

NORTH AND EAST MELTON MOWBRAY DISTRIBUTOR ROAD

Proof of Evidence LCC 08:
Ecology

Prepared by: Matt Oakley

60542201- LCC -GEN-GEN_GEN_ZZ_Z-PE-EG-0800

Leicestershire County Council

Project number: 60542201

Date: August 2021

Quality information

Prepared by

Matt Oakley

Technical Director
of Ecology

Revision History

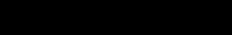
Revision	Revision date
P01	27/08/2021

Prepared for:

Leicestershire County Council

Prepared by:

AECOM Infrastructure & Environment UK Limited
12 Regan Way
Chetwynd Business Park
Nottingham NG9 6RZ
United Kingdom


aecom.com

© 2021 AECOM Infrastructure & Environment UK Limited. All Rights Reserved.

This document has been prepared by AECOM Infrastructure & Environment UK Limited (“AECOM”) for sole use of our client (the “Client”) in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

1	Introduction	1
1.1	Qualifications	1
1.2	Relevant Experience	1
2	Involvement with the Scheme and Contribution Made	2
2.1	Scope of Involvement.....	2
2.2	Contribution Made.....	2
3	Ecological Assessments undertaken to support Scheme Planning.....	3
3.1	Ecological Impact Assessment as part of the Environmental Statement	3
3.2	Legislation	3
3.3	Planning Policy	3
3.4	Biodiversity Action Plans	3
3.5	Surveys and Data Gathering.....	4
3.6	Scheme Impacts and Mitigation.....	4
3.7	Habitats	4
3.8	Great Crested Newt.....	5
3.9	Reptiles.....	5
3.10	Breeding and Wintering Birds	5
3.11	Barn Owl.....	6
3.12	Badger	6
3.13	Bats.....	6
3.14	Water Vole and Otter	7
3.15	Aquatic Invertebrates	7
3.16	White-clawed Crayfish	7
3.17	Planning Permission and Conditions.....	7
4	Changes in the Ecological Baseline since Planning Permission	10
4.1	Badger Surveys.....	10
4.2	Great Crested Newt.....	10
4.3	Bats.....	10
5	Specific Locations where Ecological Mitigation is Required	11
5.1	Plot 35 (drawing 60542201-ACM-ELS-S2_ML_ZZ_Z-DR-LV-0005_P03.pdf).....	11
5.2	Plots 76, 82 and 91 (drawing 60542201-ACM-ELS-S4_ML_ZZ_Z-DR-LV-0011_P03.pdf	11
5.3	Plot 120 (drawing 60542201-ACM-ELS-S5_ML_ZZ_Z-DR-LV-0013_P03.pdf.....	11
5.4	Plots 77, 78 and 79 (drawing 60542201-ACM-ELS-S4_ML_ZZ_Z-DR-LV-0010_P03.pdf)	11
5.5	Plot 129 (drawings 60542201-ACM-ELS-S5_ML_ZZ_Z-DR-LV-0014_P03.pdf and 60542201-ACM-ELS-S5_ML_ZZ_Z-DR-LV-0015_P03.pdf).....	12
6	Summary and Conclusion	14
	Appendix A Relevant Landscape Plans	15

1 Introduction

1.1 Qualifications

- 1.1.1 My name is Matt Oakley and I am presenting a proof of evidence in relation to the North and East Melton Mowbray Distributor Road (the Scheme), on behalf of Leicestershire County Council. I am a Chartered Environmentalist and have been a full member of the Chartered Institute for Ecology and Environmental Management for 11 years, with 15 years overall experience of ecological consultancy
- 1.1.2 I hold a BSc (Hons) degree in Environmental Science and have specialised in the assessment of ecological impacts and design of mitigation for major infrastructure projects, including roads, railways and other linear infrastructure.
- 1.1.3 I am currently a Technical Director of Ecology at AECOM and have held this post for over 2.5 years. I have previously held posts in several ecological consultancies including Atkins, WSP and RSK.

1.2 Relevant Experience

- 1.2.1 My primary technical expertise is in leading large-scale, nationally significant infrastructure schemes across many sectors but most notably in road and rail. Most recently I have been the ecological lead for the M54/M6 Junction Improvement Scheme, East West Rail Phase 2, London to Corby Rail Upgrade and the M40 Junction Improvement Scheme. I have extensive experience of survey and mitigation techniques for protected species, with expertise in bats, great crested newt, water vole, hazel dormouse, white-clawed crayfish and badger, holding survey and/or mitigation licences for these species.

2 Involvement with the Scheme and Contribution Made

2.1 Scope of Involvement

- 2.1.1 The evidence I present will provide an overview of the approach to ecology on the Scheme, focus on the key ecological mitigation areas and demonstrate the requirement for these areas.
- 2.1.2 This Proof of Evidence sets out:
- 2.1.3 A summary of the ecological survey work undertaken to support the Environmental Statement (ES) for the Scheme, as well as surveys that have been completed in subsequent years up until submission of this proof.
- 2.1.4 Likely impacts of the Scheme on Important Ecological Features (IEF) and the general mitigation measures required to reduce the impacts of the Scheme on these features.
- 2.1.5 Justification for the location of specific ecological mitigation areas relative to the Scheme.
- 2.1.6 In Section 5 I draw conclusions as to the suitability of the mitigation design of the Scheme.
- 2.1.7 This proof of evidence does not address matters concerning the impacts to the River Eye Site of Special Scientific Interest (SSSI) or the mitigation design to address those impacts. This is the subject of Proof of Evidence LCC06: River Eye diversion and Site of Special Scientific Interest, document reference 60542201-LCC-GEN-GEN_GEN_ZZ_Z-PE-EG-0600.

2.2 Contribution Made

- 2.2.1 The evidence I present relates to my input as a technical expert for ecology survey and mitigation during the detailed design phase of the Scheme.

3 Ecological Assessments undertaken to support Scheme Planning

3.1 Ecological Impact Assessment as part of the Environmental Statement

3.1.1 The ES in support of the Scheme was undertaken within the context of relevant planning policy, guidance and legislation, which is summarised below.

3.2 Legislation

3.2.1 Nature conservation policy in England is implemented through a series of sites, habitats and species designated under legislation from an international to a local level. The following national wildlife legislation is relevant to the Scheme:

- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Countryside and Rights of Way Act 2000. Section 74 of the Act provides the habitat types and species of principle importance in England (CROW Act 2000);
- The Conservation of Habitats and Species Regulations 2017, (the Habitats Regulations);
- The Natural Environment and Rural Communities Act 2006 (NERC Act 2006);
- The EC Birds Directive (Directive 79/409/ECC) as translated into UK law by the Habitats and Species Regulations 2017 (as amended);
- The EC Habitats Directive (Directive 92/43/ECC) as translated into UK law by the Habitats and Species Regulations 2017 (as amended);
- The Protection of Badgers Act 1992 (as amended);
- The Hedgerows Regulations 1997 (as amended); Circular 06/2005 (Biodiversity and Geographical Conservation);
- The Fish Health Regulations 1997 (as amended);
- Salmon & Freshwater Fisheries Act 1975 (as amended);
- Eels (England and Wales) Regulations 2009 (as amended);
- The Water Environment (Water Framework Directive) (England and Wales) Regulations 2003 (WFD);
- The Animal Welfare Act 2006;
- The Aquatic Animal Health (England and Wales) Regulations 2009 (as amended); and
- The EU Invasive Alien Species Regulation 2014

3.2.2 The above legislation was considered when identifying potential constraints to the Scheme, design options and mitigation. In some cases, compliance with legislation will require obtaining relevant protected species licences prior to the implementation of the Scheme.

3.3 Planning Policy

3.3.1 The following national and local planning policy is relevant to the Scheme:

- The National Planning Policy Framework (NPPF);
- The Local Plan of relevance is the saved policies of the Melton Borough Local Plan (1999). Relevant policies are C13 – Sites of Ecological, Geological or Other Scientific Importance, C14 – Nature Conservation Value, C15 – Wildlife Habitat Protection, and C16 – Trees and Woodland

3.4 Biodiversity Action Plans

3.4.1 The following biodiversity actions plans are relevant to the Scheme:

- The UK Post-2010 Biodiversity Framework;
- Biodiversity 2020, a national strategy for England's wildlife and ecosystem services;

- Space for Wildlife: Leicester, Leicestershire and Rutland Biodiversity Action Plan 2016 – 2026', 2nd edition (LBAP).

3.5 Surveys and Data Gathering

3.5.1 To assess how the Scheme may impact biodiversity in the context of the legislative and policy framework detailed above, a comprehensive suite of surveys has been undertaken to identify the main IEF that have the potential to be affected by the Scheme. All these surveys are set out below in Table 4.1.

