

Dewsbury Bus Station– Landscape and Ecological Management Plan (LEMP)

Willmott Dixon

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1. Introduction

1.1 Background

1.1.1 Cura Terrae Land and Nature (Cura Terrae) (formerly Ecus Ltd (Ecus)) was commissioned in July 2025 by Willmott Dixon to produce a Landscape and Ecological Management Plan (LEMP) for the development at Dewsbury Bus Station, South Street, Dewsbury, WF13 1JS, centred on Ordnance Survey National Grid Reference SE 24437 21550 and hereafter referred to as ‘the Site’.

1.1.2 The LEMP has been produced to inform the discharge of a Planning Condition 17 from Kirklees Council LPA (Application Reference: 2023/62/92141/E) as outlined below:

“17/. Prior to Phase 5 of the development’s construction (as indicated in Chapter 6.0 of document ref. 2023_DBS-JSAXX-XX-RP-00801_Design and Access Statement Rev P2 or as otherwise amended through details approved pursuant to condition 10), a landscape and ecological management plan (LEMP) shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall provide the means of providing biodiversity enhancement, and full details of how the landscaped areas will be managed and maintained in perpetuity. The LEMP will be abided by throughout the development’s lifespan. Reason: In the interest of visual and residential amenity, to ensure that there is a well laid out scheme of hard and soft landscaping, to comply with the aims and objectives of Policies LP24 and LP63 of the Kirklees Local Plan and Chapter 12 of the National Planning Policy Framework”

1.1.3 This LEMP focuses on the operational phase of the development (i.e. the long-term impacts of the development on biodiversity) and how the Site will be enhanced for biodiversity.

1.2 Site Context

1.2.1 The Site is located off South Street, Dewsbury, WF13 1JS and covers an area of approximately 1.05 hectares (ha). The wider area is largely urban comprising mainly of shops, residential dwellings with gardens, areas of greenspace (comprising grassland and wooded habitats) and associated infrastructure making up the town of Dewsbury.

1.2.2 Using the UK Habitat Classification System (UKHab 2.0) (UKHab Ltd., 2023), baseline area-based habitats recorded at the Site in November 2024 included other developed land, buildings and built-up areas and gardens (including secondary codes [10 – Scattered scrub, 32 – Scattered trees, 828 – Vegetated garden, 847 – Introduced shrub]).

1.3 The Proposed Development

1.3.1 Proposed works relate to improving the existing bus station facilities including refurbishment of the bus station main building and concourse, reconfiguration of the bus apron area and landscaping and boundary improvements. The overall Landscape proposals are detailed in the drawing “Landscape - General Arrangement” (drawing reference: DBS-ECS-Z0-SL-DR-L-00001 Rev C02, dated July 2025

(See Appendix 2). The Soft Landscape Proposals are detailed in drawing “Landscape Proposals - Detailed Planting Plan - Sheet 1 (of 2)” and “Landscape Proposals - Detailed Planting Plan - Sheet 2 (of 2)” (drawing references: DBS-ECS-Z0-SL-DR-L-00002 Rev C02, dated July 2025 and DBS-ECS-Z0-SL-DR-L-00003 Rev C02, dated July 2025 respectively, Appendix 3), hereafter referred to as the ‘Soft Landscape Proposals’.

- 1.3.2 Based on the proposals, it is understood that areas of vegetation including mature trees, native scrub and introduced shrub within the west and east of the Site will be lost to accommodate the proposed development. However, some trees on the eastern side will be retained.

1.4 Proposed Landscape Scheme

- 1.4.1 The ‘Soft Landscape Layout’ comprises ‘species rich grassland with wildflowers’ creation along with ‘individual specimen trees’ and ‘low maintenance linear shrub/herbaceous’ planting within the west and east of the Site. Additionally, a ‘wildflower green roof’ will be installed above an eastern section of B2 and area of ‘Ornamental planting’ will be created along the southern edge of the boundary where the existing stone wall will be rebuilt, parallel to Aldams Road.

- 1.4.2 A list of species for planting is shown in the ‘Soft Landscape Proposals’ (Appendix 3).

- 1.4.3 North (South Street frontage & concourse edge):

- Character: Clean, civic threshold to the bus station with simple lines, clear pedestrian routes and improved legibility.
- Hard materials: Primary pedestrian surfaces use concrete flags in graphite and silver tones with asphalt to service/transition areas and tactile paving at crossings. Kerb lines are formed by precast road kerb or conservation-style granite kerb to tie into highways interfaces. Along the northern boundary planting, the pin kerb provides crisp demarcation to beds; Alu Excel is used locally for fine alignment. Bollards, guardrails and channels have been coordinated with the engineers.
- Soft landscape: Along the northern boundary a Hornbeam hedge (*Carpinus betulus*) provides a robust green edge to the development offering foraging and nesting opportunities for birds. A species-rich wildflower mix (EM2/EC1) is proposed bringing positive ecological and visual impact which is further enhanced by the provision of Pioneer tree species such as *Betula* and *Prunus* giving structure, shade and seasonal interest.

- 1.4.4 West (service edge & secondary approaches):

- Character: Softer edge treatment and transitional spaces with ornamental planting and species-rich grassland to boost biodiversity and break up hardscape massing, ornamental planting in external concourse for human-scale green relief and wayfinding.

- Hard materials: Continuation of the flag/asphalt palette as shown on the General Arrangement for consistency and maintenance efficiency; kerb/edge hierarchy mirrors the north/east for legibility.
- Soft landscape: As per the Northern boundary, this space is characterised by species-rich wildflower mix (EM2/EC1) punctuated by *Betula*, *Prunus* and *Sorbus* trees. The Hornbeam hedge continues from the north to define the western boundary. Across the main bus route, the pedestrian concourse, leading to the bus station structure, is defined by ornamental and evergreen planting with seasonal bulbs and specimen shrubs for year-round structure and interest.

1.4.5 South (Aldams Road edge & rebuilt wall):

- Character: A greener “face” to Aldams Road - softened boundary, improved visual amenity and a clearer sense of arrival when approaching from the south.
- Hard materials: The southern boundary wall is to be rebuilt as per CTLN typical detail on drawing “DBS-ECS-Z0-SL-DR-L-00004” and engineer’s drawings; adjacent footways use the concrete flag paving with tactile bands at crossing points. Concrete pin and granite finish kerb upstands retain planting edges neatly.
- Soft landscape: Ornamental planting belts with evergreen structure follow the main route, creating a tidy foreground to the wall and softening the boundary leading up to the South entrance. Interplanted ornamental grasses layered at varying heights and seasonal perennials add colour and winter texture here.

1.4.6 East (main concourse & building interfaces):

- Character: Functional, tidy concourse edges with human-scale green relief and clear sightlines to doors and wayfinding.
- Hard materials: Flag paving with tactile surfacing aligned to crossing points; localised ArboResin (permeable resin bound aggregate surfacing) at tree pits to maintain permeability where existing tree rooting is close to hardscape. A weldmesh fence with climbing plants surrounds and helps to conceal the bin store wall. Bollards, guardrails and channels coordinated with engineers.
- Soft landscape: Ornamental planting, herbaceous belts, and short ornamental grasses to maintain visibility while partially concealing the maintenance access path along the northern boundary leading to the bin store. Clematis and heder helix plants climb the weldmesh fence surrounding the bin store to soften and conceal the wall. The two existing mature rowan trees are to be retained, clearly marking the eastern pedestrian entrance. A biodiverse green roof to Building B2 contributes habitat and visual greening to the eastern block.

2. Landscape and Ecological Management Plan

2.1 Overarching Objectives

2.1.1 Once construction has been undertaken on Site it is important to account for biodiversity within the operational phase to ensure that the Site can still be utilised by wildlife, with features being installed during the construction phase as part of the enhancement and mitigation measures. This LEMP will aim to enhance the Site for biodiversity post-development and to satisfy Planning Condition number 17 stipulated by the LPA.

2.1.2 The key landscape and ecological management objectives to achieve this aim are summarised as follows:

- To provide high quality landscape structure that enhances the appearance and character of the Site and its environment.
- To provide a landscape scheme that is durable and functional,
- To provide a landscape scheme that compliments the architecture and ties into the wider public realm.
- To provide a landscape scheme that provides seasonal interest and a boost to biodiversity.
- To provide a landscape scheme that helps to soften the appearance of the bus station and seeks to retain existing tree cover where possible.
- To ensure the longevity of new areas of landscape planting and seeding through regular and effective management and maintenance.
- Maintenance during the establishment phase for new planting, to include watering, replacement planting of dead or dying plants, adjustment of stakes and ties.
- To maximise the provision and establishment of native species and species of local provenance that are appropriate to the immediate surrounds and local area.
- To contribute positively to local air quality and microclimate by maximising canopy cover and groundcover planting where safe and practical in an urban transport setting.
- To ensure planting design contributes to climate resilience by incorporating drought-tolerant, pollution-tolerant and urban-tolerant species suitable for an urban setting.
- To provide landscape and ecological enhancements that respect the operational requirements of the bus station, maintaining pedestrian safety and accessibility.
- Placement of at least one insect tower within retained vegetation.
- Placement of at least one hedgehog house within retained vegetation.
- Installation of two externally fitted bat boxes (e.g. Beaumaris Woodstone Bat Box or similar) onto newly refurbished buildings.
- Incorporation of a minimum of two bird boxes within suitable locations.

