

Biodiversity Net Gain Assessment

Site Address:

Land to the West of Arley Drive, Knowsley, Liverpool, L36 8HN

Client:

Arnold Clark Automobiles Limited

Assessment Date:

7th November 2025

Project:

This report is prepared to inform a planning application with Knowsley Metropolitan Borough Council. The proposal is described as:

“The erection of a car dealership including a vehicle repair workshop, mot testing centre, car wash facility together with associated vehicle display and parking provision.”

[25/00283/FUL]

BNG assessment methodology and legislation can be found in the Arbtech Supplement: **BNG Methodology and Legislation – 2025.**

The results and recommendations contained within this report are valid for 18 months. An updated site visit and BNG assessment may be required if the report is to be used any longer than 18 months after completion.

Version Control			
Status	Issue	Name	Date
Draft	0.1	Dan Crispin BSc (Hons); Graduate Ecologist	06/11/2024
Reviewed	0.2	Georgina Rennie BSc (Hons), MSc; Consultant Ecologist	15/11/2024
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Site Location and Context

A baseline habitat map is provided in **Appendix 1**, a post development habitat map in **Appendix 2**, a proposed development plan in **Appendix 3**, headline BNG results in **Appendix 4**, and condition assessments in **Appendix 5**.

The survey site is centred on National Grid Reference SJ 44830 92718 and has an area of approximately 1.9ha.

The site comprises an industrial site that has been active since 2019, which has been used as a car park and storage of soils and other materials while the development adjacent is being constructed. Several temporary units are present on site, being used as offices for the staff. There are areas of standing water where the soil on site is waterlogged, alongside ruderal grassland that has grown on the soils on site. There are several trees to the east that have been planted during the development. The soil types present within the site are slowly permeable, seasonally wet, slightly acid but base-rich loamy and clayey soils with impeded drainage, supporting habitats including seasonally wet pastures and woodlands, according to Soilscales. Historically, the site was used as arable fields dating back to 1845, according to the National Library of Scotland's historic maps.

The site is situated within an urban area of Knowsley, with dense residential areas to the south, east and west and the M57 to the east. The site is surrounded by arable fields to the north, where pockets of woodland are scattered amongst the roads and fields.

The wider landscape comprises of predominantly arable fields and pasture with pockets of woodland to the north that creates a mosaic of habitat which could provide suitable habitat for wildlife. There are several dams and reservoirs to the north which could further support protected species. There are small pockets of greenspace amongst the residential areas, including a large golf course to the southeast which can provide a mosaic of habitats for species within that area. There is limited connectivity between the site and these landscapes due to being located in a heavily urbanised area, in addition to being surrounded by the ongoing development.

The site is a small part of a larger planning application (18/00062/HYB). The ecological appraisal (EA) for this previous application was written by Ascerta in December 2017 (Updated in January 2018). Mitigation across the whole, wider site for protected species was included within the report, such as timing of works for birds, light mitigation for bats, compensation of the loss of a pond, gaps under fencing for hedgehogs, and habitat and landscape management to increase biodiversity. The landscape plan was created and is available on the planning portal. Parts of the site were included in subsequent planning applications, including but not limited to 18/00062/NMA2, 20/00376/OUT and 22/00157/REM.

This report should be read in conjunction with the following documents:

- ❖ Statutory BNG Metric - Land to the west of Arley Drive L36 8HN – v3 - 38953014 (Arbtech Consulting Ltd, 2026)
- ❖ Ecological Appraisal (EA) – Earlsfield Park, Knowsley Lane, L34 4AH – January 2018 - Rev A (Ascerta, 2018)

- ❖ Preliminary Ecological Appraisal (PEA) – Land to the west of Arley Drive, L36 8HN – v2 (Arbtech Consulting Ltd, 2024)
- ❖ Proposed Site Plan – 6171-101-P4 (Taylor Design, 2026)
- ❖ Detailed Planting Plan Sheet 1 of 3 – 1551_400_C (Southern Green, 2025)
- ❖ Detailed Planting Plan Sheet 2 of 3 – 1551_401_C (Southern Green, 2025)
- ❖ Detailed Planting Plan Sheet 3 of 3 – 1551_402_C (Southern Green, 2025)
- ❖ S278 General Arrangement – 066658-CUR-00-XX-DR-C-95001-P07 (Curtins, 2020)
- ❖ Spine Road Detailed Drainage Layout Sheet 1 of 2 – 066658-CUR-00-XX-DR-C-72101-C01 (Curtins, 2020)
- ❖ Phase 02 Detailed Drainage Layout – 079708-CUR-ZZ-XX-D-C-92101-P02 (Curtins, 2022)

