8683 - Process for designing and implementing Biodiversity Net Gain – Specification.

6 Glossary

6.1 Glossary of terms

Table 6.1.1 Glossary of terms

Term	Description
BNG	Biodiversity Net Gain
CAA	Civil Aviation Authority
EIA	Environmental Impact Assessment
ES	Environmental Statement
LEMP	Landscape and Ecology Management Plan
LERL	Land East of the Railway



LONDON GATWICK

Legend

- Project Site Boundary
- Urban - Introduced shrub
- Sparsely vegetated land - Ruderal/ Ephemeral
- Grassland - Modified grassland
- Grassland - Other neutral grassland
- Heathland and shrub - Mixed scrub
- Woodland and forest - Other woodland; broadleaved
- Lakes - Ponds (non-priority habitat)
- Wetland - Reedbeds
- Urban - Built linear features
- Urban - Artificial unvegetated, unsealed surface
- Watercourse footprint
- Other

DOCUMENT

Environmental Statement

DRAWING TITLE

Habitats lost
2024-2029

DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	Figure 2.1	For ES Issue
	DRAWN BY	PM / CHECKED BY
	MS	NB

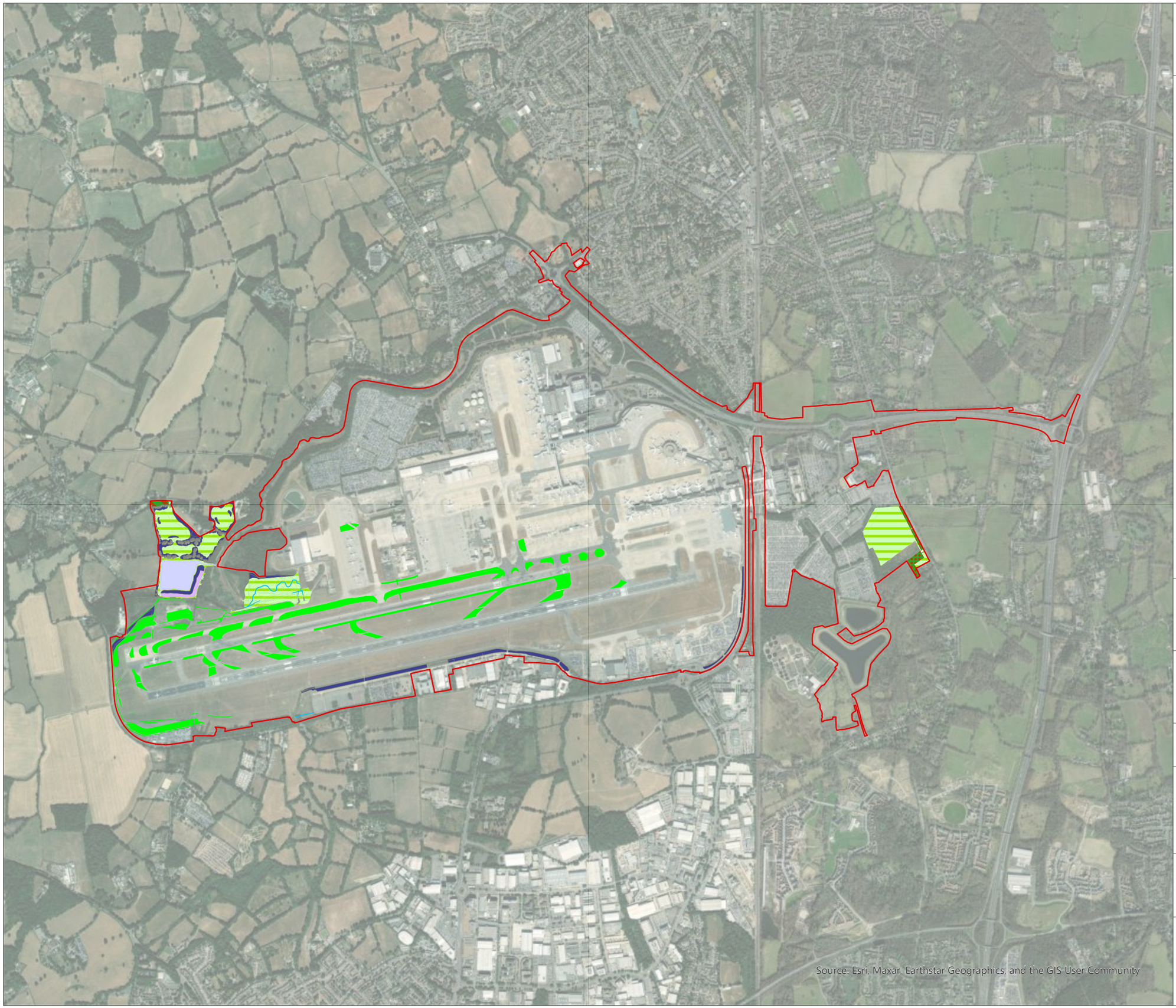
SCALE @ A3 1:34,000

0 200 400 800 1,200 m

Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office
© Crown Copyright (2023). License number 0100031673, 10001998, 100048492.

© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

O:\11055 Gatwick - Genesis\Tech\Drawings\011055-0649-003.aprx



LONDON GATWICK

Legend

- Project Site Boundary
- Grassland - Floodplain wetland mosaic and CFGM
- Grassland - Modified grassland
- Grassland - Other neutral grassland
- Heathland and shrub - Mixed scrub
- Individual trees - Urban tree
- Lakes - Ponds (non-priority habitat)
- Railway with ephemeral/short perennial
- Sparsely vegetated land - Ruderal/Ephemeral
- Urban - Artificial unvegetated, unsealed surface
- Urban - Developed land; sealed surface
- Urban - Ground level planters
- Urban - Introduced shrub
- Urban - Open mosaic habitats on previously developed land
- Watercourse footprint
- Wetland - Reedbeds
- Woodland and forest - Other woodland; broadleaved
- Woodland and forest - Wet woodland

DOCUMENT

Environmental Statement

DRAWING TITLE

Habitats Created or Recreated 2024-2029

DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	FIGURE 2.2	For ES Issue
	DRAWN BY	PM / CHECKED BY
	MS	NB

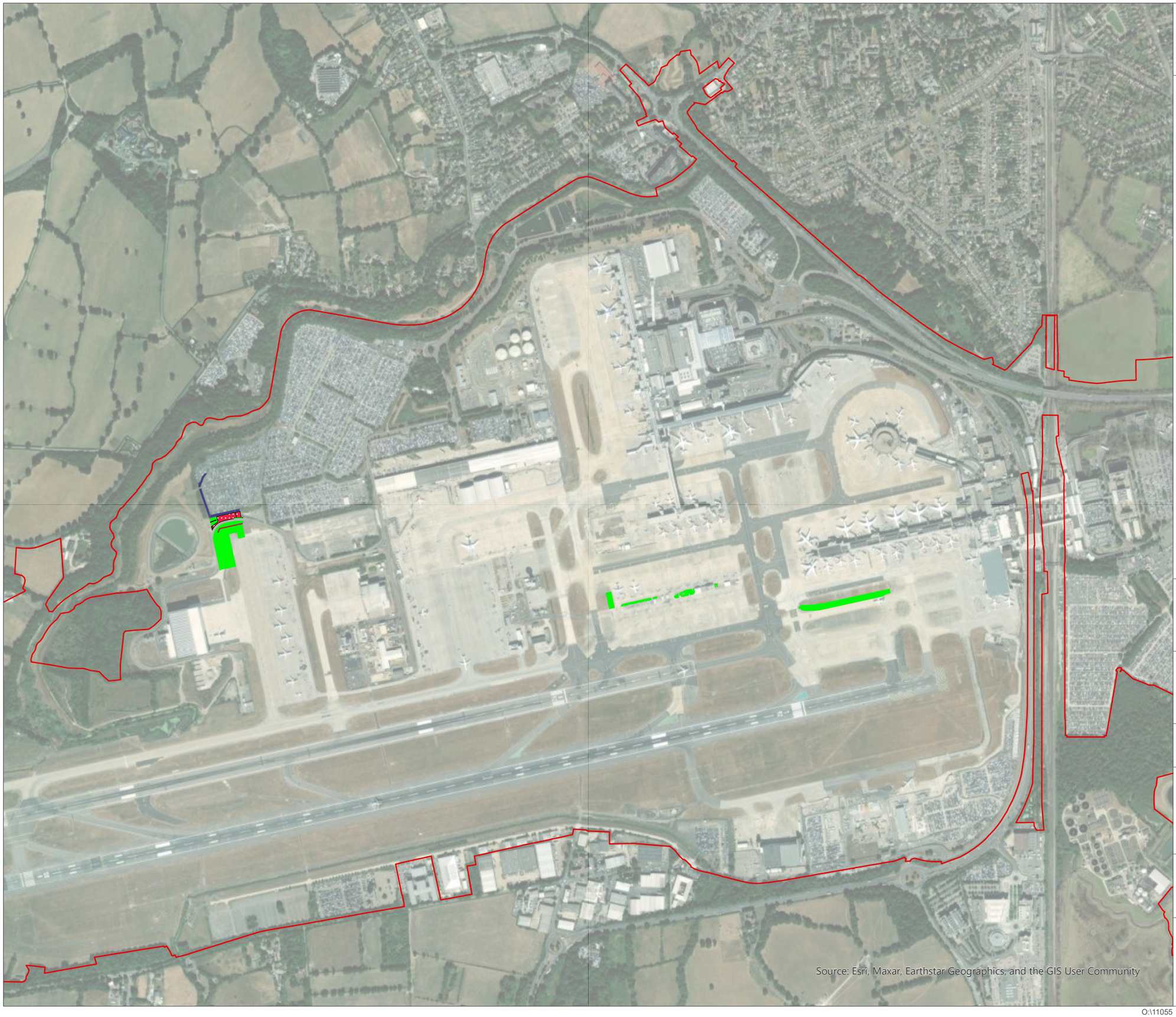
SCALE @ A3 1:34,000

0 100 200 400 600 800 1,000 1,200 m

Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.

© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

O:\11055 Gatwick - Genesis\Tech\Drawings\011055-0649-003.aprx



LONDON GATWICK

Legend

- Project Site Boundary
- Grassland - Modified grassland
- Heathland and shrub - Mixed scrub
- Urban - Built linear features
- Urban - Artificial unvegetated, unsealed surface

DOCUMENT

Environmental Statement

DRAWING TITLE

Habitats lost
2030-2032

DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	Figure 2.3	For ES Issue
	DRAWN BY	PM / CHECKED BY
	MS	NB

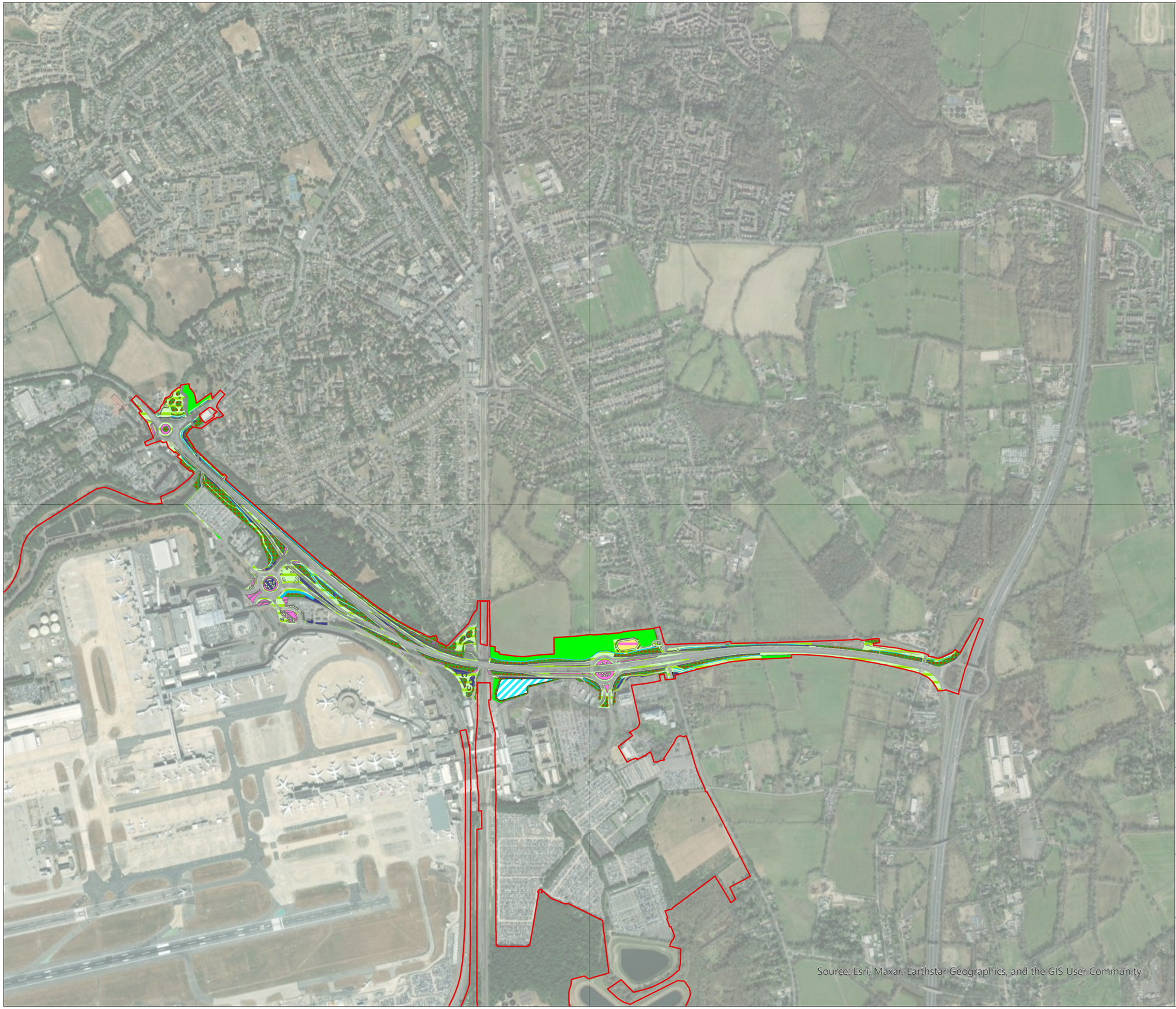
SCALE @ A3 1:18,000

0 200 400 m

Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.

© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

O:\11055 Gatwick - Genesis\Tech\Drawings\011055-0649-003.aprx



LONDON GATWICK

Legend

- Project Site Boundary
- Grassland - Floodplain wetland mosaic and CFGM
- Grassland - Modified grassland
- Grassland - Other neutral grassland
- Heathland and shrub - Mixed scrub
- Individual trees - Urban tree
- Lakes - Ponds (non-priority habitat)
- Railway with ephemeral/short perennial
- Sparsely vegetated land - Ruderal/Ephemeral
- Urban - Artificial unvegetated, unsealed surface
- Urban - Developed land; sealed surface
- Urban - Ground level planters
- Urban - Introduced shrub
- Urban - Open mosaic habitats on previously developed land
- Watercourse footprint
- Wetland - Reedbeds
- Woodland and forest - Other woodland; broadleaved
- Woodland and forest - Wet woodland

DOCUMENT

Environmental Statement

DRAWING TITLE

Habitats Created or Recreated 2030-2032

DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	FIGURE 2.4	For ES Issue
	DRAWN BY	PM / CHECKED BY
	MS	NB

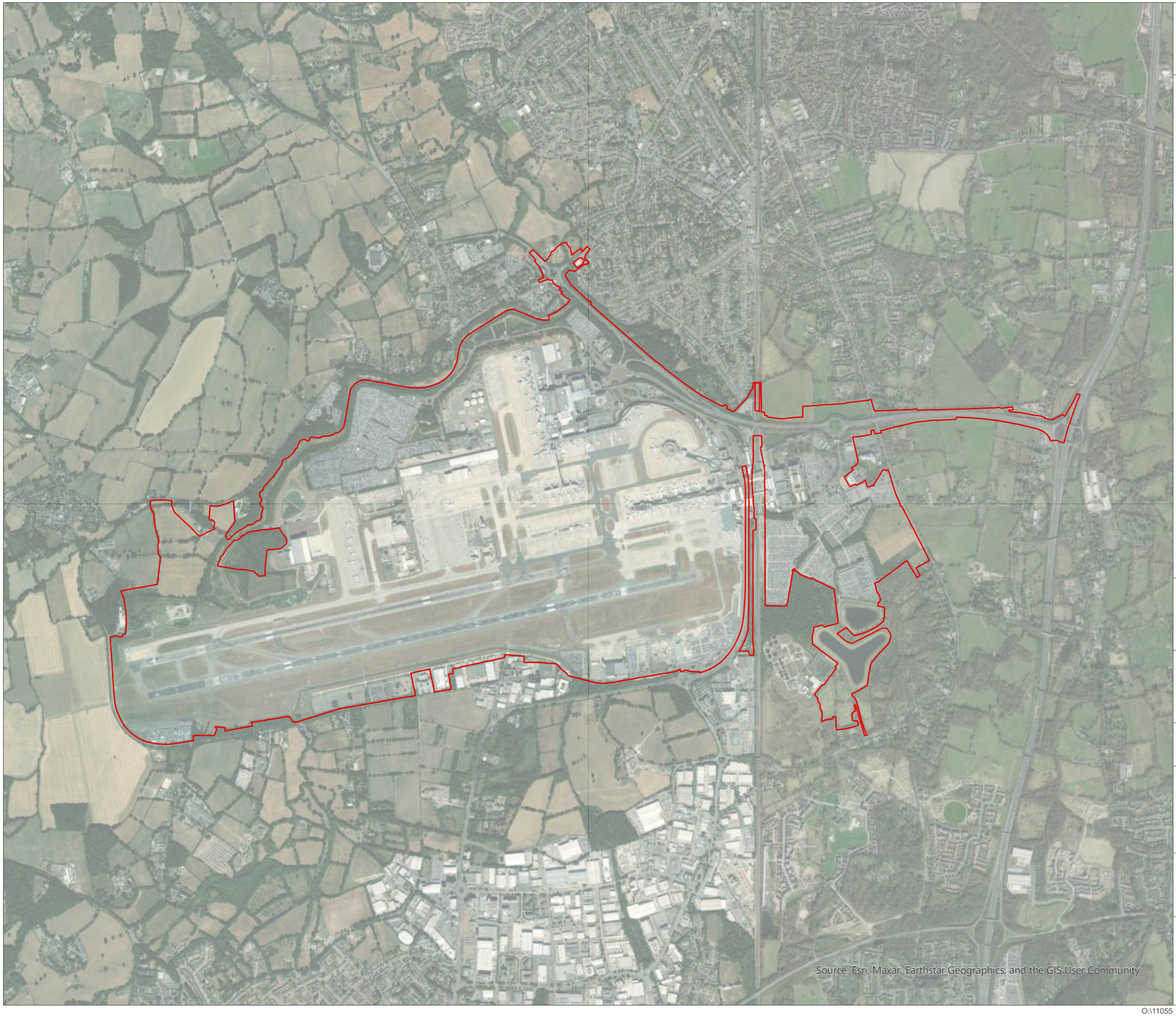
SCALE @ A3 1:22,000

0 100 200 400 600 800 m

Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.

© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

O:\11055 Gatwick - Genesis\Tech\Drawings\011055-0649-003.aprx



LONDON GATWICK

Legend

Project Site Boundary

DOCUMENT

Environmental Statement

DRAWING TITLE

Habitats lost
2033-2038

DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	Figure 2.5	For ES Issue
	DRAWN BY	PM / CHECKED BY
	MS	NB

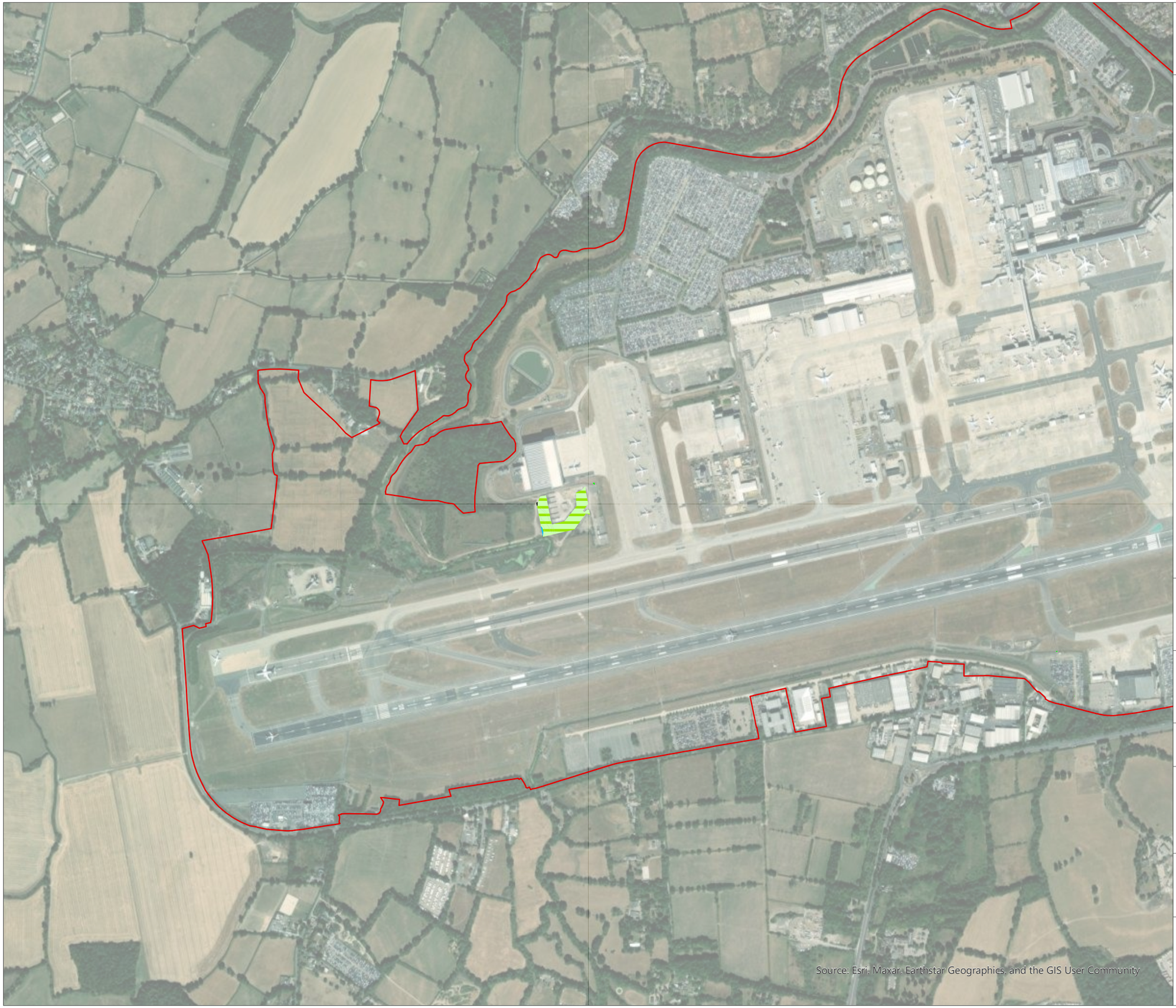
SCALE @ A3 1:34,000

0 200 400 800 1,200 m

Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office
© Crown Copyright (2023). License number 0100031673, 10001998, 100048492.

© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

O:\11055 Gatwick - Genesis\Tech\Drawings\011055-0649-003.aprx



LONDON GATWICK

Legend

- Project Site Boundary
- Grassland - Floodplain wetland mosaic and CFGM
- Grassland - Modified grassland
- Grassland - Other neutral grassland
- Heathland and shrub - Mixed scrub
- Individual trees - Urban tree
- Lakes - Ponds (non-priority habitat)
- Railway with ephemeral/short perennial
- Sparsely vegetated land - Ruderal/Ephemeral
- Urban - Artificial unvegetated, unsealed surface
- Urban - Developed land; sealed surface
- Urban - Ground level planters
- Urban - Introduced shrub
- Urban - Open mosaic habitats on previously developed land
- Watercourse footprint
- Wetland - Reedbeds
- Woodland and forest - Other woodland; broadleaved
- Woodland and forest - Wet woodland

DOCUMENT

Environmental Statement

DRAWING TITLE

Habitats Created or Recreated 2033-2038

DATE

July 2023

ORIENTATION	DRAWING NO.	REVISION
N	FIGURE 2.6	For ES Issue
	DRAWN BY	PM / CHECKED BY
	MS	NB

SCALE @ A3 1:18,000

0 100 200 400 600 m

Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.

© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

O:\11055 Gatwick - Genesis\Tech\Drawings\011055-0649-003.aprx

Annex 1

Defra Metric – Area Impacted

NATURAL ENGLAND

The Biodiversity Metric 4.0

Auditing and accounting for biodiversity

Calculation Tool

Open Tool

ISBN: 978-1-7393362-0-2

The Biodiversity Metric 4.0 - Calculation Tool
Start page

Project details			
Planning authority:	PINS		
Project name:	Northern Runway Project		
Applicant:	Gatwick Airport Ltd		
Application type:	DCO		
Planning application reference:			
Completed by:			
Date of metric completion:			
Reviewer:			
Version control:			
Consenting body reviewer:			
Date of consenting body review:			
Target % net gain:	10%		
Irreplaceable habitat present on-site at baseline:		You must specify if irreplaceable habitats are on-site at baseline ▲	
Total site area (including irreplaceable habitat area):	239.96	Irreplaceable habitat area at baseline:	0.00

Instructions

Main menu

Results

Cell style conventions	
⚠	Attention required
▲	Input error/rules and principles not met
	Use of this cell is not appropriate
	Enter data
	Automatic lookup
	Result

View all

Reset view

On-site baseline map

Insert

On-site baseline map reference number	

On-site post intervention map

Insert

On-site post-intervention map reference number	

Off-site baseline map

Insert

Off-site baseline map reference number	

Off-site post intervention map

Insert

Off-site post-intervention reference number	

The Biodiversity Metric 4.0 - Calculation Tool Instructions

Start page

Main menu

Phase 1 - metric habitat translation tool

Double click the front page below to open the file

This guide can also be found as an Appendix to the main Biodiversity Metric 4.0 – User guide.

The Biodiversity Metric 4.0

Short Data Input Guide

First published March 2023

Natural England Joint Publication JP039

www.gov.uk/natural-england

NATURAL ENGLAND

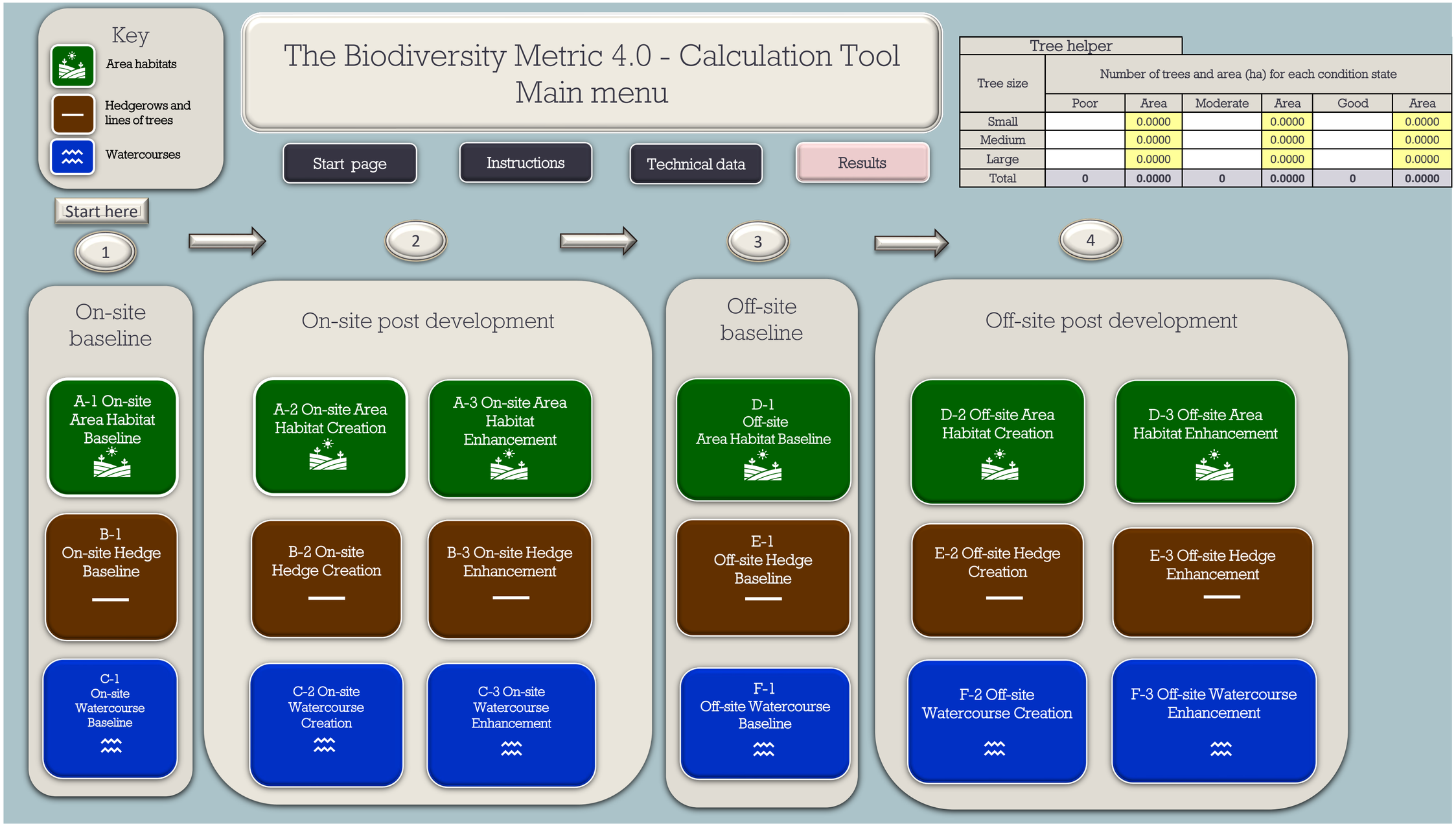
Irreplaceable habitats

For further information please refer to the irreplaceable habitats section of the metric user guide.

Habitat module type	Habitat type	Length (km)	Area (ha)	Habitat retained, enhanced, or lost?	Is the habitat included in the relevant baseline tab?	Notes and metric sheet reference	Has bespoke compensation been agreed with the relevant consenting body?	
		0.00	0.00					

Ancient/Veteran trees (No of trees):	Trees retained:		Trees enhanced:		Trees lost:		Total number of trees:	0

Summary table	
Area habitats	
Total site area (ha)	0.00
Total irreplaceable habitats area (ha)	0.00
% Area of site taken up by irreplaceable habitats (ha)	0.00
Total retained irreplaceable habitat area (ha)	0.00
Total enhanced irreplaceable habitat area (ha)	0.00
Total lost irreplaceable habitat area (ha)	0.00
Hedgerows	
Total irreplaceable hedgerow length (km)	0.00
Total retained irreplaceable hedgerow length (km)	0.00
Total enhanced irreplaceable hedgerow length (km)	0.00
Total lost irreplaceable hedgerow length (km)	0.00
Watercourses	
Total irreplaceable watercourse length (km)	0.00
Total retained irreplaceable watercourse length (km)	0.00
Total enhanced irreplaceable watercourse length (km)	0.00
Total lost irreplaceable watercourse length (km)	0.00



Tree helper

Tree size	Number of trees and area (ha) for each condition state					
	Poor	Area	Moderate	Area	Good	Area
Small		0.0000		0.0000		0.0000
Medium		0.0000		0.0000		0.0000
Large		0.0000		0.0000		0.0000
Total	0	0.0000	0	0.0000	0	0.0000

The Biodiversity Metric 4.0 - Calculation Tool Results

Return to start page

Headline results

Detailed results

Habitat trading summaries

Off-site summary

Northern Runway Project

Headline Results

Scroll down for final results ⚠

Return to results menu

Errors flagged below - please investigate further ▲

On-site baseline	*Habitat units*	332.48	
	Hedgerow units	0.00	
	Watercourse units	4.20	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	407.30	
	Hedgerow units	0.00	
	Watercourse units	4.90	
On-site net change (units & percentage)	*Habitat units*	74.81	22.50%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.70	16.70%
Off-site baseline	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	*Habitat units*	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	74.81	
	Hedgerow units	0.00	
	Watercourse units	0.70	
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	74.81
	Hedgerow units	0.00
	Watercourse units	0.70

Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	22.50%
	Hedgerow units	0.00%
	Watercourse units	16.70%

Trading rules satisfied?	No - Check Trading Summaries ▲

You must specify if irreplaceable habitats are on-site at baseline ▲

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	332.48	365.73	0.00	Unit requirement met or surpassed ✓
Hedgerow units	10.00%	0.00	0.00	0.00	Unit requirement met or surpassed ✓
Watercourse units	10.00%	4.20	4.62	0.00	Unit requirement met or surpassed ✓

Northern Runway Project

Detailed Results

Return to results menu

Summary Figures

Net project biodiversity units (Including all on-site & off-site habitat retention / creation)	*Habitat units*	74.81
	Hedgerow units	0.00
	Watercourse units	0.70
Total project biodiversity % change (Including all on-site & off-site habitat creation + retained habitats)	*Habitat units*	22.50%
	Hedgerow units	0.00%
	Watercourse units	16.70%

Combined habitat retention and enhancement

	Habitats	Hedgerows	Watercourses
Total on-site and off-site baseline area / length	239.96	0.00	0.35
Total on-site and off-site baseline units	332.48	0.00	4.20
Total on-site and off-site baseline area / length retained	0.00	0.00	0.35
Total on-site and off-site baseline units retained	0.00	0.00	4.20
Area / length proposed for enhancement	7.25	0.00	0.00
Baseline units proposed for enhancement	14.53	0.00	0.00
Total on-site and off-site baseline area / length lost	232.71	0.00	0.00
Total on-site and off-site baseline units lost	317.95	0.00	0.00

Area Habitats

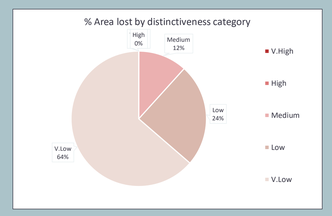
Area habitats

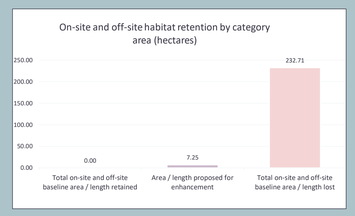
On-site change by broad habitat type

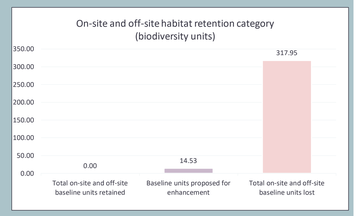
Habitat group	Baseline		Post-development on-site		On-site change	
	On-site existing area	On-site existing value	On-site proposed area	On-site proposed value	On-site area change	On-site unit change
Cropland	0.00	0.00	0.00	0.00	0.00	0.00
Grassland	67.22	169.20	59.97	281.23	-7.25	112.04
Heathland and shrub	5.90	39.42	9.97	73.09	4.07	33.67
Lakes	1.97	15.80	0.92	6.60	-1.06	-9.20
Sparsely vegetated land	0.08	0.22	0.01	0.03	-0.07	-0.19
Urban	151.21	6.88	159.38	8.49	8.17	1.60
Wetland	0.07	0.85	0.24	1.48	0.17	0.63
Woodland and forest	13.16	100.12	7.46	35.00	-5.70	-65.12
Intertidal sediment	0.00	0.00	0.00	0.00	0.00	0.00
Coastal saltmarsh	0.00	0.00	0.00	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00	0.00	0.00	0.00
Coastal lagoons	0.00	0.00	0.00	0.00	0.00	0.00
Intertidal hard structures	0.00	0.00	0.00	0.00	0.00	0.00
Watercourse footprint	0.35	0.00	1.55	0.00	1.20	0.00
Individual trees	0.00	0.00	0.46	1.38	0.46	1.38

Combined area lost by distinctiveness band

Category	Area lost (hectares)	Area lost (%)
V.High	0	
High	0.070726051	0
Medium	27.18078477	12
Low	57.34245806	25
V.Low	148.1161634	64