Table 3.1 – Ecological Field Surveys undertaken in support of the ES for the Scheme

Ecological Feature	Survey Type/ Method	Date of Surveys
Habitats	Phase 1 habitat survey	May and June 2017 May 2018
Hedgerows	Assessment against the <i>Hedgerow Regulations 1997</i> wildlife criteria	Between May and July 2017 and June 2018
Great Crested Newt	Presence/ likely absence surveys	March and April 2017 March to June 2018
Reptiles	Presence/ likely absence surveys	September 2017
Breeding Birds	Territory mapping	April and May 2018
Wintering Birds	Transect methodology	October 2017 to March 2018
Barn Owl	Presence/ likely absence surveys	August 2017
Badger	Presence/ likely absence surveys	October 2017
Bats	Preliminary roost assessment	August 2017
	Emergence re-entry surveys	August and September 2017 June and July 2018
	Activity Surveys	August 2017 to July 2018
Water Vole and Otter	Presence/ likely absence surveys	Between July 2017 and May 2018
Aquatic Invertebrates	Kick sampling	October 2017
		April and May 2018
White-clawed Crayfish	Presence/ likely absence surveys	August 2018

3.5.2 As for all major infrastructure schemes it was not possible to gain access to all land within which ecological surveys were proposed for the ecological features listed above in Table 4.1. Some areas could not be accessed for survey for safety reasons. Surveys were attempted wherever access was permitted. The majority of habitat areas and the species they potentially support that may be affected by the Scheme have been surveyed and in my professional opinion the overall level of survey coverage is sufficient to make an accurate assessment of impacts.

3.6 Scheme Impacts and Mitigation

3.7 Habitats

- 3.7.1 The Scheme would have no impacts on sites of international (Europe) importance, such as Special Protection Areas, Special Areas of Conservation or Ramsar sites, which are protected under the Habitats Regulations.
- 3.7.2 One site of national (England) importance would be impacted by the Scheme, the River Eye Site of Special Scientific Interest (SSSI) which is protected under the WCA 1981. This site and the impacts of the Scheme upon it are the subject of Proof of Evidence LCC06: River Eye diversion and Site of Special Scientific Interest, document reference 60542201-LCC-GEN-GEN_GEN_ZZ_Z-PE-EG-0600, and therefore it won't be discussed any further in this proof.
- 3.7.3 There are three Local Wildlife Sites (LWS), which warrant consideration under national and local planning policy, that could potentially be impacted by the Scheme. These three sites, Melton Country Park LWS, Nottingham Road Hedgerows LWS, and Scalford Brook LWS would be protected from harm through best practice construction methods including pollution prevention, and control of construction dust and surface water run-off.
- 3.7.4 The Scheme would result in the loss of broad-leaved semi-natural woodland, mixed plantation woodland, hedgerows, semi-improved neutral grassland, standing water and running water. These habitats are of Local to County conservation importance and require consideration under national and local planning policy as well as the NERC Act 2006 and the Hedgerow Regulations 1997. To mitigate for these impacts, areas of soft landscaping within the Scheme boundary would incorporate replacement of habitats lost to construction either temporarily or permanently with better habitat quality than the existing features, including species rich grassland and hedgerows. Field margins would be planted with species rich hedgerows, linking the Scheme to the wider landscape.

3.8 Great Crested Newt

- 3.8.1 The great crested newt surveys recorded several populations of the species, which is protected under the Habitats Regulations and the WCA 1981, though most of the waterbodies where newts were recorded are further than 250m from the Scheme boundary. These distances make it unlikely that individual newts would be inhabiting terrestrial habitats within the Scheme boundary, therefore impacts to these population are unlikely.
- 3.8.2 There is however one waterbody that supports great crested newts that would be lost during construction. Not only would a great crested newt breeding pond be lost, the death or injury of newts is likely through removal of both aquatic and terrestrial habitat. This waterbody would be replaced with two new waterbodies close to the existing one. Woodland, grassland and hedgerow planting would compensate for any terrestrial habitat losses close to known great crested newt breeding ponds. Where necessary, great crested newts would be trapped and relocated out of the construction footprint under a protected species licence from Natural England.
- 3.8.3 More detail on great crested newt compensation is provided in Section 5.

3.9 Reptiles

- 3.9.1 The reptile surveys recorded a small population of grass snake, which are protected under the WCA 1981 and listed as a priority species under the NERC Act 2006, present on the disused railway embankment running north from Melton Country Park. No other reptiles were recorded. The Scheme has the potential to impact this population of grass snake during construction through the removal of grassland and scrub.
- 3.9.2 To prevent impacts to grass snake, habitat manipulation and movement of individual grass snakes would protect the population from harm. Habitat reinstatement and creation, especially those designed for great crested newt would also benefit grass snake.

3.10 Breeding and Wintering Birds

- 3.10.1 An assemblage of notable farmland birds was identified breeding on the pastoral land and arable land within 100m of the Scheme boundary. Species included yellowhammer, tree sparrow, grey partridge and skylark which are listed as priority species under the NERC Act 2006 and warrant consideration under national and local planning policy. In addition, common nesting bird species and over wintering bird species were also identified including red kite, kingfisher and peregrine falcon.

3.10.2 The loss of grassland, scrub and arable land would impact these birds, in particular the notable assemblage of farmland species. To mitigate for these losses, landscaping to buffer road noise and visual disturbance, along with the replacement or creation of lost arable field margins and grassland would provide long term compensatory habitat for birds.

3.11 Barn Owl

3.11.1 The desk study undertaken in support of the surveys highlighted the presence of four pairs of breeding barn owl within 2km of the Scheme boundary. Barn owl are protected under Schedule 1 of the WCA 1981 and are listed as a conservation priority in Leicestershire under the LBAP. Field surveys identified occasionally used roosting sites within or close to the Scheme boundary, though no evidence of breeding was recorded. Optimal habitat for foraging barn owl is present in several areas across the route of the Scheme. However, surveys to locate any foraging barn owl did not record any individuals.

3.11.2 There is a risk of foraging barn owl colliding with road traffic when the Scheme is operational, though this risk is low considering no barn owls were recorded during the surveys, and each pair of barn owl has a territory of several hectares making it less likely they would regularly try or need to cross the road to access good foraging habitat.

3.11.3 To further reduce the risk of barn owl colliding with traffic during operation of the new road, landscaping alongside those sections of the Scheme which are adjacent to suitable barn owl foraging habitat incorporates planting that provides both a barrier preventing barn owl from accessing the highways verges, but also encourages barn owl flight up and over the carriageway.

3.12 Badger

3.12.1 Badger surveys have recorded at least three separate badger social groups present within or in the vicinity of the Scheme boundary, with several badger setts located within 30 m of the Scheme boundary which would be impacted by construction works. This includes two main setts, two annex setts, four subsidiary setts and 11 outlier setts. Badgers and their setts are protected under the Protection of Badgers Act 1992. Where main setts would be damaged or destroyed by construction works, they would be replaced with a new artificial sett in a suitable location prior to closure of the existing sett. Other setts (non-main setts) would be closed where necessary, but not replaced.

3.12.2 The Scheme, when operational, would sever badger territory as badgers are susceptible to traffic collisions at night when trying to cross roads. To allow badgers to safely cross the road when it was use and access the full extent of their territory, appropriately located and sized badger tunnels would be provided for each badger social group to allow badgers access underneath the road.

3.12.3 Specific locations for badger mitigation are detailed in Section 5.

3.13 Bats

3.13.1 Bat surveys have recorded populations of common and rarer bat species considered important in the County (Leicestershire) commuting and foraging along habitats within and close to the Scheme boundary. All UK bat species and their roosts are protected under the Habitats Regulations and the WCA 1981 and are listed as a conservation priority in Leicestershire under the LBAP. Loss of these habitats during construction could impact these bat populations in the short term, though in the medium to long term new woodland, scrub and grassland planting would replace habitat lost and would compensate for the impact.

3.13.2 The surveys have recorded bats roosting in the former railway bridge (common pipistrelle and Daubentons bats), a single tree close to the railway bridge (common pipistrelle summer roost), and within Sysonby Farm (common pipistrelle and brown long-eared bat summer roosts).

3.13.3 The railway bridge would be retained, whilst the mature tree and the roost it supports would be lost. Sysonby Farm would be demolished. Loss of bat roosts would be compensated for under protected species licence from Natural England through the provision of new roosting opportunities, proportionate to the number and status of roosts lost. For non-maternity roosts of common species (common pipistrelle and brown long-eared) it is appropriate to provide new roosts in the form of bat boxes installed on mature trees and buildings retained and unaffected by the Scheme.

3.13.4 The lighting for the Scheme would be appropriately designed to minimise impacts on bats when the road was operational. Brightness would be as low as legally possible and the times during which the lighting is to be used limited to provide some dark periods, if possible subject to safety requirements. Lighting would be directed to where it is needed to avoid any horizontal light spillage.