General Measures

- 2.1.3 Signage, such as information boards at the Site, will be created by the client and used to promote local awareness of biodiversity and key habitat features and any species-specific and habitat enhancement measures to be provided within the development (e.g. bat and bird boxes, shrub planting).
- 2.1.4 One A3 sized sign will be installed within the west of the Site which will inform readers of biodiversity enhancement measures undertaken as part of the development.

2.2 On-Site Habitats

- 2.2.1 The below list of habitats (with associated UKHab code) describes the habitats recorded during the PEA and include area-based and linear habitats, with measures undertaken post-development to produce higher quality biodiversity.

Urban - Buildings (u1b5)

- 2.2.2 Of the four buildings on the Site, it is anticipated that B1, B2 and B4 will be retained as part of the development (with B2 being refurbished) and that B3 will be demolished. Please refer to Appendix 1 for a plan illustrating the existing buildings.

Urban - Other Developed Land (u1b6) & Built up areas and gardens (u1) [10 – Scattered scrub, 32 - Scattered trees, 828 – Vegetated garden, 847 - Introduced shrub]

- 2.2.3 An area of other developed land is anticipated to be lost as part of the proposed development. Areas of introduced shrub, scattered native scrub and scattered mature trees [10, 32, 847] were present within the east and west of the Site. Some areas of scrub and shrub in the east and the west of the Site are anticipated to be lost as part of the development. Additionally, the trees adjacent to the building in the east of the Site are anticipated to be removed as part of the development, however some will be retained.
- 2.2.4 Post-development, areas of species rich grassland will be created along with individual trees and shrub planting within the west and east of the Site to compensate for the loss of these habitats. Additionally, the wildflower green roof that will be installed above an eastern section of B2 and the area of ornamental planting will further compensate for the loss of baseline habitats.

2.3 Protected Species

Amphibians

- 2.3.1 No waterbodies were identified on the Site during the PEA and the habitats present on the Site offer limited terrestrial habitat for common amphibians and great crested newt (GCN) *Triturus cristatus*.

- 2.3.2 No waterbodies are located within 250 m of the Site. Unidentified garden ponds/water features may be present within neighbouring gardens; however, these are usually relatively small in size and are more likely to be utilised by common amphibians, i.e. common frog *Rana temporaria* and smooth newt *Lissotriton vulgaris*.
- 2.3.3 The creation of species rich grassland and shrub planting on Site will provide suitable compensatory habitat for foraging and sheltering amphibians including GCN.

Badgers

- 2.3.4 No badger *Meles meles* setts were identified in the PEA, or signs of badger activity including latrines, hairs or footprints. The Site was also considered sub-optimal for foraging and sheltering, given the Site's urban context. More suitable habitat is available in the wider area including woodland to the east of the Site. The Site is subject to the high levels of human and vehicle activity, including during the night which reduces its suitability.
- 2.3.5 The creation of species rich grassland and shrub planting will provide suitable compensatory habitat post-development for foraging badgers, should they utilise the Site.

Bats

- 2.3.6 Four buildings were identified in the Site during the PEA, these included (Please refer to Appendix 1 for a plan illustrating the existing buildings):
- B1, a three-storey structure with a flat roof, which housed offices and shops and was determined to display 'low' suitability for roosting bats. A bat emergence survey was conducted in May 2025 which concluded that roosting bats were likely absent from the building.
 - B2, a single storey structure constructed from brick and metal panels, which makes up the bus station and concourse, this building was determined to display 'low' suitability for roosting bats. A bat emergence survey was conducted in May 2025 which concluded that roosting bats were likely absent from the building.
 - B3, a flat roofed bus shelter constructed from corrugated metal, this was determined to display 'negligible' suitability for roosting bats.
 - B4, a flat roofed portacabin constructed from metal, this was determined to display negligible suitability for roosting bats.
- 2.3.7 Additionally, three trees on the Site were assessed as displaying suitability for roosting bats as described in the PEA, of which two of these trees are to be retained as indicated on the Arboriculture survey ('*Dewsbury Bus Station – BS 5837:2012 Arboricultural Report, Impact Assessment and Method Statement Willmott Dixon Construction Ltd*' V1.0, Ref: 23651, dated November 2024).

- 2.3.8 A minimum of two externally fitted bat boxes (e.g. Beaumaris Woodstone Bat Box or similar) should be installed onto the newly refurbished buildings post-development. Bat boxes should be positioned at eaves level on west/south/east elevations in locations away from direct and indirect lighting, as far as possible.
- 2.3.9 The creation of new habitats post-development will provide similar to higher quality foraging and commuting habitat for bats, given the likely increase in invertebrate abundance. A sensitive lighting scheme will be required to avoid direct lighting on these features which may deter bats from utilising them. The lighting scheme will be developed by a lighting engineer in close consultation with a suitably qualified ecologist who will need to review the plan and lighting specifications. In line with recommendations in the BCT '*Bats and Artificial Lighting at Night*' (Guidance note 08/23), light spill onto boundary/linear features will be limited to 5 lux or lower as far as is practical.
- 2.3.10 These measures will provide an enhancement for roosting bats, as well as foraging and commuting bats at the Site post-development.

Birds

- 2.3.11 The Site is dominated by buildings which have some suitability to support low numbers of common nesting bird species. The mature trees, native scrub and introduced shrubs around the Site provide suitability for passerine birds to use when nesting and foraging, although there is an abundance of similar suitable habitats in the wider area and the Site is subject to high levels of disturbance from nearby pedestrians and vehicles.
- 2.3.12 The newly refurbished bus station buildings will incorporate a minimum of two bird boxes. Recommended designs include the 1SP Schwegler Sparrow Terrace (or equivalent) for house sparrows *Passer domesticus* and the Vivaro Pro Woodstone Swift Nest Box (or equivalent) for swifts *Apus apus*; this type of box is known to be utilised by other species and so would provide benefits for a variety of species. The boxes should be positioned at a minimum height of 3 m and avoid a true south orientation where there is a risk of over-heating in direct sunlight. Alternatively, a minimum of two bird boxes will be affixed to mature trees within the Site e.g., Schwegler bird boxes (e.g. 1B bird boxes or similar).
- 2.3.13 The creation of species rich grassland and low maintenance shrub and planting of individual trees post-development will increase foraging and nesting resources for birds, providing an enhancement post-development.

Invertebrates

- 2.3.14 The Site offers limited suitability for invertebrates given the dominance of buildings and hardstanding, although the introduced shrubs, native scrub and mature trees could offer foraging, commuting and basking opportunities.

- 2.3.15 The creation of species rich grassland will include flowering plants, which will improve the foraging potential for invertebrates through provision of nectar-rich plants, including for pollination. The tree and shrub planting will provide foraging and sheltering resources for invertebrates, through providing dense foliage once established.
- 2.3.16 These measures will provide an enhancement for foraging and sheltering invertebrates post-development.

Reptiles

- 2.3.17 The habitats at the Site were considered of limited suitability for reptiles, given the urban setting and limited extent of suitable habitat on-site which is isolated from suitable habitat in the wider area.
- 2.3.18 The planting of shrubs and species rich grassland creation will provide an enhancement for reptiles post-development.

Hedgehog

- 2.3.19 Site habitats are considered to display some suitability for hedgehog with the introduced shrub, native scrub and a brash pile providing some suitable shelter and hibernation habitat, although these habitats are limited in extent and separated from more suitable habitats in the wider area by major roads and pedestrianised areas that act as barriers to dispersal.
- 2.3.20 At least one hedgehog house will be placed on-site within areas of vegetation, out of view and with no access to the general public (and dogs). This will provide shelter for and increase the suitability for the Site for hedgehogs.
- 2.3.21 The creation of species rich grassland and shrub planting will provide an enhancement for foraging and commuting hedgehogs.

2.4 Constraints and Trends That May Influence Management

- 2.4.1 The establishment of new habitats, including shrub and tree planting and grassland creation, can be heavily influenced by climatic conditions, pests and disease. These elements are generally outside of the control of the client. As such, regular reviews of establishment success have been included in the program. This document should be considered live, and updates are encouraged and expected to allow the plan to adapt to evolving conditions with continuing success.
- 2.4.2 Funding mechanisms will need to be in place that allow for both habitat creation, on-going aftercare/maintenance and long-term management. Finance mechanisms will also need to address uncertainties in terms of long-term management requirements and associated costs as

management interventions in the long-term will ultimately need to be tailored according to specific needs that can only be identified through monitoring.

3. Management Responsibilities

3.1 Introduction

- 3.1.1 This report is intended to satisfy planning condition number 17 (of Kirklees Council LPA Application Reference: 2023/62/92141/E) and to ensure biodiversity enhancement at the Site.
- 3.1.2 Management and monitoring prescriptions of habitats is detailed within the 30-year management plan as shown in Table 1 and Table 2. The client will install the habitats at the Site, which will then become part of the Management Company's ownership and maintenance package.
- 3.1.3 We understand that JPB Facilities Management Limited (Unit 7, Navigation Court Calder Park, Wakefield WF2 7BJ, T: 01924 251424) will be the third-party contractor conducting the maintenance.
- 3.1.4 Following the initial development of the Site, it is expected that the first 12-month planting maintenance will be the responsibility of the landscape sub-contractor as appointed by the developer.
- 3.1.5 Monitoring will take place within Years 1-5 and then when necessary, between Years 6-30 with the maintenance regime/management plan being continually updated to reflect changes as required.

