

LANDSCAPE KEY

SOFT LANDSCAPE
(Planting: refer to planting schedule & Specification for planting details)

- Existing trees and mixed scrub vegetation to be retained. Refer to ecology habitat survey for further reference.
- **Proposed Heavy Standard Trees** Girth 12-14cm Height 350-425cm
- **Proposed Selected Standard Trees** Girth 10-12cm Height 300-350cm
- Proposed Native Planting Mix
- Proposed mixed species native hedge
- Proposed front garden planting
- Proposed front garden lawn to be turfed
- Proposed rear garden lawn to be seeded
- Proposed meadow seeding
- Proposed native bulb mix

HARD LANDSCAPE & BOUNDARIES

- Proposed access road
- Proposed permeable parking bays
- Proposed permeable paving to rear garden patios
- Proposed access track to paddock
- Proposed pedestrian footpath
- Proposed plot boundary treatments
- Flood zone 2: No build zone

HABITAT FEATURES
All habitat features are to be in accordance with ecologists specification. See Preliminary Ecological Appraisal by Middleton Bell for further detail.

- Proposed integrated swift bricks — Integrated swift brick to be fitted on the northwest elevation of each new dwelling, to go at wall top height in an unobstructed location (i.e. no extensions below).
- Proposed bat boxes — Integrated bat box to be fitted in each new dwelling. Boxes to be fitted in the southeast elevation of two of the new dwellings and the southwest elevation of the other dwelling.
- H — Proposed hedgehog holes — 13 cm x 13 cm hedgehog holes cut into the base of plot boundary fences with one per length of fence. In order to show new homeowners the purpose of fence holes, signs should be affixed over the hole on both sides of the fence (i.e. Eco Hedgehog Hole Fence Plate).

SOFTWORKS SPECIFICATION NOTES

The contractor is responsible to ensure that no products or practices are to be used that do not comply with relevant British Standards, Codes of Practice and Construction Regulations. Contractor to be fully satisfied with locations and off sets of services prior to excavations.

Site clearance generally: Where necessary remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil. Remove stones exceeding 75 mm. Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

Retain and protect trees and vegetation in accordance with BS 5837 where necessary. Grub up any large roots and dispose of without undue disturbance of soil and adjacent areas. In order to comply with UK legislation in regard to the Wildlife and Countryside Act 1981 (as amended), any tree or vegetation removal and/or management must take place outside of the bird nesting season (March to September inclusive). Where this cannot be achieved, nesting bird checks must be undertaken by a suitably qualified ecologist within 24 hours of the works.

Works within the root protection area (RPA):There shall be no areas of storage, trafficking of machinery, cultivation, ripping or mechanical rotivation, or importing of top soil, within the root protection area (RPA) of the existing trees to be retained. Where paths and hard surfacing is proposed within the retained tree RPA's, a No Dig methodology is to be adopted. Underground reinforcement, such as Cell Web (or similar approved) to be utilised in these locations. No trenches shall be dug within the RPA of the existing trees. New hedging plants within the RPA of the existing trees shall be notch planted. All of the above must be in accordance with BS 5837.

SOIL
Site preparation: Where required all existing topsoil and subsoil shall be stripped and stored separately on site. Heaps must not exceed 3m in height and should be used within 12 months in accordance with BS 4425 (Code of practice for general landscape operations).

Soil Sampling - Existing topsoil and inert sub soils, shall be analysed in accordance with BS 3882 to determine available nutrients, texture, organic matter content and pH. Where require, existing soils are to be improved in accordance with BS 3882:2015
Cultivation - Flail existing ruderal vegetation to ground level and remove arisings prior to cultivation. All areas to receive final layers of topsoil are to be de-compacted prior to spreading. Earth works vehicles to be small scale and tracked (loose-tipping) to minimise compaction, however chosen method for decompaction will be site specific dependant on size and soil conditions. Additional care must be taken as to not damage soil structure. All objects and stones over 75mm brought to the surface during decompaction are to be removed from the prepared surface layer. If existing subsoil horizon is found to consist of heavy clay, all proposed seeded areas to be fine ripped to 200mm depth at 300mm centres to increase drainage. Areas to be seeded to be chain harrowed to a fine tilth and lightly rolled to provide firm seed bed. Remove all stones over 30mm dia in any direction. Imported soil material: Import as necessary to make up any deficiency of topsoil and/or subsoil existing on site to complete the work and mitigate deficiencies. All imported material must conform with industry standards BS 8601 (Subsoil), BS 3882 Topsoil) and CLEA limits on heavy metals. Topsoil to be General purpose, 10mm screened and locally sourced (unless otherwise stated)