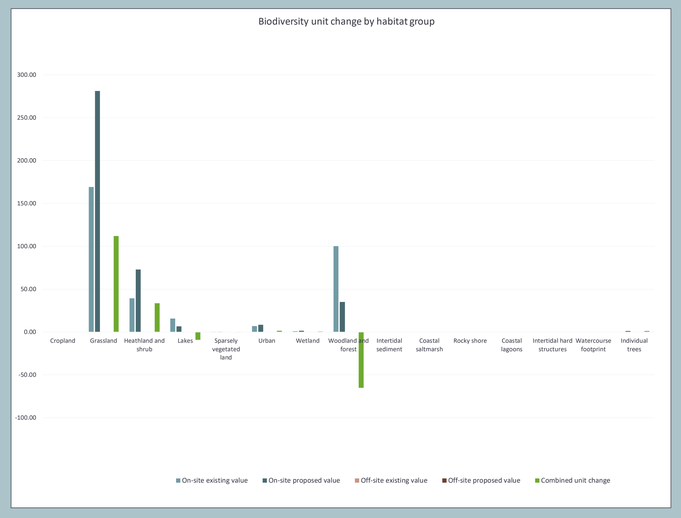




Area Habitats

Off-site change by broad habitat type

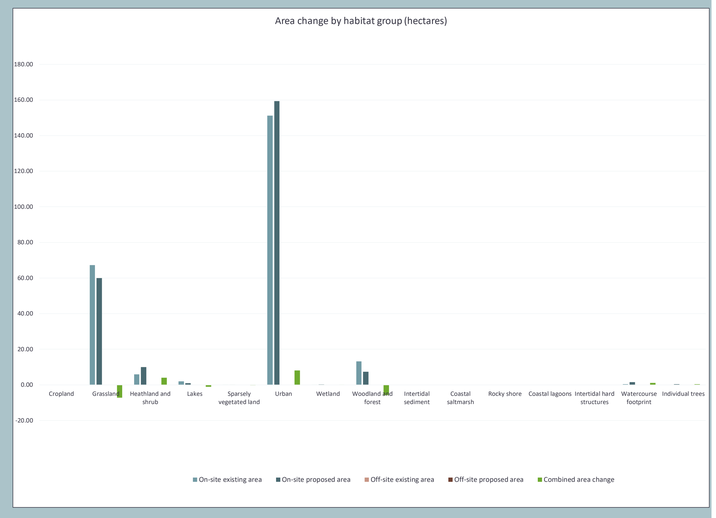
Habitat group	Baseline		Post-development off-site		Off-site change	
	Off-site existing area	Off-site existing value	Off-site proposed area	Off-site proposed value	Off-site area change	Off-site unit change
Cropland	0.00	0.00	0.00	0.00	0.00	0.00
Grassland	0.00	0.00	0.00	0.00	0.00	0.00
Heathland and shrub	0.00	0.00	0.00	0.00	0.00	0.00
Lakes	0.00	0.00	0.00	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00	0.00	0.00	0.00
Urban	0.00	0.00	0.00	0.00	0.00	0.00
Wetland	0.00	0.00	0.00	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00	0.00	0.00	0.00
Coastal saltmarsh	0.00	0.00	0.00	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00	0.00	0.00	0.00
Coastal lagoons	0.00	0.00	0.00	0.00	0.00	0.00
Intertidal hard structures	0.00	0.00	0.00	0.00	0.00	0.00
Watercourse footprint	0.00	0.00	0.00	0.00	0.00	0.00
Individual trees	0.00	0.00	0.00	0.00	0.00	0.00



Area Habitats

Combined on-site and off-site change by broad habitat type

Habitat group	Baseline		On-site and off-site post-development		Combined change	
	Combined existing area	Combined existing value	Combined proposed area	Combined proposed value	Combined area change	Combined unit change
Cropland	0.00	0.00	0.00	0.00	0.00	0.00
Grassland	67.22	169.20	59.97	281.23	-7.25	112.04
Heathland and shrub	5.90	39.42	9.97	73.09	4.07	33.67
Lakes	1.97	15.80	0.92	6.60	-1.06	-9.20
Sparsely vegetated land	0.08	0.22	0.01	0.03	-0.07	-0.19
Urban	151.21	6.88	159.38	8.49	8.17	1.60
Wetland	0.07	0.85	0.24	1.48	0.17	0.63
Woodland and forest	13.16	100.12	7.46	35.00	-5.70	-65.12
Intertidal sediment	0.00	0.00	0.00	0.00	0.00	0.00
Coastal saltmarsh	0.00	0.00	0.00	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00	0.00	0.00	0.00
Coastal lagoons	0.00	0.00	0.00	0.00	0.00	0.00
Intertidal hard structures	0.00	0.00	0.00	0.00	0.00	0.00
Watercourse footprint	0.35	0.00	1.55	0.00	1.20	0.00
Individual trees	0.00	0.00	0.46	1.38	0.46	1.38



Hedgerows and Lines of Trees

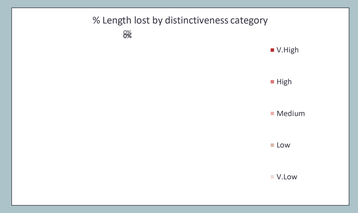
Hedgerows and lines of trees

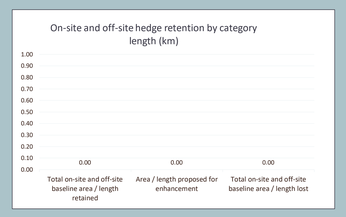
On-site change by hedgerow type

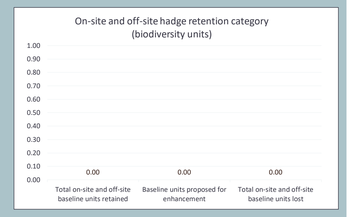
Hedgerow type	Baseline		Post-development on-site		On-site change	
	On-site existing length	On-site existing value	On-site proposed length	On-site proposed value	On-site length change	On-site unit change
Species-rich native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow with trees	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees	0.00	0.00	0.00	0.00	0.00	0.00
Ecologically valuable line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Ecologically valuable line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow	0.00	0.00	0.00	0.00	0.00	0.00
Line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Non-native and ornamental hedgerow	0.00	0.00	0.00	0.00	0.00	0.00

Combined length lost by distinctiveness band

Category	Length lost (km)	Length lost (%)
V.High	0	
High	0	
Medium	0	
Low	0	
V.Low	0	

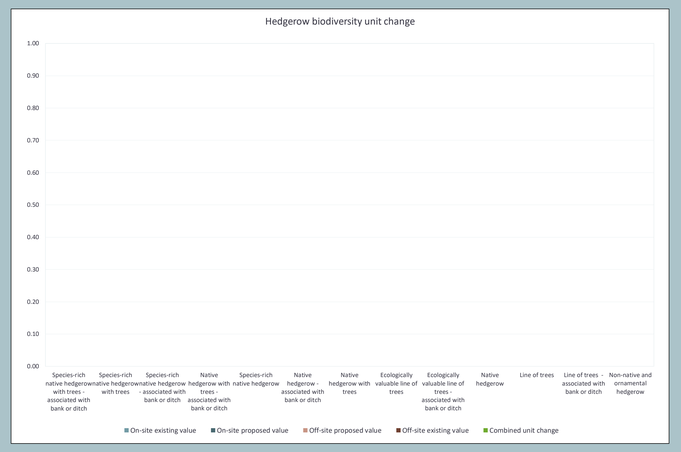






Off-site change by hedgerow type

Hedgerow type	Off-site baseline		Post-development off-site		Off-site change	
	Off-site existing length	Off-site existing value	Off-site proposed length	Off-site proposed value	Off-site length change	Off-site unit change
Species-rich native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow with trees	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees	0.00	0.00	0.00	0.00	0.00	0.00
Ecologically valuable line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Ecologically valuable line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow	0.00	0.00	0.00	0.00	0.00	0.00
Line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Non-native and ornamental hedgerow	0.00	0.00	0.00	0.00	0.00	0.00



Combined on-site and off-site change by hedgerow type

Hedgerow type	Baseline		Post-development		Change	
	Combined existing length	Combined existing value	Combined proposed length	Combined proposed value	Combined length change	Combined unit change
Species-rich native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow with trees	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees	0.00	0.00	0.00	0.00	0.00	0.00
Ecologically valuable line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Ecologically valuable line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow	0.00	0.00	0.00	0.00	0.00	0.00
Line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Non-native and ornamental hedgerow	0.00	0.00	0.00	0.00	0.00	0.00

Watercourses

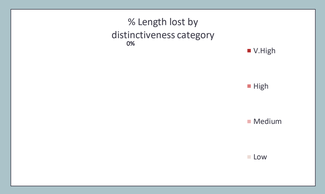
Watercourses

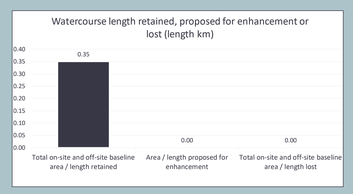
On-site change by watercourse type

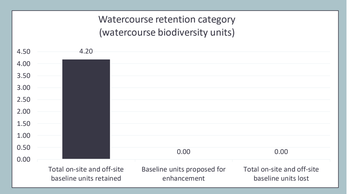
Watercourse type	Baseline		Post-development on site		On-site Change	
	On-site existing length	On-site existing value	On-site proposed length	On-site proposed value	On-site length change	On-site unit change
Priority habitat	0.0	0.0	0.0	0.0	0.0	0.0
Other rivers and streams	0.4	4.2	0.6	4.9	0.2	0.7
Ditches	0.0	0.0	0.0	0.0	0.0	0.0
Canals	0.0	0.0	0.0	0.0	0.0	0.0
Culvert	0.0	0.0	0.0	0.0	0.0	0.0

Combined length lost by distinctiveness band

Category	Length lost (km)	Length lost (%)
V.High	0	
High	0	
Medium	0	
Low	0	

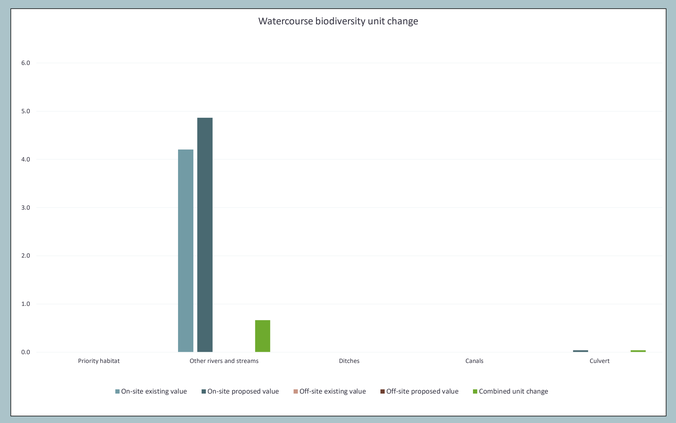


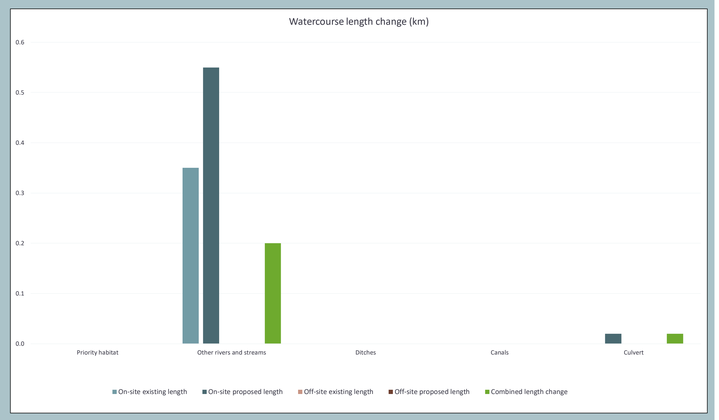




Off-site change by watercourse type

Watercourse type	Baseline		Post development off-site		Off-site Change	
	Off-site existing length	Off-site existing value	Off-site proposed length	Off-site proposed value	Off-site length change	Off-site unit change
Priority habitat	0.0	0.0	0.0	0.0	0.0	0.0
Other rivers and streams	0.0	0.0	0.0	0.0	0.0	0.0
Ditches	0.0	0.0	0.0	0.0	0.0	0.0
Canals	0.0	0.0	0.0	0.0	0.0	0.0
Culvert	0.0	0.0	0.0	0.0	0.0	0.0





Combined on-site and off-site change by watercourse type

Watercourse type	Baseline		Post-development on-site		On-site change	
	Combined existing length	Combined existing value	Combined proposed length	Combined proposed value	Combined length change	Combined unit change
Priority habitat	0.0	0.0	0.0	0.0	0.0	0.0
Other rivers and streams	0.4	4.2	0.6	4.9	0.2	0.7
Ditches	0.0	0.0	0.0	0.0	0.0	0.0
Canals	0.0	0.0	0.0	0.0	0.0	0.0
Culvert	0.0	0.0	0.0	0.0	0.0	0.0

Return to results menu

Trading summary hedgerows

Trading summary Watercourses

Trading Summary

Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Bespoke compensation likely to be required 🛠	Yes ✓
High	Same habitat required =	Yes ✓
Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	No ▲
Low	Same distinctiveness or better habitat required ≥	Yes ✓

Very High Distinctiveness

Habitat group	Group	On-site unit change	Off-site unit change	Project-wide unit change	Unit losses
Grassland - Lowland dry acid grassland	Grassland	0.00	0.00	0.00	
Grassland - Lowland meadows	Grassland	0.00	0.00	0.00	
Grassland - Upland hay meadows	Grassland	0.00	0.00	0.00	
Heathland and shrub - Mountain heaths and willow scrub	Heathland and shrub	0.00	0.00	0.00	
Lakes - Aquifer fed naturally fluctuating water bodies	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Calaminarian grasslands	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Limestone pavement	Sparsely vegetated land	0.00	0.00	0.00	
Wetland - Blanket bog	Wetland	0.00	0.00	0.00	
Wetland - Depressions on peat substrates (H7150)	Wetland	0.00	0.00	0.00	
Wetland - Fens (upland and lowland)	Wetland	0.00	0.00	0.00	
Wetland - Lowland raised bog	Wetland	0.00	0.00	0.00	
Wetland - Oceanic valley mire[1] (D2.1)	Wetland	0.00	0.00	0.00	
Wetland - Purple moor grass and rush pastures	Wetland	0.00	0.00	0.00	
Wetland - Transition mires and quaking bogs (H7140)	Wetland	0.00	0.00	0.00	
Woodland and forest - Wood-pasture and parkland	Woodland and forest	0.00	0.00	0.00	
Rocky shore - High energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Low energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Features of littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Intertidal sediment - Littoral seagrass on peat, clay or chalk	Intertidal sediment	0.00	0.00	0.00	
		0.00	0.00	0.00	0.00

Very High Distinctiveness Summary

Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00

High Distinctiveness

Habitat group	Group	On-site unit change	Off-site unit change	Project-wide unit change	Losses not yet accounted for
Grassland - Traditional orchards	Grassland	0.00	0.00	0.00	
Grassland - Floodplain wetland mosaic and CFGM	Grassland	0.00	0.00	0.00	
Grassland - Lowland calcareous grassland	Grassland	0.00	0.00	0.00	
Grassland - Tall herb communities (H6430)	Grassland	0.00	0.00	0.00	
Grassland - Upland calcareous grassland	Grassland	0.00	0.00	0.00	
Heathland and shrub - Lowland Heathland	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Dunes with sea buckthorn (H2160)	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Upland heathland	Heathland and shrub	0.00	0.00	0.00	
Lakes - High alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Low alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Marl lakes	Lakes	0.00	0.00	0.00	
Lakes - Moderate alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Peat lakes	Lakes	0.00	0.00	0.00	
Lakes - Ponds (priority habitat)	Lakes	0.00	0.00	0.00	
Lakes - Temporary lakes ponds and pools (H3170)	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Coastal sand dunes	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Coastal vegetated shingle	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Inland rock outcrop and scree habitats	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Maritime cliff and slopes	Sparsely vegetated land	0.00	0.00	0.00	
Urban - Open mosaic habitats on previously developed land	Urban	5.98	0.00	5.98	
Wetland - Reedbeds	Wetland	0.63	0.00	0.63	
Woodland and forest - Felled	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Lowland beech and yew woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Lowland mixed deciduous woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Native pine woodlands	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland birchwoods	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland mixed ashwoods	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland oakwood	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Wet woodland	Woodland and forest	1.42	0.00	1.42	
Coastal lagoons - Coastal lagoons	Coastal lagoons	0.00	0.00	0.00	
Rocky shore - High energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Moderate energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Low energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Features of littoral rock	Rocky shore	0.00	0.00	0.00	
Intertidal sediment - Littoral mud	Intertidal sediment	0.00	0.00	0.00	

High Distinctiveness Summary

High Distinctiveness Units available to offset lower distinctiveness deficit	8.03
Unit Deficit; Like for like not satisfied	0.00

Intertidal sediment - Littoral mixed sediments	Intertidal sediment	0.00	0.00	0.00	
Coastal saltmarsh - Saltmarshes and saline reedbeds	Coastal saltmarsh	0.00	0.00	0.00	
Intertidal sediment - Littoral biogenic reefs - Mussels	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral biogenic reefs - Sabellaria	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Features of littoral sediment	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral muddy sand	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral seagrass	Intertidal sediment	0.00	0.00	0.00	
		8.03	0.00	8.03	0.00

Medium Distinctiveness

Habitat group	Group	On-site unit change	Off-site unit change	Project wide unit change	Cumulative broad habitat change
Cropland - Arable field margins cultivated annually	Cropland	0.00	0.00	0.00	0.00
Cropland - Arable field margins game bird mix	Cropland	0.00	0.00	0.00	
Cropland - Arable field margins pollen and nectar	Cropland	0.00	0.00	0.00	
Cropland - Arable field margins tussocky	Cropland	0.00	0.00	0.00	
Grassland - Other lowland acid grassland	Grassland	0.00	0.00	0.00	183.13
Grassland - Other neutral grassland	Grassland	183.13	0.00	183.13	
Grassland - Upland acid grassland	Grassland	0.00	0.00	0.00	
Heathland and shrub - Blackthorn scrub	Heathland and shrub	0.00	0.00	0.00	33.67
Heathland and shrub - Bramble scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Gorse scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Hawthorn scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Willow scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Hazel scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Mixed scrub	Heathland and shrub	33.67	0.00	33.67	
Lakes - Ponds (non-priority habitat)	Lakes	-9.20	0.00	-9.20	-9.20
Lakes - Reservoirs	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Other inland rock and scree	Sparsely vegetated land	0.00	0.00	0.00	0.00
Urban - Cemeteries and churchyards	Urban	0.00	0.00	0.00	0.00
Urban - Biodiverse green roof	Urban	0.00	0.00	0.00	
Individual trees - Urban tree	Individual trees	1.38	0.00	1.38	1.38
Individual trees - Rural tree	Individual trees	0.00	0.00	0.00	
Woodland and forest - Other Scot's pine woodland	Woodland and forest	0.00	0.00	0.00	-66.54
Woodland and forest - Other woodland; broadleaved	Woodland and forest	-66.54	0.00	-66.54	
Woodland and forest - Other woodland; mixed	Woodland and forest	0.00	0.00	0.00	
Intertidal sediment - Littoral coarse sediment	Intertidal sediment	0.00	0.00	0.00	0.00
Intertidal sediment - Littoral sand	Intertidal sediment	0.00	0.00	0.00	
Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IGGI)	Intertidal hard structures	0.00	0.00	0.00	
		142.44	0.00	142.44	

Medium Distinctiveness Summary

Medium Distinctiveness Units available to offset Lower Distinctiveness Deficit	218.18
Medium Distinctiveness Broad Habitat Deficit to be offset by trading up	-75.74
Higher Distinctiveness Surplus Units minus Medium Distinctiveness Broad Habitat Deficit	-67.71
Cumulative surplus of units	150.48

Low Distinctiveness

Habitat group	Group	On-site unit change	Off-site unit change	Project wide unit change
Cropland - Cereal crops	Cropland	0.00	0.00	0.00
Cropland - Horticulture	Cropland	0.00	0.00	0.00
Cropland - Intensive orchards	Cropland	0.00	0.00	0.00
Cropland - Non-cereal crops	Cropland	0.00	0.00	0.00
Cropland - Temporary grass and clover leys	Cropland	0.00	0.00	0.00
Cropland - Winter stubble	Cropland	0.00	0.00	0.00
Grassland - Modified grassland	Grassland	-71.10	0.00	-71.10
Grassland - Bracken	Grassland	0.00	0.00	0.00
Heathland and shrub - Rhododendron scrub	Heathland and shrub	0.00	0.00	0.00
Lakes - Ornamental lake or pond	Lakes	0.00	0.00	0.00
Sparsely vegetated land - Ruderal/ephemeral	Sparsely vegetated land	-0.19	0.00	-0.19
Sparsely vegetated land - Tall forbs	Sparsely vegetated land	0.00	0.00	0.00
Urban - Bioswale	Urban	0.00	0.00	0.00
Urban - Bare ground	Urban	0.00	0.00	0.00
Urban - Allotments	Urban	0.00	0.00	0.00
Urban - Facade-bound green wall	Urban	0.00	0.00	0.00
Urban - Ground based green wall	Urban	0.00	0.00	0.00
Urban - Ground level planters	Urban	0.06	0.00	0.06
Urban - Other green roof	Urban	0.00	0.00	0.00
Urban - Intensive green roof	Urban	0.00	0.00	0.00
Urban - Introduced shrub	Urban	-4.44	0.00	-4.44
Urban - Rain garden	Urban	0.00	0.00	0.00
Urban - Actively worked sand pit quarry or open cast mine	Urban	0.00	0.00	0.00
Urban - Sustainable drainage system	Urban	0.00	0.00	0.00
Urban - Vacant or derelict land	Urban	0.00	0.00	0.00
Urban - Vegetated garden	Urban	0.00	0.00	0.00
Woodland and forest - Other coniferous woodland	Woodland and forest	0.00	0.00	0.00

Low Distinctiveness Summary

Low Distinctiveness net change in units	-75.66
Cumulative surplus of units	74.81

Coastal saltmarsh - Artificial saltmarshes and saline reedbeds	Coastal saltmarsh	0.00	0.00	0.00
Intertidal sediment - Artificial littoral coarse sediment	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral mud	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral sand	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral muddy sand	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral mixed sediments	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral seagrass	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral biogenic reefs	Intertidal sediment	0.00	0.00	0.00
Intertidal hard structures - Artificial hard structures	Intertidal hard structures	0.00	0.00	0.00
Intertidal hard structures - Artificial features of hard structures	Intertidal hard structures	0.00	0.00	0.00
Heathland and shrub - Other sea buckthorn scrub	Heathland and shrub	0.00	0.00	0.00
		-75.66		-75.66

Return to results menu

Trading summary Area Habitats

Trading summary Watercourses

Trading Summary

Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Same habitat required =	Yes ✓
High	Like for like or better	Yes ✓
Medium	Same distinctiveness or better habitat required	Yes ✓
Low/Very Low	Same distinctiveness or better habitat required	Yes ✓

Very High Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project-wide unit change
Species-rich native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00
	0.00	0.00	0.00

Very High Distinctiveness Summary

Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Unit Deficit; Like for like not satisfied	0.00

High Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Species-rich native hedgerow with trees	0.00	0.00	0.00
Species-rich native hedgerow - associated with bank or ditch	0.00	0.00	0.00
Native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00
	0.00	0.00	0.00

High Distinctiveness Summary

High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
High Distinctivness Deficit to be offset by trading up	0.00
Higher Distinctiveness surplus units minus any high distinctivness deficit	0.00

Medium Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Species-rich native hedgerow	0.00	0.00	0.00
Native hedgerow - associated with bank or ditch	0.00	0.00	0.00
Native hedgerow with trees	0.00	0.00	0.00
Ecologically valuable line of trees	0.00	0.00	0.00
Ecologically valuable line of trees - associated with bank or ditch	0.00	0.00	0.00
	0.00	0.00	0.00

Medium Distinctiveness Summary

Units available from higher distinctiveness habitats	0.00
Medium Distinctiveness net change in units	0.00
Cumulative availability of units	0.00

Low/Very Low Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Native hedgerow	0.00	0.00	0.00
Line of trees	0.00	0.00	0.00
Line of trees - associated with bank or ditch	0.00	0.00	0.00
Non-native and ornamental hedgerow	0.00	0.00	0.00
	0.00	0.00	0.00

Low Distinctiveness Summary

Low Distinctiveness net change in units	0.00
Cumulative availability of units	0.00

Return to results menu

Trading summary Area Habitats

Trading summary hedgerows

Trading Summary

Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Bespoke compensation likely to be required 🛠	Yes ✓
High	Same habitat required =	Yes ✓
Medium	Same habitat required =	Yes ✓
Low	Better distinctiveness habitat required	Yes ✓

Very High Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project-wide unit change
Priority habitat	0.00	0.00	0.00
	0.00	0.00	0.00

Very High Distinctiveness Summary

Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00

High Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project-wide unit change
Other rivers and streams	0.66	0.00	0.66
	0.66	0.00	0.66

High Distinctiveness Summary

High Distinctiveness Units available to offset lower distinctiveness deficit	0.66
Unit Deficit; Like for like not satisfied	0.00

Medium Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Ditches	0.00	0.00	0.00
Canals	0.00	0.00	0.00
	0.00	0.00	0.00

Medium Distinctiveness Summary

Medium Distinctiveness Units available to offset Lower Distinctiveness Deficit	0.00
Unit Deficit; Like for like not satisfied	0.00

Low Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Culvert	0.04	0.00	0.04
	0.04	0.00	0.04

Low Distinctiveness Summary

Low Distinctiveness net change in units	0.04
Cumulative availability of units	0.70

Summary of sites providing area habitat unit gains

Gain site reference	Off-site units baseline	Off-site units retained	Off-site units enhanced	Off-site unit creation	Off-site unit change per gain site (pre-SRM)	SRM	Off-site unit change per gain site (post-SRM)
#CALC!	0	0	0	0	0		0
	0	0	0	0	0		0
	0	0	0	0	0		0

	0	0	0	0	0		0
	0	0	0	0	0		0

	0	0	0	0	0		0
	0	0	0	0	0		0

	0	0	0	0	0		0
	0	0	0	0	0		0

Project Name: Northern Runway Project Map Reference:

A-1 On-Site Habitat Baseline

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Area habitat summary	
Total Net Unit Change	74.81
Total Net % Change	22.50%
Trading Rules Satisfied	No - check trading summaries ▲

Please ensure the watercourse details for any watercourse footprints recorded are included in the watercourse tabs ⚠

	Existing area habitats			Distinctiveness		Condition		Strategic significance				Ecological baseline	Retention category biodiversity value						Bespoke compensation agreed for unacceptable losses	Comments		
Ref	Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic Significance multiplier	Required Action to Meet Trading Rules	Total habitat units	Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost		User comments	Consenting body comments	GIS reference number
1	Urban	Introduced shrub	3.440	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	6.88			0.00	0.00	3.44	6.88				
2	Urban	Introduced shrub	0.002	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.00			0.00	0.00	0.00	0.00				
3	Heathland and shrub	Mixed scrub	0.002	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	0.02			0.00	0.00	0.00	0.02				
4	Heathland and shrub	Mixed scrub	0.006	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	0.07			0.00	0.00	0.01	0.07				
5	Woodland and forest	Other woodland; broadleaved	0.238	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	2.85			0.00	0.00	0.24	2.85				
6	Grassland	Other neutral grassland	4.871	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	38.97			0.00	0.00	4.87	38.97				
7	Grassland	Other neutral grassland	0.738	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	5.90			0.00	0.00	0.74	5.90				
8	Heathland and shrub	Mixed scrub	3.878	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	31.02			0.00	0.00	3.88	31.02				
9	Heathland and shrub	Mixed scrub	0.062	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	0.50			0.00	0.00	0.06	0.50				
10	Lakes	Ponds (non-priority habitat)	1.057	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	8.46			0.00	0.00	1.06	8.46				
11	Lakes	Ponds (non-priority habitat)	0.917	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	7.34			0.00	0.00	0.92	7.34				
12	Sparsely vegetated land	Ruderal/Ephemeral	0.020	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.08			0.00	0.00	0.02	0.08				
13	Sparsely vegetated land	Ruderal/Ephemeral	0.008	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.03			0.00	0.00	0.01	0.03				
14	Wetland	Reedbeds	0.071	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same habitat required =	0.85			0.00	0.00	0.07	0.85				
15	Woodland and forest	Other woodland; broadleaved	8.238	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	65.91			0.00	0.00	8.24	65.91				
16	Woodland and forest	Other woodland; broadleaved	0.356	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	2.85			0.00	0.00	0.36	2.85				
17	Woodland and forest	Other woodland; broadleaved	0.006	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	0.07			0.00	0.00	0.01	0.07				
18	Urban	Artificial unvegetated, unsealed surface	1.680	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00			0.00	0.00	1.68	0.00				
19	Urban	Artificial unvegetated, unsealed surface	0.001	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00			0.00	0.00	0.00	0.00				
20	Urban	Built linear features	0.079	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00			0.00	0.00	0.08	0.00				
21	Urban	Developed land; sealed surface	137.430	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00			0.00	0.00	137.43	0.00				
22	Urban	Developed land; sealed surface	7.953	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00			0.00	0.00	7.95	0.00				
23	Urban	Developed land; sealed surface	0.012	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00			0.00	0.00	0.01	0.00				
24	Watercourse footprint	Watercourse footprint	0.349	V.low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00			0.00	0.00	0.35	0.00				
25	Urban	Developed land; sealed surface	0.610	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00			0.00	0.00	0.61	0.00				
26	Grassland	Modified grassland	50.287	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	100.57			0.00	0.00	50.29	100.57				
27	Grassland	Modified grassland	3.533	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	7.07			0.00	0.00	3.53	7.07				
28	Grassland	Modified grassland	6.876	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	13.75		6.876	0.00	13.75	0.00	0.00				
29	Grassland	Modified grassland	0.356	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.71		0.356	0.00	0.71	0.00	0.00				
30	Grassland	Other neutral grassland	0.384	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	1.54			0.00	0.00	0.38	1.54				
31	Grassland	Other neutral grassland	0.171	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	0.69			0.00	0.00	0.17	0.69				
32	Heathland and shrub	Mixed scrub	1.934	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	7.74			0.00	0.00	1.93	7.74				
33	Heathland and shrub	Mixed scrub	0.017	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	0.07		0.017	0.00	0.07	0.00	0.00				
34	Woodland and forest	Other woodland; broadleaved	2.788	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	22.30			0.00	0.00	2.79	22.30				
35	Woodland and forest	Other woodland; broadleaved	0.100	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	0.40			0.00	0.00	0.10	0.40				
36	Sparsely vegetated land	Ruderal/Ephemeral	0.046	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.09			0.00	0.00	0.05	0.09				
37	Woodland and forest	Other woodland; broadleaved	1.434	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (≥)	5.74			0.00	0.00	1.43	5.74				
38	Sparsely vegetated land	Ruderal/Ephemeral	0.006	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.01			0.00	0.00	0.01	0.01				
39	Urban	Developed land; sealed surface	0.002	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00			0.00	0.00	0.00	0.00				
40																						
41																						
42																						
43																						
44																						
45																						
46																						
47																						
48																						
49																						
50																						
51																						
52																						
53																						
54																						
55																						
56																						
57																						
58																						
59																						

193																						
194																						
195																						
196																						
197																						
198																						
199																						
200																						
201																						
202																						
203																						
204																						
205																						
206																						
207																						
208																						
209																						
210																						
211																						
212																						
213																						
214																						
215																						
216																						
217																						
218																						
219																						
220																						
221																						
222																						
223																						
224																						
225																						
226																						
227																						
228																						
229																						
230																						
231																						
232																						
233																						
234																						
235																						
236																						
237																						
238																						
239																						
240																						
241																						
242																						
243																						
244																						
245																						
246																						
247																						
248																						
		Total habitat area	239.96									332.48	0.00	7.25	0.00	14.53	232.71	317.95				
		Site Area (Excluding area of Individual trees and Green walls)	239.96																			

Total area lost (excluding area of Individual trees and Green walls)	232.71

	Select a unit	Hectares	M²
M² to hectares conversion tool:			

Project Name: Northern Runway Project Map Reference:

A-2 On-Site Habitat Creation

Condense / Show Columns | Condense / Show Rows | Main Menu | Instructions

Area habitat summary	
Total Net Unit Change	74.81
Total Net % Change	22.50%
Trading Rules Satisfied	No - check trading summaries ▲
Area Check (excluding individual trees and green walls)	Error - Area created does not equal area lost ▲

Please ensure the watercourse details for any watercourse footprints recorded are included in the watercourse tabs ☭

			Distinctiveness		Condition		Strategic significance			Post development/ post intervention habitats														
													Temporal multiplier			Difficulty multipliers					Comments		
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	Habitat units delivered	User comments	Consenting body comments	GIS reference number
Urban	Introduced shrub	1.264	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1			Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	2.44			
Grassland	Other neutral grassland	5.539	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10			Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	46.55			
Heathland and shrub	Mixed scrub	3.629	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10			Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	30.50			
Urban	Open mosaic habitats on previously developed land	0.708	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10			Standard time to target condition applied	10	0.700	Medium	Standard difficulty applied	Medium	0.67	5.98			
Heathland and shrub	Mixed scrub	0.006	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10			Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	0.05			
Grassland	Other neutral grassland	3.485	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5			Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	23.33			
Grassland	Modified grassland	0.022	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	4			Standard time to target condition applied	4	0.867	Low	Standard difficulty applied	Low	1	0.08			
Grassland	Other neutral grassland	17.456	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5			Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	116.86			
Heathland and shrub	Mixed scrub	5.980	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5			Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	40.04			
Individual trees	Urban tree	0.361	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	27			Standard time to target condition applied	27	0.382	Low	Standard difficulty applied	Low	1	1.10			
Lakes	Ponds (non-priority habitat)	0.917	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	3			Standard time to target condition applied	3	0.899	Low	Standard difficulty applied	Low	1	6.60			
Sparsely vegetated land	Ruderal/Ephemeral	0.008	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	3			Standard time to target condition applied	3	0.899	Low	Standard difficulty applied	Low	1	0.03			
Urban	Ground level planters	0.034	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1			Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	0.06			
Wetland	Reedbeds	0.236	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	7			Standard time to target condition applied	7	0.779	Medium	Standard difficulty applied	Medium	0.67	1.48			
Woodland and forest	Other woodland; broadleaved	7.163	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	15			Standard time to target condition applied	15	0.586	Low	Standard difficulty applied	Low	1	33.58			
Woodland and forest	Wet woodland	0.302	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	15			Standard time to target condition applied	15	0.586	Medium	Standard difficulty applied	Medium	0.67	1.42			
Urban	Artificial unvegetated, unsealed surface	0.001	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0			Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Low	1	0.00			
Urban	Developed land; sealed surface	157.376	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0			Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Medium	0.67	0.00			
Watercourse footprint	Watercourse footprint	1.548	V.low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0			Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Low	1	0.00			
Grassland	Modified grassland	26.372	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1			Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	50.90			
Grassland	Other neutral grassland	0.171	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	2			Standard time to target condition applied	2	0.931	Low	Standard difficulty applied	Low	1	0.64			
Individual trees	Urban tree	0.100	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10			Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	0.28			
Grassland	Other neutral grassland	0.012	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5			Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	0.08			
Grassland	Modified grassland	0.018	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1			Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	0.03			

Total habitat area	232.71
Site Area (Excluding area of Individual trees and Green walls)	232.25

M² to hectares conversion tool:	Select a unit	Hectares	M²

Total Units	362.03

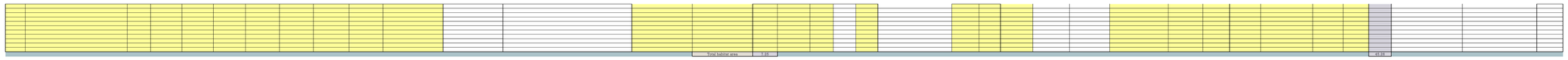
Project Name: Northern Runway Project Map Reference:

A-3 On-Site Habitat Enhancement

Condense / Show Columns | Condensed / Show Rows | Main Menu | Instructions

Area habitat summary	
Total Net Unit Change	14.81
Total Net % Change	22.50%
Trading Rules Satisfied	No - check trading summaries ▲

	Baseline habitats										Proposed Habitat (Pre-populated but can be overridden)		Change in distinctiveness and condition		Post development/ post intervention habitats																								
																		Strategic significance			Temporal risk multiplier					Difficulty risk multipliers									Comments		
Baseline ref	Baseline habitat	Total habitat area (hectares)	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Baseline strategic significance score	Baseline habitat units	Required Action to Meet Trading Rules	Proposed Broad Habitat	Proposed habitat	Distinctiveness change	Condition change	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard time to target condition (years)	Habitat enhanced in advance (years)	Delay in starting habitat enhancement (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of enhancement	Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied	Habitat units delivered	User comments	Consenting body comments	GIS reference number
38	Grassland - Modified grassland	0.87613859	Low	2	Poor	1	Low Strategic Significance	1	13.75	Same distinctiveness or better habitat required ▲	Grassland	Other neutral grassland	Low - Medium	Lower Distinctiveness Habitat - Moderate	0.87613859	Medium	4	Moderate	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10			Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	42.64			
39	Grassland - Modified grassland	0.200080275	Low	2	Poor	1	Low Strategic Significance	1	3.71	Same distinctiveness or better habitat required ▲	Heathland and shrub	Mixed scrub	Low - Medium	Lower Distinctiveness Habitat - Moderate	0.200080275	Medium	4	Moderate	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5			Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	2.50			
33	Heathland and shrub - Mixed scrub	0.017399874	Medium	4	Poor	1	Low Strategic Significance	1	0.07	Same distinctiveness or better habitat required ▲	Grassland	Other neutral grassland	Medium - Medium	Poor - Moderate	0.017399874	Medium	4	Moderate	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10			Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	0.12			


Tree habitat area
2.25
45.18

Project Name: Northern Runway Project Map Reference:

D-1 Off-Site Habitat Baseline

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Area habitat summary	
Total Net Unit Change	74.81
Total Net % Change	22.50%
Trading Rules Satisfied	No - check trading summaries ▲