3.2 Plant Replacement

- 3.2.1 Any plants, shrubs or trees that fail to establish within five years will be replaced in the following planting season with others of the same size and species unless written consent is provided by the Local Planning Authority (LPA) to agree amendments to the previously approved details.
- 3.2.2 Following five years after completion of the development, a Site inspection is recommended to record current conditions and determine if replacement planting or compensatory planting is required to maintain sufficient wildlife enhancement that complies with the original objectives. Where areas have been subjected to planting but are open to the general public, i.e. adjacent to footpaths/pavements, these will be regularly assessed if any damage/impact has been occurring, and if so, options for remedial measures may be required in order to fulfil biodiversity net gain principles for habitats and species.
- 3.2.3 Following the initial five-year period, it is recommended that this LEMP is checked and updated (if necessary) to reflect the Site conditions for future years. Works will only be undertaken with agreement with the client and LPA.
- 3.2.4 These measures will become the responsibility of the Management Company as part of the ownership and maintenance package payment.

3.3 Ongoing Monitoring and Remedial Measures

- 3.3.1 The LEMP will be continually monitored and reviewed annually with any agreed changes incorporated into the following years' schedule after consultation with the LPA.

4. Maintenance Schedule and Specification

4.1 Introduction

- 4.1.1 The schedule detailed in Table 1 and 2 outlines the key objectives for each management feature within the Site.
- 4.1.2 The schedule outlines recommended maintenance operations, timings and recommended frequency per annum to achieve these objectives. The schedule details operations that are recommended for the establishment phase up to five years following implementation and the requirements for a period of 30 years upon completion of the development.

4.2 Standards and References

- 4.2.1 All maintenance operations will be undertaken in accordance with the following best practice guidance:
- BS3998:2010 Tree Works Recommendations
 - BS7370-4: 1993 Grounds maintenance. Recommendations for maintenance of soft landscape (other than amenity turf)
 - BS3882:2015 British Standard Topsoil
 - Any other current UK and EU standards

4.3 Implementation of the Maintenance Works

- 4.3.1 Planting will be maintained by the landscape contractor for a minimum of 12 months following planting, with any plants that fail to establish within a period of 5 years from the completion to be replaced in the next planting season with the same size and species unless written consent is provided by the LPA to vary the approved details. Any seeding that fails to establish within a period of 5 years from completion or occupation is to be re-seeded the following seeding season.
- 4.3.2 Maintenance of the landscape areas shall be undertaken by a competent Landscape Contractor, registered with the British Association Landscape Industries (BALI).
- 4.3.3 Maintenance visits will be undertaken at minimum monthly intervals (i.e. 12 visits annually) for a period of five years. Increased visits for certain tasks may be required during the growing season.
- 4.3.4 The landscape maintenance of the Site is to be carried out to a high standard at all times and in accordance with the schedule and specifications within this enhancement plan and specific details provided within the detailed landscape scheme when this is available.

- 4.3.5 The contractor shall ensure that the Site is left tidy and safe following all maintenance works. All arisings are to be removed from Site in accordance with the maintenance schedule.
- 4.3.6 The contractor shall programme their visits to coincide with appropriate weather conditions for undertaking maintenance operations, including use of chemicals and grass mowing. Grass mowing in excessively wet conditions will not be undertaken.
- 4.3.7 Records of all maintenance visits are to be completed by the maintenance contractor and will be submitted to the client to review every six months.
- 4.3.8 The maintenance contractor shall ensure that chemical applications are undertaken by trained personnel only with the appropriate National Proficiency Tests Council (NPTC) certificates and in accordance with the manufacturer's recommendations. The '*Code of Practice for the Safe Use of Pesticides for Non-agricultural Purposes*' will be observed where applicable. The use of chemicals shall be included in the maintenance records as described above.
- 4.3.9 The contractor will notify the client immediately to any significant pest or disease problem affecting plant stock and devise a suitable strategy for treatment to be agreed with the Client. Any suspected non-native invasive plant species, must also be notified to the client.

Table 1: Soft Maintenance and Implementation Schedule.

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
General maintenance requirements to all planted areas, unless otherwise stated in the detailed schedule below.	To maintain high standard planting scheme across site and ensure healthy establishment of plants.	A	Inspection	March-September	Annually.	Yes	Yes
		B	Inspect tree stakes, ties and shelters and replace where necessary. Remove in Year 5.	February and after strong winds	Annually. In Year 5-Remove.	Yes	No
		C	Watering - during establishment and to ensure continued thriving	As necessary during dry spells or indicated in the detailed schedule below.	As required-daily in dry spells mainly April-September.	Yes	No
		D	Re-firm new tree / shrub planting	February and after strong winds	Annually and as required following inspection.	Yes	No

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
		E	Removal of debris and litter	Throughout	Each maintenance visit.	Yes	Yes
		F	Plant replacements and reinstatement to Year 5 when instructed on like for like basis (unless written permission from local planning authority). If climate change has affected this species, discuss suitable alternatives with the LPA.	November to March	Annually next following planting season.	Yes	No
		G	Fertiliser	March	Annually.	Yes	No
		H	Weed control by hand. Spot treatment for persistent weeds,	Mar- Sep	As required	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			(to be agreed with client prior to use).				
		I	Top up mulch to 60mm or 75mm depth (bark or gravel - refer to specification)	November	Annually.	Yes	Yes
Existing Trees	To ensure continued healthy growth of trees and safety of the site	A	Inspect to record pests and diseases, deadwood, impaired physiological and structural condition	Late spring/summer and following severe weather (heavy snow, strong wind)	Annually.	Yes	Yes
		B	Tree management operations or removal as required (observing Tree Preservation Orders and Conservation Areas as well as relevant wildlife	As necessary in winter or immediately following receipt of inspection report if urgent action is required	As required.	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			legislation). Refer to latest revision "Dewsbury Bus Station – BS 5837:2012 Arboricultural Report, Impact Assessment and Method Statement Willmott Dixon Construction Ltd" originally produced by Ecus Ltd, Nov 24, for details of existing vegetation to be retained and protection measures.				
Existing Vegetation/Planting	To ensure continued healthy growth of planting.	A	Pruning to encourage best display of given species, taking into account of natural habit and form:			Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			a) Winter flowering	Prune Spring	Annually	Yes	Yes
			b) Shrubs flowering between March and July	Prune immediately after flowering	Annually	Yes	Yes
			c) Shrubs flowering between July and October	Prune back to old wood in winter	Annually	Yes	Yes
		B	Thinning	As necessary following inspection	Annually if required	Yes	Yes
		C	Weed Control	March- September	As required	Yes	Yes
		D	Soil Aeration	April	When required	Yes	Yes
		E	Soil level readjustment/ edging	Spring	Annually	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
Proposed Tree Planting (incl. standard trees. multi-stemmed specimens and feathered trees)	To ensure that trees establish and remain in a healthy condition and attain a well balanced crown, suited to their species.	A	Establishment maintenance (weed control, fertiliser, tree guy wires, re-firming, formative pruning)	As necessary following inspection	As required.	Yes	Yes
		B	Maintain 1m diameter weed free area, adjust soil and maintain depth of mulch	As necessary following inspection	As required.	Yes	Yes
		C	Formative pruning	As necessary following inspection	As required.	Yes	Yes
Proposed Native Hedgerow - Hornbeam	To ensure the healthy establishment of new hedgerows. To encourage bushy side growth of hedgerow and maintain A- shaped profile once established.	A	Establishment pruning- heavy trim sides first year to encourage bushy side growth followed by light trimming to sides until established.	November- March	First Year.	Yes	Yes
		B	Trimming- alternate sides on an annual basis to	November- February	Once, annually on alternate	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
	<p>To provide more fruit, berries, flowers and nesting opportunities.</p> <p>To protect from rabbit damage during establishment phase.</p>		promote berries / fruit/ Maintain at a maximum height of 1-1.2m.		sides, from Year 2 onwards.		
Proposed Ornamental Planting - shrubs and herbaceous material	<p>To provide attractive and healthy landscape year-round.</p> <p>To create healthy attractive plant mixes.</p> <p>To control weed growth.</p>	A	Pruning to encourage best display of given species, taking into account of natural habit and form:				
			a) Winter flowering	Prune Spring	Annually	Yes	Yes
			b) Shrubs flowering between March and July	Prune immediately after flowering	Annually	Yes	Yes
			c) Shrubs flowering between July and October	Prune back to old wood in winter	Annually	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
		B	Thinning	As necessary following inspection	Annually if required	Yes	Yes
		C	Weed Control	March-September	As required	Yes	Yes
		D	Soil aeration	April	When required	Yes	Yes
		E	Soil level readjustment/ edging	Spring	Annually	Yes	Yes
		F	All herbaceous perennials and ornamental grasses that die back in winter to soil level can be cut back in autumn and winter, using the following guidance: •Using a knife, shears or secateurs, cut	Autumn / Winter	Annually	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			<p>stems close to the 'crown' or dormant base of the plant</p> <ul style="list-style-type: none"> •If there is any young growth, cut to just above it •Take the opportunity to remove weeds, digging out those with thick or fleshy roots •Cut back perennials that produce leaves and flower stems from below the soil level, to soil level . Consider leaving the flowering grasses until early spring to provide seasonal interest during the winter months. •Less severely cut back perennials showing new 				