Executive Summary

- ❖ The current landscaping proposal generates a net loss of **-1.17** area-habitat units (**-30.40%**) and a net gain of **+0.12** linear-habitat units (**N/A%**).
- ❖ In line with the Statutory Biodiversity Metric User Guide (2025), any loss of a habitat must be replaced on a like-for-like or like-for-better principle. At present, trading conditions are not satisfied for the loss of modified grassland (low distinctiveness). With unmet trading conditions and a net loss, the proposal fails principal Rules 1 and 2 of BNG and is not compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024).
- ❖ In order to achieve a +10% biodiversity net gain for area-habitats, a minimum score of **4.22** units will need to be achieved. At present, there is a unit deficit of **1.55** units.
- ❖ Trading conditions have been satisfied for linear-habitats.
- ❖ During the design process, the landscaping proposals have already been altered to increase the biodiversity value on-site. These alterations included increasing the areas and condition of the proposed other neutral grassland. Increasing the condition of the grassland is unlikely to be achievable due to the size and location of the parcels. There is therefore limited scope to provision additional biodiversity value on the site.
- ❖ Satisfying the trading rules and achieving +10% net gain for area-habitats is not achievable within the development boundary due to the limited soft landscaping area available; Off-site offsetting will therefore be required.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	30 th January 2020
	The baseline biodiversity value of the site is not derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd, 2024) as evidence of habitat degradation had occurred. The degradation to specific habitats has been described below, with additional supporting evidence provided in Appendix 6a-e.	
	<u>Grassland:</u> Satellite images (Google Earth) and Google Street View show that after September 2019, the site has undergone clearance and subsequently been used for construction storage, parking and offices. As these works were not completed in connection with an approved planning application, they constitute unauthorised habitat degradation. Therefore, the pre-development value of this habitat has be calculated on the date immediately before the works were carried out. The habitat value has been calculated from the Ecological Appraisal (EA, Ascerta, 2018) that was submitted with planning application 18/00062/HYB. The Phase 1 Translation Tool in the BNG metric has been used to translate the habitat type for use in this assessment. Please see the habitat map in Appendix 6a and Improved Grassland habitat description in Appendix 6b. <u>Hedgerows:</u> Satellite images (Google Earth) from 8th April 2020 show the removal of the hedgerow, present in 2020, in conjunction with planning application 20/00376/OUT. This therefore constitutes authorised degradation and so this habitat has not been included in the pre-development value of the site. Please see Appendix 6c for the S278 General Arrangement Plan (Curtins, 2020). <u>Ditches:</u> Satellite images (Google Earth) from 3rd July 2023 shows the ditch, present in 2020, has been removed in conjunction with planning applications 18/00062/NMA2 and 22/00157/REM. This therefore constitutes authorised degradation and so this habitat has not been included in the pre-development value of the site. Please see Spine Road Detailed Drainage Layout Sheet 1 of 2 (Curtins, 2020) in Appendix 6d and Phase 02 Detailed Drainage Layout (Curtins, 2022) in Appendix 6e.	

	20-09-2019 Land to the west of Arley Drive, L36 8HN  Google Earth	
	08-04-2020 Land to the west of Arley Drive, L36 8HN  Google Earth	
	03-07-2023 Land to the west of Arley Drive, L36 8HN  Google Earth	
	18-03-2024 Land to the west of Arley Drive, L36 8HN  Google Earth	
Irreplaceable Habitat Statement	No irreplaceable habitats as listed under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024) are currently present nor were present before 30 th January 2020.	
Metric Version & Publication Date	Statutory Biodiversity Metric Calculation Tool first published 29 th November 2023 with last updates to metric tools and user guides on 3 rd July 2025.	
BNG Target Uplift	+10%	
National Character Area (NCA)	58 - Merseyside Conurbation	

Strategic Significance	The Liverpool City Region Combined Authority (LCRCA), the responsible authority for drafting the Local Nature Recovery Strategy (LNRS) for Knowsley Metropolitan Borough Council (KMBC), has yet to adopt a comprehensive LNRS. As advised by KMBC, the following documents from its adopted Local Plan (including Supplementary Planning Documents, SPDs), were used to determine strategic significance: ❖ LCR Ecological Network Explorer (Liverpool City Region Ecological Network, 2026) ❖ Knowsley Local Plan Core Strategy January 2016 (KMBC, 2016) ❖ Guidance Note on Mandatory BNG (Merseyside Environmental Advisory Service, 2024) ❖ North Merseyside Biodiversity Action Plans (Merseyside Biodiversity Group, 2008) ❖ Draft LNRS Habitat Map (Liverpool City Region Combined Authority, 2025) - Guidance only			
	Baseline / Post-Development	Habitat	Value	Justification
	Baseline	Modified Grassland	Low	Urban Grasslands classified as Modified Grassland are excluded from North Merseyside Biodiversity Action Plan Habitats (NMBAP)
	Post-Development	Other Neutral Grassland	High	Urban Grassland within NMBAP.
		Urban Trees	High	Urban Trees and Urban Green Infrastructure within NMBAP.
Condition Assessment	Post-Development	Other	Low	Other habitats are not identified by Guidance Note on Mandatory BNG (MEAS, 2024). The site is not located within a 'Pre-Consultation Measures' layer in the Draft LNRS Habitat Map.
		The following tabs from the Statutory Biodiversity Metric – Condition Assessment Sheets were used when assessing the condition of each habitat:		
		Habitat	Tab No.	Tab Name
		Developed Land; Sealed Surface	N/A	Condition pre-determined
		Artificial Unvegetated; Unsealed Surface		
		Introduced Shrub		
		Modified Grassland	Tab 5	Grassland Low
		Other Neutral Grassland	Tab 6	Grassland Medium/High/Very High
		Urban Tree	Tab 9	Individual Trees
		Native Hedgerow	Tab 8	Hedgerow

Limitations

The site was cleared of vegetation before January 2020 and has been seen active use for construction storage, parking and offices since. The habitats on-site have undergone various changes during this time. Please see Habitat Degradation Statement above.

