Symmetry Park, Ardley

Biodiversity Impact Assessment

Prepared by:
The Environmental Dimension Partnership Ltd

On behalf of:
Tritax Symmetry Ardley Ltd

December 2021
Report Reference
edp2355_r016a

Contents

Appendices

Plans

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Section 1
Introduction and Methodology

Introduction

1.1 This Biodiversity Impact Assessment (BIA) has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Tritax Symmetry Ardley Ltd (hereafter referred to as 'the Client'), to determine whether development proposals for the land at Symmetry Park, Ardley (hereafter referred to as 'the Site') will deliver net biodiversity gain.

1.2 To calculate net gain, a BIA metric is used. This is a transparent way to calculate the biodiversity value of the habitats and hedgerows on an application site before and after development. It is a proxy measure to determine if the development will result in a likely on-site habitat biodiversity net loss or gain.

Methodology

1.3 To inform the Site proposals and demonstrate compliance with national and local planning policies relevant to biodiversity conservation, and national planning policy guidance relating to biodiversity (as updated by the Ministry of Housing, Communities and Local Government on 21 July 2019), a BIA was completed in December 2021.

1.4 The BIA was undertaken using the Department for Environment, Food and Rural Affairs (DEFRA) Biodiversity Metric 3.0 (version date: 09 July 2021), by an ecologist with experience of using such calculators, in accordance with the Biodiversity Metric 3.0 best practice guidance[1].

1.5 The assessment was undertaken in December 2021, based on the existing habitat information derived from the Ecological Baseline report undertaken by EDP in December 2021 (report ref: edp2355_r008, as Illustrated in the Phase 1 Habitat Plan in **Plan EDP 1**) and proposed habitats outlined in the Illustrative Landscape Strategy at **Appendix EDP 1**. The detailed calculations are shown in **Appendix EDP 2**. GIS software has been used to accurately calculate areas of habitat to be retained, enhanced and created. The proposed habitats and schemes are illustrated in **Plan EDP 2**.

1.6 A site visit was undertaken in December 2021 to assess the condition of the site habitats in accordance with the methodology and condition assessment criteria set out by DEFRA[2]. The site visit to determine the condition status of the habitats was undertaken outside of the optimal season for surveys requiring botanical species identification, although it was

[1] Stephen Panks, Nick White, Amanda Newsome, Jack Potter, Matt Heydon Edward Mayhew, Maria Alvarez, Trudy Russell, Sarah J. Scott, Max Heaver, Sarah H. Scott, Jo Treweek, Bill Butcher and Dave Stone 2021. Biodiversity metric 3.0: Auditing and accounting for biodiversity – User Guide. Natural England.

[2] Stephen Panks, Nick White, Amanda Newsome, Jack Potter, Matt Heydon Edward Mayhew, Maria Alvarez, Trudy Russell, Sarah J. Scott, Max Heaver, Sarah H. Scott, Jo Treweek, Bill Butcher and Dave Stone 2021. Biodiversity metric 3.0: Auditing and accounting for biodiversity – Technical Supplement. Natural England.

considered that given the nature of the habitats present and their respective condition criteria, species identification was sufficient to adequately assess the condition of the habitats present.

1.7 Note that the calculations deal with linear features (hedgerows) and other habitats separately, resulting in two separate scores. Any additional information required (for example the full set of calculations, condition criteria and GIS files) are available upon request. It should also be noted that this is the preliminary round of calculations for the proposals, intended to demonstrate potential achievable scores for the Site, and inform the future masterplan and landscape design evolution.

Section 2
Calculations

Current Site Habitat Value

Site

2.1 The site visit undertaken by EDP in December 2021 confirmed that the Site is dominated by arable land (Fields F1–7), with two field margins comprising game bird mixes, bounded by hedgerows (some species-rich and some species-poor). The B4100 extends through the Site, dividing the two land parcels, with improved grassland bordering the roadside. A small area of improved grassland is also present adjacent to field F2. Small areas of dense scrub are located both adjacent to the B4100 and the A43. An area of bare ground is present in the north of the site, comprising an existing manure stockpile and associated runoff. The habitats are shown on **Plan EDP 1**.

2.2 Based on this assessment, the Site measures c.83 hectares (ha) and its current biodiversity value is 172.58 Baseline Habitat Units and 74.06 Baseline Hedgerow Units.

