M42 Junction 6 Development Consent Order

Scheme Number TR010027

8.82 Interim Biodiversity Impact Calculation

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Interim Biodiversity Impact Calculation

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1 Introduction

1.1 Background

1.1.1 This report has been prepared by Highways England (the Applicant) and presents the interim results of biodiversity impact assessment calculations for the M42 Junction 6 scheme (the Scheme).

1.1.2 This report is for information purposes only and has been submitted to the Development Consent Order (DCO) Examination by the Applicant to assist stakeholders and other interested parties in understanding the likely effects of the Scheme on biodiversity and the contribution that environmental mitigation measures will have in offsetting biodiversity losses.

1.1.3 This report describes:

- the methodology applied to identify and quantify the likely effects of the Scheme on biodiversity;
- any limitations in data and assumptions that have been made during the completion of field surveys and calculations; and
- the results of the interim calculation of habitat losses and gains.

1.1.4 In addition, details of optional areas of land owned by third parties that could potentially be secured by the Applicant to deliver biodiversity offset sites and units are provided. Delivery of measures within these areas would be subject to separate agreement with landowners outside of the powers being sought within the DCO.

1.1.5 The calculations and assessments presented within this report have been based on the Scheme design and the associated Order limits contained within the submitted DCO application, and should be read alongside the following DCO application documents:

- Chapter 9: Biodiversity of Volume 1 of the Environmental Statement [**APP-054/Volume 6.1**] [**REF 1**];
- Appendix 9.2: Phase 1 and Phase 2 Habitat Survey Report (including figure) of Volume 3 of the Environmental Statement [**APP-130/Volume 6.3**] [**REF 2**]; and
- Appendix 9.3: Hedgerow Report (including figure) of Volume 3 of the Environmental Statement [**APP-131/Volume 6.3**] [**REF 3**].

1.1.6 Following completion of the DCO Examination and agreement of any design changes arising from the process, the Applicant intends to update the calculations and assessments presented within this report and disseminate a final report to stakeholders and other interested parties for information.

1.2 Policy, legislation and guidance

National Policy Statement for National Networks

1.2.1 The National Policy Statement for National Networks (NPSNN) [**REF 4**] sets out the need for and Governments policies to deliver Nationally Significant Infrastructure Projects (NSIPs) on the national road and rail networks in England.

1.2.2 The NPSNN [**REF 4**] sets out that applicants of NSIPs may wish to make use of biodiversity offsetting when devising compensation proposals to counteract any impacts of biodiversity that cannot be avoided or mitigated.

1.2.3 It further sets out that biodiversity offsets are measurable conservation outcomes resulting from actions designed to compensate for residual adverse biodiversity impacts arising from a development after mitigating measures have been taken account of, and that the goal of biodiversity offsets is to achieve no net loss and preferably a net gain.

National Planning Policy Framework

1.2.4 The National Planning Policy Framework (NPPF) [**REF 5**] does not contain specific policies for NSIPs; however, paragraph 5 notes that the document may be considered an important and relevant matter in the decision-making process for NSIPs.

1.2.5 The NPPF [**REF 5**] seeks to ensure that impacts on biodiversity are minimised and biodiversity net gains are achieved, and it expects planning decisions to contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Environment Bill

1.2.6 In the July 2019 Environment Bill Summer Policy Statement [**REF 6**], the government has mandated net gains for biodiversity as part of development within the Environment Bill.

1.2.7 NSIPs remain outside of the scope of this mandatory requirement, as the government believes that further work and engagement with industry and conservation bodies is required to establish approaches to biodiversity net gain for NSIPs (as these can have fundamentally different characteristics to other development types such as housing and commercial).

1.2.8 Accordingly, there is no legal requirement to deliver biodiversity net gain on NSIPs at the current time; however, there will likely be a future requirement to achieve net gain on such projects through further legislation (although timescales have yet to be identified in this respect).

Highways England Delivery Plan

1.2.9 The Highways England Delivery Plan [**REF7**] sets out Highways England's commitment for the strategic road network to a position that delivers a reduction in the net loss of biodiversity by 2020 and, in the long term, to deliver a net gains for biodiversity.

Highways England: Our plan to protect and increase biodiversity

1.2.10 Highways England published a Biodiversity Plan in 2015 [**REF 8**] to demonstrate how it will work with service providers to halt overall biodiversity loss and maintain and enhance habitats and ecological networks.

1.2.11 The government requires Highways England to demonstrate progress against the Plan [**REF 8**] to secure an ongoing annual reduction in the loss of net biodiversity due to its activities.

Planning Inspectorate: Advice Note Eleven – Working with public bodies in the infrastructure planning process

1.2.12 The need to engage and interact with key stakeholders on NSIPs is reflected in Planning Inspectorate's Advice Note Eleven [**REF 9**]. Specific reference is made in Annex C of this document to the input required at pre-application stage where "*there are opportunities to deliver environmental net gain*".

1.3 Biodiversity net gain

1.3.1 Biodiversity net gain is defined as *"development that leaves biodiversity in a better state than before"* and involves an approach where developers work with local governments, wildlife groups, land owners and other stakeholders in order to support their priorities for nature conservation [**REF 10**].

1.3.2 Biodiversity net gain can be achieved through the creation of new habitats or through the improvement and management of existing habitats either on-site or off-site (or through a combination of on-site and off-site measures).

1.3.3 Biodiversity net gain is achieved when measurable improvements for biodiversity are delivered in association with a development. No net loss is achieved when the impacts of a development on biodiversity are balanced by equivalent gains resulting in no overall change to biodiversity.

1.3.4 It is important that any proposed biodiversity improvement measures have appropriate arrangements in place to secure their long-term management. Where new habitats are provided, they should aim to contribute to biodiversity restoration by helping to establish more resilient and coherent ecological networks in alignment with local nature conservation priorities and local landscape character objectives.

1.3.5 Biodiversity metrics provide a tool to assess whether a biodiversity net gain outcome is expected to be achieved. A metric enables the calculation of losses and gains by assessing the habitats. The metric translates habitat distinctiveness, condition and extent into a score which is presented in biodiversity units. It also uses multipliers to account for risks in delivering habitat creation or enhancement. The change in biodiversity units indicates either a net loss or net gain.

1.3.6 It is important that evidence and rationale used to inform the calculation is underpinned by appropriate ecological expertise and local wildlife knowledge.

1.3.7 The assessment is an iterative process and can be applied during the design-development process to guide the requirements for mitigation and compensation, in terms of the type and extent of habitats to be created or improved.

1.3.8 Where biodiversity net gain cannot be achieved using areas within the extents of land associated with a development project, opportunities for the creation and/or restoration of habitats at off-site compensation areas (termed offset sites) can be explored. On highway developments, example offset sites can comprise areas of redundant carriageway and areas of third party land developed in agreement with landowners and relevant stakeholders.

1.4 Principles of biodiversity net gain

1.4.1 The assessment of the Scheme has been undertaken in accordance with best practice principles for calculating and assessing biodiversity net gain [**REF 10**].

1.4.2 The application of the mitigation hierarchy is fundamental to the achievement of net gain. This involves adopting an approach that seeks to avoid, mitigate and (as a last resort) compensate for impacts on biodiversity through all stages of project development.

1.4.3 Habitats of high distinctiveness are generally expected to be replaced on a 'like for like' basis (i.e. the mitigation and/or compensation should involve the same habitat that is being lost).

