

Ref. No: 20241125

Gravesham Borough Council
Civic Centre
Windmill Street
Gravesend
Kent
DA12 1AU

18th February 2025

Land at Worcester Close, Instead Rise, Gravesend, Kent, DA13 9LB
Application for the approval of condition 7 attached to planning reference number 20230136
relating to Tree Protection.

Dear Simon/Ethan

On behalf of our client Elkins Construction, please find below and appendices in response to the 15no. queries raised in relation to our submission of information against condition 7 associated to the above-named site.

SD Engineers – Appendix A – in response to points;

1. Location and installation of services/ utilities/ drainage.
3. Details of construction within the RPA or that may impact on the retained trees.
5. A full specification for the construction of any roads, parking areas and driveways, including details of the no-dig specification and extent of the areas of the roads, parking areas and driveways to be constructed using a no-dig specification. Details shall include relevant sections through them.

PLAN Design Landscape Architects – Appendix B - in response to points;

3. Details of construction within the RPA or that may impact on the retained trees.
4. A full specification for the installation of boundary treatment works.
6. Detailed levels and cross-sections to show that the raised levels of surfacing, where the installation of no-dig surfacing within Root Protection Areas is proposed, demonstrating that they can be accommodated where they meet with any adjacent building damp proof courses.
11. Boundary treatments within the RPA.
15. Methods to improve the rooting environment for retained and proposed trees and landscaping.

The Mayhew Consultancy – Appendix C – in response to points;

13. Arboricultural supervision and inspection by a suitably qualified tree specialist
14. Reporting of inspection and supervision

Elkins Construction – Appendix D – in response to point;

10. Details of site access, temporary parking, on site welfare facilities, loading, unloading and storage of equipment, materials, fuels and waste as well concrete mixing and use of fires

(Information continues on the next page)

The Mayhew Consultancy – Referring to Arboricultural Report, Tree Survey Arboricultural Impact Assessment & Tree Protection Plan dated December 2022 - in response to points;

2. Methods of demolition within the root protection area (RPA as defined in BS 5837:2012) of the retained trees.
Section 11.6 – And the following working method being adopted:
 - The demolition works will have to be undertaken carefully to ensure that the soil structure within the RPA is protected.
 - No mechanical vehicles whatsoever should enter into the footprint of the RPA.
 - The works should involve the minimum amount of excavation within the RPA.
 - Demolished material should be removed from off of ground beyond the boundary of the RPA – essentially from a south to north, or east to west direction.
 - Preferably existing footings should be left in-situ if possible.
 - Any roots that may be exposed during this operation should be treated as specified by an appropriately qualified arboriculturist.
 - Following completion of the demolition works, the tree protection barrier specified at 11.4 above must be immediately installed as illustrated at Appendix B.
 - Good quality topsoil should then be spread across the RPA's footprint and a grass seed mix subsequently applied.
3. Details of construction within the RPA or that may impact on the retained trees.
Section 11.4 and Appendix H
7. A specification for protective fencing to safeguard trees during both demolition and construction phases and a plan indicating the alignment of the protective fencing –
Section 11.3 and Appendix B
8. A specification for scaffolding and ground protection within tree protection zones.
Appendix B
9. Tree protection during construction indicated on a TPP and construction and construction activities clearly identified as prohibited in this area.
Section 11.3, Appendix B and Appendix G.
12. Methodology and detailed assessment of root pruning
Section 11.4.5 and Additional guidance following BS3998:2010 – Tree Works – Recommendations which says, 'exposed damaged roots or those that have to be pruned should be cut so that the final wound is as small as possible and free from ragged ends.'

We trust that this submission meets your requirements. In the meantime, please do not hesitate to contact me if you have any queries or require any further information.

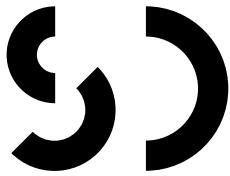
Yours sincerely.

Matthew Tear
Technical Director

APPENDIX A –

SDE-02244





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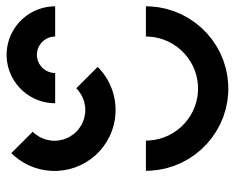
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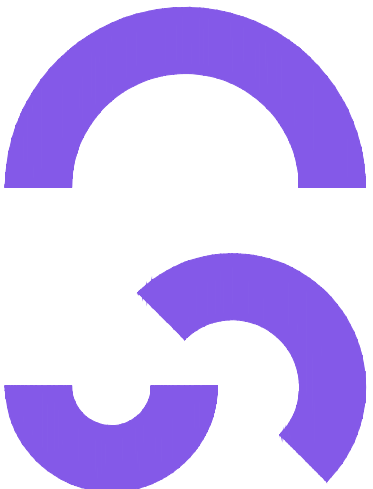
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Notes

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- Drawing is to be read in conjunction with the SD Engineer's Specification and General Notes.
- 3D views are indicative only and conflicting 2D information should take precedence. If in doubt contact SD Engineers prior to starting works.

Information Received

This drawing has been developed using information received up to and including:

11/02/2025

Where information provided to us is incomplete or subject to change, our drawings will need to be updated accordingly.

P03	17/02/2025	Issued for Information	HG	LH	CJ
P02	20/12/2024	Issued for Information	HG	BB	BB
P01	13/12/2024	Issued for Information	HG	BB	BB

Rev	Date	Amendment	Dra	Rev	App
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S2 Suitable for information

Worcester Close
SDS2244

Proposed Drainage Layout

Drawn	Status
HG	Preliminary

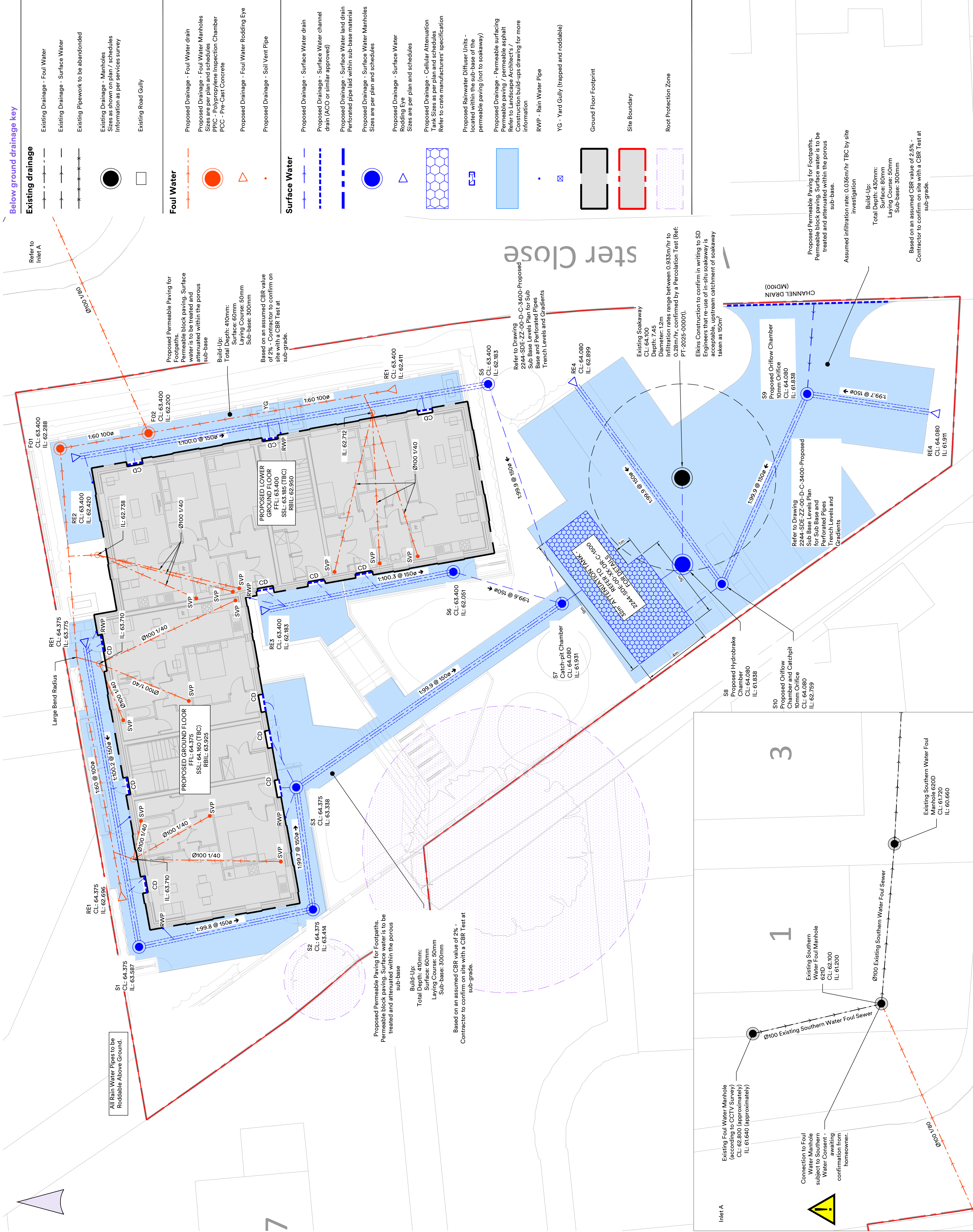
Reviewed	Date
LH	17/02/2025

Approved	Scale
CJ	1:100 at A1

2244-SDS-00-XX-DR-C-1000	S2	P03
Project	Original	Volume
Level	Type	Rate
No.	No.	Status
Revision		

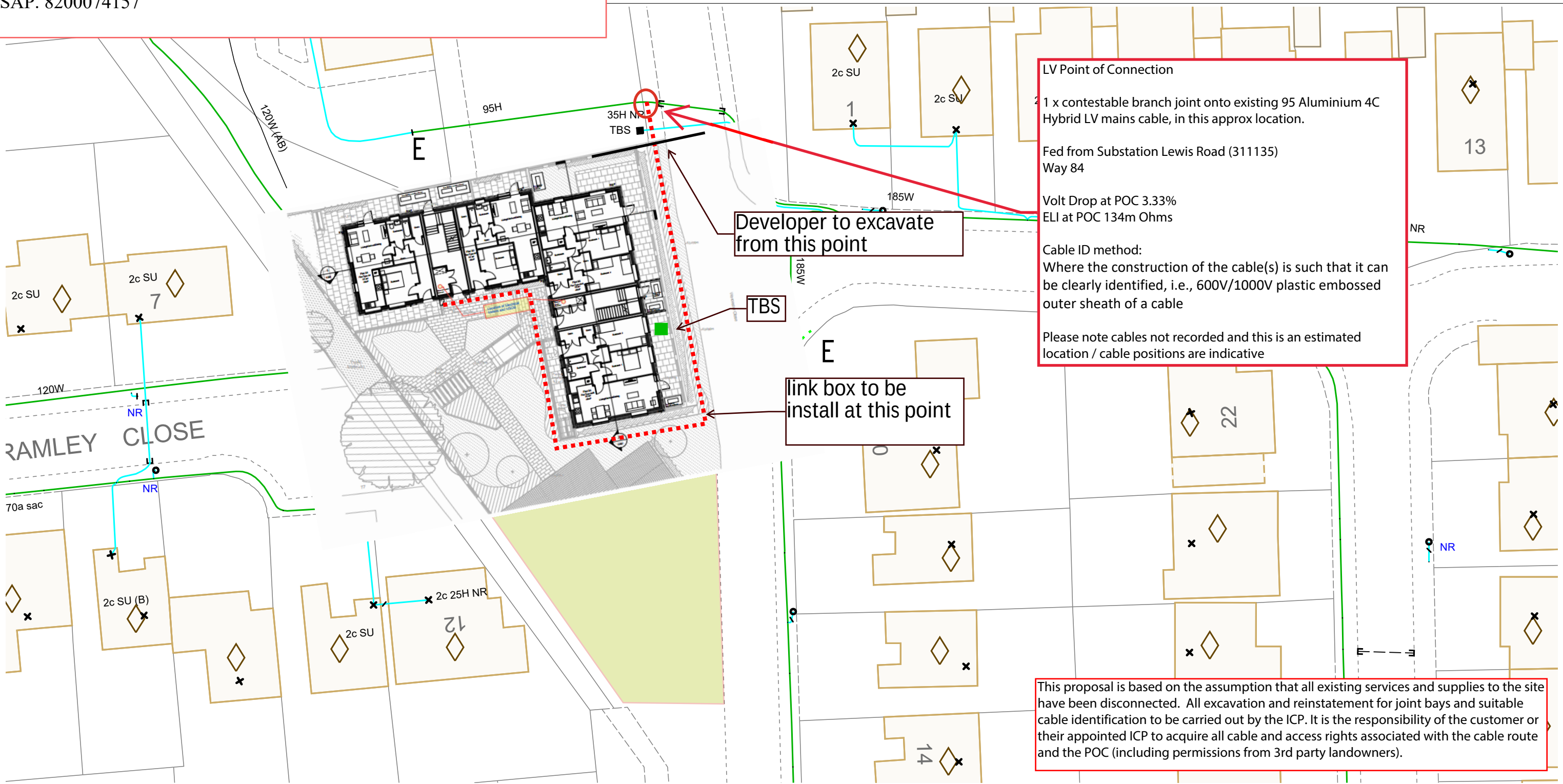
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020 8144 8900

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Worcester Close / GRAVESEND DA13 9LB - 40kVA
SAP. 8200074157

JOB NO: STANDARD PLOT



0m

5m

10m

15m

20m

25m

30m

35m

40m

45m

50m

LV Cable or Line

HV Cable or Line

EHV Cable or Line

Approx. position

Ductline

Pole & Street Furniture

Substation & Link Box

1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.

