

Landscape Ecological Management Plan



The Limes, Fallowfield
23rd October 2024



**Tyler
Grange**

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Admin QA	Author	Checked	Approved
	Elliot Grundy MSc	John Moorcroft BSc MSc MCIEEM CEnv.	John Moorcroft BSc MSc MCIEEM CEnv

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Summary

- S.1. This Landscape and Ecological Management Plan (LEMP) has been prepared by Tyler Grange Group Ltd. (TG) on behalf of Hydrock – Manchester, in relation to land at Fallowfield Campus, Whitworth Ln, Manchester, M14 6YY (OS Grid Reference SJ 85898 94336), hereafter referred to as ‘the site’. The application site measures approximately 0.47 hectares (ha).
- S.2. A full planning permission has been obtained for a new build development to relocate the existing UoM Limes Building. Consisting primarily of a two storey steel frame structure, housing the UoM Fallowfield Campus catering and estates management departments, with associated parking, service yard and landscaping.
- S.3. The habitats to be created and managed are as follows: amenity grassland; native mixed scrub; and scattered trees.
- S.4. This report provides the initial prescriptions required to correctly create the specified habitats within the site. It also evidences how the monitoring and management will ensure the retained, created and enhanced habitats reach their target condition, as detailed within the accompanying Statutory Biodiversity Metric, and Ecological Impact Assessment (EcIA) Report (ref: 16638/R01).
- S.5. **Table 1.** below summarises the content of this document.

Development Site Owner	Hydrock - Manchester
Organisation responsible for delivery of the LEMP	Hydrock - Manchester
Period covered within LEMP	0 - 30 Years
Development Site Planning Authority	Manchester City Council
Biodiversity Net Gain Report and Statutory Metric Reference	16638_The_Statutory_Biodiversity_Metric_Calculation_Tool

- S.6. With the successful implementation of the measures detailed in this report and remedial measures dictated by future monitoring, is it considered that the habitat retention and creation measures at Fallowfield Campus would deliver and maintain the necessary number of biodiversity units to achieve a minimum 10% net gain in biodiversity value associated with the development project.



Section 1: Introduction and Site Context

Purpose

- 1.1. This Landscape Ecological Management Plan (LEMP) has been prepared by Tyler Grange Group Ltd. (TG) on behalf of Hydrock – Manchester, in relation to land at Fallowfield Campus, Whitworth Ln, Manchester, M14 6YY (OS Grid Reference SJ 85898 94336). It evidences how the monitoring and management will ensure the retained, created and enhanced habitats reach their target condition, as detailed within the accompanying Statutory Biodiversity Metric, and Ecological Impact Assessment (EclA) Report (ref: 16638/R01). Detail is also given regarding the organisations responsible for the funding, delivery, monitoring and remedial measures set out in this document.
- 1.2. This LEMP has been produced to accompany the planning application as part of the BREEAM assessment, to achieve maximum ecological credits under LE05.
- 1.3. The following document will provide detail regarding the long-term management of the proposed habitats within the site for a period of 30 years. The scale and type of habitats discussed in this report are further detailed in **Appendix 1**.

Coverage

- 1.4. This LEMP relates to habitats retained/created/enhanced within the land at Fallowfield Campus, the extent of which is shown below in **Figure 1** in **Section 2** of this report. Development proposals for the site are detailed within the Proposed Site Plan (LIMES-BUT-MS-R3-DR-A-04101-Proposed Site Plan (Complete) 1) shown in **Appendix 1**.
- 1.5. This report set out details of the initial habitat interventions and subsequent long-term management of habitats, and is set out as follows:
 - **Section 2** describes the site context including details of habitats of ecological value that will be managed under this LEMP;
 - **Section 3** sets out management objectives for the LEMP and describes constraints that may influence management prescriptions;
 - **Section 4** describes the management prescriptions to achieve objectives set out in Section 3 as well as setting out monitoring and remedial actions where necessary;
 - **Section 5** evaluates the change in ecological value onsite as a result of the implementation of the proposed habitats on-site;
 - **Section 6** outlines the monitoring schedule and remedial measures which may be identified during the course of the management period; and
 - **Section 7** describes who will be responsible for implementing the plan and how arrangements for funding will be organised.
- 1.6. For the purposes of this report, Year 0 is defined as the year of the initial habitat interventions and Year 1 refers to the following year/planting season. Implementation of the plan will be iterative in the management prescriptions and will be refined as necessary based on the condition of the site and outcomes following the first cycle of the implemented management and ongoing monitoring.
- 1.7. This report must be read alongside the submitted Biodiversity Metric, Ecological Impact Assessment (EclA) Report (ref: 16638/R01) and alongside the notes provided on the Proposed Site Plan (**Appendix 1**).