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			basal shoot growth (e.g. Sedum) <ul style="list-style-type: none"> •Any attractive dead stems or flower heads can be left until early spring to provide structural interest throughout the winter. •Separate and dispose of diseased material (showing signs of leaf-spots, mildew and rusts, for example). 				
		G	Evergreen perennials are not to be cut back but will be tidied during spring and summer by removing dead foliage.	Spring and Summer	Annually	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
		H	Thinning herbaceous perennials	Spring	As required	Yes	Yes
		I	Maintain climber growth and train along wires where necessary	Mach - September	As required.	Yes	Yes
		J	Replace over mature shrubs / herbaceous species on a like for like basis (unless climate change indicates that a more resilient species should be favoured and is approved by LPA)	As required.	As required.	Yes	Yes
Proposed Bulbs	To display to best advantage.	A	Areas of bulbs shall be left uncut until after they have finished flowering and their	Throughout, according to flowering time.	As required	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			foliage yellowed and died back, after which they shall be cut as part of the routine ornamental planting regime (see ornamental planting maintenance, above).				
Proposed Meadow (makes up 80% of mix) e.g. Emorsgate EM2 - Standard General Purpose Meadow Mixture or similar approved	Maintain to achieve the greatest species diversity. Prevent future encroachment by scrub/ saplings. Control coarse grasses from outcompeting perennial wildflowers.	A	Year 1 Establishment cut (mow all plant growth to a height of 40-60mm). Don't cut until mid-late summer. Remove cuttings if dense.	Monthly, April-October	1	Year 1 only	Yes
		B	Continue cutting through to the end of March the next year. Dig out any residual perennial	September-March	Up to 6 times	Year 1 only	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			weeds such as docks.				
		C	<p>Cutting (after establishment) Main summer 'hay' cut in combination with mowing or grazing in autumn and possibly spring. Do not cut or graze from spring through to July/August to give species chance to flower. After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow or graze the re-growth through to late</p>	Hay cut - End of August / Early September (after flowering). Mow/ graze October- November and possibly March	3	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			autumn/winter to c 50mm and again in spring if needed. Remove cuttings.				
<p>Proposed Annual Wildflower Meadow Mixes (makes up 20% of mix) e.g. Emorsgate EC1 Standard Cornfield Mixtures or similar approved</p>	<p>Maintain to achieve the greatest species diversity and produce a colourful display in one growing season.</p>	A	<p>If sown as a nurse for a meadow mixture, cut and remove the vegetation in mid-summer but do not cultivate.</p> <p>Cornfield annuals will suppress annual weed growth and give shelter to the under-sown perennial meadow species but will compromise the main sowing if left uncut for too long. Cut the annual cover vegetation if it is lush and</p>	August	1	Year 1 only	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			<p>collapses and do not wait until the annuals have set seed (there is no point as they cannot grow in established grassland).</p> <p>After cutting, manage the area as an established meadow, allowing the meadow species to replace the cornfield annuals in year two and thereafter.</p>				
Biodiverse Extensive Green Roof	To ensure healthy establishment and good coverage. To minimise potential risk of fire. For further support contact Skygarden	A	Manual weed control	Monthly (as necessary)	Monthly in Y1, twice a year onwards	Yes	Yes
		B	Chemical weed control	When other methods failed	As required	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
	(maintenance@sky-garden.co.uk or visit www.skygarden.co.uk)	C	General clearance	As necessary to remove dead materials and to allow space for plants to develop; and remove any unwanted materials	As required	Yes	Yes
		D	Use slow release fertilizer once a year in spring. When planting before August feed one month after installation. When planting after August fertilize in spring.	April/May	Annually	Yes	Yes
		E	Strim wildflower areas annually to height of 50-75mm and rake up arisings and remove arisings	Autumn	Annually		Yes
		F	Plant encroachment Any vegetation which has invaded into drainage outlets, inspection chambers, walkways should be removed. [The addition of a margin	As necessary	As required	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			of washed stone pebbles could be considered if encroachment is becoming an issue around the perimeter or close to any utilities etc.]				
		G	Establishment Watering This should continue until the plants have developed a sound root system. This watering should be via a hose with a fine rose.	As necessary during dry spells to aid establishment.	Water for 6-8 weeks after installation and as required-daily in dry spells mainly April-September.	Year 1 only	No
			In warm weather, watering should take place in the early morning or evening to reduce evaporation. Ensure the substrate remains damp to the touch by watering regularly. In mid-summer, the roof may need daily, watering and will have to be constantly monitored.		After this period, water as per Post Establishment Watering Operation, below.		

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			Water for 6-8 weeks after installation.				
		H	Post Establishment Watering Green roofs will require watering in times of drought. Generally watering is best carried out in the early morning or later evening (irrigation should be set to come on at night).	As necessary. Watering should be carried out regularly as the weather dictates, typically in the summer months this would involve watering after one or two weeks without rainfall.	As required. Typically every 1-2 weeks between April-October.	Yes	Yes
			Watering is likely to prolong the flowering season for many species. Ideally monitor the appearance of the roof along with the local weather forecast. When watering, water until the substrate is soaked, and the drainage board is full of water. The roof can be left for a further 1-2 weeks before it will		Whilst generally summer months are hotter and drier, common sense should dictate when the weather is particularly severe for the time of year and if further watering is required.		

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			need watering again. Ensuring the roof is adequately watered will reduce the risk / spread of fire during drought conditions.				
		I	Regular removal of accumulated organic content or dry elements. Regular removal of leaves, rubbish and dry organic content should be undertaken to keep the area tidy and reduce the potential for fire during drought conditions.	As required	As required	Yes	Yes

Note: Key routine operations are listed in this table as required during both the defects and long-term maintenance indicating when they will be undertaken throughout the year. Note that the table should be used as a guide only. It does not include every specific operation, but all checking and intermittent maintenance actions will occur during the routine maintenance visits.

The contractor is responsible for the appearance and condition of the landscape areas and will be prepared to undertake specific maintenance tasks outside the above periods throughout the year to satisfy management or safety objectives.

Table 2: Hard Maintenance and Implementation Schedule.

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
<p>General maintenance requirements to all hard landscape areas, unless otherwise stated in the detailed schedule below.</p>	<p>To maintain a tidy and high standard across the site</p>	A	<p>Litter, debris pick and sweep up debris, dust etc that accumulates on surfaces</p>	<p>Monthly</p>	<p>Each maintenance visit</p>	<p>Yes</p>	<p>No</p>
		B	<p>Seasonal maintenance (leaf sweep, snow clearance and de-icing).</p>	<p>As necessary following inspection</p>	<p>To be proactively managed with the contractor checking weather reports.</p>	<p>Yes</p>	<p>No</p>

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
<p>Hard Surfaces - General requirements to all hard surfaces, unless otherwise stated in the detailed schedule below.</p>	<p>To maintain safe, useable and high standard paving by repairing and/or removing damaged surfaces as necessary.</p>	A	<p>Inspect the hard landscape areas to identify and repair any damaged/worn areas including paving units, pointing, haunching and edgings.</p>	<p>twice a year (every 6 months)</p>	<p>As required</p>	<p>Yes</p>	<p>Yes</p>
		B	<p>Power washing of all paved surfaces; every two years on a light setting. High powered settings should not be used as this can damage the paving and remove jointing material. An inconspicuous trial area should be tested first. Repair any joints that have been compromised.</p>	<p>As required</p>	<p>Yr2 and Yr4</p>	<p>Y2 & Y4</p>	<p>Y6 and every 2 years up to Y30</p>

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
		C	Surfaces to be kept weed free at all times. Spray paved areas with herbicide to keep weed free.	May, July, September	Annually	Yes	Yes
		D	Drainage systems associated with hard surfaces to be inspected.	As necessary following inspection	Annually	Yes	Yes
		E	Repair any subsidence or breakages promptly in accordance with best practice, manufacturer's guidance and using matching paving units.	As necessary following inspection	As required	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
		F	Undertake bi-annual checks for graffiti; remove or remediate.	As required	Bi-annually	No	Yes
		G	Gullies etc - keep clear (as required)	January, November		No	Yes
Flag Paving	Provide a durable surface that is aesthetically pleasing to coordinate with the wider material strategy.	A	"Clean slab and block paving every 5 years with product approved cleaning agent or solution. Re-point joints in accordance with the product details in the Landscape Specification (DBS-ECS-Z0-SL-T-L-00001) as required and repair any			Y5	Y10, 15, 20, 25, 30