Soil build up: Existing topsoil and subsoil to be retained and reused on site within the landscape scheme where possible. Prior to spreading all topsoil to be screened to remove large stones and other deleterious materials, such as plant roots, leaves and clay. Topsoil to be loose-tipped and spread over de-compacted subsoil/receiving area. The total minimum rooting depth for planting, after settlement, should be: Grass 450mm; Planted areas 600mm; Trees 900mm. Topsoil depths for these areas should not normally exceed 300mm with the following minimum depths for each area: Grass 150mm; Planted areas 300mm; Trees 300mm. Meadow & wildflower seeding to be sown directly onto prepared subsoil.

Finished level of topsoil after settlement: Above adjoining paving or kerbs: 25 mm; Below dpc of adjoining buildings: Not less than 150 mm; Shrub areas: Higher than adjoining grass areas by 50 mm; Within root spread of existing trees: Unchanged; Adjoining soil areas: Marry in; Thickness of turf or mulch: Included.)

ADDITIVES
Compost to tree/shrub pits: To be as per BS PAS 100: well rotted sterilised spent mushroom compost max. pH 6.7 or Target Treestart compost. The contractor shall provide a Certificate of Analysis to show that the material being supplied complies with the above criteria. Incorporate spent mushroom compost or equivalent approved peat free compost into tree and planting pits at a rate of 3 parts topsoil to 1 part compost, thoroughly mixed together.

Fertiliser to ornamental shrub beds - Apply slow release fertiliser, Scotts 'Enmag' 4.19.10 NPK or equivalent approved at a rate of 50 gms/sq. metre over topsoil surface and fork into top 225mm spit.

PLANTING
Generally: Minimise trafficking of graded slopes. All plants to be preferably planted between Nov. - March. Nursery stock trees and shrubs to be in accordance with BS 3936 and BS 8545, to be supplied and planted in accordance with British Standards and the Horticultural Association's Plant Handling Guide. Container grown shrubs to be thoroughly watered before planting; trees and bare root shrubs watered after planting.

Times of year for planting: Deciduous Trees, hedges and shrubs: Late October to late March. Evergreen hedges and shrubs: September/ October or April/ May. Container grown plants: At any time if ground and weather conditions are favourable. Watering and weed control to be provided as necessary.

Shrub/Hedge planting pits: Timing: Excavate 1-2 days (maximum) before planting. Pit sizes: Wide enough to accommodate roots/toughs when fully spread and 75 mm deeper than root system. Pit bottom improvement Break up to a depth of 150 mm, incorporating 25g of slow-release fertiliser per planting pit. Where existing planting and roots are present plants are to be notch planted to minimise disruption/root damage. Backfilling material: Reuse excavated material. Watering: Immediately after planting, thoroughly and without damaging or displacing plants or soil. Firming: Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.

Tree pit sizes: Standard trees excavate a tree pit 1.2m x 1.2m x 900mm. Break up sides and bottom of pits to a depth of 100mm to ensure free drainage.Tree pit treatment: Soil ameliorant worked into pit bottoms. Pit sides to be scarified and backfilling material to be in accordance with topsoil and subsoil specification. Drainage Layer: Provide 200mm layer washed, clean gravel to base of pits to aid drainage (tree pit to be actively drained if poor draining soil or clay discovered by contractor).

Tree Accessories: Typically trees in soft landscape to be staked unless stated otherwise by the Landscape Architect. Underground guying is recommended for semi mature trees or trees within hard landscape and in public areas. Trees to be staked using 1m long x 75mm dia. round timber stakes (size of stakes to be adjusted to suit size of tree). Cross member to be installed 75mm x 25mm (larger trees will need large cross members). Locate proprietary Hessian ties on cross member to secure tree and prevent rubbing. Short stakes (<1.0m high) with biodegradable Hessian ties are recommended to encourage wind tolerance and prevent rubbing. Tree pit accessories by Green Tech or similar: Underground guying and perforated plastic irrigation/ ventilation pipe to landscape architects approval.

Root Barriers: To be used wherever the installed rootball will be within 2m of a building foundation or within proximity to underground utilities (distance at which root barrier is required is as per utility providers standards and should be confirmed prior to installation). Root barrier by Green Tech or similar to be installed vertically in accordance with supplier recommendations.

