Sapcote Parish Council

Serving the people of Sapcote

Clerk to the Parish Council: **Josie Blackburn,**
15 William Spencer Avenue, Sapcote, Leicestershire, LE9 4NF
Tel. 07305 168086
Email: clerk@sapcoteparishcouncil.org.uk

4th October 2023

Dear Sirs

Sapcote Parish Council Cemetery Extension, Donkey Lane, Sapcote
Letter of Invitation

Following some changes to our original plans we are inviting you to retender for the contract to construct our new Cemetery extension.

All supporting documents are attached, including the revised design and plans for both hard surfacing and landscaping.

If you would like to visit the site, have any questions, or would like to discuss the project further please do contact us by Wednesday 11th October. We would expect all responses to be sent out by Monday 16th October.

All tenders should clearly show quotes for

1. All hardscaping works to create roads, paths, storage area etc.
2. All landscaping works.

All tenders and any supporting documents must be submitted to the Clerk to Sapcote Parish Council, to be received not later than Friday 27th October.

For reference purposes, please also submit the names and addresses of two employers for whom you have carried out similar work within the last two years.

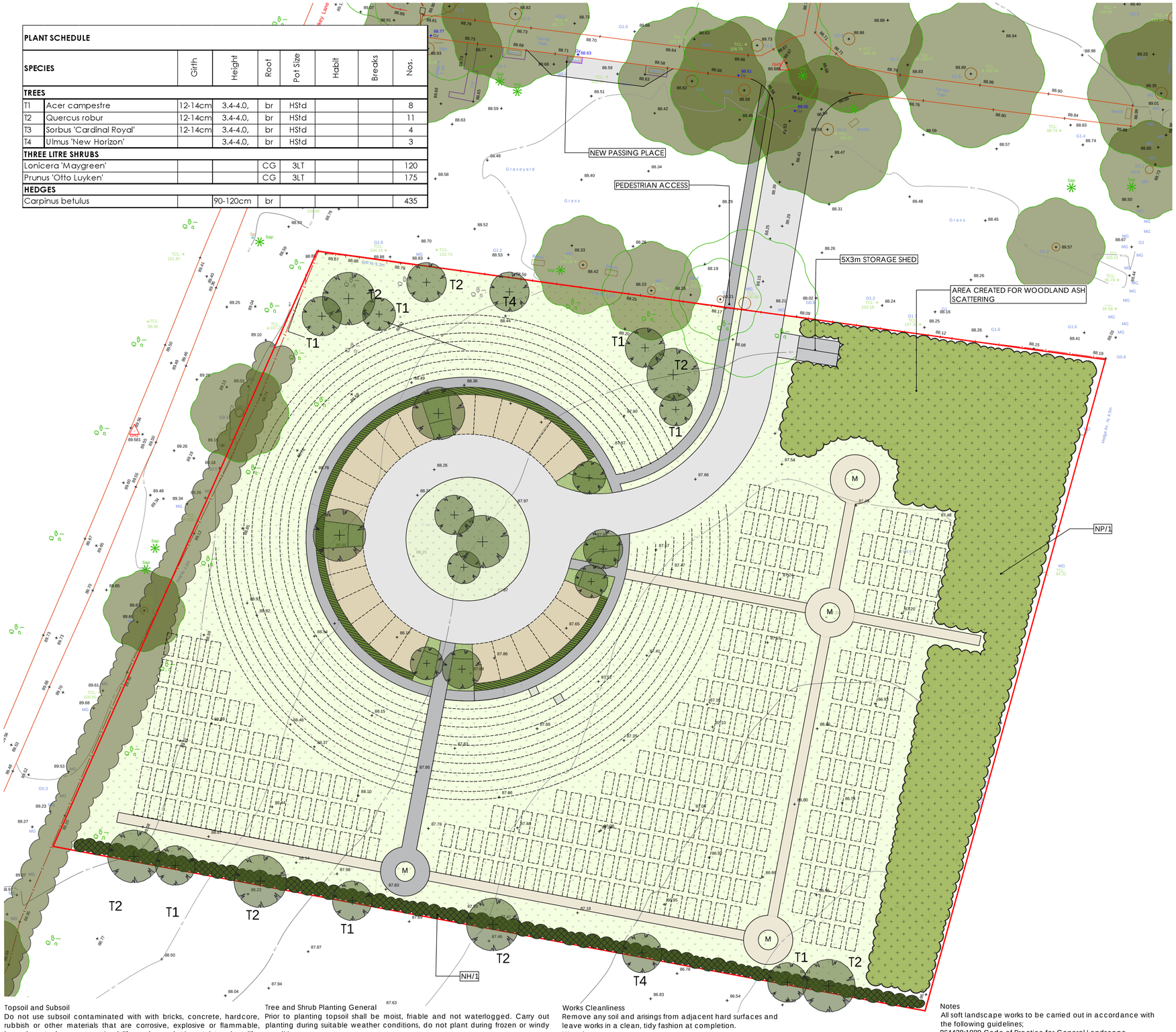
The Council does not guarantee to award all or part of this contract to the lowest or any tenderer.

Yours faithfully

Josie Blackburn
Clerk to the Parish Council

Sapcote Cemetery Extension | Landscape Proposals

PLANT SCHEDULE								
SPECIES		Girth	Height	Root	Pot Size	Habit	Breaks	Nos.
TREES								
T1	Acer campestre	12-14cm	3.4-4.0,	br	HStd			8
T2	Quercus robur	12-14cm	3.4-4.0,	br	HStd			11
T3	Sorbus 'Cardinal Royal'	12-14cm	3.4-4.0,	br	HStd			4
T4	Ulmus 'New Horizon'		3.4-4.0,	br	HStd			3
THREE LITRE SHRUBS								
Lonicera 'Maygreen'				CG	3LT			120
Prunus 'Otto Luyken'				CG	3LT			175
HEDGES								
Carpinus betulus			90-120cm	br				435