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			damaged paving units, pointing, haunching and edgings. "				
Non-Permeable Block Paving	Provide a durable surface that is aesthetically pleasing to coordinate with the wider material strategy.	A	Visually inspect the paving on a regular basis. Intensively clean paving every 5-10 years. Repoint joints as required in accordance with Landscape Specification *(DBS-ECS-Z0-SL-T-L-00001) after cleaning.			Y5	Yes
Edging/Kerbs	Provide a rigid edge to planting/change of surfacing	A	Inspect and repair all edging on a regular basis making good any damage or wear promptly to maintain the good			Y5	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
			upkeep of the development.				
Asphalt paving	Provide a durable surface	A	Reseal the asphalt pavement every three to five years.	3-5 years			Yes
		B	Repair cracks and potholes as they appear.	As required			Yes
ArboResin Surfacing (permeable resin bound aggregate surfacing)	Provide a durable, permeable surface that can be installed safely over existing tree roots.	A	Remove any dirt and debris using a brush and water.	As necessary following inspection	As required	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
		B	Repair any damage as required	As necessary following inspection	As required	Yes	Yes
Street Furniture	To maintain safe, useable and high standard street furniture by repairing and/or removing damaged furniture as necessary.	A	Routine inspection of street furniture. Routine cleaning as appropriate. Refer to manufacturer's recommendations.	As necessary following inspection	Routine inspection at each maintenance visit, cleaning as required.	Yes	Yes
		B	Undertake bi-annual checks of all street furniture; reinstall / adjust any loose fittings. Refer to manufacturer's recommendations.	As necessary following inspection	bi-annually	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
Lighting Columns	To provide a lighting scheme that is fit for purpose, safe and provides adequate lighting levels all year round. Refer to HEB's information for further details.	A	Inspect and maintain lighting columns and replace light fittings when necessary.	As necessary following inspection	As required	Yes	Yes
		B	Undertake electrical checks as required to ensure safety	In accordance with routine inspections	Annually / as required/ or after adverse weather	Yes	Yes
Boundary Treatments: Fences/gates/walls/handrails/railings/ bollards/lighting	To maintain functional aspirations and ensure safety is maintained.	A	Check condition for damage/wear and where necessary replace/ repair/ re-stain or paint as appropriate.	As necessary following inspection	As required	Yes	Yes
		B	Ensure all retaining walls are maintained in accordance with engineers/manufacturers requirements.	As necessary following inspection	As required	Yes	Yes
Green Roof - See Architect's information and Manufacturer's	To maintain the structural integrity of	A	Maintain in accordance with the manufacturer's	As required	As required	Yes	Yes

Component	Management Objectives	Code	Operation(s)	Time of Year	Frequency (per Year)	Required in Years 1-5 (Yes/No)	Required in Years 6-30 (Yes/No)
guidance for full maintenance of hard / structural elements of green roof.	the green roof. For detailed guidance see IKO https://ikogroup.co.uk/		recommendations to ensure the roof is safe and is maintained to secure the warranties.				
<p>Note: Key routine operations are listed in this table as required during both the defects and long-term maintenance indicating when they will be undertaken throughout the year. Note that the table should be used as a guide only. It does not include every specific operation, but all checking and intermittent maintenance actions will occur during the routine maintenance visits.</p> <p>The contractor is responsible for the appearance and condition of the landscape areas and will be prepared to undertake specific maintenance tasks outside the above periods throughout the year to satisfy management or safety objectives.</p>							

5. References

Ecus Ltd. (2023). *'Dewsbury Bus Station – Preliminary Ecological Appraisal'* V1.0, Ref: 24120, dated November 2024.

Ecus Ltd. (2024) *'Dewsbury Bus Station – BS 5837:2012 Arboricultural Report, Impact Assessment and Method Statement Willmott Dixon Construction Ltd'* V1.0, Ref: 23651, dated November 2024.

Institution of Lighting Professionals, 2023 *'Bats and Artificial Lighting at Night'*. Available at Guidance Note 8 Bats and Artificial Lighting | Institution of Lighting Professionals

UK Habitat Classification Working Group. (2023). UK Habitat Classification 2.0 at <https://www.ukhab.org>.

Appendix 1: Existing Buildings Plan

Legend

-  Site boundary
-  Target Notes
-  u1 - built up areas and gardens
- introduced shrub
-  u1 - built-up areas and gardens
-  u1b5 - buildings
-  u1b6 - other developed land
-  u1e - built linear feature

Secondary codes:

- 10 - Scattered scrub
- 32 - Scattered trees
- 828 - Vegetated garden
- 847 - Introduced shrub

Building reference:

- B1 - Shops and offices
- B2 - Bus Station and concourse
- B3 - Bus shelter
- B4 - Portacabin