Proposed Site Habitat Value

2.3 The proposed application is for the erection of buildings comprising logistics (Use Class B8) and ancillary office (Use Class E(g)(i)) floorspace. The proposed site design will comprise of development parcels containing buildings and associated hardstanding infrastructure, including a new road access, surrounded by a series of created and enhanced habitats to provide a buffer between the development and adjacent land uses. The created and enhanced habitats will comprise the following:

- Landscape buffer planting surrounding the development parcel, in addition to a new bund along the eastern boundary;
- A native woodland block in the southern-most corner of the Site, adjacent to an existing off-site mixed woodland;
- Species-rich meadow grassland;
- Amenity grassland;
- A wildlife wetland habitat area;
- Created hedgerows between the built development parcels;
- Enhancement of existing hedgerows along the B4100, with additional native structure planting; and

- Tree planting across the entire site within green areas and in the amenity verges.

Assumptions

2.4 Various assumptions have been made for the purposes of the calculations. Where appropriate, these have been added to the impact calculation table in the notes column, with the key ones being discussed below.

Habitat Retention and Enhancement

2.5 Several habitats that are either specified as being enhanced within the Illustrative Landscape Strategy or those that would be retained, have been enhanced within the metric calculation. This comprises 0.07ha of poor condition mixed scrub to be enhanced to good condition, 2.64ha of moderate condition modified grassland to be enhanced to moderate condition 'other neutral grassland', and 1.43km of species-poor hedgerow that will be enhanced to species-rich hedgerow of good condition.

2.6 It is considered that for hedgerows with careful selection of native species and management (including considered timings of cutting, and use of appropriate cutting methods) it would be possible to maintain the hedgerows of sufficient height and width, with few gaps both at the base and the hedge canopy to allow good condition to be achieved. Management can also ensure that undesirable species and damage caused by anthropogenic activities are minimised.

2.7 The scrub habitat could be subject to management to create a well-developed edge by scalloping the existing scrub habitat and creating discrete glades and clearings within the area, although the areas of existing scrub are fairly small and creating glades may not be possible.

2.8 The improved grassland (modified grassland) present along the road verges could be enhanced by over-sowing with a species-rich grassland seed mix or 'green hay' and implementing a management regime of annual cutting to maintain a species rich grassland sward of variable sward heights and managing undesirable species should they arise.

Habitat Creation

2.9 The 'landscape buffer planting' has been categorised as mixed scrub habitat, and it is envisaged that this area will comprise a mix of native scrub and shrub species as well as some scattered native trees to provide a buffer around the Site, screening it from the adjacent land use. It is considered that a realistic condition for this habitat could be 'good' since it is considered that with management this is an achievable target condition for this habitat based on the condition criteria.

2.10 Amenity grassland has been categorised as 'modified grassland' of poor condition due to its amenity use and potentially greater levels of disturbance.

2.11 The 'species-rich meadow grassland' has been categorised as good condition 'other neutral grassland'. With a considered management regime and careful selection of a wildflower meadow seed mix it would be possible to meet the definition of 'other neutral grassland', and a good condition for this habitat type could be achieved through maintaining a diverse sward height, and management to remediate areas of bare ground, bracken and undesirable species.

2.12 The original landscaping scheme attributed much of the grassland area to amenity use. However, in order to improve the ecological value of habitats post development this has been modified within the metric and Proposed Habitats Plan (**Plan EDP 2**) to restrict amenity grassland to areas of likely disturbance at the entrance to the Site and in front of the units and increase the area of species-rich grassland meadow elsewhere on the Site. It is considered that beside and behind the units there will be little requirement for public access, therefore these areas could be more beneficially managed as higher value species-rich grassland than for amenity use.

2.13 The 'wildlife wetland habitat' has been categorised as a non-priority pond habitat as it is envisaged this habitat will comprise a pond with marginal vegetation and associated wetland habitats. It has been assigned a condition of moderate as it is considered that with appropriate design and management the pond should be able to achieve eight of the condition criteria relating to water quality, water levels, vegetation and fish presence, invasive species and shading. However, criteria two requires that a semi-natural habitat of moderate distinctiveness or above surrounds the pond out to 10m. Given the pond's location adjacent to amenity grassland and within 10m of the built development, this criteria will be unable to be met.

2.14 The created native woodland block has been classed as 'other woodland; broadleaved' of moderate condition, located in a single area outside the built development. It is considered that with an appropriate management regime and planting schedule the majority of the 'moderate' condition criteria could be met and even potentially some 'good' condition criteria. For example, the planting schedule can include a diversity or five or more native tree and shrub species to be planted with minimal open space, and management measures will aim to prevent non-native and invasive species. In addition, as the created woodland is located adjacent to existing woodland, this will enable local seed sources for natural regeneration and over time proliferation of ground flora from the adjacent woodland. Management activities can help to protect the establishing woodland from herbivore damage, encourage a diversity of storeys/layers within the woodland and help to prevent excessive woodland disturbance.