Topsoil and Subsoil
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Do not use topsoil contaminated with with subsoil, rubbish or other materials that are corrosive, explosive or flammable, hazardous to human or animal life and are detrimental to plant life. Topsoil shall be stored in heaps no higher than 1m and wider than 2m and shall be protected from contamination and compaction. Following spreading, topsoil areas shall be cultivated to suitable depth and tilth when weather is suitably dry and the surface shall be left regular and even, levels shall be 25mm above adjacent kerbs and 50mm above lawns. Any visible weeds, roots and large stones shall be removed. Do not compact topsoil, and ensure a friable texture of separate visible crumbs.
Recommended depth after settlement:
Grass Areas: 100mm / Shrub Areas: 300 to 450mm

Tree and Shrub Planting General
Prior to planting topsoil shall be moist, friable and not waterlogged. Carry out planting during suitable weather conditions, do not plant during frozen or windy conditions.
Where beds are overgrown with weeds apply herbicide in accordance with manufacturers recommendation. Allow fallow period before cultivation. Container grown plants can be planted at any time of year if ground and weather conditions are favourable. Bare root trees and shrubs can be planted from late October to March. All plants shall be as specified, undamaged, sturdy, healthy and vigorous. They shall be free from pests, diseases, discoloration and physiological disorders. Name, form, dimensions, provenance and other criteria shall be as defined in The National Plant Specification. All plant handling shall be in accordance with HTA 'Handling and Establishing Landscape Plants'. All plants shall be stored in a secure environment and protected from site operations and over exposure to adverse weather conditions. Where topsoil is compacted it shall be broken up to a depth of no less than 350mm into particles of 2-8mm, with the surface left regular and even. Levels shall be 25mm above kerbs and hardstandings and 50mm above adjacent grass areas. Remove all visible weeds, roots and large stones exceeding 30mm. Do not cultivate soil within rootspread of existing trees and shrubs. All plants shall be planted upright or well balanced with best side to front. MycorForce Transplanter shall be spread around the roots of each plant during planting at a rate specified by the supplier.

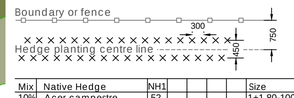
Works Cleanliness
Remove any soil and arisings from adjacent hard surfaces and leave works in a clean, tidy fashion at completion.
Watering
Water all plants immediately after planting, thoroughly and without damaging or displacing plants or soil.
Bark Mulch
All planting areas to receive 75mm depth of Melcourt Ornamental grade bark mulch unless otherwise directed.
Hedges to receive 1m wide, 75mm depth of bark mulch to base.
Individual trees in grass to have 75mm depth, 600mm diameter bark much to base.

Notes
All soft landscape works to be carried out in accordance with the following guidelines;
BS4428:1989 Code of Practice for General Landscape Operations.
BS8545:2014 Trees from Nursery to Independence in the Landscape. Recommendations.
All new planting stock shall comply with the following guidelines;
BS4043:1989 Transplanting root-balled trees
BS3936:1992 Nursery Stock Part 1. Specification for Trees and Shrubs.
Follow good modern horticultural practice in any proposed soft landscaping.
Planting compost shall be entirely free of peat. Proprietary products based on composted straw, manure or coir are acceptable, but products based on wood chips or bark shall not be used.

Proposed Native Hedgerow

To be planted at 5 plants per linear metre in double staggered row. All with spiral rabbit guards and secured with bamboo cane. Plant at 750mm from fence boundary. Areas for planting shall be treated with a translocated herbicide such as Glyphosate to clear any existing weeds before planting, the ground shall be cultivated to a depth of 300mm. Whips shall be pit planted, with backfill mixed with 70grams of Enmag slow release fertiliser. All stock delivered to site shall be of proven British provenance, a certificate shall be provided to the Landscape Architect to prove provenenance of plants prior to delivery to site.
Dip all roots into MycorForce Whip Dip prior to planting. Add 75mm deep 1m wide amenity bark mulch.

Typical Hedge Planting Plan (NTS)



Mix	Native Hedge	NH1				Size	Ttls
10%	Acer campestre	52				1+1 80-100 br	52
10%	Corylus avellana	52				1+1 80-100 br	52
50%	Crataegus monogyna	260				1+1 80-100 br	260
10%	Ilex aquifolium	56				60-90 3L	56
15%	Prunus spinosa	78				1+1 80-100 br	78
5%	Rosa canina	26				1+1 40-60 br	26

Proposed Native Scrub/Shrub Planting

To be planted within the specified areas shown below at 1.5m centres. Areas for planting shall be treated with a translocated herbicide such as Glyphosate to clear any existing weeds before planting. After herbicide has taken effect cultivate the area to a coarse tilth 250mm deep. Whips shall then be pit planted, with backfill mixed with 70grams of Enmag slow release fertiliser. Gently firm in by treading. All stock delivered to site shall be of proven British provenance, a certificate shall be provided to the Landscape Architect to prove provenenance of plants prior to delivery to site. All to have Tubex Netguard, 60cm high and 150mm diameter, dark green colour. To be fixed to firmly anchored softwood timber stakes using 2no. plastic cable ties. Dip all roots into MycorForce Whip Dip prior to planting. Contact supplier for application details, Tel:English Woodlands Burrow Nursery 01435 862992.

Plant Numbers for Native Planting Areas

%	Species	NP1				Size	Ttls
10	Betula pendula	50				1+1 80-100 br	50
20	Corylus avellana	100				1+1 80-100 br	100
40	Crataegus monogyna	200				1+1 80-100 br	200
15	Ilex aquifolium	75				1+1 80-100 cg	75
5	Rosa canina	25				1+1 80-100 br	25
10	Viburnum opulus	50				1+1 80-100 br	50

Ornamental Shrub Planting

Shrub areas to have minimum 300mm depth of good quality imported cultivated topsoil, free from bricks, large stones and other rubbish.
To have 75mm depth Melcourt Ornamental grade bark mulch or similar approved.

Formal Hedge

Ensure all plants are bushy to provide joined up length of hedge. Trim all hedges at planting to ensure neat appearance and promote new growth. Plant at 4 per linear metre.
To have 75mm depth Melcourt Ornamental grade bark mulch or similar approved to base of hedge to width of 500mm.

