

100
Millimetres
0 10
DO NOT SCALE

PLANTING MIX A - 4,860m² - PLOT NO. 1, 3, 4 & 6
MIXED NATIVE WOODLAND EDGE MIX
Woodland edge mix:

Qty%	Species	Form	Height in CM	Spacing in CM
5%	Rubus fruticosus	Whip	60-80	45
5%	Hedra helix	Whip	60-80	45
30%	Crataegus monogyna	Whip	60-80	45
10%	Prunus spinosa	Whip	60-80	45
10%	Rosa canina	Whip	60-80	45
25%	Cornus alba	Whip	60-80	45
10%	Salix caprea	Whip	60-80	45
5%	Ilex aquifolium	Whip	60-80	45

Planted at 450mm centers with rabbit guards

PLANTING MIX B - 8,868m² - PLOT NO. 2, 5 & 7 - 9
NATIVE WOODLAND MIX
Woodland edge mix:

Qty%	Species	Form	Height in CM	Spacing in CM
5%	Salix caprea	Whip	60-80	45
20%	Betula pubescens	Whip	60-80	45
15%	Quercus robur	Whip	60-80	45
15%	Fagus sylvatica	Whip	60-80	45
10%	Sorbus aucupari	Whip	60-80	45
10%	Tillia Cordata	Whip	60-80	45
5%	Ilex aquifolium	Whip	60-80	45
7.5%	Viburnum opulus	Whip	60-80	45
5%	Rosa Canina	Whip	60-80	45
7.5%	Crataegus monogyna	Whip	60-80	45

Planted at 450mm centers with rabbit guards

SCATTERED/SPECIMEN TREES:

No.	Species	Form	Height in CM	Spacing in CM
2	Pyrus communis (Pc)	Standard (Heavy)	350-425	As shown
3	Prunus padus (Pp)	Standard (Heavy)	350-425	As shown
5	Malus Sylvestris (Ms)	Standard (Heavy)	350-425	As shown
10	Betula Pendula (Bp)	Standard (Heavy)	350-435	As shown
16	Sorbus aucupari (Sa)	Standard (Heavy)	350-425	As shown
7	Tillia Cordata (Tc)	Standard (Heavy)	350-425	As shown

STREET TREES
Heavy standard street Trees

No.	Species	Form	Height in CM	Spacing in CM
39	Liquidambar styraciflua 'Festival' (Ls)	Standard (Extra Heavy)	400-450	As shown
34	Ginkgo Biloba (Gb)	Standard (Extra Heavy)	400-450	As shown
18	Hippophae salicifolia 'Streetwise' (Hs)	Standard (Extra Heavy)	450-500	As shown

