

Dated

2023

Lease

relating to

Land at Northgate, Bishop's Stortford

between

Hertfordshire County Council

and

East Hertfordshire District Council



**Weightmans LLP
No 1 Spinningfields
Hardman Square
Manchester
M3 3EB
Tel: 0345 073 9900
Fax: 0161 233 7331
Ref: ANS/9008500/900048**

LR1. Date of lease

LR2. Title number(s)

LR2.1 Landlord's title number(s)

HD494701

LR2.2 Other title numbers

HD599007

LR3. Parties to this Lease

Hertfordshire County Council

County Hall, Pegs Lane, Hertford SG13 8DQ

Tenant

East Hertfordshire District Council

Wallfields, Pegs Lane, Hertford SG13 8EQ

Other parties

None

LR4. Property

In the case of a conflict between this clause and the remainder of this Lease then, for the purposes of registration, this clause shall prevail.

See the definition of "Rights" in clause 1.1

LR5. Prescribed statements etc.

LR5.1 Statements prescribed under rules 179 (dispositions in favour of a charity), 180 (dispositions by a charity) or 196 (leases under the Leasehold Reform, Housing and Urban Development Act 1993) of the Land Registration Rules 2003.

None.

LR5.2 This Lease is made under, or by reference to, provisions of:

None.

LR6. Term for which the Rights are leased

The term specified in the definition of "Term" in Clause 1.1 of this Lease.

LR7. Premium

None.

LR8. Prohibitions or restrictions on disposing of this Lease

None

LR9. Rights of acquisition etc.

LR9.1 Tenant's contractual rights to renew this Lease, to acquire the reversion or another lease of the Property, or to acquire an interest in other land

None.

LR9.2 Tenant's covenant to (or offer to) surrender this Lease

None.

LR9.3 Landlord's contractual rights to acquire this Lease

None.

LR10. Restrictive covenants given in this Lease by the Landlord in respect of land other than the Property

None.

LR11. Easements

LR11.1 Easements granted by this Lease for the benefit of the Property

The rights set out in Schedule 1 to this Lease are granted by this Lease for the benefit of the Tenant's Property.

LR11.2 Easements granted or reserved by this Lease over the Property for the benefit of other property

The easements set out in Schedule 2 to this Lease are granted or reserved over the Landlord's Property for the benefit of other property.

LR12. Estate rentcharge burdening the Property

None.

LR13. Application for standard form of restriction

None.

LR14. Declaration of trust where there is more than one person comprising the Tenant

This Lease is made on

Parties

- (1) Hertfordshire County Council of County Hall, Pegs Lane, Hertford SG13 8DQ (Landlord) and
- (2) East Hertfordshire District Council of Wallfields, Pegs Lane, Hertford SG13 8EQ (Tenant)

This Deed provides:

1 Definitions and interpretation

1.1 Definitions

In this Lease:

Drainage Media	the drainage pipes, attenuation, interceptor and inspection manholes and associated infrastructure to be laid under the Landlord's Property in accordance with the Rights and as set out at Annexure 2.
Easement Strip	a strip measuring 3 metres in width which is shown shaded brown on the Plan
Landlord's Property	the land owned by the Landlord outlined in red on the Plan being part of the land comprised in title number HD494701 and each and every part of it but excluding the Sold Land;
Lease	a lease for a term of 250 years dated and commencing on 18th March 2021 between 1) Hertfordshire County Council and 2) East Hertfordshire District Council in respect of the Tenant's Property.
Plan	the plan annexed to this Lease at Annexure 1;
Playing Field Works	the works specified at Annexure 3 being a levelled surface appropriate for the playing of ball games and sports and which is turfed and/or

seeded with a quality grass seed mixture which establishes quickly and provides rapid cover and has a high wear tolerance.

Rights

the rights over the Landlord's Property granted by this Lease details of which are set out in Schedule 1;

Sold Land

the land shown edged in red on the plan attached to this lease and marked with plan no "EM 15567"

Tenant's Property

the land demised by the Lease and which has been allocated title number HD599007 at the Land Registry and each and every part of it;

Term

a term of years commencing on and including the date of this lease and expiring on the date of the expiry of the Lease (howsoever that determines).