Clover Rich Amenity Grass

This area of clover rich lawn will be beneficial to bees and other insects. The lawn can be maintained by periodic mowing to prevent the grass species becoming too high or untidy. Once the clover flower season has finished the lawn can be mown as a regular amenity grass. Sow Germinal A4 Low Maintenance seed with addition of 5% Trifolium pretense and 5% Trifolium repens. Sow at 35g/m2.

Amenity Grass Seeding General
Minimum 100mm cultivated topsoil.

Areas for planting shall be treated with a translocated herbicide such as Glyphosate to clear any existing weeds before planting. More than one application may be required to clear existing weeds within agricultural field.

After herbicide has tekan effect, cultivate topsoil to depth of 100mm including all consolidation, rolling, harrowing or raking to acheive a firm, fine tilth suitable for seeding.

The seed bed be shall be free from uneveness, hollows, depressions and soft areas so that an evenly graded grass surface can be acheived.

The seed bed should be evenly graded to finish 25mm above adjoining paving, kerbs etc after settlement.
Remove all weeds, and remove stones, grass sods and other debris exceeding 20mm in any dimension and all roots exceeding 15mm diameter or 200mm length.

After cultivation and prior to grass seeding, supply, spread and lightly rake into the tilth a granular pre-seedling fertiliser N:P:K ration 10:15:10 at a rate of 60 grammes per m2. Do not apply fertilisers to wild seed areas. Sow according to suppliers instructions.

Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed, but firm in with a roll, or by treading, to give good soil/seed contact.

NORTH

KEY & NOTATION

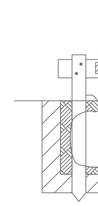
Plot Boundary

Existing Retained Vegetation

Proposed Tree Planting

The excavated hole shall be of sufficient size to accommodate the root-ball or container, allowing approximately 500mm clearance.
Before planting the sides of the pit shall be broken up and the base dug over to a depth of 150mm to improve drainage. The tree will be planted to the same depth as it was in the nursery. Backfill will be firmed in around the rootball to prevent any air pockets.
The pit shall be backfilled with a ⅔ mix of good quality topsoil and an non peat based compost. 140gms of Enmag granular slow-release fertiliser shall be incorporated to the fill mixture.
Root Barriers
Where an installed rootball is within 3m of an exisitng underground service route install protective root barrier with sides vertical and finished 75mm below finished ground level. To be Greenleaf ReRoot 2000 or similar approved.
Trees in soft ground
Trees shall be double staked and fixed to horizontal crossbar using rubber strapping, with rubber block positioned between the tree and cross bar.
Stakes shall be 60mm diameter treated softwood, driven firmly into ground either side, and not through the rootball, with tree central between the stakes. The above ground height of the stake should be a minimum of a third of the stem high. All trees to receive perforated watering pipes surrounding root ball.
Tree Aftercare
Any necessary formative pruning will be carried out and where appropriate woodchip/bark mulch applied to a depth of 75mm, and to at least the edge of the planting pit.
A properly planned maintenance programme should be kept up until successful establishment of the trees. This may include watering when necessary, checking of the support systems, weed control and further mulching.

Extra heavy standard Tree Pit and Staking Detail (NTS)



2.7x1.2m Grave Plot

1m Cremation Plot with 1.2m space between lines

Tarmac Footpaths

Breedon Gravel Footpaths

Memorial Features

Revisions			Dwn.	Date
A	1.	Minor revisions	cjn	28.09.23

Scale: 1:500 @ A1
0 10m 50m

Project
Cemetery Extension Donkey Lane, Sapcote Leicestershire

Drawing
Detailed Landscape Proposals 1 of 2

Status
For Planning, Tender & Construction

Date
03.03.2022

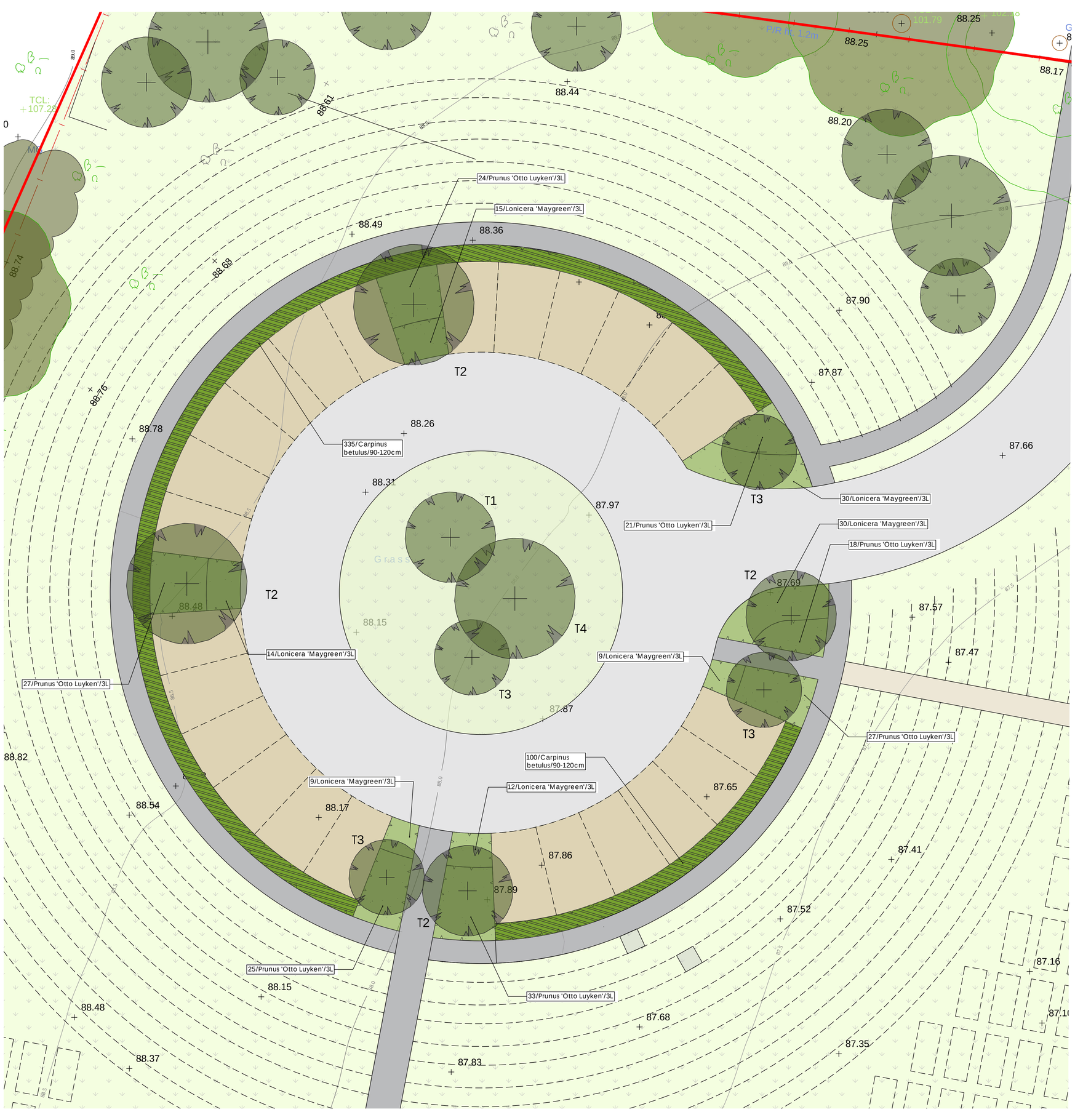
Dwg. No.	Revision	Drawn	Checked
21.1592.002	A	cjn	cjn