GRASS MIX - 8,972m²
Amenity Grass mix

LANDSCAPE FURNITURE PROPOSALS

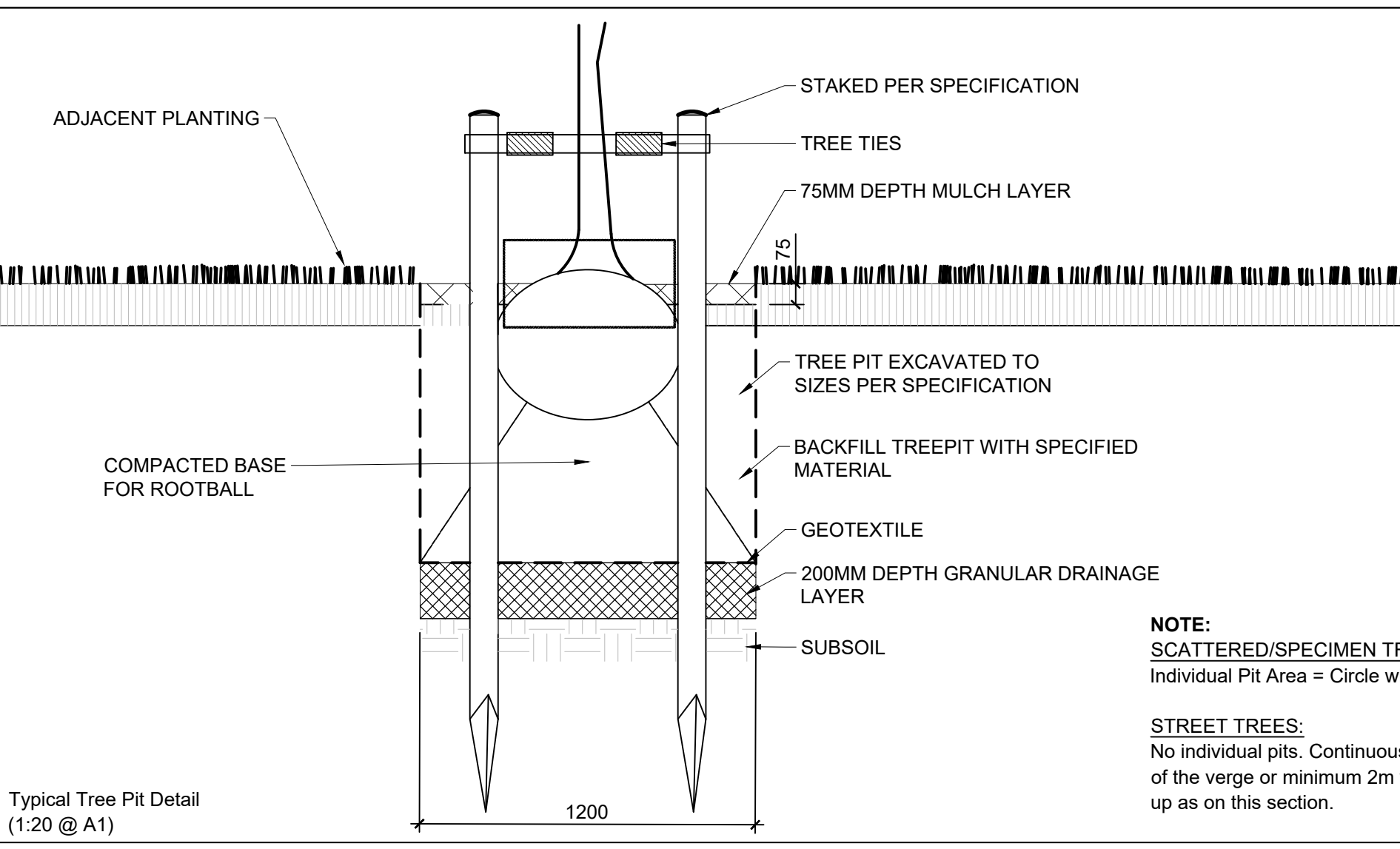
BENCHES TYPE AND NO. TBC AT DETAILED DESIGN STAGE

ALTERNATIVE STREET TREES FOR CONSIDERATION
List of alternative street trees for consideration, subject to site growing conditions and approval by the client and stakeholders'

Extra heavy standard street trees:

Species:	Form	Height in CM	Spacing in CM
Quercus robur 'Fastigiata'	Standard (Extra Heavy)	400-450	As shown
Pyrus chanticleer 'Autumn Blaze'	Standard (Extra Heavy)	400-450	As shown
Platanus xhispanica 'Tremonia'	Standard (Extra Heavy)	400-450	As shown
Acer campestre 'Elegant'	Standard (Extra Heavy)	400-450	As shown
Ulmus americana 'Princeton'	Standard (Extra Heavy)	400-450	As shown
Carpinus betulus 'Franz Fontaine'	Standard (Extra Heavy)	400-450	As shown