2. The exact position of the apparatus should be verified - use approved cable avoidance tools prior to excavation using suitable hand tools.

3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all cables have been determined.

4. It must be assumed that each property and item of street furniture has an electricity supply. Service cables shown only where known.

5. All cables must be treated as being live unless proved otherwise by UK Power Networks.

6. The information provided must be given to all people working near UK Power Networks plant & equipment. Do not use plans more than 3 months after the issue date for excavation purposes.

7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.

VISITING AN OPEN POINT? Please mark on this plan all locations visited and open points as found, then return updated map to your Business Unit - Thank You.

1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.

2. UK Power Networks does not exclude or limit its liability if it causes the death of any person or causes personal injury to a person where such death or personal injury is caused by its negligence.

3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.

4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and you must return it to the sender of the letter.

5. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.

Contact UK Power Networks on 0800 056 5866 for details of EHV Cable routes before commencing work.

Grid Ref: TQ 63664 70230

Map Centre: TQ6370SE

Scale: 1:373

(when Plotted at A3)

Plotted on: 30/01/2025

Plotted by: Erika Piper

Plan Provision

CHECK IT OUT BEFORE YOU DIG IT OUT

CALL 0800 056 5866

EMERGENCY- If you damage a cable or line

Phone 0800 096 3766 (24hrs) URGENTLY

LOOK OUT

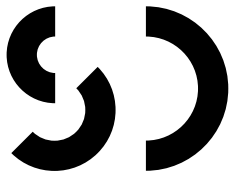
LOOK UP

ALWAYS LOOK UP BEFORE YOU START

Refer to HSE Guidance note GS6

Maps produced at 1:2500 scale are LV Geo-Schematics which show LV mains cables and overhead lines (in some cases all voltages). Prior to carrying out excavations you must refer to the 1:500 records to determine the location of all known underground plant and equipment.

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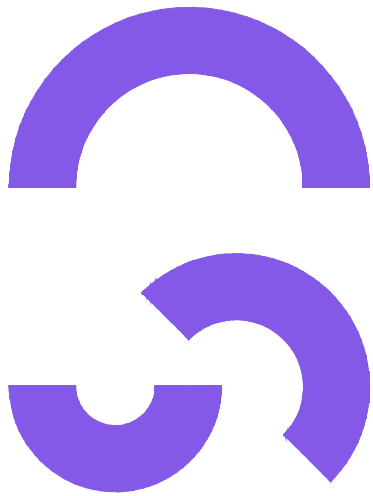
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Important
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P02	17/02/2025	Information Added	CJ	HG	LH
P01	03/02/2025	Initial Issue	CJ	HG	LH

Rev	Date	Amendment	Dra	Rev	App
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S2
Suitable for information

Worcester Close
SDE2244

Proposed Drainage Layout

Drawn	Status
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CJ
Preliminary

Reviewed	Date
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HG
03/02/2025

Approved	Scale
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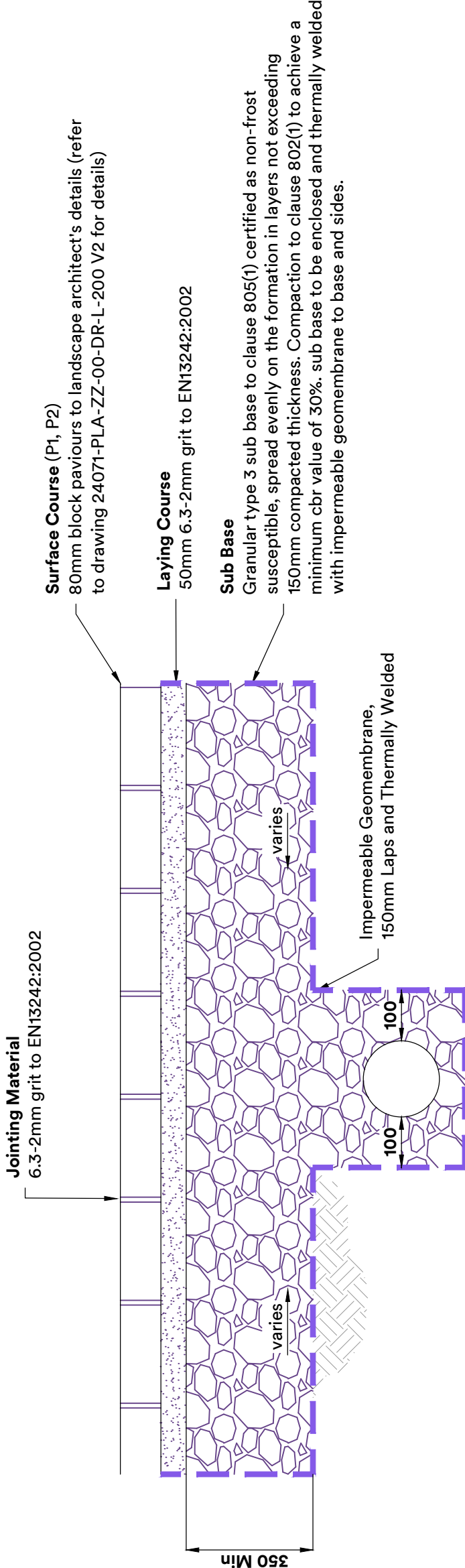
LH
As Shown @ A1

2244-SDE-00-XX-DR-C-1500	S2	P02
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Project Originator Volume Level Type Rate No Status Revision

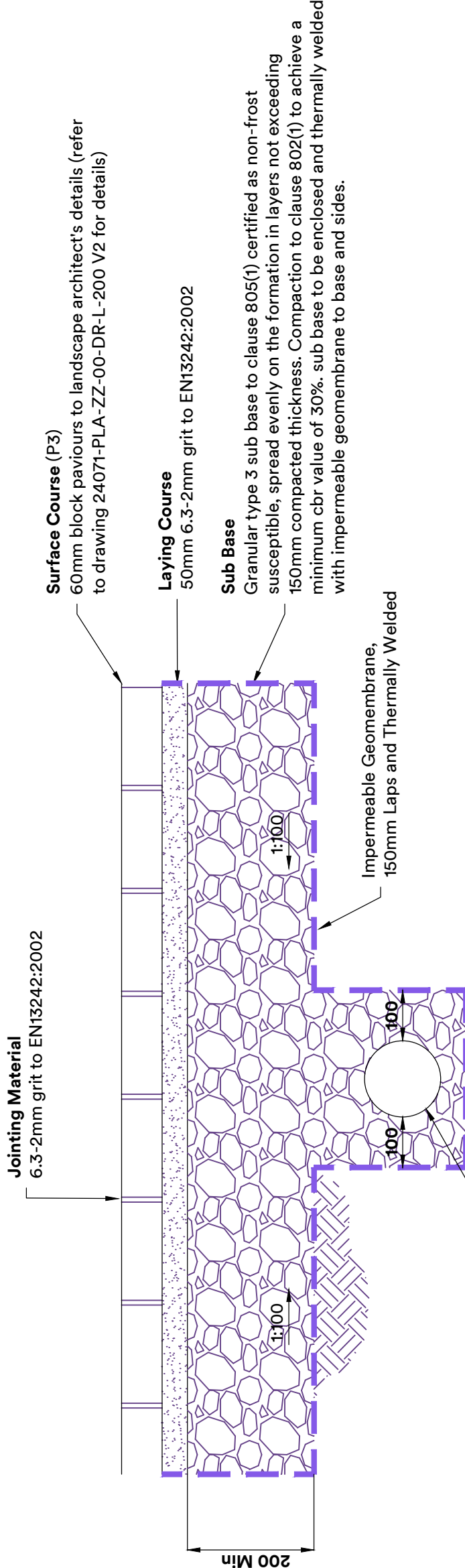
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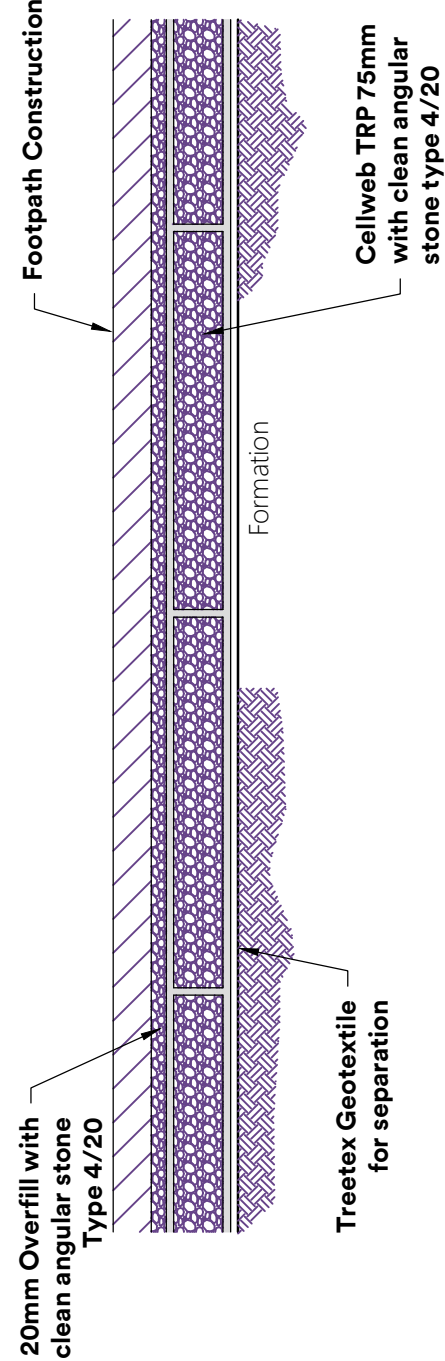


Detail 1: Permeable Pavement
(Parking and Access)

Scale 1:10

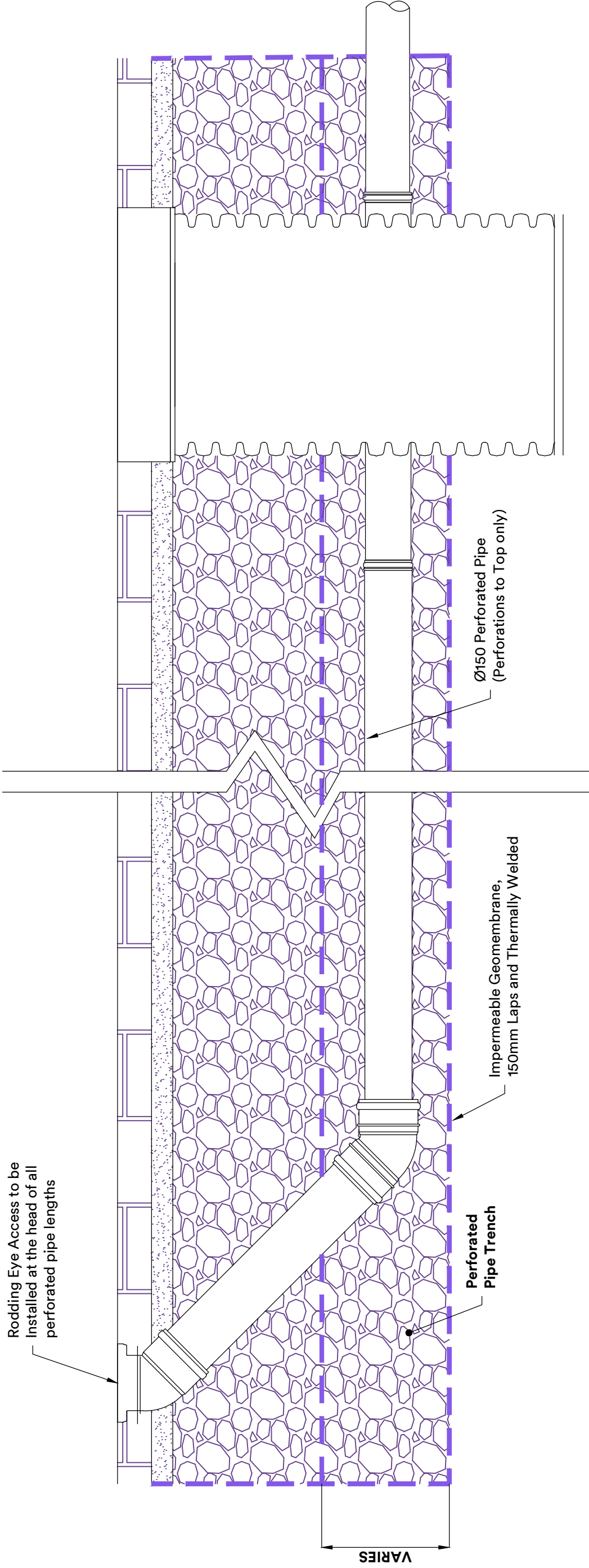


Detail 2: Permeable
Pavement (Footpath)



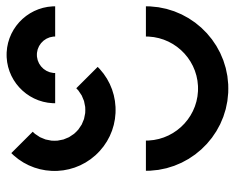
Detail 3: No Dig Zone -
Pedestrian Loading Only

