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THE HINCKLEY SCHOOL
LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN
SP0001-MAC-XX-XX-T-L-0005

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1.0 INTRODUCTION

- 1.0 This report has been prepared for the proposed demolition of five school buildings and the construction of a new three-storey school building with associated landscaping, external canopies, play area, including the construction and siting of a temporary teaching block and temporary staff car park during construction.



Figure 1: Aerial View of Existing Site at Hinckley School, Butt Lane

- 1.1 The Application Site lies within the existing school site of Hinckley School. The existing school Blocks B, C, D and E will be demolished and replaced with a new two storey block with the remaining footprint finished in a mix of soft and hard landscaping as external playground space.
- 1.2 The Landscape and Ecological Management and Maintenance shall be undertaken by the contractor during initial establishment to handover. Thereafter the long-term landscape management and maintenance operations will be carried out by the school's appointed facility management team.
- 1.3 The following ecological and arboricultural assessments have been undertaken previously:
- Ecological Feasibility Study (Tetra Tech 17/08/2021)
 - Bat Survey Report (Tetra Tech 18/08/2022)
 - Tree Survey and Arboricultural Impact Assessment (Tetra Tech (Greengage) 24/03/2021)
 - BNG Assessment (ACD Environmental 12/09/2023)
 - Condition Assessment Sheets (ACD Environmental 15/08/2023)

- Biodiversity Metric 4.0 (ACD Environmental 11.09.2023)

- 1.4 The LEMP details the management aims and objectives for the newly created habitats within the red line boundary associated with the new school building and associated areas of soft landscaping. The LEMP prescribes detailed yearly actions to be taken by the site's managers to deliver gains for biodiversity.

The plan is designed to provide information regarding long-term management (i.e. to continue for a period of no less than 30 years). This is a live document and should be subject to periodic review. Based on the findings of annual monitoring and the determined success of management prescriptions to achieve habitat target condition, the management may need to be adjusted in the future.

- 1.5 The implementation and delivery of the LEMP will be through The Futures Trust who operate The Hinckley School. The principal contractor Reds10 shall be responsible for all maintenance up until handover.

The Futures Trust will manage the site going forward.

- 1.6 Site Description and Context

Attribute	Description
Location	Hinckley School, Butt Lane, Hinckley
Site Area (ha)	4.95
Topography	Sloped and Undulating
Land Cover (on site)	The site includes school building, playground and car parking. The remainder of the site comprises mostly of amenity grassland and scattered trees.
Land Cover (site surrounds)	The wider landscape is on the edge of Hinckley with residential housing to the west and north. Hinckley Golf Course lies to the east and agricultural fields to the south.

- 1.7 Ecological Context
The site's ecological context has been informed by the ecological and arboricultural assessments noted in 1.3.

Designated Sites

Burbage and Common Woods is a LNR located 0.42km north-east of the site. Burbage and Common Woods is designated for its habitats including grassland, semi-ancient woodland and scrubland.

Burnage Wood and Aston Firs is a SSSI which is located 0.78km east of the site and is designated for its ash-oak-maple woodland.

Habitats

The following habitats were recorded on site:

- Scattered broad-leaved trees
- Intact species-poor hedgerows (upgraded to species rich following condition assessment)
- Amenity grassland
- Hardstanding
- Buildings

- Open Water

Species Baseline

The following species and species group are deemed to be a management consideration due to their confirmed presence on or adjacent to the site:

Species/Species Group	Description
Birds	The existing scattered trees and areas of hedgerows around the site boundary of the school grounds provide potential nesting opportunities, predominantly for suburban bird species. Newly created habitats (upon maturity) are likely to provide breeding opportunities for a number of bird species.
Terrestrial Mammals (badger and hedgehog)	There is a low risk of presence on site due to the perimeter fencing providing few opportunities for ingress by mammals. Newly created habitats (upon maturity) will provide foraging opportunities for mammals, should individuals pass through the site.
Bats	Bats are unlikely to be roosting within the buildings or trees on site following emergence and re-entry surveys. The installation of 3 building mounted bat tiles and 3 tree mounted bat boxes box will provide additional roosting habitat for the site.

1.8 Management Context

Subject	Management Consideration
Site Use and Amenity	The habitats covered by this LEMP are situated within the grounds of Hinckley School, Butt Lane, Hinckley. Management considerations shall be balanced with the practical use of the school grounds for curriculum activities and should not hinder the schools planned use of external spaces.
Planning and Legal	N/A
Climate Change	The UK Climate Change Projections suggest that the UK could experience: - Hotter drier summers – with temperature increases of between 3.7°C and 6.8°C by 2070 and the frequency of hot spells (daytime temperatures exceeding 30°C for more than 2 consecutive days) increasing. - Higher precipitation – with increases in hourly rainfall and an increase in the likelihood of extreme rainfall events. - More extreme events – with decreases in average summer rainfall and increases in winter rainfall. Incremental reviews of all management plan measures may be required to ensure that the aim of the objectives of this plan are resilient to future climatic changes
Protected Species	The site supports habitats that are suitable, or may over time become suitable, for protected species, namely nesting birds and terrestrial