3.14 Water Vole and Otter

3.14.1 No evidence of water vole has been recorded during surveys; therefore, water vole is likely absent from the watercourses and waterbodies that may be affected by the Scheme and no impacts would occur.

3.14.2 The surveys have shown that otters are present or assumed present on three watercourses that would be crossed by the Scheme; Thorpe Brook, the River Eye and Scalford Brook. Otters and their breeding and resting sites are protected under the Habitats Regulations and the WCA 1981 and are listed as a conservation priority in Leicestershire under the LBAP. Although evidence of otter presence has been recorded, no holts have been found to be present within 500m of any of the proposed locations where the Scheme would cross these watercourses.

3.14.3 Standard measures to prevent pollution of watercourses would help to protect otters during construction and operation. Incorporation of mammal ledges into culvert designs and underpasses as well as guide fencing, would be undertaken at suitable locations to enhance and facilitate otter movement corridors through the wider landscape and ensure that otter are not impacted by the Scheme.

3.15 Aquatic Invertebrates

3.15.1 The surveys of suitable waterbodies and watercourses for notable aquatic invertebrate species and assemblages recorded regionally important species in the River Eye and two ponds located in arable farmland at the southern end of the Scheme. Notable aquatic species include species listed as a priority for conservation under the NERC Act 2006 and species listed in the IUCN invertebrate red data book.

3.15.2 Direct mortality caused by construction is unlikely to constitute a significant impact to these species, as the population dynamics of the invertebrate community are unlikely to be permanently affected. Standard measures to prevent pollution of watercourses would help to protect aquatic invertebrates during construction and operation.

3.16 White-clawed Crayfish

3.16.1 No evidence of this species was recorded during the surveys, therefore white-clawed crayfish is likely absent from the watercourses and waterbodies that may be affected by the Scheme and no impacts would occur.

3.17 Planning Permission and Conditions

3.17.1 The desk and field based surveys undertaken in support of the Scheme recorded IEF that would be affected by the Scheme, these being: designated sites of national and local importance; great crested newt; grass snake; bats; badger; otter; breeding farmland birds; barn owl; and aquatic invertebrates.

3.17.2 Appropriate and proportionate mitigation has been committed to in the ES to address the potential impacts to IEF, and with implementation of the mitigation measures, in the long term, when planting and new habitats have become established and mitigation is maintained and managed in accordance with the Environmental Management Plan there are considered to be no significant residual effects of the Scheme with regard to nature conservation and it would accord with relevant legislation and planning policy.

3.17.3 Planning permission was granted in May 2019, subject to conditions. Those conditions relevant to nature conservation are listed below:

Biodiversity Management Plan 4.

Prior to commencement of construction works, a detailed Biodiversity Management Plan (BMP) shall be submitted to and approved in writing by the County Planning Authority. The BMP shall include provision for the ongoing management of biodiversity during the construction works including the full implementation of the approved landscaping works and for a five-year establishment period after completion of the landscaping works.

River Eye Mitigation, Compensation and Enhancement Scheme 5.

A detailed mitigation, compensation and enhancement scheme for the River Eye as shown on the Indicative Ecology Mitigation and Enhancement Plan (60542201-ACMEGN-GEN_GEN_ZZ_Z-DR-LE-0126 Rev P01) shall be submitted to and approved by the County Planning Authority prior to the commencement of any works on site. The scheme shall make provision for compensatory habitat creation including its management and monitoring and shall be implemented as approved. Thereafter, the development shall be implemented in accordance with the approved scheme.

River Eye Management and Monitoring Plan 6.

A detailed management and monitoring plan to mitigate for impact on the River Eye SSSI including hydro-morphological, ecological and surface water monitoring to ensure restoration to the objectives of the Water Framework Directive Report (including River Eye SSSI diversion and enhancement proposals) Update (March 2019) and to include appropriate management actions for a five-year establishment period after completion of the restoration works shall be submitted to and approved by the County Planning Authority prior to the completion of construction works. The plan shall make provision for annual monitoring visits and the submission of annual reports to the County Planning Authority during the five-year establishment period.

Lighting 7.

Lighting shall be in accordance with the approved Indicative Lighting Lux Contour Layout plans 60542201-ACM-HLG-S4_ML_ZZ_Z-DR-T-0011 and 60542201-ACMHLG-S4_ML_ZZ_Z-DR-T-0012 Rev P02 in the area of the existing and proposed River Eye crossings.

Landscaping 8.

Landscaping of the application site shall be in accordance with the Indicative Ecology Mitigation and Enhancement Plan (60542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE0126 to 0131 Rev P01) with regard to the amount of wildflower grassland, diverse grassland and habitat enhancement. All above ground SUDs features shall be designed to maximise benefit to wildlife. The planting of all trees, wildflower grassland, scrub, hedgerows and marginal aquatic vegetation shall be locally native species. Final landscaping plans shall be submitted to and approved by the County Planning Authority prior to implementation of the landscaping works and provide for a biodiversity net gain.

Protected Species 9.

Prior to implementation of each construction phase of the development a scheme of updated protected species surveys shall be agreed with the County Planning Authority. The surveys shall be completed, and the agreed mitigation plans revised, submitted and approved by the County Planning Authority at least 6 months prior to the commencement of that phase. All mitigation shall be implemented in accordance with the approved plans. • the surveys shall include Kingfisher on the Scalford Brook, Roosting Bats at Sysonby Farm and the railway crossing, Water Voles on the River Eye, Otters on all watercourses and Barn Owl, Great Crested Newts, and Badgers throughout the whole scheme.

10.

No development shall take place until a plan detailing the protection and/or mitigation of damage to populations of otter and its associated habitat has been submitted to and approved by the County Planning Authority. The plan must consider the whole duration of the development, from the construction phase through to development completion and shall be carried out in accordance with a timetable for implementation as approved. The scheme shall include the following elements: • details of how otters will be protected during the operational phase of the development. • details of otter ledges within culverts used on the development. • details of otter proof fencing to ensure that otters are not able to access the new road development and therefore prevent otter deaths.

- 1.4 Since planning permission was granted for the Scheme, further ecological survey and assessment has been undertaken to inform the discharge of biodiversity related planning conditions. Further surveys have also been undertaken to update the ecological baseline, as over time individuals and species can move location, set up new territory etc. so it is best practice to undertake updated surveys prior to the commencement of construction.

1.5 The further surveys undertaken at this stage are detailed below in Table 3.2.

Table 3.2 – Ecological Field Surveys undertaken since submission of the ES

Ecological Feature	Survey Type/ Method	Further surveys since submission of ES
Great Crested Newt	Presence/ likely absence surveys	April to June 2021
Kingfisher	Presence/ likely absence surveys	April and May 2021
Barn Owl	Presence/ likely absence surveys	June and July 2021
Badger	Presence/ likely absence surveys	March to June 2021
	Territory Analysis	March and April 2019
Bats	Preliminary roost assessment	February and September 2019 January 2020 February 2021
	Emergence re-entry surveys	July and September 2019 May to October 2020 June to September 2021
	Activity Surveys	June to September 2021
	Hibernation Surveys	January and February 2020 January and February 2021
Water Vole and Otter	Presence/ likely absence surveys	March to August 2021

1.6 For some ecological features, such as habitats or white-clawed crayfish, updated surveys have not been undertaken. This is because either the baseline for that IEF is unlikely to change, such as for habitats, or the species was found to be absent during the original surveys and is very unlikely to have colonised habitats within and close to the Scheme in the interim period, such as for white-clawed crayfish.

4 Changes in the Ecological Baseline since Planning Permission

1.7 This section of my proof details the results of the further surveys undertaken since planning permission was granted for the Scheme, as detailed above, and in particular highlights where changes in the ecological baseline reported in the ES have been recorded.

4.1 Badger Surveys

4.1.1 Since submission of the ES, surveys undertaken in 2021 have recorded an additional main badger sett within the Scheme boundary (exact locations have been kept confidential due to the on-going persecution that this species is subject to). The Scheme construction works in this location are currently being reconsidered so that impacts to the sett are minimised and it can be retained in situ, rather than following the process of closing the sett and providing an alternative artificial sett.

4.2 Great Crested Newt

4.2.1 Since submission of the ES, surveys undertaken in 2021 have recorded an additional great crested newt population that would be impacted by the Scheme. This population was recorded in Pond 1. Pond 1 is near the road alignment, and although the pond would be retained, terrestrial habitat surrounding the pond would be lost. Mitigation to address impacts to the population of newts in Pond 1 is discussed in more detail in Section 5 of my evidence.