	Existing area habitats			Distinctiveness		Condition		Strategic significance				Spatial risk multiplier	Ecological baseline	Retention category biodiversity value						Bespoke compensation agreed for unacceptable losses	Comments			
Baseline ref	Broad habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Required Action to Meet Trading Rules	Spatial risk category	Total habitat units	Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area lost	Units lost		User comments	Consenting body comments	GIS reference number	Off-site reference
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
32																								
33																								
34																								
35																								
36																								
37																								
38																								
39																								
40																								
41																								
42																								
43																								
44																								
45																								
46																								
47																								
48																								
49																								
50																								
51																								
52																								
53																								
54																								
55																								
56																								
57																								
58																								
59																								
60																								
61																								
62																								
63																								
64																								
65																								
66																								
67																								
68																								
69																								
70																								
71																								
72																								
73																								
74																								
75																								
76																								
77																								
78																								
79																								
80																								
81																								
82																								
83																								
84																								
85																								
86																								
87																								
88																								
89																								
90																								
91																								
92																								
93																								
94																								
95																								
96																								
97																								
98																								
99																								
100																								
101																								
102																								
103																								
104																								
105																								
106																								
107																								
108																								
109																								
110																								
111																								
112																								
113																								
114																								
115																								
116																								
117																								
118																								
119																								
120																								
121																								
122																								
123																								
124																								
125																								
126																								
127																								
128																								
129																								
130																								
131																								
132																								
133																								
134																								
135																								
136																								
137																								
138																								
139																								
140																								
141																								
142																								
143																								

144																									
145																									
146																									
147																									
148																									
149																									
150																									
151																									
152																									
153																									
154																									
155																									
156																									
157																									
158																									
159																									
160																									
161																									
162																									
163																									
164																									
165																									
166																									
167																									
168																									
169																									
170																									
171																									
172																									
173																									
174																									
175																									
176																									
177																									
178																									
179																									
180																									
181																									
182																									
183																									
184																									
185																									
186																									
187																									
188																									
189																									
190																									
191																									
192																									
193																									
194																									
195																									
196																									
197																									
198																									
199																									
200																									
201																									
202																									
203																									
204																									
205																									
206																									
207																									
208																									
209																									
210																									
211																									
212																									
213																									
214																									
215																									
216																									
217																									
218																									
219																									
220																									
221																									
222																									
223																									
224																									
225																									
226																									
227																									
228																									
229																									
230																									
231																									
232																									
233																									
234																									
235																									
236																									
237																									
238																									
239																									
240																									
241																									
242																									
243																									
244																									
245																									
246																									
247																									
248																									
		Total habitat area	0.00									Total Site baseline		0.00	0.00	0.00	0.00	0.00	0.00						

Site Area (Excluding area of Individual trees and Green walls)	0.00

M² to hectares conversion tool:	Select a unit	Hectares	M²

Total area lost (excluding area of Urban trees and Green walls)	0.00

Project Name: Northern Runway Project Map Reference:

D-2 Off-Site Habitat Creation

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Area habitat summary	
Total Net Unit Change	74.81
Total Net % Change	22.50%
Trading Rules Satisfied	No - check trading summaries ▲
Area Check (excluding individual trees and green walls)	Area Acceptable ✓

							Post development/ post intervention habitats																	
							Strategic significance		Temporal risk multiplier						Difficulty risk multipliers				Spatial risk multiplier		Comments			
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic position multiplier	Standard time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	Spatial risk category	Habitat units delivered	User comments	Consenting body comments	GIS reference number	Off-site reference

Total habitat area	0.00
Site Area (Excluding area of Individual trees and Green walls)	0.00

0.00

Total habitat area	0.00
Site Area (Excluding area of Individual trees and Green walls)	0.00

0.00

M² to hectares conversion tool:	Select a unit	Hectares	M²

Project Name: Northern Runway Project Map Reference:

D-3 Off-Site Habitat Enhancment

Condenser / Show Columns | Condenser / Show Rows

Map Menu | Instructions

Area habitat summary	
Total Net Unit Change	14.61
Total Net % Change	22.50%
Trading Rules Satisfied	No - check trading summaries ▲

Baseline habitats											Proposed Habitat (Pre-Populated but can be overridden)		Change in distinctiveness and condition							Post development post intervention habitats																							
																				Strategic significance			Temporal multiplier									Difficulty multipliers				Spatial risk multiplier			Comments			
Baseline ref	Baseline habitat	Total habitat area	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Baseline strategic significance score	Baseline habitat units	Required Action to Meet Trading Rules	Proposed Broad Habitat	Proposed Habitat	Distinctiveness change	Condition change	Area ha	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Standard time to target condition (years)	Habitat enhanced in advance (years)	Delay in starting habitat enhancement (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Difficulty of enhancement category	Applied difficulty multiplier	Difficulty	Difficulty multiplier applied	Spatial risk category	Spatial risk multiplier	Habitat units delivered	User comments	Consenting body comments	GIS reference number	Off-site reference
															Total habitat area	0.00																					0.00				

Project Name: Northern Runway Project Map Reference:

B-1 On-Site Hedge Baseline

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Hedgerow summary	
Total Net Unit Change	0.00
Total Net % Change	0.00%
Trading Rules Satisfied	Yes ✓

	Existing hedgerow habitats			Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline	Retention category biodiversity value						Comments		
Baseline ref	Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	Strategic significance		Total hedgerow units	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	User comments	Consenting body comments	GIS reference number
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	
32																	
33																	
34																	
35																	
36																	
37																	
38																	
39																	
40																	
41																	
42																	
43																	
44																	
45																	
46																	
47																	
48																	
49																	
50																	
51																	
52																	
53																	
54																	
55																	
56																	
57																	
58																	
59																	
60																	
61																	
62																	
63																	
64																	
65																	
66																	
67																	
68																	
69																	
70																	
71																	
72																	
73																	
74																	
75																	
76																	
77																	
78																	
79																	
80																	
81																	
82																	
83																	
84																	
85																	
86																	
87																	
88																	
89																	
90																	
91																	
92																	
93																	
94																	
95																	
96																	
97																	
98																	
99																	
100																	
101																	
102																	
103																	
104																	

105																	
106																	
107																	
108																	
109																	
110																	
111																	
112																	
113																	
114																	
115																	
116																	
117																	
118																	
119																	
120																	
121																	
122																	
123																	
124																	
125																	
126																	
127																	
128																	
129																	
130																	
131																	
132																	
133																	
134																	
135																	
136																	
137																	
138																	
139																	
140																	
141																	
142																	
143																	
144																	
145																	
146																	
147																	
148																	
149																	
150																	
151																	
152																	
153																	
154																	
155																	
156																	
157																	
158																	
159																	
160																	
161																	
162																	
163																	
164																	
165																	
166																	
167																	
168																	
169																	
170																	
171																	
172																	
173																	
174																	
175																	
176																	
177																	
178																	
179																	
180																	
181																	
182																	
183																	
184																	
185																	
186																	
187																	
188																	
189																	
190																	
191																	
192																	
193																	
194																	
195																	
196																	
197																	
198																	
199																	
200																	
201																	
202																	
203																	
204																	
205																	
206																	
207																	
208																	
209																	
210																	
211																	
212																	
213																	
214																	
215																	
216																	
217																	
218																	
219																	
220																	

221																	
222																	
223																	
224																	
225																	
226																	
227																	
228																	
229																	
230																	
231																	
232																	
233																	
234																	
235																	
236																	
237																	
238																	
239																	
240																	
241																	
242																	
243																	
244																	
245																	
246																	
247																	
248																	
			0.00					0.00	0.00	0.00	0.00	0.00	0.00				

Project Name: Northern Runway Project Map Reference:

B-2 On-Site Hedge Creation

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Hedgerow summary	
Total Net Unit Change	0.00
Total Net % Change	0.00%
Trading Rules Satisfied	Yes ✓

		Proposed habitats		Distinctiveness		Condition		Strategic significance			Temporal multiplier						Difficulty risk multipliers				Hedge units delivered	Comments		
Baseline ref	New hedge number	Habitat type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard Time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied		User comments	Consenting body comments	GIS reference number
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
32																								
33																								
34																								
35																								
36																								
37																								
38																								
39																								
40																								
41																								
42																								
43																								
44																								
45																								
46																								
47																								
48																								
49																								
50																								
51																								
52																								
53																								
54																								
55																								
56																								
57																								
58																								
59																								
60																								
61																								
62																								
63																								
64																								
65																								
66																								
67																								
68																								
69																								
70																								
71																								
72																								
73																								
74																								
75																								
76																								
77																								
78																								
79																								
80																								
81																								
82																								
83																								
84																								
85																								
86																								
87																								
88																								
89																								
90																								
91																								
92																								
93																								
94																								
95																								
96																								
97																								
98																								
99																								
100																								
101																								
102																								
103																								
104																								
105																								
106																								
107																								
108																								
109																								
110																								
111																								
112																								
113																								
114																								
115																								
116																								
117																								
118																								
119																								
120																								
121																								
122																								
123																								
124																								
125																								
126																								
127																								
128																								
129																								
130																								
131																								
132																								
133																								
134																								

135																									
136																									
137																									
138																									
139																									
140																									
141																									
142																									
143																									
144																									
145																									
146																									
147																									
148																									
149																									
150																									
151																									
152																									
153																									
154																									
155																									
156																									
157																									
158																									
159																									
160																									
161																									
162																									
163																									
164																									
165																									
166																									
167																									
168																									
169																									
170																									
171																									
172																									
173																									
174																									
175																									
176																									
177																									
178																									
179																									
180																									
181																									
182																									
183																									
184																									
185																									
186																									
187																									
188																									
189																									
190																									
191																									
192																									
193																									
194																									
195																									
196																									
197																									
198																									
199																									
200																									
201																									
202																									
203																									
204																									
205																									
206																									
207																									
208																									
209																									
210																									
211																									
212																									
213																									
214																									
215																									
216																									
217																									
218																									
219																									
220																									
221																									
222																									
223																									
224																									
225																									
226																									
227																									
228																									
229																									
230																									
231																									
232																									
233																									
234																									
235																									
236																									
237																									
238																									
239																									
240																									
241																									
242																									
243																									
244																									
245																									
246																									
247																									
248																									
			0.00																	0.00				

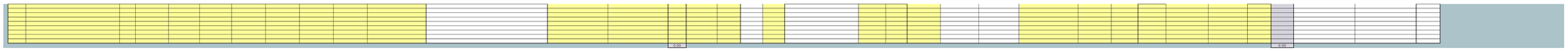
Project Name: Northern Runway Project Map Reference:
B-3 On-Site Hedge Enhancement

Crossover / Show Columns | Crossover / Show Rows

Main Menu | Instructions

Hedgerow summary	
Total Net Unit Change	0.00
Total Net % Change	0.00%
Trading Rules Satisfied	Yes ✓

Baseline Habitats											Post development/ post intervention habitats																							
												Change in distinctiveness and condition			Distinctiveness		Condition		Strategic significance			Temporal multiplier					Difficulty risk multipliers				Hedge units delivered	Comments		
Baseline ref	Baseline habitat	Length (km)	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Baseline strategic significance score	Baseline habitat units	Required Action to Meet Trading Rules	Proposed (Pre-populated but can be overridden)	Distinctiveness movement	Condition movement	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Standard Time to target condition (years)	Habitat enhanced in advance (years)	Delay in starting habitat enhancement (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final Time to target multiplier	Standard difficulty of enhancement	Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied		User comments	Consenting body comments	OSI reference number


0.00
0.00

Project Name: Northern Runway Project Map Reference:

E-1 Off-Site Hedge Baseline

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Hedgerow summary	
Total Net Unit Change	0.00
Total Net % Change	0.00%
Trading Rules Satisfied	Yes ✓

	Existing hedgerow habitats			Distinctiveness		Condition		Strategic significance			Required Action to Meet Trading Rules	Spatial risk multiplier	Ecological baseline	Retention category biodiversity value						Comments			
Baseline ref	Hedge number	Hedgerow type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier		Spatial risk category	Total hedgerow units	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	User comments	Consenting body comments	GIS reference number	Off-site reference
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							
21																							
22																							
23																							
24																							
25																							
26																							
27																							
28																							
29																							
30																							
31																							
32																							
33																							
34																							
35																							
36																							
37																							
38																							
39																							
40																							
41																							
42																							
43																							
44																							
45																							
46																							
47																							
48																							
49																							
50																							
51																							
52																							
53																							
54																							
55																							
56																							
57																							
58																							
59																							
60																							
61																							
62																							
63																							
64																							
65																							
66																							
67																							
68																							
69																							
70																							
71																							
72																							
73																							
74																							
75																							
76																							
77																							
78																							
79																							
80																							
81																							
82																							
83																							
84																							
85																							
86																							
87																							
88																							
89																							
90																							
91																							
92																							
93																							
94																							
95																							
96																							
97																							
98																							
99																							
100																							
101																							
102																							
103																							
104																							
105																							
106																							
107																							
108																							
109																							
110																							
111																							
112																							
113																							
114																							
115																							
116																							
117																							
118																							
119																							
120																							
121																							
122																							
123																							
124																							
125																							
126																							
127																							
128																							

129																									
130																									
131																									
132																									
133																									
134																									
135																									
136																									
137																									
138																									
139																									
140																									
141																									
142																									
143																									
144																									
145																									
146																									
147																									
148																									
149																									
150																									
151																									
152																									
153																									
154																									
155																									
156																									
157																									
158																									
159																									
160																									
161																									
162																									
163																									
164																									
165																									
166																									
167																									
168																									
169																									
170																									
171																									
172																									
173																									
174																									
175																									
176																									
177																									
178																									
179																									
180																									
181																									
182																									
183																									
184																									
185																									
186																									
187																									
188																									
189																									
190																									
191																									
192																									
193																									
194																									
195																									
196																									
197																									
198																									
199																									
200																									
201																									
202																									
203																									
204																									
205																									
206																									
207																									
208																									
209																									
210																									
211																									
212																									
213																									
214																									
215																									
216																									
217																									
218																									
219																									
220																									
221																									
222																									
223																									
224																									
225																									
226																									
227																									
228																									
229																									
230																									
231																									
232																									
233																									
234																									
235																									
236																									
237																									
238																									
239																									
240																									
241																									
242																									
243																									
244																									
245																									
246																									
247																									
248																									
			0.00										0.00	0.00	0.00	0.00	0.00	0.00	0.00						

Project Name: Northern Runway Project Map Reference:

E-2 Off-Site Hedge Creation

Condense / Show Columns | Condense / Show Rows | Main Menu | Instructions

Hedgerow summary	
Total Net Unit Change	0.00
Total Net % Change	0.00%
Trading Rules Satisfied	Yes ✓

		Proposed habitats		Distinctiveness		Condition		Strategic significance			Spatial risk multiplier	Temporal multiplier						Difficulty risk multipliers					Comments			
Baseline ref	New hedge number	Habitat type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Spatial risk category	Standard Time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final Time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	Hedge units delivered	User comments	Consenting body comments	GIS reference number	Off-site reference
1																										
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										
13																										
14																										
15																										
16																										
17																										
18																										
19																										
20																										
21																										
22																										
23																										
24																										
25																										
26																										
27																										
28																										
29																										
30																										
31																										
32																										
33																										
34																										
35																										
36																										
37																										
38																										
39																										
40																										
41																										
42																										
43																										
44																										
45																										
46																										
47																										
48																										
49																										
50																										
51																										
52																										
53																										
54																										
55																										
56																										
57																										
58																										
59																										
60																										
61																										
62																										
63																										
64																										
65																										
66																										
67																										
68																										
69																										
70																										
71																										
72																										
73																										
74																										
75																										
76																										
77																										
78																										
79																										
80																										
81																										
82																										
83																										
84																										
85																										
86																										
87																										
88																										
89																										
90																										
91																										
92																										
93																										
94																										
95																										
96																										
97																										
98																										
99																										
100																										
101																										
102																										
103																										
104																										
105																										
106																										
107																										
108																										
109																										
110																										
111																										
112																										
113																										
114																										
115																										
116																										
117																										
118																										
119																										
120																										
121																										
122																										
123																										
124																										
125																										
126																										
127																										
128																										
129																										
130																										
131																										
132																										
133																										
134																										
135																										
136																										
137																										
138																										
139																										
140																										
141																										
142																										
143																										
144																										
145																										
146																										
147																										
148																										
149																										
150																										
151																										
152																										
153																										
154																										
155																										
156																										
157																										

| | | |

Project name: Northern Runway Project - BNG

E-3 Off-Site Hedge Enhancement

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Hedgerow summary	
Total Net Unit Change	0.00
Total Net % Change	0.00%
Trading Rules Satisfied	Yes ✓

Baseline habitat											Post development/ post intervention habitats Change in distinctiveness and condition	Change in distinctiveness and condition			Distinctiveness		Condition		Strategic significance			Temporal multiplier						Difficulty risk multipliers				Spatial risk multiplier		Comments			
Baseline ref	Baseline habitat	Length (km)	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Baseline strategic significance score	Baseline habitat units	Required Action to Meet Trading Rules	Proposed (Pre-Populated but can be overridden)	Distinctiveness movement	Condition movement	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard Time to target condition (years)	Habitat enhanced in advance (years)	Delay in starting habitat enhancement (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final Time to target multiplier	Standard difficulty of enhancement	Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied	Spatial risk category	Hedge units delivered	User comments	Consenting body comments	GIS reference number	Off-site reference

0.00
0.00

Project Name: Northern Runway Project Map Reference:

C-1 On-Site WaterC' Baseline

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Watercourse summary	
Total Net Unit Change	0.70
Total Net % Change	16.70%
Trading Rules Satisfied	Yes ✓

Existing watercourse type			Distinctiveness		Condition		Strategic significance			Watercourse encroachment		Riparian encroachment		Required Action to Meet Trading Rules	Ecological baseline	Retention category biodiversity value						Bespoke compensation agreed for unacceptable losses	Comments		
Baseline ref	Watercourse type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Extent of encroachment	Multiplier	Extent of encroachment for both banks	Multiplier		Total watercourse units	Length retained	Length enhanced	Units retained	Units enhanced	Length Lost	Units Lost		User Comments	Consenting body comments	GIS reference number
1	Other rivers and streams	0.35	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	No Encroachment	1	No Encroachment/ No Encroachment	1	Same habitat required =	4.20	0.35		4.20	0.00	0.00	0.00				
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
32																									
33																									
34																									
35																									
36																									
37																									
38																									
39																									
40																									
41																									
42																									
43																									
44																									
45																									
46																									
47																									
48																									
49																									
50																									
51																									
52																									
53																									
54																									
55																									
56																									
57																									
58																									
59																									
60																									
61																									
62																									
63																									
64																									
65																									
66																									
67																									
68																									
69																									
70																									
71																									
72																									
73																									
74																									
75																									
76																									
77																									
78																									
79																									
80																									
81																									
82																									
83																									
84																									
85																									
86																									
87																									
88																									
89																									
90																									
91																									
92																									
93																									
94																									
95																									
96																									
97																									
98																									
99																									
100																									
101																									
102																									
103																									
104																									
105																									
106																									
107																									
108																									
109																									
110																									
111																									
112																									
113																									
114																									
115																									
116																									
117																									
118																									
119																									
120																									
121																									
122																									
123																									
124																									
125																									
126																									

127																									
128																									
129																									
130																									
131																									
132																									
133																									
134																									
135																									
136																									
137																									
138																									
139																									
140																									
141																									
142																									
143																									
144																									
145																									
146																									
147																									
148																									
149																									
150																									
151																									
152																									
153																									
154																									
155																									
156																									
157																									
158																									
159																									
160																									
161																									
162																									
163																									
164																									
165																									
166																									
167																									
168																									
169																									
170																									
171																									
172																									
173																									
174																									
175																									
176																									
177																									
178																									
179																									
180																									
181																									
182																									
183																									
184																									
185																									
186																									
187																									
188																									
189																									
190																									
191																									
192																									
193																									
194																									
195																									
196																									
197																									
198																									
199																									
200																									
201																									
203																									
203																									
204																									
205																									
206																									
207																									
208																									
209																									
210																									
211																									
212																									
213																									
214																									
215																									
216																									
217																									
218																									
219																									
220																									
221																									
222																									
223																									
224																									
225																									
226																									
227																									
228																									
229																									
230																									
231																									
232																									
233																									
234																									
235																									
236																									
237																									
238																									
239																									
240																									
241																									
242																									
243																									
244																									
245																									
246																									
247																									
248																									
		0.35													4.20	0.35	0.00	4.20	0.00	0.00	0.00				

Project Name: Northern Runway Project Map Reference:

C-2 On-Site WaterC' Creation

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Watercourse summary	
Total Net Unit Change	0.70
Total Net % Change	16.70%
Trading Rules Satisfied	Yes ✓

	Proposed habitats		Distinctiveness		Condition		Strategic significance			Temporal multiplier						Difficulty multipliers				Watercourse encroachment		Riparian encroachment			Comments		
Baseline ref	Watercourse type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard Time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final Time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	Extent of encroachment	Multiplier	Extent of encroachment for both banks	Multiplier	Watercourse units delivered	User comments	Consenting body comments	GIS reference number
1	Other rivers and streams	0.2	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	High	Standard difficulty applied	High	0.33	No Encroachment	1	No Encroachment/ No Encroachment	1	0.66	Flood attenuation		
2	Culvert	0.02	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1	0	0	Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	N/A - Culvert	1	N/A - Culvert	1	0.04	New open-top culvert		
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											
13																											
14																											
15																											
16																											
17																											
18																											
19																											
20																											
21																											
22																											
23																											
24																											
25																											
26																											
27																											
28																											
29																											
30																											
31																											
32																											
33																											
34																											
35																											
36																											
37																											
38																											
39																											
40																											
41																											
42																											
43																											
44																											
45																											
46																											
47																											
48																											
49																											
50																											
51																											
52																											
53																											
54																											
55																											
56																											
57																											
58																											
59																											
60																											
61																											
62																											
63																											
64																											
65																											
66																											
67																											
68																											
69																											
70																											
71																											
72																											
73																											
74																											
75																											
76																											
77																											
78																											
79																											
80																											
81																											
82																											
83																											
84																											
85																											
86																											
87																											
88																											
89																											
90																											
91																											
92																											
93																											
94																											
95																											
96																											
97																											
98																											
99																											
100																											
101																											
102																											
103																											
104																											
105																											
106																											
107																											
108																											
109																											
110																											
111																											
112																											
113																											
114																											
115																											
116																											
117																											
118																											
119																											
120																											
121																											
122																											
123																											
124																											
125																											
126																											
127																											
128																											
129																											
130																											
131																											
132																											
133																											

134																												
135																												
136																												
137																												
138																												
139																												
140																												
141																												
142																												
143																												
144																												
145																												
146																												
147																												
148																												
149																												
150																												
151																												
152																												
153																												
154																												
155																												
156																												
157																												
158																												
159																												
160																												
161																												
162																												
163																												
164																												
165																												
166																												
167																												
168																												
169																												
170																												
171																												
172																												
173																												
174																												
175																												
176																												
177																												
178																												
179																												
180																												
181																												
182																												
183																												
184																												
185																												
186																												
187																												
188																												
189																												
190																												
191																												
192																												
193																												
194																												
195																												
196																												
197																												
198																												
199																												
200																												
201																												
202																												
203																												
204																												
205																												
206																												
207																												
208																												
209																												
210																												
211																												
212																												
213																												
214																												
215																												
216																												
217																												
218																												
219																												
220																												
221																												
222																												
223																												
224																												
225																												
226																												
227																												
228																												
229																												
230																												
231																												
232																												
233																												
234																												
235																												
236																												
237																												
238																												
239																												
240																												
241																												
242																												
243																												
244																												
245																												
246																												
247																												
248																												
		0.22																						0.70				

Project Name: Northern Runway Project Map Reference:

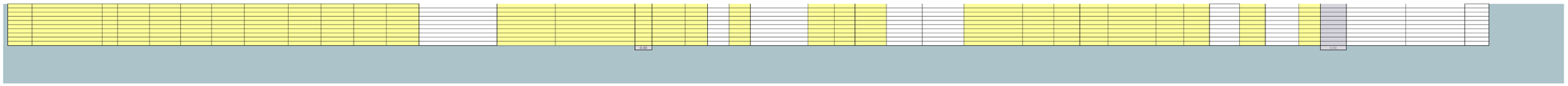
C-3 On-Site WaterC' Enhancement

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Watercourse summary	
Total Net Unit Change	0.70
Total Net % Change	16.10%
Trading Rules Satisfied	Yes ✓

Baseline habitats													Post-development/ post intervention habitats																																
														Change in distinctiveness and condition			Habitat distinctiveness		Habitat condition		Strategic significance			Temporal multiplier						Difficulty multipliers				Watercourse encroachment		Riparian encroachment			Comments		
Baseline ref	Baseline habitat	Length (km)	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Strategic significance	Baseline strategic significance Score	Required Action to Meet Trading Rules	Total units	Proposed Watercourse Type (Pre-populated can be overridden)	Distinctiveness movement	Condition movement	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard Time to target condition (years)	Habitat enhanced in advance (years)	Delay in starting habitat enhancement (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final Time to target multiplier	Standard difficulty of enhancement	Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied	Extent of encroachment	Multiplier	Extent of encroachment for both banks	Multiplier	Watercourse units delivered	User comments	Consenting body comments	GIS reference number


8.00
7.00

Project Name: Northern Runway Project Map Reference:

F-1 Off-Site WaterC' Baseline

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Watercourse summary	
Total Net Unit Change	0.70
Total Net % Change	16.70%
Trading Rules Satisfied	Yes ✓

Existing watercourse type			Distinctiveness		Condition		Strategic significance			Watercourse encroachment		Riparian encroachment		Required Action to Meet Trading Rules	Spatial risk multiplier	Ecological baseline	Retention category biodiversity value						Bespoke compensation agreed for unacceptable losses	Comments			
Baseline ref	Watercourse type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Extent of encroachment	Multiplier	Extent of encroachment for both banks	Multiplier		Spatial risk category	Total watercourse units	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost		User comments	Consenting body comments	GIS reference number	Off-site reference
1																											
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											
13																											
14																											
15																											
16																											
17																											
18																											
19																											
20																											
21																											
22																											
23																											
24																											
25																											
26																											
27																											
28																											
29																											
30																											
31																											
32																											
33																											
34																											
35																											
36																											
37																											
38																											
39																											
40																											
41																											
42																											
43																											
44																											
45																											
46																											
47																											
48																											
49																											
50																											
51																											
52																											
53																											
54																											
55																											
56																											
57																											
58																											
59																											
60																											
61																											
62																											
63																											
64																											
65																											
66																											
67																											
68																											
69																											
70																											
71																											
72																											
73																											
74																											
75																											
76																											
77																											
78																											
79																											
80																											
81																											
82																											
83																											
84																											
85																											
86																											
87																											
88																											
89																											
90																											
91																											
92																											
93																											
94																											
95																											
96																											
97																											
98																											
99																											
100																											
101																											
102																											
103																											
104																											
105																											
106																											
107																											
108																											
109																											
110																											
111																											
112																											
113																											
114																											
115																											
116																											
117																											
118																											
119																											
120																											
121																											
122																											
123																											
124																											
125																											
126																											
127																											
128																											
129																											
130																											
131																											
132																											
133																											
134																											
135																											

136																												
137																												
138																												
139																												
140																												
141																												
142																												
143																												
144																												
145																												
146																												
147																												
148																												
149																												
150																												
151																												
152																												
153																												
154																												
155																												
156																												
157																												
158																												
159																												
160																												
161																												
162																												
163																												
164																												
165																												
166																												
167																												
168																												
169																												
170																												
171																												
172																												
173																												
174																												
175																												
176																												
177																												
178																												
179																												
180																												
181																												
182																												
183																												
184																												
185																												
186																												
187																												
188																												
189																												
190																												
191																												
192																												
193																												
194																												
195																												
196																												
197																												
198																												
199																												
200																												
201																												
202																												
203																												
204																												
205																												
206																												
207																												
208																												
209																												
210																												
211																												
212																												
213																												
214																												
215																												
216																												
217																												
218																												
219																												
220																												
221																												
222																												
223																												
224																												
225																												
226																												
227																												
228																												
229																												
230																												
231																												
232																												
233																												
234																												
235																												
236																												
237																												
238																												
239																												
240																												
241																												
242																												
243																												
244																												
245																												
246																												
247																												
248																												
		0.00															0.00	0.00	0.00	0.00	0.00	0.00	0.00					

Project Name: Northern Runway Project Map Reference:

F-2 Off-Site WaterC' Creation

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

Watercourse summary	
Total Net Unit Change	0.70
Total Net % Change	16.70%
Trading Rules Satisfied	Yes ✓

	Proposed habitats		Distinctiveness		Condition		Strategic significance			Temporal multiplier						Difficulty multipliers				Watercourse encroachment		Riparian encroachment		Spatial risk multiplier			Comments			
Baseline ref	Watercourse type	Length km	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard Time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition/years	Final time to target Multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	Extent of encroachment	Multiplier	Extent of encroachment for both banks	Multiplier	Spatial risk category	Multiplier	Watercourse units delivered	User comments	Consenting body comments	GIS reference number	Off-site reference
1																														
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														
13																														
14																														
15																														
16																														
17																														
18																														
19																														
20																														
21																														
22																														
23																														
24																														
25																														
26																														
27																														
28																														
29																														
30																														
31																														
32																														
33																														
34																														
35																														
36																														
37																														
38																														
39																														
40																														
41																														
42																														
43																														
44																														
45																														
46																														
47																														
48																														
49																														
50																														
51																														
52																														
53																														
54																														
55																														
56																														
57																														
58																														
59																														
60																														
61																														
62																														
63																														
64																														
65																														
66																														
67																														
68																														
69																														
70																														
71																														
72																														
73																														
74																														
75																														
76																														
77																														
78																														
79																														
80																														
81																														
82																														
83																														
84																														
85																														
86																														
87																														
88																														
89																														
90																														
91																														
92																														
93																														
94																														
95																														
96																														
97																														
98																														
99																														
100																														
101																														
102																														
103																														
104																														
105																														
106																														
107																														
108																														
109																														
110																														
111																														
112																														
113																														
114																														
115																														
116																														
117																														
118																														
119																														
120																														
121																														
122																														
123																														
124																														
125																														
126																														
127																														
128																														
129																														
130																														
131																														
132																														
133																														
134																														
135																														
136																														
137																														
138																														
139																														
140																														
141																														

142																																		
143																																		
144																																		
145																																		
146																																		
147																																		
148																																		
149																																		
150																																		
151																																		
152																																		
153																																		
154																																		
155																																		
156																																		
157																																		
158																																		
159																																		
160																																		
161																																		
162																																		
163																																		
164																																		
165																																		
166																																		
167																																		
168																																		
169																																		
170																																		
171																																		
172																																		
173																																		
174																																		
175																																		
176																																		
177																																		
178																																		
179																																		
180																																		
181																																		
182																																		
183																																		
184																																		
185																																		
186																																		
187																																		
188																																		
189																																		
190																																		
191																																		
192																																		
193																																		
194																																		
195																																		
196																																		
197																																		
198																																		
199																																		
200																																		
201																																		
202																																		
203																																		
204																																		
205																																		
206																																		
207																																		
208																																		
209																																		
210																																		
211																																		
212																																		
213																																		
214																																		
215																																		
216																																		
217																																		
218																																		
219																																		
220																																		
221																																		
222																																		
223																																		
224																																		
225																																		
226																																		
227																																		
228																																		
229																																		
230																																		
231																																		
232																																		
233																																		
234																																		
235																																		
236																																		
237																																		
238																																		
239																																		
240																																		
241																																		
242																																		
243																																		
244																																		
245																																		
246																																		
247																																		
248																																		
		0.00																									0.00							

Project Name: Northern Runway Project MDP Reference:

F-3 Off-Site WaterC Enhancement

Condition / Zone Criteria | Condition / Zone Row 1

Main Menu | Instructions

Watercourse summary	
Total Net Unit Change	0.70
Total Net % Change	12.15%
Trading Rules Satisfied	Yes ✓

| Baseline habitats | | | | | | | | | | | | | Post development/ post intervention habitats | | | | | | | | | | | | |