	mammals (badger and hedgehog). To avoid potential harm to these species a precautionary approach to management activities and their timings should occur. This is to ensure the management works are delivered in a manner which reduces the risk of harming protected species and demonstrates accordance with UK Wildlife Legislation. In this instance this should involve: Nesting Birds – Works within areas that could support nesting birds should avoid bird nesting season (March - August, inclusive). Should work need to occur during nesting season all potential nesting areas should be full checked by suitably qualified ecologist prior to any works commencing. Bats – Potential roosting areas should be checked for the presence of bats by a qualified ecologist prior to the commencement of works. Badgers – Check that active badger setts are not present in any areas of dense growth (i.e., brambles scrub, tall ruderals, etc.) before its clearance. Signs of recent badger activity include fresh spoil and bedding material near the sett entrance, footprints, badger scat, animal runs leading from the sett. If a badger sett is identified and there is any uncertainty if it remains active, the advice of a suitably qualified ecologist should be sought prior to any works occurring within its vicinity. Hedgehogs – Any cut vegetation that is not to be used to create 'habitat piles' should be removed from site immediately after been cut. Where/if it is desired that pre-existing piles of cut vegetation should be cleared from site, these piles should first be deconstructed by hand to allow for the detection of sheltering hedgehogs, especially during their hibernation period of October – April (inclusive).
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2.0 INDUSTRY STANDARDS AND REFERENCES

These following texts and guidance have been referenced in the preparation of this report:

- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management, Construction Industry Research and Information Association & Institute of Environmental Management and Assessment (2019). Biodiversity Net Gain – Good Practice Principles for Development.

3.0 LANDSCAPE PROPOSALS (HABITAT RETENTION AND CREATION)

- 3.1 The site access is via the existing school entrance from Butt Lane. A temporary car park and teaching block shall be formed in an area of amenity grassland in the north west of the site. Teaching blocks B, C, D and E are to be demolished. Blocks B and C will be reinstated with new landscaping and playgrounds. Blocks D and W will be replaced with a new school building.

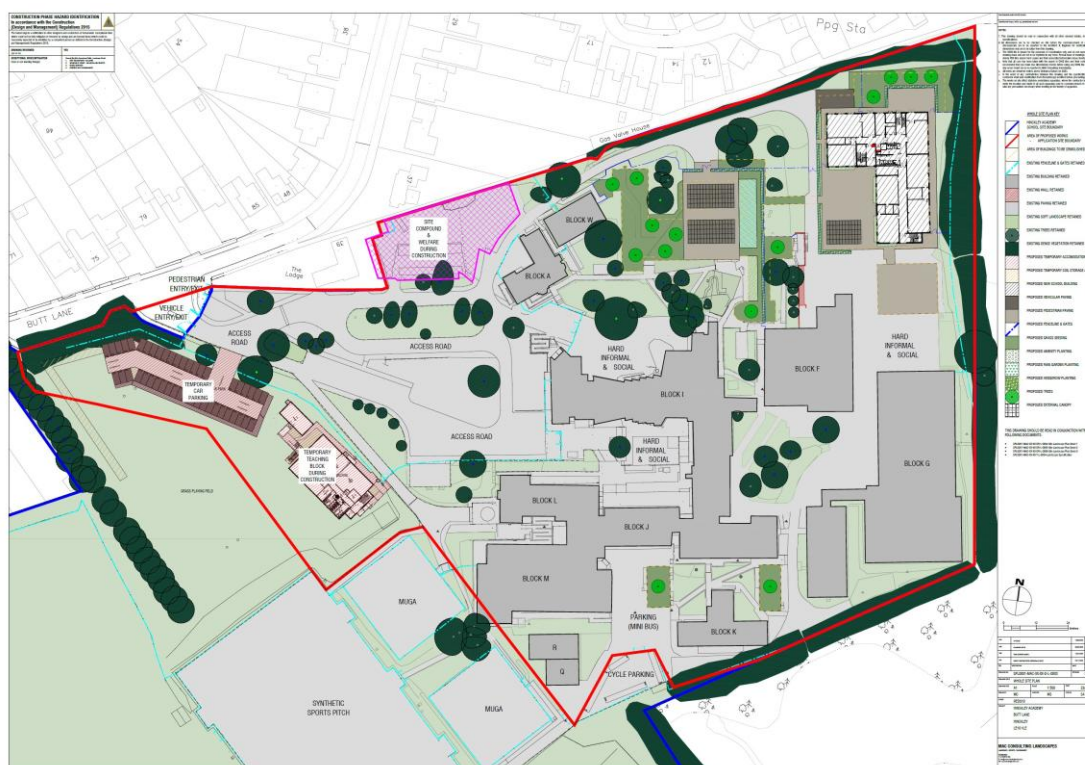


Figure 2: Proposed Site Plan

The proposed feature planting areas around the school site will incorporate amenity tree planting, species rich grass seeding, amenity shrub planting, rain garden planting, ornamental and mixed native hedgerows planting.

Habitat creation will be undertaken as part of the construction phase of the development and these habitats will form part of the overall school landscape setting thereafter. Drawings SPL0001-MAC-XX-XX-D-L-0008 Soft Landscape Plan and SPL-MAC-XX-XX-D-L-0202 Green Infrastructure Strategy in Appendix 1 show the location and extent of all proposed habitats and features that will be managed in accordance with this LEMP.