1.4.4 Ecological mitigation and compensation measures proposed as part of a development should therefore strive to result in an improvement in the extent or condition of the ecological network. To do this, the focus of the habitat restoration or creation should be on priority habitats of medium or preferably high distinctiveness. There should not be a 'trading down', for example by replacing a habitat of high distinctiveness with creation or restoration of a habitat of medium distinctiveness.

1.4.5 Planning policy encourages the avoidance of impacts on irreplaceable habitats that are either very rare or difficult/impossible to recreate [**REF 4; REF 5**]. Where it is impossible to avoid impacts on these habitats, they should not be included in the metric calculation but dealt with separately in order to develop a bespoke compensation package to address the loss.

1.4.6 Decisions on the types of habitat creation or restoration that form part of the mitigation or compensation should be taken at a local level in line with local conservation priorities.

1.4.7 Multipliers are applied to correct for disparity or risk in delivery or uncertainty in the effectiveness of restoration or habitat creation and management techniques. These address the risk associated with the level of difficulty in restoration or creation for different habitats and the temporal risk associated with the time taken for the habitat to reach target condition.

2 Methodology

2.1 Metric calculation

2.1.1 The biodiversity impact assessment is based upon a modification of the metric developed for the Defra offsetting pilot in 2012 [**REF 11**] and applies the Phase 1 habitat classification with assigned distinctiveness values and a set of condition criteria for the assessment of habitat condition.

2.1.2 The metric has enabled the calculation and comparison of the predicted losses and gains of the Scheme by assessing the distinctiveness (the type of habitat and its value), condition (the state of the habitat) and extent (the area) of habitats on site pre- and post-development. The metric was used to translate habitat data into biodiversity units, which were calculated using the following expression:

Biodiversity Units = Distinctiveness Score x Condition Score x Area

2.1.3 A series of standard 'risk multipliers' were applied to the post-development habitats to acknowledge the inherent risks of creating and restoring habitats and the time taken to establish habitats[1].

2.1.4 As the biodiversity impact assessment generates separate outputs for area-based and linear habitats, linear-based habitats such as hedgerows were considered separately and thereby generated their own loss / gain results.

2.1.5 The amount of hedgerow creation required to mitigate / compensate for the loss of hedgerow was calculated at a ratio determined by the length (km) and quality of the hedgerow impacted as a result of the Scheme, based on the Defra metric 1.0 approach [**REF 11**]. **Table 2-1** presents the hedgerow condition multipliers.

Table 2-1: Hedgerow condition multipliers

Condition of hedgerow	Multiplier
Good	3
Moderate	2
Poor	1

2.1.6 All other area-based habitats were considered together, and the result reported in biodiversity units.

2.1.7 An overall net gain can only be achieved when area-based habitats and linear habitats are both predicted to achieve net gains.

[1] The application of risk multipliers has the effect of reducing the value of the proposed habitats, meaning larger areas and habitats of higher distinctiveness and / or condition are required to achieve net gain.

2.2 Habitat data

2.2.1 The assessment used baseline data gathered from ecological surveys undertaken in 2018, the results of which are presented in Appendix 9.2: Phase 1 and Phase 2 Habitat Survey Report (including figure) of Volume 3 of the Environmental Statement [**APP-130/Volume 6.3**] [**REF 2**]. Where appropriate, desk-based studies using digital imagery were also referenced.

2.2.2 The extent of land within the Scheme's Order limits was mapped and divided into habitat parcels to provide the inputs on habitat types, habitat condition and area. The maps were digitised, and each habitat parcel measured using a Geographic Information System (GIS) for all calculations. This information was then used to calculate the baseline biodiversity units of existing area-based and linear-based habitats.

2.2.3 The Environmental Masterplan for the Scheme presented on Figure 8.8 in Volume 2 of the Environmental Statement [**APP-095/Volume 6.2**] [**REF 12**] was used to calculate the biodiversity units likely to be generated by habitats that would be created or improved as part of the Scheme.

2.2.4 Measures identified to address the impacts associated with habitat loss within Aspbury's Copse are presented in Chapter 9: Biodiversity in Volume 1 of the Environmental Statement [**APP-054/Volume 6.1**] [**REF 1**].

2.2.5 Distinctiveness and condition ratings were assigned to each habitat parcel, with reference made to the Defra guidance and Higher Level Stewardship (HLS) condition assessment tool [Farm Environment Plan (FEP) Manual] [**REF 13**] for habitats not included in the Highways England guidance.

2.2.6 Hedgerow condition was assessed based on the results presented in Appendix 9.3: Hedgerow Report (including figure) within Volume 2 of the Environmental Statement [**APP-131/Volume 6.2**] **[REF 3**] and with reference to Highways England methodology and guidance provided within the FEP manual [**REF 13**].

3 Assumptions and Limitations

3.1 Assumptions

3.1.1 The following assumptions were made in relation to the pre- and post-development data when undertaking the calculations used in the assessment.

- Only habitats within the Scheme's Order limits have been included within the calculation to establish the site's habitat biodiversity value.
- Where hedgerows could not be accessed for assessment (as reported in Appendix 9.3: Hedgerow Report (including figure) within Volume 3 of the Environmental Statement [**APP-131/Volume 6.3**] [**REF 3**]), an assumption of moderate condition has been applied.
- All habitats illustrated on Figure 8.8: Environmental Masterplan within Volume 2 of the Environmental Statement [**APP-095/Volume 6.2**] [**REF 12**], including landscaping with a principal function of providing visual screening, have an ecological value and therefore would contribute to the overall biodiversity of the site.
- The habitats used in the calculation have been based on those illustrated on Figure 8.8: Environmental Masterplan within Volume 2 of the Environmental Statement [**APP-095/Volume 6.2**] [**REF 12**], and have been re-categorised to a Phase 1 habitat code by an ecologist.
- Any retained habitats illustrated on Figure 8.8: Environmental Masterplan within Volume 2 of the Environmental Statement [**APP-095/Volume 6.2**] [**REF 12**] could be improved through appropriate management.
- Target conditions and timescales for newly created and restored habitats have been based upon professional judgement and best practice guidance on management practices [**REF 13**].
- Realistic target values have been selected, with a one step in target condition for restored habitats, to ensure that the biodiversity units are not over-estimated.
- Areas identified on the ecological mitigation would be established as a mosaic of grassland and scrub habitats; therefore, for the purpose of the calculation it has been assumed these areas will be comprised of approximately 80% grassland and 20% scrub.
- The proposed habitats illustrated in Figure 8.8: Environmental Masterplan within Volume 2 of the Environmental Statement [**APP-095/Volume 6.2**] [**REF 12**] would either be managed as part of Highways England's soft estate or by separate landowner agreement (where located on third party land), and would be managed over the projected timescales selected for the target conditions.
- No application of the spatial multiplier, as all proposed habitat creation and improvement measures would be delivered within the Scheme's Order limits.

3.2 Limitations

3.2.1 The interim assessment has been based on the known permanent loss and any retained habitats, without taking into account the lateral and vertical limits of deviation defined on the Works Plans [**APP-007/Volume 2.3**] [**REF 14**]**.** This assessment does not include any calculations relating to the temporary use of land, for example, those required for compounds or services.

3.2.2 In line with the principles of net gain, the following elements of the Scheme were excluded from the metric calculation:

- the predicted loss of ancient woodland habitat from Aspbury's Copse located adjacent to the M42 motorway; and
- the proposed soil translocation area (forming part of the overall compensation package for ancient woodland habitat loss).