Baseline

Baseline Biodiversity Value: On-Site				
Area-Habitats (A-1)				
Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Modified Grassland	1.91734	The majority of the Eastern Sector comprises improved grassland pastoral fields used for horse grazing and silage production. The sward is dominated by perennial ryegrass, with meadow grass, fescue and bent-grass species. Herbs include dandelion, broadleaved dock, creeping thistle and creeping buttercup. The fields are species poor, and some areas are heavily poached. This habitat type is common in the wider environment but is of limited value to species including birds and bats. It will be lost to the proposals. Description adapted from EA (Ascerta, 2018).	Poor: Passes 3 of 7 criteria. (Fails essential criteria A) Conservative assessment using EA (Ascerta, 2018)	Low

Post-Development

Post-Development Biodiversity Value: On-Site					
Area-Habitats					
	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Created (A-2)	Developed Land; Sealed Surface	1.45217	Proposed buildings, parking, pathways, roads and access.	N/A: Habitat condition predetermined.	Low
	Introduced Shrubs	0.14906	Proposed ornamental planting areas to the site perimeter.		
	Modified Grassland	0.08599	Proposed 'Flowering lawn' grassland.		
	Other Neutral Grassland	0.23012	Proposed native wildflower grassland.	Moderate: Passes 5 of 6 criteria. Fails essential criteria F	High
	Urban Trees	0.1262	31no. new small trees within the site. 9no. Field Maple (AC) 15no. Hornbeam 'Fastigiata' (CB) 7no. European Crab Apple (MS)	Moderate: Passes 3/4 of 6 criteria. (31no. small trees)	
Linear-Habitats					
	Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Created (B-2)	Native Hedgerow	0.06204	New native hedgerow along the western site boundary (H1).	Poor: Conservative assessment.	Low

Change of Biodiversity Value

		Biodiversity Units			
		Area-Habitat		Linear-Habitat	
On-Site	Baseline	3.83	❖ Modified Grassland (Poor)		❖ N/A
		3.83	Units - Total	0.00	Units - Total
	Post-Development	Created (A-2)		Created (B-2)	
		0.00	❖ Developed Land; Sealed Surface (N/A)	0.12	❖ H1 – Native Hedgerow (Poor)
		0.29	❖ Introduced Shrubs (N/A)		
		0.17	❖ Modified Grassland (Poor)		
		1.77	❖ Other Neutral Grassland (Moderate)		
		0.44	❖ Urban Trees (Moderate)		
		2.67	Units - Total	0.12	Units - Total
	On-Site	-1.17	Unit Change	+0.12	Unit Change
	Net Change	-30.40%	% Change	N/A	% Change