PLOT AREAS			
PLANTING MIX	GRASS MIX	GRASS MIX	GRASS MIX
Plot 1 - 4416m ²	Plot 10 - 64m ²	Plot 26 - 206m ²	Plot 42 - 192m ²
Plot 2 - 607m ²	Plot 11 - 46m ²	Plot 27 - 360m ²	Plot 43 - 147m ²
Plot 3 - 61m ²	Plot 12 - 63m ²	Plot 28 - 211m ²	Plot 44 - 304m ²
Plot 4 - 320m ²	Plot 13 - 93m ²	Plot 29 - 147m ²	Plot 45 - 104m ²
Plot 5 - 945m ²	Plot 14 - 104m ²	Plot 30 - 53m ²	Plot 46 - 84m ²
Plot 6 - 63m ²	Plot 15 - 147m ²	Plot 31 - 32m ²	Plot 47 - 65m ²
Plot 7 - 1165m ²	Plot 16 - 96m ²	Plot 32 - 202m ²	Plot 48 - 123m ²
Plot 8 - 3674m ²	Plot 17 - 165m ²	Plot 33 - 46m ²	Plot 49 - 137m ²
Plot 9 - 2477m ²	Plot 18 - 295m ²	Plot 34 - 219m ²	Plot 50 - 85m ²
	Plot 19 - 567m ²	Plot 35 - 403m ²	Plot 51 - 44m ²
	Plot 20 - 193m ²	Plot 36 - 87m ²	Plot 52 - 58m ²
	Plot 21 - 101m ²	Plot 37 - 228m ²	Plot 53 - 269m ²
	Plot 22 - 84m ²	Plot 38 - 110m ²	Plot 54 - 12m ²
	Plot 23 - 58m ²	Plot 39 - 722m ²	Plot 55 - 980m ²
	Plot 24 - 119m ²	Plot 40 - 152m ²	Plot 56 - 269m ²
	Plot 25 - 136m ²	Plot 41 - 62m ²	Plot 57 - 528m ²
TOTAL AREA OF VEGETATION: 22,700m²			8,972m²



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Landscape - Outline Specification - High Level Only

GENERAL
Quality Standards / Control

Material substitutions to be of same quality and performance as original specification and approved
Provide locally-sourced material where possible
Provide materials with high recycling content where possible
Store materials in accordance with product guidance - suitable compound and storage to be provided
Install proprietary products to manufacturers details
All samples to be approved by landscape architect
All softworks areas to be verified as decompacted prior to planting
All topsoil to be fully tested prior to use on site
All softworks installed within suitable planting seasons
All softworks trees/large shrubs to be inspected and approved by landscape architect prior to installation
All softworks material to be bio-secure compliant
All pesticides/herbicides to conform to legal requirements, safe application and storage

SITE PREPARATION
Site Clearance / Excavation and Fill

Install full tree protection / root protection measures in advance of site disturbance. Tree protection measures to remain in place for full duration of construction. All measures are subject to direction from the arboriculturalist's Tree Survey

Item ID	Item Type	Dimensional Info / Build Up (Indicative Only - subject to surveys, operational requirements, item supplier)	Material (Provisional Only)
TP01	Fencing (tree protection)		Heras Fencing supported by scaffold suitable for tree protection to BS 5837:2012 standard

For all areas, clear and remove existing conditions suitable for installation of full depth construction of proposed materials/softworks. Protect / divert existing utilities to be retained. Material stored for re-use / backfilling of planted areas to be stored in secure area, see **Topsoil, Soil Ameliorants and External Planting**. See **Civils / Structures / Drainage** for site clearance of their site elements.

HARDWORKS
External Signage and Interpretation

All signage TBC by client. All Highways / traffic signs by Civils

Kerbs / Edgings / Channels

All kerbs / edgings / channels by Civils

Paving

All paving by Civils

Fencing

See **Site Clearance / Excavation and Fill** above for Tree Protection fencing

Barriers / Guardrails

All barriers / guardrails by Civils

Site / Street Furniture / Equipment

Item ID	Item Type	Dimensional Info / Build Up (Indicative Only - subject to surveys, operational requirements, item supplier)	Material (Provisional Only)
	Litter Bins		TBC by client
	Cycle Stand on conc found. Pad		TBC by client
	Benches		TBC by client

Lighting

All lighting by Civils and Lighting Engineer

SOFTWORKS
Topsoil, Soil Ameliorants and External Planting

Soil Management

Soil management and use of all soils shall be in accordance with DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, BS3882 and BS8601.