Section 2: Site Context

- 2.1 This section provides context for the development site (within the redline boundary) and describes the baseline habitats and ecological resources of the site.

Site Location

- 2.2 The extent of the development site is denoted by the red line boundary as shown in **Figure 1** below and is centred on (OS) Grid Reference SJ 85898 94336. The surrounding landscape is formed of a mosaic of built form and greenspace in the form of playing fields associated with the university of Manchester and Manchester Grammar School. The wider landscape is largely formed of residential housing.



Figure 1 – Site Boundary © Google Aerial Imagery

Existing Land Tenure and Management

- 2.3 All land within the development site is owned by and within the control of Hydrock – Manchester.

Baseline

- 2.4 Full ecological baseline details of the development site are given in the accompanying ecological impact assessment report **16638/R01**, which should be read alongside this report for full context. **Table 2** below summarises the baseline ecological/ground conditions of the site.



Statutory/Non-Statutory Sites	Rochdale Canal Special Areas of Conservation (SAC) is within 10 km of the site, and no statutory or non-statutory designated sites within 2 km of the site. There is no connecting habitat which links the site to the SAC. As a result of this, no potential impacts are anticipated on the SAC.
Protected and Notable Species	The following key faunal groups have been assessed as likely to use the site: • Amphibians – The site mainly comprises habitats of negligible suitability for great crested newts, the site is considered unlikely to support GCN. • Bats – boundary trees and scrub likely support low numbers of foraging and commuting bats and all the trees and buildings within and adjacent to the site possessed negligible bat roosting potential; • Breeding birds – The small number of trees and introduced shrub on-site have the potential to support common and widespread nesting bird species. The site is considered to be unsuitable for ground nesting birds as it is primarily comprised of hardstanding, it is considered unlikely that the site would support any important populations of notable bird species, however any losses in suitable habitat will be compensated through the implementation of the detailed landscaping strategy; • Hedgehog – <i>Erinaceus europaeus</i> may utilise the scrub vegetation found throughout the site. Therefore, Precautionary Working Methods during construction and implementation of hedgehog highways will maintain habitat links to adjacent land and limit impacts to individuals that may use the site. • European badger <i>Meles meles</i>, brown hare <i>Lepus europaeus</i>, dormouse <i>Muscardinus avellanarius</i>, water vole <i>Arvicola amphibius</i> and otter <i>Lutra lutra</i>: negligible potential for these species to utilise this site – no further action is required.
Baseline Habitats	Habitats of negligible ecological importance to be lost to the development, such as developed land, require no specific mitigation. Habitats of low ecological importance to be lost, such as scattered trees, will be more than compensated for through replacement planting in the form of native species tree, hedgerow, and native scrub planting.
Current Use	The site is currently used as university parking.
Irreplaceable Habitats	There are no irreplaceable habitats present within the site boundary, Habitats of ecological importance to be lost, will be more than compensated for through replacement native species planting.

Table 1 – Site Baseline Summary

Other Key Considerations

- 1.1 Aside from the faunal groups identified on-site, the principal purpose of this document and habitat management is to ensure the landscape detail delivers the benefits and target conditions assessed within the Defra biodiversity metric for the site.



Section 3: Management Objectives and Biodiversity Net Gain

Management Considerations

- 3.1. All management works should take place within daylight hours to avoid the disturbance of foraging and commuting bats, or if unavoidable maintain dark corridors around the site;
- 3.2. All tree, hedgerow and shrub cutting works should occur outside of the 'core' nesting bird period (September – March inclusive). Due diligence is also required by maintenance staff to avoid the disturbance of nesting birds, which can also nest outside the core period. Should vegetation clearance works be required between the months of March to September inclusive, a Suitably Qualified Ecologist (SQE) should inspect the vegetation to assess presence of nesting birds.
- 3.3. Contractors undertaking any hedgerow, shrub or treeline management works should exercise due diligence when cutting any ground covering vegetation during the winter months (November-March), by completing a pre clearance check for hibernating hedgehogs.