1.2 Interpretation

1.2.1 The expression the Landlord includes the person or persons from time to time entitled to the reversion immediately expectant upon determination of the Term.

1.2.2 The expression the Tenant includes the Tenant's personal representatives, administrator or trustee in bankruptcy only.

1.2.3 Where any party to this Lease for the time being comprises two or more persons, obligations expressed or implied to be made by or with that party are deemed to be made by or with the persons comprising that party jointly and severally.

1.2.4 Words that indicate one gender include all other genders, words that indicate the singular include the plural and vice versa and words that indicate persons shall be interpreted as extending to a corporate body or a partnership and vice versa.

1.2.5 References to any numbered clause or schedule without any further description shall be interpreted as a reference to the clause or schedule of this Lease numbered in that manner.

1.2.6 The clause and schedule headings do not form part of this Lease and shall be ignored in its construction.

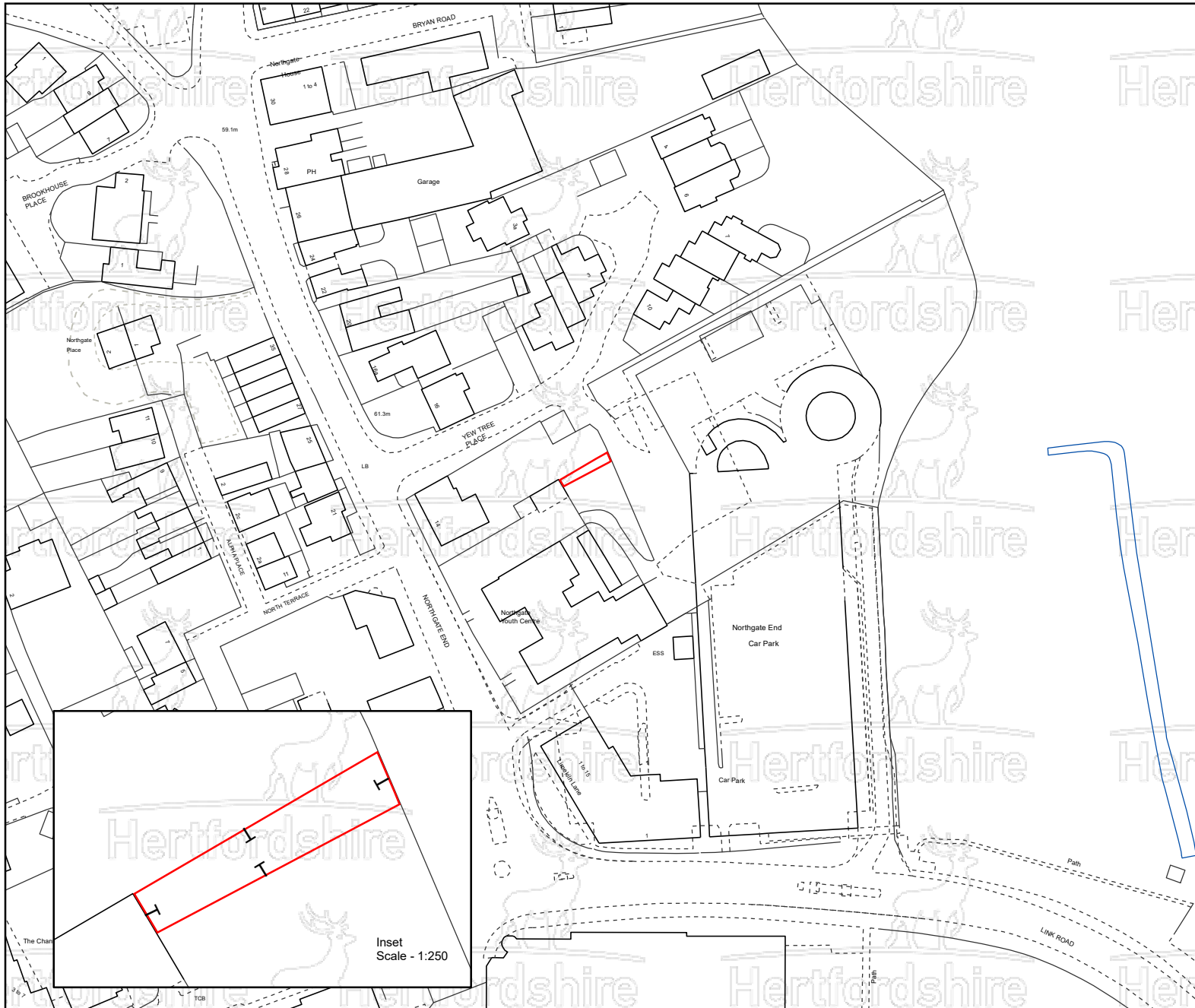
1.2.7 Any reference to a colour or letter is to one on the Plan.