Habitat/Feature	Area (ha) /Length (km)/No.	Description
Grassland	0.77Ha	Creation of wildflower-rich grassland using the Germinal WFG20 Eco Species Rich Lawn to grassed areas around the perimeter of the site.
Ornamental Shrub Planting	0.012Ha	Mixed shrub and groundcover planting (including herbaceous perennials and grasses) around the new building
Hedgerow Planting Species rich	0.18Km	Native mixed species hedgerows planted as double standard rows along the site boundary. Species to comprise of field

		maple, horn beam, hazel, bird cherry, dogwood, alder, beech, spindle.
Native Trees	14 no.	Mixed size of native trees including Norway Maple, Alder, Silver Birch, Hawthorn, Scots Pine and Wild Cherry.
Extensive Biodiverse Green Roof	0.06Ha	A biosolar green roof is provided to the building with a mix of shade tolerant low growing vegetation including wildflowers, annuals, grasses and sedum.
Hardstandings – pavements, car parking, playgrounds, MUGA	0.355Ha	This comprises the functional external areas required for the school's successful operation including access road, car parking, pedestrian paths, external plant rooms, bin stores, playgrounds and cycle storage.
Bird Boxes – Building Mounted	2 no.	To be fixed to the building at suitable locations. Schwegler 1Sp Sparrow Terrace.
Bird Boxes – Tree Mounted	2 no.	To be fixed to existing retained trees on the site boundary at suitable locations. Schwegler 1B nest boxes.
Sparrow Terrace – Building Mounted	2 no.	To be fixed to the building at suitable locations. Schwegler 1B nest boxes.
Bat Boxes – Building mounted	2 no.	To be fixed to the building at suitable locations. Schwegler 1FF Bat Boxes.

4.0 MANAGEMENT AIMS AND OBJECTIVES

The following table sets out the aims and management objectives for all habitats and features to be created.

Ref	Habitat Type/Feature	Aim	Objective
S1 and S2	Grassland	Create and establish 0.77Ha of species-rich grassland as part of the soft landscaping around the school grounds. E11 Flowering Lawn Seed Mix to be used in general amenity areas and EH1 Hedgerow/Shade mix to be used in shaded areas as shown on drawing SPL0001-MAC-XX-XX-D-L-0008. Maintain in a moderate ecological condition.	- No net loss of species-rich grassland area. - Manage sward to promote high coverage of wildflowers (>20%). - Manage encroachment of scrub and undesirable weeds (nettles, docks and thistles) at threshold values (<5%).
S3	Extensive Green Roof	Create and establish a biodiverse green roof covering as part of a biosolar roof installation and maintain in a moderate ecological condition	- Low intensity management - No net loss of wildflowers, grasses or sedum planting. - Maintain a diverse range of flowering plant species including grassland wildflowers and sedum species.
S4	Ornamental Shrub Planting	Create and establish 0.012Ha of ornamental shrub planting as part of the soft landscaping around the building entrance. This habitat is not assigned an ecological condition.	- No net loss of native, sensory or ornamental shrub planting. - Maintain shrubs for biodiversity and amenity value. - Prune shrubs to minimise encroachment into adjacent areas.
S5	Rain Garden	Creation of sustainable drainage systems Manage local stormwater	Maintain the drainage system to ensure it functions as required.
H1	Single Species Hedgerow	Plant 0.091Km of native ornamental hedgerow within the school grounds and maintain in moderate ecological condition.	- Gap up and replace failed hedgerow stock. - Management to maintain aesthetic and screening value and enclosure to playground areas.
H2	Native Mixed Species Hedgerow	Create 0.085Km of hedgerow around the perimeter of the school grounds and maintain in moderate ecological condition.	- Low intensity management. - Gap up and replace failed hedgerow stock to maintain linear connectivity along length (prevent hedgerow from becoming defunct). - Establish high diversity in hedgerow ground flora.
T1	Native Trees	Plant and establish all proposed new trees and maintain in a moderate ecological condition.	- No net loss of newly planted trees. - Replace all failed, damaged or diseased tree stock.
SP1	Habitat Features	Install nest boxes and maintain in good physical condition.	Net increase in habitat features to improve opportunities for birds and invertebrates.

			• Carry out remedial works for habitat features if required.
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5.0 IMPLEMENTATION AND DELIVERY

The following section outlines the management prescriptions that will be implemented throughout the life of the proposed development to ensure that the aims and objectives noted in section 3.0 are achieved. Management timings are provided as a guide to the recommended months for carrying out proposed activities. Plant schedule is as shown on drawing SPL0001-MAC-XX-XX-D-L-0008 and included below:

PLANTING SCHEDULE - HINCKLEY SCHOOL							
SPECIES	COMMON NAME	KEY	HEIGHT (CM)	ROOT*	GIRTH (CM)	FORM	TOTAL PLANTS
AMENITY TREES							
ACER PLATANOIDES 'CLEVELAND'	(NORWAY MAPLE)	Ap	300-350	RB/CG	10-12	Selected Standard	3
ALNUS GLUTINOSA	(ALDER)	Ag	300-350	RB/CG	10-12	Selected Standard	2
BETULA PENDULA	(SILVER BIRCH)	Bp	300-350	RB/CG	10-12	Selected Standard	2
CRATAEGUS MONOGYNA	(HAWTHORN)	Cm	min 250	CG		Multi-Stem	2
PINUS SYLVESTRIS	(SCOTS PINE)	Ps	300-350	RB/CG	10-12	Selected Standard	1
PRUNUS AVIUM	(WILD CHERRY)	Pa	min 250	CG		Multi-Stem	4
		*Container Grown/Rootball to be determined subject to timing for ordering to final programme					
S1 SPECIES RICH LAWN GRASS SEEDING TO GRASS AREAS							
SEEDED AT 10g/M2		EL1 Flowering Lawn Seed Mix by Emorsgate Seeds (Overseed with EG1 Grass Seed at 10g/m2 to aid establishment)					
TOTAL AREA (M2):	1016						
S2 WILDFLOWER GRASS SEEDING TO SHADED AND MARGIN AREAS							
SEEDED AT 10g/M2		EH1 Hedgerow/Shade Wildflower Seed Mix by Emorsgate Seeds (Overseed with EG1 Grass Seed at 10g/m2 to aid establishment)					
TOTAL AREA (M2):	766						
S3 EXTENSIVE BIOSOLAR GREEN ROOF							
SEEDED AT 5g/M2		Zinco "Rockery Type Plants" Green Roof System Planting Mix					
TOTAL AREA (M2):	610						
S4 AMENITY PLANTING - BUILDING BORDERS							
		DENSITY	HEIGHT	ROOT	POT	MIX	TOTAL PLANTS
PLANT IN GROUPS OF SINGLE SPECIES OF BETWEEN 3-6		(PLANTS/M2)	(CM)		(I)	%	
TOTAL AREA (M2):	131						
HEBE RAIKAIENSIS	(SHRUBBY VERONICA)	5	20-30	C	5	25%	164
LONICERA NITIDA	(BOX LEAVED HONEYSUCKLE)	7	20-30	C	2	25%	229
LAVANDULA HIDCOTE	(ENGLISH LAVENDER)	7	20-30	C	2	25%	229
PERVOSKIA 'BLUE SPIRE'	(RUSSIAN SAGE)	7	20-30	C	2	25%	229
S5 RAIN GARDEN PLANTING							
		DENSITY	HEIGHT	ROOT	POT (I)	MIX	TOTAL PLANTS
PLANT IN GROUPS OF SINGLE SPECIES OF BETWEEN 5 - 10		(PLANTS/M2)	(CM)		(I)	%	
TOTAL AREA (M2):	170						
CAREX PENDULA	(PENDULOUS SEDGE)	7	20-30	C	2	15%	179
CORNUS SANGUINEA 'Midwinter Fire'	(DOGWOOD 'Midwinter Fire')	7	20-30	C	2	10%	119
HYDRANGEA ARBORESCENS	(HYDRANGEA 'Annabelle')	7	20-30	C	2	15%	179
IRIS PSEUDOCORUS	(YELLOW FLAG)	7	20-30	C	2	15%	179
JUNCUS EFFUSUS	(SOFT RUSH)	7	20-31	C	2	15%	179
LOBELIA CARDINALIS	(BOG SAGE)	7	20-32	C	2	15%	179
SAMBUCUS NIGRA	(COMMON ELDER)	7	20-33	C	2	15%	179
H1 ORNAMENTAL NATIVE HEDGE PLANTING							
		% MIX	HEIGHT (CM)	ROOT	AGE	FORM	TOTAL PLANTS
PLANT IN A DOUBLE STAGGERED ROW AT 8 PLANTS PER METRE							
TOTAL LENGTH (M):	91						
FAGUS SYLVATICA	(COMMON BEECH)	100%	125-150	B	2X	hedging plant	728
H2 NATIVE BOUNDARY HEDGE PLANTING							
		% MIX	HEIGHT (CM)	ROOT	AGE	FORM	TOTAL PLANTS
PLANT IN A DOUBLE STAGGERED ROW AT 6 PLANTS PER METRE							
TOTAL LENGTH (M):	85						
ACER CAMPESTRE	(FIELD MAPLE)	25%	40-60	B	1+1	Seedling	128
CARPINUS BETULUS	(HORNBEAM)	25%	40-60	B	1+1	Seedling	128
CORYLUS AVELLANA	(HAZEL)	25%	40-60	B	1+1	Seedling	128
PRUNUS PADUS	(BIRD CHERRY)	5%	40-60	B	1+1	Seedling	26
CORNUS SANGUINEA	(COMMON DOGWOOD)	5%	40-60	B	1+1	Seedling	26
ALNUS GLUTINOSA	(COMMON ALDER)	5%	40-60	B	1+1	Seedling	26
FAGUS SYLVATICA	(COMMON BEECH)	5%	40-60	B	1+1	Seedling	26
EUONYMUS EUROPAEUS	(SPINDLE)	5%	40-60	B	1+1	Seedling	26

Ref	Management Activity	Duration	J	F	M	A	M	J	J	A	S	O	N	D	Notes
Grassland															
S1, S2	Cultivate grassland creation areas by stripping 150 mm of topsoil and raking subsoil to create a medium tilth.	Once only (Year 1)			X	X	X	X	X	X	X	X			
S1, S2	Sow proposed wildflower (EH1 Emorsgate Seed Mix) and amenity (EL1 Emorsgate Seed Mix) areas with relevant seed mixtures at recommended sowing densities. Rake and roll to ensure contact with soil and encourage germination.	Once only (Year 1)								X	X	X			
S1, S2	Cut or pull weeds (docks, nettles and thistles) if they exceed threshold of 5% cover of grassland areas or individual stands greater than 5 m ² .	As required (Years 1 – 30)						X	X	X	X				
S1	Cut amenity grassland to a height of 20-50 mm monthly/bi-monthly (at least 10 times per year). Remove arisings from site at each cut.	Twice monthly (Years 1 – 30)				X	X	X	X	X	X				
S2	Undertake initial cut of wildflower grassland to reduce competition for germinating seeds. Cut grassland to a height of 70 – 100 mm, removing all arisings from site immediately to reduce nutrient build up that may favour coarse species within sward.	Once only (Year 1)									X	X			Cutting should occur mid-September to early-October.
S2	Cut wildflower grassland to a height of 70-100 mm. Arisings to be left for a maximum of one week then removed from site.	Once annually (Years 2 – 30)								X	X				Cutting should occur mid-August to early-October, after seeding of desirable species.
S2	Lightly mow wildflower sward (as required) down to 70-100 mm throughout winter months and remove arisings.	As required (Years 2 – 30)	X	X	X									X	