Management Objectives

- 3.4. Considering the habitats and key fauna present within the site, the following objectives for nature conservation management have been set:
 - Objective 1: To protect and enhance existing retained habitats on site;
 - Objective 2: To create a diverse range of new habitats on site;
 - Objective 3: To ensure the continuance of opportunities for key faunal species identified on site;
 - Objective 4: To monitor the efficacy of nature conservation management through regular assessment of habitat establishment; and
 - Objective 5: To create high ecological value habitats in appropriate condition according to the targets set in the Defra statutory biodiversity metric.

Key Faunal Groups and Management Requirements

- 3.5. The detailed landscape strategy will retain where possible suitable habitat for foraging and commuting bats, birds, hedgehog and common amphibians, as well as nesting habitat for birds.
- 3.6. The creation of landscape buffers, with additional hedgerow, shrub and tree planting, will enhance these features and ensure commuting, foraging and nesting resources are maintained and enhanced within the site for local fauna.
- 3.7. Hedgehog highways will also be created through the site to maintain the permeability of the site for hedgehog.



Section 4: Management Prescriptions

- 4.1. The management prescriptions, including timings and responsibilities for the site, are set out in **Table 4.1** within the subsequent pages of this section of the report. The LEMP will be implemented in stages as indicated in the timings column in accordance with the management task, as will the appropriate timing of required habitat maintenance once established.
- 4.2. It will be the responsibility of the controlling body (be that the existing landowners, or any subsequent owners or associated nominated body) to employ a suitable contractor to undertake the management prescriptions set out in Table 4.1 and to appoint a Suitably Qualified Ecologist (SQE) to undertake all monitoring for the duration of the LEMP.
- 4.3. The prescriptions seek to cover a period equating to a 30-year period and include both the start-up works and continued management post intervention. This is inclusive of primary establishment of habitats and subsequent management regimes. These actions are set out under the individual objective headings set out in **Section 3**.
- 4.4. It is expected that the initial habitat groundworks will commence in Autumn 2024, meaning that Year 1 will be the growing season (Apr – Sep) of 2025.
- 4.5. The habitat compartments referenced are indicated on drawing **16638/P02** appended to this report.



Habitat / Management Item	Rationale for Feature Creation/Management	Management Tasks	Monitoring Tasks	Timings
Amenity Grassland	To create suitable habitats for small mammals, particularly hedgehog. Providing areas for public recreation and landscape features within residential gardens and some sections of site boundary	<u>Soil Preparation and Cultivation</u> Topsoil should generally be a minimum of 400mm depth over planting beds and graded to fall. Imported topsoil to be to BS3882:2007 Existing Topsoil is to be treated with selected, non-residual, translocated herbicide prior to planting or screefed to remove unwanted Vegetation, removing from site. All planting areas to then have 50mm depth planting compost spread evenly over surface and worked into top 150mm, removing all stones greater than 50mm dia. roots and other debris. Ensure subsoil is free-draining, if necessary carrying out ripping to a suitable depth, although avoid areas beneath existing protected trees. All turf/seeded areas to be cultivated to a fine tilth and levelled , removing any stones greater than 25mm diameter, together with any other debris. Pre-seeding fertilizer applied at 35gms per m2 to ornamental turfed areas. Prior to hand over areas are to be managed to create a uniform and dense sward, free of weeds. All planting areas are to be maintained reasonably free of weed growth and litter, with all dead, dying and otherwise defective plant material to be replaced prior to handover. Please note that we have made every effort to avoid use of poisonous plant materials on the site; however, it should be noted that consumption of any ornamental plant may lead to adverse symptoms. <u>Seeding</u> Sowing shall be carried out during calm weather. All sowing is at the contractor's own risk and any areas where germination fails shall be re-seeded at the contractor's own expense.	A suitably qualified ecologist to undertake a habitat survey, with Defra Statutory Metric Biodiversity Net Gain condition assessment to monitor enhancement measures, habitat condition and to specify any remedial actions or changes to the management plan that may be necessary. This will include checking for invasive plant species returning. Monitoring will be required in Years 2, 3 and 5, 10, and 30 post-development.	Cutting completed as required throughout the growing season (Spring – Autumn)