Imported topsoil, to make up deficiencies on site, shall comply with BS 3882 Specification for topsoil, and classified as Multipurpose topsoil. Tree pits shall be back-filled with site won Topsoil and subsoil either site won or imported shall be appropriate for the intended use (e.g. to seed, plant, and establish vegetation) and the handling, storage and use of topsoil and subsoils on site is monitored throughout the duration of the works, to ensure its health and suitability for use.

Topsoil shall be imported from a source approved by the Overseeing Organisation. It shall be friable, not be sticky or leave a polished surface when smeared or be easily moulded when moist. It shall be free from subsoil, rubbish, roots of perennial weeds, non-soil material, brick or other construction materials, any toxic substances and substances injurious to plant growth including contamination from Japanese Knotweed or Himalayan Balsam. Topsoil shall be free of rubbish and stones over 50mm in diameter.

Laboratory analyses and units of measurement shall be in accordance with the methods and units specified in BS 3882. Analyses shall cover soil texture/particle size analysis, stone content, pH value, nutrient content (N, P, K and Mg), organic matter content (through loss on ignition), electrical conductivity (supplemented by exchangeable sodium percentage, where appropriate) and compaction. Laboratory analysis shall be submitted to the Overseeing Organisation together with topsoil samples for approval.

Zootoxic elements shall not exceed the following concentrations

CHEMICAL SYMBOL	CONCENTRATION MG/KG
As	40
Cd	15
Cr	1000
Pb	2000
Hg	2

Phytotoxic elements shall not exceed the following concentrations

CHEMICAL SYMBOL	CONCENTRATION MG/KG
Cu I	30
Ni	70
Zn	300
B(Water soluble)	3

Electrical conductivity shall not exceed 1500 µs/cm (micro Siemens per centimetre) in a 1:2 (grams soil: ml water) extract. Organic matter content to be not less than 4% (volume: weight). Zootoxic elements shall not exceed the following concentrations:

CHEMICAL	CONCENTRATION MG/KG
Nitrogen	2000
Extractable Phosphorous	40
Extractable Potassium	240
Extractable Magnesium	100

The Contractor shall ensure topsoil and subsoil depths, either imported or site derived, are sufficient to ensure establishment of the full rooting depth of trees, shrubs or grass.

The Contractor shall ensure that the total thickness of topsoil is to unconsolidated depths of a minimum of 150mm for grass areas, 300mm for planting areas and as per the Landscape Architect Specialist's site-specific requirement for individual tree pits. Subsoils shall make up the remaining plant rooting depth as recommended within BS 3882 and BS 8601.

Importing of Soil and Other Fill Materials

The Contractor shall obtain written acceptance from the Employer prior to importing of any soil and other fill material on to the Works.

The Contractor shall provide physical soil samples for visual inspection, supported by certificates of compliance and testing, to assure suitability for use.

The Contractor shall provide RAMS for suitability and appropriateness testing for final use (i.e. to confirm topsoil specification, chemical content including asbestos, and geotechnical properties) of all soils to be imported on to the Works.

Where soils are sourced from a greenfield site, the Contractor shall demonstrate that the site of origin is uncontaminated and that the soils are appropriate for use on the Works, by providing a Verification Report for written acceptance by the Employer.

Grading/Subsoil
General: Grade to smooth flowing contours to achieve specified finished levels of topsoil. Areas of thicker topsoil: Excavate locally.

Subsoil surface prep
General: Excavate and/or place fill to required profiles and levels

Loosening:
- Light and non-cohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 300 mm.
- Stiff clay and cohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 450 mm.
- Rock and chalk subgrades: Lightly scarify to promote free drainage.
Stones: Immediately before spreading topsoil, remove stones larger than 50 mm.
Remove from site: arisings, contaminants and debris.
Where the surface is uneven or irregular, adjust by blade grading and/or local filling provided the final depth or topsoil will not be less than specified.

Beneath existing tree canopies
Where indicated, loosen soil by compressed air injections in locations as directed and agreed with the Certified Arborist

Topsoil Storage - stockpiled at no more than 2m. Ht.