0 10 20 m



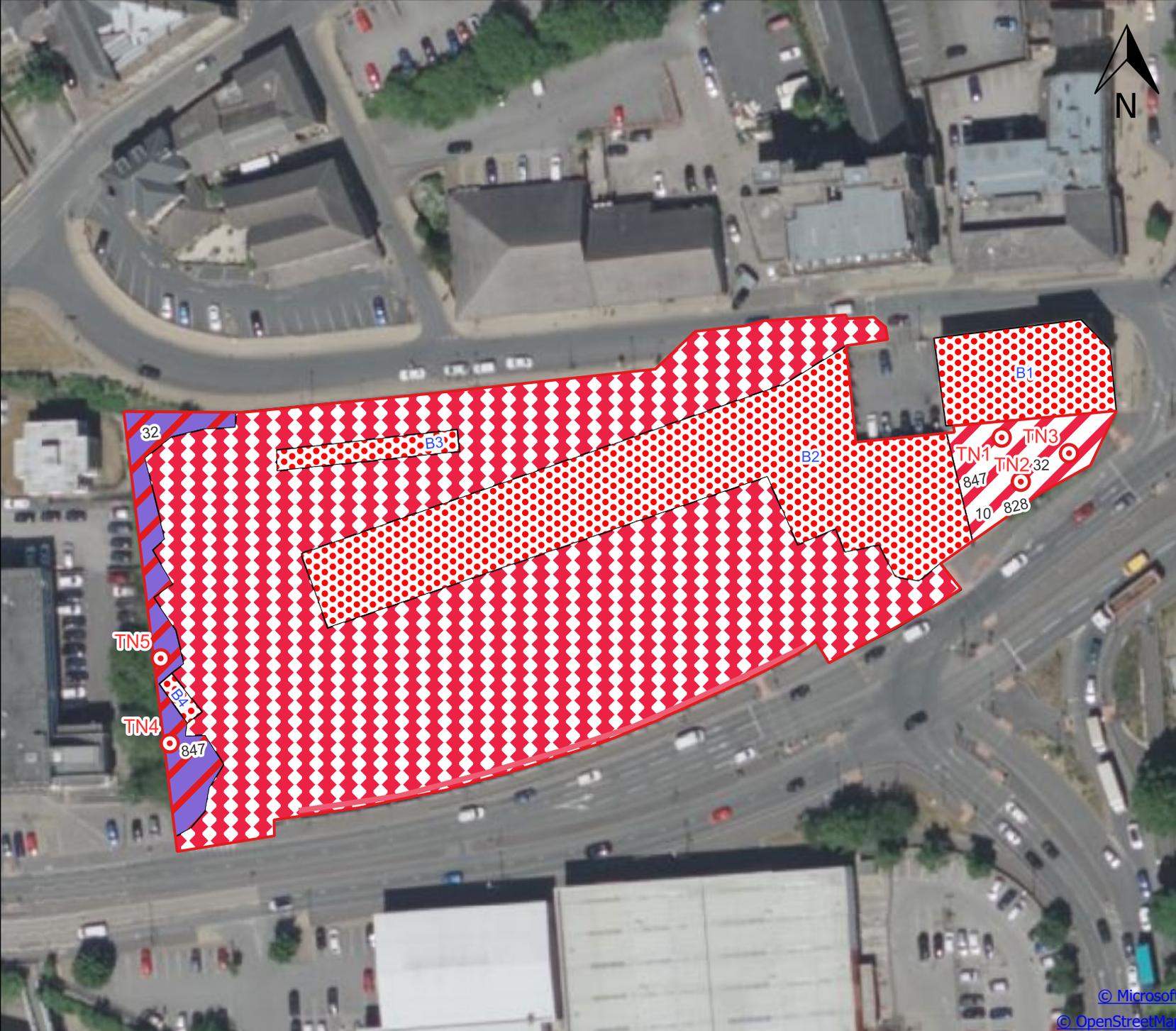
Willmott Dixon Construction Ltd

Dewsbury Bus Station
Preliminary Ecological Appraisal

Figure 1
UK Habitat Classification Map

A	14/11/2024	LS	JS
Rev	Date	Drawn by	Checked by

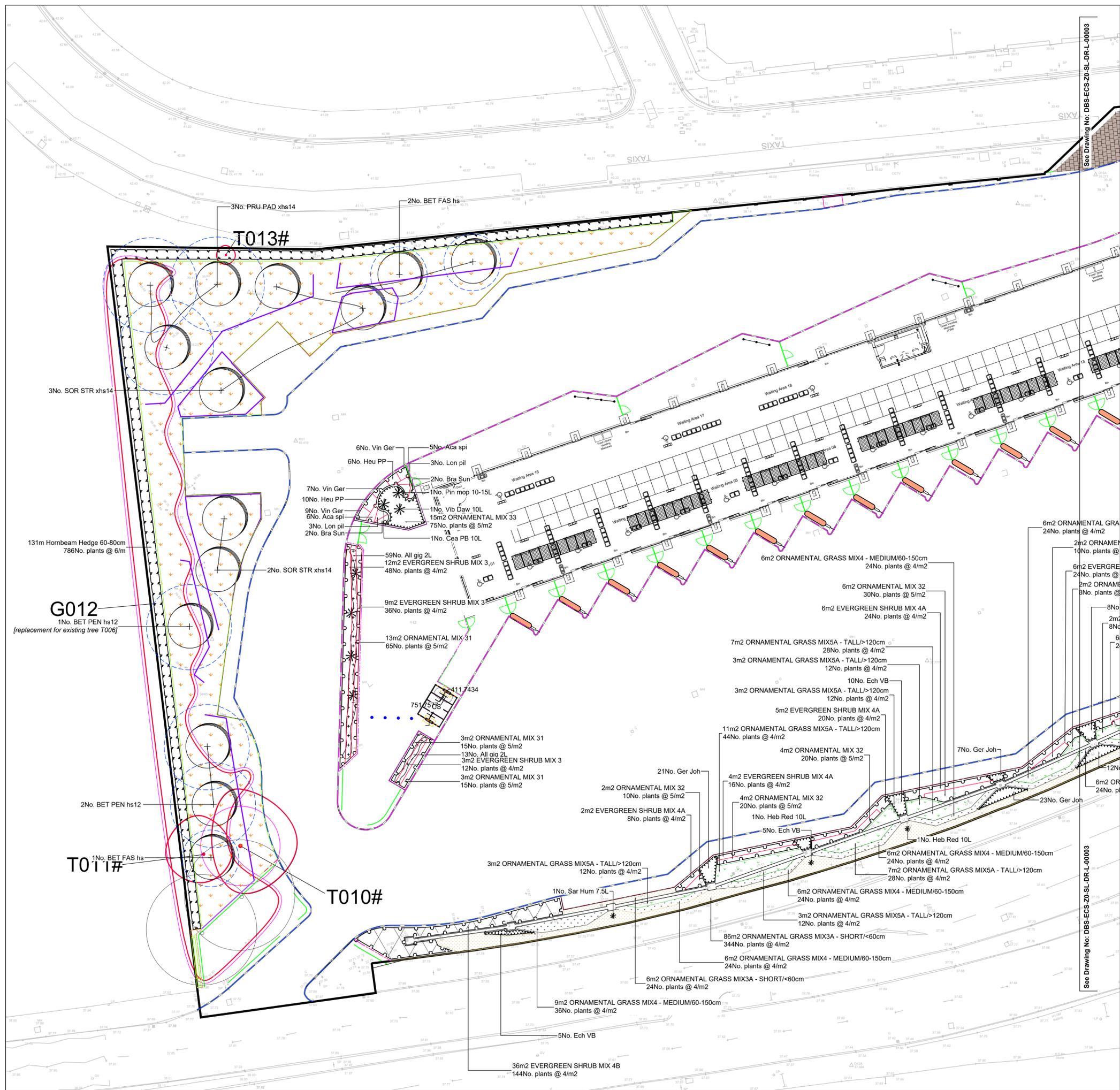
Unit 4, President Buildings, Savile Street East,
Sheffield, United Kingdom, S4 7UQ.



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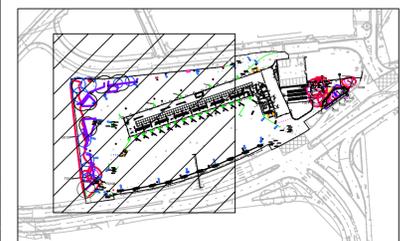
Appendix 2: Landscape General Arrangement Plan

Appendix 3: Detailed Planting Plans

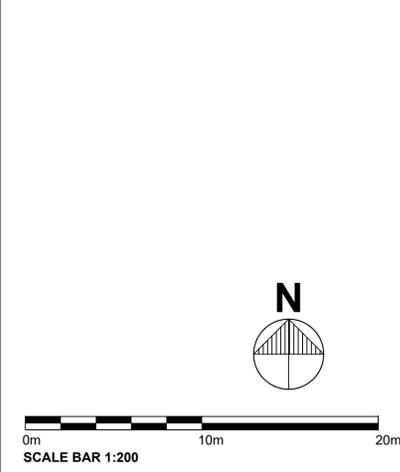


KEY

- Soft Works**
- Existing Tree to be Retained - see Arboriculture report (Dewsbury Bus Station - BS 5837:2012 Arboriculture Report, Impact Assessment and Method Statement) produced by Ecus Ltd, Nov 24) for further details
 - Tree-Existing to be Removed - see Arboriculture report for further details
 - Proposed Tree - Heavy Standard / Standard - see plant schedule for species and specification
 - Indicative extent of tree's mature canopy spread (if it extends beyond tree graphic symbol)
 - Proposed Low Hedge - see plant schedule for species and specification
 - Proposed Shrub Planting - Deterrent Evergreen - Small / less than 500mm - see plant schedule for species and specification
 - Proposed Shrub Planting - Small / less than 500mm - see plant schedule for species and specification
 - Proposed Herbaceous / Perennial Planting - see plant schedule for species and specification
 - Proposed Green Roof - See Architectural Specification "DBS-AHR-XX-ZZ-T-A-00001" for details
 - Proposed Bulb Planting - see plant schedule for species and specification
 - Proposed Climbing Shrub - see plant schedule for species and specification
 - Proposed Specimen Shrub - see plant schedule for species and specification
 - Proposed Ornamental Grass planting - Tall height - see plant schedule for species and specification
 - Proposed Ornamental Grass planting - Medium height - see plant schedule for species and specification
 - Proposed Ornamental Grass planting - Short height - see plant schedule for species and specification
 - Proposed Grass rich with Wildflower - 80% Emorsgate EM2 mix (4g/m2) and 20% Emorsgate EC1 mix (2g/m2)
 - Proposed Root barrier - shown indicatively. ReRoot 1000 (Ribbed) by GreenBlue Urban (www.greenblue.com) or similar approved



KEY PLAN (not to scale)



GENERAL NOTES

Arboriculture Report, Impact Assessment and Method Statement Willmot Dixon Construction Ltd originally produced by Ecus Ltd, Nov 24, for details of existing vegetation to be retained and protection measures. All works within the vicinity of the existing trees to be overseen by an appointed qualified Arboriculture consultant acting as ECOW in accordance with the Arboriculture Method Statement.

- Building / Site Layout provided by AHR Architects Ltd on drawing no: DBS-AHR-XX-00-D-A-20001_P5

- Refer to Bryan G Hall's Setting Out Information for Fencing, Guardrails and Security & Heavy Duty Bollards on Drawing "Apron Works Proposed Fencing & Guardrails", Dwg No: DBS-BGH-ZO-XX-DR-C-0010

- For details of the wall structure, refer to engineer's detail drawing no: DBS-RCS-SSK-01

- Building foundations to be confirmed by Engineer with reference to planting proposals and NHBC guidance (or alternative where applicable). Tree locations to be fully co-ordinated once building foundation depth are confirmed. Requirements for root barriers to be confirmed by an engineer.

- Refer to Engineer's details for level and drainage information

- Levels to be confirmed following coordination with the design team.

- Levels to be verified by the contractor with any variations to be reported to the drainage engineer

- For utilities information, see "DBS-KZN-ZO-XX-D-U-1001" produced by HEB/Kaizen Consulting Engineers

- For Green roof details, refer to "DBS-AHR-XX-ZZ-T-A-00001" Architectural Specification

- Setting out on site to be agreed with Landscape Architect

- Check all dimensions on site.

- Do not scale from this drawing

- Report any discrepancies and omissions to CTLN

- This drawing is Copyright

- All levels indicative only. Extrapolated from site levels. All require to be checked.

- All details subject to approval by the local authority for the discharge of relevant planning conditions.

3RD PARTY INFORMATION
NB This drawing includes information provided by independent surveyors and / or consultants, to whom all queries shall be made. CTLN can accept no liability for its context or accuracy.

DESIGN
Unless stated otherwise, the designs shown are subject to detailed site survey, investigations, and legal definition, the CDM regulations and the comments and / or approval of the various relevant Local Authority Officers, Statutory Undertakers, Fire Officers, Engineers and the like. They are copyright, project specific and confidential. No part is to be used or copied in anyway without the express prior consent of CTLN.

TREE NOTES:
Note that all tree and shrub locations are subject to coordination with services, to be undertaken by others. **The requirement for root barriers is to be confirmed by an engineer.**
Note that it is best practice that root barriers are required to extend 2m beyond the mature canopy spread of new trees to protect all structures and hard landscape elements, such as highways, services and buildings. In addition, root barriers are required for all new trees within 5m of highways - e.g. GreenBlue Urban ReRoot 2000 or similar. Depth of tree root barrier to be confirmed by an engineer once services design has been produced at construction detail. Install to manufacturer's and engineer's guidance.

SETTING OUT INFORMATION
It is the contractor's responsibility to ensure the setting out information is correct prior to construction. Any queries or discrepancies are to be raised immediately.

CDM - Risks / Hazards

1. Proposed locations of landscape elements shown are subject to the presence of below ground services. A detailed survey is to be undertaken and necessary method statements prepared and approved prior to undertaking any excavations / work within this area.