4.3 Bats

4.3.1 Since submission of the ES, surveys undertaken in 2020 have recorded a change in status of the bat roost in the disused railway bridge. The original surveys recorded a small number of non-breeding common pipistrelle roosting in the bridge. The updated surveys have recorded a common pipistrelle maternity roost and a small non-breeding Daubentons bat roost in the bridge. The bridge is being retained and therefore impacts to the bats roosting here are unlikely to occur as a result of the Scheme.

4.3.2 No further significant changes to the ecological baseline have been recorded during the surveys undertaken between 2019 and 2021 since the ES was submitted, and nothing discovered effects the Orders before this inquiry or the planning permission on which they are based.

5 Specific Locations where Ecological Mitigation is Required

In this section of my evidence, I detail specific areas of ecological mitigation and provide justification for their inclusion within the Scheme.

Relevant drawings are provided in [Appendix A](#).

5.1 Plot 35 (drawing 60542201-ACM-ELS-S2_ML_ZZ_Z-DR-LV-0005_P03.pdf)

- 5.1.1 Where the Scheme crosses Scaffold Brook and the disused railway embankment adjacent to it, woodland hedgerow and scrub would be removed during construction of the road, the embankments and the access road.
- 5.1.2 To ensure the Scheme meets the requirements of the NPPF and local planning policy C14 - *Nature Conservation Value* which states that planning permission for development which may adversely affect the nature conservation value of hedgerows and tree belts; woodlands; river corridors and main drains; marshes, ponds and lakes; disused railway lines, and semi-natural limestone grassland will only be permitted where these habitats are retained, replaced or reinstated, mitigation measures incorporated into the Scheme Design include minimising habitat loss. Where habitat loss occurs, replacement habitat will be created that is of greater conservation importance. For example, species poor grassland and hedgerows would be replaced with species rich grassland and hedgerows.
- 5.1.3 The ecological mitigation area in Plot 35 is required to provide replacement habitat for the loss of habitat along Scaffold Brook and the railway embankment. This plot is adjacent to the location where the impact of habitat loss would occur and would maintain the existing mosaic of wetland, grassland, scrub and tree habitat here. The location of the compensatory habitat has followed guidance in the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecology Impact Assessment (2018), which state that compensation should be focused on the same type of ecological features as those affected and equivalent levels of ecological 'functionality' sought. Any replacement area should be similar in terms of ecological features and ecological functions that have been lost or damaged, and compensation should be provided as close as possible to the location where effects have occurred and benefit the same habitats and species as those affected.
- 5.1.4 This part of Plot 35 would be difficult to access post construction, which is a factor that has also been considered when locating areas of habitat creation to minimise the impacts to landowners local to the Scheme.

5.2 Plots 76, 82 and 91 (drawing 60542201-ACM-ELS-S4_ML_ZZ_Z-DR-LV-0011_P03.pdf)

- 5.2.1 The ecological mitigation areas in these plots are required to mitigate for the loss of grassland, arable and hedgerow habitat that provides habitat for IEF including the notable populations of farmland birds including yellowhammer, tree sparrow, grey partridge and skylark.
- 5.2.2 The principals and need for compensation detailed above for the ecological mitigation site in Plot 35 have been followed when designing these areas of ecological mitigation so that the requirements of national and local planning policy are met. They are located close to where the impacts of habitat loss would occur and are considered plots that would be isolated or difficult to access once the Scheme has been constructed and is operational.

5.3 Plot 120 (drawing 60542201-ACM-ELS-S5_ML_ZZ_Z-DR-LV-0013_P03.pdf)

- 5.3.1 The ecological mitigation area in this plot is required to mitigate for the loss of grassland and scrub habitat adjacent to the River Eye SSSI.
- 5.3.2 The principals and need for compensation detailed above for the ecological mitigation site in Plot 35 has been followed when designing this area of ecological mitigation so that the requirements of national and local planning policy are met. It is located close to where the impacts of habitat loss would occur and is considered a plot that would be isolated or difficult to access once the Scheme has been constructed and is operational.

5.4 Plots 77, 78 and 79 (drawing 60542201-ACM-ELS-S4_ML_ZZ_Z-DR-LV-0010_P03.pdf)

- 5.4.1 Badger sett 5 is a main sett located within the footprint of the Scheme and would be lost during construction. Badgers and their setts are protected under the Protection of Badgers Act 1992, which makes it an offence to wilfully kill, injure, take, possess or cruelly ill-treat a badger, to attempt to do so; or to intentionally or recklessly interfere with a sett. Section 10 of the act allows for licences to be granted to undertake actions that would otherwise be unlawful, such as the damage or destruction of a sett.
- 5.4.2 In order to get a licence to damage or destroy a sett, an alternative sett needs to be available to the badger clan affected. As a main sett is occupied all year round and is where badgers breed, the alternative sett needs to take the form of an artificial sett created in advance of the loss of the existing sett, rather than simply relying on badgers utilising one of their other setts in their territory.
- 5.4.3 The land required to create the artificial sett to compensate for the loss of Sett 5 is situated on the east of the proposed Scheme alignment. There are several principals that have been followed when determining this location for the artificial sett, which are in line with *Best Practice Guidance – Creation of Artificial Setts* (Scottish Natural Heritage, 2006):
- Badgers are territorial; therefore, any alternative artificial sett must be located within the appropriate social group territory.
 - Badgers must be able to locate the replacement sett without any difficulty. A site must be selected as close to the existing sett(s) and/or area of badger activity as is practicable. However, the site must not be so close to the new development that disturbance could distract badgers from using it. In this instance, the artificial sett would be located approximately 50m from the existing sett and 100m from the road alignment, maximising the chances of badgers finding the sett but keeping it a suitable distance from construction and operational disturbance.
 - Regardless of the artificial sett size, a minimum area of 30m radius should be demarcated from the outlying holes of the artificial sett to prevent damage and disturbance. An area 10m x 10m would accommodate a small artificial sett comprising two entrances with tunnels leading to at least two chambers. Small artificial setts, even though physically capable of accommodating the appropriate number of badgers excluded from larger setts, generally tend not to work. Therefore, it is important to construct a structure with adequate chambers and tunnels which replicates as much as possible the bulk of the natural sett it replaces. A mechanical digger is normally used to prepare the site and the amount of soil excavated during this procedure can necessitate a construction area considerably larger than the dimensions of the artificial sett itself. In this instance, Sett 5 has nine entrances and is approximately 50 m² in extent so a sufficient area has been included in the mitigation area to replicate the size of the existing sett and include a suitable buffer to prevent disturbance. Land has also been included for tree and shrub planting to provide long-term cover and shielding for the sett from the road and adjacent farmland.
 - It is important that there is sufficient drainage to avoid the artificial sett becoming flooded. In this location, the ground to the east of the new road alignment would not flood due to the topography, compared to the lower lying land to the west of the carriageway.
- 5.4.4 This location is therefore the optimal location for badger mitigation for the loss of the main badger sett (Sett 5).
- 5.5 [Plot 129 \(drawings 60542201-ACM-ELS-S5_ML_ZZ_Z-DR-LV-0014_P03.pdf and 60542201-ACM-ELS-S5_ML_ZZ_Z-DR-LV-0015_P03.pdf\)](#)**
- 5.5.1 Ponds 1 and 4 support populations of great crested newts. Pond 4 would be dewatered and destroyed during creation of the embankments for the new road alignment. It is not possible to retain Pond 4 through redesign of the Scheme. Pond 1 would not be lost but is near the construction footprint and the alignment of the road.
- 5.5.2 Great crested newt is protected by European and national law, making it an offence, amongst others, to disturb them or to damage or destroy their breeding sites or resting places. Licences can be granted by Natural England to undertake actions that would otherwise be an offence, such as the destruction of a

great crested newt breeding pond, but only if three licensing tests are met. These tests are (1) Regulation 53(2)(e) states: a licence can be granted for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”. (2) Regulation 53(9)(a) states: the appropriate authority shall not grant a licence unless they are satisfied “that there is no satisfactory alternative”. (3) Regulation 53(9)(b) states: the appropriate authority shall not grant a licence unless they are satisfied “that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range.”