3.2.3 Figure 8.8: Environmental Masterplan within Volume 2 of the Environmental Statement [**APP-095/Volume 6.2**] [**REF 13**] incorporates the creation of habitats to replace those impacted by the Scheme. The aim has been to replace habitats lost with Priority Habitats of the same or a higher distinctiveness, in line with the principles outlined at Section 2.2; however, due to the Scheme being located within Birmingham Airport's aerodrome safeguarding zone, the objective of delivering biodiversity enhancements has necessarily been carefully balanced with the need to reduce any potential increase in the risk of bird strike. Further detail on bird strike in relation to the Scheme is provided in the Outline Bird Strike Management Plan [**REP2-023**] [**REF 15**].

3.2.4 This constraint has restricted the types of habitats that can be delivered as part of the Scheme, for example the creation of open waterbodies, areas of woodland, and wetlands and marshes as these could make the area more attractive to birds and potentially introduce hazards such as bird flight-lines across aircraft flightpaths.

3.2.5 The calculations of habitat creation have been based only on the areas illustrated on Figure 8.8: Environmental Masterplan within Volume 2 of the Environmental Statement [**APP-095/Volume 6.2**] [**REF 13**] and do not include habitat losses or gains that form part of any reconfigured design of the Warwickshire Gaelic Athletics Association sports facility.

4 Results of calculation and assessment

4.1 Area-based habitats

4.1.1 The total area of land used in the calculation is 67.82 hectares (ha).

4.1.2 The existing habitats within the Scheme's Order limits comprise a mixture of woodland, scrub, grassland and wetland habitats, cultivated land and existing areas of hardstanding. The most abundant habitats are arable land (30.31 ha), semi-improved grasslands (8.50 ha), improved grassland (8.81 ha) and hardstanding (7.22 ha).

4.1.3 Further descriptions of the habitats present are detailed in Appendix 9.2: Phase 1 and Phase 2 Habitat Survey Report (including figure) within Volume 3 of the Environmental Statement [**APP-130/Volume 6.3**] [**REF 2**].

Habitat loss and retention

4.1.4 **Table 4-1** provides a summary of the existing habitat types, condition and area that are present within the Scheme's Order limits.

4.1.5 The habitats and their associated condition rating derived from the habitat survey are listed in Appendix A with their locations illustrated on **Figure 1: Habitat Condition Plan**.

Table 4-1: Habitat condition and area within the Scheme's Order limits

Phase 1 habitat code	Habitat type	Condition	Area (ha)		
			Existing	Lost	Retained
A1.1.1	Broadleaved woodland - semi-natural	good	0.73	-	0.73
A1.1.1	Broadleaved woodland - semi-natural	moderate	0.18	0.18	-
A1.1.2	Broadleaved woodland – plantation	good	0.46	0.46	-
A1.1.2	Broadleaved woodland – plantation	moderate	0.74	0.74	-
A1.1.2	Broadleaved woodland – plantation	poor	0.68	0.68	-
A.1.3.1	Mixed woodland - semi-natural	good	0.18	0.18	-
A1.3.2	Mixed woodland – plantation	poor	2.10	0.62	1.48
A2.1	Scrub - dense/continuous	good	0.78	0.76	0.02
A2.1	Scrub - dense/continuous	moderate	0.37	0.37	-
A2.1	Scrub - dense/continuous	poor	2.19	2.19	-
A2.2	Scrub – scattered	moderate	2.07	1.92	0.15
A2.2	Scrub – scattered	poor	0.77	0.77	-
A3.1	Broadleaved parkland/scattered trees	good	0.19	0.19	-
A3.1	Broadleaved parkland/scattered trees	moderate	0.09	0.09	-

Phase 1 habitat code	Habitat type	Condition	Area (ha)		
			Existing	Lost	Retained
A3.3	Mixed parkland/scattered trees	good	0.07	0.07	-
B2.2	Neutral grassland - semi-improved	moderate	7.74	6.32	1.42
B2.2	Neutral grassland - semi-improved	poor	0.63	0.63	-
B4	Improved grassland	moderate	4.53	4.53	-
B4	Improved grassland	poor	4.28	4.28	-
B5	Marsh/marshy grassland	poor	0.09	0.09	-
B6	Poor semi-improved grassland	poor	0.04	0.04	-
G1	Standing water	poor	0.09	0.03	0.06
G2	Running water	moderate	0.02	0.01	0.01
J1.1	Cultivated/disturbed land – arable	poor	30.31	30.31	-
J1.2	Cultivated/disturbed land - amenity grassland	poor	0.34	0.34	
J1.3	Cultivated/disturbed land - ephemeral/short perennial	poor	0.93	0.93	-
J3.6	Buildings / hardstanding	N/A	7.22	7.22	-
		Total area	**67.82**	**63.95**	**3.87**

4.1.6 The calculated area of existing habitat that would be lost during the construction and landscaping of the Scheme is 63.95 ha. This accounts for all of the baseline habitats except for the retained habitats, which comprise; 2.21 ha of woodland, 1.42 ha of grassland, 0.17 ha of scrub, 0.06 ha of standing water and 0.01 ha of running water (3.87 ha total).

Habitat creation and enhancement

4.1.7 Excluding the hardstanding and built areas, the Scheme offers scope to enhance or create a total of 50.00 ha of habitat (comprising 3.12 ha retained habitat that is enhanced, and 46.88 ha created habitat).

4.1.8 The Scheme has scope for the enhancement of 3.12 ha of retained habitats, which would be achieved through improvements in habitat condition. These include woodland (1.48 ha), scrub (0.15 ha), grassland (1.42 ha), standing water (0.06 ha) and running water (0.01 ha). The grassland habitat includes the area that will be translocated as reported in Chapter 9: Biodiversity in Volume 1 of the Environmental Statement [**APP-054/Volume 6.1**] [**REF 1**] and as illustrated on Figure 8.8: Environmental Masterplan within Volume 2 of the Environmental Statement [**APP-095/Volume 6.2**] [**REF 13**].

4.1.9 The Scheme would also result in the creation of a total of 46.88 ha of new habitat, comprising woodland (3.30 ha), scrub (8.09 ha), grassland (34.86 ha) and standing water (i.e. reed beds) (0.63 ha).

4.1.10 The existing condition (for existing habitats only), target condition, time to target condition and area of the enhanced or created habitats are detailed in **Table 4-2**.

Table 4-2: Habitat condition and area within the Scheme's Order limits

Habitat type	Existing condition	Target Condition	Time to Target Condition	Area (ha)
Retained & Enhanced Habitats				
Mixed plantation	Poor	Moderate	15 years	1.48
Scattered scrub	Moderate	Good	5 years	0.15
Semi-improved neutral grassland*	Moderate	Good	10 years	1.17
Semi-improved neutral grassland	Moderate	Good	5 years	0.25
Standing water	Poor	Moderate	5 years	0.06
Running water	Moderate	Good	5 years	0.01
			Total	3.12
Created Habitats				
Broad-leaved plantation	-	Moderate	31+ years	3.30
Dense continuous scrub	-	Moderate	10 years	5.58
Scattered Scrub	-	Moderate	5 years	2.11
Introduced shrub	-	Moderate	5 years	0.40
Semi-improved neutral grassland	-	Moderate	10 years	34.86
Standing water	-	Moderate	5 years	0.63
			Total	46.88

* Corresponds with the area of grassland translocation

4.2 Linear-based habitats (hedgerows)

4.2.1 The description of hedgerows is provided in Appendix 9.3 Hedgerow Report (including figure) in Volume 3 of the Environmental Statement [**APP-131/Volume 6.3**] [**REF 3**]. Appendix B provides a summary of hedgerow condition within the Scheme's Order limits.