		The operation should be carried out in equal sowings and transverse directions and the seed shall be raked or harrowed in. Sowing shall be at the rate of 50 grammes per square meter and overseeding shall be at a rate of 20 grammes per square meter. <u>First Cut</u> When the grass is 100mm high, it shall be cut down to 50mm so as to avoid root pulling. If the grass has been allowed to grow any longer than 100mm then the cuttings shall be raked off and taken off site. <u>Second Cut</u> When the grass is 65mm high a second cut shall be carried out using a rotor mower. No more than one third of the foliage must be removed. <u>Subsequent Cuts</u> Thereafter, when the grass grows to 100mm high, it shall be cut down to 50mm with a mower, until the end of the maintenance period, or longer if so directed. The grass shall be cut on a regular basis if so directed.		
Tree Planting	To create opportunities for wildlife in particular nesting birds and roosting bats as well as a range of aesthetics for public recreation and landscape features.	Trees to be planted in pits 900x900x600mm or dimensions of root ball, whichever is greater with an addition 25L planting compost. All trees to be underground- guyed. Where planted in grass areas to have 900mm diameter. area free of turf and mulched. Native hedge and trees to be rabbit proofed. Immediately following planting, areas are to be watered to field capacity and mulched with 50mm depth pulverized bark. <u>Initial aftercare (years 1 – 5)</u> Annual monitoring of trees in growing season and replacement of any dead / unsuccessful / vandalized trees in next growing season.	A suitably qualified ecologist to undertake a habitat survey, with Defra Statutory Metric Biodiversity Net Gain condition assessment to monitor enhancement measures, habitat condition and to specify any remedial actions or changes to the management plan that	December-February Growing season



		Weeding will be undertaken during monthly maintenance visits during the growing season, whereby weeds will either be spot treated with a suitable herbicide or hand weeded. During the monthly maintenance visits for the first 5 years, all stakes/ties/rabbit guards will be readjusted as necessary. Watering of trees will require three monthly visits in growing season for first 5 years. An additional visit per month may be required for trees in hard surfaces during periods of drought – to be informed by monthly maintenance visits. The following will apply: • Last week in March – 1 visit; • April – September – 3 visits each month (more in periods of drought); • Early October – 1 visit <u>Years 5-10</u> At year 5 the growth of new trees should be assessed and formation pruning undertaken as necessary and stakes and strimmer guards removed at year 5. Any trees which are vandalised or otherwise fail between years 5-10 will be replanted on a like-for-like basis in the next growing season. <u>Years 10-30</u> Pruning as necessary in March or October (taking into account nesting bird presence).	may be necessary. This will include checking for invasive plant species returning. Monitoring will be required in Years 2, 3 and 5, 10, and 30 post-development.	Pruning to be completed between September – February (outside the nesting bird season) as necessary. Annual monitoring in growing season.
Proposed Native Scrub	To create opportunities for wildlife in particular nesting birds as well as a range of aesthetics for public recreation and landscape features.	<u>Management</u> Native shrub will be sensitively managed to fairly good condition with more than three species present along with a good age and structural range and a well-developed edge.	A suitably qualified ecologist to undertake a habitat survey, with Defra Statutory Metric Biodiversity Net Gain	Annually (as required) for 30 years as per condition- November to February to avoid bird breeding season, if necessary, outside this



		To achieve this, selective thinning will be used to enhance the structure with field and ground flora layers in favourable proportions. Coverage of undesirable species would also be kept below 5% with this achieved by hand removal or the targeted application of herbicide if required.	condition assessment to monitor enhancement measures, habitat condition and to specify any remedial actions or changes to the management plan that may be necessary. This will include checking for invasive plant species returning. Monitoring will be required in Years 2, 3 and 5, 10, and 30 post-development.	period management can proceed following checks by an ecologist to confirm the absence of nesting birds. The provision of later cutting would retain food source for birds over winter so should be used where practical.
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Table 4.1 – Management prescriptions for retained/created/enhanced habitats



Section 5: Biodiversity Net Gain (BNG)

- 5.1. As part of the BREEAM assessment, a Biodiversity Net Gain Calculation has been undertaken to understand change in ecological value as a result of development.
- 5.2. In summary, development proposals would result in a net gain of 0.27 habitat units (39.08% net gain). The existing site baseline is predominantly developed land; sealed surface, with small areas of introduced shrub, bare ground and urban scattered trees, providing 0.69 habitat units. There are no linear habitat units on-site. The areas of modified grassland, mixed scrub and introduced shrub planting, along with the planting of scattered trees, results in 0.96 habitat units being created. **Table 5.1** below detail the Biodiversity Net Gain statutory metric calculation for the development.