- 5.5.3 FCS relates to the long-term distribution and abundance of the populations of species in their natural range. It describes a situation in which individual species are maintaining themselves at all relevant geographical scales and with good prospects to continue to do so in the future.
- 5.5.4 Test 1 is met through the need to construct the Scheme as set out in the business case presented to the Department for Transport. Test 2 is met as the Scheme cannot be resigned to avoid the impacts to great crested newts. To maintain the FCS of a great crested newt population, loss of breeding ponds and the terrestrial habitat surrounding them needs to be compensated for. The loss of a pond should be compensated for with at least two new ponds, and terrestrial habitat should be of at least equivalent size and quality to that being lost (Great Crested Newt Mitigation Guidelines, England Nature 2001 – pg42).
- 5.5.5 The ecological mitigation area (receptor site) in Plot 129 to the east of the new road alignment (drawings [60542201-ACM-ELS-S5_ML_ZZ_Z-DR-LV-0014_P03.pdf](#)) is of sufficient size to provide two new ponds and terrestrial habitat to compensate for the loss of Pond 4 and the terrestrial habitat surrounding it. Locating the receptor site to the east of the road would maintain connectivity for newts between Ponds 1 and 4, which is currently possible in the absence of any road via the network of hedgerows in this location that would be lost during construction of the Scheme. Locating the receptor site to the west of the road would sever connectivity between Ponds 1 and 4, impacting the great crested newt metapopulation. A metapopulation is a group of associated populations, made up from newts which breed in, and live around, a cluster of ponds. The receptor site location is the remainder of a field lost to the Scheme and would therefore be difficult for the existing landowner to get access following completion of the work without removing large sections of hedgerow that would otherwise remain unaffected by the Scheme. Removal of these hedgerows would constitute a further impact on the population of great crested newts, and biodiversity in general and is therefore not considered a viable option.
- 5.5.6 The second ecological mitigation area (drawing [60542201-ACM-ELS-S5_ML_ZZ_Z-DR-LV-0015_P03.pdf](#)) provides terrestrial habitat compensation for the loss of habitat adjacent to Pond 1. A sufficient area of terrestrial habitat would be provided for the loss of habitat within the Scheme footprint as well as habitat to the north and west of the road that would be functionally ‘lost’ to the great crested newt population once the road was operational as newts would no longer be able to access it. As the land is required here to provide terrestrial habitat for great crested newts, the Scheme would take the opportunity to enhance the existing Pond 1 through removal of shading vegetation around the pond and enhancing the aquatic plant species diversity.

6 Summary and Conclusion

- 6.1.1 As part of the ES for the Scheme, which supported the planning application submitted in 2018, a comprehensive suite of desk and field based ecological studies and surveys were completed between 2017 and 2018, which in my professional opinion are sufficient in scope to ensure that the impacts of the Scheme on these IEF have been understood. These surveys focused on IEF that could potentially be affected by the Scheme and included designated sites, terrestrial and aquatic habitats, bats, badger, water vole, otter, great crested newt, reptiles, birds including barn owl, and aquatic invertebrates.
- 6.1.2 The surveys recorded IEF that would likely be affected by the Scheme: the River Eye SSSI, Melton Country Park LWS, Nottingham Road Hedgerows LWS, and Scaford Brook LWS. Habitats include broad-leaved semi-natural woodland, mixed plantation woodland, hedgerows, semi-improved neutral grassland, standing water and running water. Protected and notable species recorded are foraging and roosting bats, several badger social groups, otter, great crested newt populations, a population of grass snake, notable breeding farmland bird species, barn owl and regionally important aquatic invertebrates.
- 6.1.3 The ES considered how impacts to the IEF recorded could be avoided or reduced through design changes. Where this wasn't possible, compensation measures have been proposed that would 'offset' the impacts to IEF.
- 6.1.4 Mitigation is proportionate to the predicted scale of the impacts of the Scheme, and its design including where mitigation is located has followed good practice and professional experience. With implementation of the mitigation measures as summarised above and provided in detail in the ES, when planting and new habitats have become established and mitigation is maintained and managed in accordance with the EMP, there are considered to be no significant residual effects of the Scheme with regard to nature conservation and the Scheme would fulfil its legal obligations regarding ecological issues.

Appendix A Relevant Landscape Plans

60542201-ACM-ELS-S2_ML_ZZ_Z-DR-LV-0005_P03.pdf

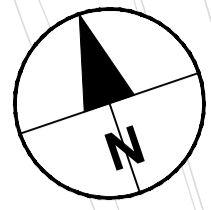
60542201-ACM-ELS-S4_ML_ZZ_Z-DR-LV-0010_P03.pdf

60542201-ACM-ELS-S4_ML_ZZ_Z-DR-LV-0011_P03.pdf

60542201-ACM-ELS-S5_ML_ZZ_Z-DR-LV-0013_P03.pdf

60542201-ACM-ELS-S5_ML_ZZ_Z-DR-LV-0014_P03.pdf

60542201-ACM-ELS-S5_ML_ZZ_Z-DR-LV-0015_P03.pdf



- NOTES**
- ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
 - THIS DRAWING IS BASED ON ORDNANCE SURVEY DATA AND THE COMBINED AECOM AND LCC TOPOGRAPHICAL SURVEY.
 - FOR DETAILS OF LANDSCAPING DESIGN, REFER TO 60542201-ACM-GEN-GEN_GEN_ZZ_Z-SP-Z-3000.
 - LEX.X CODES USED IN KEY ARE DEFINED IN HA 91/01 OF THE DMRB.
 - FOR DETAIL OF ECOLOGICAL MITIGATION AREAS, PLEASE REFERENCE THE LBMP (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0052) AND THE MCE (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0071).

KEY

	LE1.1 PROPOSED AMENITY GRASSLAND - EFB/EFE
	LE1.3 PROPOSED WILDFLOWER SEEDING - EFB/EFE/efd/efe
	LE2.1 PROPOSED NATIVE BROADLEAF WOODLAND - EFA/EFB/efd/efe
	LE2.6 PROPOSED NATIVE SHRUBS - EFA/EFB/efd/efe
	P3.1 PROPOSED ROUNDABOUT FEATURE (TO BE DETERMINED BY LEICESTERSHIRE COUNTY COUNCIL) - EFC/efd
	LE4.3 PROPOSED NATIVE BROADLEAF HEDGE - EFA/EFB/efd/efe
	LE4.4 PROPOSED NATIVE HEDGEROWS WITH TREES - EFA/EFB/efd/efe
	LE5.1 PROPOSED INDIVIDUAL TREE - EFA/efd/efe
	LE6.1 PROPOSED MARGINAL PLANTING - EFB/efd/efe/efh
	LE6.1 PROPOSED BALANCING PONDS
	LE6.4 WETLAND MEADOW - EFB/EFE/efd/efe
	PROPOSED ECOLOGICAL MITIGATION/ENHANCEMENT - EFD*
	PROPOSED RIVER EYE MITIGATION/ENHANCEMENT - EFD*

* SEE DWGS 60542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-0127 - 0542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-031
** SEE DWGS 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0001 - 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0003

FOR DISCHARGE OF PLANNING CONDITIONS	NL	MS	14/07/21	P03
REVISION DETAILS	BY	CHECK	DATE	SUFFIX

PROJECT MANAGEMENT INITIALS

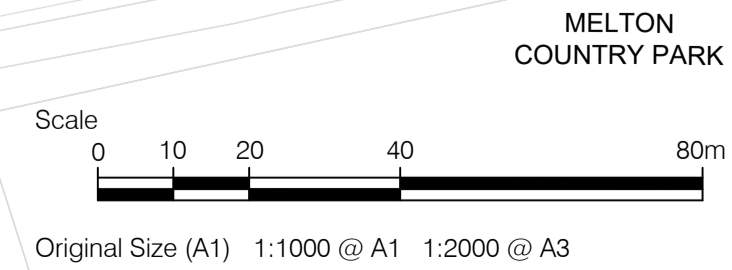
DESIGNED: NW	CHECKED: JS	APPROVED: MS
--------------	-------------	--------------

INTERNAL PROJECT NUMBER	SCALE
60542201	1:1000

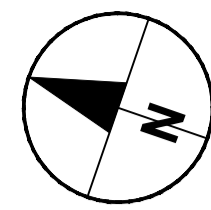
STATUS	BS1192 SUITABILITY
FOR REVIEW & COMMENT	S3

SHEET TITLE
LANDSCAPE DRAWING
SHEET 5 OF 21

DRAWING NUMBER	REV
60542201-ACM-ELS -S2_ML_ZZ_Z -DR-LV-0005	P03



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.



SECTION 4
SECTION 3

WATERCOURSE

NEW ECOLOGICAL MITIGATION AND ENHANCEMENT AREA FOR CREATION OF ARTIFICIAL BADGER SETT INCLUDING PLANTING OF NATIVE TREES AND SHRUBS THAT WOULD PROVIDE ADDITIONAL FORAGING RESOURCES.

GAP IN HEDGE AT DITCH. THIS HAS BEEN INCLUDED AS A CONTINUOUS LENGTH IN THE ANNOTATED VALUE ON THE ADJOINING SHEET.