2.15 The original landscaping scheme comprised woodland covering the entire south-eastern corner of the Site. However, this has been adjusted in the post development Proposed Habitat Areas Plan (**Plan EDP 2**) to create a corridor of woodland around the edge of the Site with a mixed scrub buffer planting between this and the adjacent grassland habitat. This will create a series of successional habitat types in this area, whilst still maintaining a green corridor of connectivity across the eastern boundary.

2.16 The internal amenity hedgerows have been assigned as ornamental non-native hedges, which are automatically assigned a poor condition, given their location within the built development, which may result in greater levels of disturbance.

2.17 The Illustrative Landscape Strategy includes provision of additional tree planting across the Site. Details about tree size and species are unknown, therefore for the purpose of this assessment tree planting has been assumed in several locations as illustrated in the Landscape Strategy, with a mix of tree sizes and conditions given. Trees planted in the amenity verges present around the buildings and car parks (35 in total), have been assigned as small sized trees in 'poor' condition under the 'Urban Street tree' criteria.

2.18 Trees located in the grassland areas outside the built development, numbering 77 in total, have been assigned as medium sized trees of 'moderate' condition. This distinction has been made because the trees in the amenity verges are bounded by hardstanding and buildings and given the amenity use of these areas are likely to be subject to greater disturbance and therefore are less likely to achieve criteria required for moderate condition. With careful management and selection of native trees species, the trees within the grassland areas could be able to achieve sufficient criteria to be classified as moderate, as management practices can ensure than the trees are maintained in a healthy condition with regards to their canopy and can ensure presence of other vegetation beneath. Furthermore, their location outside of the heavy footfall areas would help to ensure there is no impact to tree condition from anthropogenic activities.

Section 3
Results Summary

3.1 The BIA calculations pertaining to habitat areas and linear habitat features based on the initial Illustrative Landscape Strategy are provided in **Appendix EDP 2.** The proposed Post Development habitats based on the initial indicative plans upon which the BIA assessment is made are shown in **Plan EDP 2**. It has been demonstrated that, based on current proposals, the Site alone is not capable of delivering biodiversity net gain, as summarised in **Table EDP 3.1**.

Table EDP 3.1: Biodiversity Impact Assessment Summary

Biodiversity Value	Area Habitat Units	Hedgerow Units
Existing Site	172.58	74.06
Post-development	163.27	57.64
Net Balance (units)	-9.31	-16.42
Net Balance (%)	-5.39%	-22.17%

3.2 The metric includes an assessment of whether certain trading rules have been met by the proposed scheme. Trading rules applied by the metric require that any loss of habitat is replaced on a 'like for like' or 'like for better' distinctiveness basis, to prevent 'trading down' whereby more ecologically valuable habitats are lost and replaced with larger areas of lower value habitats.

3.3 Under the above assessment the Trading Rules for the metric are not satisfied, as overall there is a net loss of 'Medium' and 'Low' distinctness habitat.

Discussion and Conclusions

3.4 The loss of linear hedgerow units is a result of several of the central hedgerows being lost to facilitate the development. Several hedgerows associated with the Site boundaries will be retained as part of the development. However, even with the enhancement of the remaining on-site hedgerows this is not sufficient to offset the loss of 3.04ha of hedgerow much of which comprises species-rich hedgerow of moderate and good condition.

3.5 The loss of area habitat units is primarily a result of the loss of the large areas of arable land habitat and replacement with negligible value habitat. Despite the relatively low ecological value of the arable fields and margins these areas of low distinctiveness habitat are none-the-less extensive and therefore cumulatively add up to a significant loss, which is compounded by replacement across much of this area with buildings and hardstanding which is of negligible ecological value, or amenity grassland which is of low value.

3.6 Furthermore, although the landscaping scheme does include provision of green space, through grassland habitats, woodland and landscape buffer planting, these areas are relatively small in comparison to the development footprint and not of sufficient area, distinctiveness or condition to offset the loss of units from the development footprint.

3.7 The above assessment is considered to represent an achievable but conservative estimate of the changes in biodiversity value obtained from the Illustrative Landscape Strategy. In the absence of more detailed habitat and landscaping plans this assessment is based on several assumptions as detailed above and is based on a precautionary approach to determining the types of habitats and condition scores that could feasibly be achieved.