2. Care to be taken when working in proximity to the surrounding existing roads.

3. Care to be taken when clearing the existing site due to the potential presence of needles, litter etc.

ID	RISK	MITIGATION	DATE OF MITIGATION
RESIDUAL PROJECT RISKS			
C02	29.07.25	JS	CTLN Key and notes updated
C01	17.07.25	JS	CTLN Stage 5 Issue
P01	09.04.24	JS	Ecus Stage 4 Issue
REV	DATE	DRAWN BY	CHECKED BY

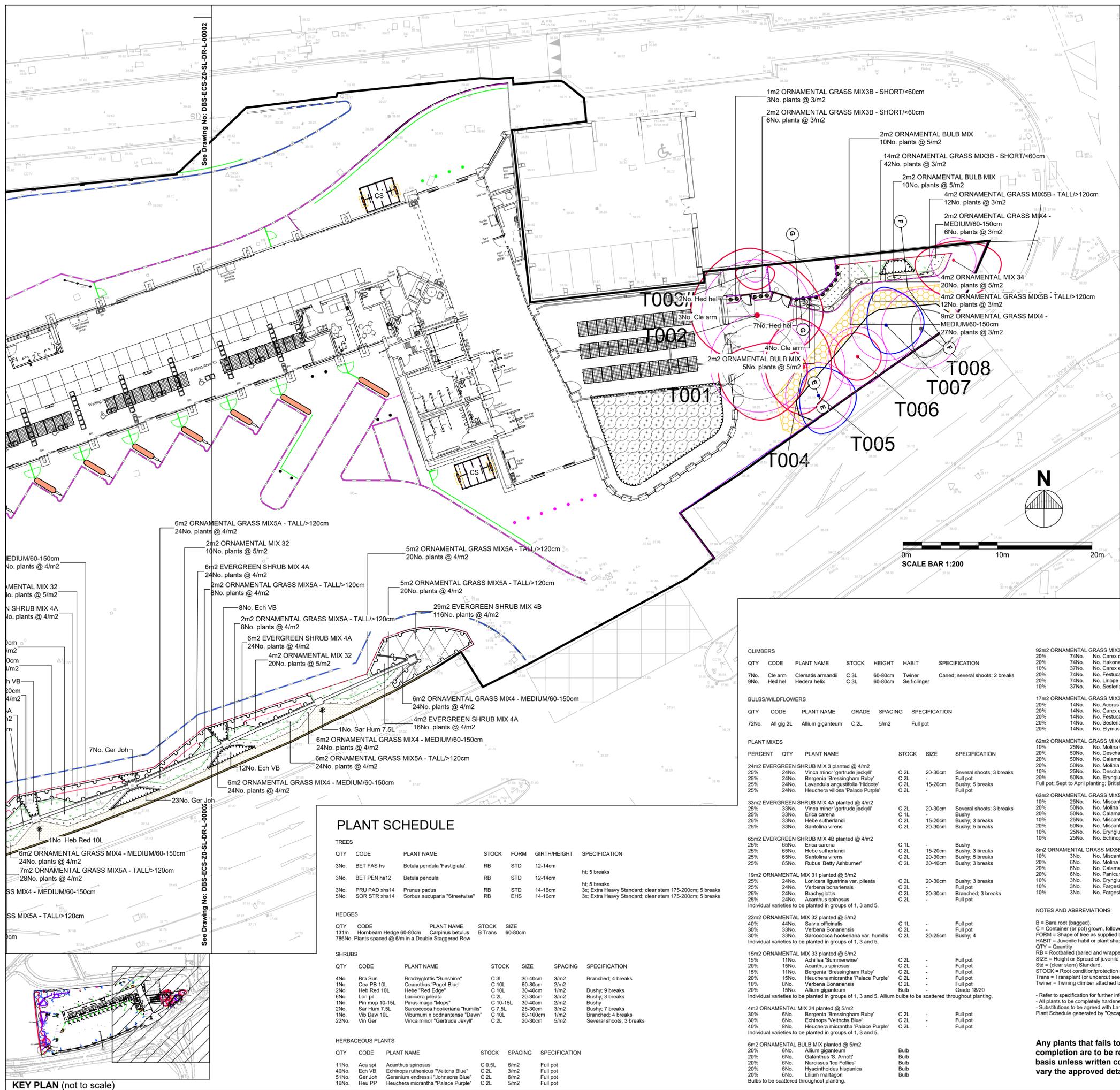
DRAWING STATUS: Construction

Job
DEWSBURY BUS STATION

Title
Landscape Proposals - Detailed Planting Plan - Sheet 1 (of 2)

Drawn by Date Scale
TA Dec 23 1:200 at A1

Drg. no. Rev
DBS-ECS-ZO-SL-DR-L-00002 C02



KEY

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 - Proposed Root barrier - shown indicatively, ReRoot 1000 (Ribbed) by GreenBlue Urban (www.greenblue.com) or similar approved

- GENERAL NOTES**
- Cura Terrae Land & Nature (CTLN - formerly Ecus) drawing/document references:
 - DBS-ECS-ZO-SL-DR-L-00001 General Arrangement
 - DBS-ECS-ZO-SL-DR-L-00002 Planting Plan sheet 1 of 2
 - DBS-ECS-ZO-SL-DR-L-00003 Planting Plan sheet 2 of 2
 - DBS-ECS-ZO-SL-DR-L-00004 Typical Details - Southern Wall
 - DBS-ECS-ZO-SL-DR-L-00005 Typical Details - Paving
 - DBS-ECS-ZO-SL-DR-L-00006 Typical Details - Tree Pits
 - DBS-ECS-ZO-SL-DR-L-00007 Typical Details - Eastern area
 - DBS-ECS-ZO-SL-DR-L-00008 Maintenance Schedule
 - DBS-ECS-ZO-SL-DR-L-00010 Landscape Proposals - Southern Boundary Wall Setting Out Information
 - DBS-ECS-ZO-SL-DR-L-00011 Landscape Proposals - Surfacing Setting Out Information
 - DBS-ECS-ZO-SL-DR-L-00012 Landscape Proposals - Planters Setting Out Information
 - DBS-ECS-ZO-SL-DR-L-00013 Landscape Proposals - Eastern Area Setting Out Information (Bin Store & Planter Edges)
 - DBS-ECS-ZO-SL-DR-L-00014 Typical Details - Cycle Store
 - DBS-ECS-ZO-SL-DR-L-00015 Typical Details - Pedestrian Guardrail
 - DBS-ECS-ZO-SL-T-L-00001 Landscape Specification

- Refer to latest revision "Dewsbury Bus Station - BS 5837.2012 Arboricultural Report, Impact Assessment and Method Statement" Willmot Dixon Construction Ltd originally produced by Ecus Ltd, Nov 24, for details of existing vegetation to be retained and protection measures. All works within the vicinity of the existing trees to be overseen by an appointed qualified Arboricultural consultant acting as ECOW in accordance with the Arboricultural Method Statement.
- Building / Site Layout provided by AHR Architects Ltd on drawing no: DBS-AHR-XX-00-D-A-20001_P5
- Refer to Bryan G Hall's Setting Out Information for Fencing, Guardrails and Security & Heavy Duty Bollards on Drawing "Apron Works Proposed Fencing & Guardrails", Dwg No: DBS-BGH-ZO-XX-DR-C-010
- For details of the wall structure, refer to engineer's detail drawing no: DBS-RCS-SBK-01
- Building foundations to be confirmed by Engineer with reference to planting proposals and NHBC code (or alternative where applicable). Tree locations to be fully co-ordinated once building foundation depth are confirmed. Requirements for root barriers to be confirmed by an engineer.
- Refer to Engineer's details for level and drainage information
- Levels to be confirmed following coordination with the design team.
- Levels to be verified by the contractor with any variations to be reported to the drainage engineer
- For utilities information, see "DBS-KZN-ZO-XX-D-U-1001" produced by HEB/Kaizen Consulting Engineers
- For Green roof details, refer to "DBS-AHR-XX-ZZ-T-A-00001" Architectural Specification
- Setting out on site to be agreed with Landscape Architect
- Check all dimensions on site.
- Do not scale from this drawing
- Report any discrepancies and omissions to CTLN
- This drawing is Copyright
- All levels indicative only. Extrapolated from site levels. All require to be checked.
- All details subject to approval by the local authority for the discharge of relevant planning conditions.

3RD PARTY INFORMATION
 NB This drawing includes information provided by independent surveyors and / or consultants, to whom all queries shall be made. CTLN can accept no liability for its context or accuracy.

DESIGN
 Unless stated otherwise, the designs shown are subject to detailed site survey, investigations, and legal definition, the CDM regulations and the comments and / or approval of the various relevant Local Authority Officers, Statutory Undertakers, Fire Officers, Engineers and the like. They are copyright, project specific and confidential. No part is to be used or copied in anyway without the express prior consent of CTLN.

TREE NOTES:
 Note that all tree and shrub locations are subject to coordination with services, to be undertaken by others. The requirement for root barriers is to be confirmed by an engineer.
 Note that it is best practice that root barriers are required to extend 2m beyond the mature canopy spread of new trees to protect all structures and hard landscape elements, such as highways, services and buildings. In addition, root barriers are required for all new trees within 5m of highways - e.g. GreenBlue Urban ReRoot 2000 or similar. Depth of tree root barrier to be confirmed by an engineer once services design has been produced at construction detail. Install to manufacturer's and engineer's guidance.