Results, Discussion, and Next Steps

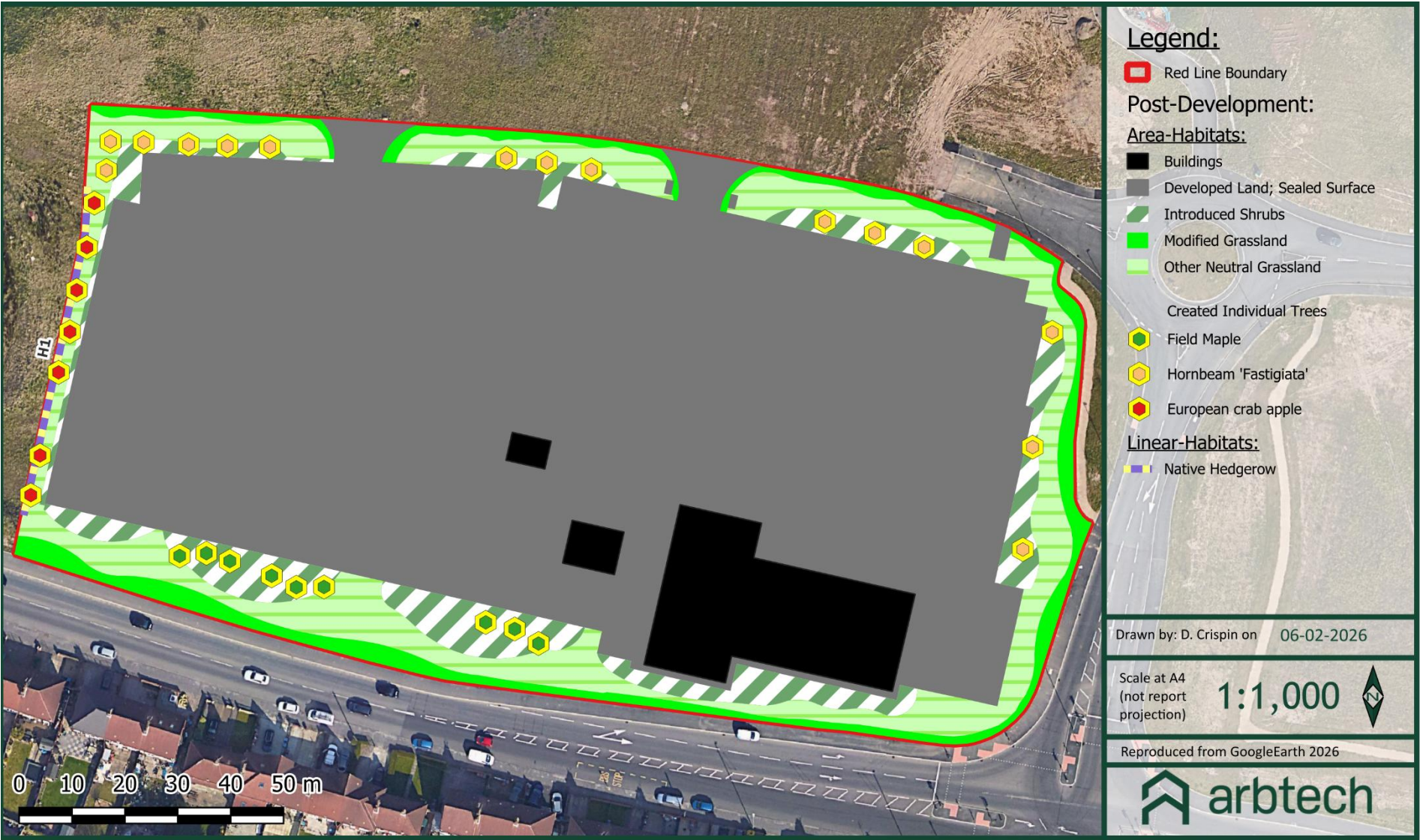
BNG Informative	
Results	The current landscaping proposal generates a net loss of -1.17 area-habitat units (-30.40%) and a net gain of +0.12 linear-habitat units (N/A%). In line with the Statutory Biodiversity Metric User Guide (2025), any loss of a habitat must be replaced on a like-for-like or like-for-better principle. At present, trading conditions are not satisfied for the loss of modified grassland (low distinctiveness). With unmet trading conditions and a net loss, the proposal fails principal Rules 1 and 2 of BNG and is not compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024). In order to achieve a +10% biodiversity net gain for area-habitats, a minimum score of 4.22 units will need to be achieved. At present, there is a unit deficit of 1.55 units. Trading conditions have been satisfied for linear-habitats.
Recommendations and Next Steps	During the design process, the landscaping proposals have already been altered to increase the biodiversity value on-site. These alterations included increasing the areas and condition of the proposed other neutral grassland. Increasing the condition of the grassland is unlikely to be achievable due to the size and location of the parcels. There is therefore limited scope to provision additional biodiversity value on the site. As such, it is unlikely that net gain will be achieved by ways of habitat creation/enhancement without significant changes to the proposals on site or require unfeasible commitments off-site. As such, a financial contribution to off-site ecological enhancements (i.e. purchasing biodiversity units) within an approved scheme is required to make up the +10% net gain for area-habitat units. The mechanism for securing this off-setting will need to be proposed to and confirmed by the LPA and would be linked to the application through a planning obligation Section 106 (s106) agreement. The proposed habitat compensation must be of an appropriate distinctiveness to meet the trading rules of BNG.

	A summary as to what off-site units will be required is detailed in the table below.				
		Distinctiveness	Broad Habitat Group	Habitat	Units Required
	Area-Habitat	Low	Any	Any	1.55
		Total			1.55
Pre-Commencement	A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years to ensure that biodiversity net gain is delivered. These additional requirements can only be actioned following the finalisation of the BNG assessment – be it on-site or off-site net gains sought.				
BNG Mitigation Hierarchy					
Avoidance	The on-site habitats were cleared as part of works for a separate planning application.				
Minimisation					
Mitigation	During the design process, landscaping proposals were altered to increase the post-development value of other neutral grassland habitats. The proposal includes the provisioning of new trees and hedgerows to the perimeter of the site.				
Offset	Satisfying the trading rules and achieving +10% net gain for area-habitats is not achievable within the development boundary due to the limited soft landscaping area available; Off-site offsetting will therefore be required.				