3.8 It is considered likely that the above habitat and linear unit values could be improved through commitments to enhance and manage certain habitats on the Site and through creation or enhancement of specific higher value habitats, and reasonable assumptions have been made where this is considered to be achievable. However, this would require further consideration within the detailed design stage, and therefore outside the scope of this initial high-level assessment.

3.9 Potential options for improving the units available on site include the following:

- Additional hedgerow provision comprising native species-rich hedgerows could be included within the detailed scheme to compensate for the hedgerow loss; and

- The proposed hedgerows between the proposed units are currently assigned to non-native ornamental hedge for its amenity value. However, if these were to be planted as native species-rich hedgerows, with appropriate management even in 'poor' condition (to reflect its location and amenity use), this could achieve an uplift of 3.57 units, creating a net change of -17.35% for linear units.

3.10 It is recommended that the detailed design exercise is undertaken concurrently with further iterations of the metric calculations in order to maximise the potential unit values that can feasibly be achieved on site. Once completed, a full BIA assessment can be undertaken which will determine the final biodiversity unit values that can be achieved on-site, and establish the requirement for off-site compensation required in order to achieve a target of 10% Net Gain for the development.

Appendix EDP 1
Illustrative Landscape Strategy
(edp2355_d024b 16 December 2021 LCH/BC)

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Site Boundary

Existing Hedgerows

Landscape Buffer Planting

Species Rich Meadow Grassland

Amenity Grassland

Proposed Hedgerows

Proposed Tree

Wildlife Wetland Habitat

Direction of Views

client
Tritax Symmetry Ardley Ltd

project title
Symmetry Park, Ardley

drawing title
Figure 9.6: Illustrative Landscape Strategy

date	**16 DECEMBER 2021**	drawn by	**LCH**
drawing number	**edp2355_d024b**	checked	**BC**
scale	**1:5,000 @ A3**	QA	**RB**

the environmental dimension partnership

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Appendix EDP 2
Biodiversity Impact Assessment Metric 3.0

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Headline Results

Return to

On-site baseline	*Habitat units*	172.58
	Hedgerow units	74.06
	River units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	163.27
	Hedgerow units	57.64
	River units	0.00
On-site net % change (Including habitat retention, creation & enhancement)	*Habitat units*	-5.39%
	Hedgerow units	-22.17%
	River units	0.00%
Off-site baseline	*Habitat units*	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-9.31
	Hedgerow units	-16.42
	River units	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-5.39%
	Hedgerow units	-22.17%
	River units	0.00%
Trading rules Satisfied?		No - Check Trading Summary

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A-1 Site Habitat Baseline

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	Habitats and areas			Distinctiveness		Condition		Strategic significance			Suggested action to address habitat losses	Ecological baseline	Retention category biodiversity value						Bespoke compensation agreed for unacceptable losses	Comments	
Ref	Broad habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic Significance multiplier		Total habitat units	Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area lost	Units lost		Assessor comments	Reviewer comments
1	Cropland	Arable field margins game bird mix	1.02	Medium	4	N/A - Agricultural	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required	4.08			0.00	0.00	1.02	4.08		Field margins sown with game cover / sunflowers	
2	Urban	Vacant/derelict land/ bareground	0.13	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required	0.26			0.00	0.00	0.13	0.26		Manure pile. No vegetatation. Condition score: Fails all 3 criteria	
3	Cropland	Cereal crops	78.55	Low	2	N/A - Agricultural	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required	157.10			0.00	0.00	78.55	157.10		Arable- cereal crops	
4	Urban	Developed land; sealed surface	0.8	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00	0.8		0.00	0.00	0.00	0.00		Road between two sections of Site	
5	Heathland and shrub	Mixed scrub	0.07	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required	0.28		0.07	0.00	0.28	0.00	0.00		Dense scrub patches dominated by blackthorn and bramble. Condition score: Only passes criteria 3.	
6	Grassland	Modified grassland	2.64	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required	10.56		2.37	0.00	9.48	0.27	1.08		Poor SI grassland along road verge. Condition score: Passes criteria 2,3,4,5,6,7.	
7	Grassland	Modified grassland	0.15	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required	0.30			0.00	0.00	0.15	0.30		Improve grassland to east of Field F2. Condition score: Passes criteria 5,6,7.	
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			83.36									172.58	0.80	2.44	0.00	9.76	80.12	162.82			

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A-2 Site Habitat Creation

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Post development/ post intervention habitats

Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness		Condition		Strategic significance			Temporal multiplier					Difficulty multipliers				Habitat units delivered	Comments	
			Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard time to target condition/years	Habitat created in advance/years	Delay in starting habitat creation/years	Standard or adjusted time to target condition	Final time to target condition/years	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied		Assessor comments	Reviewer comments
Grassland	Modified grassland	2.96	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1	0	0	Standard time to target condition applied	1	0.955	Low	Standard difficulty applied	Low	1	7.64	Amenity grassland. Poor condition assumed due to amenity use.	
Urban	Developed land; sealed surface	59.71	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0	0	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Medium	0.67	0.00	Buildings and hardstanding	
Urban	Developed land; sealed surface	0.27	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0	0	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Medium	0.67	0.00	Additional road layout	
Heathland and shrub	Mixed scrub	8.57	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	72.02	Landscape buffer planting to comprise native scrub species and scattered trees. With management considered feasible for good condition criteria to be met	
Woodland and forest	Other woodland; broadleaved	1.68	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	15	0	0	Standard time to target condition applied	15	0.586	Low	Standard difficulty applied	Low	1	7.88	Native woodland block. Woodland block location adjacent to existing woodland for local seed sources for natural regeneration and a suitable size that with a considered management regime and appropriate planting schedule majority of 'moderate' condition criteria could be met and even potentially some 'good' condition criteria.	
Grassland	Other neutral grassland	6.69	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	56.22	Species-rich meadow grassland. With a considered management regime and careful selection of a wildflower meadows seeding mix it would be possible to meet the definition of other neutral grassland in UKHab, as well as maintain a diverse sward height and management to remediate areas of bare ground, bracken and undesirable species.	
Lakes	Ponds (Non- Priority Habitat)	0.24	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	3	0	0	Standard time to target condition applied	3	0.899	Low	Standard difficulty applied	Low	1	1.73	Wildlife wetland habitat. Comprising a pond and marginal vegetation. With appropriate management should be able to achieve 8 of 9 pond criteria, with criteria 2 being unable to be met due to its location within 10m of the built development	
Urban	Urban Tree	0.02	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	0.06	Planted trees in amenity verges surrounding by trafficg and hardstanding Taken to be small sized and poor condition based on location	
Urban	Urban Tree	0.31	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	27	0	0	Standard time to target condition applied	27	0.382	Low	Standard difficulty applied	Low	1	0.95	Planted trees in species rich grassland areas and amenity grassland outside of built development area. Assumed to be planted as medium size and with management should be achievable to reach moderate condition.	
	Total area	80.12																	Total Units	146.48	

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A-3 Site Habitat Enhancement

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Baseline habitats											Post development/ post intervention habitats: Proposed Habitat (Pre-Populated but can be overridden)		Change in distinctiveness and condition							Strategic significance			Temporal risk multiplier						Difficulty risk multipliers					Comments	
Baseline ref	Baseline habitat	Total habitat area	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Baseline strategic significance score	Baseline habitat units	Suggested action to address habitat losses	Proposed Broad Habitat	Proposed habitat	Distinctiveness change	Condition change	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard time to target condition/years	Habitat enhanced in advance/years	Delay in starting habitat enhancement/years	Standard or adjusted time to target condition	Final time to target condition/years	Final time to target multiplier	Standard difficulty of enhancement	Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied	Habitat units delivered	Assessor comments	Reviewer comments
5	Heathland and shrub - Mixed scrub	0.07	Medium	4	Poor	1	Low Strategic Significance	1	0.28	Same broad habitat or a higher distinctiveness habitat required	**Heathland and shrub**	**Mixed scrub**	Medium - Medium	Poor - Good	0.07	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	0.67	Exisitng dense scrub to be enhanced when incorporated into buffer planting	
6	Grassland - Modified grassland	2.64	Low	2	Moderate	2	Low Strategic Significance	1	10.56	Same distinctiveness or better habitat required	**Grassland**	**Other neutral grassland**	Low - Medium	Lower Distinctiveness Habitat - Moderate	2.37	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	16.12	Enhance to species rich grassland through oversowing of seed mix to improve diversity and management of roadside verge	
															2.44																		16.79		