Francis House, Coventry Road
Burbage, Leics LE10 2HL
T. 01455 611 950

Ian Stemp Landscape Associates
Landscape Architecture Landscape & Visual Assessment Arboriculture Ecology

Landscape Institute Registered Practice

Sapcote Cemetery Extension | Landscape Proposals



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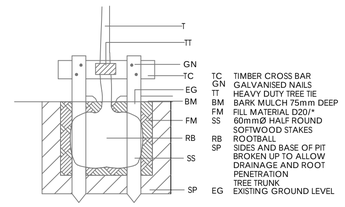

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Revisions			Dwn.	Date
A	1.	Minor revisions	cjn	28.09.23

0 1m 10m
Scale: 1:100 @ A1

Cemetery Extension
Donkey Lane, Sapcote
Leicestershire

Drawing
Detailed Landscape Proposals 2 of 2

Status
For Planning, Tender & Construction

Date
03.03.2022

Dwg. No.	Revision	Drawn	Checked
21.1592.003A		cjn	cjn

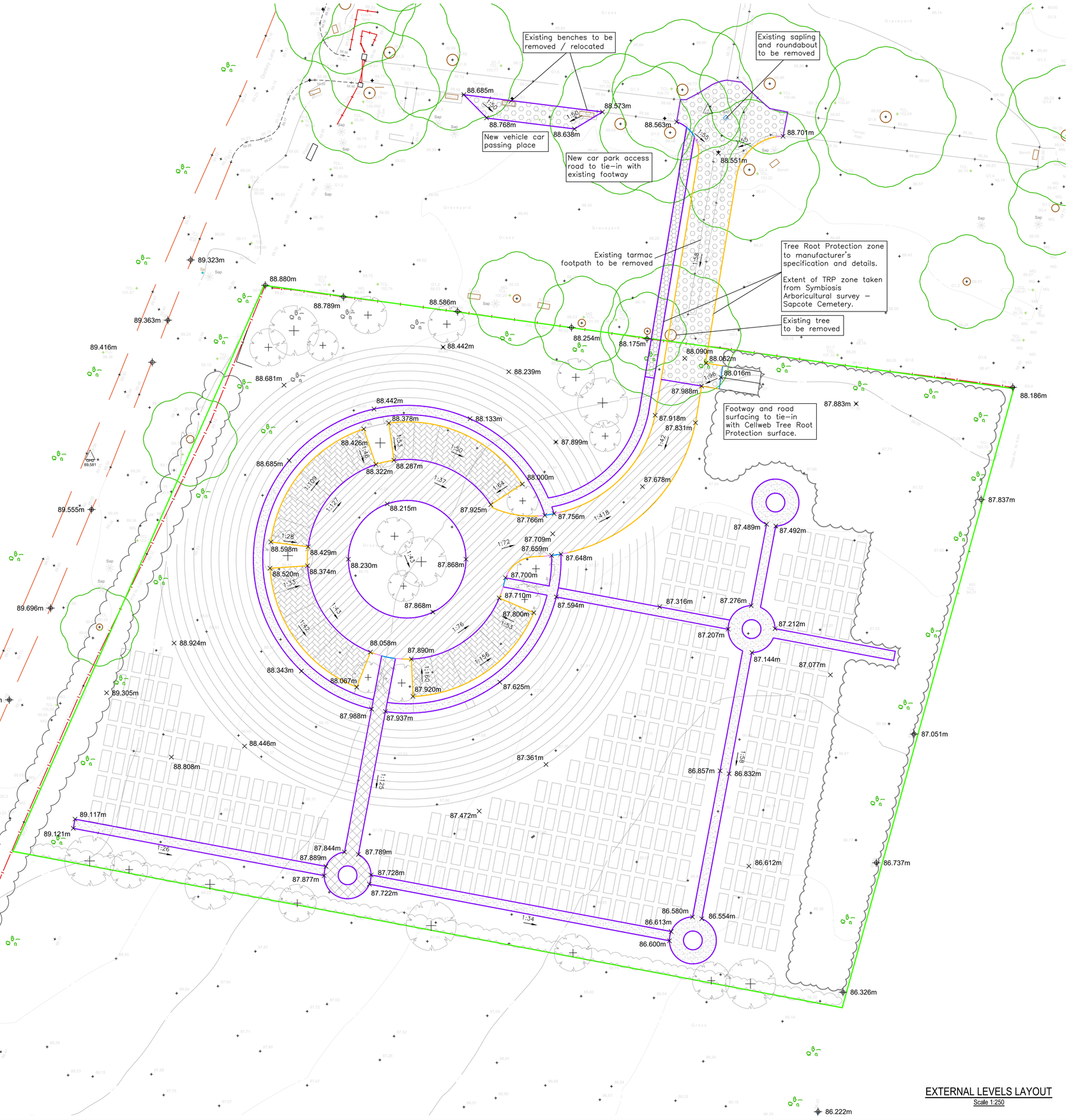
Francis House, Coventry Road
Burbage, Leics LE10 2HL
T. 01455 611 950