Scale 1:10



Section Through Car Park Perforated Pipe

Scale 1:10



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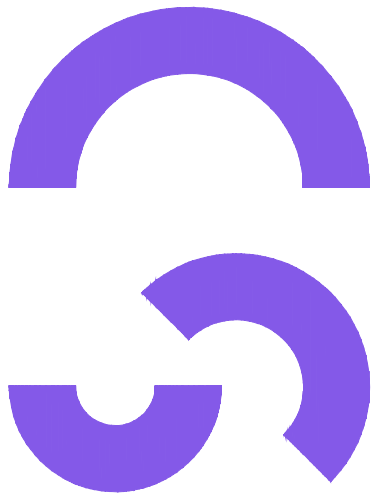
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P02	17/02/2025	Information Added	CJ	HG	LH
P01	03/02/2025	Initial Issue	CJ	HG	LH

Rev	Date	Amendment	Dra	Rev	App
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S2
Suitable for information

Worcester Close
SDE2244

Proposed Drainage Layout

Drawn	Status
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CJ
Preliminary

Reviewed	Date
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HG
03/02/2025

Approved	Scale
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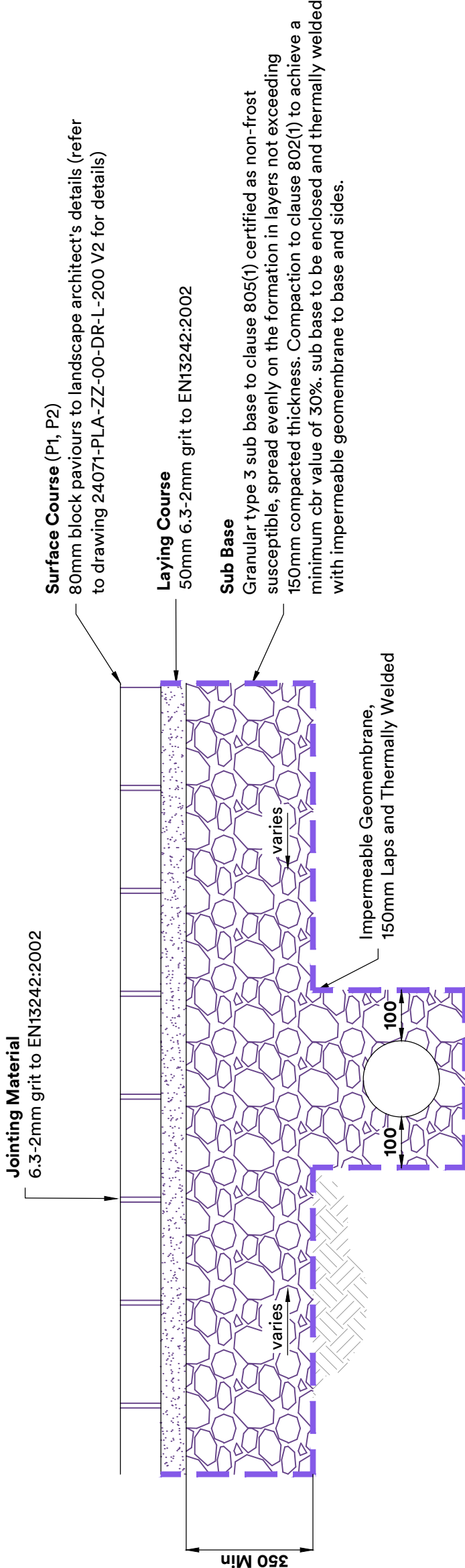
LH
As Shown @ A1

2244-SDE-00-XX-DR-C-1500	S2	P02
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Project Originator Volume Level Type Rate No. Status Revision

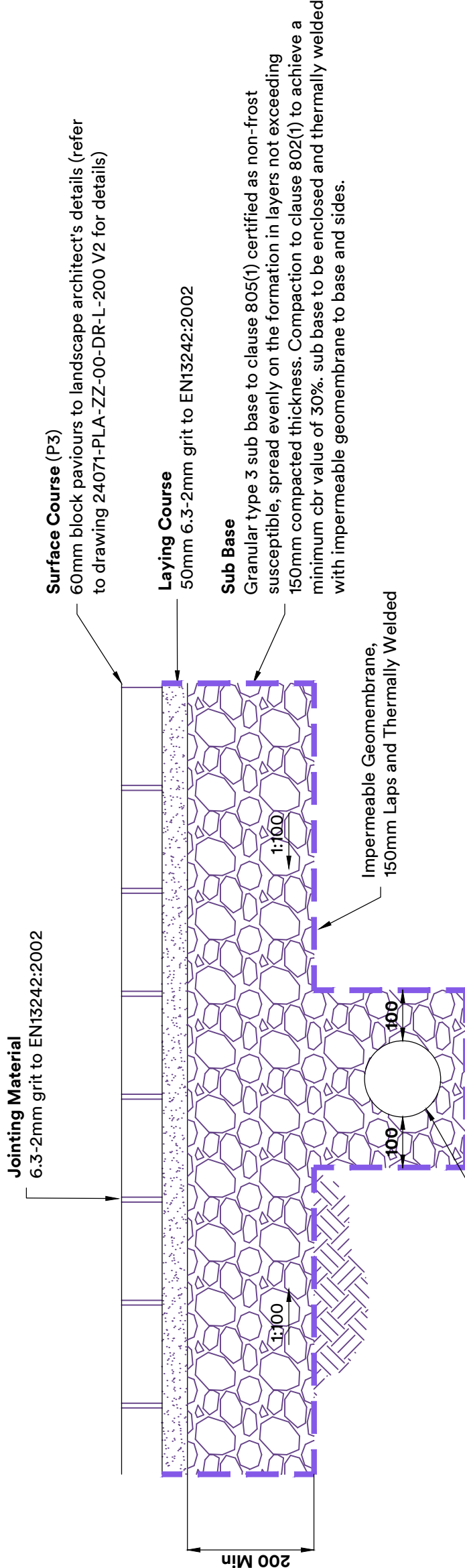
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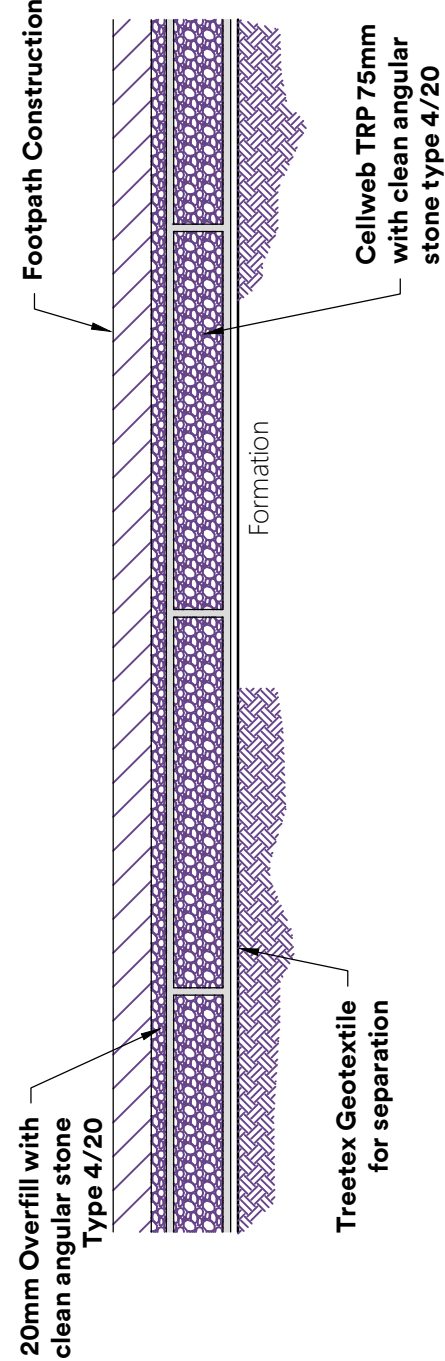


Detail 1: Permeable Pavement
(Parking and Access)

Scale 1:10

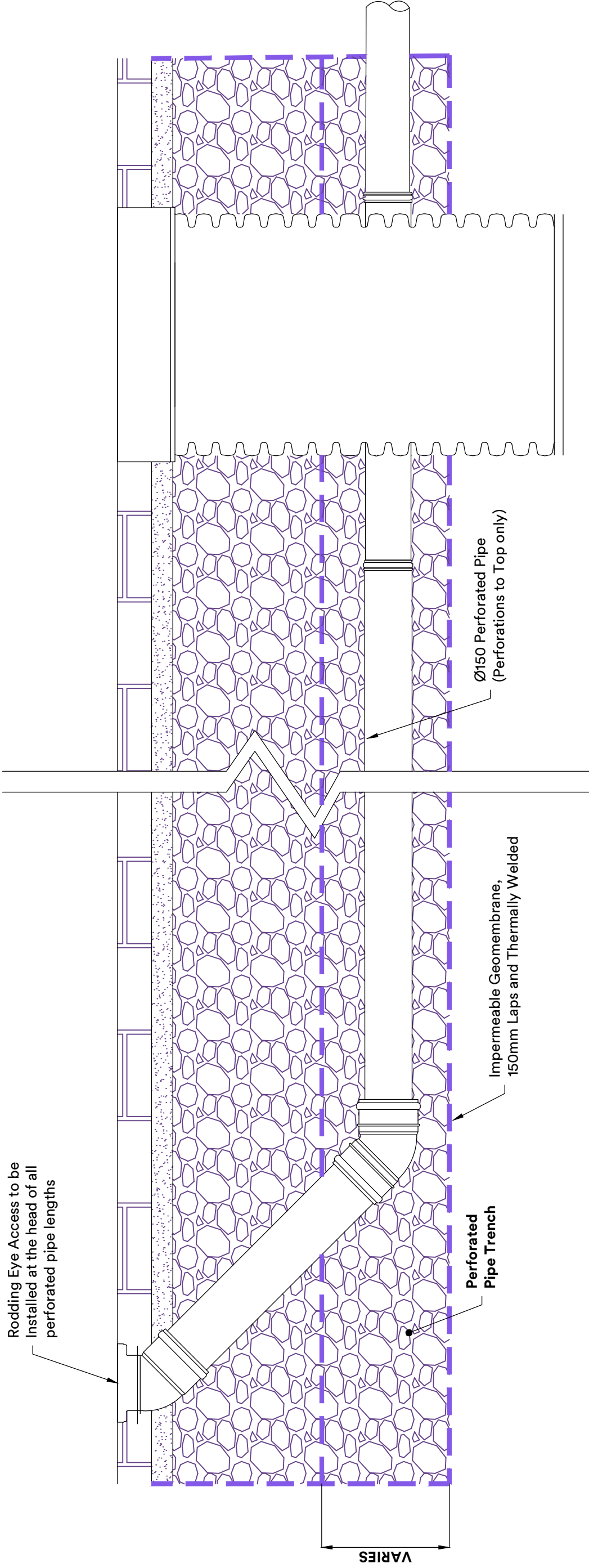


Detail 2: Permeable
Pavement (Footpath)



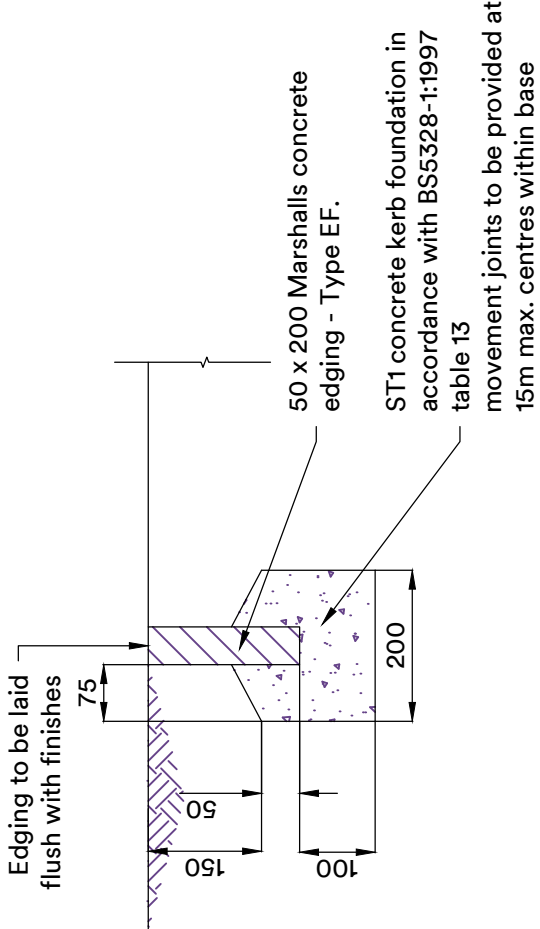
Detail 3: No Dig Zone -
Pedestrian Loading Only