4.2.2 The hedgerows and their associated condition rating are shown on **Figure 2: Hedgerow Condition Plan.**

Habitat loss

4.2.3 The length and condition of hedgerow impacted by the Scheme is detailed in **Table 4-3**.

Table 4-3: Hedgerow condition and length within the Scheme's Order limits

Habitat type	Condition	Length
Hedgerow	good	3 km
Hedgerow	moderate	1.2 km
Hedgerow	good	600 m

Habitat creation and enhancement

4.2.4 As detailed in Chapter 9: Biodiversity in Volume 1 of the Environmental Statement [**APP-054/Volume 6.1**] [**REF 1**] the Scheme includes scope for the provision of 12,000 m of hedgerow planting. The condition and lengths of existing hedgerow and the multipliers applied in the assessment to calculate the length of replacement hedgerow are detailed in **Table 4-4**.

Table 4-4: Hedgerow metric

Hedgerow condition	Length lost (km)	Multiplier	Length of replacement (km)
Good	3 km	3	9 km
Moderate	1.2 km	2	2.4 km
Poor	600 m	1	600 m
Total length	**4.8 km**	**-**	**12 km**

4.3 Assessment results

4.3.1 The following summarises the biodiversity impact assessment results for area- and liner-based habitats within the Scheme's Order limits.

Area-based habitats

4.3.2 The summary of the metric calculation for area based habitats is provided in **Table 4-5**.

Table 4-5: Summary of metric calculation outputs for area based habitats

Description	Biodiversity units
Baseline	249.34
Loss	-218.14
Enhanced (Retained Habitat)	8.39
Mitigation value (Scheme Landscaping)	193.05
Net change	**-16.70**

4.3.3 The Scheme is predicted to result in a net loss of 16.70 biodiversity units, which represents a 6.7% loss in biodiversity units.

Linear habitats

4.3.4 The Scheme is predicted to result in the loss of 4.8 km of hedgerow.

4.3.5 The total amount of replacement hedgerow required is 12 km, which has been calculated by applying the relevant compensation ratio according to the condition of the hedgerow being affected, as presented in **Table 4-4**.

4.3.6 The Scheme's Order limits include land for the delivery of 12 km of replacement hedgerow planting, which is illustrated on Figure 8.8 - Environmental Masterplan within Volume 2 of the Environmental Statement [**APP-095/Volume 6.2**] [**REF 13**].

4.3.7 Delivery of 12 km of replacement hedgerow would achieve no net loss of hedgerows.

4.4 Potential offset sites

4.4.1 Highways England has engaged with local stakeholders to explore potential offset sites, which if secured, could deliver additional biodiversity units through the creation of new habitats or restoration of existing habitats.

4.4.2 This engagement has resulted in the identification of offset sites within the Scheme's Order limits that have potential to provide additional biodiversity units. These sites as labelled as 'Land identified for biodiversity offsetting measures' on Figure 8.8 within Volume 2 of the Environmental Statement [**APP-095/Volume 6.2**] [**REF 13**].

4.4.3 The offset sites were identified based on areas of land that could integrate with wider mitigation and compensation planting, and contribute to the ecological network by helping to expand, buffer and connect existing habitats.

4.4.4 Subject to securing these offset sites either through the powers of the DCO or through separate landowner agreement, these areas of land would facilitate the delivery of biodiversity improvements which would offset some of the loss of area-based habitats recorded within the interim calculation.

5 References

Reference	Source
REF 1	6.1 – Environmental Statement Chapter 9: Biodiversity [**APP-054/Volume 6.1**]. Highways England (2019).
REF 2	6.3 – Environmental Statement Appendix 9.2: Phase 1 and Phase 2 Habitat Survey Report (including figure) [**APP-130/Volume 6.3**]. Highways England (2019). https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010027/TR010027-000218-TR010027_M42J6_6-3_Environmental_Statement_Appendicies_Appendix_9.2.pdf
REF 3	6.3 – Environmental Statement Appendix 9.3: Hedgerow Report (including figure) [**APP-131/Volume 6.3**]. Highways England (2019). https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010027/TR010027-000219-TR010027_M42J6_6-3_Environmental_Statement_Appendicies_Appendix_9.3.pdf
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REF 5	National Planning Policy Framework. Ministry of Housing, Communities & Local Government (2019). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf
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REF 8	Our plan to protect and increase biodiversity. Highways England (2015). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/441300/N150146_-_Highways_England_Biodiversity_Plan3lo.pdf
REF 9	Advice Note 11 – Working with public bodies in the infrastructure planning process. The Planning Inspectorate (2017). https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2014/12/Advice-note-11-v3_1.pdf
REF 10	*Biodiversity Net Gain – Good practice principles for development*. CIRIA, CIEEM and IEMA (2016). https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf
REF 11	Biodiversity Offsetting Pilots – Technical paper: The metric for the biodiversity offsetting pilot in England. Defra (2012). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69531/pb13745-bio-technical-paper.pdf
REF 12	6.2 – Environmental Statement Figure 8.8 – Environmental Masterplan [**APP-095/Volume 6.2**]. Highways England (2019). https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010027/TR010027-000183-TR010027_M42J6_6-2_Environmental_Statement_Figures_Figure%208.8.pdf

Reference	Source
REF 13	Higher Level Stewardship Farm Environment plan (FEP) Manual – Technical guidance on the completion of the FEP and identification, condition assessment and recording of HLS FEP features (Third Edition March 2010). Natural England (2010). http://adlib.everysite.co.uk/resources/000/251/202/NE264.pdf
REF 14	2.3 – Works Plans [**APP-007/Volume 2.3**]. Highways England (2019). https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010027/TR010027-000095-TR010027_M42J6_2-3_Works_Plans.pdf
REF 15	8.25 – Outline Bird Strike Management Plan [**REP2-023**]. Highways England (2019). https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010027/TR010027-000448-TR010027_M42J6_8.25_Outline%20Bird%20Strike%20Management%20Plan.pdf

Appendix A: Area-based habitat condition

Habitat Type	Condition Rating	Justification
Phase 1: A1.1.2 - Broadleaved woodland - plantation Farm Environment Plan (FEP): T08	Poor	All trees are of 1 age range, Vegetation is free from physical damage associated with wild mammals, Vegetation is not free of human damage large amount of litter.
Phase 1: B4 - Improved grassland FEP: Not covered	Moderate	Less than 50% perennial rye grass and no human damage. Although a varied range of species criteria No.1 not met as species typical of semi-improved grassland do not represent ≥50% vegetation cover and there aren't ≥3 indicator species (or 2 indicator species found throughout).
Phase 1: A3.1 - Broadleaved parkland/scattered trees FEP: T03 Wood pasture and parkland	Moderate	Vegetation all of one age category and not indicative of local woodland pasture. It is free of human damage.
Phase 1: A2.2 - Scrub - scattered FEP: V05 Scrub of high environmental value	Poor	Less than tree woody species and single age class. Free from physical damage.
Phase 1: G2 - Running water (Stream) FEP: Not covered	No condition assessment details so not assessed.	Not applicable.
Phase 1: Hard standing FEP: Not covered	No condition assessment details so not assessed.	Not applicable.
Phase 1: A1.3.2 - Mixed woodland - plantation FEP: T06 Mixed woodland	Poor	All trees a similar age and damage from humans and no damage from animals.
Phase 1: J1.2 - Cultivated/disturbed land - amenity grassland FEP: Not covered	Poor	Low species diversity present and over 50% of species present include perennial rye grass. Land free of physical damage associated with humans.
Phase 1: A2.1 - Scrub - dense/continuous FEP: V05 Scrub of high environmental value	Poor	Bramble makes up over 75% of the species present, no clearings present and no tall herb margins present. Land is free of physical damage associated with humans.
Phase 1: A1.1.2 - Broadleaved woodland - plantation FEP:T08 Native semi-natural woodland	Good	Native species of diverse age ranges and free of damage from mammals and humans.
Phase 1: A2.2 - Scrub - scattered FEP: V05 Scrub of high environmental value	Moderate	Low diversity of woody species. However there are areas of clearings and tall herbs present in margins and low levels of human damage.