Ian Stemp Landscape Associates
Landscape Architecture Landscape & Visual Assessment Arboriculture Ecology

Landscape Institute Registered Practice

Key:

- Car Park Access surfacing – permeable
  Surface: 35mm thk PA 10 surf 70/100
  Binder: 60mm thk AC 20 open bin 160/220
  Base: 325mm thk granular Type 3
- Parking Bay surfacing – permeable blockwork
  Surface: 80mm thk Formpave blockwork
  Bedding: 50mm thk 5mm sharp sand
  Base: 325mm thk granular Type 3
- Footway surfacing
  Surface: 20mm thk AC 6 dense surf 100/150
  Base: 50mm thk AC 20 dense bin 160/220 rec
  Sub-base: 160mm thk granular Type 1
- Breedon Gravel Footway surfacing
  Surface: 75mm thk Breedon compacted to 50mm
  Sub-base: 150mm thk granular Type 1
- Cellweb Tree Root Protection surfacing (Footway)
- Cellweb Tree Root Protection surfacing (Car Access)
- Dropped kerb
- Transition kerb
- HB kerb
- EF kerb
- 87.790 Existing Levels
- X 87.000 Proposed Levels



EXTERNAL LEVELS LAYOUT
Scale 1:250

DO NOT SCALE

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DWS DRAWINGS, CALCULATIONS, REPORTS AND SPECIFICATIONS (WHERE APPLICABLE) AND, ALL OTHER RELEVANT ENGINEERS, ARCHITECTS & SPECIALIST DESIGN DETAILS.
2. STANDARD NOTES & DETAILS:
   Refer to drawing number 0-170 onwards for standard notes – CIVIL
   Refer to drawing number 0-180 onwards for standard details – CIVIL

Ref	Revision	Date	By
P3	Updated Site Layout and design	14.09.23	DW
P2	Revised Cellweb TRP surfacing following Arboricultural report	27.07.23	DW
P1	First issue	25.05.23	DW

NOT FOR CONSTRUCTION

Issue: PRELIMINARY

DWS Consulting Engineers
Diamond Wood & Shaw Limited
The Old School • Blaby Road • Enderby • Leicester • LE19 4AR
Tel: 0116 284 8989 • Email: mail@dwsltd.co.uk

Project Title: CAR PARK AND EXTENSION SAPCOTE CEMETARY

Drawn	Engineer	Checked
DW	DW	LM

Scale at	Date
1:250 @ A1	MAY 2023

Drawing Title: EXTERNAL LEVELS LAYOUT

Project No.	Drawing No.	Revision
23-20134	0-200	P3

BIM Code

NOTES

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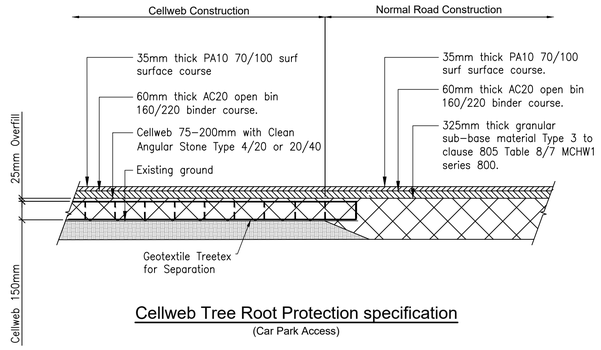
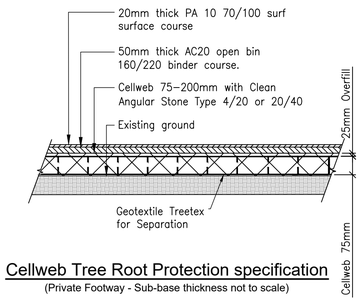
   Refer to drawing number 0-180 onwards for standard details – CIVIL

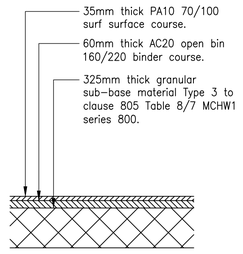
Depth of Cellweb TRP	Unit	Gross Vehicle Weight (GVW)	Application
200mm	Kg	<60,000	HGV & Construction Traffic
150mm	Kg	<30,000	Emergency Access & Refuse Vehicles
100mm	Kg	<6,000	Cars up to a Transit Van
75mm	Kg	<1,000	Pedestrians & Cycleways



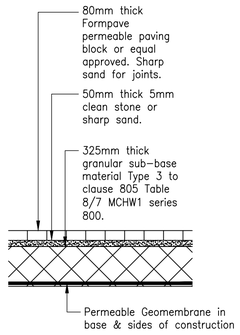
Cellweb Tree Root Protection specification
(Car Park Access)



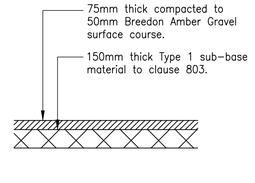
Cellweb Tree Root Protection specification
(Private Footway - Sub-base thickness not to scale)



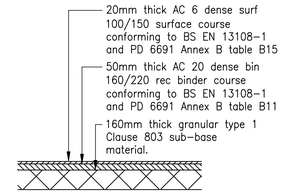
Permeable Car Park Access specification
(For car and light vehicle use)



Permeable Car Parking Bay Paving
(Suitable for cars and light vehicle use)



Gravel Footway specification
(Breedon Gravel)



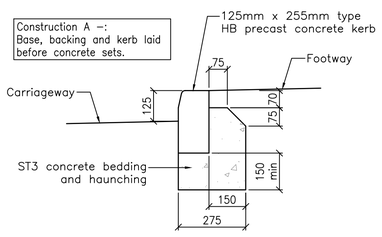
Private Footway specification

Notes:
1. Permeable paving parking bays to be installed to the manufacturers recommendations and requirements.
2. The designs are based to a CBR value of 2–3%. On site testing should be carried out to determine CBR value before construction. A capping layer beneath geomembrane may be required if CBR is low.
3. Prior to construction, a check on the ground's frost susceptibility should be made. If prone, a minimum of 450mm depth construction must be provided for all hard surfaced areas. This will be achieved using capping (6F5 or equal approved) material to bring the overall depth to 450mm.