SETTING OUT INFORMATION
 It is the contractor's responsibility to ensure the setting out information is correct prior to construction. Any queries or discrepancies are to be raised immediately.

- CDM - Risks / Hazards**
- Proposed locations of landscape elements shown are subject to the presence of below ground services. A detailed survey to be undertaken and necessary method statements prepared and approved prior to undertaking any excavations / work within this area.
 - Care to be taken when working in proximity to the surrounding existing roads.
 - Care to be taken when clearing the existing site due to the potential presence of needles, litter etc.

ID	RISK	MITIGATION	DATE OF MITIGATION	
RESIDUAL PROJECT RISKS				
C02	29.07.25	JS	CTLN	Key and notes updated
C01	17.07.25	JS	CTLN	Stage 5 Issue
P01	09.04.24	JS	Ecus	Stage 4 Issue
REV	DATE	DRAWN BY	CHECKED BY	REVISION COMMENT

DRAWING STATUS: Construction

Job
DEWSBURY BUS STATION

Title
Landscape Proposals - Detailed Planting Plan - Sheet 2 (of 2)

Drawn by Date Scale
TA Dec 23 1:200 at A1

Drg. no. Rev
DBS-ECS-ZO-SL-DR-L-00003 C02

CLIMBERS

QTY	CODE	PLANT NAME	STOCK	HEIGHT	HABIT	SPECIFICATION
7No.	Cle arm	Clematis armandi	C 3L	60-80cm	Twinner	Caned; several shoots; 2 breaks
9No.	Hed hel	Hedera helix	C 3L	60-80cm	Self-clinger	

BULBS/WILDFLOWERS

QTY	CODE	PLANT NAME	GRADE	SPACING	SPECIFICATION
72No.	All gig 2L	Allium giganteum	C 2L	5m2	Full pot

PLANT MIXES

PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION
25%	24No.	VERBENA SHRUB MIX 3 planted @ 4m2			
25%	24No.	Vinca minor 'gertrude jekyll'	C 2L	20-30cm	Several shoots; 3 breaks
25%	24No.	Bergenia 'Bressingham Ruby'	C 2L	Full pot	Bushy; 5 breaks
25%	24No.	Lavandula angustifolia 'Hidcote'	C 2L	15-20cm	Bushy; 5 breaks
25%	24No.	Heuchera villosa 'Palace Purple'	C 2L	15-20cm	Bushy; 5 breaks

33m2 EVERGREEN SHRUB MIX 4A planted @ 4m2

PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION
25%	33No.	Vinca minor 'gertrude jekyll'	C 2L	20-30cm	Several shoots; 3 breaks
25%	33No.	Erica carnea	C 1L	15-20cm	Bushy; 5 breaks
25%	33No.	Hebe sutherlandii	C 2L	15-20cm	Bushy; 3 breaks
25%	33No.	Santolina virens	C 2L	20-30cm	Bushy; 5 breaks

65m2 EVERGREEN SHRUB MIX 4B planted @ 4m2

PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION
25%	65No.	Erica carnea	C 1L	15-20cm	Bushy; 3 breaks
25%	65No.	Hebe sutherlandii	C 2L	15-20cm	Bushy; 5 breaks
25%	65No.	Santolina virens	C 2L	20-30cm	Bushy; 5 breaks
25%	65No.	Rubus 'Betty Ashburner'	C 2L	30-40cm	Bushy; 3 breaks

19m2 ORNAMENTAL MIX 31 planted @ 5m2

PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION
25%	24No.	Lonicera ligustrina var. pileata	C 2L	20-30cm	Bushy; 3 breaks
25%	24No.	Verbena bonariensis	C 2L	Full pot	Full pot
25%	24No.	Brachyglottis	C 2L	20-30cm	Branched; 3 breaks
25%	24No.	Acanthus spinosus	C 2L	Full pot	Full pot

22m2 ORNAMENTAL MIX 32 planted @ 5m2

PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION
40%	44No.	Salvia officinalis	C 1L	-	Full pot
30%	33No.	Bergenia Bonariensis	C 2L	-	Full pot
30%	33No.	Sarcococca hookeriana var. humilis	C 2L	20-25cm	Bushy; 4

15m2 ORNAMENTAL MIX 33 planted @ 5m2

PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPACING	SPECIFICATION
15%	11No.	Achillea 'Summerwine'	C 2L	-	-	Full pot
20%	15No.	Acanthus spinosus	C 2L	-	-	Full pot
15%	11No.	Bergenia 'Bressingham Ruby'	C 2L	-	-	Full pot
20%	15No.	Heuchera micrantha 'Palace Purple'	C 2L	-	-	Full pot
10%	6No.	Verbena Bonariensis	C 2L	-	-	Full pot
20%	15No.	Allium giganteum	Bulb	-	-	Grade 18/20

92m2 ORNAMENTAL GRASS MIX3A - SHORT/<60cm planted @ 4m2

PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION
74%	74No.	No. Carex morrowii 'Silver Sceptre'	C 2L	-	Full Pot
20%	74No.	No. Hakonechloa Macra	C 2L	-	Full Pot
10%	37No.	No. Carex elata 'Aurea'	C 2L	-	Full Pot
20%	74No.	No. Festuca Elyjah Blue	C 2L	-	Full Pot
20%	74No.	No. Linum catharticum	C 3L	-	Full Pot
10%	37No.	No. Sesleria autumnalis	C 2L	-	Full Pot

17m2 ORNAMENTAL GRASS MIX3B - SHORT/<60cm planted @ 4m2

PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION
20%	14No.	No. Acorus gramineus 'ogon'	C 2L	-	Full Pot
20%	14No.	No. Carex elata 'Aurea'	C 2L	-	Full Pot
20%	14No.	No. Festuca Elyjah Blue	C 2L	-	Full Pot
20%	14No.	No. Sesleria autumnalis	C 2L	-	Full Pot
20%	14No.	No. Elymus magellanicus	C 3L	-	Full Pot

62m2 ORNAMENTAL GRASS MIX4 - MEDIUM/60-150cm planted @ 4m2

PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION
10%	25No.	No. Molinia Caerulea	C 2L	-	Full Pot
20%	50No.	No. Deschampsia Schottland	C 2L	-	Full Pot
20%	50No.	No. Calamagrostis Overdam	C 3L	-	Full Pot
20%	50No.	No. Molinia Transparent	C 2L	-	Full Pot
10%	25No.	No. Deschampsia cespitosa	C 2L	-	Full Pot
20%	50No.	No. Eryngium alpinum	C 2L	-	Full Pot

63m2 ORNAMENTAL GRASS MIX5A - TALL/>120cm planted @ 4m2

PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION
10%	25No.	No. Miscanthus Flamingo	C 2L	-	Full Pot
20%	50No.	No. Molinia Transparent	C 2L	-	Full Pot
20%	50No.	No. Calamagrostis 'Karl Foerster'	C 2L	-	Full Pot
10%	25No.	No. Miscanthus 'Ferner Osten'	C 2L	-	Full Pot
20%	50No.	No. Miscanthus 'Yakushima Dwarf'	C 2L	-	Full Pot
10%	25No.	No. Eryngium alpinum	C 2L	-	Full Pot
10%	25No.	No. Echinops ritro	C 2L	-	Full Pot

8m2 ORNAMENTAL GRASS MIX5B - TALL/>120cm planted @ 4m2

PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION
10%	3No.	No. Miscanthus Flamingo	C 2L	-	Full Pot
20%	6No.	No. Molinia Transparent	C 2L	-	Full Pot
20%	6No.	No. Calamagrostis 'Karl Foerster'	C 2L	-	Full Pot
20%	6No.	No. Panicum virgatum 'Heavy Metal'	C 2L	-	Full Pot
10%	3No.	No. Eryngium alpinum	C 2L	-	Full Pot
10%	3No.	No. Fargesia sinensis	C 3L	30-40cm	Several shoots; 4 breaks
10%	3No.	No. Fargesia nitida	C 3L	40-60cm	Several shoots; 5 breaks

NOTES AND ABBREVIATIONS:

B = Bare root (bagged).

C = Container (or pot) grow, followed by size of the container (or pot).

FORM = Shape of tree as supplied by the nursery.

HABIT = Juvenile habit or plant shape as supplied by the nursery.

QTY = Quantity

RB = Rootballed (balled and wrapped).

SIZE = Height or Spread of juvenile plant.

Std = (clear stem) Standard.

STOCK = Root condition/protection method eg Bare root.

Trans = Transplant (or undercut seedling).

Twinner = Twinning climber attached to trellis/frame, refer to specification.

- Refer to specification for further information.

- All plants to be completely hardened off.

- Substitutions to be agreed with Landscape Architect.

Plant Schedule generated by "Qscape" software 17/07/2025

Any plants that fails to establish within a period of 5 years from the completion are to be replaced in the next planting season on a like for like basis unless written consent is provided by the Local Planning Authority to vary the approved details.

KEY PLAN (not to scale)