Ref	Management Activity	Duration	J	F	M	A	M	J	J	A	S	O	N	D	Notes
Mixed Shrub															
S4	Lightly cultivate soils and plant relevant mix of native, 'sensory' and ornamental shrubs to recommended specifications as per drawing SPL0001-MAC-XX-XX-D-L-0008. Do not plant if soil is waterlogged or frozen.	Once only (Year 1)			X	X	X				X	X			Most perennials and shrubs are best planted in either spring or autumn.
S4	Water during prolonged dry periods to maintain healthy growth.	As required (Years 1 – 30)					X	X	X	X					
S4	Carry out litter pick to ensure visual and amenity benefits are maintained.	As required (Years 1 – 10)	X	X	X	X	X	X	X	X	X	X	X	X	
S4	Top-up mulch to help keep planting beds clear of weeds.	Once annually (Years 2 – 30)		X											
S4	Prune vegetation once established to prevent overhanging on footpaths/hardstanding and to achieve/retain desired dimensions and form, leaving a well-balanced natural appearance. Arisings to be removed.	Once annually (Years 2 – 30)	X	X								X	X	X	Pruning times should be tailored towards species, i.e. after flowering and should avoid the bird nesting season.
S4	Regularly remove any plants that are poisonous or toxic from sensory and horticultural areas, if there is risk of consumption.	As required (Years 2 – 30)	X	X	X	X	X	X	X	X	X	X	X	X	
Trees															
T1	Prepare ground and plant tree stock to recommended specifications as per drawing SPL0001-MAC-XX-XX-D-L-0008. Stakes should be driven into the ground prior to planting trees to allow tree roots to be arranged around the stake, minimising root damage. Loosely fix trees to stakes with a flexible tie. Do not plant if soil is waterlogged or frozen.	Once only (Year 1)	X	X	X								X	X	Trees should not have their roots exposed before being planted.
T1	Replace any failed planting stock within first five years of establishment. If for any reason large-scale losses of trees occur, then an arboricultural assessment may be required to determine reasons for failure and identify appropriate remedial action.	As required (Years 1 – 5)										X			Trees should be replaced like-for-like with specimens of similar size.

T1	Stakes, ties and tree guards installed at time of planting to be checked regularly during establishment phase and loosened, tightened, or replaced as necessary. Stakes should be removed in Year 3 and tree protection removed in Year 5 if no longer required.	As required (Years 1 – 5)	X	X	X	X	X	X	X	X	X	X	X	X	X	Any damaged or unnecessary tree guards to be removed from site.
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Ref	Management Activity	Duration	J	F	M	A	M	J	J	A	S	O	N	D	Notes
T1	Minimum intervention strategy once trees are established. Tree condition to be reviewed annually to ensure no damaged/dead trees pose a health and safety risk.	Annually (Years 5 – 30)	X	X	X	X	X	X	X	X	X	X	X	X	
Hedgerow - Ornamental															
H1	Prepare ground and plant hedging stock to recommended specifications as per drawing SPL0001-MAC-XX-XX-D-L-0008. At least five woody species to be planted per 30 m to establish hedgerow.	Once only (Year 1)	X	X	X								X	X	Hedgerow to be planted as a double standard row to establish a total width of approx. 1.0 m.
H1	Replace any failed planting stock within first five years of establishment.	Years 1-5										X	X		To ensure no loss of new hedgerow habitat. Vegetation removal should occur from October to avoid nesting bird season.
H1	Newly planted sections of hedgerows to be clipped after the first year of establishment to encourage bushy growth.	Year 1	X	X								X	X	X	Time to avoid bird nesting season.
H1	Water newly planted sections of hedgerow as necessary and during dry periods.	Year 1									X	X			To ensure survival during establishment period.
H1	Infill gaps or poor hedgerow structure with native woody species, as required, to ensure no net loss of hedgerow habitat.	Annually (Years 3 – 30)									X	X	X		To ensure no net loss of hedgerow habitat.