Scale 1:10



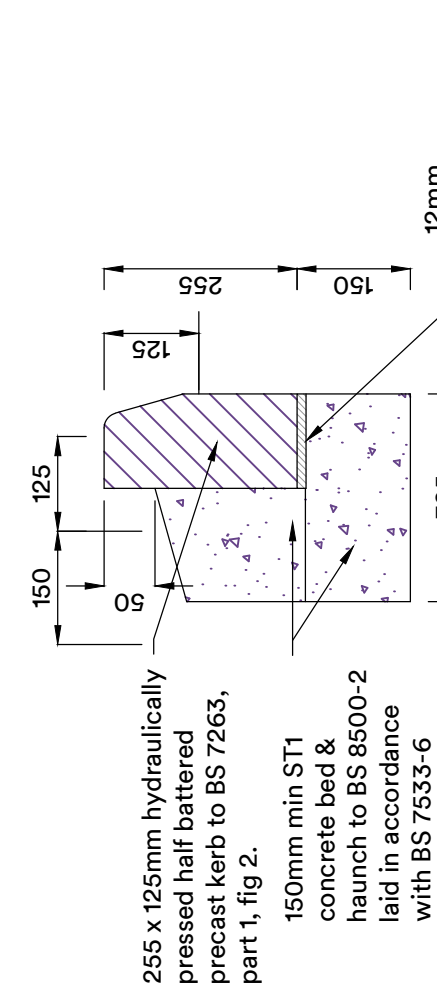
Section Through Car Park Perforated Pipe

Scale 1:10



PCC Concrete Edging (EF Kerb)

Scale 1:10



PCC Half Battered Kerb

Scale 1:10

APPENDIX B –

PLA-0104-TD-1000 R01

24071-PLA-ZZ-00-DR-L-200

24071-PLA-ZZ-00-DR-L-620 Wall Details Private Terraces Courtyard

24071-PLA-ZZ-00-DR-L-631 Boundary Wall Detail - Sheet 1

24071-PLA-ZZ-00-DR-L-632 Boundary Wall Detail - Sheet 2

24054-PLA-ZZ-00-DR-L-603

24071-PLA-ZZ-00-DR-L-400



PLAN Design Landscape Architects Ltd
239 Old Bath Road
Cheltenham
GL53 9EF

T: 07760190496 | 07557140477
E: Jack@plan-design.co.uk
www.plan-design.co.uk

19.02.2025

Re: Worcester Close Planning - External Landscape - Trees

To Whom It May Concern,

Regarding landscape works within root protection zones the following points have been integrated into the proposed landscape design and construction methods:

Paving

All paving is to be permeable and to be installed on geowebcells on top of the existing ground, which leaves the existing soil undisturbed. The construction method is shown in the Arboricultural Report by Mathew Consultancy Ltd. and has been specified within the PLAN design Ltd. construction detail drawings (installation of permeable pavers over 50mm Open Grade Rock laying course over Geocell 25/15 by Terram infilled with Mot Type 3 Open Grade Rock).

Boundary Treatment

The proposed boundary treatment within the RPA will be brick piers with open railings (overall height 1200mm). The piers will be installed as point foundations with the exact location to be confirmed after soil and root investigations in order to avoid existing roots. The other boundaries outside of the Tree Protection Areas around the private terraces are closed board timber fencing, brick piers with board timber fencing and low brick walls with railings.

Detailed Levels

A levels plan has been issued. None of the proposed levels are below the existing levels. The new proposed levels are slightly higher than the existing ones, hence the installation of permeable paving in geocells will occur on top of the existing levels without the need to disturb the existing ground.

Tree Roots Environment Improvement

Regarding the improvement of the environment of tree roots, PLAN Design's softscape details drawing 24054-PLA-ZZ-00-DR-L-603 shows the planting details for proposed trees, e.g. pit size double the size of rootball, drainage layer and broken up base layer whereas the Topsoil and Amelioration Plan 24054-PLA-ZZ-00-DR-L-400 explains the soil treatment with the RPZ's including careful excavation where required avoiding roots and the mixing in of soil improvers and compost. The Arboricultural Report Section 11.4 sets out the requirements for permanent ground protection which are being followed incl. removal of turf and vegetation by hand tools only and the use of compacted semi-permeable material as wearing course where required.

Best wishes,

A handwritten signature in dark ink, appearing to read 'B. Schneider'.

Bianka Schneider
MSc (Hons) CMLI
Senior Associate



HARDWORKS KEY

PAVING

- P1** 'Ecogranite Permeable Aquaflo' Concrete Block Paving; (Tanked permeable) Size: 200 x100 x 80mm Bond: Herringbone bond; Colour: 'Balmoral' Supplier: Hardscape.
- P2** 'Ecogranite Permeable Aquaflo' Concrete Block Paving; (Tanked permeable) Size: 200 x100 x 80mm Bond: Herringbone bond; Colour: 'Cornish Silver Grey' Supplier: Hardscape.
- P3** 'Ecogranite Permeable Aquaslab' Concrete Flag Paving Paving size: 450 x 300 x 60mm Pattern: Stretcher bond Colour: 'Cornish Silver Grey' Supplier: Hardscape
- P4** 'Hazard Warning Tactile Textured' Concrete Flag Paving Paving size: 400 x 400 x 50mm Colour: 'Natural' Supplier: Marshalls Plc
- S1** Solid Concrete Step Units; Conservation x Textured Step Sizes: 350 x 150 x 1000mm 400 x 150 x 1000mm (top tread) Colour: 'Silver Grey' incl. 55mm wide visibility strips Supplier: Marshalls Plc.
- incl. metal handrails on both sides

- Slot Drain/ Channel Drain
- Door Threshold Drain (by archs.)

EDGINGS

- E1** Flat top Concreet Edging Size: 50 x150 x 1000mm Supplier: Marshalls Plc.
- E2** Vehicular Kerb 'Size: 125 x 255 x 1000mm Bullnosed; Supplier: Marshalls Plc.

BOUNDARIES

- A** Type A Brick Piers & Open Railings (overall height 1200mm high)
- B** Type B Low Brick Wall with Railings (overall height 1200mm high)
- C** Type C Close Board Timber Fence (1800mm high)
- D1** Type D1 Brick Piers & Board Timber Fence (1800mm high)
- D2** Type D1 Brick Piers & Board Timber Fence (1200mm high)
- W1** Brickwork Retaining Wall; Brick to match architectural facade; For details see archs and engs. dwgs; Brick on edge coping
- W2** Brickwork Retaining Wall to sides of stairs; Brick to match architectural facade; For details see archs and engs. dwgs; Brick on edge coping; allow for metal handrails to inside of walls facing steps

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This drawing defines the design intent and finishes only. Refer to the General Designers information for detail information and to the Engineers specification for construction build up. Sub-base, retaining walls and foundations are illustrative only and should be agreed with the engineer/others. All dimensions nominal.

V224.01.2025Steps paving layout adjustedBSJD

R0020.01.2025First IssueBSJD

Revision	Date	Description	Drawn	Ch'd

PLAN Design Landscape Architects Ltd.
www.plan-design.co.uk
t: 07557140477 | 07760190496
e: jack@plan-design.co.uk | holly@plan-design.co.uk

PLAN

Client

Elkins Construction

Project

Worcester Close

Drawing Title

Hardscape Plan

Date: 19.12.2024	Scale: 1:100@A1	Drawn by: BS	Ch'd by: JD
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Status

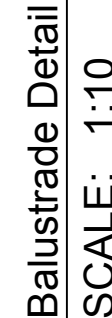
Stage 4

Drawing Number:

24071-PLA-ZZ-00-DR-L-200

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JD	23.01.2025	First Issue	BS	JD
Revision	Date	Description	Drawn	Ch'd

PLAN

PLAN Design Landscape Architects Ltd.
www.plan-design.co.uk
: 07357 14477 | 07760 193496
e: jack@plan-design.co.uk | holly@plan-design.co.uk

Client

Elkins Construction

Worcester Close

Drawing Title

Date: 4.01.2025	Scale: As shown @ A1	Drawn by: BS	Ch'd by: JD
Status:			

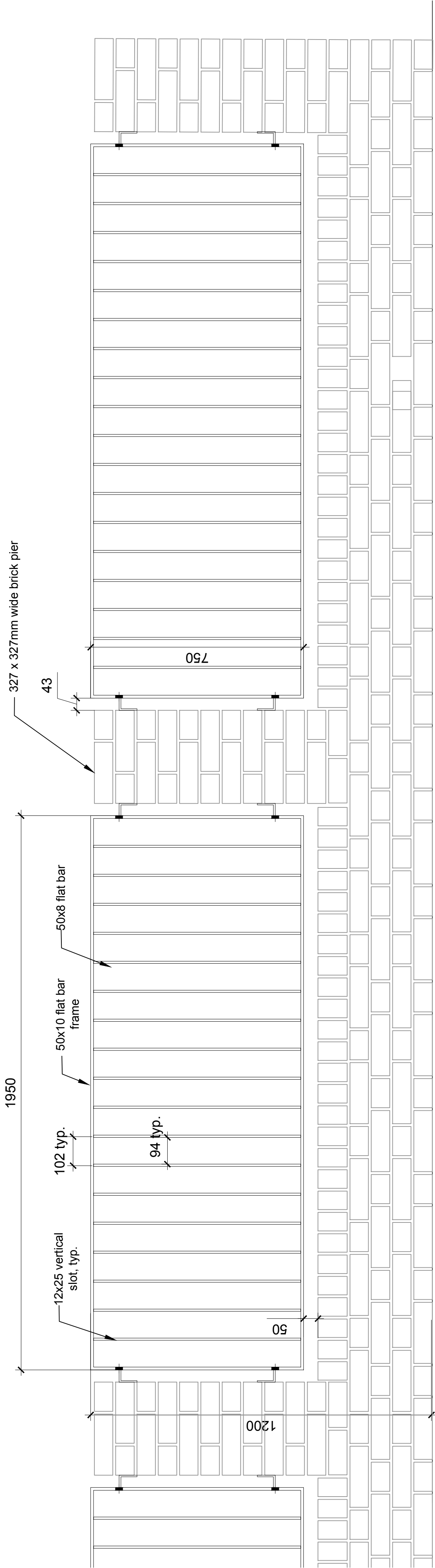
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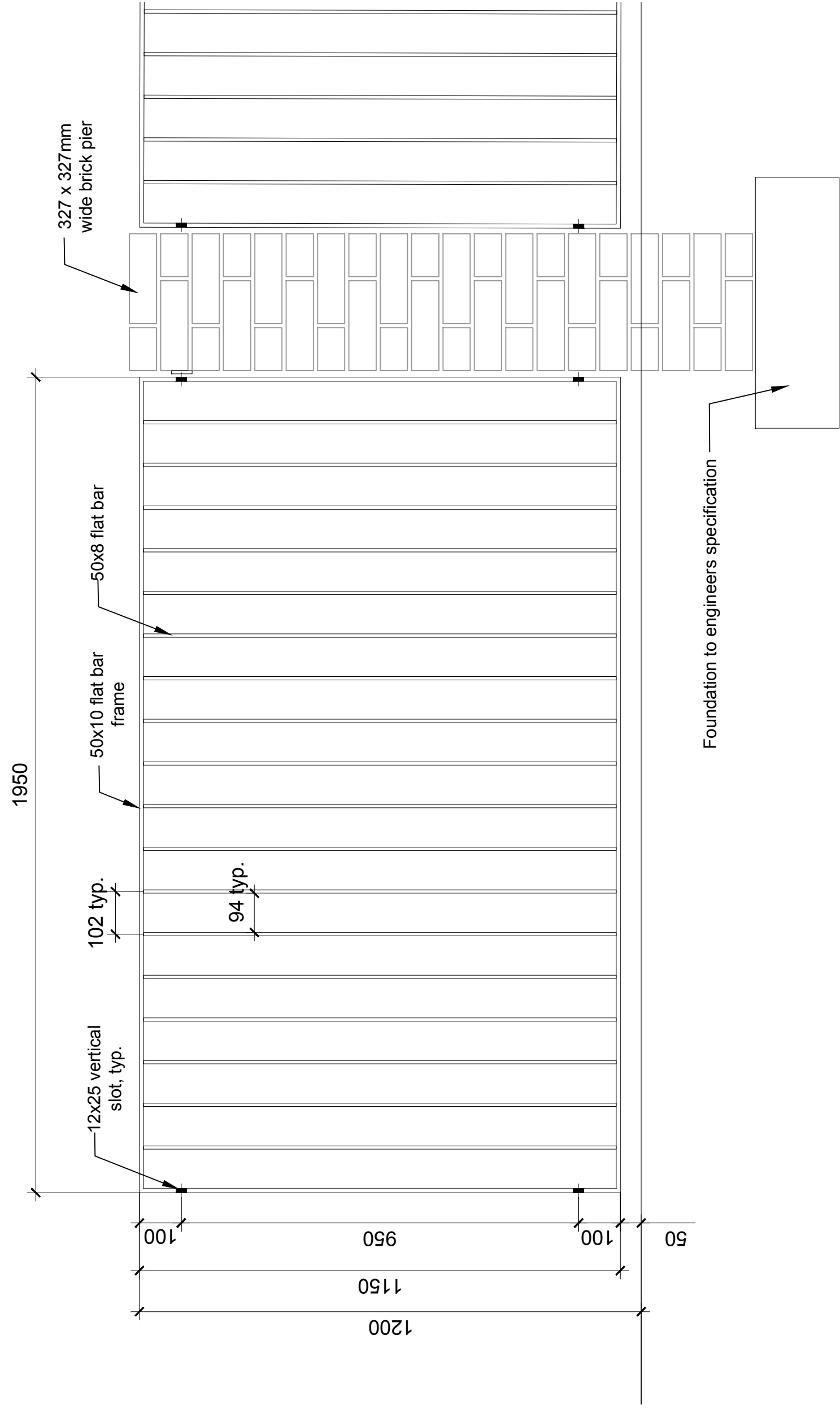
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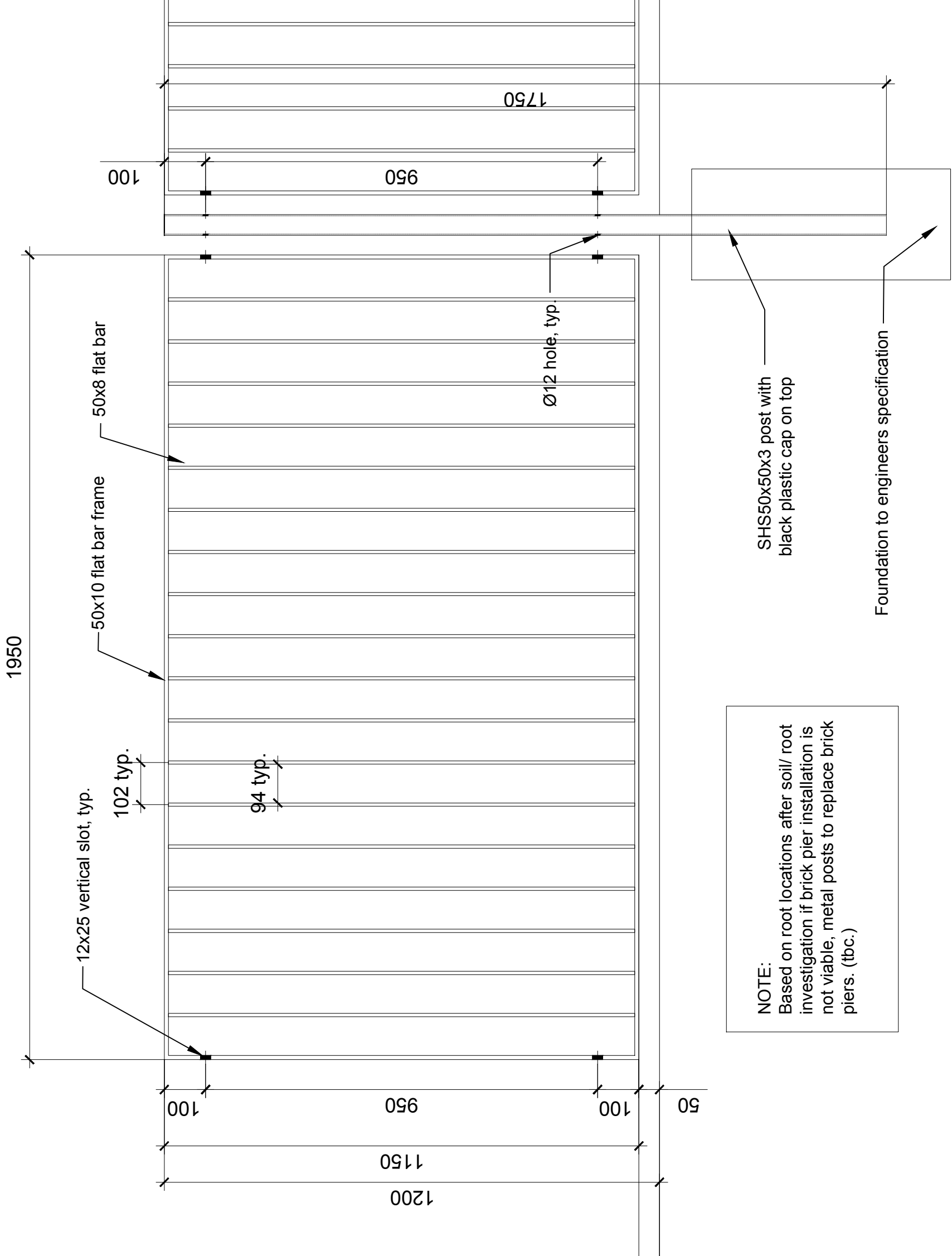
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1 Boundary Brick Pier and Balustrade Wall Elevation @ Southern Boundary
SCALE: 1:10