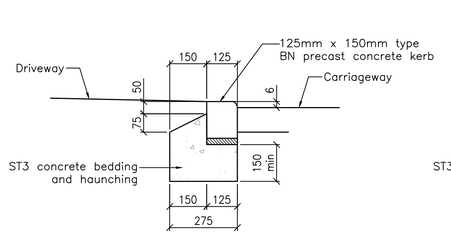
Road sub-base layer

CBR value	Sub-base
less than 2%	Subgrade requires improvement
2–3%	325mm
3–5%	250mm
5 to 7%	150mm
7 to 20%	100mm

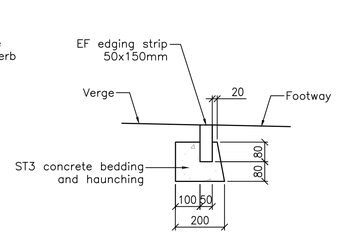
the top 450mm has to be materials that are not frost susceptible



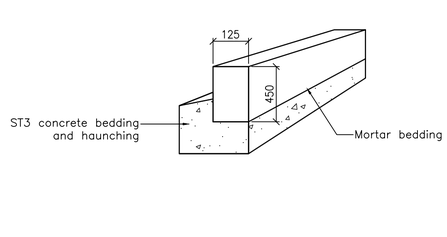
HB Kerb - Typical Half Battered Kerb Detail
Construction A



BN Kerb - Typical Bullnosed Dropped Kerb Detail



EF Kerb - Typical Footway Edging Kerb Detail



TR Kerb - Typical Transition from HB to BN Kerb Detail
(Isometric View)

CIVIL DETAILS
NTS

Ref	Revision	Date	By
P2	Amended Tree Root Protection Details	27.07.23	DW
P1	First issue	25.05.23	DW

NOT FOR CONSTRUCTION

Issue: PRELIMINARY

DWS Consulting Engineers

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Project Title: CAR PARK AND EXTENSION SAPCOTE CEMETARY

Drawn	Engineer	Checked
DW	DW	LM

Scale at	Date
NTS	MAY 2023

Drawing Title: CIVIL DETAILS

Project No.	Drawing No.	Revision
23-20134	0-180	P2

BIM Code

ALL PARTIES ARE RESPONSIBLE FOR READING ALL NOTES REMAINING IN BOLD. ANY NOTES THAT ARE SHOWN IN GREY ARE NOT APPLICABLE TO THIS PROJECT.
IF ANY INFORMATION IS UNCLEAR, PLEASE CONTACT DWS FOR CLARIFICATION

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DWS DRAWINGS, CALCULATIONS, REPORTS AND SPECIFICATIONS (WHERE APPLICABLE) AND, ALL OTHER RELEVANT ENGINEERS, ARCHITECTS & SPECIALIST DESIGN DETAILS.

DISCLAIMERS AND ABBREVIATIONS

1. ALL DESIGN INFORMATION PROVIDED BY DWS IS TO BE READ IN CONJUNCTION WITH ALL OTHER DWS DRAWINGS, CALCULATIONS, REPORTS AND SPECIFICATIONS (WHERE APPLICABLE), AND ALL OTHER RELEVANT ENGINEERS, ARCHITECTS & SPECIALIST DESIGN DETAILS.

2. ABBREVIATIONS:
AOD = Above Ordnance Datum
BEGL = Below existing ground level
BOC = Bottom of concrete
BOS = Bottom of steel
CL = Cover level
DPC = Damp proof course
DPM = Damp proof membrane
EGL = Existing ground level (also see OSL)
IL = Invert level
FFL = Finished floor level
OSL = Original survey level (original Topo)
PGL = Proposed ground level
SP = Survey or Station point
SOP = Setting out point
SSL = Structural slab level
TBC = To be confirmed
TOB = Top of beam
TOC = Top of concrete
TOS = Top of steel
UNO = Unless noted otherwise

3. SOURCE INFORMATION:
The following third party reports, drawings and information have been used and form the basis of our design.
Site Layout – Sapcote Cemetery 25.08.23
Topo' Survey – 42527_T_REV 0
GI Report – ####
Arch' Drawings – ####
Other Misc' – 21.1592.001A Sapcote Cemetery Extension 25.08.23 – Landscaping Plan

4. DRAWING / DOCUMENT STATUS:
All drawings, reports and calculations issued as either Draft, For Comment, Preliminary, Building Regulations or Tender should never be used for construction purposes or ordering materials. Should any contractor or client reply on this information for such purposes, DWS accept no responsibility.
All drawings issued as Tender status can only be used for pricing purposes, not material order.
All drawings, reports and calculations issued as Construction status can be used for construction and material order.

5. DOCUMENT REVIEW:
DWS issue all information in good faith and assume that all parties will review and comment accordingly. If no comments are received, DWS will assume that no further design development is necessary and all parties are happy to proceed with construction based on the information provided. Should changes to design be required or requested after construction issue, additional fees will be charged accordingly.

6. DESIGN CHANGES & ADDITIONAL WORKS:
DWS will make every reasonable effort to consume small design changes within the stated fee proposal. Time spent on numerous or major design changes will be recorded and discussed accordingly to recoup fees as appropriate.
Should any work be requested outside the scope of the fee proposal, DWS will notify all necessary parties to advise or agree additional fees.