Baseline				
Habitat	Area (ha)	Condition	Unit Value	Area Retained/Enhanced
Grassland - Modified grassland	0.001	Poor	0.00	All Lost
Urban - Developed land; sealed surface	0.46	N/A - Other	0.00	All Lost
Urban - Introduced shrub	0.007	Condition Assessment N/A	0.01	0.005 ha Retained
Urban - Developed land; sealed surface	0.02	N/A - Other	0.00	All Lost
Urban - Bare ground	0.04	Poor	0.08	0.004 ha Retained
Individual trees - Urban Tree	0.1489	Poor	0.60	0.1448 Retained
Post-Intervention				
Habitat	Area (ha)	Condition	Unit Value	
Urban – Developed Land; sealed surface	0.32	N/A - Other	0.00	
Urban – Developed Land; sealed surface	0.15	N/A - Other	0.00	
Grassland – Modified Grassland	0.004	Poor	0.01	
Heathland and shrub – Mixed scrub	0.04	Poor	0.15	
Urban – Introduced shrub	0.002	Condition Assessment N/A	0.00	
Individual trees – Urban tree	0.065	Moderate	0.20	
Unit Change		+0.27		
Net Change (%)		+39.08		

Table 5.1: Biodiversity Net Gain Calculations for on-site Habitat Areas



Section 6: Monitoring and Remedial Measures

- 6.1. Along with the requirement for ongoing management of the site by specialist contractors, it will also be necessary for the site to be periodically monitored by a Suitably Qualified Ecologist (SQE) to ensure the created and retained habitats are in the appropriate condition and are either showing signs of success in the management objectives put forward (i.e. between Years 1 and 3) and later with evidence that each habitat has achieved its target.
- 6.2. It is therefore recommended that monitoring of the site is undertaken in Year 1 once development and habitat creation in a given area is complete. Given the scale and phased nature of the development, construction will span over a single year. 'Year 1' and subsequent years will therefore refer to the time after completion of development/landscape features in a given phase.
- 6.3. In Year 1 of a phase, monitoring will be required once all landscaping in a phase has been completed to ensure that all created/retained habitats have been installed to the correct specification and location. Should the monitoring by the SQE identify that a habitat or feature has been installed incorrectly or to the wrong specification, it will be the responsibility of the SQE to report this to Hydrock - Manchester. Hydrock and their appointed contractors will then be responsible for resolving the issue immediately.
- 6.4. Monitoring will then be required in Years 2, 3 and 5, 10, and 30 post-development. The appointed SQE will perform a condition assessment of all created habitat features to assess their progress against management objectives. Should any habitats appear to be failing or in poor condition, it will be the responsibility of the SQE to report this to Hydrock and their contractors. It will then be the responsibility of Hydrock and their contractors to implement the necessary remedial measures (i.e. re-fixing rabbit guards, replacement of failing tree).