Protective fencing/guards: Newly planted areas or individual plants are to include rabbit/deer proof fencing. Either perimeter mesh fencing or individual biodegradable plastic free spiral guards/shelters/tubes are to be installed around all planting where required. Where areas are fenced, mesh to be 1m min above ground and buried 300mm below ground.

Mulching: Approved medium course chipped tree bark composted for at least 4 weeks. Particle size 25-75mm dia, max. 20% fines, pests and disease free and free of Methyl Bromide contamination. Clear any weeds, ensure soil is thoroughly moistened prior to applying mulch. All planting areas inc. trees, hedges and planting beds should receive an even 75mm depth of bark mulch, adjoining edge of mulch to be 15mm min. below adjacent hardstanding to avoid spillage. 50mm depth of mulch is only suitable for higher quality ornamental bark (<5% fines, 5-35mm size etc.), All bark should be FSC certified. Option to use biodegradable mulch mats to control moisture, soil temperature, erosion and weeds. All trees within grass are to have a 1.5m diameter mulch circle.

Seeding and making good existing grass areas: Steep embankments to be hydroseeded where required. After cultivating, grading and fertilizing prepare seed bed to fine, firm tilth with good crumb structure (Depth: 25 mm). Rake to a true, even surface, friable and lightly firmed but not over compacted. Remove surface stones/earth clods. Extend cultivation into existing adjacent amenity grassed areas sufficient to ensure full marrying in of levels where required. Evenly distribute seeds at an application rate of 35g/m² or as per supplier recommendations. Establish good seed contact with the root zone to promote healthy, consistent growth. Lightly harrow or rake to cover seed. Thoroughly water completed seeding until germination as necessary to keep the surface damp and soil most but not water logged.

Cutting In: Where cutting planting beds into existing grassed areas, the surrounding grass shall be protected and made good as necessary. These areas to be made good by preparing and re-seeding area. Seed mixes: John Chambers Lawn/Meadow seed or similar approved.

Turf Preparation - Lay turf with minimum possible delay after lifting. If delay occurs, lay turf out on topsoil and keep moist. Do not lift turf in frosty weather or if ground waterlogged. Arrange phased delivery timescales to avoid need for excessive stacking. Stacking height 1m (max). Do not use dried out or deteriorated turf. After cultivating, grading and fertilizing prepare seed bed to fine, firm tilth with good crumb structure (Depth: 25 mm). Rake to a true, even surface, friable and lightly firmed but not over compacted. Remove surface stones/earth clods. Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.

Turf Implementation - Turf to be laid in Spring and summer within 18 hours of delivery; and Autumn and winter within 24 hours of delivery. Do not lay turf when persistent cold or drying winds are likely to occur or soil is frost bound, waterlogged or excessively dry. Planks to be laid on previously laid turf. Do not walk on prepared bed or newly laid turf. Turf laid along contours with staggered, close butted joints. Do not stretch turf. At the edges, whole turfs to overlap line, trimmed to a true line. Remove high spots and fill hollows with fine soil to adjust levels Lightly and evenly firm as laying proceeds to ensure full contact with substrate. Do not use rollers. Dress turf with Sharp sand at a rate of 2kg/m2 and brushed in to completely fill joints. Thoroughly water completed turf immediately after laying. Check that water has penetrated into the soil below. Use hardy low maintenance amenity turf suitable for use in shade (To BS 3969).

Seed Preparation and Implementation for Wildflower Areas: No addition of nutrient to soil required. Method to suit soil type, proposed usage, location and weather conditions during and after sowing. A friable firm seed bed required, weed free, alleviation of compaction to a depth of 100-200mm, sowed on a firm and fine tilth. Seed bed preparation to be conducted in dry conditions, close to the time of sowing Remove surface stones/earth clods. Marry in with adjacent levels where required. Evenly distribute seeds at the manufacturers recommended application rate. Establish good seed contact with the root zone to promote healthy, consistent growth. Lightly harrow or rake to cover seed. Thoroughly water completed seeding.