Habitat Type	Condition Rating	Justification
Phase 1: J1.3 - Cultivated/disturbed land - ephemeral/short perennial FEP: Not covered	Poor	Species present do not match typical species of semi improved grassland and percentage of bare ground/shrubs is over 10% but very little human related damage.
Phase 1: A2.1 - Scrub - dense/continuous FEP: V05 Scrub of high environmental value	Poor	<3 woody species present and lacks clearings and a developed edge with tall herbs. Signs of physical damage associated with wild mammals (rabbits) and large amounts of litter present.
Phase 1: A1.1.2 - Broadleaved woodland - plantation FEP:T08 Native semi-natural woodland	Poor	All trees are of 1 age range, Vegetation is free from physical damage associated with wild mammals, Vegetation is not free of human damage and large amounts of litter.
Phase 1: B2.2 - Neutral grassland - semi-improved FEP: G02 Semi-improved grassland	Moderate	Meets 2 of the criteria no human damage and diverse species although bramble invading in parts.
Phase 1: A1.1.1 - Broadleaved woodland - semi-natural FEP:T08 Native semi-natural woodland	Good	Diverse mix of ages and >90% native species no sign of damage from mammals or humans.
Phase 1: J1.1 - Cultivated/disturbed land - arable FEP: Not covered	Poor	Human disturbance present, no species present associated with semi improved grassland. <50% rye grass <10% invasive trees/shrubs <10% bare ground.
Phase 1: A1.1.1 - Broadleaved woodland - semi-natural FEP: T08 Native semi-natural woodland	Good	Diverse mix of ages and >90% native species no sign of damage from mammals or humans.
Phase 1: J1.3 - Cultivated/disturbed land - ephemeral/short perennial FEP: Not covered	Poor	Species present do not match typical species of semi improved grassland and percentage of bare ground/shrubs is over 10% , very little human related damage but extensive physical damage associated with wild mammals (rabbits).
Phase 1: J2.3.2 - Hedge with trees - species-poor FEP: F02 High environmental value boundary	Poor	Hawthorn dominant less than 4 woody species and less than 2m in height.
Phase 1: A1.3.2 - Mixed woodland - plantation FEP: T06 Mixed woodland	Poor	Free from animal damage, litter present and non-native species present.
Phase 1: G1 - Standing water FEP: W07 Ponds	Poor	No damaging non-native plants however pond is not set in a semi natural habitat and it is not free of human disturbance.
Phase 1: G1 - Standing water FEP: F02 High environmental value boundaries (for wet ditches)	Poor	Meets none of the criteria.

Habitat Type	Condition Rating	Justification
Phase 1: B2.2 - Neutral grassland - semi-improved FEP: G02 Semi-improved grassland	Moderate	Meets 2 of the criteria no human damage and diverse species.
Phase 1: B4 - Improved grassland FEP: Not covered	Poor	No human damage but low species diversity and dominated by perennial ryegrass.
Phase 1: A3.1 - Broadleaved parkland/scattered trees FEP: T03 Wood pasture and parkland	Good	Diverse mix of ages and >90% native species, no sign of damage from mammals or humans. The balance of trees, scrub and grassland is typical of wood pasture in the local area and cover of bare ground is <10%.
Phase 1: B2.2 - Neutral grassland - semi-improved FEP: G02 Semi-improved grassland	Moderate	2 criteria met -assigned a moderate condition rating due to invading bramble.
Phase 1: A2.1 - Scrub - dense/continuous FEP: V05 Scrub of high environmental value	Good	>3 woody species present and scrub is of diverse maturity with clearings and glades and has a well developed edge with tall herbs. > 90% of scrub is free from human damage.
Phase 1: J1.1 - Cultivated/disturbed land - arable FEP: Not covered	Poor	Human disturbance present (littering/fly-tipping), no species present associated with semi improved grassland. <50% rye grass <10% invasive trees/shrubs <10% bare ground)
Phase 1: B2.2 - Neutral grassland - semi-improved FEP: G02 Semi-improved grassland	Poor	Low species diversity and invading shrubs. Area is heavily horse grazed.
Phase 1: B2.1 - Neutral grassland - unimproved FEP: G06 Lowland meadows	Poor	Species diversity of indicator species is low and species indicative of poor condition is >5%. No sign of human damage.
Phase 1: A1.1.1 - Broadleaved woodland - semi-natural FEP: T08 Native semi-natural woodland	Moderate	>90% native species of diverse ages. Free of damage from wildlife however there are signs of human damage (dumping of litter and rubbish)
Phase 1: A1.2.2 Woodland - Coniferous - Plantation FEP: T06 Plantations on woodlands site	Poor	Vegetation is not of diverse maturity and has signs of human damage. No signs of damage from animals.
Phase 1: A2.2 - Scrub - scattered FEP: V05 Scrub of high environmental value	Poor	<3 woody species present and lacks clearings and a developed edge with tall herbs. Signs of human damage are present.
Phase 1: G1 - Standing water FEP: W07 Ponds	Moderate	Pond is not set in a semi natural habitat but it is free from human damage and damaging non-native plants.
Phase 1: F1.1 - Single species dominant swamp FEP: Not covered	No condition assessment details so not assessed.	Not applicable.

Habitat Type	Condition Rating	Justification
Phase 1: A1.3.1 - Mixed woodland - semi-natural FEP: T08 Native semi-natural woodland	Moderate	>90% native species of diverse ages. Free of damage from wildlife however there are signs of human damage (dumping of litter and rubbish)
Phase 1: B5 - Marsh/marshy grassland FEP: G07 Purple Moorgrass and Rush pasture	Poor	Low species diversity and cover of species indicative of poor condition is greater than 10%. Free of human damage.
Phase 1: B4 - Improved grassland FEP: Not covered	Low	1 criteria met; cover of perennial rye grass is less than 50% and less than 10% bare ground and trees and shrubs. Although a varied range of species criteria No.1 not met as species typical of semi-improved grassland do not represent ≥50% vegetation cover and there aren't ≥3 indicator species (or 2 indicator species found throughout). and Criteria no.3 not met as areas contain large amounts of littering (fly-tipped material) and are thus not free of damage associated with humans.
Phase 1: B4 - Improved grassland FEP: Not covered	Low	1 criteria met; free of damage associated with humans.