B-1 Site Hedge Baseline

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	UK Habitats - existing habitats			Habitat distinctiveness		Habitat condition		Strategic significance			Suggested action to address habitat losses	Ecological baseline	Retention category biodiversity value						Comments	
Baseline ref	Hedge number	Hedgerow type	Length KM	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier		Total hedgerow units	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	Assessor comments	Reviewer comments
1	H1	Native Hedgerow	0.438	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	2.63		0.438	0.00	2.63	0.00	0.00	Intact Species-poor Hedgerow. Note: condition assessment undertaken in december, outside of the optimum time for undertaking floral surveys for criteria C2. Therefore a precautionary approach has been taken to assume C2 would be passed, for all hedgerow. Condition score: Fail D2.	
2	H2	Native Hedgerow	0.147	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.88			0.00	0.00	0.15	0.88	Intact Species-poor Hedgerow. Condition score: Fail C1, D2.	
3	H3	Native Species Rich Hedgerow with trees	0.413	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	7.43	0.413		7.43	0.00	0.00	0.00	Intact Species-rich Hedgerow and Treea. Condition score: Fail A2, D2.	
4	H4	Native Hedgerow with trees	0.377	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	4.52		0.377	0.00	4.52	0.00	0.00	Intact Species-poor Hedgerow and Treeas. Condition score: Fail D2.	
5	H5	Native Species Rich Hedgerow with trees	0.296	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	5.33	0.296		5.33	0.00	0.00	0.00	Intact Species-rich Hedgerow and Treea. Condition score: Fail D2.	
6	H6	Native Species Rich Hedgerow	0.315	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	2.52			0.00	0.00	0.32	2.52	Intact Species-rich Hedgerows. Condition score: FailA2, C1, D2.	
7	H7	Native Hedgerow	0.306	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.22			0.00	0.00	0.31	1.22	Intact Species-poor Hedgerows. Condition score: Fail A2, C1, D2.	
8	H8	Native Hedgerow with trees	0.336	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	2.69			0.00	0.00	0.34	2.69	Intact Species-poor Hedgerow and Treeas. Condition score: Fail C1, D2, E1.	
9	H9	Native Species Rich Hedgerow with trees	0.457	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	8.23	0.395		7.11	0.00	0.06	1.12	Intact Species-rich Hedgerows and treea. Conditon score: Fail A2, E1, D2.	
10	H10	Native Species Rich Hedgerow - Associated with bank or ditch	0.363	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	6.53			0.00	0.00	0.36	6.53	Intact Species-rich Hedgerows. Condition score: Fail C1.	
11	H11	Native Species Rich Hedgerow - Associated with bank or ditch	0.264	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	3.17			0.00	0.00	0.26	3.17	Intact Species-rich Hedgerows. Condition score: Fail A2, C1, D2.	
12	H12	Native Species Rich Hedgerow	0.284	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	2.27			0.00	0.00	0.28	2.27	Intact Species-rich Hedgerows. Condition score: Fail C1, D2.	
13	H13	Native Species Rich Hedgerow - Associated with bank or ditch	0.3	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	3.60			0.00	0.00	0.30	3.60	Intact Species-rich Hedgerows. Condition score: Fail C1, D2.	
14	H14	Native Hedgerow - Associated with bank or ditch	0.401	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	4.81		0.401	0.00	4.81	0.00	0.00	Intact Species-poor Hedgerows. Condition score: Fail D2.	
15	H15	Native Species Rich Hedgerow	0.219	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	2.63	0.219		2.63	0.00	0.00	0.00	Intact Species-rich Hedgerows. Condition score: Fail D2.	
16	H16	Native Species Rich Hedgerow	0.436	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	5.23	0.436		5.23	0.00	0.00	0.00	Intact Species-rich Hedgerows. Condition score: Fail C1, D2.	
17	H17	Native Species Rich Hedgerow	0.724	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	8.69	0.695		8.34	0.00	0.03	0.35	Intact Species-rich Hedgerows. Condition score: Fail D2.	
18	H18	Native Hedgerow	0.278	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.67		0.209	0.00	1.25	0.07	0.41	Intact Species-poor Hedgerows. Condition score: Fail D2.	
19																				
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			6.36									74.06	2.48	1.43	36.07	13.82	2.48	24.77		

B-3 Site Hedge Creation

Condense / Show Columns | Condense / Show Rows

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		Proposed habitats		Habitat distinctiveness		Habitat condition		Strategic significance			Temporal multiplier						Difficulty risk multipliers				Hedge units delivered	Comments	
Baseline cell	Site / hedge number	Habitat type	Length km	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard Time to target condition/years	Habitat created in advance/years	Delay in starting habitat creation/years	Standard or adjusted time to target condition	Final time to target condition/years	Final Time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied		Assessor comments	Reviewer comments
1		Hedge: Ornamental/Non-Native	1.319	Very Low	0	Poor	0	Area/compensation not in Local Strategy or local strategy	Low Strategic significance	0	0	0	0	Standard time no longer considered applied	0	0	Low	Low	Standard difficulty applied	Low	0	1.319	Created hedgerows as amenity verges	
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2356 Junction 10 M40 Ardley