Return to start

	All Habitats Based on UKHab																	
	Labeling column	Definitive UKHAB / EUNIS/HS Code	Level 1	Level 2 code	Level 2 Label	Level 3 code	Level 3 Label	Level 4 code	Level 4 Label (Priority Habitat in Bold)	Distinctiveness Category	Distinctiveness Score	Trading notes	Technical Difficulty Checklist	Multiplier	Technical Difficulty Enhancement	Multiplier	Basic Description	Condition Assessment Notes
Arable field margins cultivated annuals	Cropland - Arable field margins cultivated annuals	c1a7	Terrestrial		Cropland		Arable and horticulture		Arable field margins	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	1		
Arable field margins game bird mix	Cropland - Arable field margins game bird mix	c1a8	Terrestrial		Cropland		Arable and horticulture		Arable field margins	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	1		
Arable field margins pollen and nectar mix	Cropland - Arable field margins pollen and nectar mix	c1a6	Terrestrial		Cropland		Arable and horticulture		Arable field margins	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	1		
Arable field margins biomass	Cropland - Arable field margins biomass	c1a	Terrestrial	c	Cropland	c1	Arable and horticulture	c1a	Arable field margins	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	1		
Cereal crops	Cropland - Cereal crops	c1c	Terrestrial		Cropland		Arable and horticulture	c1c	Cereal crops	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Flower crops	Cropland - Flower crops	c1d	Terrestrial		Cropland		Arable and horticulture		Flower crops	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Horticulture	Cropland - Horticulture	c1f	Terrestrial		Cropland		Arable and horticulture	c1f	Horticulture	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Intensive orchards	Cropland - Intensive orchards	c1e	Terrestrial		Cropland		Arable and horticulture	c1e	Intensive orchards	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Non-cereal crops	Cropland - Non-cereal crops	c1b	Terrestrial		Cropland		Arable and horticulture		Non-cereal crops	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Temporary grass and clover leys	Cropland - Temporary grass and clover leys	c1h	Terrestrial		Cropland		Arable and horticulture	c1h	Temporary grass and clover leys	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Traditional orchards	Cropland - Traditional orchards	f1	Terrestrial		Grassland		Traditional orchard		Traditional orchard	High	8	Same habitat required +	High	0.33	Medium	0.67		
Grassland	Grassland - Grassland	g	Terrestrial		Grassland		Grassland	g911	Grassland	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	1		
Floodplain wetland mosaic and CFGM	Grassland - Floodplain wetland mosaic and CFGM	MG9111	Terrestrial		Grassland		Floodplain Wetland Mosaic		Floodplain Wetland Mosaic	High	6	Same habitat required +	High	0.33	Medium	0.67		
Lowland calcareous grassland	Grassland - Lowland calcareous grassland	g34	Terrestrial		Grassland	g3	Calcareous grassland	g34	**Lowland calcareous grassland**	High	6	Same habitat required +	High	0.33	High	0.33		
Lowland dry acid grassland	Grassland - Lowland dry acid grassland	g38	Terrestrial	g	Grassland	g3	Acid grassland	g38	**Lowland dry acid grassland**	High	6	Same habitat required +	High	0.33	Medium	0.67		
Lowland meadow	Grassland - Lowland meadow	g4	Terrestrial		Grassland	g5	Neutral grassland	g4	**Lowland meadow**	Very High	8	Bespoke compensation likely to be required ✖	High	0.33	Medium	0.67		
Modified grassland	Grassland - Modified grassland	g3	Terrestrial		Grassland	g9	Modified grassland	Grassland Forward	Modified grassland	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Other acid grassland (priority habitat)	Grassland - Other acid grassland (priority habitat)	g38	Terrestrial		Grassland		Acid grassland	g38	Other acid grassland	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	1		
Other neutral grassland	Grassland - Other neutral grassland	g4	Terrestrial		Grassland		Neutral grassland	g4	Other neutral grassland	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	1		
Tall herb communities (MG10)	Grassland - Tall herb communities (MG10)	g146	Terrestrial		Grassland	g6	Other grassland		Other grassland	High	6	Same habitat required +	High	0.33	High	0.33		
Upland calcareous grassland	Grassland - Upland calcareous grassland	g34	Terrestrial		Grassland		Calcareous grassland	g34	**Upland calcareous grassland**	High	6	Same habitat required +	High	0.33	High	0.33		
Upland calcareous grassland	Grassland - Upland calcareous grassland	g34	Terrestrial		Grassland		Calcareous grassland	g34	**Upland calcareous grassland**	High	6	Same habitat required +	High	0.33	Medium	0.67		
Upland hay meadows	Grassland - Upland hay meadows	g4b	Terrestrial		Grassland		Neutral grassland	g4b	**Upland hay meadows**	Very High	8	Bespoke compensation likely to be required ✖	High	0.33	Medium	0.67		
Blackthorn scrub	Heathland and shrub - Blackthorn scrub	h34	Terrestrial		Heathland and shrub	h3	Dense scrub	h34	Blackthorn scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	-		
Gorse scrub	Heathland and shrub - Gorse scrub	h34	Terrestrial		Heathland and shrub		Dense scrub	h34	Gorse scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	-		
Hawthorn scrub	Heathland and shrub - Hawthorn scrub	h34	Terrestrial		Heathland and shrub		Dense scrub	h34	Hawthorn scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	-		
Hazel scrub	Heathland and shrub - Hazel scrub	h34	Terrestrial		Heathland and shrub		Dense scrub	h34	Hazel scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	-		
Lowland heathland	Heathland and shrub - Lowland heathland	h12	Terrestrial	h	Heathland and shrub	h1	Dwarf shrub heath	h12	**Lowland Heathland**	High	6	Same habitat required +	High	0.33	Medium	0.67		
Mixed scrub	Heathland and shrub - Mixed scrub	h36	Terrestrial		Heathland and shrub		Dense scrub	h36	Mixed scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	-	To include scattered mixed scrub over grassland.	
Mountain heaths and willow scrub	Heathland and shrub - Mountain heaths and willow scrub	h11	Terrestrial		Heathland and shrub		Dwarf shrub heath	h11	**Mountain heaths and willow scrub**	V.High	8	Bespoke compensation likely to be required ✖	High	0.33	High	0.33		
Rhododendron scrub	Heathland and shrub - Rhododendron scrub	h3q	Terrestrial		Heathland and shrub		Dense scrub	h3q	Rhododendron scrub	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Sea buckthorn scrub	Heathland and shrub - Dense sea buckthorn (MG10) scrub	h3n8	Terrestrial		Heathland and shrub		Dense scrub	h3n	Sea buckthorn scrub	High	6	Same habitat required +	Medium	0.67	Low	1		
Other sea buckthorn scrub	Heathland and shrub - Other sea buckthorn scrub	h3n8	Terrestrial		Heathland and shrub		Dense scrub	h3n	Other Sea buckthorn scrub	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Scrub (other)	Heathland and shrub - Scrub (other)	h3	Terrestrial		Heathland and shrub		Dense scrub	h3	Scrub (other)	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Medium	0.67	Low	1		
Upland heathland	Heathland and shrub - Upland heathland	h12	Terrestrial		Heathland and shrub	h1	Dwarf shrub heath	h12	**Upland Heathland**	High	6	Same habitat required +	High	0.33	Medium	0.67		
Arable fen/naturally fluctuating water bodies	Lake - Arable fen/naturally fluctuating water bodies	r1d	Freshwater		Lakes		Standing open water and canals	r1d	**Aquifer fed naturally fluctuating water bodies**	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	High	0.33		
Ornamental lake or pond	Lake - Ornamental lake or pond	r1a	Freshwater		Lakes		Standing open water and canals		Ornamental lake or pond	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Eutrophic lake	Lake - Eutrophic lake	MG501	Freshwater		Lakes		Standing open water and canals			High	6	Same habitat required +	High	0.33	High	0.33		
Low alkalinity lake	Lake - Low alkalinity lake	MG501	Freshwater		Lakes		Standing open water and canals			High	6	Same habitat required +	High	0.33	Medium	0.67		
Other lake	Lake - Other lake	MG501	Freshwater		Lakes		Standing open water and canals			High	6	Same habitat required +	High	0.33	High	0.33		
Oligotrophic alkalinity lake	Lake - Oligotrophic alkalinity lake	MG501	Freshwater		Lakes		Standing open water and canals			High	6	Same habitat required +	High	0.33	High	0.33		
Pond lake	Lake - Pond lake	MG501	Freshwater		Lakes		Standing open water and canals			High	6	Same habitat required +	High	0.33	High	0.33		
Ponds (priority habitat)	Lake - Ponds (priority habitat)	MG5108	Freshwater		Lakes		Standing open water and canals			High	6	Same habitat required +	Medium	0.67	Medium	0.67		
Reservoirs (priority habitat)	Lake - Reservoirs (priority habitat)	MG501	Freshwater		Lakes		Standing open water and canals	r1b		High	6	Same habitat required +	High	0.33	Medium	0.67		
Reservoir	Lake - Reservoir	MG501	Freshwater		Lakes		Standing open water and canals			Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Medium	0.67	Medium	0.67		
Temporary lakes ponds and pools	Lake - Temporary lakes ponds and pools (MG7D)	MG9113	Freshwater		Lakes		Standing open water and canals	r1c		High	6	Same habitat required +	Medium	0.67	Medium	0.67		
Coastal saltmarsh	Saltmarsh - Coastal saltmarsh	s1	Terrestrial	Saltmarsh - vegetated zone			Saltmarsh		**Coastalmarsh greatmarsh**	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	Medium	0.67		
Coastal sand dunes	Saltmarsh - Coastal sand dunes	s2a	Freshwater	Saltmarsh - vegetated zone			Saltmarsh Sediment			High	6	Same habitat required +	Very High	0.1	Medium	0.67		
Coastal shingle vegetation	Saltmarsh - Coastal shingle vegetation	s2b	Terrestrial	Saltmarsh - vegetated zone			Saltmarsh Sediment	s1c		High	6	Same habitat required +	Very High	0.1	Medium	0.67		
Rocky foreshore	Saltmarsh - Rocky foreshore	s3	Terrestrial	Saltmarsh - vegetated zone			Rocky Shore		Rocky foreshore	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-	Including low value tall herb	
Tall herbs	Saltmarsh - Tall herbs	s4	Terrestrial	Saltmarsh - vegetated zone			Saltmarsh Sediment		Ephemeral	Low	2	Same distinctiveness or better habitat required ?	Low	1	Medium	0.67		
Inland rock outcrop and scree habitats	Saltmarsh - Inland rock outcrop and scree habitats	s7a	Terrestrial	s	Saltmarsh - vegetated zone	s7	Inland rock	s7a	**Inland rock outcrop and scree habitats**	High	6	Same habitat required +	High	0.33	Low	1		
Limestone pavement	Saltmarsh - Limestone pavement	s7c	Terrestrial	Saltmarsh - vegetated zone			Inland rock	s7c	**Limestone pavement**	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	Medium	0.67		
Maritime cliff and slopes	Saltmarsh - Maritime cliff and slopes	s6a	Terrestrial	Saltmarsh - vegetated zone	s6	Maritime cliff and slopes	Saltmarsh Rock		**Maritime cliff and slopes**	High	6	Same habitat required +	High	0.33	Medium	0.67		
Other inland rock and scree	Saltmarsh - Other inland rock and scree	s7d	Terrestrial	Saltmarsh - vegetated zone			Inland rock	s7d	Other inland rock and scree	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Medium	0.67	Medium	0.67		
Allotments	Urban - Allotments	u1d	Urban		Urban		Built up areas and gardens		Allotments	Low	2	Compensation Not Required	Low	1	Low	-		
Artificial unvegetated, unsealed surface	Urban - Artificial unvegetated, unsealed surface	u1c	Urban		Urban		Built up areas and gardens	u1c	Artificial unvegetated, unsealed surface	Low	2	Compensation Not Required	Low	1	Low	-		
Bioswale	Urban - Bioswale	i1	Terrestrial		Urban		Built up areas and gardens		Bioswale	Low	2	Same distinctiveness or better habitat required ?	Medium	0.67	Low	1		
Intensive green roof	Urban - Intensive green roof	MG5108	Terrestrial		Urban		Built up areas and gardens			Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Built linear features	Urban - Built linear features	u14	Terrestrial		Urban		Built up areas and gardens	u14	Built linear features	V.Low	0	Compensation Not Required	Low	1	Low	-		
Developed land; sealed surface	Urban - Developed land; sealed surface	u1b	Urban		Urban		Built up areas and gardens		Developed land; sealed surface	Low	2	Same broad habitat or a higher distinctiveness habitat required (2)	Medium	0.67	Low	1		
Developed land; sealed surface	Urban - Developed land; sealed surface	u1b	Urban		Urban		Built up areas and gardens	u1b	Developed land; sealed surface	Low	2	Compensation Not Required	Low	1	Medium	0.67		
Other green roof	Urban - Other green roof	MG5108	Terrestrial		Urban		Built up areas and gardens			Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Other green walls (living walls)	Urban - Other green walls (living walls)	u12	Terrestrial		Urban		Built up areas and gardens		Facade (living) green wall	Low	2	Same distinctiveness or better habitat required ?	Medium	0.67	Low	1		
Ground based green wall	Urban - Ground based green wall	u12	Terrestrial		Urban		Built up areas and gardens		Ground based green wall	Low	2	Same distinctiveness or better habitat required ?	Medium	0.67	Low	1		
Ground level planters	Urban - Ground level planters	u12d	Terrestrial		Urban		Built up areas and gardens		Ground level planters	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Modularised green roof	Urban - Modularised green roof	MG5108	Terrestrial		Urban		Built up areas and gardens		Modularised green roof	Low	2	Same broad habitat or a higher distinctiveness habitat required (2)	Medium	0.67	Low	1		
Modularised green wall	Urban - Modularised green wall	u12	Terrestrial		Urban		Built up areas and gardens			Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Open Mosaic Habitats on previously developed land (priority habitat)	Urban - Open Mosaic Habitats on previously developed land	u14	Terrestrial	u	Urban	u1	Built up areas and gardens	u14	**Open Mosaic Habitats on Previously Developed Land**	High	6	Same habitat required +	Medium	0.67	Medium	0.67		
Bare ground	Urban - Bare ground	u1b	Terrestrial		Urban		Built up areas and gardens		Bare ground	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Actively worked sand pit quarry or open cast mine	Urban - Actively worked sand pit quarry or open cast mine	1100	Terrestrial		Urban		Built up areas and gardens		Sand pit quarry or open cast mine	Low	2	Same distinctiveness or better habitat required ?	Medium	0.67	Medium	0.67		
Sustainable drainage system	Urban - Sustainable drainage system	1100	Terrestrial		Urban		Built up areas and gardens		Sustainable urban drainage feature	Low	2	Same distinctiveness or better habitat required ?	Medium	0.67	Medium	0.67		
Urban tree planting	Urban - Urban tree planting	u1d	Urban		Urban		Built up areas and gardens		Ornamental garden	Low	2	Compensation Not Required	Low	1	Medium	0.67		
Vacant or derelict land	Urban - Vacant or derelict land	u9	Urban		Urban		Built up areas and gardens		Vacant or derelict land	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	1	Justify why not Open Mosaic Habitat	
Bare ground	Urban - Bare ground	MG9115	Urban		Urban		Built up areas and gardens		Bare ground	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	1	Justify why not Open Mosaic Habitat	
Vegetated garden	Urban - Vegetated garden	u1d	Urban		Urban		Built up areas and gardens		Vegetated garden	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Street tree	Urban - Street tree	MG9113	Urban		Urban		Street tree		Street tree	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	-		
Rural tree	Individual trees - Rural tree	MG9113	Individual trees		Individual trees					Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	-		
Blanket bog	Wetland - Blanket bog	f1a	Terrestrial		Wetland		Bog	f1a	**Blanket bog**	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	High	0.33		
Depressions on peat substrates (priority habitat)	Wetland - Depressions on peat substrates (priority habitat)	f1	Terrestrial	f	Wetland	f1	Bog		**Depressions on Peat substrates (PH196)**	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	High	0.33		
Fen (calcareous and lowland)	Wetland - Fen (calcareous and lowland)	f2a	Terrestrial		Wetland	f2	Fen marsh and swamp	f2a	**Lowland fens**	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.33	High	0.33		
Lowland raised bog	Wetland - Lowland raised bog	f1b	Terrestrial		Wetland		Bog	f1b	**Lowland raised bog**	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	High	0.33		
Oligotrophic marsh (MG10.1)	Wetland - Oligotrophic marsh (MG10.1)	MG9110	Terrestrial		Wetland		Fen marsh and swamp	f2	Oligotrophic Marsh (MG10.1)	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	High	0.33		
Purple moor grass and rush pastures (priority habitat)	Wetland - Purple moor grass and rush pastures	f2c	Terrestrial		Wetland		Fen marsh and swamp	f2c	**Purple moor grass and rush pastures**	V.High	8	Bespoke compensation likely to be required ✖	High	0.33	Medium	0.67		
Reedbeds	Wetland - Reedbeds	f2c	Terrestrial		Wetland		Fen marsh and swamp	f2c	**Reedbeds**	High	8	Same habitat required +	Medium	0.67	Medium	0.67		
Transition mires and quaking bogs (MG1/4D)	Wetland - Transition mires and quaking bogs (MG1/4D)	f2ab	Terrestrial		Wetland		Fen marsh and swamp		Wetland - Transition mires and quaking bogs (MG4D)	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	High	0.33		
Fallow	Woodland and forest - Fallow	h1	Terrestrial		Woodland and forest		Fallow		Fallow	Low	2	Same habitat required +	High	0.33	Low	1		
Lowland beech and yew woodland	Woodland and forest - Lowland beech and yew woodland	w1c	Terrestrial		Woodland and forest		Broadleaved mixed and yew woodland	w1c	**Lowland beech and yew woodland**	High	6	Same habitat required +	High	0.33	High	0.33		
Lowland mixed deciduous woodland	Woodland and forest - Lowland mixed deciduous woodland	w1f	Terrestrial		Woodland and forest		Broadleaved mixed and yew woodland	w1f	**Lowland mixed deciduous woodland**	High	6	Same habitat required +	High	0.33	High	0.33		
Native pine woodlands	Woodland and forest - Native pine woodlands	w1e	Terrestrial		Woodland and forest	w1e	Coniferous woodland	w1e	**Native pine woodlands**	High	6	Same habitat required +	High	0.33	High	0.33		
Other coniferous woodland	Woodland and forest - Other coniferous woodland	w1e	Terrestrial		Woodland and forest		Coniferous woodland	w1e	Other Scots Pine woodland	Low	2	Same distinctiveness or better habitat required ?	Low	1	Low	-		
Other broad-leaved woodland	Woodland and forest - Other broad-leaved woodland	w1h	Terrestrial		Woodland and forest		Broadleaved mixed and yew woodland	w1h	Other broad-leaved woodland	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Medium	0.67	Medium	0.67		
Other woodland: broadleaved	Woodland and forest - Other woodland: broadleaved	w1h	Terrestrial		Woodland and forest		Broadleaved mixed and yew woodland	w1h	Other broadleaved woodland	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Low	1	Low	-		
Other woodland: mixed	Woodland and forest - Other woodland: mixed	w1h	Terrestrial		Woodland and forest		Broadleaved mixed and yew woodland	w1h	Other mixed woodland	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Medium	0.67	Low	1		
Upland birchwoods	Woodland and forest - Upland birchwoods	w1h	Terrestrial		Woodland and forest		Broadleaved mixed and yew woodland	w1h	**Upland birchwoods**	High	6	Same habitat required +	Medium	0.67	Medium	0.67		
Upland mixed ashwoods	Woodland and forest - Upland mixed ashwoods	w1h	Terrestrial		Woodland and forest		Broadleaved mixed and yew woodland	w1h	**Upland mixed ashwoods**	High	6	Same habitat required +	High	0.33	High	0.33		
Wet woodland	Woodland and forest - Wet woodland	w1g	Terrestrial	w	Woodland and forest	w1	Broadleaved mixed and yew woodland	w1g	**Wet woodland**	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	High	0.33		
Wet woodland	Woodland and forest - Wet woodland	w1g	Terrestrial		Woodland and forest		Broadleaved mixed and yew woodland	w1g	**Wet woodland**	V.High	8	Bespoke compensation likely to be required ✖	Medium	0.67	Medium	0.67		
Wood pasture and parkland	Woodland and forest - Wood pasture and parkland	h5	Terrestrial		Woodland and forest		Other woodland		Wood pasture and parkland	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	High	0.33		
Ancient woodland	Woodland and forest - Ancient woodland	MG9113	Individual trees		Individual trees		Ancient tree			V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	High	0.33		
High energy littoral rock	Rocky shore - High energy littoral rock	A1.1	Intertidal	A1	Rocky shore		High energy littoral rock		High energy littoral rock	V.High	8	Bespoke compensation likely to be required ✖	High	0.33	Medium	0.67		
High energy littoral rock - on peat, clay or chalk	Rocky shore - High energy littoral rock - on peat, clay or chalk	A1.1	Intertidal	A1	Rocky shore		High energy littoral rock - on bedrock including chalk, peat or clay			V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	Medium	0.67		
Moderate energy littoral rock	Rocky shore - Moderate energy littoral rock	A1.2	Intertidal	A1	Rocky shore		Moderate energy littoral rock		Moderate energy littoral rock	High	6	Same habitat required +	High	0.33	Medium	0.67		
Moderate energy littoral rock - on peat, clay or chalk	Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	A1.2 FCC	Intertidal	A1	Rocky shore		Moderate energy littoral rock - on bedrock including chalk, peat or clay			V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	Medium	0.67		
Low energy littoral rock	Rocky shore - Low energy littoral rock	A1.3	Intertidal	A1	Rocky shore		Low energy littoral rock		Low energy littoral rock	V.High	8	Bespoke compensation likely to be required ✖	High	0.33	Medium	0.67		
Low energy littoral rock - on peat, clay or chalk	Rocky shore - Low energy littoral rock - on peat, clay or chalk	A1.3 FCC	Intertidal	A1	Rocky shore		Low energy littoral rock - on bedrock including chalk, peat or clay			V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	Medium	0.67		
Features of littoral rock	Rocky shore - Features of littoral rock	A1.4	Intertidal	A1	Rocky shore		Features of littoral rock		Features of littoral rock	High	6	Same habitat required +	High	0.33	Medium	0.67		
Features of littoral rock - on peat, clay or chalk	Rocky shore - Features of littoral rock - on peat, clay or chalk	A1.4 FCC	Intertidal	A1	Rocky shore		Features of littoral rock - on bedrock including chalk, peat or clay			V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	Medium	0.67		
Saltworks and saline swellings	Coastal saltmarsh - Saltworks and saline swellings	A2.6	Intertidal	A2	Coastal saltmarsh		Coastal saltmarsh and saline swellings		Coastal saltmarsh and saline swellings	High	6	Same habitat required +	High	0.33	Medium	0.67		
Artificial saltworks and saline swellings	Coastal saltmarsh - Artificial saltworks and saline swellings	ART_A2.6			Coastal saltmarsh		Artificial saltworks and saline swellings		Artificial saltworks and saline swellings	Low	2	Same distinctiveness or better habitat required ?	High	0.33	Medium	0.67		
Lagoon	Coastal saltmarsh - Lagoon	A2.7	Intertidal	A2	Coastal saltmarsh		Coastal saltmarsh and saline swellings		Coastal saltmarsh and saline swellings	High	6	Same habitat required +	High	0.33	Medium	0.67		
Lateral mudflat	Intertidal sediment - Lateral mudflat	A2.1	Intertidal	A2	Intertidal sediment		Lateral mud		Lateral mud	High	6	Same habitat required +	High	0.33	Medium	0.67		
Lateral sandy sediment	Intertidal sediment - Lateral sandy sediment	A2.2	Intertidal	A2	Intertidal sediment		Lateral sand		Lateral sand	High	6	Same habitat required +	High	0.33	Medium	0.67		
Lateral mixed sediments	Intertidal sediment - Lateral mixed sediments	A2.3	Intertidal	A2	Intertidal sediment		Lateral mixed sediments		Lateral mixed sediments	V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	High	0.33		
Lateral seagrass	Intertidal sediment - Lateral seagrass	A2.4	Intertidal	A2	Intertidal sediment		Lateral seagrass		Lateral seagrass (formerly for aquatic angiosperms)	High	6	Same habitat required +	High	0.33	High	0.33		
Lateral seagrass on peat, clay or chalk	Intertidal sediment - Lateral seagrass on peat, clay or chalk	A2.4 FCC	Intertidal	A2	Intertidal sediment		Lateral seagrass - on peat, clay or chalk			V.High	8	Bespoke compensation likely to be required ✖	Very High	0.1	High	0.33		
Lateral biogenic reefs - Mussels	Intertidal sediment - Lateral biogenic reefs - Mussels	A2.7.M	Intertidal	A2	Intertidal sediment		Lateral biogenic reefs		Lateral biogenic reefs - Mussels	High	6	Same habitat required +	High	0.33	Medium	0.67		
Lateral biogenic reefs - Sabellaria	Intertidal sediment - Lateral biogenic reefs - Sabellaria	A2.7.S	Intertidal	A2	Intertidal sediment		Lateral biogenic reefs - Sabellaria		Lateral biogenic reefs - Sabellaria	High	6	Same habitat required +	High	0.33	Medium	0.67		
Features of littoral sediment	Intertidal sediment - Features of littoral sediment	A2.8	Intertidal	A2	Intertidal sediment		Features of littoral sediment		Features of littoral sediment	High	6	Same habitat required +	High	0.33	Medium	0.67		
Artificial littoral sediment	Intertidal sediment - Artificial littoral sediment	ART_A2.1	Intertidal	A2	Intertidal sediment		Artificial littoral mud and sediment		Artificial littoral mud	Low	2	Same distinctiveness or better habitat required ?	Medium	0.67	Medium	0.67		
Artificial littoral mud	Intertidal sediment - Artificial littoral mud	ART_A2.1			Intertidal sediment		Artificial littoral mud		Artificial littoral mud	Low	2	Same distinctiveness or better habitat required ?	High	0.33	Medium	0.67		
Artificial littoral mud (priority habitat)	Intertidal sediment - Artificial littoral mud (priority habitat)	ART_A2.1 (U1/H1/E1)			Intertidal sediment		Artificial littoral mud		Artificial littoral mud	Low	2	Same distinctiveness or better habitat required ?	Medium	0.67	Medium	0.67		
Artificial littoral mud - Saltmarsh	Intertidal sediment - Artificial littoral mud - Saltmarsh	ART_A2.1	Intertidal	A2	Intertidal sediment		Artificial littoral mud		Artificial littoral mud - Saltmarsh	Low	2	Same distinctiveness or better habitat required ?	High	0.33	Medium	0.67		
Artificial littoral mud - Seagrass	Intertidal sediment - Artificial littoral mud - Seagrass	ART_A2.1	Intertidal	A2	Intertidal sediment		Artificial littoral mud		Artificial littoral mud - Seagrass	Low	2	Same distinctiveness or better habitat required ?	High	0.33	High	0.33		
Artificial littoral mud - Sabellaria	Intertidal sediment - Artificial littoral mud - Sabellaria	ART_A2.1	Intertidal	A2	Intertidal sediment		Artificial littoral mud		Artificial littoral mud - Sabellaria	Low	2	Same distinctiveness or better habitat required ?	High	0.33	Medium	0.67		
Artificial littoral mud - Saltmarsh	Intertidal sediment - Artificial littoral mud - Saltmarsh	ART_A2.1	Intertidal	A2	Intertidal sediment		Artificial littoral mud		Artificial littoral mud - Saltmarsh	Low	2	Same distinctiveness or better habitat required ?	High	0.33	Medium	0.67		
Artificial littoral mud - Seagrass	Intertidal sediment - Artificial littoral mud - Seagrass	ART_A2.1	Intertidal	A2	Intertidal sediment		Artificial littoral mud		Artificial littoral mud - Seagrass	Low	2	Same distinctiveness or better habitat required ?	High	0.33	High	0.33		
Artificial littoral mud - Sabellaria	Intertidal sediment - Artificial littoral mud - Sabellaria	ART_A2.1	Intertidal	A2	Intertidal sediment		Artificial littoral mud		Artificial littoral mud - Sabellaria	Low	2	Same distinctiveness or better habitat required ?	High	0.33	Medium	0.67		
Artificial littoral sand	Intertidal sediment - Artificial littoral sand	A2.2	Intertidal	A2	Intertidal sediment		Artificial littoral sand		Artificial littoral sand	Low	2	Same distinctiveness or better habitat required ?	Medium	0.67	Medium	0.67		
Artificial littoral muddy sand	Intertidal sediment - Artificial littoral muddy sand	A2.3	Intertidal	A2	Intertidal sediment		Artificial littoral mixed sediments		Artificial littoral mixed sediments	Low	2	Same distinctiveness or better habitat required ?	High	0.33	Medium	0.67		
Artificial features of hard structures	Intertidal hard structures - Artificial hard structures	ART_A1.4	Intertidal		Intertidal hard structures		Artificial hard structures		Artificial hard structures	Low	2	Same distinctiveness or better habitat required ?	Medium	0.67	Medium	0.67		
Artificial features of hard structures	Intertidal hard structures - Artificial features of hard structures	ART_A1.4	Intertidal		Intertidal hard structures		Artificial hard structures		Artificial hard structures	Low	2	Same distinctiveness or better habitat required ?	Medium	0.67	Medium	0.67		
Artificial hard structures with integrated greening of grey infrastructure (IGGI)	Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IGGI)	ART_A1_IGGI	Intertidal		Intertidal hard structures		Artificial hard structures with Integrated Greening of Grey Infrastructure (IGGI)		Artificial hard structures with Integrated Greening of Grey Infrastructure (IGGI)	Medium	4	Same broad habitat or a higher distinctiveness habitat required (2)	Medium	0.67	Medium	0.67		
Watercourse footprint	Watercourse footprint - Watercourse footprint	MEDIUM		Watercourse footprint		Watercourse footprint			Watercourse footprint	V.low	0	Compensation Not Required	Medium	0.67	Very High	0.1	Area footprint of

Return To Start

All Habitats

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Habitat Description	Group	Distinctiveness	Trading Rtime	Existing area baseline on site	Existing units baseline on site	Existing area retained on site	Existing units retained on site	Existing area lost on-site	Existing units lost baseline on-site	Proposed habitat creation on-site post development	Proposed habitat enhancement on-site post development	Proposed habitat retainment on-site post development	Total proposed habitat on-site post development	Total proposed units on-site post development	Net area change on-site	Net unit change on-site	Existing area off-site	Existing units off-site	Retained area off-site	Retained units off-site	Proposed habitat creation off-site	Proposed units creation off-site	Proposed habitat enhancement off-site	Proposed units enhancement off-site	Total proposed area off-site	Total proposed units off-site	Off-site net area change	Off-site net unit change	Overall area change	Overall unit change
Cropland - Arable field margin (planted or natural)	Cropland	Medium	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grassland - Semi-improved grassland (neutral)	Grassland	Medium	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grassland - Amenity grassland (species rich)	Grassland	Medium	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grassland - Amenity grassland (other)	Grassland	Low	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grassland - Amenity grassland (mown)	Grassland	Low	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grassland - Amenity grassland (other)	Grassland	Low	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grassland - Grass verge	Grassland	Low	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grassland - Grass verge (species rich)	Grassland	Medium	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grassland - Grass verge

Return to start

Risk

Habitat Description	Technical Difficulty Creation	Multiplier	Technical Difficulty Enhancement	Multiplier
Coastal lagoons - Coastal lagoons	Medium	0.67	Medium	0.67
Coastal saltmarsh - Saltmarshes and saline reedbeds	High	0.33	Medium	0.67
Cropland - Arable field margins cultivated annually	Low	1	Low	1
Cropland - Arable field margins game bird mix	Low	1	Low	1
Cropland - Arable field margins pollen and nectar	Low	1	Low	1
Cropland - Arable field margins tussocky	Low	1	Low	1
Cropland - Cereal crops	Low	1	Low	1
Cropland - Winter stubble	Low	1	Low	1
Cropland - Horticulture	Low	1	Low	1
Cropland - Intensive orchards	Low	1	Low	1
Cropland - Non-cereal crops	Low	1	Low	1
Cropland - Temporary grass and clover leys	Low	1	Low	1
Grassland - Traditional orchards	Low	1	Medium	0.67
Grassland - Bracken	Low	1	Low	1
Grassland - Floodplain wetland mosaic and CFGM	High	0.33	Medium	0.67
Grassland - Lowland calcareous grassland	High	0.33	High	0.33
Grassland - Lowland dry acid grassland	High	0.33	High	0.33
Grassland - Lowland meadows	High	0.33	Medium	0.67
Grassland - Modified grassland	Low	1	Low	1
Grassland - Other lowland acid grassland	Low	1	Low	1
Grassland - Other neutral grassland	Low	1	Low	1
Grassland - Tall herb communities (H6430)	High	0.33	High	0.33
Grassland - Upland acid grassland	Low	1	Low	1
Grassland - Upland calcareous grassland	High	0.33	High	0.33
Grassland - Upland hay meadows	High	0.33	Medium	0.67
Heathland and shrub - Blackthorn scrub	Low	1	Low	1
Heathland and shrub - Bramble scrub	Low	1	Low	1
Heathland and shrub - Gorse scrub	Low	1	Low	1
Heathland and shrub - Hawthorn scrub	Low	1	Low	1
Heathland and shrub - Hazel scrub	Medium	0.67	Low	1
Heathland and shrub - Willow scrub	Medium	0.67	Low	1
Heathland and shrub - Lowland heathland	High	0.33	Medium	0.67
Heathland and shrub - Mixed scrub	Low	1	Low	1
Heathland and shrub - Mountain heaths and willow scrub	High	0.33	High	0.33
Heathland and shrub - Rhododendron scrub	Low	1	Low	1
Heathland and shrub - Dunes with sea buckthorn (H2160)	Medium	0.67	Low	1
Heathland and shrub - Other sea buckthorn scrub	Low	1	Low	1
Heathland and shrub - Upland heathland	Medium	0.67	Medium	0.67
Intertidal sediment - Artificial littoral biogenic reefs	High	0.33	Medium	0.67
Intertidal sediment - Artificial littoral coarse sediment	Medium	0.67	Medium	0.67
Intertidal sediment - Artificial littoral mixed sediments	High	0.33	Medium	0.67
Intertidal sediment - Artificial littoral muddy sand	High	0.33	Medium	0.67
Intertidal sediment - Artificial littoral seagrass	High	0.33	High	0.33
Intertidal sediment - Features of littoral sediment	High	0.33	Medium	0.67
Intertidal sediment - Littoral biogenic reefs - Sabellaria	High	0.33	Medium	0.67
Intertidal sediment - Littoral coarse sediment	Medium	0.67	Medium	0.67
Intertidal sediment - Littoral mixed sediments	High	0.33	Medium	0.67
Intertidal sediment - Littoral mud	High	0.33	Medium	0.67
Intertidal sediment - Littoral seagrass	High	0.33	High	0.33
Intertidal sediment - Littoral seagrass on peat, clay or chalk	Very High	0.1	High	0.33
Lakes - Aquifer fed naturally fluctuating water bodies	Very High	0.1	High	0.33
Lakes - Ornamental lake or pond	Low	1	High	0.33
Lakes - High alkalinity lakes	High	0.33	High	0.33
Lakes - Low alkalinity lakes	High	0.33	Medium	0.67
Lakes - Marl lakes	High	0.33	High	0.33
Lakes - Moderate alkalinity lakes	High	0.33	High	0.33
Lakes - Peat lakes	High	0.33	High	0.33
Lakes - Ponds (non-priority habitat)	Low	1	Medium	0.67
Lakes - Ponds (priority habitat)	Medium	0.67	Medium	0.67
Lakes - Reservoirs	Medium	0.67	Medium	0.67
Lakes - Temporary lakes ponds and pools (H3170)	Medium	0.67	Medium	0.67
Rocky shore - Features of littoral rock	High	0.33	Medium	0.67
Rocky shore - Features of littoral rock - on peat, clay or chalk	Very High	0.1	Medium	0.67
Rocky shore - High energy littoral rock	High	0.33	Medium	0.67
Rocky shore - High energy littoral rock - on peat, clay or chalk	Very High	0.1	Medium	0.67
Rocky shore - Low energy littoral rock	High	0.33	Medium	0.67
Rocky shore - Low energy littoral rock - on peat, clay or chalk	Very High	0.1	Medium	0.67
Rocky shore - Moderate energy littoral rock	High	0.33	Medium	0.67
Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	Very High	0.1	Medium	0.67
Sparsely vegetated land - Calaminarian grasslands	Very High	0.1	Medium	0.67
Sparsely vegetated land - Coastal sand dunes	Very High	0.1	Medium	0.67
Sparsely vegetated land - Coastal vegetated shingle	Very High	0.1	Medium	0.67
Sparsely vegetated land - Inland rock outcrop and scree habitats	High	0.33	Low	1
Sparsely vegetated land - Limestone pavement	Very High	0.1	Medium	0.67
Sparsely vegetated land - Maritime cliff and slopes	High	0.33	Medium	0.67
Sparsely vegetated land - Other inland rock and scree	Medium	0.67	Medium	0.67
Sparsely vegetated land - Ruderal/Ephemeral	Low	1	Medium	0.67
Sparsely vegetated land - Tall forbs	Low	1	Medium	0.67
Urban - Vacant or derelict land	Low	1	Low	1
Urban - Bare ground	Low	1	Low	1
Urban - Allotments	Low	1	Low	1
Urban - Artificial unvegetated, unsealed surface	Low	1	Low	1
Urban - Bioswale	Medium	0.67	Low	1
Urban - Intensive green roof	Low	1	Low	1
Urban - Built linear features	Low	1	Low	1
Urban - Cemeteries and churchyards	Medium	0.67	Low	1
Urban - Developed land; sealed surface	Low	1	Medium	0.67
Urban - Other green roof	Low	1	Low	1
Urban - Facade-bound green wall	Medium	0.67	Medium	0.67
Urban - Ground based green wall	Medium	0.67	Medium	0.67
Urban - Ground level planters	Low	1	Low	1
Urban - Biodiverse green roof	Medium	0.67	Medium	0.67
Urban - Introduced shrub	Low	1	Low	1
Urban - Open mosaic habitats on previously developed land	Medium	0.67	Medium	0.67
Urban - Rain garden	Low	1	Low	1
Urban - Actively worked sand pit quarry or open cast mine	Medium	0.67	Medium	0.67
Individual trees - Urban tree	Low	1	Low	1
Urban - Sustainable drainage system	Medium	0.67	Medium	0.67
Urban - Unvegetated garden	Low	1	Low	1
Urban - Vegetated garden	Low	1	Low	1
Wetland - Blanket bog	Very High	0.1	High	0.33
Wetland - Depressions on peat substrates (H7150)	Very High	0.1	High	0.33
Wetland - Fens (upland and lowland)	High	0.33	High	0.33
Wetland - Lowland raised bog	Very High	0.1	High	0.33

Spatial multipliers

Strategic Significance		
Description	Strategic significance	Multiplier
Formally identified in local strategy	High strategic significance	1.15
Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1

Difficulty

Category	Value
Low	1
Medium	0.67
High	0.33
Very High	0.1

Spatial risk

Category	Multiplier
Compensation inside LPA boundary or NCA of impact site	1
Compensation outside LPA or NCA of impact site, but in neighbouring LPA or NCA	0.75
Compensation outside LPA or NCA of impact site and neighbouring LPA or NCA	0.5
This metric is being used by an off-site provider	1
Intertidal habitats - Compensation inside Marine Plan Area of impact site	1
Intertidal habitats - Compensation outside, same Marine Plan Area but in neighbouring Marine Plan Area	0.75
Intertidal habitats - Compensation outside, Marine Plan Area of impact site and beyond neighbouring Marine Plan Area	0.5

Urban trees

Tree size	Diameter (m)	RPA Radius (m)	RPA (ha)
Small	0.3	3.6	0.0041
Medium	0.9	10.8	0.0366
Large	1.3	15.6	0.0765

Wetland - Oceanic valley mire[1] (D2.1)	Very High	0.1	High	0.33
Wetland - Purple moor grass and rush pastures	High	0.33	High	0.33
Wetland - Reedbeds	Medium	0.67	Medium	0.67
Wetland - Transition mires and quaking bogs (H7140)	Very High	0.1	High	0.33
Woodland and forest - Felled	High	0.33	Low	1
Woodland and forest - Lowland beech and yew woodland	High	0.33	High	0.33
Woodland and forest - Lowland mixed deciduous woodland	High	0.33	High	0.33
Woodland and forest - Native pine woodlands	High	0.33	High	0.33
Woodland and forest - Other coniferous woodland	Low	1	Low	1
Woodland and forest - Other Scot's pine woodland	Medium	0.67	Medium	0.67
Woodland and forest - Other woodland; broadleaved	Low	1	Low	1
Woodland and forest - Other woodland; mixed	Low	1	Low	1
Woodland and forest - Upland birchwoods	Medium	0.67	Medium	0.67
Woodland and forest - Upland mixed ashwoods	High	0.33	High	0.33
Woodland and forest - Upland oakwood	High	0.33	High	0.33
Woodland and forest - Wet woodland	Medium	0.67	Medium	0.67
Woodland and forest - Wood-pasture and parkland	Very High	0.1	High	0.33
Intertidal sediment - Littoral sand	Medium	0.67	Medium	0.67
Intertidal sediment - Littoral muddy sand	High	0.33	Medium	0.67
Intertidal hard structures - Artificial hard structures	Medium	0.67	Medium	0.67
Intertidal hard structures - Artificial features of hard structures	Medium	0.67	Medium	0.67
Intertidal hard structures - Artificial hard structures with integrated greening of grey infr	Medium	0.67	Medium	0.67
Coastal saltmarsh - Artificial saltmarshes and saline reedbeds	High	0.33	Medium	0.67
Intertidal sediment - Littoral biogenic reefs - Mussels	High	0.33	Medium	0.67
Intertidal sediment - Artificial littoral mud	High	0.33	Medium	0.67
Intertidal sediment - Artificial littoral sand	Medium	0.67	Medium	0.67
Watercourse footprint - Watercourse footprint	Low	1	Low	1
Individual trees - Rural tree	Low	1	Low	1

Return to start

Temporal multipliers

Year	% of original unit	Time to target Multiplier
0	100	1.000
1	96.5	0.965
2	93.1225	0.931
3	89.8632125	0.899
4	86.71800006	0.867
5	83.68287006	0.837
6	80.75396961	0.808
7	77.92758067	0.779
8	75.20011535	0.752
9	72.56811131	0.726
10	70.02822742	0.700
11	67.57723946	0.676
12	65.21203607	0.652
13	62.92961481	0.629
14	60.72707829	0.607
15	58.60163055	0.586
16	56.55057348	0.566
17	54.57130341	0.546
18	52.66130779	0.527
19	50.81816202	0.508
20	49.03952635	0.490
21	47.32314293	0.473
22	45.66683292	0.457
23	44.06849377	0.441
24	42.52609649	0.425
25	41.03768311	0.410
26	39.6013642	0.396
27	38.21531646	0.382
28	36.87778038	0.369
29	35.58705807	0.356
30	34.34151104	0.343
31	33.13955815	0.331
30+	31.97967361	0.320
Not Possible	N/A	N/A