Appendix B: Linear-based (hedgerow) habitat condition

Survey section	Type	Important	Condition	Justification
H3	Defunct hedge - species-poor	No	Poor	0 criteria met
H4	Hedge with trees - species-poor	No	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H5	Intact hedge - species-poor	No	Poor	0 criteria met
H6	Intact hedge - species-poor	No	Poor	0 criteria met
H10	Hedge with trees - species-poor	No	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H11	Intact hedge - species-poor	No	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H17	Hedge with trees - species-poor	No	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H18	Intact hedge - species-poor	No	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage.
H20	Hedge with trees - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H23	Hedge with trees - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage

Survey section	Type	Important	Condition	Justification
H28	Hedge with trees - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H29	Intact hedge - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H30	Intact hedge - species-rich	No	Moderate	2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage.
H32	Hedge with trees - species-poor	No	Moderate	2 criteria met: ≥4 UK native woody species; ≥90% free from physical damage
H35	Hedge with trees - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H38	Hedge with trees - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H40	Hedge with trees - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H42	Hedge with trees - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H45	Hedge with trees - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage

Survey section	Type	Important	Condition	Justification
H53	Intact hedge - species-poor	No	Moderate	Inaccessible - assumed 2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H54	Intact hedge - species-poor	No	Poor	0 criteria met
H60	Intact hedge - species-poor	No	Moderate	Inaccessible - assumed 2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H61	Intact hedge - species-poor	No	Moderate	Inaccessible - assumed 2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H62	Intact hedge - species-poor	No	Moderate	Inaccessible - assumed 2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H63	Intact hedge - species-poor	No	Poor	0 criteria met
H65	Intact hedge - species-poor	No	Poor	0 criteria met
H67	Hedge with trees - species-poor	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H73	Hedge with trees - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H75	Hedge with trees - species-poor	No	Poor	1 criteria met: ≥90% free from physical damage.
H77	Hedge with trees - species-poor	No	Moderate	Inaccessible - assumed 2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H79	Intact hedge - species-poor	No	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage

Survey section	Type	Important	Condition	Justification
H81	Intact hedge - species-poor	No	Moderate	2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H83	Intact hedge - species-poor	No	Poor	0 criteria met
H84	Intact hedge - species-poor	No	Moderate	Inaccessible - assumed 2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H88	Intact hedge - species-rich	No	Moderate	2 criteria met: ≥4 UK native woody species; ≥90% free from physical damage
H89	Intact hedge - species-rich	No	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage.
H93	Intact hedge - species-poor	No	Moderate	Inaccessible - assumed 2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H94	Hedge with trees - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H96	Hedge with trees - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H98A	Intact hedge - species-poor	No - check if >30 years old	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H98B	Intact hedge - species-rich	Yes	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H99	Intact hedge - species-poor	No	Poor	0 criteria met

Survey section	Type	Important	Condition	Justification
H102	Intact hedge - species-poor	No	Poor	0 criteria met
H104	Hedge with trees - species-poor	No	Moderate	2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H110	Intact hedge - species-poor	No - check if >30 years old	Poor	1 criteria met: ≥90% free from physical damage
H114	Intact hedge - species-poor	No	Moderate	2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H20	Intact hedge - species-poor	No	Moderate	2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage.
H121	Intact hedge - species-poor	No	Poor	0 criteria met
H22	Intact hedge - species-poor	No	Moderate	Inaccessible - assumed 2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H23	Intact hedge - species-poor	No	Moderate	Inaccessible - assumed 2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H126	Intact hedge - species-poor	No	Moderate	2 criteria met: ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage
H127	Intact hedge - species-poor	No	Good	3 criteria met: ≥4 UK native woody species; ≥2 height and ≥1.5m width with gaps <10%; ≥90% free from physical damage

Figure 1: Habitat Condition Plan

N

NOTES

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- LIMITS OF LAND TO BE TEMPORARILY ACQUIRED FOR SIGNAGE INSTALLATION
- LAND NOT INCLUDED WITHIN THE ORDER LIMITS
- GENERAL ARRANGEMENT BOUNDARY

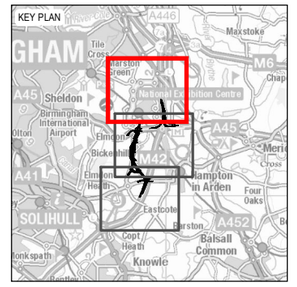
HABITAT CONDITION RATING

- GOOD
- MODERATE
- POOR

SEE SHEET 2

0 50 100 200 300 400 Metres

KEY PLAN



FIRST ISSUE	GB / JG	03/10/19	C01
Revision Details	By / Check	Date	Suffix

Purpose of Issue

DCO SUBMISSION

Client

Highways England
Floor 5
Two Colmore Square
38 Colmore Circus
B4 6BN

Development Consent Order Number

TR010027

Project Title

M42 JUNCTION 6 IMPROVEMENT

Drawing Title

FIGURE 1

HABITAT CONDITION PLAN

SHEET 1 OF 3

Designed	Drawn	Checked	Approved	Date
MWH	GB	MWH	JG	03/10/19

Internal Project No	Suitability
60543032	D7
Scale @ A3	Zone
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Highways England Pin	Originator	Volume		Rev
HE551485	-ACM	-EGN-		C01
Location		Type	Role / Number	
M42_SW_ZZ_ZZ		-DR-	DC-0076	

Filename: \\uk\ds2pfpsw001\LE_Projects\GIS Management\60543032 - M42 Jct 6 GIS Folder_GIS\01_Maps\00_Figures\New Template\Ecology Figures\FIGURE 1 - Habitat Condition Plan.mxd

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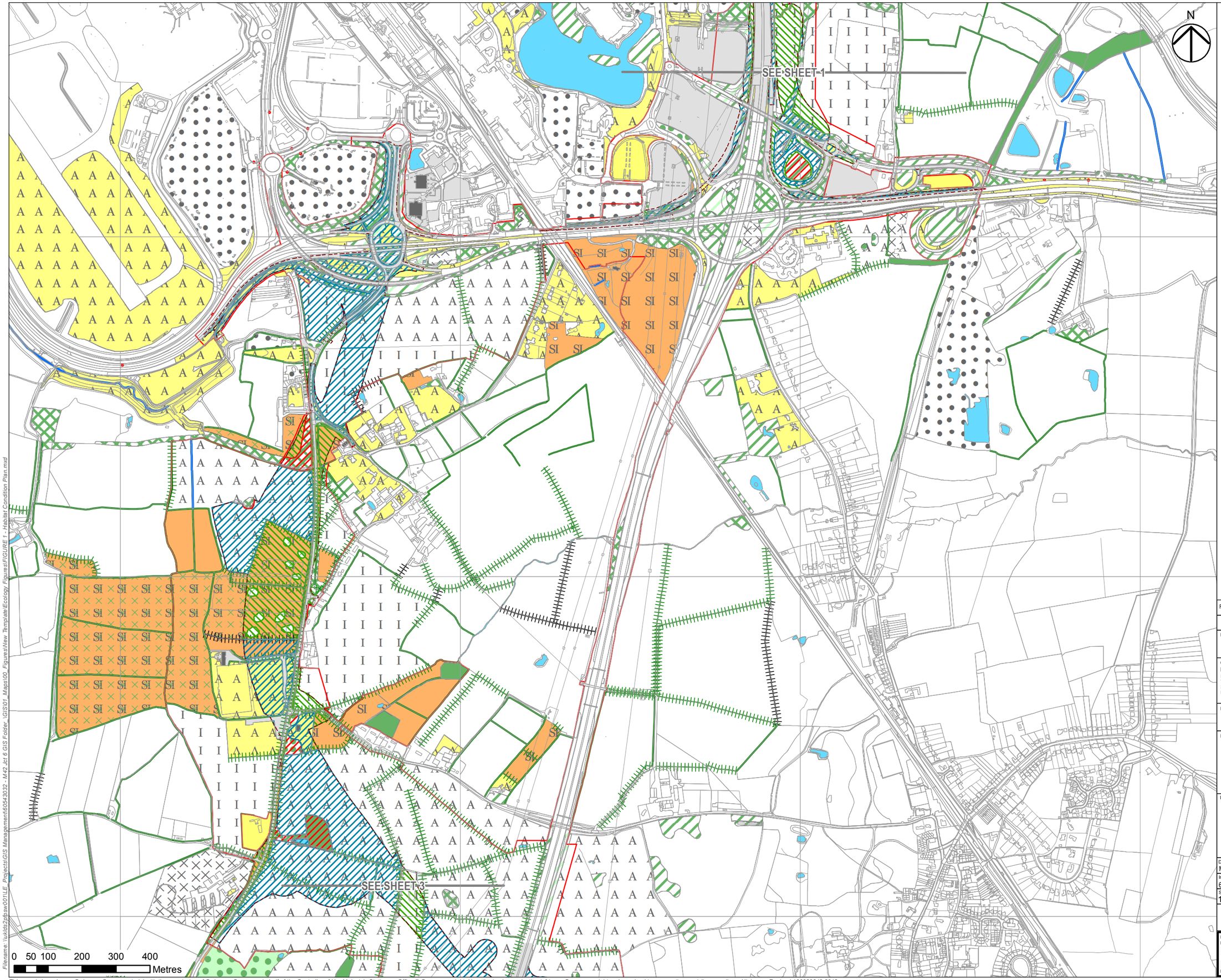