CH3800

CH3850

CH3900

CH3950

CH4000

CH4050

CH4100

CH4150

CH4200

CH4300

CH4350

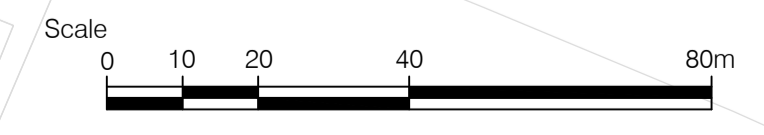
CH4400

CONTINUED ON SHEET 9

CONTINUED ON SHEET 11

ADJ. MELTON ROAD

SECTION 4
SECTION 3



Original Size (A1) 1:1000 @ A1 1:2000 @ A3



PROJECT
NORTH & EAST MMDR



County Hall, Glenfield
Leicester, LE3 8RA
tel: [REDACTED]
www.leicestershire.gov.uk

CONSULTANT
AECOM
12 Regan Way
Chetwynd Business Park
Chilwell, Nottingham, NG9 6RZ
tel: [REDACTED]
www.aecom.com

- NOTES**
1. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
 2. THIS DRAWING IS BASED ON ORDNANCE SURVEY DATA AND THE COMBINED AECOM AND LCC TOPOGRAPHICAL SURVEY.
 3. FOR DETAILS OF LANDSCAPING DESIGN, REFER TO 60542201-ACM-GEN-GEN_GEN_ZZ_Z-SP-Z-3000.
 4. LEX.X CODES USED IN KEY ARE DEFINED IN HA 91/01 OF THE DMRB.
 5. FOR DETAIL OF ECOLOGICAL MITIGATION AREAS, PLEASE REFERENCE THE LBMP (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0052) AND THE MCE (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0071).

KEY

	LE1.1 PROPOSED AMENITY GRASSLAND - EFB/EFE
	LE1.3 PROPOSED WILDFLOWER SEEDING - EFB/EFE/efd/efe
	LE2.1 PROPOSED NATIVE BROADLEAF WOODLAND - EFA/EFB/efd/efe
	LE2.6 PROPOSED NATIVE SHRUBS - EFA/EFB/efd/efe
	P3.1 PROPOSED ROUNDABOUT FEATURE (TO BE DETERMINED BY LEICESTERSHIRE COUNTY COUNCIL) - EFC/efd
	LE4.3 PROPOSED NATIVE BROADLEAF HEDGE - EFA/EFB/efd/efe
	LE4.4 PROPOSED NATIVE HEDGEROWS WITH TREES - EFA/EFB/efd/efe
	LE5.1 PROPOSED INDIVIDUAL TREE - EFA/efd/efe
	LE6.1 PROPOSED MARGINAL PLANTING - EFB/efd/efe/efh
	LE6.1 PROPOSED BALANCING PONDS
	LE6.4 WETLAND MEADOW - EFB/EFE/efd/efe
	PROPOSED ECOLOGICAL MITIGATION/ENHANCEMENT - EFD*
	PROPOSED RIVER EYE MITIGATION/ENHANCEMENT - EFD*

* SEE DWGS 60542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-0127 - 0542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-031
 ** SEE DWGS 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0001 - 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0003

FOR DISCHARGE OF PLANNING CONDITIONS	NL	MS	14/07/21	P03
REVISION DETAILS	BY	CHECK	DATE	SUFFIX

PROJECT MANAGEMENT INITIALS
 DESIGNED: NW CHECKED: JS APPROVED: MS

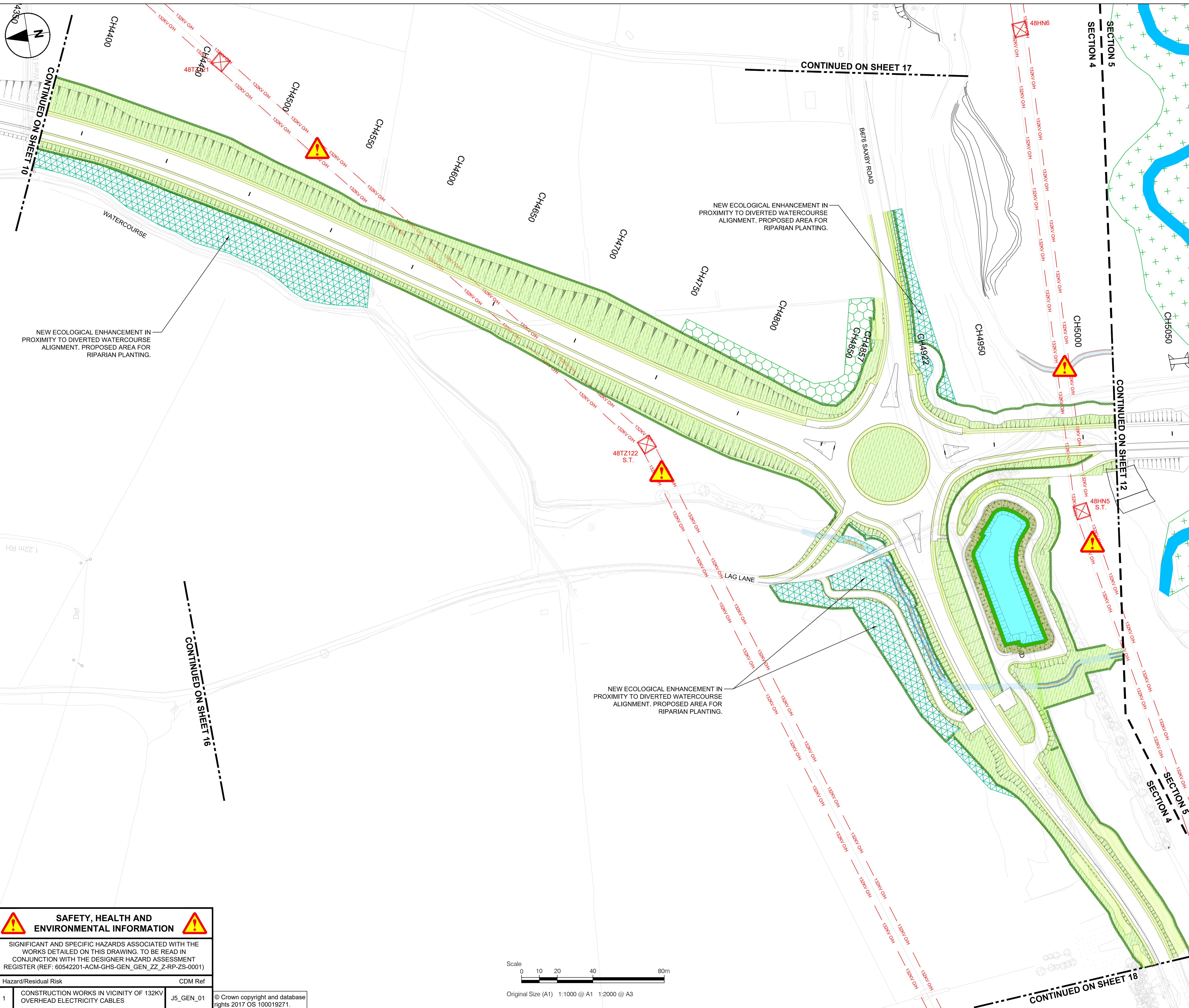
INTERNAL PROJECT NUMBER **SCALE**
 60542201 1:1000

STATUS **BS1192 SUITABILITY**
 FOR REVIEW & COMMENT S3

SHEET TITLE
 LANDSCAPE DRAWING
 SHEET 10 OF 21

DRAWING NUMBER **REV**
 60542201-ACM-ELS -S4_ML_ZZ_Z -DR-LV-0010 P03

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.



- NOTES**
1. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
 2. THIS DRAWING IS BASED ON ORDNANCE SURVEY DATA AND THE COMBINED AECOM AND LCC TOPOGRAPHICAL SURVEY.
 3. FOR DETAILS OF LANDSCAPING DESIGN, REFER TO 60542201-ACM-GEN-GEN_GEN_ZZ_Z-SP-Z-3000.
 4. LEX.X CODES USED IN KEY ARE DEFINED IN HA 91/01 OF THE DMRB.
 5. FOR DETAIL OF ECOLOGICAL MITIGATION AREAS, PLEASE REFERENCE THE LBMP (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0052) AND THE MCE (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0071).