Appendix 1: Baseline Habitat Plan



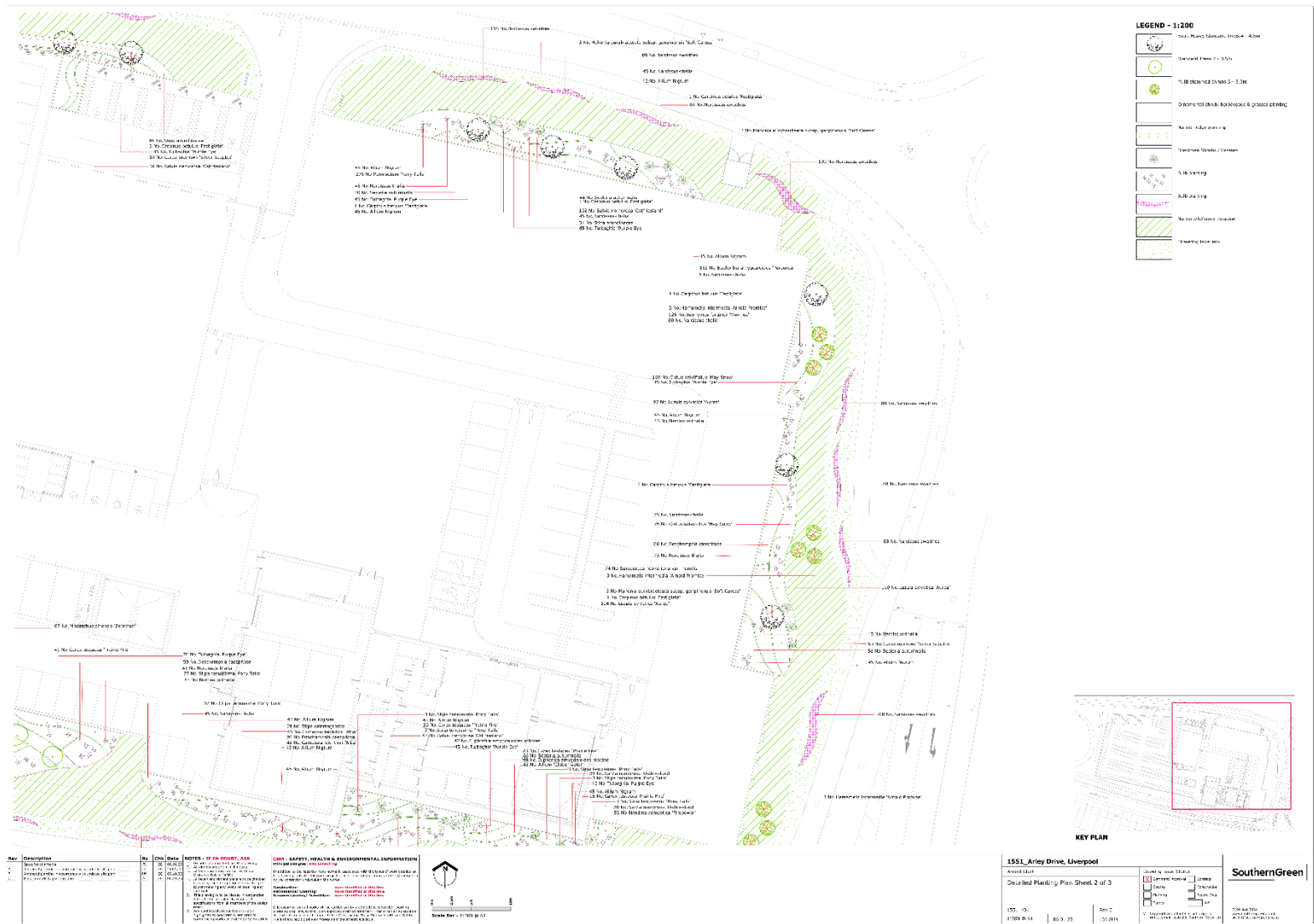
Appendix 2: Post-Development Habitat Plan