B-3 Site Hedge Enhancement

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	Baseline Habitats										
Baseline ref	Baseline habitat	Length KM	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Baseline strategic significance score	Baseline habitat units	Suggested action	Proposed (Pre-Populated but can be overridden)
1	Native Hedgerow	0.438	Low	2	Good	3	Low Strategic Significance	1	2.628	Same distinctiveness band or better	Native Species Rich Hedgerow
4	Native Hedgerow with trees	0.377	Medium	4	Good	3	Low Strategic Significance	1	4.524	Like for like or better	Native Species Rich Hedgerow with trees
14	Native Hedgerow - Associated with bank or ditch	0.401	Medium	4	Good	3	Low Strategic Significance	1	4.812	Like for like or better	Native Species Rich Hedgerow - Associated with bank or ditch
18	Native Hedgerow	0.278	Low	2	Good	3	Low Strategic Significance	1	1.668	Same distinctiveness band or better	Native Species Rich Hedgerow

	Post development/ post intervention habitats																								
	Change in distinctiveness and condition			Distinctiveness		Condition		Strategic significance			Temporal multiplier						Difficulty risk multipliers					Comments	
Baseline ref	Distinctiveness movement	Condition movement	Length KM	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard Time to target condition/years	Habitat enhanced in advance/years	Delay in starting habitat enhancement/years	Standard or adjusted time to target condition	Final time to target condition/years	Final Time to target multiplier	Standard difficulty of enhancement	Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied	Hedge units delivered	Assessor comments	Reviewer comments
1	Low - Medium	Lower Distinctiveness Habitat - Good	0.438	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	4.83	Species-poor hedgerow to be enhanced to native species rich hedgerow along B-road.	
4	Medium - High	Lower Distinctiveness Habitat - Good	0.377	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	6.42	Enhanced to species rich with infill planting and management	
14	Medium - High	Lower Distinctiveness Habitat - Good	0.401	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	6.83	Enhanced to species rich with infill planting and management	
18	Low - Medium	Lower Distinctiveness Habitat - Good	0.209	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	2.30	Enhanced to species rich with infill planting and management	
			1.43																		20.37		

Plans

Plan EDP 1	Extended Phase 1 Habitat Plan (edp2355_d034a 17 December 2021 VMS/JS)
Plan EDP 2	Proposed Habitat Areas (edp2355_d043a 17 December 2021 GY/CP)