MAINTENANCE
1 year Defects Liability Period applies. All dead or failing plants to be replaced the following growing season. Maintain a weedfree bare earth area 600mm dia minimum around individual trees and shrubs. Herbicide shall only be used where necessary and if use is required it should be a non-residual translocated herbicide and spot applied/applied with spray guard. Application and use to be in accordance with EA guidance. Prior to spraying ensure all spirals are tight to ground level and leaves within spray range are fully enclosed. Arisings: Remove. Trim all edges. Weed control: Substantially free of broad leaved weeds. Method: Application of a suitable selective herbicide. Remove any stones 25 mm in any dimension brought to the surface. Watering: To ensure establishment.

NOTE: Works to be carried out in accordance with the most up to date and current British Standards referenced within this specification.

PLANTING SCHEDULES

Tree Planting:

TREES					
Total	Species	Height	Girth	Size	Spec.
2	Acer campestre (Ac)	300-350cm	10-12cm	SS	RB, clear stem 175-200mm
1	Acer campestre (Ac)	350-425cm	12-14cm	HS	RB, clear stem 175-200mm
2	Alnus glutinosa (Ag)	300-350cm	10-12cm	SS	RB, clear stem 175-200mm
1	Alnus glutinosa (Ag)	350-425cm	12-14cm	HS	RB, clear stem 175-200mm
3	Betula pendula (Bp)	300-350cm	10-12cm	SS	RB, clear stem 175-200mm
4	Malus 'John Downie' (MJD)	350-425cm	12-14cm	HS	RB, clear stem 175-200mm
2	Malus domestica 'Ribston Pippin' (MRP)	250-450 cm	MM106	S	Root Stock: MM106
3	Prunus padus (Pp)	300-350cm	10-12cm	SS	RB, clear stem 175-200mm
2	Pyrus communis 'Conference'	300-350cm		S	Root Stock: Quince A
1	Quercus robur (Qr)	300-350cm	10-12cm	SS	RB, clear stem 175-200mm
3	Sorbus aucuparia (Sau)	300-350cm	10-12cm	SS	RB, clear stem 175-200mm
4	Sorbus aucuparia (Sau)	350-425cm	12-14cm	HS	RB, clear stem 175-200mm

Note: All tree pits to be mulched as per specification.

NOTE:
All planting to be sourced from a local supplier. Nursery stock trees, shrubs, planting and seed mixes are to be in accordance with BS 3936 and BS 8545, to be supplied and planted in accordance with British Standards and the Horticultural Association's Plant Handling Guide. Container grown shrubs to be thoroughly watered before planting; trees and bare root shrubs watered after planting. All species to be native and native grown where specified.

Mixed Native Scrub Planting:

Total Area: 124m²

NATIVE SHRUB MIX				
% of Mix	Species	Age	Size in cm	Spec.
10	Corylus avellana	1/2	60-80cm	BR
45	Crataegus monogyana	1u1	50-60cm	BR
5	Ilex aquifolium		50-60cm	3L
5	Lonicera periclymenum		50-60cm	3L
10	Prunus spinosa	1/0	30-40cm	BR
5	Rosa canina	1/0	30-40cm	BR
10	Sambucus nigra	1/1	60-80cm	BR
10	Viburnum opulus	1/2	80-100cm	BR

To be planted at 1m centres in groups of 3-17nr of a single species. Larger growing species to be planted to the centre of the areas and smaller growing species to be planted to the external edges. Biodegradable plastic free spiral guards to be provided to each plant, where required. All planting pits to be mulched as per specification.

Hedge Planting:

Total Length: 40lm

MIXED NATIVE HEDGEROW				
% of mix	Name	Size	Root	Spec.
5	Acer Campestre	40-60cm	BR	Hedge to be planted as a double staggered row @ 5 plants p/lm with 450mm spacings
10	Corylus avellana	60-80cm	BR	
45	Crataegus monogyana	40-60cm	BR	
5	Lonicera periclymenum	50-60cm	2L	
10	Malus sylvestris	40-60cm	BR	
20	Prunus spinosa	60-80cm	BR	
5	Viburnum lantana	60-80cm	BR	

Biodegradable plastic free spiral guards to be provided to each plant, where required. All trenches to be mulched as per specification.