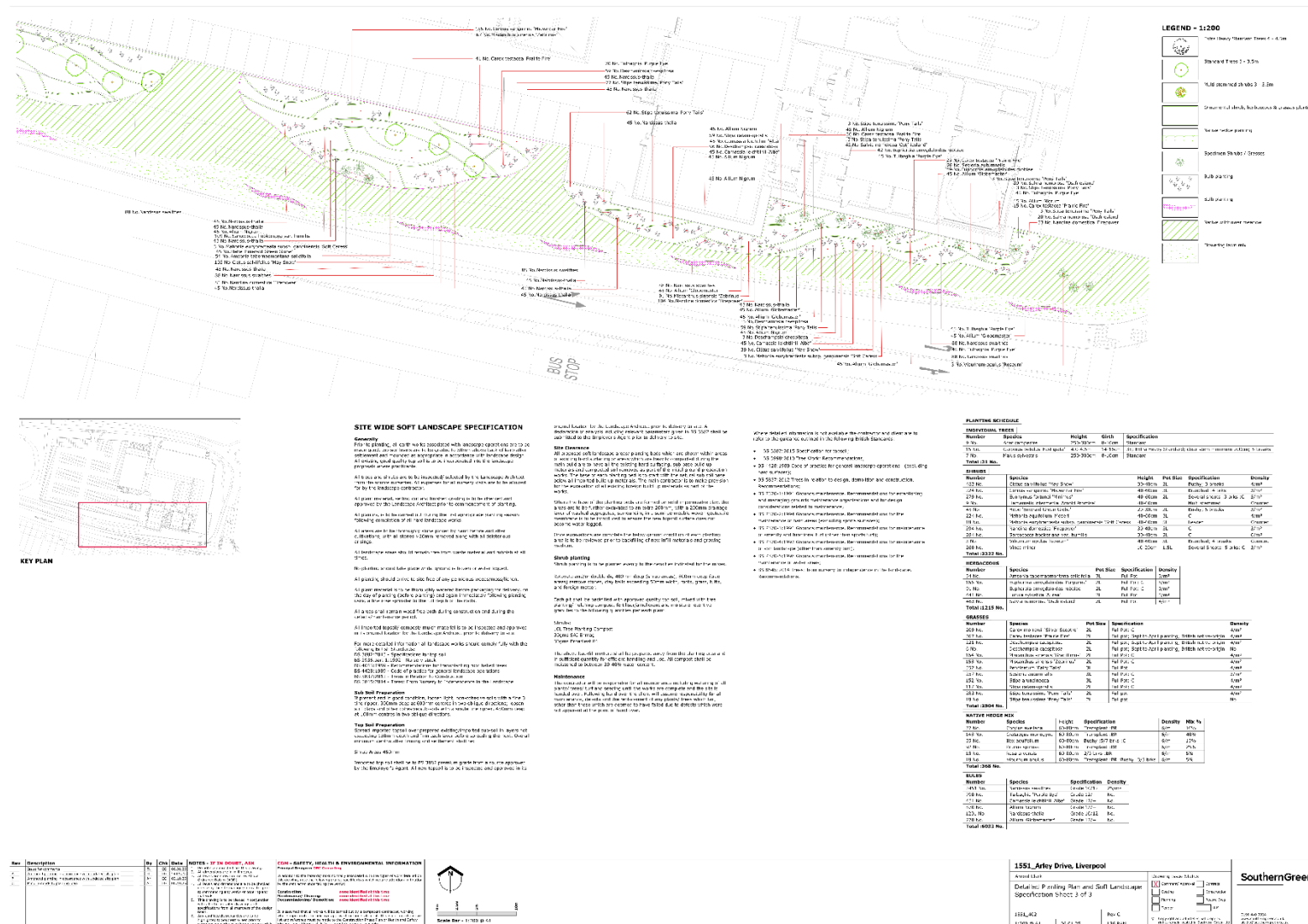
Biodiversity Net Gain Assessment



Appendix 3b: Proposed Detailed Planting Plan – Sheet 2



Appendix 3c: Proposed Detailed Planting Plan – Sheet 3



Appendix 4: Headline BNG Results

On-site baseline	Area habitat units	3.83		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	2.67		
	Hedgerow units	0.12		
	Watercourse units	0.00		
On-site net change (units & percentage)	Area habitat units	-1.17	-30.40%	On-site net gain is less than target set ▲ Zero baseline units - % cannot be calculated
	Hedgerow units	0.12	N/A	
	Watercourse units	0.00	0.00%	
Off-site baseline	Area habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	Area habitat units	0.00	0.00%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-1.17		
	Hedgerow units	0.12		
	Watercourse units	0.00		
Spatial risk multiplier (SRM) deductions	Area habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-1.17		
	Hedgerow units	0.12		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-30.40%	Total net gain achieved is less than target set ▲	
	Hedgerow units	N/A	0 baseline units - % cannot be calculated	
	Watercourse units	0.00%		
Trading rules satisfied?	No - Check Trading Summaries ▲			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	3.83	4.22	1.55
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00
				No additional hedgerow units required to meet target ✓
				No additional watercourse units required to meet target ✓

Appendix 5a: Baseline Habitat Condition Assessment Sheets

Retrospective - Modified Grassland; assessed using 'Grasslands Low Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria:		Condition Passed (Y / N)	Notes/Justification
A	There must be 6-8 vascular plant species per m ² , including at least 2 forbs. Note – this criterion is essential for achieving moderate condition.	N	Species poor, <6 vascular plant species per m ² due to bare ground limiting species density.
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	Used for horse grazing and silage production. Assumed fail.
C	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	Assumed pass.
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N	Fail due to grazing and silage production.
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	N	Fail due to grazing and silage production.
F	Cover of bracken less than 20%.	Y	Assumed pass.
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	Assumed pass.
Essential criterion achieved (Y/N)		N	
Number of criteria passed		3	
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Passes 6 or 7 of 7 criteria including passing essential criterion A		Good (3)	
Passes 4 or 5 of 7 criteria including passing essential criterion A		Moderate (2)	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion A		Poor (1)	✓

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Created – Modified Grassland; assessed using 'Grasslands Low Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria:		Condition Passed (Y / N)	Notes/Justification
A	There must be 6-8 vascular plant species per m ² , including at least 2 forbs. Note – this criterion is essential for achieving moderate condition.	N	<6 vascular plant species per m ² .
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	Uniform sward height anticipated (~5cm).
C	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	Management to remove as required.
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Y	Management to remove as required.
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Y	Management to remove as required.
F	Cover of bracken less than 20%.	Y	Management to remove as required.
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	Management to remove as required.
Essential criterion achieved (Y/N)		N	
Number of criteria passed		5	
Condition Assessment Result	Condition Assessment Score	Score Achieved ✓	
Passes 6 or 7 of 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 of 7 criteria including passing essential criterion A	Moderate (2)		
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion A	Poor (1)	✓	