2 Boundary Brick Pier and Balustrade Wall Elevation @ Root Protection Zone
SCALE: 1:10

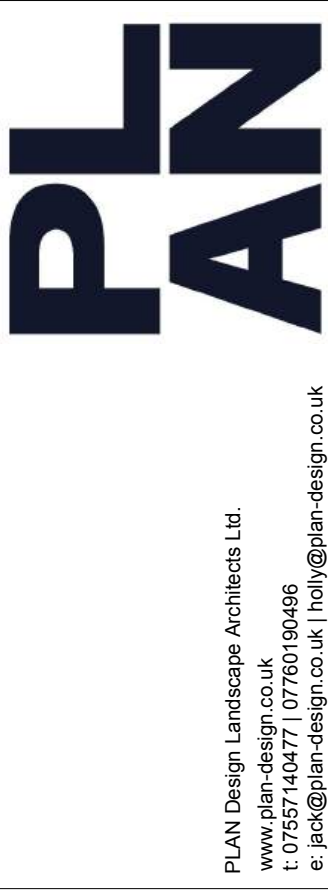


NOTE:
Based on root locations after soil/ root investigation if brick pier installation is not viable, metal posts to replace brick piers. (tbc.)

SHS50x50x3 post with black plastic cap on top

Foundation to engineers specification

Revision	Date	Description	Drawn	JD
00	13.02.2025	First Issue		



Client

Elkins Construction

Project

Worcester Close

Drawing Title

Boundary Wall Details - Sheet 1

Date	Scale	Drawn by:	Check by:
13.02.2025	As shown @ A1	BS	JD

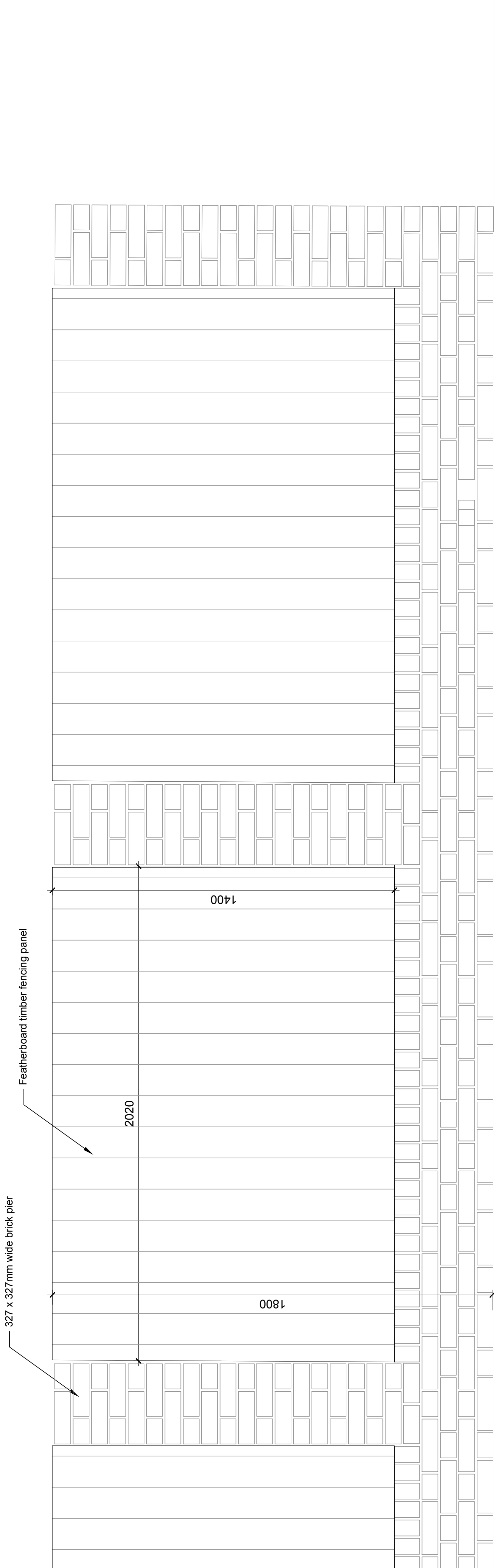
Status:
Stage 4

Drawing Number:
PLA 0107 631 R00

NOTES:

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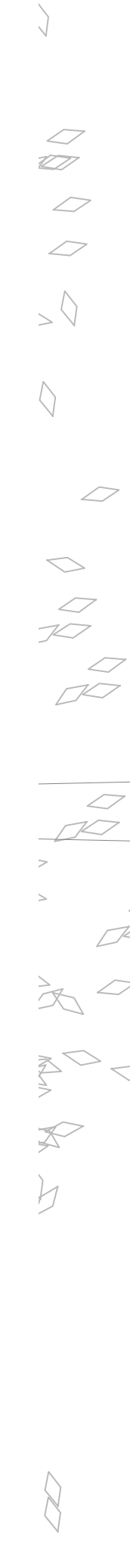
This drawing defines the design intent and finishes only. Refer to the General Designers information for detail information and to the Engineers specification for construction build details. All dimensions are illustrative only and should be agreed with the engineer/contractor. All dimensions nominal.



1 Boundary Brick Pier and Timber Fence Elevation @ Private Garden

SCALE: 1:10

00	13.02.2025	First Issue	BS	JD
Revision	Date	Description	Drawn	Chd
PLAN PLAN Design Landscape Architects Ltd. www.plan-design.co.uk t: 07557 140477 07769 190496 e: jak@plan-design.co.uk holly@plan-design.co.uk Client Elkins Construction Worcester Close Boundary Wall Details - Sheet 2 Date: 13.02.2025Scale: As shown @ A1Drawn by: BSChd by: JD Status: Stage 4 Drawing Number: PLA 0107 632 R00				



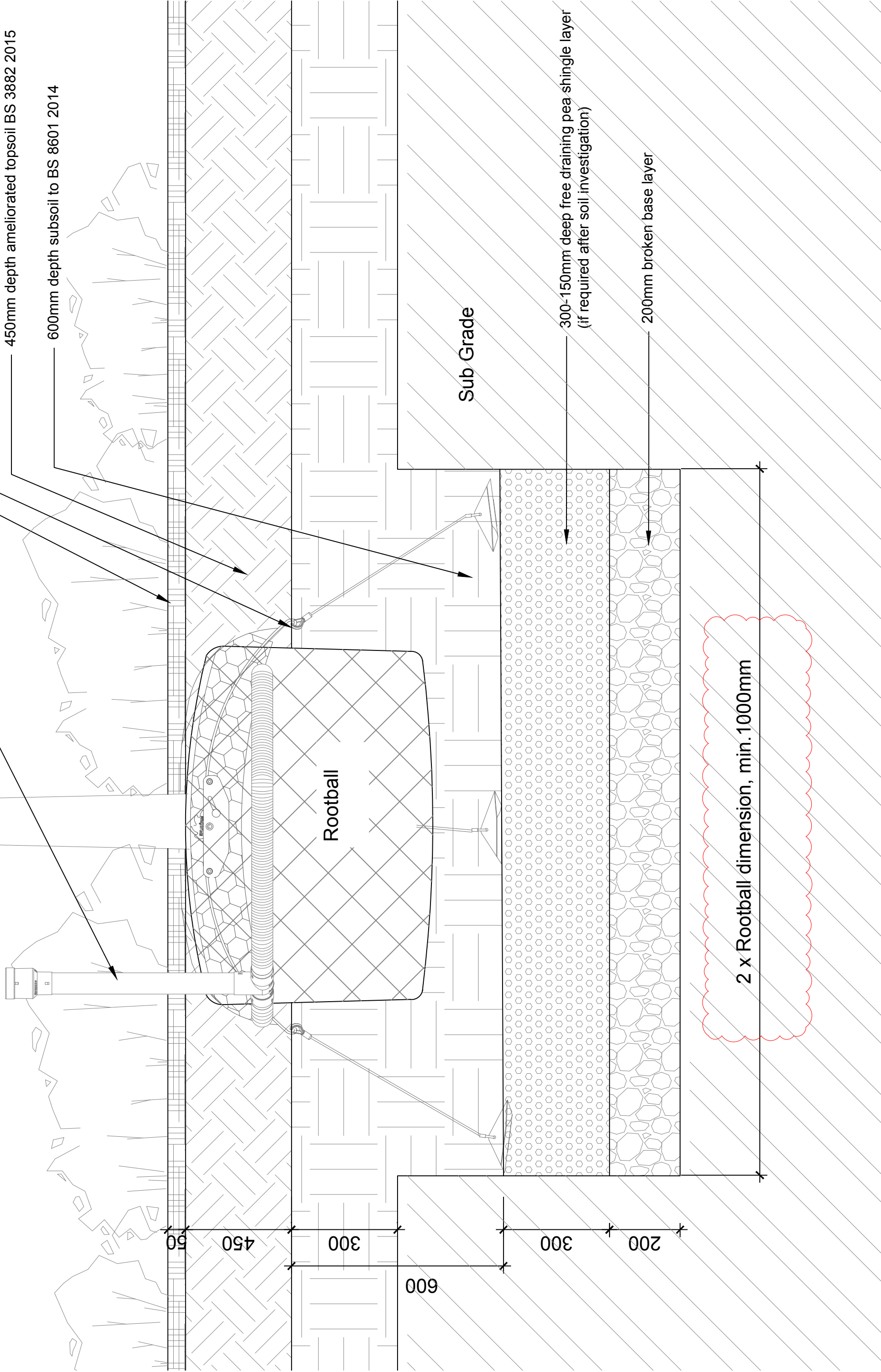
'GreenBlue Urban' RootRain Civic - Tree pit Irrigation & aeration system, or equal and approved installed to mfrs. recommendation