2 Letting

In consideration of the Playing Field Works, and an annual rent of a peppercorn (if demanded) payable by the Tenant to the Landlord the Landlord lets with limited title guarantee the Rights to the Tenant for the Term for the benefit of the Tenant's Property and each and every part of it excepting and reserving to the Landlord the rights specified in Schedule 2,

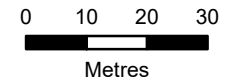
3 Tenant's covenants

- 3.1 The Tenant covenants with the Landlord to undertake the Playing Field Works in a proper and workmanlike manner as soon as reasonably practicable and in any event within a reasonable period following the date of this Lease to the reasonable satisfaction of the Landlord.
- 3.2 The Tenant will forthwith make good to the reasonable satisfaction of the Landlord and at its own expense all damage caused to the Landlord's Property and to all other services laid in the Landlord's Property by the exercise of the Rights and indemnify the Landlord against all claims and liability in respect of these matters.
- 3.3 The Tenant covenants with the Landlord that when exercising the Rights:
- (a) it shall cause as little inconvenience as reasonably possible to the Landlord;
 - (b) shall promptly make good (at its own expense) to the reasonable satisfaction of the Landlord any physical damage caused to the Landlord's Property by reason of the Tenant exercising the Rights;
 - (c) shall exercise the Rights at reasonable times and give the Landlord reasonable notice (except in the case of emergency); and
 - (d) it shall comply with any reasonable health and safety and safeguarding requirements required by the Landlord.
- 3.4 The Tenant will comply with all laws governing the installation and use of the Drainage Media when exercising the Rights.
- 3.5 The Tenant shall indemnify the Landlord against all liabilities, costs, expenses, damages and losses suffered or incurred by the Landlord arising out of or in connection with:



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Carter Jonas



PROJECT
Land Let as Garden at Northgate End Centre,
14 Northgate End

DRAWING TITLE
EM Plan

DRAWN I CHATZIS

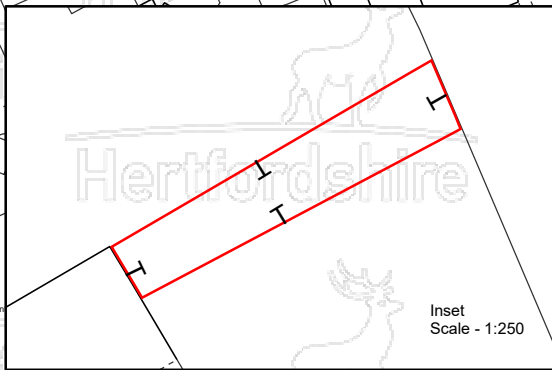
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DATE 28/02/2023

SCALE 1:1,250 @A4

PLAN NO EM 15567 **REVISION**

MAP CENTRE 548,777 221,695



- 3.5.1 the exercise of the Rights;
- 3.5.2 the carrying out of any works permitted by this Lease;
- 3.5.3 any breach of the covenants on the part of the tenant in this lease; and
any breach of the terms of this lease by the Tenant, any occupier of the Tenant's Property (or part thereof) or by any other person who is allowed or permitted by the Tenant to exercise the Rights.