Habitat banking dropdown list

Year
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

Creation

Habitat Description	Good	Fairly Good	Moderate	Fairly Poor	Poor	Condition Assessment N/A	N/A - Other
Cropland - Arable field margins cultivated annually	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Arable field margins game bird mix	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Arable field margins pollen and nectar	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Arable field margins tussocky	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Cereal crops	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Winter stubble	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Horticulture	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Intensive orchards	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Non-cereal crops	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Temporary grass and clover leys	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Grassland - Traditional orchards	30	25	20	10	5	Not Possible	Not Possible
Grassland - Bracken	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Grassland - Floodplain wetland mosaic and CFGM	20	15	10	8	5	Not Possible	Not Possible
Grassland - Lowland calcareous grassland	20	15	10	8	5	Not Possible	Not Possible
Grassland - Lowland dry acid grassland	30+	25	20	15	10	Not Possible	Not Possible
Grassland - Lowland meadows	15	12	10	8	5	Not Possible	Not Possible
Grassland - Modified grassland	7	5	4	2	1	Not Possible	Not Possible
Grassland - Other lowland acid grassland	15	12	10	5	1	Not Possible	Not Possible
Grassland - Other neutral grassland	10	7	5	3	2	Not Possible	Not Possible
Grassland - Tall herb communities (H6430)	30	25	20	15	10	Not Possible	Not Possible
Grassland - Upland acid grassland	15	12	10	5	1	Not Possible	Not Possible
Grassland - Upland calcareous grassland	25	20	15	12	10	Not Possible	Not Possible
Grassland - Upland hay meadows	20	18	15	12	10	Not Possible	Not Possible
Heathland and shrub - Blackthorn scrub	10	7	5	3	1	Not Possible	Not Possible
Heathland and shrub - Bramble scrub	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Heathland and shrub - Gorse scrub	10	7	5	3	1	Not Possible	Not Possible
Heathland and shrub - Hawthorn scrub	10	7	5	3	1	Not Possible	Not Possible
Heathland and shrub - Hazel scrub	15	12	10	7	5	Not Possible	Not Possible
Heathland and shrub - Willow scrub	15	12	10	7	5	Not Possible	Not Possible
Heathland and shrub - Lowland heathland	30+	25	20	15	10	Not Possible	Not Possible
Heathland and shrub - Mixed scrub	10	7	5	3	1	Not Possible	Not Possible
Heathland and shrub - Mountain heaths and willow scrub	30+	30+	25	23	15	Not Possible	Not Possible
Heathland and shrub - Rhododendron scrub	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Heathland and shrub - Dunes with sea buckthorn (H2160)	10	7	5	3	1	Not Possible	Not Possible
Heathland and shrub - Other sea buckthorn scrub	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Heathland and shrub - Upland heathland	30	25	20	15	10	Not Possible	Not Possible
Lakes - Aquifer fed naturally fluctuating water bodies	30	20	15	10	1	Not Possible	Not Possible
Lakes - High alkalinity lakes	30	20	10	7	5	Not Possible	Not Possible
Lakes - Low alkalinity lakes	30	20	10	7	5	Not Possible	Not Possible
Lakes - Marl lakes	30	20	10	7	5	Not Possible	Not Possible
Lakes - Moderate alkalinity lakes	30	20	10	7	5	Not Possible	Not Possible
Lakes - Peat lakes	30	20	10	7	5	Not Possible	Not Possible
Lakes - Ponds (priority habitat)	5	4	3	2	1	Not Possible	Not Possible
Lakes - Ponds (non-priority habitat)	5	4	3	2	1	Not Possible	Not Possible
Lakes - Reservoirs	10	7	5	3	1	Not Possible	Not Possible
Lakes - Temporary lakes ponds and pools (H3170)	5	4	3	2	1	Not Possible	Not Possible
Sparsely vegetated land - Calaminarian grasslands	10	7	5	3	2	Not Possible	Not Possible
Sparsely vegetated land - Coastal sand dunes	20	15	10	7	5	Not Possible	Not Possible
Sparsely vegetated land - Coastal vegetated shingle	20	15	10	7	5	Not Possible	Not Possible
Sparsely vegetated land - Ruderal/Ephemeral	5	4	3	2	1	Not Possible	Not Possible
Sparsely vegetated land - Tall forbs	5	4	3	2	1	Not Possible	Not Possible
Sparsely vegetated land - Inland rock outcrop and scree habitats	30+	25	20	15	10	Not Possible	Not Possible
Sparsely vegetated land - Limestone pavement	30+	30+	30+	30+	30+	Not Possible	Not Possible
Sparsely vegetated land - Maritime cliff and slopes	20	15	10	7	5	Not Possible	Not Possible
Sparsely vegetated land - Other inland rock and scree	20	15	10	7	5	Not Possible	Not Possible
Urban - Allotments	1	1	1	1	1	Not Possible	Not Possible
Lakes - Ornamental lake or pond	5	4	3	2	1	Not Possible	Not Possible
Urban - Artificial unvegetated, unsealed surface	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	0
Urban - Bioswale	3	2	1	1	1	Not Possible	Not Possible

21	Urban - Intensive green roof	5	4	3	2	1	Not Possible	Not Possible
22	Urban - Built linear features	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	0
23	Urban - Cemeteries and churchyards	20	17	15	12	10	Not Possible	Not Possible
24	Urban - Developed land; sealed surface	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	0
25	Urban - Other green roof	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
26	Urban - Facade-bound green wall	5	4	3	2	1	Not Possible	Not Possible
27	Urban - Ground based green wall	5	4	3	2	1	Not Possible	Not Possible
28	Urban - Ground level planters	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
29	Urban - Biodiverse green roof	10	8	5	3	1	Not Possible	Not Possible
30	Urban - Introduced shrub	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
30+	Urban - Open mosaic habitats on previously developed land	10	7	4	2	0	Not Possible	Not Possible
	Urban - Rain garden	5	4	3	2	1	Not Possible	Not Possible
	Urban - Actively worked sand pit quarry or open cast mine	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
	Individual trees - Urban tree	30+	30+	27	19	10	Not Possible	Not Possible
	Urban - Sustainable drainage system	5	4	3	2	1	Not Possible	Not Possible
	Urban - Unvegetated garden	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	0
	Urban - Vacant or derelict land	5	4	3	2	1	Not Possible	Not Possible
	Urban - Bare ground	5	4	3	2	1	Not Possible	Not Possible
	Urban - Vegetated garden	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
	Wetland - Blanket bog	30+	30+	30+	30+	30+	Not Possible	Not Possible
	Wetland - Depressions on peat substrates (H7150)	30+	30+	30	25	15	Not Possible	Not Possible
	Wetland - Fens (upland and lowland)	30	25	20	15	10	Not Possible	Not Possible
	Wetland - Lowland raised bog	30+	30+	30	20	15	Not Possible	Not Possible
	Wetland - Oceanic valley mire[1] (D2.1)	30+	30+	30	20	15	Not Possible	Not Possible
	Wetland - Purple moor grass and rush pastures	30	25	20	15	10	Not Possible	Not Possible
	Wetland - Reedbeds	12	10	7	5	3	Not Possible	Not Possible
	Wetland - Transition mires and quaking bogs (H7140)	30+	30+	30	25	15	Not Possible	Not Possible
	Woodland and forest - Felled	30+	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
	Woodland and forest - Lowland beech and yew woodland	30+	30+	30+	25	10	Not Possible	Not Possible
	Woodland and forest - Lowland mixed deciduous woodland	30+	30+	30+	25	10	Not Possible	Not Possible
	Woodland and forest - Native pine woodlands	30+	30+	30+	25	10	Not Possible	Not Possible
	Woodland and forest - Other coniferous woodland	30+	30+	30	10	5	Not Possible	Not Possible
	Woodland and forest - Other Scot's pine woodland	30+	30+	30+	25	10	Not Possible	Not Possible
	Woodland and forest - Other woodland; broadleaved	30+	25	15	7	5	Not Possible	Not Possible
	Woodland and forest - Other woodland; mixed	30+	30+	30	10	5	Not Possible	Not Possible
	Woodland and forest - Upland birchwoods	30+	30	25	20	10	Not Possible	Not Possible
	Woodland and forest - Upland mixed ashwoods	30+	30+	30+	25	10	Not Possible	Not Possible
	Woodland and forest - Upland oakwood	30+	30+	30+	25	10	Not Possible	Not Possible
	Woodland and forest - Wet woodland	30+	30	15	10	5	Not Possible	Not Possible
	Woodland and forest - Wood-pasture and parkland	30+	30+	30+	25	10	Not Possible	Not Possible
	Coastal lagoons - Coastal lagoons	10	8	5	3	1	Not Possible	Not Possible
	Rocky shore - High energy littoral rock	10	7	4	2	1	Not Possible	Not Possible
	Rocky shore - High energy littoral rock - on peat, clay or chalk	30+	30+	30+	30+	30+	Not Possible	Not Possible
	Rocky shore - Moderate energy littoral rock	13	8	4	2	1	Not Possible	Not Possible
	Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	30+	30+	30+	30+	30+	Not Possible	Not Possible
	Rocky shore - Low energy littoral rock	15	10	5	1	1	Not Possible	Not Possible
	Rocky shore - Low energy littoral rock - on peat, clay or chalk	30+	30+	30+	30+	30+	Not Possible	Not Possible
	Rocky shore - Features of littoral rock	13	8	4	2	1	Not Possible	Not Possible
	Rocky shore - Features of littoral rock - on peat, clay or chalk	30+	30+	30+	30+	30+	Not Possible	Not Possible
	Intertidal sediment - Littoral coarse sediment	3	2	1	1	1	Not Possible	Not Possible
	Intertidal sediment - Littoral mud	6	4	3	2	1	Not Possible	Not Possible
	Intertidal sediment - Littoral mixed sediments	5	4	3	2	1	Not Possible	Not Possible
	Coastal saltmarsh - Saltmarshes and saline reedbeds	15	10	7	3	1	Not Possible	Not Possible
	Coastal saltmarsh - Artificial saltmarshes and saline reedbeds	15	10	7	3	1	Not Possible	Not Possible
	Intertidal sediment - Littoral seagrass	20	15	10	5	2	Not Possible	Not Possible
	Intertidal sediment - Littoral seagrass on peat, clay or chalk	30+	30+	30+	30+	30+	Not Possible	Not Possible
	Intertidal sediment - Littoral biogenic reefs - Mussels	15	10	5	3	3	Not Possible	Not Possible
	Intertidal sediment - Littoral biogenic reefs - Sabellaria	15	10	5	3	3	Not Possible	Not Possible
	Intertidal sediment - Features of littoral sediment	10	7	5	3	3	Not Possible	Not Possible
	Intertidal sediment - Artificial littoral coarse sediment	3	2	1	1	1	Not Possible	Not Possible
	Intertidal sediment - Artificial littoral mud	6	4	3	2	1	Not Possible	Not Possible
	Intertidal sediment - Artificial littoral sand	4	2	1	1	1	Not Possible	Not Possible
	Intertidal sediment - Artificial littoral muddy sand	5	4	3	2	1	Not Possible	Not Possible
	Intertidal sediment - Artificial littoral mixed sediments	5	4	3	2	1	Not Possible	Not Possible
	Intertidal sediment - Artificial littoral seagrass	20	15	10	5	2	Not Possible	Not Possible
	Intertidal sediment - Artificial littoral biogenic reefs	15	10	5	3	3	Not Possible	Not Possible
	Intertidal sediment - Littoral sand	4	2	1	1	1	Not Possible	Not Possible
	Intertidal sediment - Littoral muddy sand	5	4	3	2	1	Not Possible	Not Possible
	Intertidal hard structures - Artificial hard structures	15	10	5	2	1	Not Possible	Not Possible

	Intertidal hard structures - Artificial features of hard structures	13	8	4	2	1	Not Possible	Not Possible
	Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IG	13	8	4	2	1	Not Possible	Not Possible
	Watercourse footprint - Watercourse footprint	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	0
	Individual trees - Rural tree	30+	30+	27	19	10	Not Possible	Not Possible

Return to start

Start condition	Lower Distinctiveness Habitat	Lower Distinctiveness Habitat	Lower Distinctiveness Habitat	Lower Distinctiveness Habitat	Lower Distinctiveness Habitat	Lower Distinctiveness Habitat	Lower Distinctiveness Habitat	Condition Assessment N/A	Condition Assessment N/A	Condition Assessment N/A	Condition Assessment N/A	Poor	Poor	Poor	Poor	Fairly Poor	Fairly Poor	Fairly Poor	Moderate	Moderate	Fairly Good	Good
Target condition	N/A - Other	Condition Assessment N/A	Poor	Fairly Poor	Moderate	Fairly Good	Good	Fairly Poor	Moderate	Fairly Good	Good	Fairly Poor	Moderate	Fairly Good	Good	Moderate	Fairly Good	Good	Fairly Good	Good	Good	Good
Habitat	Lower Distinctiveness Habitat - N/A - Other	Lower Distinctiveness Habitat - Condition Assessment N/A	Lower Distinctiveness Habitat - Poor	Lower Distinctiveness Habitat - Fairly Poor	Lower Distinctiveness Habitat - Moderate	Lower Distinctiveness Habitat - Fairly Good	Lower Distinctiveness Habitat - Good	Condition Assessment N/A - Fairly Poor	Condition Assessment N/A - Moderate	Condition Assessment N/A - Fairly Good	Condition Assessment N/A - Good	Poor - Fairly Poor	Poor - Moderate	Poor - Fairly Good	Poor - Good	Fairly Poor - Moderate	Fairly Poor - Fairly Good	Fairly Poor - Good	Moderate - Fairly Good	Moderate - Good	Fairly Good - Good	Good - Good
Cropland - Arable field margins cultivated annually	Not Possible	1	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Cropland - Arable field margins game bird mix	Not Possible	1	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Cropland - Arable field margins pollen and nectar	Not Possible	1	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Cropland - Arable field margins tussocky	Not Possible	1	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Cropland - Cereal crops	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Cropland - Winter stubble	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Cropland - Horticulture	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Cropland - Intensive orchards	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Cropland - Non-cereal crops	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Cropland - Temporary grass and clover leys	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Grassland - Traditional orchards	Not Possible	Not Possible	5	10	20	25	30	Not Possible	Not Possible	Not Possible	Not Possible	5	15	20	25	10	15	20	5	10	5	Not Possible
Grassland - Bracken	Not Possible	Not Possible	1	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Grassland - Floodplain wetland mosaic and CFGM	Not Possible	Not Possible	5	8	10	12	15	Not Possible	Not Possible	Not Possible	Not Possible	8	10	12	15	2	4	7	2	4	3	Not Possible
Grassland - Lowland calcareous grassland	Not Possible	Not Possible	10	15	20	25	30	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	20	5	10	15	5	10	5	Not Possible
Grassland - Lowland dry acid grassland	Not Possible	Not Possible	10	15	20	25	30+	Not Possible	Not Possible	Not Possible	Not Possible	5	15	20	30+	8	15	25	10	20	10	Not Possible
Grassland - Lowland meadows	Not Possible	Not Possible	5	8	10	12	15	Not Possible	Not Possible	Not Possible	Not Possible	4	8	11	15	4	8	11	4	8	4	Not Possible
Grassland - Modified grassland	Not Possible	1	1	5	10	12	15	Not Possible	Not Possible	Not Possible	Not Possible	5	10	12	15	8	10	12	8	10	8	Not Possible
Grassland - Other lowland acid grassland	Not Possible	Not Possible	1	5	10	12	15	Not Possible	Not Possible	Not Possible	Not Possible	5	10	12	15	8	10	12	8	10	8	Not Possible
Grassland - Other neutral grassland	Not Possible	Not Possible	1	5	10	12	15	Not Possible	Not Possible	Not Possible	Not Possible	5	10	12	15	8	10	12	8	10	8	Not Possible
Grassland - Tall herb communities (H6430)	Not Possible	Not Possible	10	15	20	25	30	Not Possible	Not Possible	Not Possible	Not Possible	10	20	25	30	10	10	15	5	10	5	Not Possible
Grassland - Upland acid grassland	Not Possible	Not Possible	1	5	10	12	15	Not Possible	Not Possible	Not Possible	Not Possible	5	10	12	15	8	10	12	8	10	8	Not Possible
Grassland - Upland calcareous grassland	Not Possible	Not Possible	10	12	15	20	25	Not Possible	Not Possible	Not Possible	Not Possible	10	15	18	20	10	15	18	10	10	10	Not Possible
Grassland - Upland hay meadows	Not Possible	Not Possible	10	12	15	18	20	Not Possible	Not Possible	Not Possible	Not Possible	10	15	18	20	10	15	18	10	15	10	Not Possible
Heathland and shrub - Blackthorn scrub	Not Possible	Not Possible	1	3	5	7	10	1	5	7	10	1	5	7	10	3	5	7	2	3	2	Not Possible
Heathland and shrub - Bramble scrub	Not Possible	Not Possible	1	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Heathland and shrub - Gorse scrub	Not Possible	Not Possible	1	3	5	7	10	1	5	7	10	1	5	7	10	3	5	7	2	3	2	Not Possible
Heathland and shrub - Hawthorn scrub	Not Possible	Not Possible	1	3	5	7	10	1	5	7	10	1	5	7	10	3	5	7	2	3	2	Not Possible
Heathland and shrub - Hazel scrub	Not Possible	Not Possible	5	7	10	12	15	5	7	12	15	5	7	12	15	5	8	12	5	7	5	Not Possible
Heathland and shrub - Willow scrub	Not Possible	Not Possible	5	7	10	12	15	5	7	12	15	5	7	12	15	5	8	12	5	7	5	Not Possible
Heathland and shrub - Lowland heathland	Not Possible	Not Possible	10	15	20	25	30+	5	10	15	25	5	10	15	25	5	10	20	5	15	10	Not Possible
Heathland and shrub - Mixed scrub	Not Possible	Not Possible	1	3	5	7	10	1	5	7	10	1	5	7	10	3	5	7	2	3	2	Not Possible
Heathland and shrub - Mountain heaths and willow scrub	Not Possible	Not Possible	15	23	25	30+	30+	20	30+	30+	30+	20	30+	30+	30+	20	30+	30+	20	30+	20	Not Possible
Heathland and shrub - Rhododendron scrub	Not Possible	Not Possible	1	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Heathland and shrub - Dunes with sea buckthorn (H2160)	Not Possible	Not Possible	5	7	10	12	15	5	7	10	12	5	7	10	12	5	7	10	5	7	5	Not Possible
Heathland and shrub - Other sea buckthorn scrub	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Heathland and shrub - Upland heathland	Not Possible	Not Possible	10	15	20	25	30	Not Possible	Not Possible	Not Possible	Not Possible	10	20	30	30+	10	20	30	10	20	10	Not Possible
Lakes - Aquifer fed naturally fluctuating water bodies	Not Possible	Not Possible	1	10	15	20	30	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	30	5	15	25	5	20	5	Not Possible
Lakes - High alkalinity lakes	Not Possible	Not Possible	2	3	5	7	10	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	30	5	15	25	10	20	10	Not Possible
Lakes - Low alkalinity lakes	Not Possible	Not Possible	5	10	15	20	30	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	20	5	10	15	5	10	5	Not Possible
Lakes - Marl lakes	Not Possible	Not Possible	5	7	10	15	20	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	30	5	15	25	10	20	10	Not Possible
Lakes - Moderate alkalinity lakes	Not Possible	Not Possible	5	7	10	15	20	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	30	5	15	25	10	20	10	Not Possible
Lakes - Peat lakes	Not Possible	Not Possible	5	10	15	20	30	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	30	5	15	25	10	20	10	Not Possible
Lakes - Ponds (priority habitat)	Not Possible	Not Possible	2	3	5	7	10	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	8	2	4	6	2	4	2	Not Possible
Lakes - Ponds (non-priority habitat)	Not Possible	Not Possible	1	2	3	4	5	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	8	2	4	6	2	4	2	Not Possible
Lakes - Reservoirs	Not Possible	Not Possible	1	3	5	7	10	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	30	5	15	25	10	20	10	Not Possible
Lakes - Temporary lakes ponds and pools (H3170)	Not Possible	Not Possible	2	3	5	7	10	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	8	2	4	6	2	4	2	Not Possible
Sparsely vegetated land - Calaminarian grasslands	Not Possible	Not Possible	2	3	5	7	10	Not Possible	Not Possible	Not Possible	Not Possible	1	3	5	8	1	4	7	2	5	3	Not Possible
Sparsely vegetated land - Coastal sand dunes	Not Possible	Not Possible	5	7	10	15	20	Not Possible	Not Possible	Not Possible	Not Possible	5	8	15	20	5	10	18	7	12	8	Not Possible
Sparsely vegetated land - Coastal vegetated shingle	Not Possible	Not Possible	5	7	10	15	20	Not Possible	Not Possible	Not Possible	Not Possible	5	8	15	20	5	10	18	7	12	8	Not Possible
Sparsely vegetated land - Ruderal/Ephemeral	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	5	1	2	3	1	2	1	Not Possible
Sparsely vegetated land - Tall forbs	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	5	1	2	3	1	2	1	Not Possible
Sparsely vegetated land - Inland rock outcrop and scree habitats	Not Possible	Not Possible	10	15	20	25	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	15	25	30+	20	25	27	15	20	15	Not Possible
Sparsely vegetated land - Limestone pavement	Not Possible	Not Possible	30+	30+	30+	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	20	5	10	15	5	10	5	Not Possible
Sparsely vegetated land - Maritime cliff and slopes	Not Possible	Not Possible	10	15	20	25	30+	Not Possible	Not Possible	Not Possible	Not Possible	5	8	15	20	5	10	18	7	12	8	Not Possible
Sparsely vegetated land - Other inland rock and scree	Not Possible	Not Possible	3	5	10	15	20	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	20	5	10	15	5	10	5	Not Possible
Urban - Allotments	Not Possible	Not Possible	1	1	1	1	1	Not Possible	Not Possible	Not Possible	Not Possible	1	1	1	1	1	1	1	1	1	1	Not Possible
Lakes - Ornamental lake or pond	Not Possible	Not Possible	1	2	3	4	5	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	8	2	4	6	2	4	2	Not Possible
Urban - Artificial unvegetated, unsealed surface	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Urban - Bioswale	Not Possible	Not Possible	1	2	3	2	3	Not Possible	Not Possible	Not Possible	Not Possible	1	2	2	3	1	3	3	2	2	2	Not Possible
Urban - Intensive green roof	Not Possible	Not Possible	1	2	3	4	5	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	5	1	2	3	1	2	1	Not Possible
Urban - Built linear features	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Urban - Cemeteries and churchyards	Not Possible	Not Possible	10	12	15	17	20	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	20	10	15	20	10	15	5	Not Possible
Urban - Developed land; sealed surface	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Urban - Other green roof	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Urban - Facade-bound green wall	Not Possible	Not Possible	1	2	3	4	5	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	5	1	2	3	1	2	1	Not Possible
Urban - Ground based green wall	Not Possible	Not Possible	1	2	3	4	5	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	5	1	2	3	1	2	1	Not Possible
Urban - Ground level planters	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Urban - Biodiverse green roof	Not Possible	Not Possible	1	3	5	8	10	Not Possible	Not Possible	Not Possible	Not Possible	3	5	8	10	3	8	8	3	5	2	Not Possible
Urban - Introduced shrub	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Urban - Open mosaic habitats on previously developed land	Not Possible	Not Possible	0	2	4	7	10	Not Possible	Not Possible	Not Possible	Not Possible	2	4	7	10	2	5	8	3	4	3	Not Possible
Urban - Rain garden	Not Possible	Not Possible	1	1	1	1	1	Not Possible	Not Possible	Not Possible	Not Possible	1	1	1	1	1	1	1	1	1	1	Not Possible
Urban - Actively worked sand pit quarry or open cast mine	Not Possible	Not Possible	1	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Individual trees - Urban tree	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	8	16	24	30+	8	16	24	8	16	8	Not Possible
Urban - Sustainable drainage system	Not Possible	Not Possible	1	2	3	4	5	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	5	1	2	3	1	2	1	Not Possible
Urban - Unvegetated garden	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Urban - Vacant or derelict land	Not Possible	Not Possible	1	1	1	1	1	Not Possible	Not Possible	Not Possible	Not Possible	1	1	1	1	1	1	1	1	1	1	Not Possible
Urban - Bare ground	Not Possible	Not Possible	1	1	1	1	1	Not Possible	Not Possible	Not Possible	Not Possible	1	1	1	1	1	1	1	1	1	1	Not Possible
Urban - Vegetated garden	Not Possible	Not Possible	1	2	3	4	5	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	5	1	2	3	1	2	1	Not Possible
Wetland - Blanket bog	Not Possible	Not Possible	15	25	30	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	20	30+	30	10	30+	30+	30	30+	30	Not Possible
Wetland - Depressions on peat substrates (H7150)	Not Possible	Not Possible	15	25	30	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	20	25	30	10	20	25	10	20	10	Not Possible
Wetland - Fens (upland and lowland)	Not Possible	Not Possible	10	12	15	25	30	Not Possible	Not Possible	Not Possible	Not Possible	10	12	15	18	10	12	15	10	12	10	Not Possible
Wetland - Lowland raised bog	Not Possible	Not Possible	15	20	30	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	20	25	30	10	20	20	10	15	10	Not Possible
Wetland - Oceanic valley mire[1] (D2.1)	Not Possible	Not Possible	15	20	30	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	20	25	30	10	20	20	10	15	10	Not Possible
Wetland - Purple moor grass and rush pastures	Not Possible	Not Possible	10	12	15	17	20	Not Possible	Not Possible	Not Possible	Not Possible	10	10	15	20	10	15	20	10	15	10	Not Possible
Wetland - Reedbeds	Not Possible	Not Possible	5	7	10	12	15	Not Possible	Not Possible	Not Possible	Not Possible	5	7	10	12	5	7	10	5	7	5	Not Possible
Wetland - Transition mires and quaking bogs (H7140)	Not Possible	Not Possible	15	25	30	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	20	25	30	10	20	20	10	15	10	Not Possible
Woodland and forest - Felled	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Woodland and forest - Lowland beech and yew woodland	Not Possible	Not Possible	10	25	30+	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	25	30+	30+	30+	30+	30+	30+	30+	30+	30+	Not Possible
Woodland and forest - Lowland mixed deciduous woodland	Not Possible	Not Possible	10	25	30+	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	20	25	30+	10	20	25	10	20	10	Not Possible
Woodland and forest - Native pine woodlands	Not Possible	Not Possible	25	30	30+	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	15	20	30+	15	20	25	10	15	10	Not Possible
Woodland and forest - Other coniferous woodland	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	5	25	30+	30+	20	15	25	5	7	10	Not Possible
Woodland and forest - Other Scot's pine woodland	Not Possible	Not Possible	20	25	30+	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	15	20	30+	15	20	25	10	15	10	Not Possible
Woodland and forest - Other woodland; broadleaved	Not Possible	Not Possible	5	10	15	20	25	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	20	5	10	15	5	10	5	Not Possible
Woodland and forest - Other woodland; mixed	Not Possible	Not Possible	5	10	15	20	25	Not Possible	Not Possible	Not Possible	Not Possible	5	10	15	20	5	10	15	5	10	5	Not Possible
Woodland and forest - Upland birchwoods	Not Possible	Not Possible	10	20	25	30	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	15	20	30+	15	20	25	10	15	10	Not Possible
Woodland and forest - Upland mixed ashwoods	Not Possible	Not Possible	10	25	30+	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	15	20	30+	15	20	25	10	15	10	Not Possible
Woodland and forest - Upland oakwood	Not Possible	Not Possible	10	25	30+	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	25	30+	30+	30+	30+	30+	30+	30+	30+	30+	Not Possible
Woodland and forest - Wet woodland	Not Possible	Not Possible	10	20	25	30	30+	Not Possible	Not Possible	Not Possible	Not Possible	10	10	15	30+	15	20	25	10	15	10	Not Possible
Woodland and forest - Wood-pasture and parkland	Not Possible	Not Possible	10	25	30+	30+	30+	Not Possible	Not Possible	Not Possible	Not Possible	25	30+	30+	30+	30+	30+	30+	30+	30+	30+	Not Possible
Coastal lagoons - Coastal lagoons	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	4	8	12	3	7	11	4	8	4	Not Possible
Rocky shore - High energy littoral rock	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	10	2	4	8	2	6	4	Not Possible
Rocky shore - High energy littoral rock - on peat, clay or chalk	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	10	2	4	8	2	6	4	Not Possible
Rocky shore - Moderate energy littoral rock	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	11	2	4	9	2	7	5	Not Possible
Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	11	2	4	9	2	7	5	Not Possible
Rocky shore - Low energy littoral rock	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	12	2	4	10	2	8	6	Not Possible
Rocky shore - Low energy littoral rock - on peat, clay or chalk	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	12	2	4	10	2	8	6	Not Possible

Rocky shore - Features of littoral rock	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	11	2	4	9	2	7	5	Not Possible
Rocky shore - Features of littoral rock - on peat, clay or chalk	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	11	2	4	9	2	7	5	Not Possible
Intertidal sediment - Littoral coarse sediment	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	4	1	2	3	1	2	1	Not Possible
Intertidal sediment - Littoral mud	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	8	2	4	6	2	4	2	Not Possible
Intertidal sediment - Littoral mixed sediments	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	4	1	2	3	1	2	1	Not Possible
Coastal saltmarsh - Saltmarshes and saline reedbeds	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	6	10	20	4	8	18	4	14	10	Not Possible
Coastal saltmarsh - Artificial saltmarshes and saline reedbeds	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	6	10	20	4	8	18	4	14	10	Not Possible
Intertidal sediment - Littoral seagrass	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	3	13	23	30+	10	20	30	10	20	10	Not Possible
Intertidal sediment - Littoral seagrass on peat, clay or chalk	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	7	30+	2	3	8	3	6	3	Not Possible
Intertidal sediment - Littoral biogenic reefs - Mussels	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	7	10	2	3	8	3	6	3	Not Possible
Intertidal sediment - Littoral biogenic reefs - Sabellaria	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	7	10	2	3	8	3	6	3	Not Possible
Intertidal sediment - Features of littoral sediment	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	5	1	2	4	1	3	2	Not Possible
Intertidal sediment - Artificial littoral coarse sediment	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	4	1	2	3	1	2	1	Not Possible
Intertidal sediment - Artificial littoral mud	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	8	2	4	6	2	4	2	Not Possible
Intertidal sediment - Artificial littoral sand	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	3	4	6	1	2	4	1	3	2	Not Possible
Intertidal sediment - Artificial littoral muddy sand	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	8	2	4	6	2	4	2	Not Possible
Intertidal sediment - Artificial littoral mixed sediments	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	2	3	4	1	2	3	1	2	1	Not Possible
Intertidal sediment - Artificial littoral seagrass	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	3	13	23	30+	10	20	30	10	20	10	Not Possible
Intertidal sediment - Artificial littoral biogenic reefs	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	7	10	2	3	8	3	6	3	Not Possible
Intertidal sediment - Littoral sand	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	3	4	6	1	2	4	1	3	2	Not Possible
Intertidal sediment - Littoral muddy sand	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	2	4	6	8	2	4	6	2	4	2	Not Possible
Intertidal hard structures - Artificial hard structures	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	6	4	10	2	2	8	6	2	12	4	Not Possible
Intertidal hard structures - Artificial features of hard structures	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	5	4	9	2	2	7	6	2	11	4	Not Possible
Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (E	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	5	4	9	2	2	7	6	2	11	4	Not Possible
Watercourse footprint - Watercourse footprint	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Individual trees - Rural tree	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	8	16	24	30+	8	16	24	8	16	8	Not Possible

Return to start

Habitat Description	Distinctiveness		Creation - Years to Target Condition			Enhancement Through Condition - Years to Target Condition			Enhancement Through Distinctiveness - Years to Target Condition												Difficulty		Suggested Action
	Distinctiveness Category	Distinctiveness Score	Poor	Moderate	Good	Poor - Moderate	Poor - Good	Moderate - Good	Species-rich native hedgerow with trees - associated with bank or ditch	Species-rich native hedgerow with trees	Species-rich native hedgerow - associated with bank or ditch	Species-rich native hedgerow - associated with bank or ditch	Species-rich native hedgerow	Native hedgerow with trees	Native hedgerow with trees	Ecologically valuable line of trees	Ecologically valuable line of trees - associated with bank or ditch	Native hedgerow	Line of trees	Line of trees - associated with bank or ditch	Non-native and ornamental hedgerow	Technical Difficulty Creation	Technical Difficulty Enhancement	
Species-rich native hedgerow with trees - associated with bank or ditch	V.High	8	1	10	20	6	10	4	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Low	Low	Like for like
Species-rich native hedgerow with trees	High	6	1	10	20	6	10	4	5	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Low	Low	Like for like or better
Species-rich native hedgerow - associated with bank or ditch	High	6	1	5	12	3	5	2	10	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Low	Low	Like for like or better
Native hedgerow with trees - associated with bank or ditch	High	6	1	10	20	6	10	4	5	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Low	Low	Like for like or better
Species-rich native hedgerow	Medium	4	1	5	12	3	5	2	10	10	5	10	Error	Error	Error	Error	Error	Error	Error	Error	Error	Low	Low	Same distinctiveness band or better
Native hedgerow - associated with bank or ditch	Medium	4	1	5	12	3	5	2	10	10	5	10	Error	Error	Error	Error	Error	Error	Error	Error	Error	Low	Low	Same distinctiveness band or better
Native hedgerow with trees	Medium	4	1	10	20	6	10	4	5	5	5	5	Error	Error	Error	Error	Error	Error	Error	Error	Error	Low	Low	Same distinctiveness band or better
Ecologically valuable line of trees	Medium	4	5	20	30+	20	30	10	12	12	Error	12	Error	Error	Error	Error	Error	Error	Error	Error	Error	Low	Low	Same distinctiveness band or better
Ecologically valuable line of trees - associated with bank or ditch	Medium	4	5	20	30+	20	30	10	12	12	Error	12	Error	Error	Error	Error	Error	Error	Error	Error	Error	Low	Low	Same distinctiveness band or better
Native hedgerow	Low	2	1	5	12	3	5	2	10	10	5	10	5	6	10	Error	Error	Error	Error	Error	Error	Low	Low	Same distinctiveness band or better
Line of trees	Low	2	5	20	30+	20	30	10	12	12	Error	12	Error	Error	12	Error	Error	Error	Error	Error	Error	Low	Low	Same distinctiveness band or better
Line of trees - associated with bank or ditch	Low	2	5	20	30+	20	30	10	12	12	Error	12	Error	Error	12	Error	Error	Error	Error	Error	Error	Low	Low	Same distinctiveness band or better
Non-native and ornamental hedgerow	V.Low	1	1	N/A	N/A	N/A	N/A	N/A	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Error	Low	Low	Same distinctiveness band or better

Condition	
Condition Category	Condition Score
Good	3
Moderate	2
Poor	1

Baseline Hedge Type	Enhancement through Distinctiveness	Post Development Hedge Type												
		Species-rich native hedgerow with trees - associated with bank or ditch	Species-rich native hedgerow with trees	Species-rich native hedgerow - associated with bank or ditch	Native hedgerow with trees - associated with bank or ditch	Species-rich native hedgerow	Native hedgerow - associated with bank or ditch	Native hedgerow with trees	Ecologically valuable line of trees	Ecologically valuable line of trees - associated with bank or ditch	Native hedgerow	Line of trees	Line of trees - associated with bank or ditch	Non-native and ornamental hedgerow
Species-rich native hedgerow with trees - associated with bank or ditch		V.High - V.High	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down
Species-rich native hedgerow with trees		High - V.High	High - High	High - High	High - High	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down
Species-rich native hedgerow - associated with bank or ditch		High - V.High	High - High	High - High	High - High	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down
Native hedgerow with trees - associated with bank or ditch		High - V.High	High - High	High - High	High - High	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down
Species-rich native hedgerow		Medium - V.High	Medium - High	Medium - High	Medium - High	Medium - Medium	Medium - Medium	Medium - Medium	Error - Enhancement not possible	Error - Enhancement not possible	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down
Native hedgerow - associated with bank or ditch		Medium - V.High	Medium - High	Medium - High	Medium - High	Medium - Medium	Medium - Medium	Medium - Medium	Error - Enhancement not possible	Error - Enhancement not possible	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down
Native hedgerow with trees		Medium - V.High	Medium - High	Medium - High	Medium - High	Medium - Medium	Medium - Medium	Medium - Medium	Medium - Medium	Medium - Medium	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down
Ecologically valuable line of trees		Medium - V.High	Medium - High	Error - Enhancement not possible	Medium - High	Error - Enhancement not possible	Error - Enhancement not possible	Medium - Medium	Medium - Medium	Medium - Medium	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down
Ecologically valuable line of trees - associated with bank or ditch		Medium - V.High	Medium - High	Error - Enhancement not possible	Medium - High	Error - Enhancement not possible	Error - Enhancement not possible	Medium - Medium	Medium - Medium	Medium - Medium	Error Trading Down	Error Trading Down	Error Trading Down	Error Trading Down
Native hedgerow		Low - V.High	Low - High	Low - High	Low - High	Low - Medium	Low - Medium	Low - Medium	Error - Enhancement not possible	Error - Enhancement not possible	Low - Low	Error - Enhancement not possible	Error - Enhancement not possible	Error Trading Down
Line of trees		Low - V.High	Low - High	Error - Enhancement not possible	Low - High	Error - Enhancement not possible	Error - Enhancement not possible	Low - Medium	Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	Low - Low	Low - Low	Error Trading Down
Line of trees - associated with bank or ditch		Low - V.High	Low - High	Error - Enhancement not possible	Low - High	Error - Enhancement not possible	Error - Enhancement not possible	Low - Medium	Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	Low - Low	Low - Low	Error Trading Down
Non-native and ornamental hedgerow		Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	Error - Enhancement not possible	V.Low - V.Low