7. UNFORESEEN CIRCUMSTANCES:
DWS will not be held responsible for any unforeseen circumstances such as underground obstructions or changes in ground conditions not identified in the Ground Investigation report or any other survey information. Every action will be taken to assist if such events occur, and any additional fees will be discussed accordingly.

8. UNDERMINING AND PARTY WALL AWARDS:
Where excavations are situated close to land boundaries or adjacent to any property, due consideration is required by all parties to ensure undermining or collapse does not occur. Any risks should be negated by professional methods to avoid disputes and possible damage to property.
Where any construction is within 3m of any off site structure owned by a third party, the client, developer and Architect must consider and obtain (where necessary) a Party Wall Award.

9. TEMPORARY WORKS AND DEMOLITION:
DWS are not responsible for the design or providing advice on any form of temporary works (including propping) unless specifically requested at project inception and subsequently noted in our fee proposal.
The contractor is responsible for all risks associated with demolition.

9. STANDARD NOTES & DETAILS:
Refer to drawing number 0–150 for standard notes – STRUCTURAL

Refer to drawing number 0–160 for standard details – STRUCTURAL

Refer to drawing number 0–170 for standard notes – CIVIL

Refer to drawing number 0–180 for standard details – CIVIL

SEWERS FOR ADOPTION - 6th EDITION

1. The position, line, level and diameter of all existing drainage apparatus should be confirmed on site prior to the commencement of works. Any discrepancies should be reported to the engineer immediately.
2. All dimensions are in millimetres unless noted otherwise.
3. The connection of foul and surface water drainage to the existing public sewer system shall be subject to the approval of the Water Authority
4. All work is to be carried out in accordance with the relevant, current British Standard and Codes of Practice and Building Regulations.
5. All drainage works shall be carried out in accordance with WSA "Sewers for Adoption (6th Edition)" and "Civil Engineering Specification for the Water Industry (6th Edition)".
6. UPVC pipes and fittings to comply with BS EN 1401–1 1998.
7. Clayware pipes and fittings to comply with BS EN 295:1991 Part 1.
8. Rubber joint rings shall be Type D to BS 2494 and shall be obtained from the same manufacturer as the chosen pipe.
9. Drainage to BS 8301 with pipes of approved type on granular bed and surround are to be laid strictly in accordance with the manufacturers instructions.
10. Pipes under buildings and with cover less than:–
• 600mm under gardens & non trafficked areas
• 900mm under car parking areas
• 1200mm under roads
to have concrete protection applied.
11. All pipes entering & exiting manholes are to be connected using preformed branch channel bends 3/4 section at half the main channel height.
12. The first flexible joint in pipes, adjacent to a manhole, shall be a maximum 600mm from the inside face of the manhole, connected to a rocker pipe.
13. Precast concrete manholes, cover slabs and seating rings shall comply with BS 5911 Part 200.
14. Brick manholes to be constructed in flush pointed. English Bond brickwork using Class B solid engineering bricks to BS 3921 in a suitable sand / cement mortar.
15. Manhole step irons to comply with BS 1247.
16. Manhole covers and frames to be ductile iron heavy duty grade D400 double triangular to BS EN 124 in carriageways and heavy vehicular trafficked areas (150mm thick).
Manhole covers and frames to be ductile iron medium duty grade B125 circular or rectangular to BS EN 124 in non trafficked areas, unless noted otherwise.
17. All cement used in the construction of manholes shall be Ordinary Portland Cement (OPC) to the relevant provisions of BS 4027 CESWI specification clause 2.15.
18. Refer to CESWI specification clause 2.20 for sand / cement mortar grades.
19. High strength granolithic concrete topping to benching to be steel trowelled to a dense smooth face neatly shaped and finished to all branch connections in accordance with CESWI specification clause 4.30.
20. Pipes shall be laid to their true line and level by laser or by boning each end and middle.
21. All soft spots within pipe trenches shall be removed and filled with Type 1 material.
22. No water shall be allowed to accumulate in pipe trenches during construction.
23. All fill material shall be compacted in layers not exceeding 225mm.
24. All in–situ concrete used in below ground pipe protection to be of minimum grade C20P.
25. Compressible filler for interruption of concrete pipe protection shall consist of bitumen impregnated insulating board to BS 1142 Part 3 at each pipe joint; thickness in accordance with CESWI Clause 2.52.
26. Any redundant drains shall be removed or concrete sealed.
27. Where pipes are crossing, plastic membrane is to be used for protection to eliminate the chance of cross contamination if leakage occurs.
28. Pipes of different diameters are to enter the manhole at soffit to soffit level unless noted otherwise.
29. Precast concrete manholes are not to be cut or core drilled under any circumstances.
30. All manhole covers and frames are to be a minimum of 675 x 675mm to maintain a clear opening. Covers and frames to be Kite Marked.
31. Where the depth of a manhole is greater than 3000mm to soffit, a vertical galvanised mild steel access ladder with 230mm clearance to the wall is required. Double encapsulated step rungs are to be used in manholes less than 3000mm deep.