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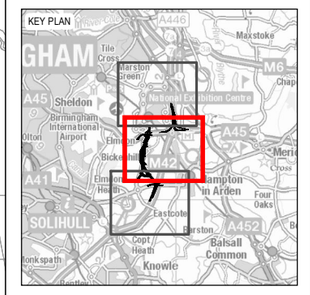
- LIMITS OF LAND TO BE TEMPORARILY ACQUIRED FOR SIGNAGE INSTALLATION
- LAND NOT INCLUDED WITHIN THE ORDER LIMITS
- GENERAL ARRANGEMENT BOUNDARY

HABITAT CONDITION RATING

- GOOD
- MODERATE
- POOR

KEY PLAN



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Two Colmore Square
38 Colmore Circus
B4 6BN

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M42 JUNCTION 6 IMPROVEMENT

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FIGURE 1

HABITAT CONDITION PLAN

SHEET 2 OF 3

Designed	Drawn	Checked	Approved	Date
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Internal Project No	Suitability
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Location		Type	Role	Number
M42_SW_ZZ_ZZ		-DR-	DC-	0077

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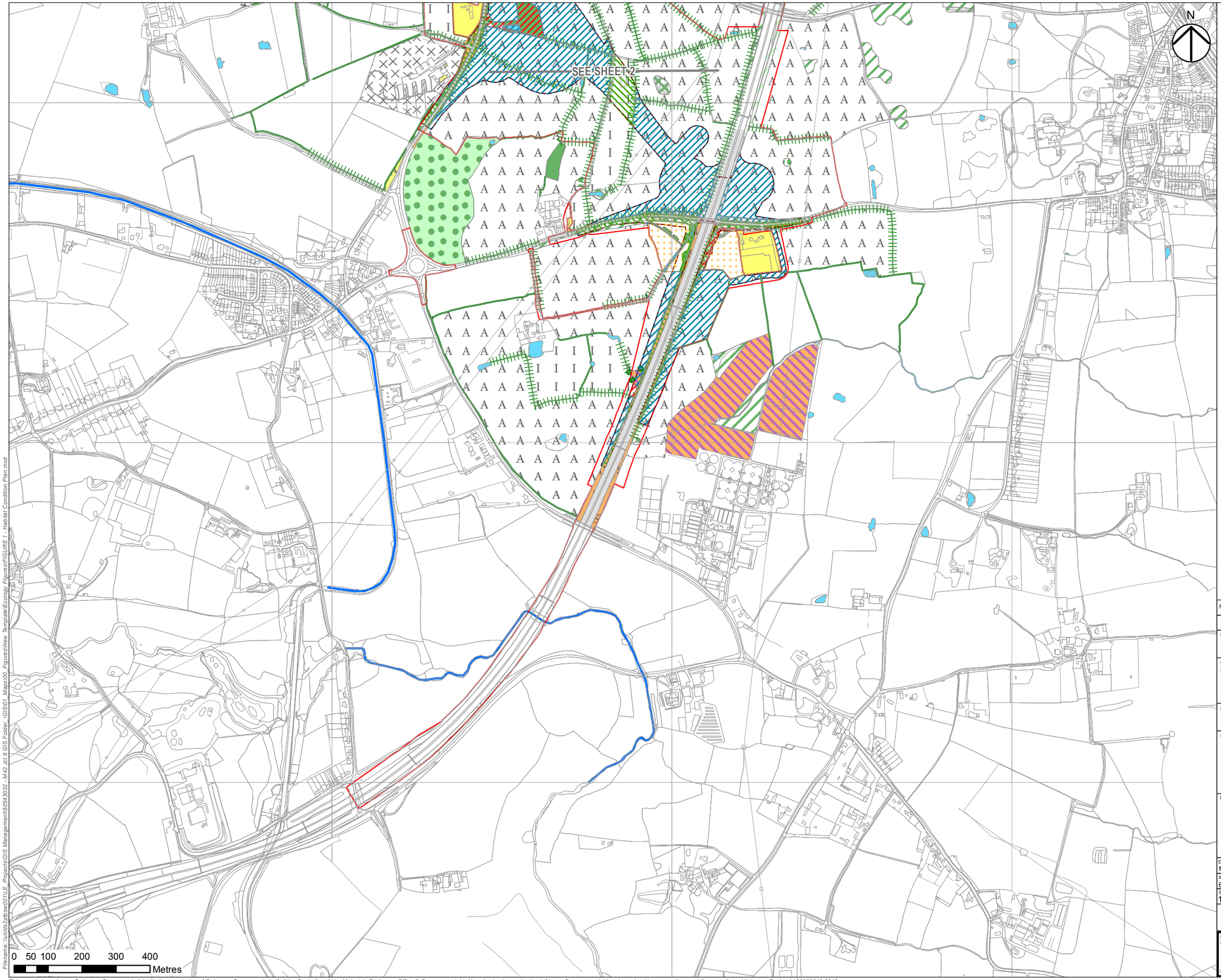

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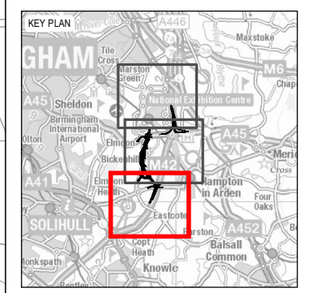
- LIMITS OF LAND TO BE TEMPORARILY ACQUIRED FOR SIGNAGE INSTALLATION
- LAND NOT INCLUDED WITHIN THE ORDER LIMITS
- GENERAL ARRANGEMENT BOUNDARY

HABITAT CONDITION RATING

- GOOD
- MODERATE
- POOR

KEY PLAN



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B4 6BN

Development Consent Order Number

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Project Title

M42 JUNCTION 6 IMPROVEMENT

Drawing Title

FIGURE 1

HABITAT CONDITION PLAN

SHEET 3 OF 3

Designed	Drawn	Checked	Approved	Date
MWH	GB	MWH	JG	03/10/19

Internal Project No	Suitability
60543032	D7
Scale @ A3	Zone
1:10,000	M42

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HE551485	-ACM	-EGN-		C01
Location		Type	Role / Number	
M42_SW_ZZ_ZZ		-DR-DC-0078		

Filename: \\ukids2pfsw001\LE_Projects\GIS Management\60543032 - M42 Jct 6 GIS Folder_\GIS\01_Maps\00_Figures\New Template\Ecology Figures\FIGURE 1 - Habitat Condition Plan.mxd

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Figure 2: Hedgerow Condition Plan