H1	Once established, trim ornamental hedgerows to a height of 1 m high x 1 m wide.	Annually (Years 3-30)	X	X									X	X	X		Timing to avoid nesting bird season. To maintain amenity and landscape value of the hedgerows.
Hedgerow – Species Rich																	
H2	Prepare ground and plant hedging stock to recommended specifications as per drawing SPL0001-MAC-XX-XX-D-L-0008. At least five woody species to be planted per 30 m to establish hedgerow.	Once only (Year 1)											X	X	X		Hedgerow to be planted as a double standard row to establish a total width of approx. 2 m.
H2	Clip half the height of newly planted sections of hedgerow after the first year of establishment to help roots establish and encourage bushy growth.	Once only (Year 2)	X	X										X	X	X	Time to avoid bird nesting season.
H2	Once established, cut 1/3 of hedgerows to a minimum height of 2 m high and 2 m wide on rotation to provide varying hedgerow structure for the benefit of biodiversity.	Annually (Years 5 – 30)	X	X									X	X	X	X	Time to avoid bird nesting season.
H2	Where possible, maintain a minimum 2 m wide buffer strip around hedgerows where grass is not cut to promote a hedgerow 'ecotone' for use by small mammals, birds and invertebrates.	Annually (Years 5 – 30)											X	X			To promote a transition area between habitats
H2	Infill gaps or poor hedgerow structure with native woody species, as required, to ensure no net loss of hedgerow habitat.	Annually (Years 5 – 30)											X	X	X		To ensure no loss of hedgerow habitat
Species Features																	
SP1	Install nest boxes at a minimum height of 2 – 3 m to prevent disturbance, with entrances angled away from the prevailing wind, direct sunlight and, where possible, slightly downward facing to give protection against the rain.	Once only (Year 1)	X												X	X	Exact locations should be determined by a suitably qualified ecologist when features are installed. Time installation to give birds

																	plenty of time to get used to boxes prior to nesting season
SP1	Inspect bird boxes and undertake any necessary maintenance or replacement.	Annually (Years 2 - 30)	X											X	X	X	Maintenance/replacement of bird boxes should take place outside the nesting bird season. Note that unhatched eggs can only be legally removed between October and January.
SP1	Inspect bat boxes from ground level and undertake any necessary maintenance or replacement.	Annually (Years 2 - 30)												X			Maintenance/replacement of bat boxes should take place in October which is outside the maternity and hibernation periods for bats. Should bat boxes need to be physically disturbed or repaired, they should first be checked by a licenced bat worker to confirm that no bats are present.

SP1	Inspect sparrow terraces and undertake any necessary maintenance or replacement.	Annually (Years 2 - 30)	X											X	X	X	Maintenance/replace ment of bird boxes should take place outside the nesting bird season. Note that unhatched eggs can only be legally removed between October and January.
SP1	Inspect brick boxes and undertake any necessary maintenance or replacement.	Annually (Years 2 - 30)	X											X	X	X	Maintenan ce/replace ment of bird boxes should take place outside the nesting bird season. Note that unhatched eggs can only be legally removed between October and January.
Green Roof																	
S3	Water during prolonged hot, dry periods.	As required Annually (Years 1 – 30)							X	X	X						Watering point should be available on the roof.
S3	Ensure ongoing maintenance of roof infrastructure to maintain drainage and function of green roof.	As required Annually (Years 1 – 30)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	To manufactur er's recommen dations
S3	Joints must offer open access for inspection, maintenance and upkeep.	Quarterly (Years 1-30)		X	X	X	X	X	X	X	X	X					General mainten ance of the waterproofi ng membrane

S3	Any areas or joints (such as vents, ducts, drains and expansion joints, etc) where the roof is penetrated should be regularly inspected and kept free of roots, leaves, rocks and debris.	Quarterly (Years 1-30)		X	X	X	X	X	X	X	X	X	X				General maintenance of the waterproofing membrane
S3	Remove woody species and undesirable plants manually by hand, as required when they colonise. Control of populations of plants through removal and cutting. Bare areas are to be left to naturally regenerate	Annually (Years 1 – 30)				X	X				X	X					Avoid growth of unintentional vegetation which could be detrimental to the intentional planting regime, biodiversity and the building fabric
S3	A vegetation free zone 30 cm around the perimeter of the roof and around all drainage locations is recommended. Zone typically has rocks or gravel.	Quarterly (Years 1-30)		X	X	X	X	X	X	X	X	X	X				Plants are susceptible to insufficient drainage in the soil.
S3	Addition of substrate or reprofiling as required.	As required Annually (Years 1 – 30)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	To maintain substrate levels and variety of depths.

Ref	Management Activity	Duration	J	F	M	A	M	J	J	A	S	O	N	D	Notes
Rain Garden															
S5	Remove litter and debris	Monthly	X	X	X	X	X	X	X	X	X	X	X	X	To keep the water clean.
S5	Manage Wetland Plants	Monthly	X	X	X	X	X	X	X	X	X	X	X	X	To ensure the wetland plants

																	establish well and do not choke the drainage system.
S5	Inspect inlets, outlets and overflows for blockages and clear if required.	Monthly	X	X	X	X	X	X	X	X	X	X	X	X	X	X	To ensure the drainage system functions as designed and does not flood the surrounding area.
S5	Manage bankside vegetation and remove nuisance plants.	Monthly	X	X	X	X	X	X	X	X	X	X	X	X	X	X	To prevent unwanted establishment and keep banks unobstructed.
S5	Tidy all dead growth before start of growing season.	Spring			X	X											To remove excess nutrients and prevent unwanted establishment

6.0 MONITORING AND REVIEW

The LEMP will be subject to ongoing monitoring and review. This will ensure that:

- The provisions of the management actions are fulfilled in accordance with the terms of habitat management proposals; and,
- The management remains appropriate and adaptable to achieve the target habitat types and condition.

To inform this approach, Management Audits and Field Surveillance Visits will be completed throughout the management period to provide information about the delivery of the management works and the status of the habitats. All management actions will be monitored against management prescriptions or conservation objectives to demonstrate that the aims of the LEMP are being fulfilled.