50mm depth ornamental bark mulch

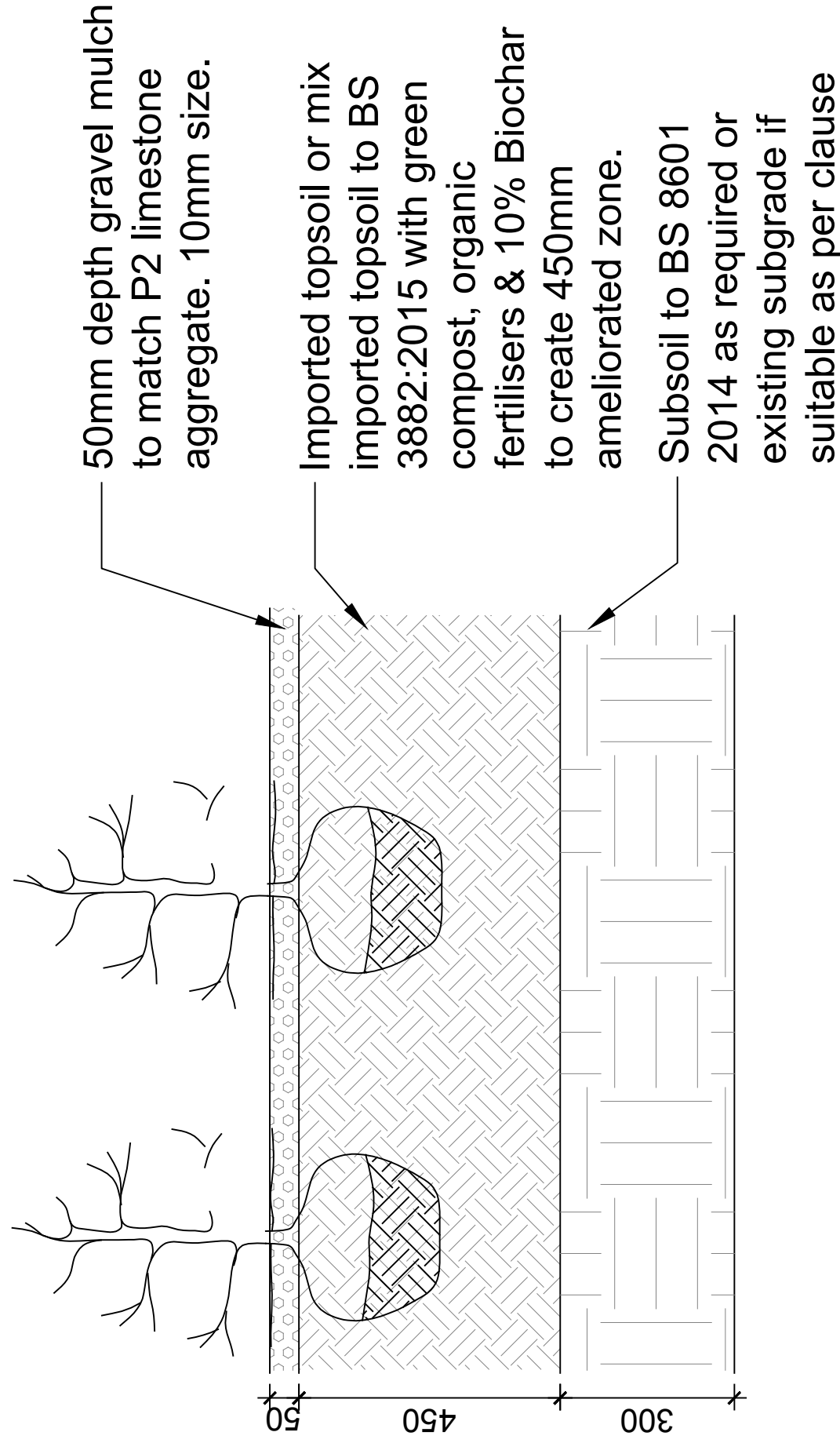
Platimat RF2P Underground guying system. Supplier: Platipus

450mm depth ameliorated topsoil BS 3882 2015

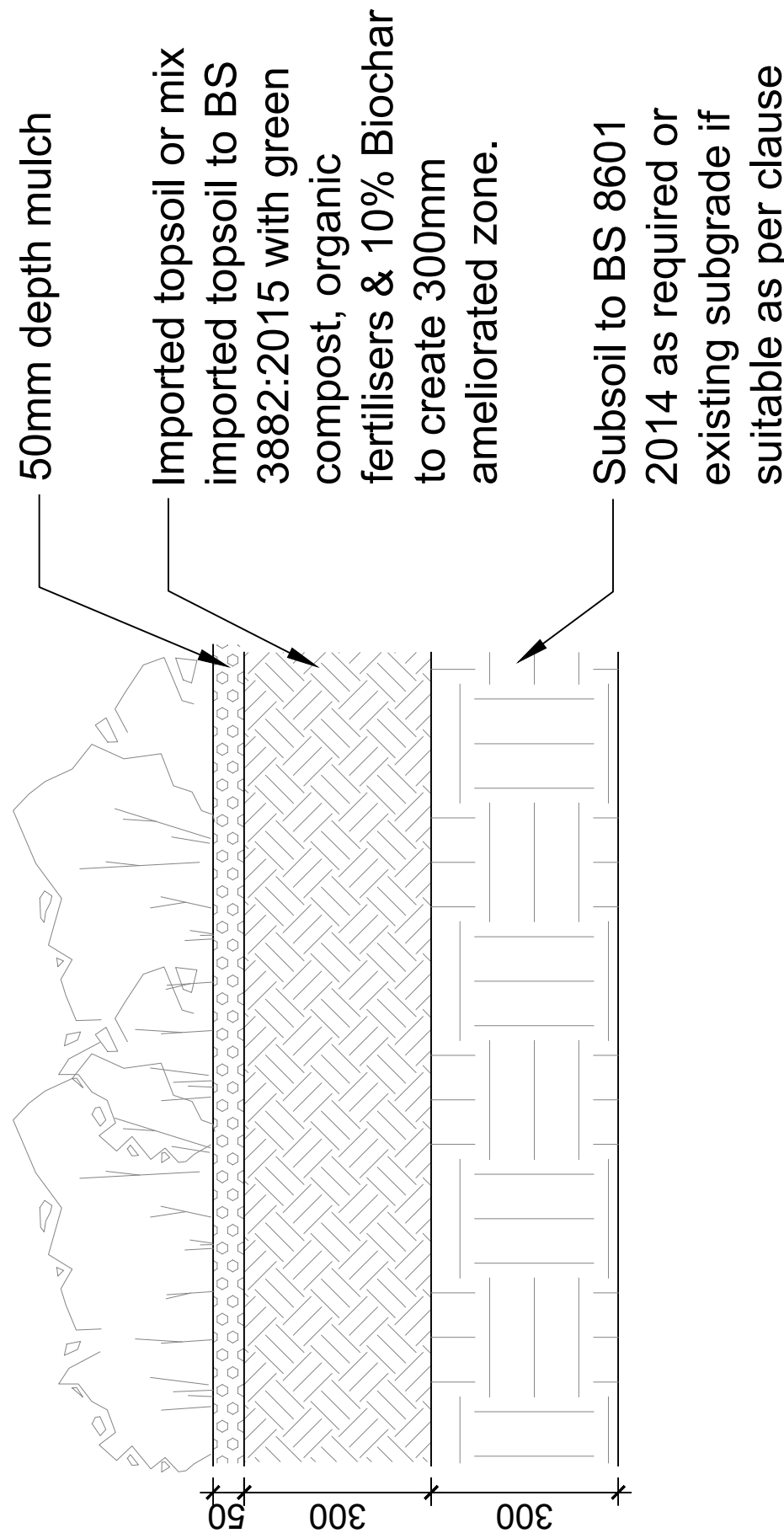
600mm depth subsoil to BS 8601 2014



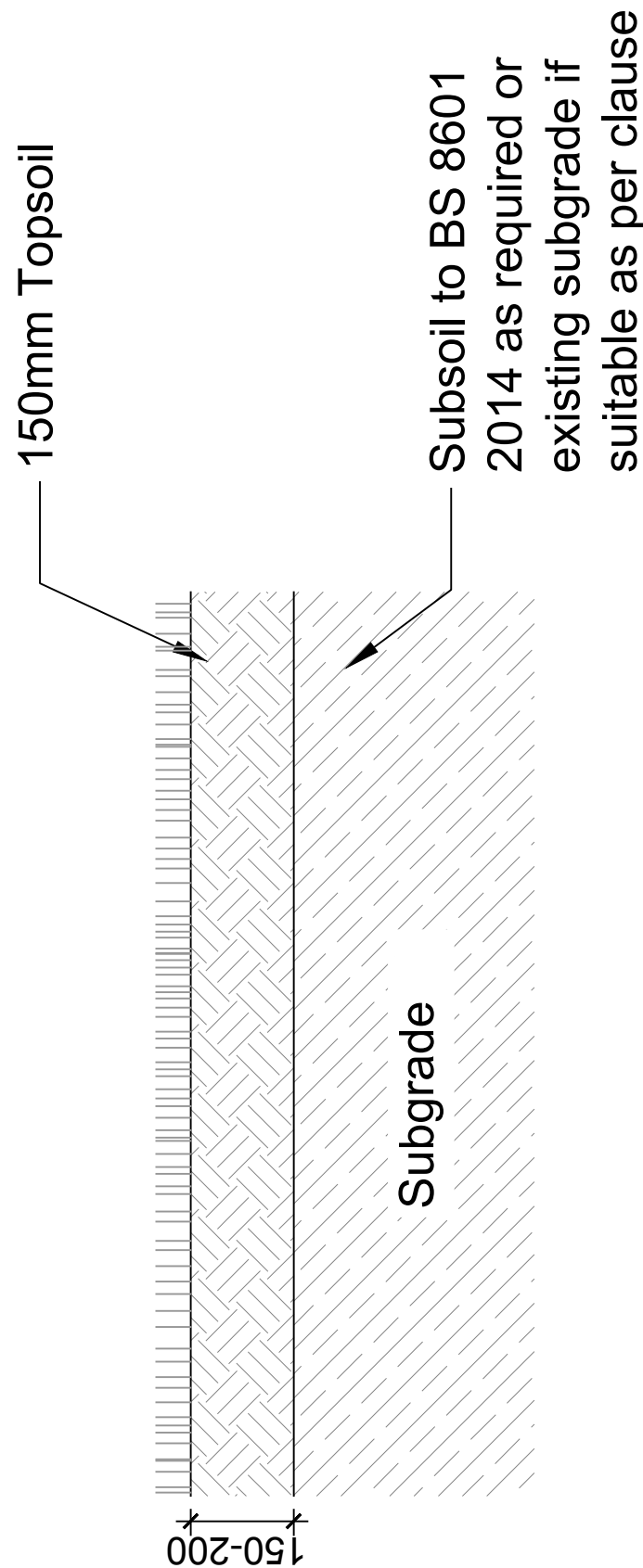
1 Tree Planting Detail
SCALE: 1:10



2 Shrub Planting Detail
SCALE: 1:10



3 Herbaceous Planting Detail
SCALE: 1:10



4 Lawn Detail
SCALE: 1:10

NOTES:

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This drawing defines the design intent and finishes only. Refer to the General Designing information for detail information and to the Engineers specification for construction build up. Sub-base, retaining walls and foundations are illustrative only and should be agreed with the engineer/other. All dimensions nominal.

Revision	Date	Description	Drawn	Chkd
V1	18.02.2025	Dimension note added	BS	JD
00	23.01.2025	First Issue	BS	JD

PLAN

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Client

Elkins Construction

Project

Worcester Close

Drawing Title

Planting Details

Date:	Scale:	Chkd by:
14.01.2025	As shown @ A1	JD

Status:

Stage 4

Drawing Number:

24054-PLA-ZZ-00-DR-L-603



KEY



TREE PITS (indicative soil area shown. Adjustment may be required to allow for existing nearby services).
450mm depth ameliorated topsoil - BS 3882:2015
600mm depth subsoil - BS 8601:2014
150-300mm depth clean angular stone drainage layer
Base of tree pit to be domed subsoil to aid drainage.