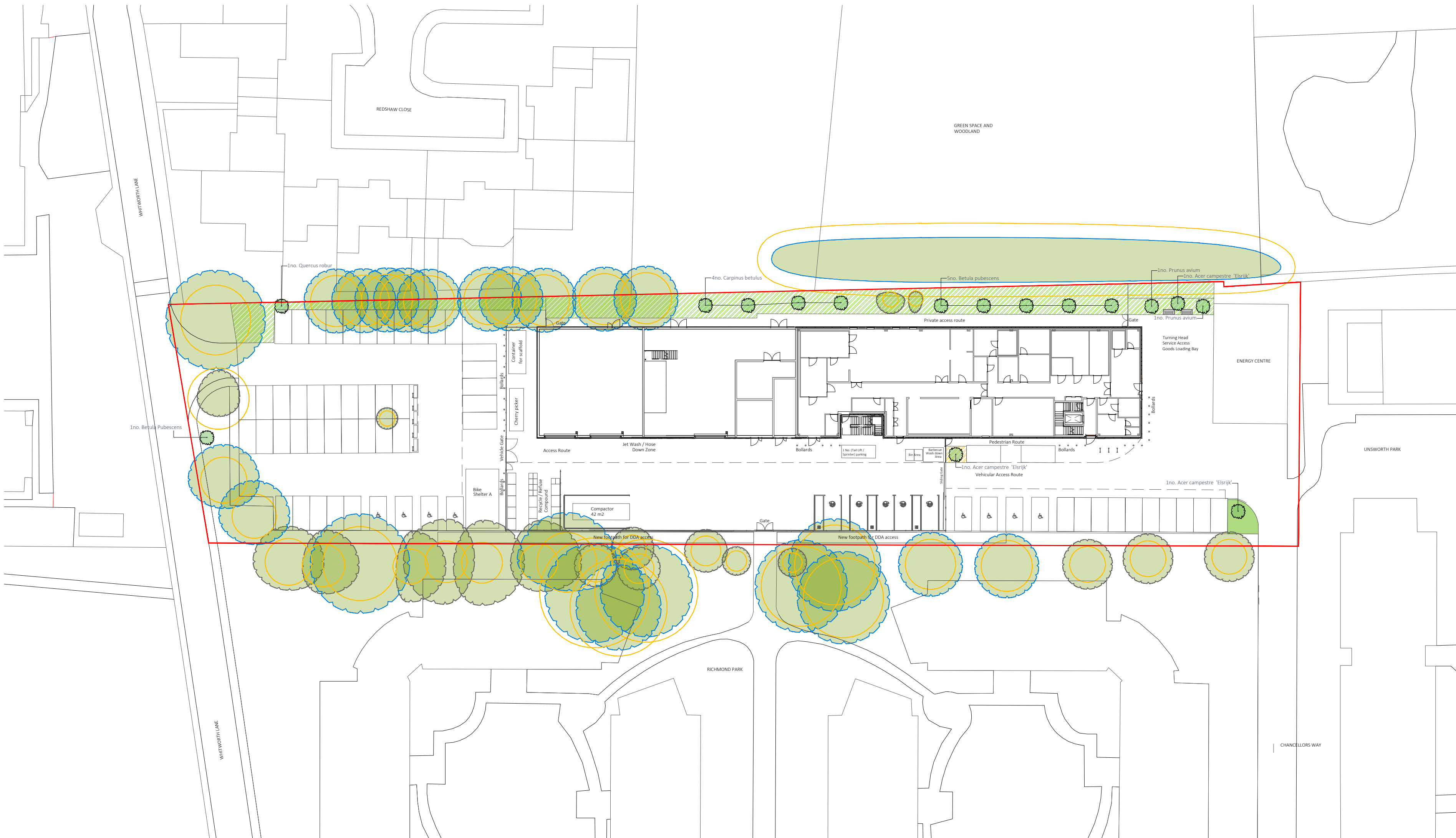
Section 7: Delivery of the LEMP

- 7.1. The landowner will be responsible for the implementation, of the management prescriptions provided in **Table 4.1** both for initial habitat establishment period and subsequent aftercare / management, as well as that the monitoring proposed in Objective 4, which will need to be completed by a suitably qualified ecologist. Should the site be acquired by a new owner, liability for continuing the management prescriptions provided in **Table 4.1** would transfer to the new owner.
- 7.2. An SQE (such as Tyler Grange) will need to be appointed to undertake the required monitoring measures discussed in **Section 6** during Years 2, 3 and 5, 10, and 30 post development.