3.6 The Tenant shall not cause any nuisance, annoyance or disturbance to the Landlord or occupiers of the Landlord 's Property, or of any neighbouring land, or to any other person entitled to the rights specified in Schedule 2.

4 Landlord's covenants

- 4.1 The Landlord covenants with the Tenant to observe and perform the requirements of this clause 4.
- 4.2 The Tenant shall peaceably and quietly to hold and enjoy the Rights without any interruption or disturbance from or by the Landlord or any person claiming under or in trust for him except as otherwise permitted by this Lease.

5 Insurance

- 5.1 The Tenant must insure against:
 - (a) liability of the Tenant and the Landlord;
 - (b) loss or damage to the Landlord's Property;
 - (c) all actions, costs, claims or proceedings or liabilities to third parties arising through the exercise of the Rights;with a reputable insurer and must pay all premiums and other sums due in respect of the insurance promptly.
- 5.2 If any damage from an insured risk arises the Tenant must pursue the claim against the insurers diligently and must lay out all money received as a result of the claim in making good any damage or satisfying any proper claim brought by a third party.

6 Forfeiture

If and whenever during the Term the Tenant breaches any covenant of this lease the Landlord may at any time by written notice to the Tenant immediately determine the Term, upon which the Term is to cease absolutely and the Tenant shall cease to be entitled to exercise the Rights but without prejudice to any rights or remedies that may have accrued to either party against

the other in respect of any breach of covenant or other term of this Lease, including the breach in respect of which the determination is made.

7 General

- 7.1 The Law of Property Act 1925 Section 196 shall apply to all notices required or permitted to be served under this Lease.
- 7.2 This Lease is a new tenancy for the purposes of the 1995 Act Section 1.
- 7.3 The parties agree that this Lease shall be exclusively governed by and interpreted in accordance with the laws of England and Wales and to submit to the exclusive jurisdiction of the English Courts.
- 7.4 This lease does not give rise to any rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this lease.
- 7.5 The grant of this lease does not create by implication any easements or other rights for the benefit of the Tenant's Property or the Tenant and the operation of section 62 of the Law of Property Act 1925 is excluded.

8 Exclusion of Sections 24–28 of the Landlord and Tenant Act 1954

- 8.1 The Parties:
- (a) confirm that:
 - (i) the Landlord served a notice on the Tenant, as required by section 38A(3)(a) of the Landlord and Tenant Act 1954 ("the LTA 1954") , applying to the tenancy created by this lease, before this lease was entered into; and
 - (ii) DECLARANT'S NAME who was duly authorised by the Tenant to do so made a statutory declaration dated 2023 in accordance with the requirements of section 38A(3)(b) of the LTA 1954; and
 - (iii) there is no agreement for lease to which this lease gives effect; and
 - (b) agree that the provisions of sections 24 to 28 of the LTA 1954 are excluded in relation to the tenancy created by this lease.

The lease has been executed as a Deed by the parties and is delivered and takes effect on the date stated at the beginning of it

Schedule 1 – The Rights Granted

- 1 The Landlord grants to the Tenant the following rights for the benefit of the Tenant's Property:
 - 1.1 The right to enter those parts of the Landlord's Property as are not built on and are reasonably necessary to access the Easement Strip with or without vehicles, plant and equipment (at the Tenant's expense and in a proper and workmanlike manner) to install, inspect, maintain, repair , replace, renew and make good the Drainage Media within the Easement Strip below the present surface of the Landlord's Property and afterwards to retain within the Easement Strip , inspect, maintain, repair, alter, renew, replace and remove the Drainage Media.
 - 1.2 The right to use the Drainage Media for all purposes relating to the Tenant's use of the Tenant's Property

Schedule 2 – The Rights Reserved

- 1 The Landlord reserves the following rights for the benefit of the Landlord's Property
 - 1.1 Subject to available capacity, the right to connect into and use the Drainage Media for purposes connected with the Landlord's Property but subject to the Landlord making good all damage caused in the exercise of this right.
 - 1.2 Subject to the Landlord's covenants in clause 4 the right to use any part of the Landlord's Property as the Landlord thinks fit, or to build on or develop any part of the Landlord's Property.