Return to start

Habitat Description	Distinctiveness		Difficulty			Condition				
	Distinctiveness Category	Distinctiveness Score	Technical Difficulty Creation	Technical Difficulty Enhancement	Trading Rules	Good	Fairly Good	Moderate	Fairly Poor	Poor
Priority habitat	V.High	8	High	Medium	Bespoke compensation likely to be required. ✖	3	2.5	2	1.5	1
Other rivers and streams	High	6	High	Medium	Same habitat required =	3	2.5	2	1.5	1
Ditches	Medium	4	Low	Medium	Same habitat required =	3	2.5	2	1.5	1
Canals	Medium	4	Low	Medium	Same habitat required =	3	2.5	2	1.5	1
Culvert	Low	2	Low	Medium	Better distinctiveness habitat required	Not Possible	Not Possible	Not Possible	Not Possible	1

Target Condition for All Habitats	
Good	10
Fairly Good	8
Moderate	6
Fairly Poor	2
Poor	1

Enhancement - Years to Target Condition for All Habitats	
Enhancement through Distinctiveness	10

Enhancement - Years to Target Condition					
	Proposed Condition				
Baseline Condition	Poor	Fairly Poor	Moderate	Fairly Good	Good
Poor	1	1	1	1	1
Fairly Poor	N/A	1	2	2	2
Moderate	N/A	N/A	1	2	2
Fairly Good	N/A	N/A	N/A	1	1
Good	N/A	N/A	N/A	N/A	1

Encroachment	
Encroachment into Watercourse	multiplier
No Encroachment	1
Minor	0.8
Major	0.5
N/A - Culvert	1

Encroachment	
Riparian Encroachment for Both Banks	multiplier
Major/Major	0.75
Major/Moderate	0.8
Major/Minor	0.84
Major/No Encroachment	0.87
Moderate/ Moderate	0.85
Moderate/ Minor	0.9
Moderate/ No Encroachment	0.92
Minor/ Minor	0.95
Minor/ No Encroachment	0.96
No Encroachment/ No Encroachment	1
N/A - Culvert	1

Spatial		
Description of multiplier	Category	Strategic multiplier
Low potential/action not identified in any plan	Low Strategic Significance	1
Delivery within Local Plans	High strategic significance	1.15
Delivery within River Basin Management Plan	High strategic significance	1.15
Delivery within Catchment Plans	High strategic significance	1.15
Delivery within Catchment Planning System	High strategic significance	1.15
Delivery within Priority Habitats for Restoration	High strategic significance	1.15

Spatial		
Description of multiplier	Category	Strategic multiplier
Formally identified in local strategy	High strategic significance	1.15
Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1

Spatial	
Description of multiplier	Strategic multiplier
This metric is being used by an off-site provider	1
Within waterbody catchment	1
Outside waterbody catchment but within operational catchment	0.75
Outside operational catchment	0.5

Distinctiveness categories		
Distinctiveness Category	Distinctiveness Score	Suggested Action
V.High	8	Less Unacceptable
High	6	Avoid
Medium	4	Avoid, Mitigate or Compensate
Low	2	Mitigate or Compensate

Return to start

Habitat Description	Condition						
	Good	Fairly Good	Moderate	Fairly Poor	Poor	Condition Assessment N/A	N/A - Other
Cropland - Arable field margins cultivated annually	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Arable field margins game bird mix	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Arable field margins pollen and nectar	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Arable field margins tussocky	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Cereal crops	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Winter stubble	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Horticulture	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Intensive orchards	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Non-cereal crops	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Cropland - Temporary grass and clover leys	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Grassland - Traditional orchards	3	2.5	2	1.5	1	Not Possible	Not Possible
Grassland - Bracken	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Grassland - Floodplain wetland mosaic and CFGM	3	2.5	2	1.5	1	Not Possible	Not Possible
Grassland - Lowland calcareous grassland	3	2.5	2	1.5	1	Not Possible	Not Possible
Grassland - Lowland dry acid grassland	3	2.5	2	1.5	1	Not Possible	Not Possible
Grassland - Lowland meadows	3	2.5	2	1.5	1	Not Possible	Not Possible
Grassland - Modified grassland	3	2.5	2	1.5	1	Not Possible	Not Possible
Grassland - Other lowland acid grassland	3	2.5	2	1.5	1	Not Possible	Not Possible
Grassland - Other neutral grassland	3	2.5	2	1.5	1	Not Possible	Not Possible
Grassland - Tall herb communities (H6430)	3	2.5	2	1.5	1	Not Possible	Not Possible
Grassland - Upland acid grassland	3	2.5	2	1.5	1	Not Possible	Not Possible
Grassland - Upland calcareous grassland	3	2.5	2	1.5	1	Not Possible	Not Possible
Grassland - Upland hay meadows	3	2.5	2	1.5	1	Not Possible	Not Possible
Heathland and shrub - Blackthorn scrub	3	2.5	2	1.5	1	Not Possible	Not Possible
Heathland and shrub - Bramble scrub	Not Possible	Not Possible	Not Possible	1.5	Not Possible	1	Not Possible
Heathland and shrub - Gorse scrub	3	2.5	2	1.5	1	Not Possible	Not Possible
Heathland and shrub - Hawthorn scrub	3	2.5	2	1.5	1	Not Possible	Not Possible
Heathland and shrub - Hazel scrub	3	2.5	2	1.5	1	Not Possible	Not Possible
Heathland and shrub - Lowland heathland	3	2.5	2	1.5	1	Not Possible	Not Possible
Heathland and shrub - Mixed scrub	3	2.5	2	1.5	1	Not Possible	Not Possible
Heathland and shrub - Mountain heaths and willow scrub	3	2.5	2	1.5	1	Not Possible	Not Possible
Heathland and shrub - Rhododendron scrub	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Heathland and shrub - Dunes with sea buckthorn (H2160)	3	2.5	2	1.5	1	Not Possible	Not Possible
Heathland and shrub - Other sea buckthorn scrub	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Heathland and shrub - Willow scrub	3	2.5	2	1.5	1	Not Possible	Not Possible
Heathland and shrub - Upland heathland	3	2.5	2	1.5	1	Not Possible	Not Possible
Lakes - Aquifer fed naturally fluctuating water bodies	3	2.5	2	1.5	1	Not Possible	Not Possible
Lakes - High alkalinity lakes	3	2.5	2	1.5	1	Not Possible	Not Possible
Lakes - Low alkalinity lakes	3	2.5	2	1.5	1	Not Possible	Not Possible
Lakes - Marl lakes	3	2.5	2	1.5	1	Not Possible	Not Possible
Lakes - Moderate alkalinity lakes	3	2.5	2	1.5	1	Not Possible	Not Possible
Lakes - Peat lakes	3	2.5	2	1.5	1	Not Possible	Not Possible
Lakes - Ponds (priority habitat)	3	2.5	2	1.5	1	Not Possible	Not Possible
Lakes - Ponds (non-priority habitat)	3	2.5	2	1.5	1	Not Possible	Not Possible
Lakes - Reservoirs	3	2.5	2	1.5	1	Not Possible	Not Possible
Lakes - Temporary lakes ponds and pools (H3170)	3	2.5	2	1.5	1	Not Possible	Not Possible

Sparsely vegetated land - Calaminarian grasslands	3	2.5	2	1.5	1	Not Possible	Not Possible
Sparsely vegetated land - Coastal sand dunes	3	2.5	2	1.5	1	Not Possible	Not Possible
Sparsely vegetated land - Coastal vegetated shingle	3	2.5	2	1.5	1	Not Possible	Not Possible
Sparsely vegetated land - Ruderal/Ephemeral	3	2.5	2	1.5	1	Not Possible	Not Possible
Sparsely vegetated land - Tall forbs	3	2.5	2	1.5	1	Not Possible	Not Possible
Sparsely vegetated land - Inland rock outcrop and scree habitats	3	2.5	2	1.5	1	Not Possible	Not Possible
Sparsely vegetated land - Limestone pavement	3	2.5	2	1.5	1	Not Possible	Not Possible
Sparsely vegetated land - Maritime cliff and slopes	3	2.5	2	1.5	1	Not Possible	Not Possible
Sparsely vegetated land - Other inland rock and scree	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Allotments	3	2.5	2	1.5	1	Not Possible	Not Possible
Lakes - Ornamental lake or pond	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Artificial unvegetated, unsealed surface	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	0
Urban - Bioswale	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Intensive green roof	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Built linear features	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	0
Urban - Cemeteries and churchyards	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Developed land; sealed surface	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	0
Urban - Other green roof	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Urban - Facade-bound green wall	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Ground based green wall	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Ground level planters	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Urban - Biodiverse green roof	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Introduced shrub	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Urban - Open mosaic habitats on previously developed land	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Rain garden	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Actively worked sand pit quarry or open cast mine	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Individual trees - Urban tree	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Sustainable drainage system	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Unvegetated garden	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	0
Urban - Vacant or derelict land	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Bare ground	3	2.5	2	1.5	1	Not Possible	Not Possible
Urban - Vegetated garden	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	1	Not Possible
Wetland - Blanket bog	3	2.5	2	1.5	1	Not Possible	Not Possible
Wetland - Depressions on peat substrates (H7150)	3	2.5	2	1.5	1	Not Possible	Not Possible
Wetland - Fens (upland and lowland)	3	2.5	2	1.5	1	Not Possible	Not Possible
Wetland - Lowland raised bog	3	2.5	2	1.5	1	Not Possible	Not Possible
Wetland - Oceanic valley mire[1] (D2.1)	3	2.5	2	1.5	1	Not Possible	Not Possible
Wetland - Purple moor grass and rush pastures	3	2.5	2	1.5	1	Not Possible	Not Possible
Wetland - Reedbeds	3	2.5	2	1.5	1	Not Possible	Not Possible
Wetland - Transition mires and quaking bogs (H7140)	3	2.5	2	1.5	1	Not Possible	Not Possible
Woodland and forest - Felled	3	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible
Woodland and forest - Lowland beech and yew woodland	3	2.5	2	1.5	1	Not Possible	Not Possible
Woodland and forest - Lowland mixed deciduous woodland	3	2.5	2	1.5	1	Not Possible	Not Possible
Woodland and forest - Native pine woodlands	3	2.5	2	1.5	1	Not Possible	Not Possible
Woodland and forest - Other coniferous woodland	3	2.5	2	1.5	1	Not Possible	Not Possible
Woodland and forest - Other Scot's pine woodland	3	2.5	2	1.5	1	Not Possible	Not Possible
Woodland and forest - Other woodland; broadleaved	3	2.5	2	1.5	1	Not Possible	Not Possible
Woodland and forest - Other woodland; mixed	3	2.5	2	1.5	1	Not Possible	Not Possible
Woodland and forest - Upland birchwoods	3	2.5	2	1.5	1	Not Possible	Not Possible
Woodland and forest - Upland mixed ashwoods	3	2.5	2	1.5	1	Not Possible	Not Possible
Woodland and forest - Upland oakwood	3	2.5	2	1.5	1	Not Possible	Not Possible
Woodland and forest - Wet woodland	3	2.5	2	1.5	1	Not Possible	Not Possible

Woodland and forest - Wood-pasture and parkland	3	2.5	2	1.5	1	Not Possible	Not Possible
Coastal lagoons - Coastal lagoons	3	2.5	2	1.5	1	Not Possible	Not Possible
Rocky shore - High energy littoral rock	3	2.5	2	1.5	1	Not Possible	Not Possible
Rocky shore - High energy littoral rock - on peat, clay or chalk	3	2.5	2	1.5	1	Not Possible	Not Possible
Rocky shore - Moderate energy littoral rock	3	2.5	2	1.5	1	Not Possible	Not Possible
Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	3	2.5	2	1.5	1	Not Possible	Not Possible
Rocky shore - Low energy littoral rock	3	2.5	2	1.5	1	Not Possible	Not Possible
Rocky shore - Low energy littoral rock - on peat, clay or chalk	3	2.5	2	1.5	1	Not Possible	Not Possible
Rocky shore - Features of littoral rock	3	2.5	2	1.5	1	Not Possible	Not Possible
Rocky shore - Features of littoral rock - on peat, clay or chalk	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Littoral coarse sediment	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Littoral mud	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Littoral mixed sediments	3	2.5	2	1.5	1	Not Possible	Not Possible
Coastal saltmarsh - Saltmarshes and saline reedbeds	3	2.5	2	1.5	1	Not Possible	Not Possible
Coastal saltmarsh - Artificial saltmarshes and saline reedbeds	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Littoral seagrass	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Littoral seagrass on peat, clay or chalk	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Littoral biogenic reefs - Mussels	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Littoral biogenic reefs - Sabellaria	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Features of littoral sediment	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Artificial littoral coarse sediment	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Artificial littoral mud	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Artificial littoral sand	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Artificial littoral muddy sand	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Artificial littoral mixed sediments	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Artificial littoral seagrass	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Artificial littoral biogenic reefs	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Littoral sand	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal sediment - Littoral muddy sand	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal hard structures - Artificial hard structures	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal hard structures - Artificial features of hard structures	3	2.5	2	1.5	1	Not Possible	Not Possible
Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IGG	3	2.5	2	1.5	1	Not Possible	Not Possible
Watercourse footprint - Watercourse footprint	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	Not Possible	0
Individual trees - Rural tree	3	2.5	2	1.5	1	Not Possible	Not Possible

Return to start

This tool is intended to be used for historic data. Any suggested translation between a phase 1 habitat and metric habitat should not be considered a rule - there may be circumstances where a more appropriate metric habitat may be chosen when ecological expertise is applied.

Phase 1 Habitat	Metric habitat	Distinctiveness band
Woodland	Woodland and forest - Other woodland; mixed	Medium
Broadleaved woodland	Woodland and forest - Other woodland; broadleaved	Medium
Semi-natural broadleaved woodland	Woodland and forest - Lowland mixed deciduous woodland	High
Plantation broadleaved woodland	Woodland and forest - Other woodland; broadleaved	Medium
Coniferous woodland	Woodland and forest - Other coniferous woodland	Low
Semi-natural coniferous woodland	Woodland and forest - Native pine woodlands	High
Plantation coniferous woodland	Woodland and forest - Other coniferous woodland	Low
Mixed woodland	Woodland and forest - Other woodland; mixed	Medium
Semi-natural mixed woodland	Woodland and forest - Lowland mixed deciduous woodland	High
Plantation mixed woodland	Woodland and forest - Other woodland; mixed	Medium
Scrub	Heathland and shrub - Mixed scrub	Medium
Dense / continuous scrub	Heathland and shrub - Mixed scrub	Medium
Scattered scrub	Heathland and shrub - Mixed scrub	Medium
Parkland / scattered trees	Woodland and forest - Wood-pasture and parkland	V.High
Broadleaved parkland / scattered trees	Woodland and forest - Wood-pasture and parkland	V.High
Coniferous parkland / scattered trees	Woodland and forest - Other coniferous woodland	Medium
Mixed parkland / scattered trees	Woodland and forest - Wood-pasture and parkland	V.High
Scattered trees	Individual trees - Urban tree	Medium
Scattered trees	Individual trees - Rural tree	Medium
Recently-felled woodland	Woodland and forest - Felled	High
Broadleaved recently felled woodland	Woodland and forest - Felled	High
Coniferous recently felled woodland	Woodland and forest - Felled	High
Mixed recently felled woodland	Woodland and forest - Felled	High
Acid grassland	Grassland - Other lowland acid grassland	Medium
Acid grassland	Grassland - Upland acid grassland	Medium
Unimproved acid grassland	Grassland - Lowland dry acid grassland	V.High
Unimproved acid grassland	Grassland - Upland hay meadows	V.High
Semi-improved acid grassland (Good quality)	Grassland - Upland acid grassland	Medium
Semi-improved acid grassland (Good quality)	Grassland - Other lowland acid grassland	Medium
Semi-improved acid grassland (Poor quality)	Grassland - Modified grassland	Low
Neutral grassland	Grassland - Other neutral grassland	Medium
Unimproved neutral grassland	Grassland - Lowland meadows	V.High
Semi-improved neutral grassland (Good quality)	Grassland - Other neutral grassland	Medium
Semi-improved neutral grassland (Poor quality)	Grassland - Modified grassland	Low
Calcareous grassland	Grassland - Upland calcareous grassland	High
Calcareous grassland	Grassland - Lowland calcareous grassland	High

Unimproved calcareous grassland	Grassland - Lowland calcareous grassland	High
Unimproved calcareous grassland	Grassland - Upland calcareous grassland	High
Semi-improved calcareous grassland (Good quality)	Grassland - Upland calcareous grassland	High
Semi-improved calcareous grassland (Good quality)	Grassland - Lowland calcareous grassland	High
Semi-improved calcareous grassland (Poor quality)	Grassland - Modified grassland	Low
Improved grassland	Grassland - Modified grassland	Low
Marsh/marshy grassland	Wetland - Purple moor grass and rush pastures	V.High
Marsh/marshy grassland	Grassland - Other neutral grassland	Medium
Marsh/marshy grassland	Grassland - Modified grassland	Low
Poor semi-improved grassland	Grassland - Modified grassland	Low
Strandline vegetation coastland	Sparsely vegetated land - Coastal vegetated shingle	High
Sand dune	Sparsely vegetated land - Coastal sand dunes	High
Dune slack sand dune coastland	Sparsely vegetated land - Coastal sand dunes	High
Dune grassland sand dune coastland	Sparsely vegetated land - Coastal sand dunes	High
Dune heath sand dune coastland	Sparsely vegetated land - Coastal sand dunes	High
Dune scrub sand dune coastland	Sparsely vegetated land - Coastal sand dunes	High
Open dune sand dune coastland	Sparsely vegetated land - Coastal sand dunes	High
Maritime cliff coastland	Sparsely vegetated land - Maritime cliff and slopes	High
Hard maritime cliff coastland	Sparsely vegetated land - Maritime cliff and slopes	High
Soft maritime cliff	Sparsely vegetated land - Maritime cliff and slopes	High
Crevice/ledge vegetation	Sparsely vegetated land - Maritime cliff and slopes	High
Crevice/ledge vegetation	Grassland - Tall herb communities	High
Coastal grassland	Sparsely vegetated land - Maritime cliff and slopes	High
Coastal grassland	Grassland - Lowland meadows	V.High
Coastal grassland	Grassland - Lowland dry acid grassland	V.High
Coastal grassland	Grassland - Other lowland acid grassland	Medium
Coastal heathland	Sparsely vegetated land - Maritime cliff and slopes	High
Coastal heathland	Heathland and shrub - Lowland heathland	High
Standing open water	lakes - Aquifer fed naturally fluctuating water bodies	V.High
Standing open water	Lakes - Ditches	Medium
Standing open water	Lakes - High alkalinity lakes	High
Standing open water	Lakes - Low alkalinity lakes	High
Standing open water	Lakes - Marl lakes	High
Standing open water	Lakes - Moderate alkalinity lakes	High
Standing open water	Lakes - Peat Lakes	High
Standing open water	Lakes - Ponds (priority habitat)	High
Standing open water	Lakes - Ponds (non-priority habitat)	Medium
Standing open water	Lakes - Reservoirs	Medium
Standing open water	Lakes - Temporary lakes, ponds and pools	High
Dry dwarf shrub heath	Heathland and shrub - Lowland heathland	High
Dry dwarf shrub heath	Heathland and shrub - Upland heathland	High
Acidic dry dwarf shrub heath	Heathland and shrub - Lowland heathland	High
Acidic dry dwarf shrub heath	Heathland and shrub - Upland heathland	High
Basic dry dwarf shrub heath	Heathland and shrub - Lowland heathland	High

Basic dry dwarf shrub heath	Heathland and shrub - Upland heathland	High
Wet dwarf shrub heath	Heathland and shrub - Lowland heathland	High
Wet dwarf shrub heath	Heathland and shrub - Upland heathland	High
Lichen / bryophyte heath	Heathland and shrub - Lowland heathland	High
Lichen / bryophyte heath	Heathland and shrub - Upland heathland	High
Montane heath / dwarf herb	Heathland and shrub - Mountain heaths and willow scrub	V.High
Dry heath / acidic grass mosaic	Heathland and shrub - Lowland heathland	High
Wet heath / acidic grass mosaic	Heathland and shrub - Lowland heathland	High
Dry heath / acidic grass mosaic	Heathland and shrub - Upland heathland	High
Wet heath / acidic grass mosaic	Heathland and shrub - Upland heathland	High
Bracken	Grassland - Bracken	Low
Continuous bracken	Grassland - Bracken	Low
Scattered bracken	Grassland - Bracken	Low
Other tall herb or fern (Good quality)	Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Other tall herb or fern	Grassland - Bracken	Medium
Tall ruderal	Sparsely vegetated land - Ruderal/ephemeral	Low
Tall ruderal	Sparsely vegetated land - Tall forbs	Low
Non-ruderal	Sparsely vegetated land - Ruderal/ephemeral	Low
Bog	Wetland - Lowland raised bog	V.High
Sphagnum bog	Wetland - Lowland raised bog	V.High
Blanket bog	Wetland - Blanket bog	V.High
Raised bog	Wetland - Lowland raised bog	V.High
Wet modified bog	Wetland - Transition mires and quaking bogs (H7140)	V.High
Dry modified bog	Wetland - Blanket bog	V.High
Dry modified bog	Wetland - Lowland raised bog	V.High
Flush and spring	Wetland - Fens (upland and lowland)	V.High
Acid/neutral flush	Wetland - Fens (upland and lowland)	V.High
Basic flush	Wetland - Fens (upland and lowland)	V.High
Bryophyte-dominated spring	Wetland - Fens (upland and lowland)	V.High
Fen	Wetland - Fens (upland and lowland)	V.High
Valley mire	Wetland – Oceanic valley mire[1] (D2.1)	V.High
Basin mire	Wetland – Oceanic valley mire[1] (D2.1)	V.High
Floodplain mire	Wetland – Oceanic valley mire[1] (D2.1)	V.High
Bare peat	Wetland - Depressions on peat substrates (H7150)	V.High
Swamp	Wetland - Fens (upland and lowland)	V.High
Marginal and inundation	Wetland - Fens (upland and lowland)	V.High
Marginal and inundation	Wetland - Reedbeds	High
Marginal vegetation	Use the feature that it is within, i.e. River, Lake type etc.	
Inundation vegetation	Wetland - Reedbeds	High
Natural rock exposures and caves (Good quality)	Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Natural rock exposures and caves	Sparsely vegetated land - Other inland rock and scree	Medium
Inland cliff (High quality)	Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Inland cliff	Sparsely vegetated land - Other inland rock and scree	Medium
Acidic inland cliff	Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Basic inland cliff	Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Scree	Sparsely vegetated land - Inland rock outcrop and scree habitats	High

Acidic scree	Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Basic scree	Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Limestone pavement	Sparsely vegetated land - Limestone pavement	V.High
Other natural rock exposure	Sparsely vegetated land - Other inland rock and scree	Medium
Other acidic natural rock exposure	Sparsely vegetated land - Other inland rock and scree	Medium
Other basic rock exposure	Sparsely vegetated land - Other inland rock and scree	Medium
Artificial rock exposures	Sparsely vegetated land - Other inland rock and scree	Medium
Artificial rock exposures	Sparsely vegetated land - Other inland rock and scree	Medium
Artificial rock exposures	Sparsely vegetated land - Other inland rock and scree	Medium
Artificial rock exposures	Sparsely vegetated land - Other inland rock and scree	Medium
Artificial rock exposures	Sparsely vegetated land - Other inland rock and scree	Medium
Artificial rock exposures	Sparsely vegetated land - Other inland rock and scree	Medium
Quarry	Urban - Active sand pit quarry or open cast mine	Low
Spoil heap	Urban - Active sand pit quarry or open cast mine	Low
Mine	Urban - Active sand pit quarry or open cast mine	Low
Refuse tip	Urban - Artificial unvegetated, unsealed surface	V.Low
Cultivated/disturbed ground	Cropland - Cereal crops	Low
Arable	Select most appropriate habitat within the 'Cropland' broad habitat tybe	Low
Amenity grassland	Grassland - Modified grassland	Low
Ephemeral / short perennial	Sparsely vegetated land - Ruderal/ephemeral	Low
Introduced shrub	Urban - Introduced shrub	Low
Fence	Urban - Built linear features	V.Low
Wall	Urban - Built linear features	V.Low
Built-up areas	Urban - Developed land; sealed surface	V.Low
Caravans	Urban - Developed land; sealed surface	V.Low
Sea wall (artificial materials)	Urban - Developed land; sealed surface	V.Low
Buildings	Urban - Developed land; sealed surface	V.Low
Bare ground	Urban - Vacant or derelict land	Low
Bare ground	Urban - Bare ground	Low

The Biodiversity Metric 4.0 - Calculation Tool Technical Data

- Return to start page
- All area habitats
- Area habitat groups
- Multipliers
- Temporal multipliers
- Enhancement temporal multipliers
- Hedgerow data
- Watercourse data
- Condition data
- Phase 1 - metric habitat translation tool

Local Authority List	Application type
Adur and Worthing Borough Council	Householder planning consent
Adur District Council	Full planning consent;
Allerdale Borough Council	Hybrid planning consent
Amber Valley Borough Council	Outline planning consent
Arun District Council	Reserved Matters
Ashfield District Council	Listed building consent
Ashford Borough Council	Advertisement consent
Aylesbury Vale District Council	Lawful Development Certificate (LDC)
Babergh District Council	Prior notification
Barnsley Metropolitan Borough Council	Removal/variation of conditions
Barrow-in-Furness Borough Council	Approval of conditions
Basildon Borough Council	Consent under Tree Preservation Orders
Basingstoke and Deane Borough Council	Notification of proposed works to trees in conservation areas
Bassetlaw District Council	Application for non-material amendments
Bath and North East Somerset Council	Nationaly Significant Infrastructure Habitats (NSIP'S)
Bedford Borough Council	
Birmingham City Council	
Blaby District Council	
Blackburn with Darwen Borough Council	
Blackpool Borough Council	
Blaenau Gwent County Borough Council	
Bolsover District Council	
Bolton Metropolitan Borough Council	
Borough of Broxbourne	
Borough of Poole	
Boston Borough Council	
Bournemouth Borough Council	
Bracknell Forest Council	
Bradford Metropolitan District Council	
Braintree District Council	
Breckland District Council	
Brentwood Borough Council	
Bridgend County Borough Council	
Brighton and Hove City Council	
Bristol City Council	
Broadland District Council	
Bromsgrove District Council	
Broxtowe Borough Council	
Buckinghamshire County Council	
Burnley Borough Council	
Bury Metropolitan Borough Council	
Caerphilly County Borough Council	
Calderdale Metropolitan Borough Council	
Cambridge City Council	
Cambridgeshire County Council	

Habitat list
Cropland - Arable field margins cultivated annually
Cropland - Arable field margins game bird mix
Cropland - Arable field margins pollen and nectar
Cropland - Arable field margins tussocky
Cropland - Cereal crops
Cropland - Winter stubble
Cropland - Horticulture
Cropland - Intensive orchards
Cropland - Non-cereal crops
Cropland - Temporary grass and clover leys
Grassland - Traditional orchards
Grassland - Bracken
Grassland - Floodplain wetland mosaic and CFGM
Grassland - Lowland calcareous grassland
Grassland - Lowland dry acid grassland
Grassland - Lowland meadows
Grassland - Modified grassland
Grassland - Other lowland acid grassland
Grassland - Other neutral grassland
Grassland - Tall herb communities (H6430)
Grassland - Upland acid grassland
Grassland - Upland calcareous grassland
Grassland - Upland hay meadows
Heathland and shrub - Blackthorn scrub
Heathland and shrub - Bramble scrub
Heathland and shrub - Gorse scrub
Heathland and shrub - Hawthorn scrub
Heathland and shrub - Hazel scrub
Heathland and shrub - Lowland heathland
Heathland and shrub - Mixed scrub
Heathland and shrub - Mountain heaths and willow scrub
Heathland and shrub - Rhododendron scrub
Heathland and shrub - Dunes with sea buckthorn (H2160)
Heathland and shrub - Other sea buckthorn scrub
Heathland and shrub - Upland heathland
Lakes - Aquifer fed naturally fluctuating water bodies
Lakes - High alkalinity lakes
Lakes - Low alkalinity lakes
Lakes - Marl lakes
Lakes - Moderate alkalinity lakes
Lakes - Peat lakes
Lakes - Ponds (priority habitat)
Lakes - Ponds (non-priority habitat)
Lakes - Reservoirs
Lakes - Temporary lakes ponds and pools (H3170)

Cannock Chase District Council		Sparsely vegetated land - Calaminarian grasslands
Canterbury City Council		Sparsely vegetated land - Coastal sand dunes
Cardiff Council		Sparsely vegetated land - Coastal vegetated shingle
Carlisle City Council		Sparsely vegetated land - Ruderal/Ephemeral
Carmarthenshire County Council		Sparsely vegetated land - Inland rock outcrop and scree habitats
Castle Point Borough Council		Sparsely vegetated land - Limestone pavement
Central Bedfordshire Council		Sparsely vegetated land - Maritime cliff and slopes
Ceredigion County Council		Sparsely vegetated land - Other inland rock and scree
Charnwood Borough Council		Urban - Allotments
Chelmsford City Council		Lakes - Ornamental lake or pond
Cheltenham Borough Council		Urban - Artificial unvegetated, unsealed surface
Cherwell District Council		Urban - Bioswale
Cheshire East Council (Unitary)		Urban - Intensive green roof
Cheshire West and Chester Council		Urban - Built linear features
Chesterfield Borough Council		Urban - Cemeteries and churchyards
Chichester District Council		Urban - Developed land; sealed surface
Chiltern District Council		Urban - Other green roof
Chorley Council		Urban - Facade-bound green wall
Christchurch Borough Council		Urban - Ground based green wall
City of Lincoln Council		Urban - Ground level planters
City of London		Urban - Biodiverse green roof
City of York Council		Urban - Introduced shrub
Colchester Borough Council		Urban - Open mosaic habitats on previously developed land
Conwy County Borough Council		Urban - Rain garden
Copeland Borough Council		Urban - Actively worked sand pit quarry or open cast mine
Corby Borough Council		Individual trees - Urban tree
Cornwall Council (Unitary)		Urban - Sustainable drainage system
Cotswold District Council		Urban - Unvegetated garden
Coventry City Council		Urban - Vacant or derelict land
Craven District Council		Urban - Vegetated garden
Crawley Borough Council		Wetland - Blanket bog
Cumbria County Council		Wetland - Depressions on peat substrates (H7150)
Dacorum Council		Wetland - Fens (upland and lowland)
Darlington Borough Council		Wetland - Lowland raised bog
Dartford Borough Council		Wetland - Oceanic valley mire[1] (D2.1)
Daventry District Council		Wetland - Purple moor grass and rush pastures
Denbighshire County Council		Wetland - Reedbeds
Derby City Council		Wetland - Transition mires and quaking bogs (H7140)
Derbyshire County Council		Woodland and forest - Felled
Derbyshire Dales District Council		Woodland and forest - Lowland beech and yew woodland
Devon County Council		Woodland and forest - Lowland mixed deciduous woodland
Doncaster Metropolitan Borough Council		Woodland and forest - Native pine woodlands
Dorset County Council		Woodland and forest - Other coniferous woodland
Dover District Council		Woodland and forest - Other Scot's pine woodland
Dudley Metropolitan Borough Council		Woodland and forest - Other woodland; broadleaved
Durham County Council		Woodland and forest - Other woodland; mixed

East Cambridgeshire District Council		Woodland and forest - Upland birchwoods
East Devon District Council		Woodland and forest - Upland mixed ashwoods
East Dorset District Council		Woodland and forest - Upland oakwood
East Hampshire District Council		Woodland and forest - Wet woodland
East Hertfordshire District Council		Woodland and forest - Wood-pasture and parkland
East Lindsey District Council		Coastal lagoons - Coastal lagoons
East Northamptonshire Council		Rocky shore - High energy littoral rock
East Riding of Yorkshire Council		Rocky shore - High energy littoral rock - on peat, clay or chalk
East Staffordshire Borough Council		Rocky shore - Moderate energy littoral rock
East Sussex County Council		Rocky shore - Moderate energy littoral rock - on peat, clay or chalk
Eastbourne Borough Council		Rocky shore - Low energy littoral rock
Eastleigh Borough Council		Rocky shore - Low energy littoral rock - on peat, clay or chalk
Eden District Council		Rocky shore - Features of littoral rock
Elmbridge Borough Council		Rocky shore - Features of littoral rock - on peat, clay or chalk
Epping Forest District Council		Intertidal sediment - Littoral coarse sediment
Epsom and Ewell Borough Council		Intertidal sediment - Littoral mud
Erewash Borough Council		Intertidal sediment - Littoral mixed sediments
Essex County Council		Coastal saltmarsh - Saltmarshes and saline reedbeds
Exeter City Council		Intertidal sediment - Littoral seagrass
Fareham Borough Council		Intertidal sediment - Littoral seagrass on peat, clay or chalk
Fenland District Council		Intertidal sediment - Littoral biogenic reefs - Sabellaria
Flintshire County Council		Intertidal sediment - Features of littoral sediment
Forest Heath District Council		Intertidal sediment - Artificial littoral coarse sediment
Forest of Dean District Council		Intertidal sediment - Artificial littoral muddy sand
Fylde Borough Council		Intertidal sediment - Artificial littoral mixed sediments
Gateshead Metropolitan Borough Council		Intertidal sediment - Artificial littoral seagrass
Gedling Borough Council		Intertidal sediment - Artificial littoral biogenic reefs
Gloucester City Council		Individual trees - Rural tree
Gloucestershire County Council		0
Gosport Borough Council		0
Gravesham Borough Council		0
Great Yarmouth Borough Council		0
Guildford Borough Council		0
Gwynedd County Council		0
Halton Borough Council		0
Hambleton District Council		0
Hampshire County Council		0
Harborough District Council		0
Harlow Council		0
Harrogate Borough Council		0
Hart District Council		0
Hartlepool Borough Council		0
Hastings Borough Council		0
Havant Borough Council		0
Herefordshire Council		0
Hertfordshire County Council		0

Hertsmere Borough Council		0
High Peak Borough Council		0
Hinckley and Bosworth Borough Council		
Horsham District Council		
Huntingdonshire District Council		
Hyndburn Borough Council		
Ipswich Borough Council		
Isle of Anglesey County Council		
Isle of Wight Council		
Isles of Scilly		
Kent County Council		
Kettering Borough Council		
King's Lynn and West Norfolk Borough Council		
Kingston-upon-Hull City Council		
Kirklees Council		
Knowsley Metropolitan Borough Council		
Lancashire County Council		
Lancaster City Council		
Leeds City Council		
Leicester City Council		
Leicestershire County Council		
Lewes District Council		
Lichfield District Council		
Lincolnshire County Council		
Liverpool City Council		
London Borough of Barking and Dagenham		
London Borough of Barnet		
London Borough of Bexley		
London Borough of Brent		
London Borough of Bromley		
London Borough of Camden		
London Borough of Croydon		
London Borough of Ealing		
London Borough of Enfield		
London Borough of Hackney		
London Borough of Hammersmith & Fulham		
London Borough of Haringey		
London Borough of Harrow		
London Borough of Havering		
London Borough of Hillingdon		
London Borough of Hounslow		
London Borough of Islington		
London Borough of Lambeth		
London Borough of Lewisham		
London Borough of Merton		
London Borough of Newham		

London Borough of Redbridge
London Borough of Richmond upon Thames
London Borough of Southwark
London Borough of Sutton
London Borough of Tower Hamlets
London Borough of Waltham Forest
London Borough of Wandsworth
Luton Borough Council
Maidstone Borough Council
Maldon District Council
Malvern Hills District Council
Manchester City Council
Mansfield District Council
Medway Council
Melton Borough Council
Mendip District Council
Merthyr Tydfil County Borough Council
Mid Devon District Council
Mid Suffolk District Council
Mid Sussex District Council
Middlesbrough Borough Council
Milton Keynes
Mole Valley District Council
Monmouthshire County Council
Neath Port Talbot County Borough Council
New Forest District Council
Newark and Sherwood District Council
Newcastle-Under-Lyme District Council
Newport City Council
Newcastle-upon-Tyne City Council
Norfolk County Council
North Devon Council
North Dorset District Council
North East Derbyshire District Council
North East Lincolnshire Council
North Hertfordshire District Council
North Kesteven District Council
North Lincolnshire Council
North Norfolk District Council
North Somerset Council
North Tyneside Metropolitan Borough Council
North Warwickshire Borough Council
North West Leicestershire District Council
North Yorkshire County Council
Northampton Borough Council
Northamptonshire County Council

Northumberland Council
Norwich City Council
Nottingham City Council
Nottinghamshire County Council
Nuneaton and Bedworth Borough Council
Oadby and Wigston District Council
Oldham Metropolitan Borough Council
Oxford City Council
Oxfordshire County Council
Pembrokeshire County Council
Pendle Borough Council
Perth and Kinross Council
Peterborough City Council
Plymouth City Council
Portsmouth City Council
Powys County Council
Preston City Council
Purbeck District Council
Reading Borough Council
Redcar and Cleveland Council
Redditch Borough Council
Reigate & Banstead Borough Council
Rhondda Cynon Taf County Borough Council
Ribble Valley Borough Council
Richmondshire District Council
Rochdale Metropolitan Borough Council
Rochford District Council
Rossendale Borough Council
Rother District Council
Rotherham Metropolitan Borough Council
Royal Borough of Greenwich
Royal Borough of Kensington and Chelsea
Royal Borough of Kingston upon Thames
Royal Borough of Windsor and Maidenhead
Rugby Borough Council
Runnymede Borough Council
Rushcliffe Borough Council
Rushmoor Borough Council
Rutland County Council
Ryedale District Council
Salford City Council
Sandwell Metropolitan Borough Council
Scarborough Borough Council
Sedgemoor District Council
Sefton Metropolitan Borough Council
Selby District Council

Sevenoaks District Council
Sheffield City Council
Shepway District Council
Shropshire Council - Unitary
Slough Borough Council
Solihull Metropolitan Borough Council
Somerset County Council
South Buckinghamshire District Council
South Cambridgeshire District Council
South Derbyshire District Council
South Gloucestershire Council
South Hams District Council
South Holland District Council
South Kesteven District Council
South Lakeland District Council
South Norfolk District Council
South Northamptonshire Council
South Oxfordshire District Council
South Ribble Borough Council
South Somerset District Council
South Staffordshire Council
South Tyneside Council
Southampton City Council
Southend-on-Sea Borough Council
Spelthorne Borough Council
St Albans City and District Council
St Edmundsbury Borough Council
St Helens Metropolitan Borough Council
Stafford Borough Council
Staffordshire County Council
Staffordshire Moorlands District Council
Stevenage Borough Council
Stockport Metropolitan Borough Council
Stockton-on-Tees Borough Council
Stoke-on-Trent City Council
Strabane District Council
Stratford-on-Avon District Council
Stroud District Council
Suffolk Coastal District Council
Suffolk County Council
Sunderland City Council
Surrey County Council
Surrey Heath Borough Council
Swale Borough Council
Swansea City and Borough Council
Swindon Borough Council

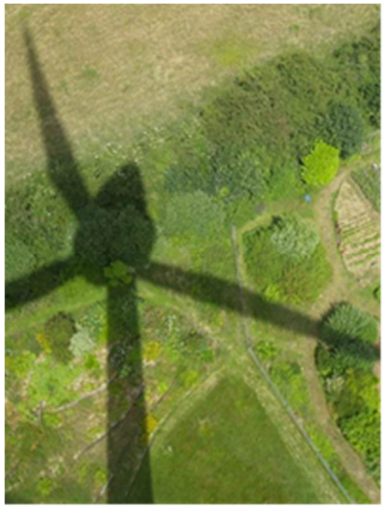
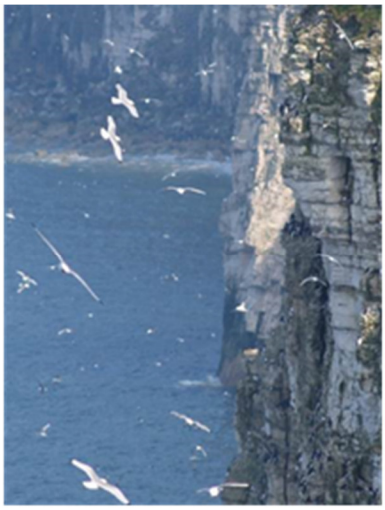
Tameside Metropolitan Borough Council
Tamworth Borough Council
Tandridge District Council
Taunton Deane Borough Council
Teignbridge District Council
Telford & Wrekin Council
Tendring District Council
Test Valley Borough Council
Tewkesbury Borough Council
Thanet District Council
Three Rivers District Council
Thurrock Council
Tonbridge and Malling Borough Council
Torbay Council
Torfaen County Borough Council
Torridge District Council
Trafford Metropolitan Borough Council
Tunbridge Wells Borough Council
Uttlesford District Council
Vale of Glamorgan Council
Vale of White Horse District Council
Wakefield Metropolitan District Council
Walsall Metropolitan Borough Council
Warrington Borough Council
Warwick District Council
Warwickshire County Council
Watford Borough Council
Waveney District Council
Waverley Borough Council
Wealden District Council
Wellingborough Borough Council
Welwyn Hatfield Council
West Berkshire Council
West Devon Borough Council
West Dorset District Council
West Lancashire Borough Council
West Lindsey District Council
West Oxfordshire District Council
West Somerset District Council
West Sussex County Council
Westminster City Council
Weymouth and Portland Borough Council
Wigan Metropolitan Borough Council
Wiltshire Council
Winchester City Council
Wirral Council

Woking Borough Council	
Wokingham Borough Council	
Wolverhampton City Council	
Worcester City Council	
Worcestershire County Council	
Wrexham County Borough Council	
Wychavon District Council	
Wycombe District Council	
Wyre Council	
Wyre Forest District Council	

Annex 2

River Condition Assessment

Thomson
environmental
consultants

River Condition Assessment

Gatwick Airport

For

RPS Ltd

Project No.: RPS001-022-001

February 2023

www.thomsonec.com

London & South East
Compass House
Surrey Research Park
Guildford
GU2 7AG . UK
t: +44 (0)1483 466 000

North & Borders
The Tannery
91 Kirkstall Road
Leeds
LS3 1HS. UK
t: +44 (0)113 247 3780

Wales & South West
Sophia House
28 Cathedral Road
Cardiff
CF11 9LJ UK
t: +44 (0) 2920 660180

Midlands
Edmund House
12-22 Newhall Street
Birmingham
B3 3AS
t: +44 (0) 121 726 3494

Enquiries

e: enquiries@thomsonec.com

w: www.thomsonec.com

ISO 9001:2015 UKAS MANAGEMENT SYSTEMS Member of SN Registrars (Holdings) Ltd 8327

ISO 14001:2015 UKAS MANAGEMENT SYSTEMS Member of SN Registrars (Holdings) Ltd 8327

Project Number	Report No.
RPS001-022-001	001

Revision No.	Date of Issue	Author	Reviewer	Approver
001		Alex Charlesworth	Joe Salkeld	Tessa Harding

Disclaimer:

Copyright Thomson Environmental Consultants Limited. All rights reserved.