Tree pit sizes as shown on plan

Method:

- Cultivate formation levels
- Break up existing ground
- Add 150-300mm 10-20mmØ clean angular stone
- Place 600mm subsoil
- Place topsoil to 200, 450mm depth backfilled in layers 100mm deep
- Place 100mm green compost & organic fertilisers
- Mix items 5/6 to provide 300mm ameliorated zone
- 50mm depth PAS 100l bark mulch (renewed annually)



TREE PIT ROOT BARRIERS

- ReRoot 1000 (1000mm depth) to edges adjacent to building edges and new retaining walls.
- ReRoot 600 (600mm depth) to edges adjacent existing walls, and path surfaces. Installed in accordance with root barrier installation information provided by engineers. Supplier: Green-tech Ltd. (or equal and approved)



PLANTING BEDS GENERALLY

300mm depth ameliorated topsoil for herbaceous planting- BS 3882:2015
450mm depth ameliorated topsoil for shrub planting- BS 3882:2015
300mm depth subsoil - BS 8601:2013
Break up existing ground and add 10-20mmØ clean angular stone (subject to soil assessment on site)



LAWN GENERALLY (and creepers)

150mm depth ameliorated topsoil for lawn - BS 3882:2015

Break up existing ground and add 10-20mmØ clean angular stone (subject to soil assessment on site)

METHOD FOR LAWN AND PLANTING:

- Cultivate formation levels
- Break up existing surface
- Add 50mm layer 10-20mmØ clean angular stone
- Place 300mm subsoil
- Place topsoil depth backfilled in layers 100mm deep
- Provide 200, 300, 450mm ameliorated zone (as above)
- 50mm depth PAS 100l bark mulch to shrub and herbaceous areas (not for lwan areas)



Existing Tree Root Zones

Minimise disturbance to soil within existing tree root zones.

Follow recommended works outlined in the Arboricultural Impact Assessment for works within tree RPAs.
For turf remove maximum 50mm depth of surface and re-turf with lawn. For hedging and shrub planting carefully excavate hole at least 2 x the size of the plant rootball. Mix in soil improvers and compost. Avoid existing tree roots.

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V2	24.01.2025	Steps paving layout adjusted	BS	JD
R00	20.01.2025	First Issue	BS	JD
Revision	Date	Description	Drawn	Ch'd

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Client

Elkins Construction

Project

Worcester Close

Drawing Title

Topsoil and Amelioration Plan

Date: 30.01.2025	Scale: 1:100@A1	Drawn by: BS	Ch'd by: JD
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Status:

Stage 4

Drawing Number:

24071-PLA-ZZ-00-DR-L-400

PLAN

APPENDIX C-

Arboricultural Scheme of Supervision - Worcester Close, Gravesend - February 2025

Scheme of Arboricultural Supervision

Land at
Worcester Close
Istead Rise
Gravesend

Prepared by:
The Mayhew Consultancy

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Robertsbridge
East Sussex
TN32 5AS

Tel: 07711 673138

www.cmarb.co.uk

AR/117422

February 2025

Contents

Section	Title	Page
1.0	Summary	3
2.0	Background	4
3.0	Instructions	4
4.0	Site details	5
5.0	Planning history	5
6.0	Key personnel	7
7.0	Scheme of arboricultural supervision	8
Appendix A	Existing tree plan – From the original Arboricultural Report - AR/117422 – December 2025	
Appendix B	Tree Protection Plan – From the original Arboricultural Report - AR/117422 – December 2025	
Appendix C	Tree survey schedule – From the original Arboricultural Report - AR/117422 – December 2025	

1.0 Summary

- 1.1 The subject site is located on land at Worcester Close, Istead Rise, Gravesend.
- 1.2 Planning consent was granted by Gravesham Borough Council on 29th November 2023. (Application Number: 20230136)
- 1.3 Part of Condition 7 of that consent requires that an agreed scheme of supervision for the approved arboricultural protection measures be submitted and approved by the local planning authority.
- 1.4 The contents of this report are intended to provide the information required by items 'm' and 'n' within Condition 7.

2.0 Background

The Site: Land at Worcester Close, Istead Rise, Gravesend

TMC Ref: AR/117422

Local authority: Gravesham Borough Council

Report date: 14th February 2025

Surveyed by: Clive Mayhew BA (Hons), MICFor, FArborA, CEnv

3.0 Instructions

- 3.1 I am instructed to prepare a scheme of arboricultural supervision for the site to be applied for the duration of the construction period.
- 3.2 My name is Clive Mayhew, and I am the author this report. I have over 20 years' experience in tree, landscape and ecology management in both the public and private sectors. I am a Chartered Arboriculturist within the Institute of Chartered Foresters, a Chartered Environmentalist, and a Fellow of the Arboricultural Association.

4.0 Site details

- 4.1 The subject site is located on land at Worcester Close, Istead Rise, Gravesend.
- 4.2 **Existing structures:** There are no existing above ground structures on site.
- 4.3 **Existing topography:** The body of the site is essentially level throughout with no topographical variations of any arboricultural significance. The ground rises to a gentle bank along the northern site boundary; my visual impression was that this bank is made up with soil possibly originating historically from adjacent construction works.
- 4.4 **Existing vegetation:** Apart from the trees listed within this report the primary vegetation within the body of the site is improved amenity grassland.
- 4.5 **Soils:** The soil type is of relevance because soils with a high clay content can be compacted, which in turn can be extremely damaging to tree roots. The British Geological website indicates the bedrock geology to be chalk from the Lewes nodular chalk formation, Seaford chalk formation and Newhaven chalk formation. The clay content within such soils is likely to be low, but the tree protection measures advocated in this report are still set at the highest level of current technical specifications.

5.0 Planning history

- 5.1 Planning consent was granted by Gravesham Borough Council on 29th November 2023. (Application Number: 20230136)
- 5.2 Condition 7 of that permission states that:

Tree Protection

Prior to the commencement of the development hereby approved (including demolition and all preparatory work), a scheme for the protection of the retained trees, in accordance with BS 5837:2012, including a tree protection plan(s) (TPP) and an arboricultural method statement (AMS) shall be submitted to and approved in writing by the Local Planning Authority.

Specific issues to be dealt with in the TPP and AMS:

- (a) Location and installation of services/ utilities/ drainage.
- (b) Methods of demolition within the root protection area (RPA as defined in BS 5837: 2012) of the retained trees.
- (c) Details of construction within the RPA or that may impact on the retained trees.

- (d) a full specification for the installation of boundary treatment works.
- (e) a full specification for the construction of any roads, parking areas and driveways, including details of the no-dig specification and extent of the areas of the roads, parking areas and driveways to be constructed using a no-dig specification. Details shall include relevant sections through them.
- (f) Detailed levels and cross-sections to show that the raised levels of surfacing, where the installation of no-dig surfacing within Root Protection Areas is proposed, demonstrating that they can be accommodated where they meet with any adjacent building damp proof courses.
- (g) A specification for protective fencing to safeguard trees during both demolition and construction phases and a plan indicating the alignment of the protective fencing
- (h) a specification for scaffolding and ground protection within tree protection zones.
- (i) Tree protection during construction indicated on a TPP and construction and construction activities clearly identified as prohibited in this area.
- (j) Details of site access, temporary parking, onsite welfare facilities, loading, unloading and storage of equipment, materials, fuels and waste as well concrete mixing and use of fires
- (k) Boundary treatments within the RPA
- (l) Methodology and detailed assessment of root pruning
- (m) Arboricultural supervision and inspection by a suitably qualified tree specialist
- (n) Reporting of inspection and supervision
- (o) Methods to improve the rooting environment for retained and proposed trees and landscaping

The development thereafter shall be implemented in strict accordance with the approved details.

Reason Required prior to commencement of development to satisfy the Local Planning Authority that the trees to be retained will not be damaged during demolition or construction and to protect and enhance the appearance and character of the site and locality, in accordance with Policies CS12 and CS19 of the Gravesham Local Plan Core Strategy (September 2014) and pursuant to section 197 of the Town and Country Planning Act 1990.

- 5.3 The contents of this report are intended to provide the information required by items 'm' and 'n' within Condition 7.

- 5.4 This scheme of arboricultural supervision should be read in conjunction with **The Mayhew Consultancy** Arboricultural report dated December 2022 (Ref: AR/117422) which was specifically commissioned to cover the proposed works and forms part of the planning application and consent for the site. All aspects of tree protection are detailed within the report. The arboricultural supervision detailed below, which will be in place during the construction phase, will ensure that these measures are adhered to.

6.0 Key Personnel

- 6.1 The following individuals and organisations are central to the delivery of the scheme and the arboricultural protection measures it requires:

6.1.1 **Main Contractor(s):** Elkins Construction

Contact Name: Billy Mould

Address: Unit 1a, Industrial Trading Estate, Juno Way SE14 5RW

Telephone: 020 8692 4960

6.1.2 **Site Agent:** Elkins Construction

Name: David Glisson

Address: Pearmain House, Worcester Close, Istead Rise, DA13 9LB

Telephone: 07766 626 670

Email: david.glisson@elkinsconstruction.co.uk

6.1.3 **Supervising arboriculturist:**

To be appointed

6.1.4 **Approved contractor for tree works:**

To be appointed.

7.0 Scheme of arboricultural supervision

7.1 The supervising arboriculturist

7.1.1 The supervising arboriculturist is yet to be appointed.

7.1.2 Arboricultural supervision will be predicated upon:

- **Communication**

Prior to commencement of works on site, key personnel and their individual responsibilities will be identified and their contact numbers recorded and circulated.

- **Induction**

An induction meeting will be held by the supervising arboriculturist with the site agent/foreman (See 7.2 below) where the scope of responsibilities will be discussed.

- **Awareness**

The supervising arboriculturist will ensure that the tree protection principles and their practice, *as they relate to this particular project*, are communicated to the site agent/foreman prior to the commencement of works – Reference will be made to the schematic plan at Appendix B within *The Mayhew Consultancy* arboricultural report - AR/117422.

7.2 Pre-commencement meeting

7.2.1 Prior to the commencement of works, a pre-commencement meeting will be held on site. Attendees shall include:

- The retained arboricultural consultant
- The site agent
- Any other individual or personnel responsible for the implementation of tree protection measures during the development phase.

7.3 Site visits – Timing and record keeping

7.3.1 The nature and frequency of the arboricultural supervision and the attendance of the supervising arboriculturist on site will be based upon the construction project timeline, which may in turn be modified by events actually occurring on site.

7.3.2 Formal timetabled visits will occur prior to commencement of works; following the erection of protective fencing; at times which co-ordinate with earthworks/digging which will place trees at greatest risk, and thereafter when deemed appropriate.

7.3.2 *In addition to the above*, site visits will occur as and when necessary (with or without prior warning) depending upon a particular phase of the works and any impact that may have on trees.

7.3.3 A written record of all site visits will be made and copies retained by the main contractor and the supervising arboriculturist.

7.3.4 The site agent will be able to contact the supervising arboriculturist at any time if any arboricultural matters arise that might need his attention or service.

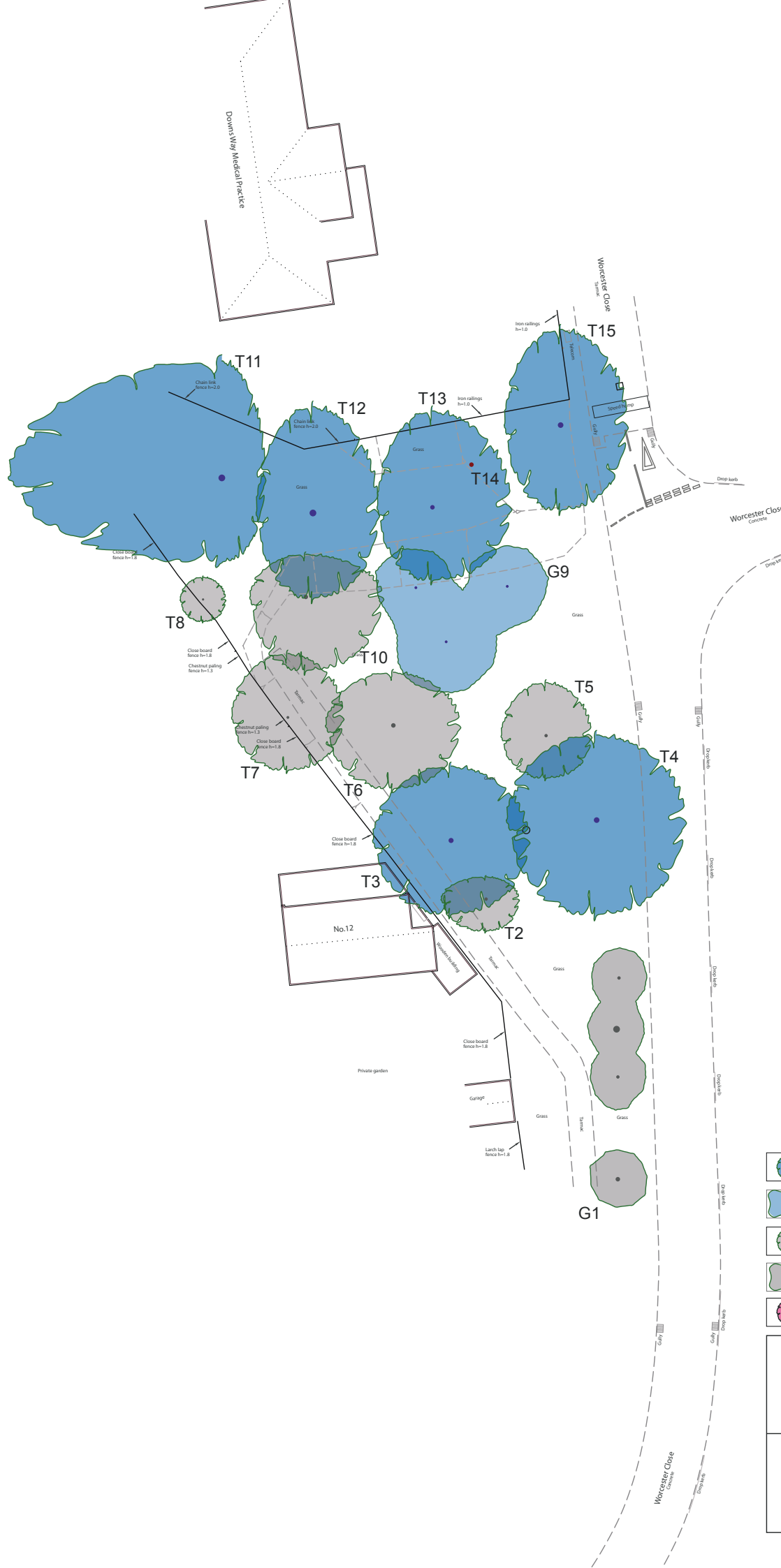
7.4 **Variations**

7.4.1 A Variation Notice will be issued where any modifications to tree protection measures and construction become necessary. The Notice will set out in writing the problem which led to the change, the modification subsequently required and a confirmation that the modification specified has been properly implemented.