Appendix 1: Proposed Site Plan





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- Application boundary
- Woodland shrub mix
- Low ground cover mix
- Ornamental shrub mix
- CAT B tree
- CAT C tree
- Root protection area
- Proposed tree

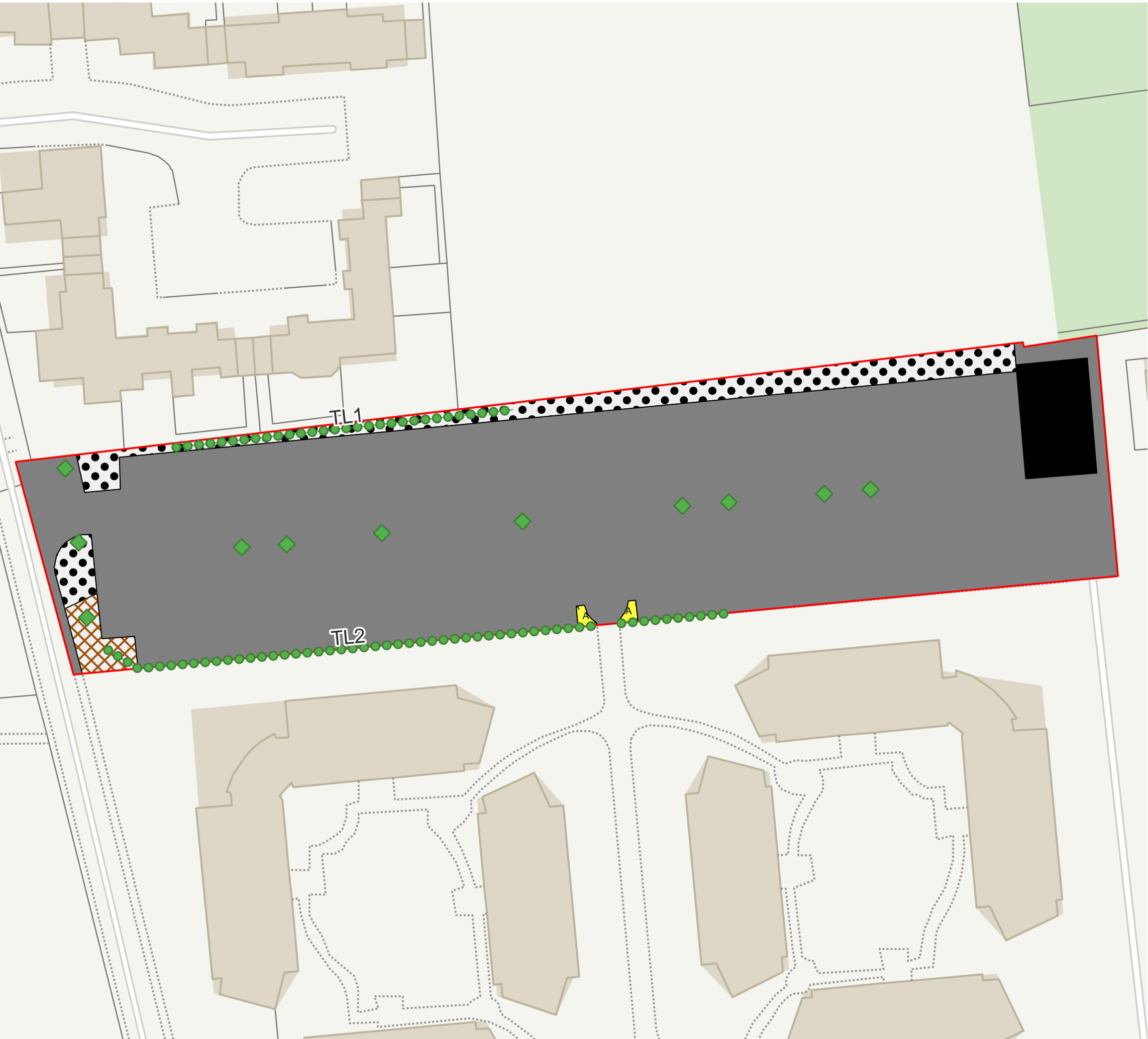
DATE October 2024 SCALE 1:500 @ A2



Plans:

Plan 1: **Habitat Features Plan**





- Redline Boundary
- Bare ground
- Buildings
- Introduced shrub
- Modified Grassland
- Hardstanding
- Individual Urban Trees
- Line of Trees



Project	The Limes, Fallowfield
Drawing Title	Habitat Features Plan
Scale	As Shown (Approximate)
Drawing No.	16638/P01
Date	18/04/2024
Checked	ECG/OM



3 Jordan Street, Deansgate, Manchester, M15 4PY
T: 0161 236 8367 E: info@tylergrange.co.uk W: www.tylergrange.co.uk

www.tylergrange.co.uk



Tyler Grange

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