Created - Other Neutral Grassland; assessed using 'Grasslands Medium/High/Very High Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria		Criterion Passed (Y / N)	Notes/Justification
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relative to the specific habitat type. Note – this criterion is essential for achieving moderate or good condition for non-acid grassland types only.	Y	Does represent a good example of its habitat type.
B	Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	Varied sward height.
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	Y	Cover of bare ground <5%.
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	Areas of bramble scrub account for <20% and bracken accounts for <5%.
E	Combined cover of species indicative of sub-optimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.	Y	Damaged ground accounts for <5% of parcel (construction traffic and storage). No invasives present.
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). Note – this criterion is essential for achieving good condition for non-acid grassland types only.	N	<10 species per m2.
Essential criterion for good condition achieved (for non-acid grassland) (Yes or No)		N	
Number of criteria passed		5	
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Non-acid grassland types (result out of 6 criteria)			
Passes 5 or 6 criteria, including essential criterion A and additional criterion F		Good (3)	
Passes 3 - 5 criteria, including essential criterion A		Moderate (2)	✓
Passes 2 or fewer criteria OR Passes 3 or 4 criteria excluding criterion A and F		Poor (1)	

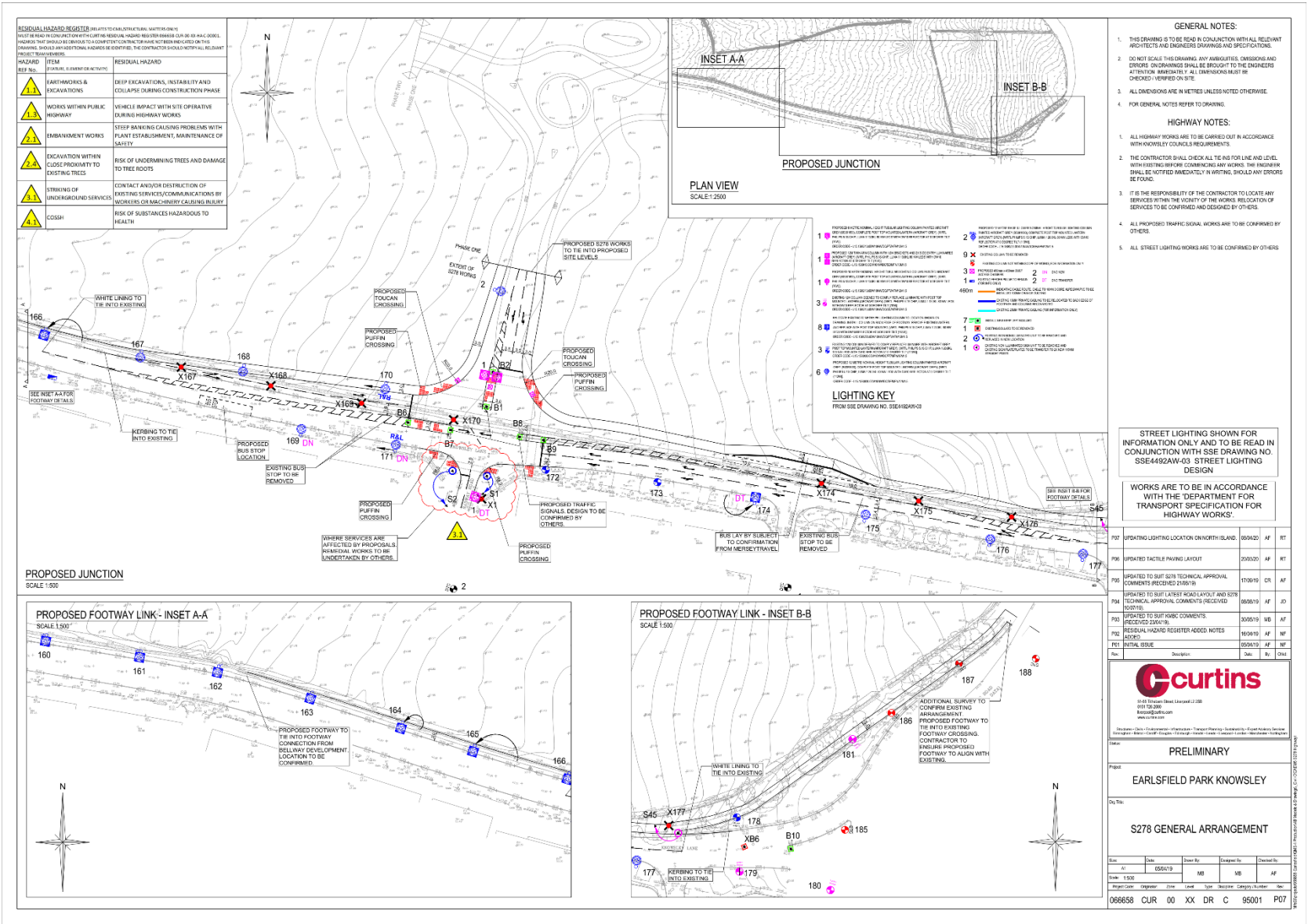
Created – Urban Trees; assessed using 'Individual Trees' habitat type condition sheet:

Condition Assessment Criteria												
A	The tree is a native species (or more than 70% within the block are native species).											
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).											
C	The tree is mature (or more than 50% within the block are mature).											
D	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.											
E	Natural Ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.											
F	More than 20% of the tree canopy area is oversailing vegetation beneath.											
Tree Ref	Count	Size Cat	Common Name	Latin Name	A	B	C	D	E	F	Criteria Passed	Condition
AC	9	Small	Field maple	<i>Acer campestre</i>	Y	Y	N	Y	N	Y	4	MODERATE
CB	15	Small	Hornbeam 'Fastigiata'	<i>Carpinus betulus</i> 'Fastigiata'	N	Y	N	Y	N	Y	3	MODERATE
MS	7	Small	European crab apple	<i>Malus sylvestris</i>	Y	Y	N	Y	N	Y	4	MODERATE

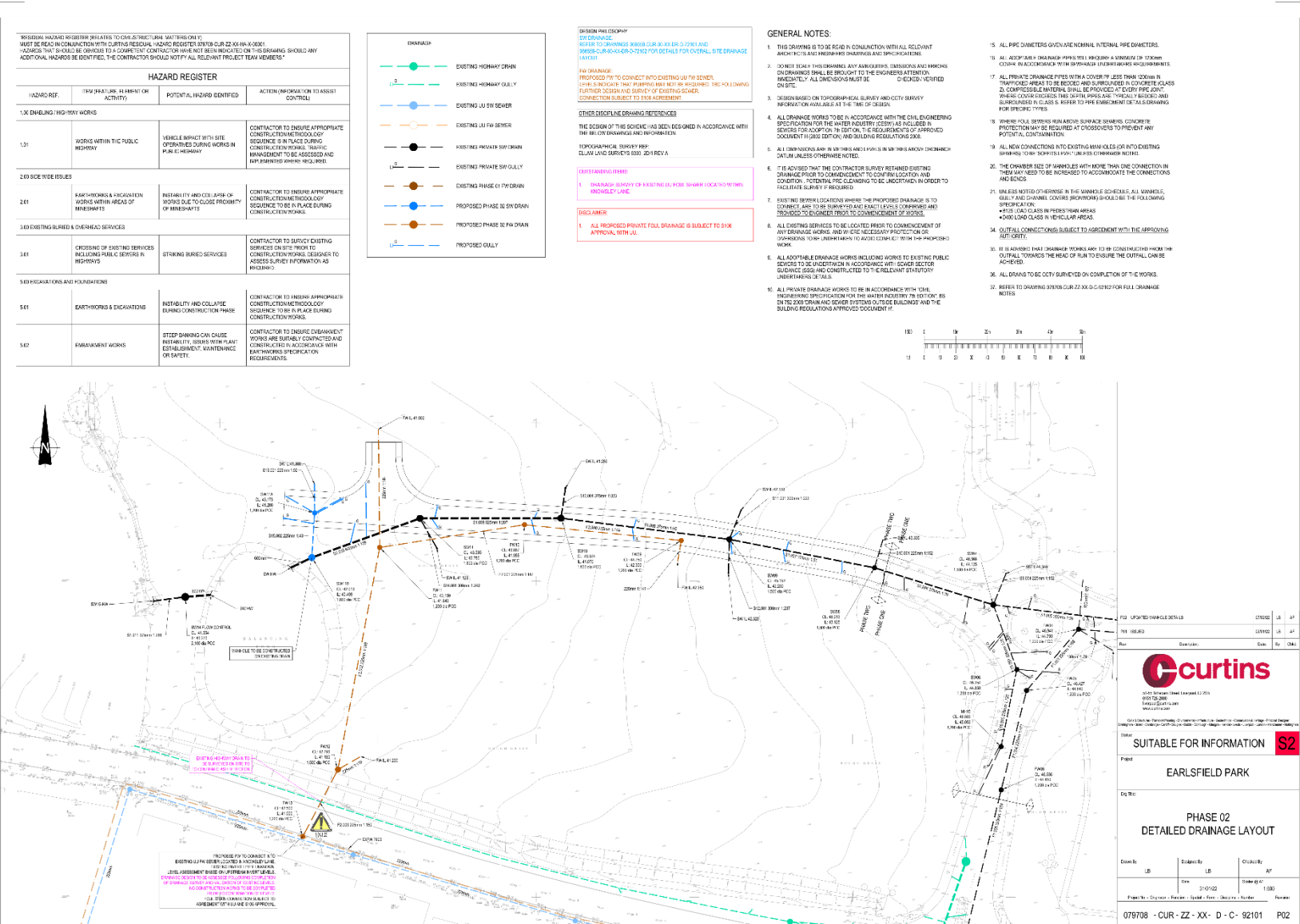
Appendix 6b: Ecological Appraisal – Improved Grassland Habitat Description

Ecological Value	Local
Improved Grassland: The majority of the Eastern Sector comprises improved grassland pastoral fields used for horse grazing and silage production. The sward is dominated by perennial ryegrass, with meadow grass, fescue and bent-grass species. Herbs include dandelion, broadleaved dock, creeping thistle and creeping buttercup. The fields are species poor and some areas are heavily poached. This habitat type is common in the wider environment but is of limited value to species including birds and bats. It will be lost to the proposals.	 Looking south at the poached horse grazed field, with farm building 5 to the left of the photo.

Appendix 6c: S278 General Arrangement Plan



Appendix 6d: Spine Road Detailed Drainage Layout Sheet 1 of 2



[illegible]