KEY

	LE1.1 PROPOSED AMENITY GRASSLAND - EFB/EFE
	LE1.3 PROPOSED WILDFLOWER SEEDING - EFB/EFE/EFD/EFE
	LE2.1 PROPOSED NATIVE BROADLEAF WOODLAND - EFA/EFB/EFD/EFE
	LE2.6 PROPOSED NATIVE SHURBS - EFA/EFB/EFD/EFE
	P3.1 PROPOSED ROUNDABOUT FEATURE (TO BE DETERMINED BY LEICESTERSHIRE COUNTY COUNCIL) - EFC/efd
	LE4.3 PROPOSED NATIVE BROADLEAF HEDGE - EFA/EFB/EFD/EFE
	LE4.4 PROPOSED NATIVE HEDGEROWS WITH TREES - EFA/EFB/EFD/EFE
	LE5.1 PROPOSED INDIVIDUAL TREE - EFA/EFD/EFE
	LE6.1 PROPOSED MARGINAL PLANTING - EFB/EFD/EFE/EFH
	LE6.1 PROPOSED BALANCING PONDS
	LE6.4 WETLAND MEADOW - EFB/EFE/EFD/EFE
	PROPOSED ECOLOGICAL MITIGATION/ENHANCEMENT - EFD*
	PROPOSED RIVER EYE MITIGATION/ENHANCEMENT - EFD*

* SEE DWGS 60542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-0127 - 0542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-031
** SEE DWGS 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0001 - 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0003

FOR DISCHARGE OF PLANNING CONDITIONS	NL	MS	14/07/21	P03
REVISION DETAILS	BY	CHECK	DATE	SUFFIX

PROJECT MANAGEMENT INITIALS

DESIGNED: NW	CHECKED: JS	APPROVED: MS
--------------	-------------	--------------

INTERNAL PROJECT NUMBER 60542201 **SCALE** 1:1000

STATUS BS1192 SUITABILITY **S3**

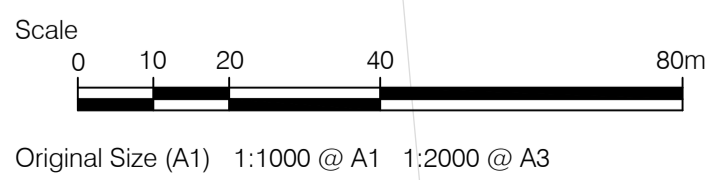
SHEET TITLE
LANDSCAPE DRAWING
SHEET 11 OF 21

DRAWING NUMBER 60542201-ACM-ELS -S4_ML_ZZ_Z -DR-LV-0011 **REV** P03

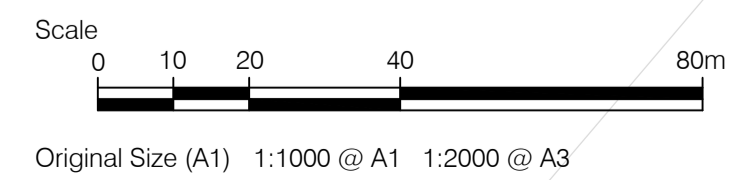
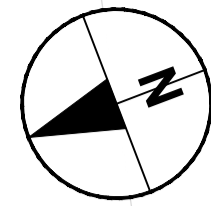
SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

SIGNIFICANT AND SPECIFIC HAZARDS ASSOCIATED WITH THE WORKS DETAILED ON THIS DRAWING. TO BE READ IN CONJUNCTION WITH THE DESIGNER HAZARD ASSESSMENT REGISTER (REF: 60542201-ACM-GHS-GEN_GEN_ZZ_Z-RP-ZS-0001)

Hazard/Residual Risk	CDM Ref
1 CONSTRUCTION WORKS IN VICINITY OF 132KV OVERHEAD ELECTRICITY CABLES	J5_GEN_01



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this drawing. All measurements must be obtained from the stated dimensions.



- NOTES**
- ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
 - THIS DRAWING IS BASED ON ORDNANCE SURVEY DATA AND THE COMBINED AECOM AND LCC TOPOGRAPHICAL SURVEY.
 - FOR DETAILS OF LANDSCAPING DESIGN, REFER TO 60542201-ACM-GEN-GEN_GEN_ZZ_Z-SP-3000.
 - LEX.X CODES USED IN KEY ARE DEFINED IN HA 91/01 OF THE DMRB.
 - FOR DETAIL OF ECOLOGICAL MITIGATION AREAS, PLEASE REFERENCE THE LBMP (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0052) AND THE MCE (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0071).

KEY

	LE1.1 PROPOSED AMENITY GRASSLAND - EFB/EFE
	LE1.3 PROPOSED WILDFLOWER SEEDING - EFB/EFE/efd/efe
	LE2.1 PROPOSED NATIVE BROADLEAF WOODLAND - EFA/EFB/efd/efe
	LE2.6 PROPOSED NATIVE SHRUBS - EFA/EFB/efd/efe
	P3.1 PROPOSED ROUNDABOUT FEATURE (TO BE DETERMINED BY LEICESTERSHIRE COUNTY COUNCIL) - EFC/efd
	LE4.3 PROPOSED NATIVE BROADLEAF HEDGE - EFA/EFB/efd/efe
	LE4.4 PROPOSED NATIVE HEDGEROWS WITH TREES - EFA/EFB/efd/efe
	LE5.1 PROPOSED INDIVIDUAL TREE - EFA/efd/efe
	LE6.1 PROPOSED MARGINAL PLANTING - EFB/efd/efe/efh
	LE6.1 PROPOSED BALANCING PONDS
	LE6.4 WETLAND MEADOW - EFB/EFE/efd/efe
	PROPOSED ECOLOGICAL MITIGATION/ENHANCEMENT - EFD*
	PROPOSED RIVER EYE MITIGATION/ENHANCEMENT - EFD*

* SEE DWGS 60542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-0127 - 0542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-031
** SEE DWGS 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0001 - 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0003

FOR DISCHARGE OF PLANNING CONDITIONS	NL	MS	14/07/21	P03
REVISION DETAILS	BY	CHECK	DATE	SUFFIX

PROJECT MANAGEMENT INITIALS

DESIGNED: NW	CHECKED: JS	APPROVED: MS
--------------	-------------	--------------

INTERNAL PROJECT NUMBER	SCALE
60542201	1:1000

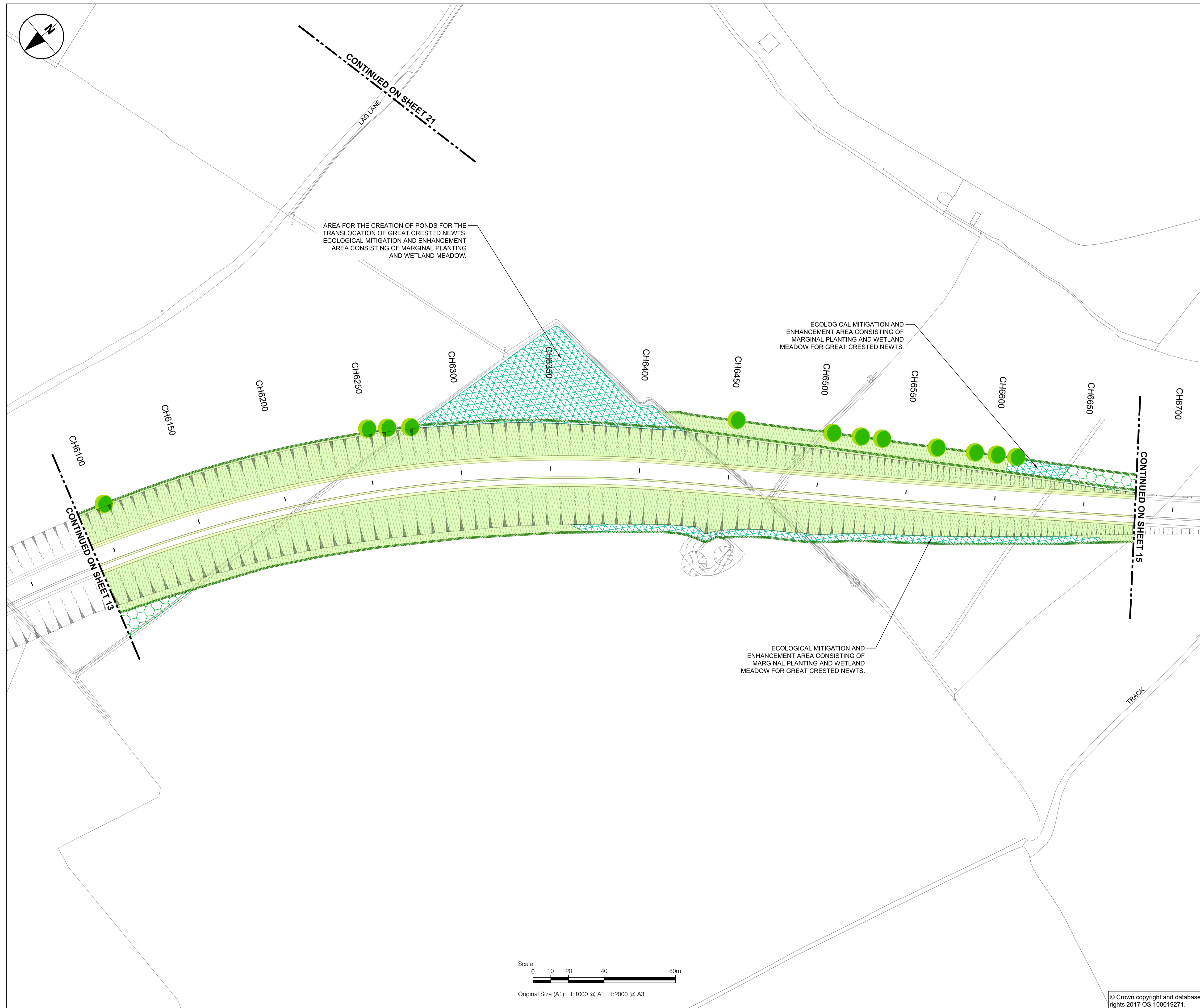
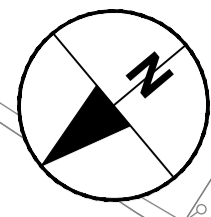
STATUS	BS1192 SUITABILITY
FOR REVIEW & COMMENT	S3

SHEET TITLE

LANDSCAPE DRAWING
SHEET 13 OF 21

DRAWING NUMBER	REV
60542201-ACM-ELS -S5_ML_ZZ_Z -DR-LV-0013	P03

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.