No part of this report may be copied or reproduced by any means without prior written permission from Thomson Environmental Consultants Limited. If you have received this report in error, please destroy all copies in your possession or control and notify Thomson Environmental Consultants Limited.

This report has been prepared for the exclusive use of the commissioning party and unless otherwise agreed in writing by Thomson Environmental Consultants Limited, no other party may use, make use of or rely on the contents of the report. No liability is accepted by Thomson Environmental Consultants Limited for any use of this report, other than for the purposes for which it was originally prepared and provided.

Opinions and information provided in the report are on the basis of Thomson Environmental Consultants Limited using due skill, care and diligence in the preparation of the same and no explicit warranty is provided as to their accuracy. It should be noted and it is expressly stated that no independent verification of any of the documents or information supplied to Thomson Environmental Consultants Limited has been made.

Contents

1. Summary and Main Recommendations 6
1.1 Summary 6
1.2 Main Recommendations 6
2. Introduction 11
2.1 Development Background 11
2.2 Ecology Background 11
2.3 The Brief and Objectives 12
2.4 Limitations 12
2.5 Surveyors 12
3. Methodology 13
3.1 Modular River Physical Habitat (MoRPH) Survey 13
3.2 River Type Assessment 16
3.3 River Condition Assessment 17
4. Results 20
4.1 River Mole MoRPH 5 Survey 20
4.2 River Mole River Type Assessment 21
4.3 River Mole River Condition Assessment 21
4.4 Gatwick Stream MoRPH 5 Survey 21
4.5 Gatwick Stream River Type Assessment 24
4.6 Gatwick Stream River Condition Assessment 24
4.7 Baseline River Units 24
5. Legal and Planning Policy Considerations 27
6. Conclusions and recommendations 28
6.1 Conclusions 28
6.2 Recommendations 28
7. References 30
Appendix 1 MoRPH Results 31

Table 1: River module lengths for MoRPH surveys for a typical river width 13
Table 2: Abundance scale used in MoRPH surveys 14
Table 3: Likely best and worst preliminary condition scores for each river type, and lower condition score threshold values. 19
Table 4: General information recorded for River Mole 20
Table 5: General information recorded for Gatwick Stream 23
Table 6: River Condition Assessment for River Mole and Gatwick Stream 25
Table 7: Baseline River Units 26
Table 8: Bank top/floodplain data recorded for each module River Mole 31

Table 9: Bank face/channel margin data recorded for each module River Mole 33
Table 10: Channel bed data recorded for each module River Mole 36
Table 11: Bank top/floodplain data recorded for each module Gatwick Stream 41
Table 12: Bank face/channel margin data recorded for each module, Gatwick Stream 44
Table 13: Channel bed data recorded for each module, Gatwick Stream 47

Figure 1 Site Location 8
Figure 2 Location of Modules 9
Figure 3 Photographs of the Site 10

1. Summary and Main Recommendations

1.1 Summary

1.1.1 Two watercourses, the River Mole and Gatwick Stream will be directly affected by proposals to expand operations at Gatwick airport. The scheme includes the creation of new flood attenuation areas within the River Mole flood plain to the north west of the airport and widening of the existing road crossings of the A23 London Road and Brighton Road over the River Mole. A new discharge point into the Gatwick Brook and discharge of treated effluent from a proposed new water treatment plant.

1.1.2 In line with future legislation and current planning policy, the development will be required to demonstrate that the proposals achieve biodiversity net gain, which includes a net gain for the river habitat on site. Thomson Environmental Consultants was commissioned to undertake a River Condition Assessment of the site comprising a Modular River Physical Habitat (MoRPH) survey and River Type Assessment.

1.1.3 The study area encompasses a 1.3km stretch of the River Mole south of Brockley Wood and a 1.5km stretch of the Gatwick Stream that runs through Riverside Park, Crawley.

1.1.4 The River Mole is assessed as a “Type H” river (i.e. a straight to sinuous river with sand/gravel substrate) in moderate condition with a score 0.62. This provides 1.84 river units per 100m. The Gatwick Stream is assessed as a “Type F” river (i.e. a straight to sinuous river with gravel/cobble substrate) in fairly poor condition with a score -0.16. This provides 1.38 river units per 100m.

1.1.5 Using the river condition assessment methodology it was determined that River Mole and Gatwick Stream will contribute 1.84 and 1.38 baseline river units respectively to the overall Biodiversity Net Gain site baseline calculation. The suggested action in the Biodiversity Metric 3.1 for increasing the score is to restore the existing channel.

1.1.6 The proposed expansion of Gatwick Airport will include re-meandering of an approximately 300m section of the River Mole immediately downstream of the runway culvert. This offers the opportunity to increase the river condition score for the River Mole thereby increasing the number of BNG units in the post development scenario.

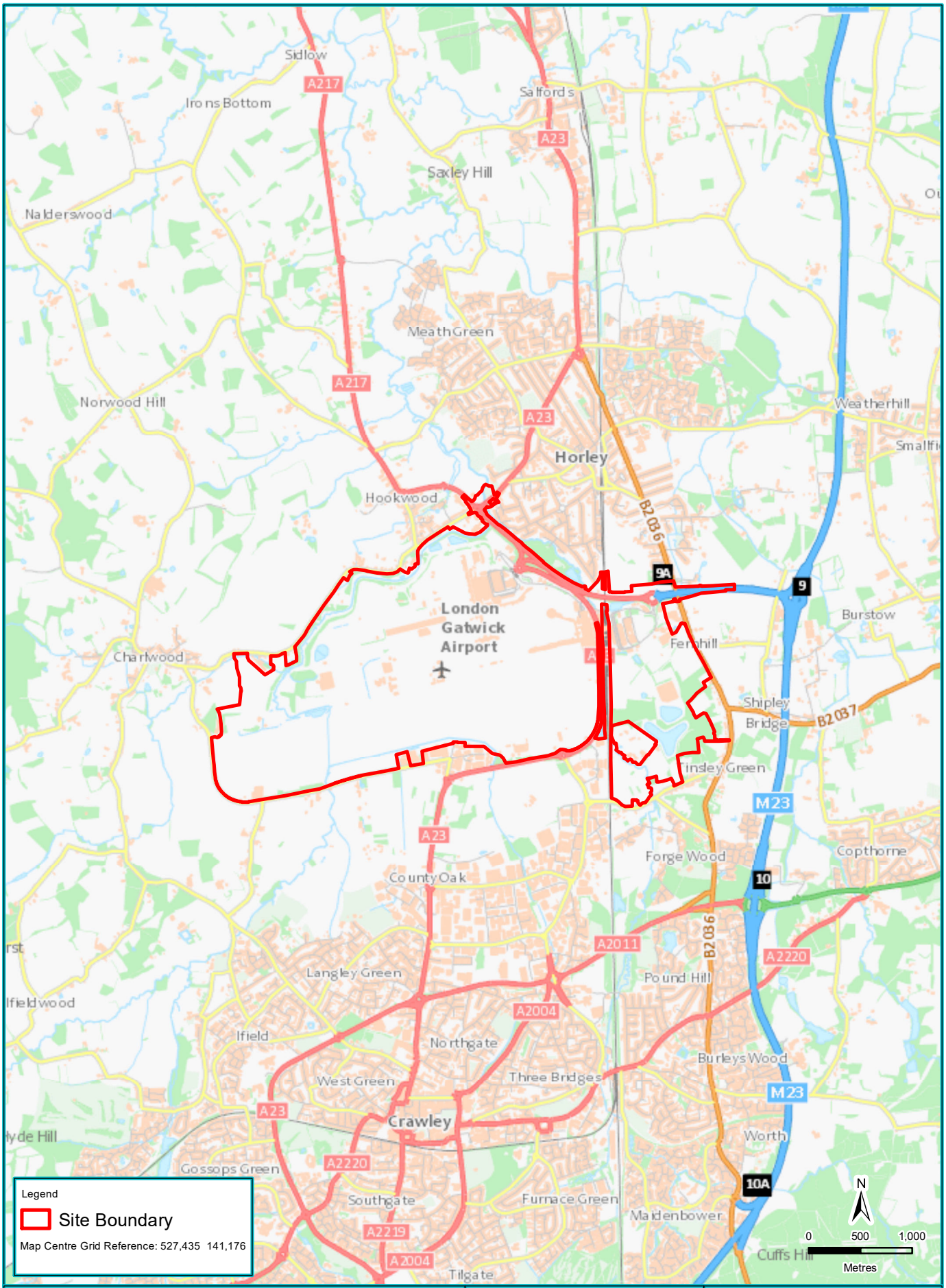
1.2 Main Recommendations

1.2.1 The design of the re-meandered section of the River Mole should aim to increase the number of positive indicators, such as by maximising the hydraulic diversity of the channel. Reducing the extent of invasive non-native species on the bank top and bank faces of the existing channel downstream of the diversion will help to reduce the number of negative indicators.

1.2.2 The following additional actions are suggested to increase the river units:

- Reduction in managed ground cover on bank tops around Gatwick Stream

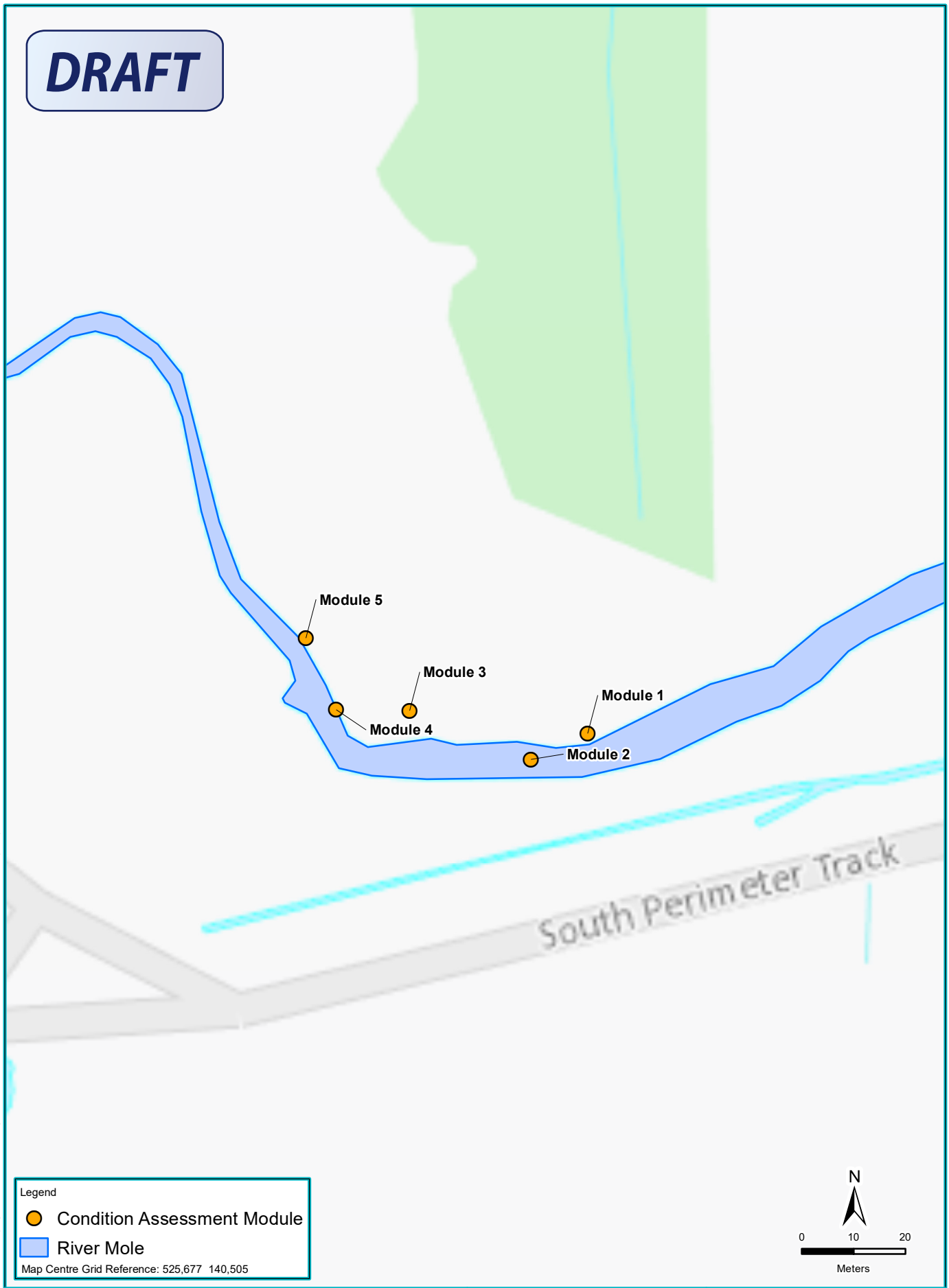
- Reduction of artificial bank reinforcement on the Gatwick Stream
- Re-naturalise the bank profile of the River Mole
- Reduce siltation in both rivers using nature-based solutions.
- Post MoRPH assessment following completion of diversion design.



Client	RPS Ltd	Drawing Ref	RPS001-022/402162/1
Figure Number	1	Scale at A4	1:50,000
Figure Title	Site Location	Drawn: AS	Checked: JB
		Date: 20/02/2023	Date: 20/02/2023

Thomson environmental consultants
www.thomsonec.com
enquiries@thomsonec.com

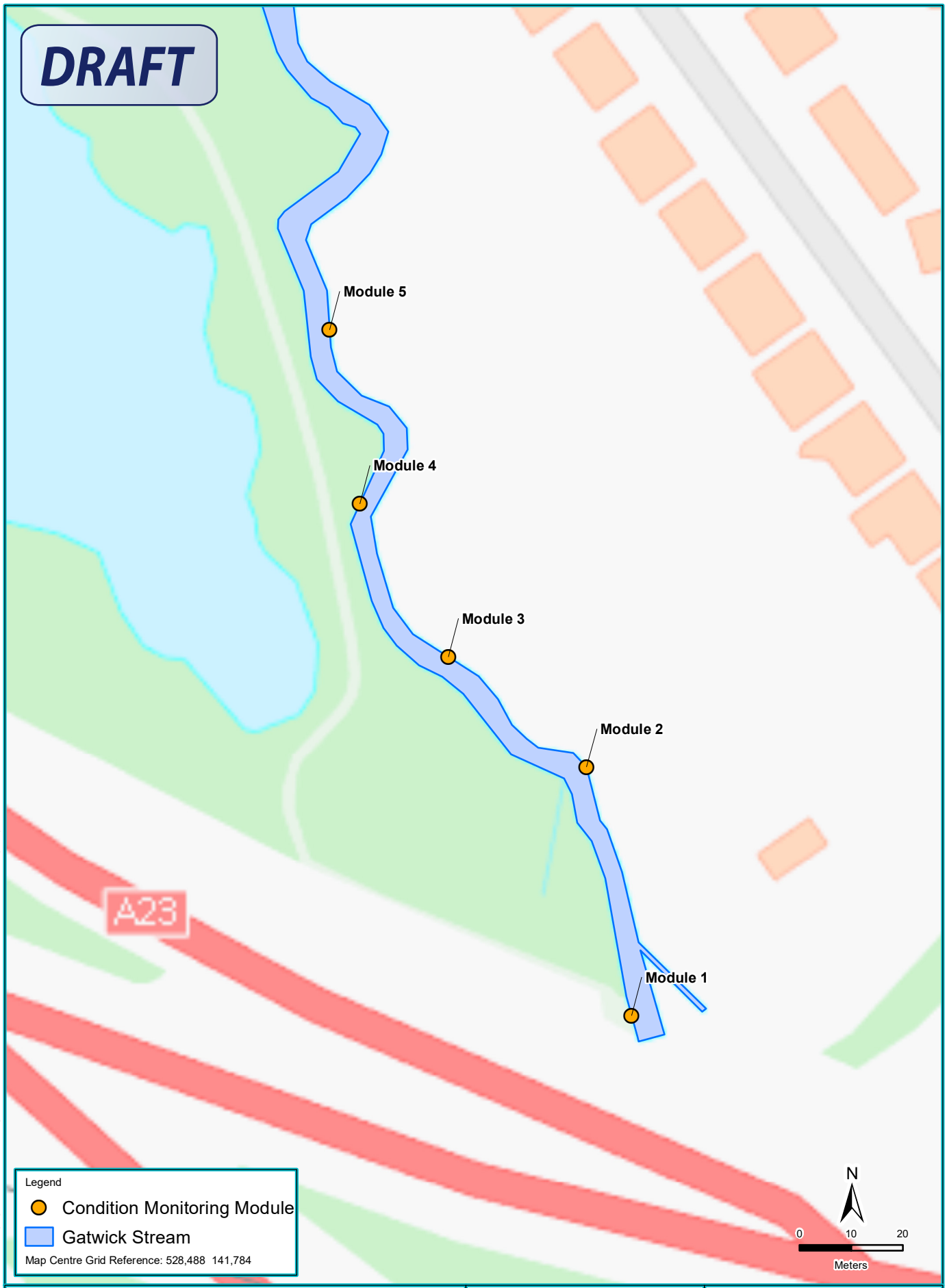
Filepath: R:\Water Ecology\RPS001-022_1 - Aquatic surveys at Gatwick Airport\Mapping\Working\RPS001_022_Fig1_SiteLocation_AS_200223.mxd
Contains Ordnance Survey data © Crown copyright and database right 2023. This map must not be copied or reproduced by any means without prior written permission from Thomson Ecology Ltd.



Client: RPS Consulting Services Ltd.		Drawing Ref: RPS001-022/401995/1	
Figure Number: 2a		Scale at A4: 1:1,000	
Figure Title: River Condition Assessment (River Mole)		Drawn: SC	Checked: AS
		Date: 25/01/2023	Date: 25/01/2023

Thomson environmental consultants
www.thomsonec.com
enquiries@thomsonec.com

Filepath: R:\Live Projects\Water Ecology\RPS001-022_1 - Aquatic surveys at Gatwick Airport\Mapping\Working\RPS001_022_Fig2a_RiverMoleCondition_SC_240123.mxd
Contains Ordnance Survey data © Crown copyright and database right 2023. This map must not be copied or reproduced by any means without prior written permission from Thomson Environmental Consultants.



Client: RPS Consulting Services Ltd.		Drawing Ref: RPS001-022/401996/1	
Figure Number: 2b		Scale at A4: 1:1,000	
Figure Title: River Condition Assessment (Gatwick Stream)		Drawn: SC	Checked: AS
		Date: 25/01/2023	Date: 25/01/2023

Thomson environmental consultants
www.thomsonec.com
enquiries@thomsonec.com

Filepath: R:\Live Projects\Water Ecology\RPS001-022_1 - Aquatic surveys at Gatwick Airport\Mapping\Working\RPS001_022_Fig2b_GatwickStreamCondition_SC_250123.mxd
Contains Ordnance Survey data © Crown copyright and database right 2023. This map must not be copied or reproduced by any means without prior written permission from Thomson Environmental Consultants.

Photograph 1:
Module 1

Photograph 2:
Module 2

Photograph 3:
Module 3

Photograph 4:
Module 4

Photograph 5:
Module 5

Client: RPS Consulting Services Ltd	Drawing Ref: RPS001-022-001/003/1	Thomson environmental consultants
Figure Number: Figure 3a	Drawn: LG / Checked: JS	www.thomsonec.com enquiries@thomsonec.com
Figure Title: Photographs of Gatwick Stream	Date: 27/06/2022	

Photograph 1:
Module 1

Photograph 2:
Module 2

Photograph 3:
Module 3

Photograph 4:
Module 4

Photograph 5:
Module 5

Client: RPS Consulting Services Ltd	Drawing Ref: RPS001-022-001/003/1		Thomson environmental consultants
Figure Number: Figure 3b	Drawn: LG	Checked: JS	www.thomsonec.com enquiries@thomsonec.com
Figure Title: Photographs of River Mole	Date: 27/06/2022		

2. Introduction

2.1 Development Background

2.1.1 Two watercourses, the River Mole and Gatwick Stream will be directly affected by proposals to expand operations at Gatwick airport. The project proposes alterations to the existing northern runway, and development of a range of infrastructure and facilities to increase passenger numbers and aircraft movements. Specifically in relation to the watercourses the proposal includes:

- Creation of additional flood storage to the west of Gatwick Airport within the flood plain of the River Mole;
- Widening of the existing road crossings of the River Mole under the A23 Brighton Road and A23 London Road;
- Lengthening of the River Mole culvert beneath the northern runway;
- Construction of a new discharge point into the Gatwick Brook and discharge of treated effluent from a proposed new water treatment plant;
- An existing straightened section of the River Mole immediately north of the airport will be re-meandered.

2.1.1 The proposals described above are hereafter referred to collectively as “the proposed development”.

2.1.2 A 1.3km stretch of the River Mole south of Brockley Wood (TQ 25703 40486) will be affected by the creation of the additional flood storage and the river diversion. The flood storage area in Museum Field to the west of Gatwick Airport will connect to the River Mole via a new channel resulting in some loss of bank habitat. The new re-meandered section of the River Mole will be created off line and will not result in habitat loss from the existing channel with the exception of short sections of bank lowering at the up and downstream connection points. The re-meandered section is thus considered an enhancement.

2.1.3 The Gatwick Stream will be affected by the creation of an outfall from a new water treatment works treating run-off from the airport runways and aprons. The survey was undertaken on the reach of the Gatwick Stream which runs through Riverside Park (grid reference TQ 28507 41727).

2.2 Ecology Background

2.2.1 Macroinvertebrate and fish surveys were undertaken on both watercourses by Thomson Environmental Consultants in 2020. In addition to repeating fish and macroinvertebrate surveys RPS Ltd have requested that that a river condition assessment is undertaken to inform the biodiversity net gain assessment (BNG) relating to the riparian habitats bordering the site.

2.3 The Brief and Objectives

2.3.1 RPS Ltd commissioned Thomson Environmental Consultants on 22nd June 2022 to carry out a River Condition Assessment of the river on site. The brief was to:

- Carry out a Modular River Physical Habitat (MoRPH 5) Survey of the watercourses on site. Following the survey, use the data collected along with desk-based information (River Type Assessment) to undertake a River Condition Assessment (RCA). These will be undertaken by an accredited MoRPH surveyor.
- Provide a report detailing the methods and results of the MoRPH 5 survey and RCA. The report will include a discussion of the results in relation to the development proposals, including any legal implications and how these may be overcome, and recommendations for any remedial actions that should be undertaken.

2.4 Limitations

2.4.1 The reach of the Gatwick Stream surveyed for the river condition assessment lies downstream approximately 1.5km downstream of the connection point due to access constraints. However, due to the homogenous nature of the reach this is not considered to be a significant limitation to the results of the river condition assessment.

2.4.2 The Biodiversity Net Gain Metric 3.0 calculations are based on the development proposals to Thomson on 14th November 2022. Subsequent changes to the development proposals are likely to result in a requirement to recalculate the biodiversity units for the post-development condition.

2.5 Surveyors

2.5.1 The survey was carried out on 27th June 2022 by Aquatic Consultant, Alex Charlesworth MSc BSc (hons). Alex is a trained and accredited MoRPH surveyor.

3. Methodology

3.1 Modular River Physical Habitat (MoRPH) Survey

3.1.1 MoRPH is a survey technique which provides a sample of the physical character of the river reach within which it is located. Five contiguous MoRPH modules are combined to produce a MoRPH5 survey to record vegetation, sediment and morphological characteristics of short sub-reaches.

3.1.2 The length of modules used in MoRPH surveys vary with rivers of different sizes. The MoRPH River width is measured at a typical cross section within the sub-reach. The MoRPH River width is defined as the width of the water and any bare sediments, bars and areas of emergent aquatic plants at the water's edge. A single typical MoRPH river width, was selected to apply across all modules to ensure that all MoRPH modules were the same length. The appropriate module length for different sized rivers is given in Table 1.

Table 1: River module lengths for MoRPH surveys for a typical river width

MoRPH river width	Module length
<5m	10m
5 to <10m	20m
10 to <20m	30m
20 to <30m	40m
≥ 30m (or where channel bed is not visible)	50m

3.1.3 The MoRPH module survey is designed to characterise the river channel, banks (or generally steeper areas next to the active channel) and immediate bank tops (adjacent flatter areas) up to 10 m from the bank top edge. A 10 m distance from the bank top edge is chosen to enclose features (particularly vegetation) on the bank top that may provide habitat for river organisms or may act as a pressure on the river ecosystem.

3.1.4 For each river module, general information on the river was recorded, followed by the physical features and vegetation properties (both natural and human-modified) for each of the following:

- Bank top/floodplain (within 10 m of the bank top edge);
- Bank faces and channel edges; and
- Channel bed.

3.1.5 Where abundances were recorded the following scale was used, as shown in Table 2.

Table 2: Abundance scale used in MoRPH surveys

Scale	Percent cover
Absent (A)	0%
Trace (T)	<5%
Present (P)	5 - 33%
Extensive (E)	>33%

3.1.6 All data was collected following The MoRPH Survey Technical Reference Manual (Modular River Survey; 2020). Survey data was collected using the Modular River Surveys online survey forms and uploaded to the Thomson Environmental Consultants' Modular River Survey Cartographer workspace.

General Information

3.1.7 For each module the general information detailed below was recorded:

- River name
- Reach name
- Sub-reach name
- Module number
- Module length
- Grid reference - midpoint
- MoRPH river width (m)
- Bankfull width (m)
- Left bank height (m)
- Right bank height (m)
- Water width (m)
- Water depth (m)

Bank top/floodplain

3.1.8 For each module the following was recorded for the bank top/floodplain:

- Dominant and sub-dominant artificial ground cover[1] (type and abundance) for the left and right bank;
- Abundance of terrestrial vegetation types[2] on the left and right bank;
- Non-native invasive plant species (type and abundance) on the left and right bank; and
- Bank top water related features[3] (type and abundance) on the left and right bank.

Bank face/channel margin

3.1.9 For each module the following was recorded for the bank face and channel margin:

- Dominant and sub-dominant bank profile[4] (type and abundance) for the left and right bank;
- Sediment type[5] for the top 2/3 and bottom 1/3 of the bank face for the left and right bank;
- Extent (vertical and horizontal) of bank face reinforcement for the left and right banks;
- Dominant and sub-dominant bank reinforcement type[6];
- Natural physical features[7] (type, abundance and sediment size[8]) for the left and right banks;
- Artificial physical features[9] for the left and right banks;
- Abundance of terrestrial vegetation[10] on the bank face for the left and right banks;
- Abundance of aquatic vegetation[11] at the bank-water margin for the left and right banks; and
- Non-native invasive plant species (type and abundance) on the left and right bank faces.

---

[1] Pedestrianised footpath, transport infrastructure, buildings (commercial/industrial), buildings (residential), storage area, landfill area, arable agriculture/allotments, permanently vegetated agriculture, permanently vegetated recreation, plantation woodland, open water.
[2] Unvegetated (bare soil/rock), mosses/lichens, short/creeping herbs/grasses, tall herbs/grasses, scrub/shrubs, saplings/trees, fallen trees, leaning trees, j-shaped trees, tree/shrub branches tailing into channel, large wood, predominant tree type
[3] Pond – disconnected from river, pond – connected to river, side channel, wetland – short non-woody vegetation, wetland – tall non-woody vegetation, wetland – shrubs and trees.
[4] Vertical, vertical with overhang, undercut or vertical with undercut, vertical with toe, steep (>45º), gentle (<45º), composite, reshaped, artificial two-stage, embanked, set-bank embankment, poached bank
[5] Artificial, bedrock, boulder, cobble, gravel-pebble, sand, silt, clay, organic, peat, earth, not visible
[6] Concrete, concrete and brick, blocks or stone, brick/ laid stone/ block, sheet piling, wood piling, builders waste, rip-rap, gabions, willow spiling/faggot bundles, planted reeds, biotex/coir, washed out
[7] Bare unvegetated side bar, vegetated side bar, berm, bench, stable cliff, eroding cliff, toe, nest hole or animal burrows, marginal backwater, tributary junction/confluence (count)
[8] Unvegetated/vegetated side bar only
[9] Pipes/outfalls (count), Jetty/Deflector (major, intermediate, minor, absent
[10] Unvegetated (bare soil/rock), mosses/lichens, short/creeping herbs/grasses, tall herbs/grasses, scrub/shrubs, saplings/trees, fallen trees, leaning trees, j-shaped trees, tree/shrub branches tailing into channel, large wood, exposed tree roots, discrete organic accumulation
[11] Liverworts, mosses and lichens, emergent broad-leaved, emergent linear-leaved (inc. horsetails), amphibious, filamentous algae

Channel bed

3.1.10 For each module the following was recorded for the channel bed:

- Channel bed sediment size[12] (type and abundance);
- Channel bed reinforcement (extent and dominant/sub-dominant type[13]);
- Water surface flow patterns[14] (type and abundance);
- Channel bed natural physical features[15] (type and abundance);
- Channel bed artificial features[16] (type and abundance);
- Vegetation within the wetted channel[17] (type and abundance);
- Vegetation interacting with the wetted channel[18] (type and abundance); and
- Non-native invasive plant species (type and abundance).

3.2 River Type Assessment

3.2.1 The river reach was allocated to one of 13 river types (A to M). The 13 river types are defined primarily by their planform (e.g. straight, meandering or braided) and bed material, supported by the degree to which they are confined by their valley and also the valley gradient. The 13 types represent the range of near-natural river types likely to be encountered in England.

3.2.2 For the purposes of MoRPH rivers greater than 20m wide are considered to be 'large rivers' and are not surveyed using the methodology since it is considered that they will be too deep for their bed material to be assessed accurately. Canals and navigable rivers are also excluded since their modified nature prevents the assignment of an indicative 'near natural' type (Gurnell et al., 2020).

3.2.3 The river type for the reach within which the site is located was determined using an extended reach. The reach selected for analysis was long enough to determine its type robustly and was a

[12] Bedrock, boulder, cobble, gravel-pebble, sand, silt, clay, organic, peat, silt overlying coarser sediments (continuous or patchy).
[13] Concrete, concrete and brick, blocks or stone, brick/ laid stone/ block, sheet piling, wood piling, builders waste, rip-rap, gabions, willow spiling/faggot bundles, planted reeds, biotex/coir, washed out
[14] Free fall, chute, broken standing waves, unbroken standing waves, upwelling, rippled, smooth, no perceptible flow, dry
[15] Exposed bedrock, exposed unvegetated boulders/rocks, exposed vegetated boulders/rocks, unvegetated mid channel bar, vegetated mid channel bar, island, cascade, pool (count), riffle (count), step (count), waterfall (count)
[16] Large trash, weir (major, intermediate, minor - as count), bridge piers (count), bridge shadow (wide, intermediate, narrow), culvert (count)
[17] Unvegetated, liverworts, mosses, lichens, emergent broad-leaved, emergent linear-leaved, floating leaved (rooted), free floating, amphibious, submerged broad-leaved, submerged linear-leaved, submerged fine-leaved, filamentous algae, channel choked with plants (Y/N)
[18] Vegetation shading the channel, submerged tree roots, trees, shrubs, saplings growing on river bed, large wood in channel, organic material, large wood dam (count), fallen trees (count)

length which broadly showed a similar width and planform along its length and did not include large structures (dams) or large tributaries.

3.2.4 For rivers which will be one of the A – M river types the following information was recorded using maps and aerial images:

- A1 - Braiding index (BI)[19]
- A2 - Sinuosity index (SI)[20]
- A3 - Anabranching index (AI)[21]
- A4 - Level of confinement[22] (U, PC, C)[23]
- A5 - Valley gradient[24]
- A6 - Bedrock[25]
- A7 - Coarsest bed material size class[26]
- A8 - Average alluvial bed material size class[27]

3.2.5 The results for the values of each of the above indicators were entered into the Thomson EC workspace on the Cartographer data base and an indicative river type was generated.