Monitoring

A Field Monitoring Report will be compiled in Years 1, 3, 5 and every five years thereafter. The reports will be informed by the following:

- Management Audits – an audit of management works undertaken by the site manager/landowner, including collation of evidence to demonstrate that the works have been carried out.
- Field Surveillance Visits – undertaken by a suitably qualified ecologist, comprising a habitat survey completed using a standard habitat survey method (e.g., UK Habitat Classification) and a habitat condition assessment using standardised condition criteria.

The results of the audits and surveillance visits will be used to establish if the target habitat type, extent and condition have been fulfilled as described in section 3.0.

The party responsible for implementation of monitoring is The Futures Trust and/or their appointed contractor/ecologist.

Management Review

A review of the LEMP will be undertaken in Years 1, 3, 5 and every five years thereafter to ensure that the target habitat or condition thresholds are being achieved. Information from the Field Monitoring Reports will feed into the management reviews to determine if the management actions proposed remain appropriate to achieve the aims of the plan and/or what, if any, adaptations will be needed to remediate any shortfalls. This could include amendments to the timings or prescriptions of the management plan, subject to the provision of evidence, to justify the relevant management change.

If requested, Field Monitoring Reports will be submitted to the Local Planning Authority for approval along with any proposed amendments to the management plan.

7.0 APPENDIX 1 – SOFT LANDSCAPE PLANS

8.0 APPENDIX 2 - LANDSCAPE MAINTENANCE AND MANAGEMENT SCHEDULE

7.1 Annual Maintenance and Management Specifications:

- **Existing Mature Trees and Vegetation;** inspect trees annually for dead and dying branches during the Spring of every year. All existing trees are to be inspected every year for dead, dying, or damaged branches. Any dead, dying, or damaged branches should be cleaned from the tree trunk, removing all dead wood back to the tree trunk;
- **Proposed Tree Planting Mulching;** Trees within Grassland should be maintained with a mulch zone 500 – 700mm diameter to the base of the trees. Mulch layer to be checked annually;
- **Proposed Tree Planting Defects;** Replace dead trees as required. Check annually;
- **Hedgerow - Trimming and Pruning;** Light trimming of hedgerow transplants to stimulate vigorous and dense growth; carry out annually during Spring;
- **Native Understorey Shrub Planting – Trimming and Pruning;** Light trimming and pruning to stimulate vigorous and dense growth and prevent overgrowth into visibility splay, carry out annually during Spring;
- **Native Understorey Shrub Planting – Replacement Planting;** Replace dead trees / shrubs as required within the first 5 years of establishment.
- **Meadow Grassland Areas;** Annual Cutting; October of each maintenance year;
- **Biodiverse Green Roof (School Building);** Spring fertiliser application; late autumn strimming of unwanted vegetation;
- **Rain Garden:** Remove and trim all plant from water inlet channels and mulch; Scarify and spike topsoil to improve infiltration and break up silt deposits; pruning back shrubs in autumn if required
- **Fencing:** All fencing and gates to be checked for damage/wear and repaired/repainted, as necessary.
- **Play/Sports Equipment:** All equipment to be checked for damage/wear and repaired as necessary as per manufacturer's instructions.
- **Site Furniture:** All external furniture to be checked for damage/wear and repaired as necessary as per manufacturer's instructions.
- **Asphalt Paving:** All paved areas to be checked for damage/wear and repaired as necessary; Litter picking and clearance from paved areas shall take place each maintenance visit and litter removed from site.

7.2 Spring and Summer Maintenance and Management Specifications:

- **Proposed Tree Planting Watering;** Nursery Stock Tree Planting to be watered fortnightly throughout May / June / July / August / September; fortnightly - 20 litres per tree at each watering visit; and as deemed necessary after the establishment period, only where natural precipitation levels are insufficient; During any dry period of the first 1 – 2 years following planting all hedge plants shall be watered 3 times a week applying 20 litres of water at each visit.
- **Proposed Tree Planting Tree Guards and Tree Ties;** Check fitting of tree guards and rubber tree ties including tree stakes; check during Spring;
- **Proposed Tree Planting Pruning;** Prune trees for dead and damaged branches bi-annually; Spring when the trees are in leaf;
- **Hedgerow - Weeding;** Maintain hedgerow planting areas weed free; check during Spring;
- **Hedgerow - Mulch Top Up;** Maintain mulch to all hedgerow planting areas; check during Spring;