- NOTES**
1. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
 2. THIS DRAWING IS BASED ON ORDNANCE SURVEY DATA AND THE COMBINED AECOM AND LCC TOPOGRAPHICAL SURVEY.
 3. FOR DETAILS OF LANDSCAPING DESIGN, REFER TO 60542201-ACM-GEN-GEN_GEN_ZZ_Z-SP-Z-3000.
 4. LEX.X CODES USED IN KEY ARE DEFINED IN HA 91/01 OF THE DMRB.
 5. FOR DETAIL OF ECOLOGICAL MITIGATION AREAS, PLEASE REFERENCE THE LBMP (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0052) AND THE MCE (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0071).

KEY

	LE1.1 PROPOSED AMENITY GRASSLAND - EFB/EFE
	LE1.3 PROPOSED WILDFLOWER SEEDING - EFB/EFE/EFD/EFE
	LE2.1 PROPOSED NATIVE BROADLEAF WOODLAND - EFA/EFB/EFD/EFE
	LE2.6 PROPOSED NATIVE SHRUBS - EFA/EFB/EFD/EFE
	P3.1 PROPOSED ROUNDABOUT FEATURE (TO BE DETERMINED BY LEICESTERSHIRE COUNTY COUNCIL) - EFC/efd
	LE4.3 PROPOSED NATIVE BROADLEAF HEDGE - EFA/EFB/EFD/EFE
	LE4.4 PROPOSED NATIVE HEDGEROWS WITH TREES - EFA/EFB/EFD/EFE
	LE5.1 PROPOSED INDIVIDUAL TREE - EFA/EFD/EFE
	LE6.1 PROPOSED MARGINAL PLANTING - EFB/EFD/EFE/EFH
	LE6.1 PROPOSED BALANCING PONDS
	LE6.4 WETLAND MEADOW - EFB/EFE/EFD/EFE
	PROPOSED ECOLOGICAL MITIGATION/ENHANCEMENT - EFD*
	PROPOSED RIVER EYE MITIGATION/ENHANCEMENT - EFD*

* SEE DWGS 60542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-0127 - 0542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-031
** SEE DWGS 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0001 - 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0003

FOR DISCHARGE OF PLANNING CONDITIONS	NL	MS	14/07/21	P03
REVISION DETAILS	BY	CHECK	DATE	SUFFIX

PROJECT MANAGEMENT INITIALS

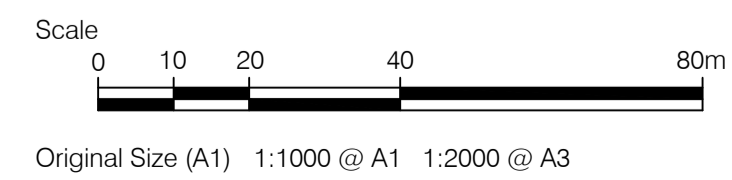
DESIGNED: NW	CHECKED: JS	APPROVED: MS
--------------	-------------	--------------

INTERNAL PROJECT NUMBER	SCALE
60542201	1:1000

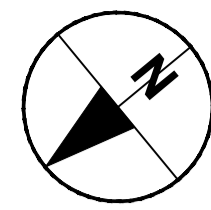
STATUS	BS1192 SUITABILITY
FOR REVIEW & COMMENT	S3

SHEET TITLE
LANDSCAPE DRAWING
SHEET 14 OF 21

DRAWING NUMBER	REV
60542201-ACM-ELS -S5_ML_ZZ_Z -DR-LV-0014	P03



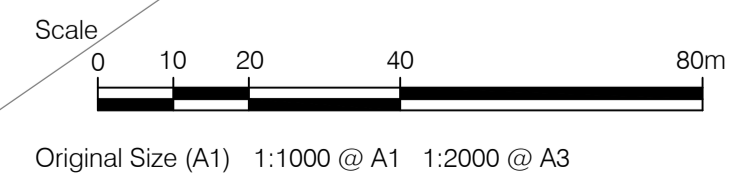
This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.



AREA FOR THE ENHANCEMENT OF EXISTING POND FOR THE USE BY GREAT CRESTED NEWTS. ECOLOGICAL MITIGATION AND ENHANCEMENT AREA CONSISTING OF MARGINAL PLANTING AND WETLAND MEADOW.

CONTINUED ON SHEET 14

CONTINUED ON SHEET 21



County Hall, Glenfield
Leicester, LE3 8RA
tel: [REDACTED]
www.leicestershire.gov.uk

CONSULTANT
AECOM
12 Regan Way
Chetwynd Business Park
Chilwell, Nottingham, NG9 6RZ
tel: [REDACTED]
www.aecom.com

- NOTES**
1. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
 2. THIS DRAWING IS BASED ON ORDNANCE SURVEY DATA AND THE COMBINED AECOM AND LCC TOPOGRAPHICAL SURVEY.
 3. FOR DETAILS OF LANDSCAPING DESIGN, REFER TO 60542201-ACM-GEN-GEN_GEN_ZZ_Z-SP-Z-3000.
 4. LEX.X CODES USED IN KEY ARE DEFINED IN HA 91/01 OF THE DMRB.
 5. FOR DETAIL OF ECOLOGICAL MITIGATION AREAS, PLEASE REFERENCE THE LBMP (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0052) AND THE MCE (DOCUMENT REF: 60542201-ACM-VES-GEN_GEN_ZZ_Z-RP-0071).

KEY

	LE1.1 PROPOSED AMENITY GRASSLAND - EFB/EFE
	LE1.3 PROPOSED WILDFLOWER SEEDING - EFB/EFE/efd/efe
	LE2.1 PROPOSED NATIVE BROADLEAF WOODLAND - EFA/EFB/efd/efe
	LE2.6 PROPOSED NATIVE SHRUBS - EFA/EFB/efd/efe
	P3.1 PROPOSED ROUNDABOUT FEATURE (TO BE DETERMINED BY LEICESTERSHIRE COUNTY COUNCIL) - EFC/efd
	LE4.3 PROPOSED NATIVE BROADLEAF HEDGE - EFA/EFB/efd/efe
	LE4.4 PROPOSED NATIVE HEDGEROWS WITH TREES - EFA/EFB/efd/efe
	LE5.1 PROPOSED INDIVIDUAL TREE - EFA/efd/efe
	LE6.1 PROPOSED MARGINAL PLANTING - EFB/efd/efe/efh
	LE6.1 PROPOSED BALANCING PONDS
	LE6.4 WETLAND MEADOW - EFB/EFE/efd/efe
	PROPOSED ECOLOGICAL MITIGATION/ENHANCEMENT - EFD*
	PROPOSED RIVER EYE MITIGATION/ENHANCEMENT - EFD*

* SEE DWGS 60542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-0127 - 0542201-ACM-EGN-GEN_GEN_ZZ_Z-DR-LE-031
** SEE DWGS 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0001 - 60542201-ACM-EWE-GEN_RIV_ZZ_Z-DR-LV-0003

FOR DISCHARGE OF PLANNING CONDITIONS	NL	MS	14/07/21	P03
REVISION DETAILS	BY	CHECK	DATE	SUFFIX

PROJECT MANAGEMENT INITIALS
DESIGNED: NW CHECKED: JS APPROVED: MS

INTERNAL PROJECT NUMBER **SCALE**
60542201 1:1000

STATUS **BS1192 SUITABILITY**
FOR REVIEW & COMMENT S3

SHEET TITLE
LANDSCAPE DRAWING
SHEET 15 OF 21

DRAWING NUMBER **REV**
60542201-ACM-ELS -S5_ML_ZZ_Z -DR-LV-0015 P03

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this drawing. All measurements must be obtained from the stated dimensions.