Ornamental Planting:

Total Area: 15m²

SHRUBS & HERBACEAOUS				
Name	Pot Size	Size in cm	Spec.	Density p/m²
Ajuga reptans 'Burgundy Glow'	1.5-2L		C	5/m²
Artemisia 'Canescens'	1.5-2L		C	5/m²
Calamagrotstis 'Karl Forester'	3L	40-50	C	4/m²
Choisya ternata 'Sun Dance'	3L	30-40	C	3/m²
Cornus alba 'Aurea'	2L	50-60	C	3/m²
Cornus alba 'Sibirica'	2L	50-60	C	3/m²
Carex testacea	2L		C	5/m²
Euonymous fortunei 'Silver Queen'	3L	30-40	C	4/m²
Hebe pinguifolia 'Sutherlandii'	3L	30-40	C	4/m²
Hosta 'Francee' (fortune)	3L		C	5/m²
Lavandula hidcote	3L	30-40	C	5/m²
Liriope muscari	2L		C	6/m²
Lonicera 'May Green'	3L	30-40	C	4/m²
Sarcococca confusa	3L	20-30	C	5/m²
Skimmia 'Kew Green;	3L	40-60	C	4/m²
Stipa tenuissima	2L		C	7/m²
Spirea japonica 'Gold Flame'	3L	40-60	C	3/m²
Viburnum opulus 'Roseum'	3L	40-60	C	3/m²

Schedule provides an indicative but not exhaustive list. Species to be selected based on suitability for location. Biodegradable plastic free spiral guards to be provided where required. All planting areas to be mulched as per specification.

Meadow Seed Mixes:

Total area: 330m²

MEADOW SEED MIX
Habitat Aid Basic 80% Wildflower 20% Grass Seed Mix
Sowing rate @ 4g/m²
20% Wildflowers (by weight)
2.0 Yarrow Achillea millefolium
2.0 Common Knapweed Centaurea nigra
1.0 Daucus Carota Wild carrot
1.0 Hedge Bedstraw Galium mollugo
1.0 Ladies Bedstraw Galium verum
1.0 Oxeye Daisy Leucanthemum vulgare
1.0 Birdsfoot Trefoil Lotus corniculatus
3.0 Ribwort Plantain Plantago lanceolata
2.0 Selfheal Prunella vulgaris
2.0 Meadow Buttercup Ranunculus acris
1.0 Common Sorrel Rumex acetosa
3.0 Red Campion Silene dioica
80% Grasses
10.0 Common Bent Agrostis capillaris
5.0 Smaller Cat's-tail Phleum bertolini
25.0 Creeping Red Fescue Festuca rubra
25.0 Crested dogstail Cynosurus cristatus
15.0 Smooth-stalked meadow grass Poa pratensis

To be sown as per suppliers recommendations at 4 - g/m2. Not to be sown in topsoil as per other plantings, to be sown on subsoil to BS 8601:2013 or an un-improved soil with a lower nutrient level. Once established meadow areas are to be subject to to a reduce mowing regime. A narrow mown margin to path and highway edges to be incorporated where required.

Project: Bence farm Stables, Barnsley Road		**Client:** Britology						
Title: Outline Landscape Masterplan		**Drawn:** LW	**Chk'd:** LW	**App'd** SH				
Drawing Number: PWP 774 001	**Revision:** 00	**Drawing Scale:** 1:200 @ A1						
			00 **Rev**	25/05/23 **Date**	For Coordination **Detail**	LW **Made**	LW **Chk'd**	SH **App'd**

Notes:
1. Not for construction all dimensions to be confirmed on site
2. Based on Layout Drawing 0280_DART_RM Information by eleven52architects
3. Refer to architects/engineers drawing for hard landscape, boundary treatments, site levels, drainage, retaining walls.
4. Build ups/footings to engineers specification.
5. Contractor to be fully satisfied with locations of services prior to excavations.
6. All existing trees to be protected to BS 5837.
7. Crown copyright and database rights 2021. Ordnance Survey 100053143

NOTES:
Trees & Services
- Where paths and hard surfacing is proposed within close proximity to trees all construction is to be in accordance with BS 5837: 2012
- Root barriers / root protection measures are to be incorporated where required in accordance with guidelines where existing and proposed trees and vegetation are within 2m of proposed building or trees are in close proximity to services (details to be agreed).
- Tree and shrub planting proposed within drainage easements to be approved by local water authority. Planting to incorporate root protection measures around services or planting pits to ensure the sewer system is resistant to tree root ingress in accordance with the current Code for Design.
- Contractor shall comply with NJUG publication, volume 4 'Guidelines For The Planning, Installation And Maintenance Of Utility Services In Proximity To Trees' together with BS 5837:2012 Trees in Relation to Construction. Where conflict arises refer to the British Standard.

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