Topsoil Spreading - 100mm lifts

Herbicide - apply all areas to be planted / seeded

Fertilizer - slow release for all areas except meadows (no fertilizer)

Planting

All plants & planting to comply with current BS specifications including BS 3936: Part I, Part II and Part IV. Where applicable BS 4428. All plants to be supplied in accordance with the schedule. Trees to be planted as shown. All planting material to be stock of British origin and fully hardened off. Tree root protection barriers to be installed where trees are near underground services, building foundations, pavements and roads. Planting should only be undertaken in suitable weather conditions.

Item Type	Dimensional Info / Build Up (Indicative Only - subject to surveys, operational requirements, item supplier)	Material (Provisional Only)
Grass Area (amenity)	N/A 150mm 300mm	Seeded Amenity Grass Topsoil Decompacted subsoil
		Maintenance - regular watering during establishment. Fenced until established.

Item Type	Dimensional Info / Build Up (Indicative Only - subject to surveys, operational requirements, item supplier)	Material (Provisional Only)
Native Tree / Shrub Planting	Pit size for planting 450mm x 450mm x 450mm pits	
	Pit build up 75mm 300mm Backfill to make up pit depth	Mulch Topsoil Decompacted subsoil
	Tree/Shrub supply size Size - per schedule, or as required by local authority	
	Format Shrubs Trees	Containerised or as approved B & B or as approved
	Other Per Item	Rabbit guard

Item Type	Dimensional Info / Build Up (Indicative Only - subject to surveys, operational requirements, item supplier)	Material (Provisional Only)
Trees (Street Trees and Scattered / Specimen Trees)	All Trees Pit build up 75mm 1000mm 200mm	Mulch (to 1200mm dia ring around stem) Topsoil Gravel Drainage layer
	Tree/Shrub supply size Size - per schedule, or as required by local authority Street trees to be 2m clear stem or as approved	
	Format Trees	B & B or as approved
	Other Per Item	Rabbit guard 2 x stakes per tree (min 1.5m above surface) Tree ties for stakes Slow release watering bag size TBC Root barrier for street trees or where required near utilities

Item Type	Dimensional Info / Build Up (Indicative Only - subject to surveys, operational requirements, item supplier)	Material (Provisional Only)
Scattered / Specimen Trees	Individual Pits 1200mm dia. circular plan area x 1200mm (d)	
Street Trees	Continuous trench 2000mm (w) x length of planting plot/verge (l) x 1200mm (d)	

Establishment, Maintenance and Irrigation

All seeding / planting: Water plants thoroughly immediately after planting and lightly firm soil around plants. Rabbit protection guards to be installed around plants with stakes or canes to ensure successful establishment of plants. Plots to be fenced to prevent trespass/damage

Maintenance period as specified in any associated planning conditions.

All planting to be watered regularly and with increased frequency during drought periods

Any trees, plants or grass / wildflower removed, dying, severely damaged or seriously diseased within specified planning conditions to be replaced in the following planting season with replacement planting.

Establishment and permanent irrigation TBC

END

NOTES:

- To Be Read in-conjunction with Landscape Proposal Drawing: STDC_HWY-ATK-LDC-SHPR-DR-CH-000040 and all landscape and civil design information.
- Subject to site conditions prior to installation, including the final levels design, proposed trees and planting mixes may require to be changed. All planting shown is indicative as an aid to the size, character and environmental benefits which are envisaged.

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

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ISSUED FOR PLANNING	A2	CO1	LS	MT	MT	DMA	02/09/22

Drawing Suitability	Status
APPROVED - ORDERS / LICENSES	A2

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TEESWORKS

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Project Title: **SOUTH TEES DEVELOPMENT CORPORATION**

Drawing Title: **STEEL HOUSE PARK & RIDE PLANNING APPLICATION LANDSCAPE SCHEDULE OF AREAS**

Drawing Number	Project	Originator	Volume
STDC_HWY - ATK - LDC - SHPR	- DR - CH - 000043		
Original Size: A1	Scale: NTS	Project Ref. No: 5198022	Sheet: 1 of 1 Rev: C01