SEWERS FOR ADOPTION - 7th EDITION DCG

1. The position, line, level and diameter of all existing drainage apparatus should be confirmed on site prior to the commencement of works. Any discrepancies should be reported to the engineer immediateley.
2. All dimensions are in millimetres unless noted otherwise.
3. The connection of foul and surface water drainage to the existing public sewer system shall be subject to the approval of the Water Authority
4. All work is to be carried out in accordance with the relevant, current British Standard and Codes of Practice and Building Regulations.
5. All drainage works shall be carried out in accordance with Water UK "Sewage Sector Guidance Appendix C" Version 2 (The Code, DCG) and "Civil Engineering Specification for the Water Industry (7th Edition)".
6. UPVC pipes and fittings to comply with BS EN 1401–1 1998.
7. Clayware pipes and fittings to comply with BS EN 295:1991 Part 1.
8. Rubber joint rings shall be Type D to BS 2494 and shall be obtained from the same manufacturer as the chosen pipe.
9. Drainage to BS 8301 with pipes of approved type on granular bed and surround are to be laid strictly in accordance with the manufacturers instructions.
10. Pipes under buildings and with cover less than:–
• 600mm under gardens & non–trafficked areas
• 900mm under car parking areas
• 1200mm under roads
to have concrete protection applied.
11. All pipes entering & exiting manholes are to be connected using preformed branch channel bends 3/4 section at half the main channel height.
12. The first flexible joint in pipes, adjacent to a manhole, shall be a maximum 600mm from the inside face of the manhole, connected to a rocker pipe.
13. Precast concrete manholes, cover slabs and seating rings shall comply with BS 5911 Part 200.
14. Brick manholes to be constructed in flush pointed. English Bond brickwork using Class B solid engineering bricks to BS 3921 in a suitable sand / cement mortar.
15. Manhole step irons to comply with BS 1247.
16. Manhole covers and frames to be ductile iron heavy duty grade D400 double triangular to BS EN 124 in carriageways and heavy vehicular trafficked areas (150mm thick).
Manhole covers and frames to be ductile iron medium duty grade B125 circular or rectangular to BS EN 124 in non trafficked areas, unless noted otherwise.
17. All cement used in the construction of manholes shall be Ordinary Portland Cement (OPC) to the relevant provisions of BS 4027 CESWI specification clause 2.15.
18. Refer to CESWI specification clause 2.20 for sand / cement mortar grades.
19. High strength granolithic concrete topping to benching to be steel trowelled to a dense smooth face neatly shaped and finished to all branch connections in accordance with CESWI specification clause 4.30.
20. Pipes shall be laid to their true line and level by laser or by boning each end and middle.
21. All soft spots within pipe trenches shall be removed and filled with Type 1 material.
22. No water shall be allowed to accumulate in pipe trenches during construction.
23. All fill material shall be compacted in layers not exceeding 225mm.
24. All in–situ concrete used in below ground pipe protection to be of minimum grade C20P.
25. Compressible filler for interruption of concrete pipe protection shall consist of bitumen impregnated insulating board to BS 1142 Part 3 at each pipe joint; thickness in accordance with CESWI Clause 2.52.
26. Any redundant drains shall be removed or concrete sealed.
27. Where pipes are crossing, plastic membrane is to be used for protection to eliminate the chance of cross contamination if leakage occurs.
28. Pipes of different diameters are to enter the manhole at soffit to soffit level unless noted otherwise.
29. Precast concrete manholes are not to be cut or core drilled under any circumstances.
30. All manhole covers and frames are to be a minimum of 600 x 600mm to maintain a clear opening. Covers and frames to be Kite Marked.
31. Where the depth of a manhole is greater than 3000mm to soffit, a vertical galvanised mild steel access ladder with 230mm clearance to the wall is required. Double encapsulated step rungs are to be used in manholes less than 3000mm deep.

CONCRETE

1. UNDERGROUND PIPE PROTECTION CONCRETE MIX:
A prescribed mix in accordance with the current requirements of BS 8500–1 & 8500–2.
Grade = C20 P, consistency class S2.
2. MANHOLE SURROUND CONCRETE MIX:
A designated mix in accordance with the current requirements of BS 8500–1 & 8500–2.
Grade = PAV 2, consistency class S2.
3. EXTERNAL SLAB CONCRETE MIX:
A designated mix in accordance with the current requirements of BS 8500–1 & 8500–2.
Grade = PAV 2, consistency class S3.
4. COVER SLAB (IN HIGHWAY) CONCRETE MIX:
A designed mix in accordance with the current requirements of BS 8500–1 & BS 8500–2.
Grade = C32/40. Also refer to calculations.
Consistency class S3.
5. CONCRETE ADDITIVES AND COMPACTION:
NO additives to any concrete will be allowed unless agreed with by the engineer. Where necessary, concrete to be compacted by means of a mechanical poker vibrator & with a workability such that dense concrete free from voids will be produced.
6. REINFORCEMENT:
All reinforcement to be in accordance with the current requirements of BS 8666.
Minimum reinforcement laps to be:
Mesh & B10 = 400mm
Cover to be 50mm all round UNO. Where cast directly against soil cover to be increased to 75mm.
Reinforcement cover to be maintained by the use of proprietary type spacers or chairs as required.
7. CONCRETE CUBE TESTING:
Four concrete cubes are to be made, stored and tested in accordance with BS.1881 from a representative sample of each batch. Two cubes shall be tested at 7 days and two shall be tested at 28 days.

WARNING

HIGH VOLTAGE CABLES PRESENT UNDERGROUND.
CONTRACTOR TO LOCATE AND TAKE ALL REASONABLE PRECAUTIONS, PRODUCE A FULL RISK ASSESSMENT AND METHOD STATEMENT PRIOR TO CONSTRUCTION.

WARNING

GAS MAIN PRESENT UNDERGROUND.
CONTRACTOR TO LOCATE AND TAKE ALL REASONABLE PRECAUTIONS, PRODUCE A FULL RISK ASSESSMENT AND METHOD STATEMENT PRIOR TO CONSTRUCTION.

WARNING

CONTAMINATED GROUND LOCATED ON SITE.
CONTRACTOR TO LOCATE AND TAKE ALL REASONABLE PRECAUTIONS, PRODUCE A FULL RISK ASSESSMENT AND METHOD STATEMENT FOR REMOVAL / REMEDIATION PRIOR TO CONSTRUCTION.

Ref	Revision	Date	By
P2	Updated Source Information section	13.09.23	DW
P1	First issue	25.05.23	DW

NOT FOR CONSTRUCTION

Issue: PRELIMINARY

DWS Consulting Engineers
Diamond Wood & Shaw Limited
The Old School • Blaby Road • Enderby • Leicester • LE19 4AR
Tel: 0116 284 8989 • Email: mail@dwsltd.co.uk

Project Title: CAR PARK AND EXTENSION SAPCOTE CEMETARY

Drawn	Engineer	Checked
DW	DW	LM

Scale at	Date
1:1 @ A1	MAY 2023

Drawing Title: STANDARD NOTES - CIVIL
SHEET 1 OF 1

Project No.	Drawing No.	Revision
23-20134	0-170	P2

BIM Code