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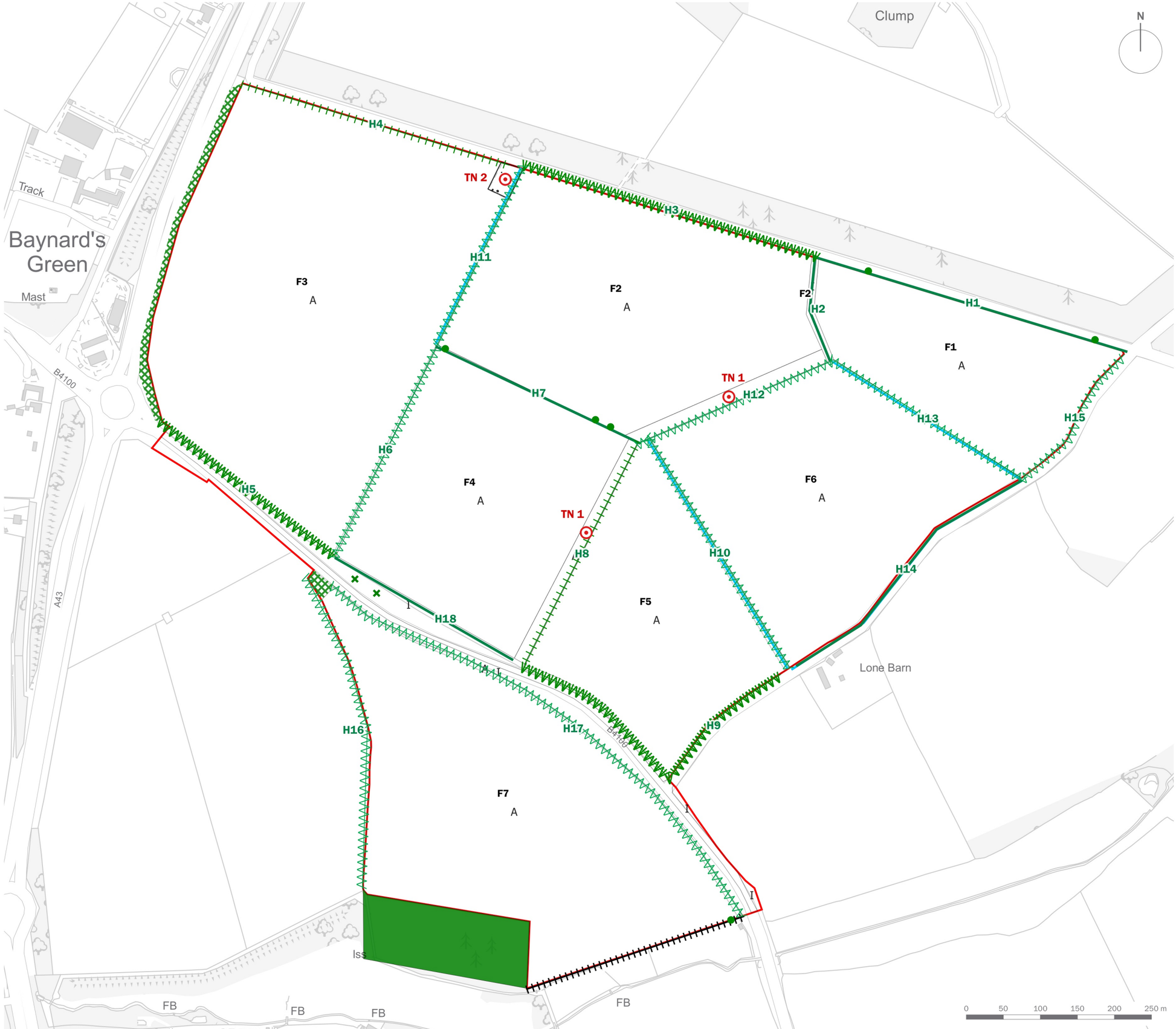

Site Boundary

Broadleaved Semi-natural Woodland

Dense Continuous Scrub

A — Arable

I — Improved Grassland

Bare Ground

Intact Species-rich Hedgerow and Trees

Intact Species-poor Hedgerow and Trees

Intact Species-rich Hedgerow

Intact Species-poor Hedgerow

Wet Ditch

Fence

Scattered Trees (Broadleaved)

Scattered Scrub

TN1 — Target Note

F1 — Field Number

client

Tritax Symmetry Ardley Ltd

project title

Symmetry Park, Ardley

drawing title

Plan EDP 1: Extended Phase 1 Habitat Survey

date	**17 DECEMBER 2021**	drawn by	**VMS**
drawing number	**edp2355_d034a**	checked	**JSn**
scale	**1:5,000 @ A3**	QA	**RB**

the environmental dimension partnership

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Site Boundary

Retained Habitats

- Road - Developed Land; Sealed Surface
- Native Species-rich Hedgerow and Trees (Good Condition)
- Native Species-rich Hedgerow (Good Condition)

Enhanced Habitats

- Landscape Buffer Planting - Mixed Scrub (Good Condition)
- Road Verge - Other Neutral Grassland (Moderate Condition)
- Native Species-rich Hedgerow and Trees (Good Condition)
- Native Species-rich Hedgerow (Good Condition)
- Native Species Rich Hedgerow - Associated with bank or ditch (Good Condition)

Created Habitats

- Native Woodland Block - Other Woodland; Broadleaved (Moderate Condition)
- Landscape Buffer Planting - Mixed Scrub (Good Condition)
- Species-rich Meadow Grassland - Other Neutral Grassland (Good Condition)
- Amenity Grassland - Modified Grassland (Poor Condition)
- Wildlife Wetland Habitat - Pond - Non Priority (Moderate Condition)
- Developed Land; Sealed Surface
- Amenity Hedgerow - Hedge Ornamental Non Native (Poor Condition)
- Scattered Tree in Grassland (Moderate Condition)
- Scattered Tree on Amenity Verges (Poor Condition)

client

Tritax Symmetry Ardley Ltd

project title

Symmetry Park, Ardley

drawing title

Plan EDP 2: Proposed Habitat Areas

date	**17 DECEMBER 2021**	drawn by	**GY**
drawing number	**edp2355_d043a**	checked	**CP**
scale	**1:5,000 @ A3**	QA	**RB**

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