3.3 River Condition Assessment

3.3.1 The river condition was assessed using 32 condition indicators that are automatically extracted from the MoRPH5 field surveys. Each river condition indicator was assigned a score of 0 to +4 (positive indicators[28]), or 0 to -4 (negative indicators[29]). Positive indicators represent diversity

[19] Average number of distinct flowing threads counted across 10 equally-spaced cross-sections of the river corridor. Reaches may be single thread (BI $\leq$1.1) or multithread (BI >1.1)
[20] For single thread rivers (BI $\leq$1.1). The ratio of the river reach length along the centre line divided by the length of the broad river or valley course. Reaches may be straight-sinuous (SI <1.5), or meandering (SI $\geq$1.5)
[21] Average number of distinct flowing channels separated by islands, counted across 10 equally-sapaced cross-sections.
[22] Proportion of the river reach's bank length that is in contact with the valley side slopes or ancient terraces.
[23] U = unconfined - <10% total river bank in contact, PC = partly confined 10 – 90% contact, C = confined - >90% contact.
[24] Difference in elevation between the start and end of the river reach divided by the length of the broad valley course.
[25] Recorded where bedrock is observed as 'extensive' (i.e. >33% cover) in at least 3 survey modules or is 'extensive' in 2 modules and 'present' (i.e. 5 to 33% cover) in the remaining 3 modules of the subreach.
[26] records the coarsest bed material size class that is observed as present or extensive in any module in the subreach.
[27] weighted average of the alluvial bed material size classes (i.e. excludes bedrock) recorded as present or extensive in all 5 modules within the subreach
[28] Bank top vegetation structure, bank top tree feature richness, bank top water related features, bank face riparian vegetation structure, bank face tree feature richness, bank face natural bank profile extent, bank face natural bank profile richness, bank face natural material richness, bank face bare sediment extent, channel margin aquatic vegetation extent, channel margin aquatic morphotype richness, channel margin physical feature extent, channel margin physical feature richness, channel aquatic morphotype richness, channel bed tree features richness, channel bed hydraulic features richness, channel bed natural features extent, channel bed natural features richness, channel bed material richness.
[29] Bank top NNIPS cover, Bank top managed ground cover, Bank face artificial bank profile extent, bank face reinforcement extent, bank face reinforcement material severity, bank face NNIPS cover, channel margin artificial

(richness) and abundance (extent) of physical habitats offered by vegetation, sediment, vegetation-sediment-related physical features and hydraulic habitats. Negative indicators represent the extent and severity of local human interventions or pressures.

3.3.2 The Preliminary Condition Score for each MoRPH5 sub-reach was calculated as the sum of the average of the positive condition indicator scores and the average of the negative condition indicator scores for the sub-reach.

3.3.3 The preliminary condition score for a MoRPH5 sub-reach is translated into a final condition score (5-Good, 4-Fairly Good, 3-Moderate, 2-Fairly Poor, 1-Poor) according to the river type under consideration. The boundaries for assigning a final condition score or class, based on the numerical preliminary condition scores are presented in Table 3. For example, a Type A river scoring 1.9 or above would be classed as 'Good'. A Type B river would need to score >2.2 to be classed as Good.

3.3.4 Once the score or class has been assigned the Biodiversity Metric 3.1 (Natural England, undated) calculator is used to derive the baseline river units, which contribute to the overall Biodiversity Net Gain for the site. The information used to derive the baseline river units is presented in Table 7. In addition to the river condition score, it includes habitat distinctiveness based on whether it is a priority habitat under Section 41 of the Natural Environment and Rural Communities Act 2006; its strategic significance, based on whether it is a main river in the river basin management plan; and whether the development will result in encroachment into the watercourse or riparian zone.

features, channel bed siltation, channel bed reinforcement extent, channel bed reinforcement severity, channel bed artificial features severity, channel bed NNIPS extent, channel bed filamentous algae extent

Table 3: Likely best and worst preliminary condition scores for each river type, and lower condition score threshold values.

River type	Canals / navigable	Large	A	B	C	D	E	F	G	H	I	J	K	L	M
Likely best average condition score	1.8	2.5	2.4	2.7	2.7	2.7	2.7	2.8	3.0	2.9	3.1	2.8	2.4	2.4	2.4
Lower threshold for 'Good'	>1.4	>2.0	>1.9	>2.2	>2.2	>2.2	>2.2	>2.3	>2.5	>2.4	>2.5	>2.3	>1.9	>1.9	>1.9
Lower threshold for 'Fairly Good'	>0.7	>1.3	>1.2	>1.4	>1.4	>1.4	>1.4	>1.5	>1.6	>1.6	>1.7	>1.5	>1.2	>1.2	>1.2
Lower threshold for 'Moderate'	>-0.1	>0.3	>0.2	>0.2	>0.2	>0.2	>0.2	>0.4	>0.5	>0.5	>0.6	>0.4	>0.2	>0.2	>0.2
Lower threshold for 'Fairly Poor'	>-1.2	>-1.0	>-1.0	>-0.9	>-0.9	>-0.9	>-0.9	>-0.9	>-0.9	>-0.9	>-0.8	>-0.9	>-1.0	>-1.0	>-1.0
Likely worst average condition score	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5

4. Results

4.1 River Mole MoRPH 5 Survey

4.1.1 The results of the MoRPH 5 surveys for the River Mole are presented in Appendix 1 (Tables 8 to 10). The locations of the modules surveyed are shown on Figure 2a and photographs on Figure 3.

4.1.2 The general information recorded for each module is shown in Table 4 below.

Table 4: General information recorded for River Mole

Module name and location					
River name	River Mole				
Location/Reach name	River Mole South of Brockley Wood				
Sub-reach name (used to reference a sub-reach of contiguous modules)	1				
Module length (m)	20m				
Grid reference - midpoint	TQ 25701 40490	TQ 25690 40483	TQ 25667 40492	TQ 25652 40492	TQ 25647 40505
River channel dimensions	**1**	**2**	**3**	**4**	**5**
MoRPH river width (m)	9	9	9	8	8
Bankfull width (m)	15	15	10	10	10
Left bank height (m)	0.85	0.85	0.2	0.3	0.2
Right bank height (m)	2	2	3	1.5	1.5
Water width (m)	9	9	9	8	8
Water depth (m)	1	1	1	1	1

4.1.3 The River Mole varies between 8 and 9m wide in the section surveyed and therefore does not qualify as a large river so can have a "Type Assessment" carried out. Both banks are relatively natural with no artificial ground cover recorded. A range of terrestrial vegetation was recorded along the survey section. An artificial bank face was recorded in only one module, comprising a two stage channel on the right bank in module 4. The invasive non-native species Himalayan balsam (*Impatiens glandulifera*) was recorded as 'extensive' on the left bank face in module 5 and, given that this is the most downstream module, is also likely present downstream of the survey section. The channel bed substrate ranged from gravel to silt with sand the predominant substrate.

4.2 River Mole River Type Assessment

4.2.1 The River Mole river type for the extended reach in which the site is located was assessed to be a "Type H" river . Type H is defined as 'a straight to sinuous river with sand/gravel substrate'.

4.3 River Mole River Condition Assessment

4.3.1 The full results of the RCA for each indicator type are presented in Table 6.

4.3.2 The preliminary RCA score was **0.62 (**Table 6**)**. As per Table 3 this gives a final river condition score for a Type H River of **Moderate.** The lower threshold for Fairly Good condition for Type H is 1.6.

4.3.3 Negative indicators recorded which affected the condition score include:

- The presence of non-native invasive plant species on the bank top and bank face; and
- Extent of artificial bank faces.

4.4 Gatwick Stream MoRPH 5 Survey

4.4.1 The results of the MoRPH 5 surveys for the Gatwick Stream are presented in Appendix 1 Tables 11 to 13. The locations of the modules surveyed are shown on Figure 2b and photographs on Figure 3.

The general information recorded for each module is shown in

4.4.2 Table 5.

Table 5: General information recorded for Gatwick Stream

Module name and location					
River name	Gatwick Stream				
Location/Reach name	Riverside Garden Park				
Sub-reach name (used to reference a sub-reach of contiguous modules)	1				
Module length (m)	20m				
Grid reference - midpoint	TQ 28520 41712	TQ 28508 41755	TQ 28482 41776	TQ 28469 41807	TQ 28457 41847
River channel dimensions	**1**	**2**	**3**	**4**	**5**
MoRPH river width (m)	8	8	7	7	7
Bankfull width (m)	8	8	8	8	8
Left bank height (m)	3	1	2	3	3
Right bank height (m)	3	3	2	3	3
Water width (m)	8	8	7	7	7
Water depth (m)	0.3	0.3	0.8	0.8	0.3

4.4.3 The Gatwick Stream flows along the northeast boundary of the airport before confluencing with the River Mole immediately east of the A23 Brighton Road/London Road junction. It is slightly narrower than the River Mole but considerably shallower with 3 of the modules only recording a depth of 30cm.

4.4.4 Given the location of the survey module within a public park, the surrounding land comprised artificial ground cover uses in all modules including playing field, buildings and footpaths.. Nevertheless, natural morphological bank features were noted including extensive stable earth cliffs on the bank face in modules 2, 3, 4 and 5, and leaning trees on the bank top in modules 1, 2 and 5. Himalayan balsam was observed along both banks. The channel bed was predominantly sand and gravel with occasional larger material.

4.5 Gatwick Stream River Type Assessment

4.5.1 The Gatwick Stream river type for the extended reach in which the site is located was assessed to be a “Type F” river. Type F is defined as 'a straight to sinuous river with gravel/cobble substrate’.

4.6 Gatwick Stream River Condition Assessment

4.6.1 The full results of the RCA for each indicator type are presented in Table 6.

4.6.2 The preliminary river condition assessment score was **-0.16 (**Table 6**)**. As per Table 3 this gives a final river condition score for a large river of **Fairly Poor.** The lower threshold for Moderate condition for Type F rivers is 0.4.

4.6.3 Negative indicators recorded which affected the condition score include:

- Managed ground cover;
- The presence of non-native invasive plant species on the bank;
- Siltation; and
- Channel bed artificial feature.

4.7 Baseline River Units

4.7.1 The baseline river units for the site calculated using the Biodiversity Metric 3.1 Calculation Tool is 1.84 river units per 100m of the river Mole and 1.38 river units per 100m of the Gatwick Stream, as shown in Table 7.

Table 6: River Condition Assessment for River Mole and Gatwick Stream

	Indicator type	River Mole Baseline Condition Score	Gatwick Stream Baseline Condition Score
Bank top	B1: Vegetation structure	2	3
	B2: Tree feature richness	2	2
	B3: Water related features	1	2
	B4: NNIPS cover	-1	-2
	B5: Managed ground cover	0	-4
Bank Face	C1: Riparian vegetation structure	1	2
	C2: Tree feature richness	1	1
	C3: Natural bank profile extent	2	2
	C4: Natural bank profile richness	4	3
	C5: Natural bank material richness	1	1
	C6: Bare sediment extent	2	1
	C7: Artificial bank profile extent	-3	0
	C8: Reinforcement extent	0	-2
	C9: Reinforcement material severity	0	-2
	C10: NNIPS cover	-3	-2
Channel - Water Margin	D1: Aquatic vegetation extent	2	0
	D2: Aquatic morphotype richness	2	0
	D3: Physical feature extent	1	2
	D4: Physical feature richness	1	1
	D5: Artificial features	0	-1
Channel Bed	E1: Aquatic morphotype richness	3	0
	E2: tree related features	0	1
	E3: Hydraulic feature richness	0	2
	E4: Natural features extent	0	2
	E5: Natural features richness	0	1
	E6: Material richness	3	3
	E7: Siltation	-2	-2
	E8: Reinforcement extent	0	-1
	E9: Reinforcement severity	0	-2
	E10: Artificial features severity	0	-4
	E11: NNIPS extent	0	0
	E12: Filamentous algae extent	-2	0
	Average of Positive Indicators	**1.47**	**1.52**
	Average of Negative Indicators	**-0.84**	**-1.69**
	Preliminary Condition Score	**0.62**	**-0.16**
	Final Condition Score	**Moderate**	**Fairly Poor**

Table 7: Baseline River Units

Existing river type		Habitat distinctiveness		Habitat condition		Strategic significance			Watercourse encroachment		Riparian encroachment		Suggested action	Ecological baseline
River type	Length KM	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Extent of encroachment	Multiplier	Extent of encroachment	Multiplier		Total river units
Priority Habitat (River Mole)	0.1	V.High	8	Moderate	2	Within River Basin Management Plan	High strategic significance	1.15	No Encroachment	1	No Encroachment	1	Restore	1.84
Priority Habitat (Gatwick Stream)	0.1	V.High	8	Fairly Poor	1.5	Within River Basin Management Plan	High strategic significance	1.15	No Encroachment	1	No Encroachment	1	Restore	1.38

5. Legal and Planning Policy Considerations

5.1.1 The Environmental Bill became an act of parliament on 9th November 2021 making Biodiversity Net Gain (BNG) a mandatory requirement for new development. The requirement will also be incorporated into the forthcoming amendments to the Town & Country Planning Act 1990 to be enacted in England in 2023. A BNG baseline calculation has been undertaken using the Biodiversity Metric 3.1 calculator, and will subsequently be undertaken for the post development scenario with the updated 4.0 calculator.

5.1.2 Himalayan balsam is included on Part 2 of the Invasive Alien Species (Enforcement and Permitting) Order 2019 reinforcing existing offences under Schedule 9 of the Wildlife and Countryside Act 1981 to introduce or cause its spread in the wild.

6. Conclusions and recommendations

6.1 Conclusions

6.1.1 The River Mole was found to have a final condition score of Moderate and the Gatwick Stream of Fairly Poor. The final condition score is derived from the sum of the positive and negative indicators. The Gatwick Stream had a higher average for positive indicators (1.52) compared with the River Mole (1.47), but also a lower average for negative indicators (-1.69 compared with -0.84) giving a total of -016 compared with 1.62 for the River Mole. The lowest scoring indicators on the Gatwick Stream related to artificial ground cover on the bank top, due to the location of the survey reach within a public park, and artificial features on the channel bed. The presence of the invasive non-native species Himalayan balsam on the bank top, reinforcements to the bank face and bed, and siltation were also negative indicators.

6.1.2 The River Mole scored lower than the Gatwick Stream in relation to artificial bank profile extent due to the presence of an artificial two-stage channel in module 4, and non-native species on the bank face, but overall had greater natural bank profile richness, and less artificial reinforcement to the bank face and channel bed. To increase river condition scores, it will be necessary to either remove or reduce the extent of features which give rise to negative indicators, such as bank and channel reinforcements and invasive non-native species, or increase the positive indicators.

6.1.3 Using the river condition assessment methodology it was determined that River Mole and Gatwick Stream will contribute 1.84 and 1.38 baseline river units respectively to the overall Biodiversity Net Gain site baseline calculation. The suggested action in the Biodiversity Metric 3.1 for increasing the score is to restore the existing channel.

6.1.4 The proposed expansion of Gatwick Airport will include re-meandering of an approximately 300m section of the River Mole immediately downstream of the runway culvert. This offers the opportunity to increase the river condition score for the River Mole thereby increasing the number of BNG units in the post development scenario.

6.2 Recommendations

6.2.1 The design of the re-meandered section of the River Mole should aim to increase the number of positive indicators. The diversion will have a two stage profile with a central narrow channel to increase flow velocities during low flow condition. A marginal berm will be created on alternate sides of the channel to create a central meandering course. The marginal berm will be flooded during high flow conditions and will be colonised by reeds and other emergent and bankside species. Introducing features such as pools and riffles into the new channel course will increase hydraulic feature richness, for which the River Mole currently scores 0.

6.2.2 Introducing measures to reduce siltation would improve condition scores for both watercourses. Silt interceptors should be incorporated into river outfalls, such as from car park X into the R Mole, and the new treatment works on the Gatwick Stream. Ideally, these should use nature-based solutions such as reed beds.

6.2.3 Reducing the extent of invasive non-native species on the bank top and bank faces of the existing channel downstream of the diversion will help to reduce the number of negative indicators.

6.2.4 Once the design of the diversion is finalised the post development MoRPH assessment should be undertaken.

7. References

7.1.1 Gurnell, England, Scott, Shuker (2020) A Guide to Assessing River Condition – Part of the Rivers and Streams Component of the Biodiversity Net Gain Metric.

7.1.2 Modular River Survey (2020) The MoRPH Survey Technical Reference Manual

7.1.3 Natural England (undated) The Biodiversity Metric 3.1 auditing and accounting for biodiversity. Calculation Tool. ISBN 978-1-78354-953-5

Appendix 1 MoRPH Results

Table 8: Bank top/floodplain data recorded for each module River Mole

Bank top - Artificial/managed ground cover											
		1		2		3		4		5	
		LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Artificial ground cover	Dominant type	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
	Sub-dominant type	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

Bank top - Natural/lightly managed ground cover											
		1		2		3		4		5	
		LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Terrestrial vegetation	Unvegetated (bare soil/rock)	T	P	P	A	T	T	P	T	E	T
	Mosses/lichens	A	A	A	A	A	A	A	A	A	A
	Short/creeping herbs/grasses	T	T	A	A	A	A	T	A	T	T
	Tall herbs/grasses	E	P	T	T	P	T	P	P	P	P
	Scrub/shrubs	E	E	E	E	A	E	T	P	A	T
	Saplings/trees	A	T	P	P	P	P	T	A	P	P
	Fallen trees	A	A	A	A	A	A	A	A	A	A
	Leaning trees	A	A	A	A	A	T	A	A	A	A
	J-shaped trees	A	A	A	A	A	A	A	A	A	A
	Tree/shrub branches trailing into channel	P	T	T	P	T	T	T	T	P	T

		Bank top - Natural/lightly managed ground cover									
		1		2		3		4		5	
		LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
	Large wood	A	A	A	A	A	A	A	A	A	A
	Predominant tree type	A	Deciduous	A	Deciduous	Deciduous	Deciduous	A	Deciduous	Deciduous	Deciduous
Non-native invasive plant species	Himalayan balsam	A	A	A	A	A	A	T	A	A	A
	Japanese knotweed	A	A	A	A	A	A	A	A	A	A
	Giant hogweed	A	A	A	A	A	A	A	A	A	A
	Floating pennywort	A	A	A	A	A	A	A	A	A	A
	Other	A	A	A	A	A	A	A	A	A	A

Bank top - Water related features											
		1		2		3		4		5	
		LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Pond	Disconnected from river at the time of the survey	A	A	A	A	A	A	A	A	A	A
	Connected to river by water-filled channel at time of the survey	A	A	A	A	A	A	A	A	A	A
Side channel		A	A	A	A	A	A	A	A	A	A
Wetland	Short non-woody vegetation	A	A	A	A	A	A	A	A	A	A
	Tall, non-woody vegetation	T	A	T	A	A	A	A	A	A	A
	Shrubs and trees	A	A	A	A	A	A	A	A	A	A

Table 9: Bank face/channel margin data recorded for each module River Mole

Bank face - Profile											
		1		2		3		4		5	
		LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Natural/artificial bank profile	Dominant type	Vertical (E)	Set-Back Embankment (E)	Gentle (E)	Embanked (E)	Vertical (E)	Set-Back Embankment (E)	Vertical (E)	Artificial Two Stage (E)	Vertical (E)	Vertical (E)
	Sub-dominant type	Vertical with Toe (P)	Vertical with Undercut (P)	Gentle (P)	Vertical with Toe (P)	Gentle (P)	Vertical (E)	Gentle (P)	Artificial two stage	A	A
Bank face - sediment type	Top 2/3 of bank	Earth	Earth	Earth	Earth	Earth	Earth	Earth	Earth	Artificial	Earth
	Bottom 1/3 of bank	Earth	Earth	Earth	Earth	Earth	Earth	Earth	Earth	Earth	Earth
Bank face - Reinforcement	Which part of the bank is reinforced	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
	Horizontal extent of reinforcement in module	A	A	A	A	A	A	A	A	A	A
	Dominant type	A	A	A	A	A	A	A	A	A	A
	Sub-dominant type	A	A	A	A	A	A	A	A	A	A

Natural Physical Features										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Unvegetated Side Bar	A	A	A	A	A	A	A	A	A	A
Vegetated Side Bar	A	A	A	A	A	A	A	A	A	A
Berm	A	A	A	A	A	A	A	A	A	A
Bench	A	A	A	A	A	A	A	A	A	A

Natural Physical Features										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	LB	RB	LB	RB	LB
Stable Cliff	P	A	A	A	A	E	A	P	A	E
Eroding Cliff	A	A	A	A	A	A	A	A	A	A
Toe	T	A	A	P	A	A	A	A	A	A
Animal Burrows	A	A	A	A	A	A	A	A	A	A
Marginal Backwater	A	A	A	A	A	A	A	A	A	A
Tributary Confluence	0	0	0	0	0	0	0	0	0	0

Artificial Physical Features										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Pipes/Outfalls	0	0	0	0	0	0	0	0	0	0
Jetty	0	0	0	0	0	0	0	0	0	0
Deflector	0	0	0	0	0	0	0	0	0	0

Terrestrial Vegetation										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Unvegetated (bare soil/rock)	T	P	P	P	A	P	A	T	T	T
Mosses/lichens	A	A	A	A	A	A	A	A	A	A
Short/creeping herbs/grasses	A	A	A	A	A	A	A	A	T	A

Terrestrial Vegetation										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	LB	RB	LB	RB	LB
Tall herbs/grasses	T	T	T	T	T	T	P	T	E	E
Scrub/shrubs	A	A	A	E	A	E	A	P	A	P
Saplings/trees	A	A	A	T	A	T	A	A	A	A
Fallen trees	A	A	A	A	A	A	A	A	A	A
Leaning trees	A	A	A	A	A	T	A	A	A	A
J-shaped trees	A	A	A	A	A	A	A	A	A	A
Tree/shrub branches trailing into channel	P	T	T	P	P	P	P	T	P	T
Large wood	A	A	A	A	A	A	A	A	A	A
Exposed tree roots	A	A	A	A	A	A	A	A	A	A
Discrete organic accumulations	A	A	A	A	A	A	A	A	A	A
Vegetation at water margin										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Liverworts, mosses, lichens	A	A	A	A	A	A	A	A	A	A
Emergent broadleaved	A	A	P	A	P	A	P	A	P	P
Emergent reeds/linear leaved	T	T	P	A	P	A	P	A	P	P
Amphibious	A	A	A	A	A	A	A	A	A	A
Filamentous algae	E	E	T	T	T	T	T	T	A	A

Vegetation at water margin										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Himalayan balsam	A	A	A	A	A	A	A	T	E	A
Japanese knotweed	A	A	A	A	A	A	A	A	A	A
Giant hogweed	A	A	A	A	A	A	A	A	A	A
Floating pennywort	A	A	A	A	A	A	A	A	A	A
Other	A	A	A	A	A	A	A	A	A	A

Table 10: Channel bed data recorded for each module River Mole

Channel bed material					
	1	2	3	4	5
Bedrock Abundance	A	A	A	A	A
Boulder Abundance	A	A	A	A	A
Cobble Abundance	A	A	A	A	A
Gravel-Pebble Abundance	P	P	P	P	P
Sand Abundance	P	P	P	P	P
Silt (and Finer Non-Sticky Particles) Abundance	P	P	E	P	E
Clay Abundance	A	A	A	A	A
Organic Abundance	T	A	A	A	A
Peat Abundance	A	A	A	A	A

Channel bed material					
	1	2	3	4	5
Continuous Silt Layer Abundance	P	P	P	P	P
Patchy Thin Silt Layer Abundance	A	A	A	A	A
Channel bed reinforcement	A	A	A	A	A
Surface flow type					
	1	**2**	**3**	**4**	**5**
Free fall	A	A	A	A	A
Chute	A	A	A	A	A
Broken standing waves	A	A	A	A	A
Unbroken standing waves	A	A	A	A	A
Upwelling	A	A	A	A	A
Rippled	A	A	A	A	A
Smooth	E	E	E	E	E
No perceptible flow	A	A	A	A	A
Dry	A	A	A	A	A
Natural Physical Features					
	1	**2**	**3**	**4**	**5**
Exposed bedrock	A	A	A	A	A
Unvegetated rocks	A	A	A	A	A
Vegetated rocks	A	A	A	A	A

Natural Physical Features					
	1	2	3	4	5
Unvegetated mid-channel bar	A	A	A	A	A
Vegetated mid-channel bar	A	A	A	A	A
Island	A	A	A	A	A
Cascade	A	A	A	A	A
Pool	0	0	0	0	0
Riffle	0	0	0	0	0
Step	0	0	0	0	0
Waterfall	0	0	0	0	0
Artificial Physical Features					
	1	2	3	4	5
Large trash	A	A	A	A	A
Major weir	0	0	0	0	0
Intermediate weir	0	0	0	0	0
Minor weir	0	0	0	0	0
Bridge piers in river bed	0	0	0	0	0
Bridge shadow	0	0	0	0	0
Culvert	0	0	0	0	0

In Channel Vegetation					
	1	2	3	4	5
Unvegetated	T	A	A	A	A
Liverworts, mosses, lichens	E	A	P	P	P
Emergent broadleaved	T	T	P	P	E
Emergent reeds/linear leaved	T	P	P	P	E
Floating Leaved (Rooted) Abundance	P	E	P	T	P
Free-Floating Abundance	A	E	T	E	E
Amphibious Abundance	A	A	A	A	A
Submerged broadleaved	A	P	P	T	P
Submerged linear leaved	A	A	A	A	A
Submerged fine leaved	A	A	A	A	A
Filamentous algae	E	A	A	A	A
Channel choked with plants	No	No	Yes	Yes	Yes
Vegetation Interacting with Channel					
	1	2	3	4	5
Shading	A	A	T	T	T
Submerged tree roots	A	A	A	A	A
Trees, shrubs, saplings growing on channel bed	A	A	A	A	A
Large wood	A	A	A	A	A
Discrete organic accumulation	A	A	A	A	A

Vegetation Interacting with Channel					
	1	2	3	4	5
Large wood dam	0	0	0	0	0
Fallen tree	0	0	0	0	0
Himalayan balsam	A	A	A	A	A
Japanese knotweed	A	A	A	A	A
Giant hogweed	A	A	A	A	A
Floating pennywort	A	A	A	A	A
Other	A	A	A	A	A

Table 11: Bank top/floodplain data recorded for each module Gatwick Stream

Bank top - Artificial/managed ground cover											
		1		2		3		4		5	
		LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Artificial ground cover	Dominant type	Permanently vegetated recreation (e.g. playing fields) Extensive	Buildings (residential) Extensive	Permanently vegetated recreation (e.g. playing fields) Extensive	Buildings (residential) Extensive	Permanently vegetated recreation (e.g. playing fields) Extensive	Buildings (residential) Extensive	Pedestrianised, footpath Extensive	Buildings (residential) Extensive	Pedestrianised, footpath Extensive	Buildings (residential) Extensive
	Sub-dominant type	Plantation woodland Extensive	Plantation woodland Present	Plantation woodland Extensive	Plantation woodland Present	Plantation woodland Extensive	Absent	Absent	Absent	Permanently vegetated recreation (e.g. playing fields) Present	Absent

Bank top - Natural/lightly managed ground cover											
		1		2		3		4		5	
		LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Terrestrial vegetation	Unvegetated (bare soil/rock)	T	A	T	T	A	A	E	T	P	T
	Mosses/lichens	T	T	T	T	A	A	A	A	A	A
	Short/creeping herbs/grasses	P	A	P	P	T	P	P	T	T	T
	Tall herbs/grasses	P	T	T	P	E	E	E	E	P	P
	Scrub/shrubs	A	P	E	E	P	P	A	T	P	P
	Saplings/trees	P	P	P	P	P	T	T	T	A	A
	Fallen trees	A	A	A	A	A	A	A	T	A	A
	Leaning trees	T	A	T	T	A	A	A	T	A	A
	J-shaped trees	A	A	A	A	A	A	A	A	A	A

		Bank top - Natural/lightly managed ground cover									
		1		2		3		4		5	
		LB	RB	LB	RB	LB	LB	RB	LB	RB	LB
	Tree/shrub branches trailing into channel	P	T	P	P	P	P	T	P	T	T
	Large wood	A	A	A	A	A	A	A	A	A	A
	Predominant tree type	Deciduous	Deciduous	Deciduous	Deciduous	Deciduous	Deciduous	Deciduous	Deciduous	Deciduous	Deciduous
Non-native invasive plant species	Himalayan balsam	A	A	P	A	T	P	A	P	A	A
	Japanese knotweed	A	A	A	A	A	A	A	A	A	A
	Giant hogweed	A	A	A	A	A	A	A	A	A	A
	Floating pennywort	A	A	A	A	A	A	A	A	A	A
	Other	A	A	A	A	A	A	A	A	A	A

Bank top - Water related features											
		1		2		3		4		5	
		LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Pond	Disconnected from river at the time of the survey	A	A	A	A	A	A	E	A	E	A
	Connected to river by water-filled channel at time of the survey	A	A	A	A	A	A	A	A	A	A
Side channel		A	A	A	A	A	A	A	A	A	A
Wetland	Short non-woody vegetation	A	A	A	A	A	A	A	A	A	A

	Bank top - Water related features										
		1		2		3		4		5	
		LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
	Tall, non-woody vegetation	A	A	A	A	A	A	A	A	A	A
	Shrubs and trees	A	A	A	A	A	A	A	A	A	A

Table 12: Bank face/channel margin data recorded for each module, Gatwick Stream

Bank face - Profile											
		1		2		3		4		5	
		LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Natural/artificial bank profile	Dominant type	Steep (E)	Steep (E)	Vertical (E)	Steep (E)	Vertical (E)	Steep (E)	Vertical (E)	Vertical (E)	Vertical (E)	Vertical (E)
	Sub-dominant type	Vertical (E)	Vertical (E)	Steep (E)	Vertical (E)	Steep (E)	Vertical (E)	Undercut or vertical with undercut	A	Steep (E)	Steep (E)
Bank face - sediment type	Top 2/3 of bank	Earth	Earth	Earth	Earth	Earth	Earth	Earth	Earth	Artificial	Earth
	Bottom 1/3 of bank	Earth	Earth	Earth	Earth	Earth	Earth	Earth	Earth	Earth	Earth
Bank face - Reinforcement	Which part of the bank is reinforced	Whole	Whole	Absent	Absent	Absent	Top	Absent	Absent	Absent	Absent
	Horizontal extent of reinforcement in module	P	P	A	A	A	T	A	A	A	A
	Dominant type	Concrete and brick/laid stone (cemented)	Concrete	A	A	Wood piling/panels	A	A	A	A	A
	Sub-dominant type	Concrete	Concrete	A	A	A	A	A	A	A	A

Natural Physical Features										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Unvegetated Side Bar	A	A	A	A	A	A	A	A	A	A
Vegetated Side Bar	A	A	A	A	A	A	A	A	A	A
Berm	A	A	A	A	A	A	A	A	A	A
Bench	A	A	A	A	A	A	A	A	A	A

Natural Physical Features										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Stable Cliff	P	P	E	P	E	P	E	E	E	E
Eroding Cliff	A	A	A	A	A	A	A	A	A	A
Toe	A	A	A	A	A	A	A	A	A	A
Animal Burrows	A	A	A	A	A	A	A	A	A	A
Marginal Backwater	A	A	A	A	A	A	A	A	A	A
Tributary Confluence	0	0	0	0	0	0	0	0	0	0

Artificial Physical Features										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Pipes/Outfalls	0	1	0	0	0	0	0	0	0	0
Jetty	0	0	0	0	0	0	0	0	0	0
Deflector	0	0	0	0	0	0	0	0	0	0

Terrestrial Vegetation										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Unvegetated (bare soil/rock)	P	P	T	T	A	A	T	T	P	T
Mosses/lichens	T	T	T	T	A	A	T	T	A	A
Short/creeping herbs/grasses	A	A	T	P	A	A	A	A	T	T

Terrestrial Vegetation										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Tall herbs/grasses	A	T	P	P	P	P	E	P	P	P
Scrub/shrubs	A	T	P	P	T	T	A	A	A	A
Saplings/trees	T	T	T	T	T	A	A	A	A	A
Fallen trees	A	A	A	A	A	A	A	A	A	A
Leaning trees	T	A	T	A	T	A	A	A	A	A
J-shaped trees	A	A	A	A	A	A	A	A	A	A
Tree/shrub branches trailing into channel	T	T	P	P	P	P	P	P	T	T
Large wood	A	A	A	A	A	A	A	A	A	A
Exposed tree roots	T	T	T	T	T	A	A	A	A	T
Discrete organic accumulations	A	A	A	A	A	A	A	A	A	A
Vegetation at water margin										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Liverworts, mosses, lichens	A	A	A	A	A	A	A	A	A	A
Emergent broadleaved	A	A	A	A	A	A	A	A	A	A
Emergent reeds/linear leaved	A	A	A	A	A	A	A	A	A	A
Amphibious	A	A	A	A	A	A	A	A	A	A
Filamentous algae	A	A	A	A	A	A	A	A	A	A

Vegetation at water margin										
	1		2		3		4		5	
	LB	RB	LB	RB	LB	RB	LB	RB	LB	RB
Himalayan balsam	A	A	A	A	A	T	P	P	A	A
Japanese knotweed	A	A	A	A	A	A	A	A	A	A
Giant hogweed	A	A	A	A	A	A	A	A	A	A
Floating pennywort	A	A	A	A	A	A	A	A	A	A
Other	A	A	A	A	A	A	A	A	A	A

Table 13: Channel bed data recorded for each module, Gatwick Stream

Channel bed material					
	1	2	3	4	5
Bedrock Abundance	A	A	A	A	A
Boulder Abundance	A	A	T	A	A
Cobble Abundance	T	T	A	A	T
Gravel-Pebble Abundance	E	E	P	P	E
Sand Abundance	T	E	P	E	E
Silt (and Finer Non-Sticky Particles) Abundance	A	T	E	E	T
Clay Abundance	A	A	A	A	A
Organic Abundance	A	A	A	A	A
Peat Abundance	A	A	A	A	A

Channel bed material					
	1	2	3	4	5
Continuous Silt Layer Abundance	A	T	E	P	T
Patchy Thin Silt Layer Abundance	A	A	A	A	A
Channel bed reinforcement	T	A	A	A	A
Surface flow type					
Surface flow type	1	2	3	4	5
Free fall	T	A	A	A	A
Chute	A	A	A	A	A
Broken standing waves	A	A	A	A	A
Unbroken standing waves	T	A	A	A	P
Upwelling	A	A	A	A	A
Rippled	E	E	T	A	E
Smooth	A	E	E	E	P
No perceptible flow	A	A	A	A	A
Dry	A	A	A	A	A
Natural Physical Features					
	1	2	3	4	5
Exposed bedrock	A	A	A	A	A
Unvegetated rocks	A	A	A	A	A
Vegetated rocks	A	A	A	A	A

Natural Physical Features					
	1	2	3	4	5
Unvegetated mid-channel bar	A	A	A	A	A
Vegetated mid-channel bar	A	A	A	A	A
Island	A	A	A	A	A
Cascade	A	A	A	A	A
Pool	0	1	1	0	0
Riffle	1	0	0	0	2
Step	0	0	0	0	0
Waterfall	0	0	0	0	0
Artificial Physical Features					
	1	2	3	4	5
Large trash	A	T	A	A	T
Major weir	0	0	0	0	0
Intermediate weir	0	0	0	0	0
Minor weir	0	0	0	0	0
Bridge piers in riverbed	0	0	0	0	0
Bridge shadow	0	0	0	0	0
Culvert	1	0	0	0	0

In Channel Vegetation					
	1	2	3	4	5
Unvegetated	E	E	E	E	E
Liverworts, mosses, lichens	A	A	A	A	A
Emergent broadleaved	A	A	A	A	A
Emergent reeds/linear leaved	A	A	A	A	A
Floating Leaved (Rooted) Abundance	A	A	A	A	A
Free-Floating Abundance	A	A	A	A	A
Amphibious Abundance	A	A	A	A	A
Submerged broadleaved	A	A	A	A	A
Submerged linear leaved	A	A	A	A	A
Submerged fine leaved	A	A	A	A	A
Filamentous algae	A	A	A	A	A
Channel choked with plants	No	No	No	No	No
Vegetation Interacting with Channel					
	1	2	3	4	5
Shading	A	A	A	T	T
Submerged tree roots	A	A	A	A	A
Trees, shrubs, saplings growing on channel bed	A	A	A	A	A
Large wood	A	A	P	P	A
Discrete organic accumulation	A	A	A	T	A

Vegetation Interacting with Channel					
	1	2	3	4	5
Large wood dam	0	0	0	0	0
Fallen tree	0	0	0	0	0
Himalayan balsam	A	A	A	A	A
Japanese knotweed	A	A	A	A	A
Giant hogweed	A	A	A	A	A
Floating pennywort	A	A	A	A	A
Other	A	A	A	A	A

Annex 3

Habitat areas lost and gained (ha)

On-site change by broad habitat type						
	Baseline		**Post-development on-site**		**On-site change**	
Habitat group	**On-site existing area**	**On-site existing value**	**On-site proposed area**	**On-site proposed value**	**On-site area change**	**On-site unit change**
Cropland	0.00	0.00	0.00	0.00	0.00	0.00
Grassland	67.22	169.20	59.97	281.23	-7.25	112.04
Heathland and shrub	5.90	39.42	9.97	73.09	4.07	33.67
Lakes	1.97	15.80	0.92	6.60	-1.06	-9.20
Sparsely vegetated land	0.08	0.22	0.01	0.03	-0.07	-0.19
Urban	151.21	6.88	159.38	8.49	8.17	1.60
Wetland	0.07	0.85	0.24	1.48	0.17	0.63
Woodland and forest	13.16	100.12	7.46	35.00	-5.70	-65.12
Intertidal sediment	0.00	0.00	0.00	0.00	0.00	0.00
Coastal saltmarsh	0.00	0.00	0.00	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00	0.00	0.00	0.00
Coastal lagoons	0.00	0.00	0.00	0.00	0.00	0.00
Intertidal hard structures	0.00	0.00	0.00	0.00	0.00	0.00
Watercourse footprint	0.35	0.00	1.55	0.00	1.20	0.00
Individual trees	0.00	0.00	0.46	1.38	0.46	1.38