7.4.2 Any variation will need to be agreed in writing by the Council before implementation.

7.5 **Incidents**

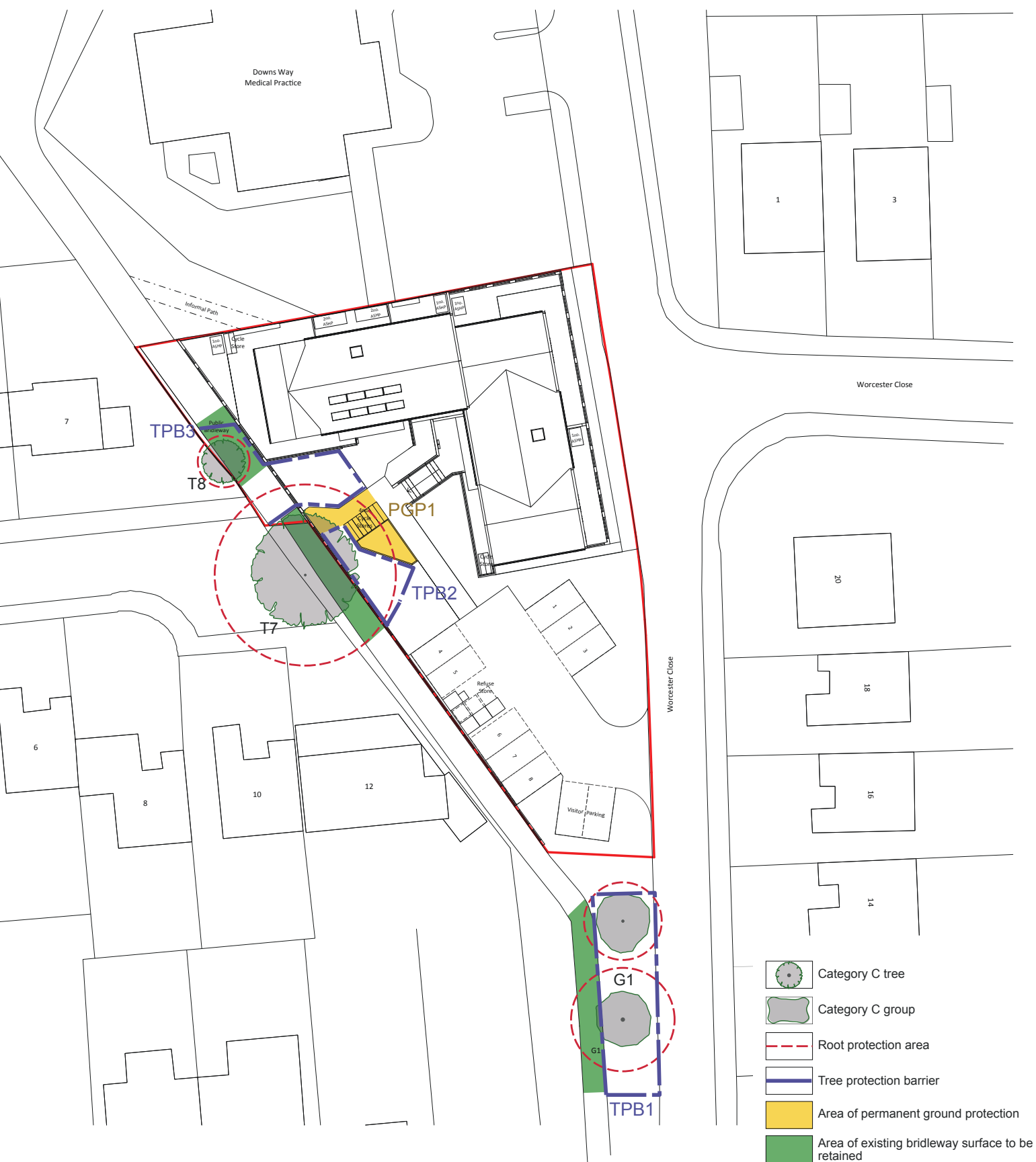
7.5.1 An Incident Notice will be issued if an unforeseen event occurs that compromises tree protection measures or damages a tree. This Notice will set out the written details of what has happened, the reasons for the occurrence, who is responsible, the remedial measures undertaken, the alteration of practices that will follow to avoid repetition and a confirmation that the incident has been properly closed.



-  Category B tree
-  Category B group/hedge/woodland
-  Category C tree
-  Category C group/hedge
-  Category U tree

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E-mail: clive@cmarb.co.uk

AR/117422 - Worchester Close
 Gravesend
Existing Tree Plan
 December 2022
 Do not scale from drawing



-  Category C tree
-  Category C group
-  Root protection area
-  Tree protection barrier
-  Area of permanent ground protection
-  Area of existing bridleway surface to be retained

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 E-mail: clive@cmarb.co.uk

AR/117422 - Worcester Close
 Gravesend
Tree Protection Plan
 December 2022
 Do not scale from drawing

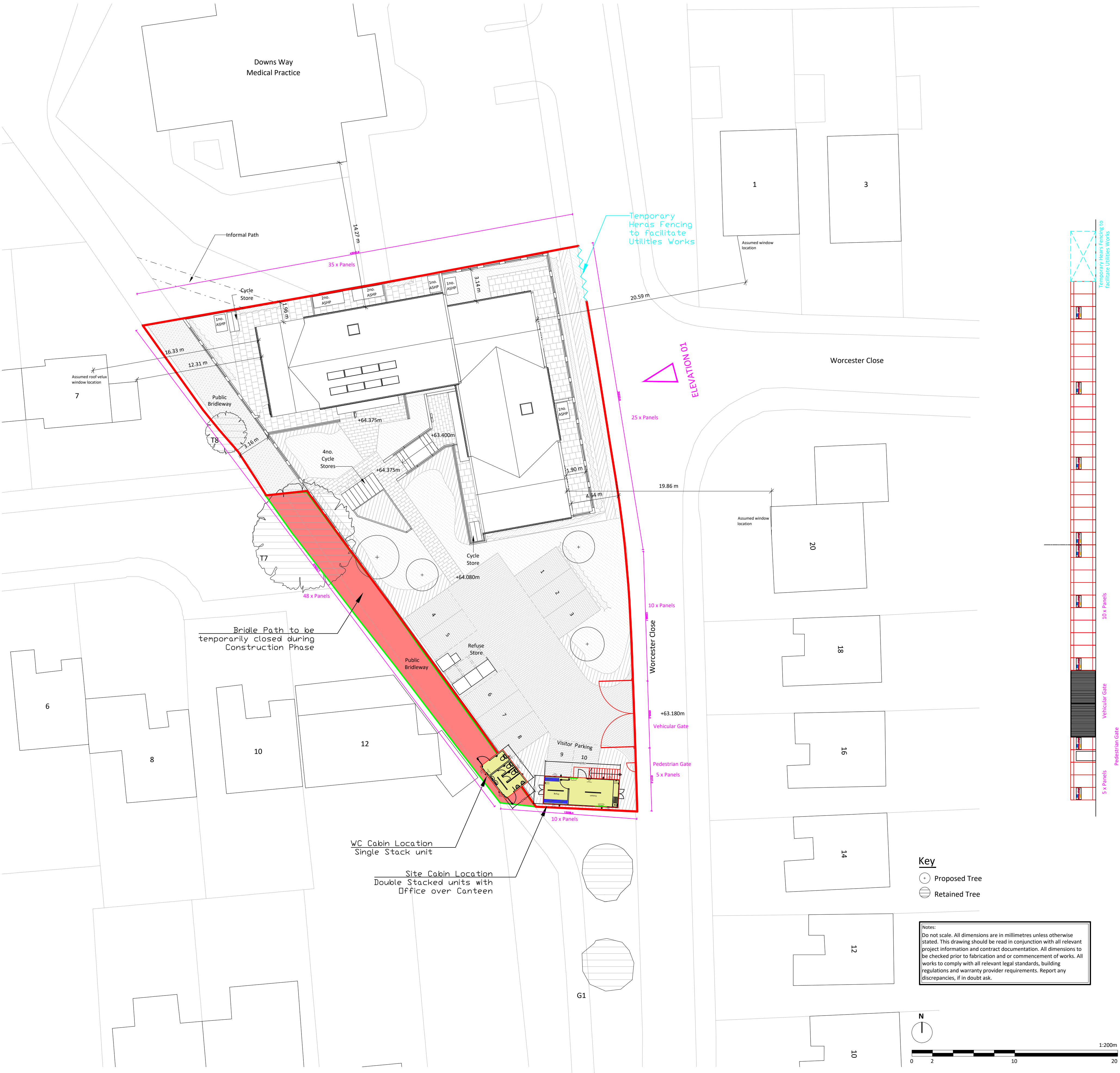
Tree Survey – 11th August 2022

Tree No	Species	Ht.	Stem dia.	RPA Rad	RPA Area	Crown spread N – S – E - W				CB	Age class	Phy con	Str con	ECR	Class	Observations & recommendations
G1	Apple	<5	<60	7.2	163	As per plan				GL	M	G	F	M	C	Mature, multi-stemmed, roadside trees.
T2	Apple	4	30	3.6	41	2	3	3	4	GL	M	F	F	M	C	Established apple tree adjacent to path.
T3	Ash	15	45	5.4	92	7	7	7	7	3	SM	G	G	M	B	Established tree to rear (west) of green.
T4	Oak	15	50	6.0	113	8	9	8	8	2	SM	G	G	L	B	Good established tree. Prominent to road.
T5	Silver birch	14	30	3.6	41	5	4	4	4	2	SM	G	G	M	C	Established, but generally unexceptional silver birch tree.
T6	Ash	13	40	4.8	72	5	6	6	6	3	SM	G	G	M	C	Established, full crowned tree.
T7	Sycamore	7	25/25/20	8.4	222	6	5	5	5	2	SM	F	F	M	C	Self-set, multi-stemmed tree at base - on western boundary.
T8	Norway maple	6	20	2.4	18	2	2	2	2	2	Y	F	F	M	C	Small, unexceptional tree.
G9	Silver birch x3	<12	<25	3.0	28	As per plan				3	SM	G	G	M	B	Cohesive group within the central body of the green.
T10	Ash	11	40	4.8	72	4	7	7	5	2	SM	F	F	M	C	Established tree, but somewhat thin crowned.
T11	Norway maple	12	60	7.2	163	11	8	4	19	2	M	G	G	L	B	Good established tree.
T12	Norway maple	13	60	7.2	163	10	8	6	5	2	M	G	G	L	B	Good established tree on bank.

Tree No	Species	Ht.	Stem dia.	RPA Rad	RPA Area	Crown spread N – S – E - W				CB	Age class	Phy con	Str con	ECR	Class	Observations & recommendations
T13	Norway maple	7	40	4.8	72	9	7	7	5	2	SM	G	G	L	B	Good established semi-mature tree on bank.
T14	Dead fallen tree	-	-	-	-	As per plan				-	-	-	-	-	U	Dead fallen tree.
T15	Norway maple	11	50	6.0	113	9	8	6	5	2	SM	G	G	L	B	Good established tree – prominent to road .

APPENDIX D –

E33156-24-EC-ZZ-0 1-DR-A-GA-0 100



- Notes
- 1 All dimensions are in millimeters.
 - 2 Dimensions are not to be scaled directly from this drawing.
 - 3 All dimensions are to be checked on site and the Architect is to be informed of any discrepancies before construction commences.
 - 4 All references to drawings refer to the current revision of that drawing.
 - 5 Structural and services information shown is indicative only. Refer to Consultants drawings for details and setting out.

P02 Welfare Units Re-located to southern end of site 11.11.24 GA
P01 Drawing issued for comment 30.10.24 GA

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www.elkinsconstruction.co.uk

Job title

WORCESTER CLOSE

Drawing title
Site Setup Plans & Elevations

Scale	Sheet size	Drawn by	Date			
1/100	A3	SG	15.10.24			
Project	Originator	Vol / zone	Level	Type	Role	Number
E33156-24-EC-ZZ-01-DR-A-GA-01						
Status					Revision	
Sketch					P02	