- **Hedgerow - Trimming and Pruning;** Light trimming of hedgerow transplants to stimulate vigorous and dense growth; carry out annually during Spring;
- **Hedgerow - Shrub Guards;** Check and refit where necessary all hedgerow shrub guards, check during Spring;
- **Hedgerow - Planting Watering;** Fortnightly during May / June / July / August / September for establishment of new hedgerow planting; and as deemed necessary after the establishment period, only where natural precipitation levels are insufficient; During any dry period of the first 1 – 2 years following planting all hedge plants shall be watered 3 times a week applying 20 litres of water at each visit.
- **Hedgerow - Litter Collection;** Collection on a fortnightly basis during Spring;
- **Hedgerow - Long-term Management;** Maintain hedgerows at between 1.5m –2.0 metres height as specified above; check during Spring;
- **Soft Landscape Planting Areas; Weeding;** Maintain soft landscape areas weed free; check during Spring: Check throughout the Spring / Summer repeat where necessary;
- **Soft Landscape Planting Areas; Plant Debris:** Remove and trim all plant debris during monthly maintenance visits throughout the Spring / Summer;
- **Soft Landscape Planting Areas Mulch Top-Up;** Maintained mulch levels to a consistent depth of 75 mm; check during Spring;
- **Soft Landscape Planting Areas Watering;** Water plant material fortnightly during the summer season for the first two years of establishment; and as deemed necessary after the establishment period, only where natural precipitation levels are insufficient; During any dry period of the first 1 – 2 years following planting all hedge plants shall be watered 3 times a week applying 20 litres of water at each visit.
- **Soft Landscape Planting Areas; Pruning and trimming;** lightly prune / trim plant materials to all soft landscape areas during Spring;
- **Native Understorey Shrub Planting; Weeding;** mulched planting pits to be kept clear of weeds to the base of each plant. Planting pits to be cleared of weeds bi- annually; Spring and Autumn;
- **Native Understorey Shrub Planting; Trimming and Pruning;** during the first three years of establishment the native shrubs should be lightly trimmed to encourage vigorous and dense re-growth. Trimming during the first three years of establishment should be undertaken annually; during the Spring;
- **Native Understorey Shrub Planting; Watering;** transplants should be watered fortnightly throughout the summer season in the first three years of establishment during May / June / July / August / September. Quantity of water to be 10 litres per metre square during each visit only; During any dry period of the first 1 – 2 years following planting all hedge plants shall be watered 3 times a week applying 10 litres of water at each visit.
- **Native Understorey Planting; Shrub Guards;** to be checked and refitted to all transplants. Shrub guards should be checked bi-annually.
- **Meadow Grassland Areas; Litter Collection;** Collection on a fortnightly basis during Spring;
- **Meadow Grassland Areas; Initial Spring Cut;** Monthly cutting throughout the Spring and Summer for initial 1st season (thereafter annual maintenance cut; October);
- **Grassed Areas; Grass Cutting;** Initial cut early Spring; Regular cutting fortnightly during April / May / June / July / August / September;
- **Grassed Areas; Bare Patches;** Re-seeding during Spring;
- **Grassed Areas; Fertiliser;** Bi-annually undertake during Spring;
- **Biodiverse Green Roof (School Building);** Spring fertiliser application; watering if required during drought
- **Rain Garden:** Maintained mulch levels to a consistent depth of 75 mm; Water plant material fortnightly during the summer season for the first year of establishment; and

as deemed necessary after the establishment period, only where natural precipitation levels are insufficient; remove self-seeded invasive species and woody seedlings check bi-annually

7.3 Autumn Maintenance and Management Specifications:

- **Proposed Tree Planting Trees within Grassland;** Maintain a weed-free zone at the base of Nursery Stock Trees; check during Autumn;
- **Proposed Tree Planting Tree Guards and Tree Ties;** Check fitting of tree guards and rubber tree ties including tree stakes; check during Autumn;
- **Proposed Tree Planting Tree Pruning;** Prune trees for dead and damaged branches check during Autumn whilst the trees are still in leaf;
- **Proposed Tree Planting; Weeding;** Trees within Grassland; to be maintained with a weed and grass-free area at the base of each tree to be undertaken during Autumn;
- **Hedgerow - Weeding;** Maintain hedgerow planting areas weed free; check during Autumn;
- **Hedgerow - Mulch Top Up;** Maintain mulch to all hedgerow planting areas; check during Autumn;
- **Hedgerow - Shrub Guards;** Check and refit where necessary all hedgerow shrub guards, check during Autumn;
- **Hedgerow - Litter Collection;** Collection on a fortnightly basis during Autumn;
- **Hedgerow - Long-term Management;** Maintain hedgerows at 1.5 - 2.0 metres height as specified above; check during Autumn;
- **Soft Landscape Planting Areas Mulch Top-Up;** Maintained mulch levels to a consistent depth of 75 mm; check during Autumn;
- **Soft Landscape Planting Areas; Pruning and trimming;** lightly prune / trim plant materials to all soft landscape areas during Autumn;
- **Native Understorey Planting; Weeding;** mulched planting pits to be kept clear of weeds to the base of each plant. Planting pits to be cleared of weeds bi- annually; Spring and Autumn;
- **Meadow Grassland Areas; Annual Cutting;** October of each maintenance year;
- **Meadow Grassland Areas; Litter Collection;** Collection on a fortnightly basis;
- **Grassed Areas; Grass Cutting;** Regular cutting fortnightly during September / October; Final Cut; November;
- **Grassed Areas; Bare Patches;** Re-seeding during Autumn;
- **Grassed Areas; Fertiliser;** during Autumn;
- **Biodiverse Green Roof (School Building);** Strimming unwanted vegetation
- **Rain Garden;** Weeding; Mulch top up; Pruning; Clear water inlets.
- **Asphalt Paving;** Remove leaf drop weekly during autumn;

7.4 Long-Term Maintenance and Management Specifications:

- **Proposed Tree Planting Tree Guards and Tree Ties;** Check fitting of tree guards and rubber tree ties including tree stakes; check during Spring / autumn; Remove all guards, stakes, ties upon successful establishment. Tree guards can be removed after 3-5yrs, stakes and ties removed after 5-7yrs.
- **Proposed Tree Planting Pruning;** Continue to prune trees for dead and damaged branches bi-annually; Spring/ autumn when the trees are in leaf;
- **Native Hedgerow - Long-term Management;** Maintain hedgerows at specified height; check bi-annually; Spring and Autumn.

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