N

H135

H137 H134

H136

H112 H133 H132

H116 H131 H130

H115

H111 H110 H114 H109 H98 H101 H108 H121 H104 H99 H94 H96 H102 H120 H122 H123 H126 H93 H124 H128 H74 H79 H83 H81 H127 H73 H125 H82 H78 H66 H71 H80 H67 H65 H52 H77 H60 H42 H88 H56 H57 H55 H84 H54 H45 H50 H90 H75 H40 H85 H86 H44 H51 H76 H39 H49 H89 H43 H41

H105 H107 H117 H118 H106 H119

SEE-SHEET-2

0 50 100 200 300 400 Metres

NOTES

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- THE SCHEME
- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
- LIMITS OF LAND TO BE TEMPORARILY ACQUIRED FOR SIGNAGE INSTALLATION
- LAND NOT INCLUDED WITHIN THE ORDER LIMITS
- GENERAL ARRANGEMENT

HEDGEROW CONDITION

- GOOD CONDITION,
- MODERATE CONDITION,
- POOR CONDITION,
- MODERATE CONDITION, INACCESSIBLE

KEY PLAN

FIRST ISSUE	GB / JG	03/10/19	C01
Revision Details	By / Check	Date	Suffix

Purpose of Issue

DCO SUBMISSION

Client

Highways England
Floor 5
Two Colmore Square
38 Colmore Circus
B4 6BN

Development Consent Order Number

TR010027

Project Title

M42 JUNCTION 6 IMPROVEMENT

Drawing Title

FIGURE 2
HEDGEROW CONDITION PLAN
SHEET 1 OF 2

Designed	Drawn	Checked	Approved	Date
MWH	GB	MWH	JG	03/10/19

Internal Project No	Suitability
60543032	D7
Scale @ A3	Zone
1:7,500	M42

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Drawing Number

Highways England Pin	Originator	Volume		Rev
HE551485	-ACM	-EGN-		C01
Location		Type	Role / Number	
M42_SW_ZZ_ZZ		-DR-DC-	0118	

Filename: \\ukhds2pfpsw001\LE_Projects\GIS Management\60543032 - M42 Jct 6 GIS Folder_\GIS\01_Maps\00_Figures\New Template\Ecology Figures\Figure 2 - Hedgerow Condition Plan.mxd

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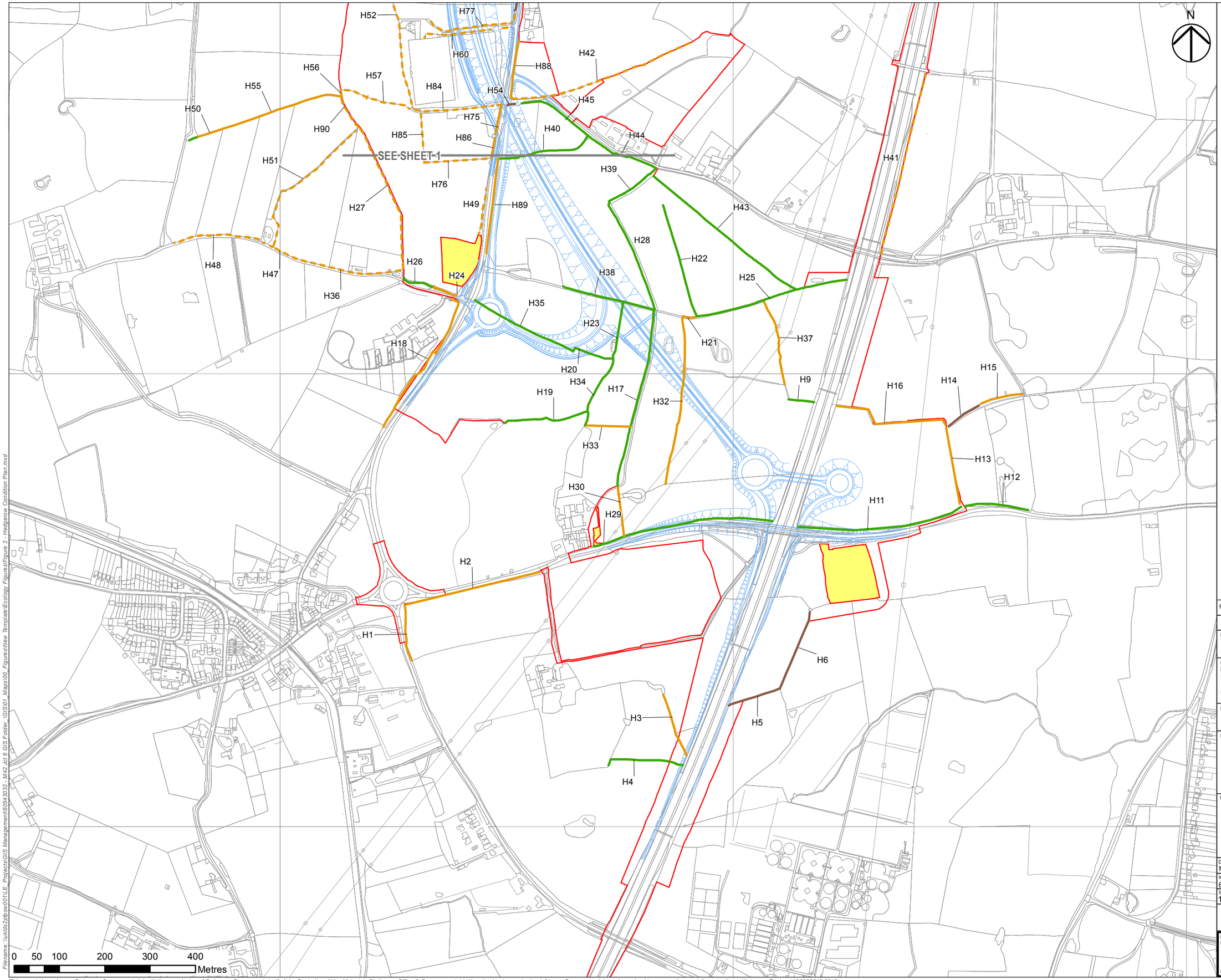

NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.

LEGEND

- THE SCHEME
- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
- LIMITS OF LAND TO BE TEMPORARILY ACQUIRED FOR SIGNAGE INSTALLATION
- LAND NOT INCLUDED WITHIN THE ORDER LIMITS
- GENERAL ARRANGEMENT

HEDGEROW CONDITION

- GOOD CONDITION,
- MODERATE CONDITION,
- POOR CONDITION,
- MODERATE CONDITION, INACCESSIBLE

FIRST ISSUE	GB / JG	03/10/19	C01	
Revision Details	By / Check	Date	Suffix	

Purpose of Issue

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Floor 5
Two Colmore Square
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Development Consent Order Number

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Project Title

M42 JUNCTION 6 IMPROVEMENT

Drawing Title

FIGURE 2
HEDGEROW CONDITION PLAN
SHEET 2 OF 2

Designed	Drawn	Checked	Approved	Date
MWH	GB	MWH	JG	03/10/19

Internal Project No: 60543032	Suitability: D7
Scale @ A3: 1:7,500	Zone: M42

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Drawing Number

Highways England Pin	Originator	Volume	Rev
HE551485	-ACM	-EGN-	C01
Location: M42_SW_ZZ_ZZ		Type / Role / Number: -DR-DC-0119	

Filename: \\ukbd2pfpsw001\LE_Projects\GIS Management\60543032 - M42 Jct 6 GIS Folder_\GIS\01_Maps\00_Figures\New Template\Ecology Figures\Figure 2 - Hedgerow Condition Plan.mxd

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