Executed as a Deed by the affixing the common seal of **Hertfordshire County Council** in the presence of

Authorised Signatory

Executed as a Deed by the affixing of the common seal of **East Hertfordshire District Council** in the presence of

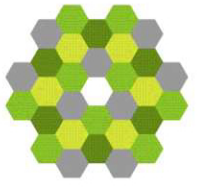
Authorised Signatory

Annexure 1 - The Plan

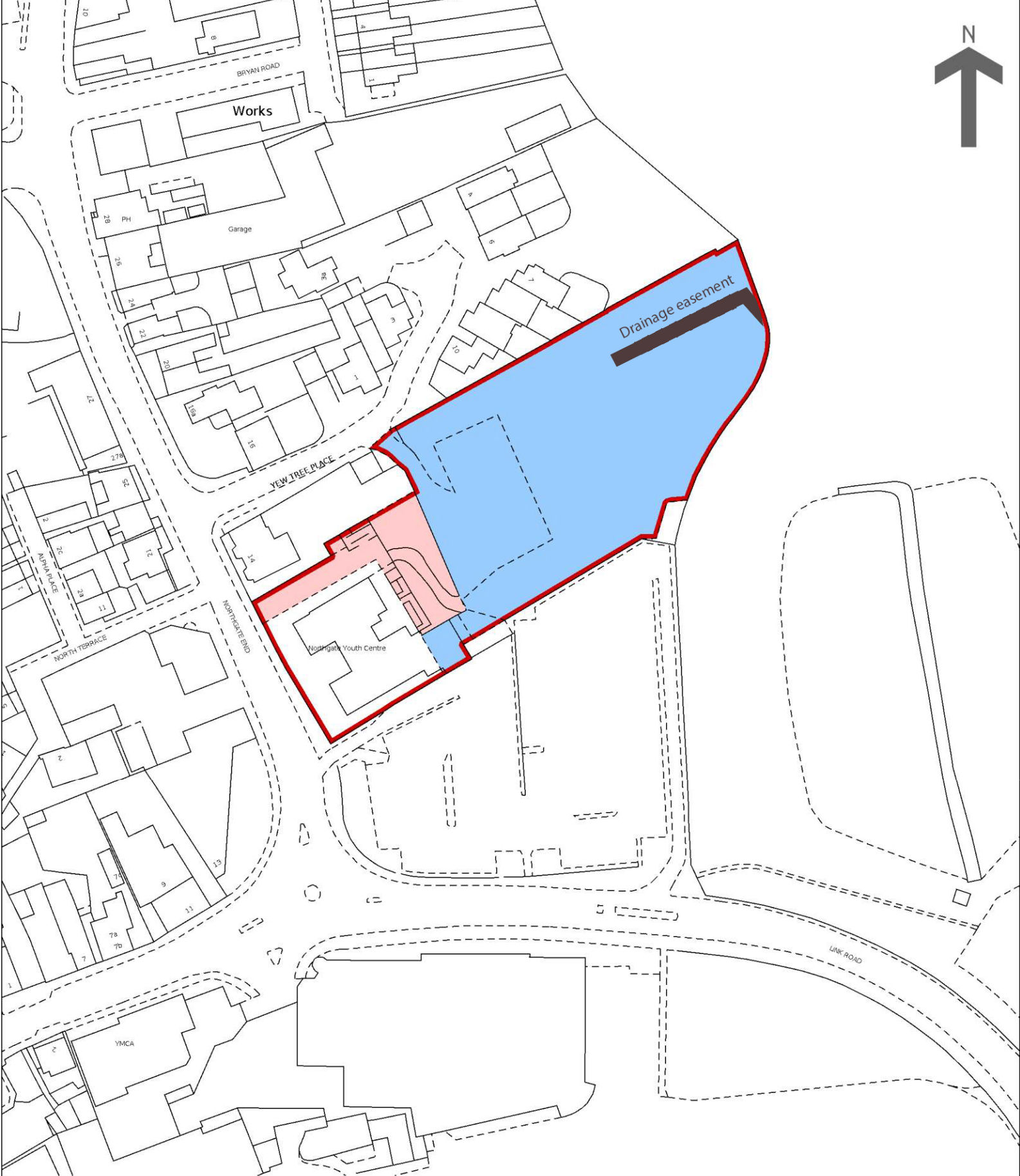
HM Land Registry

Official copy of
title plan

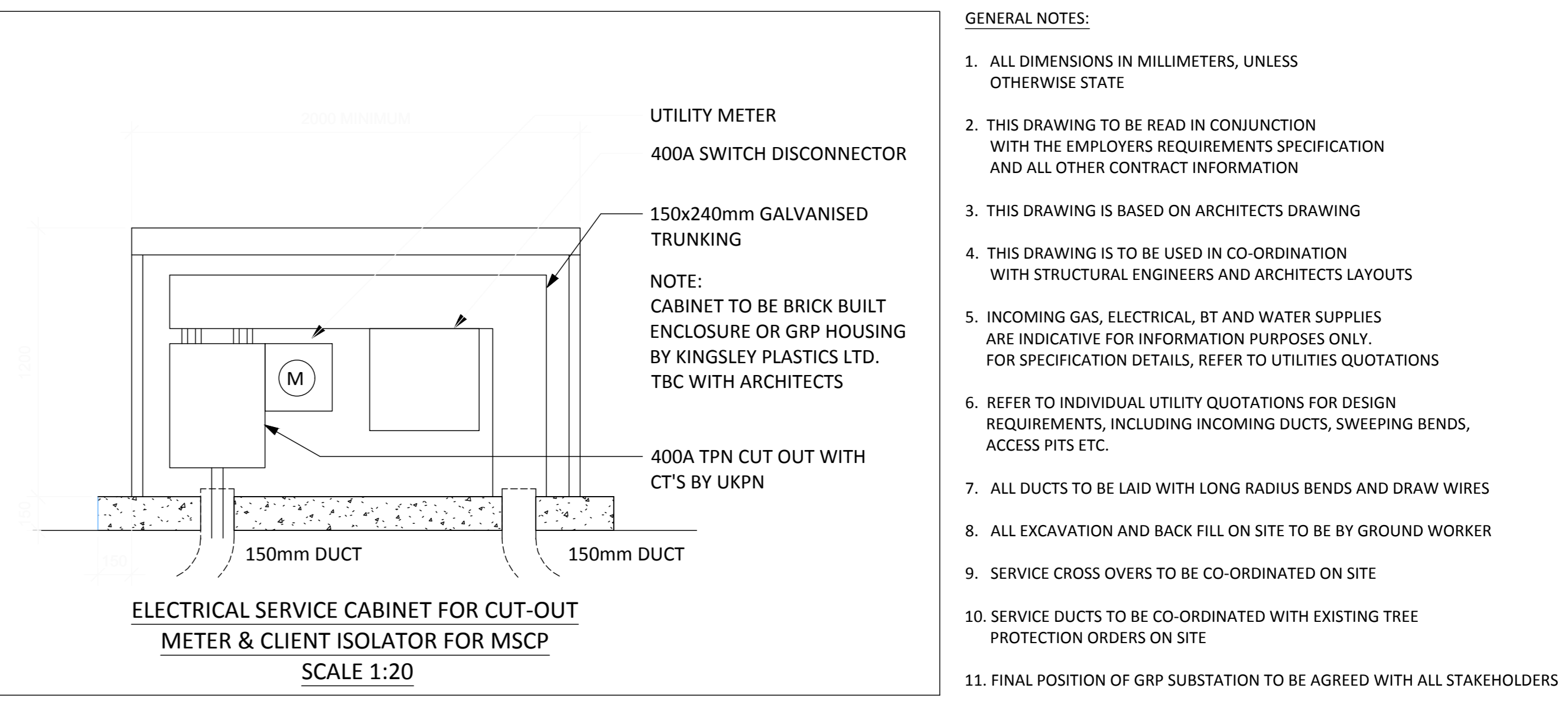
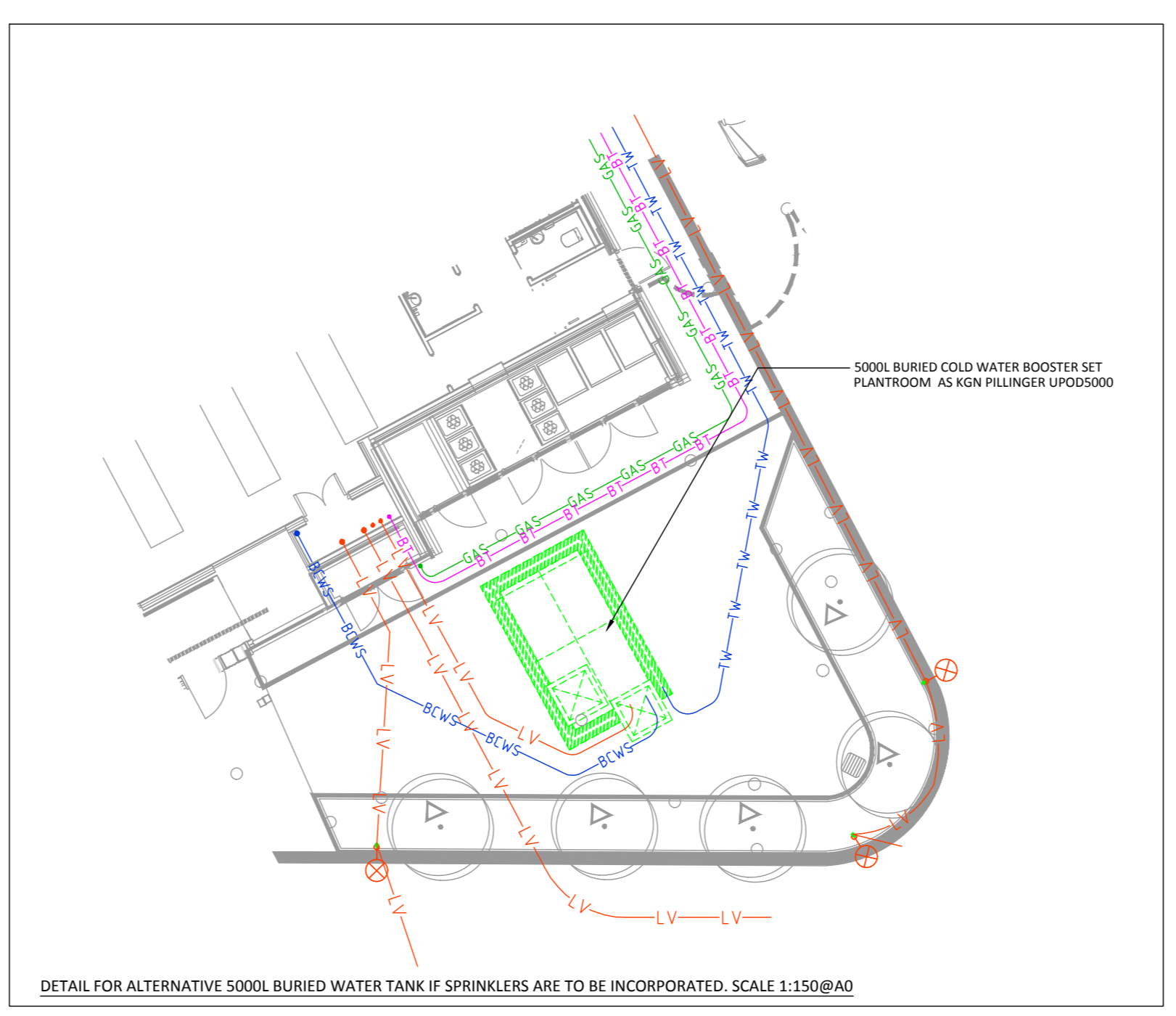
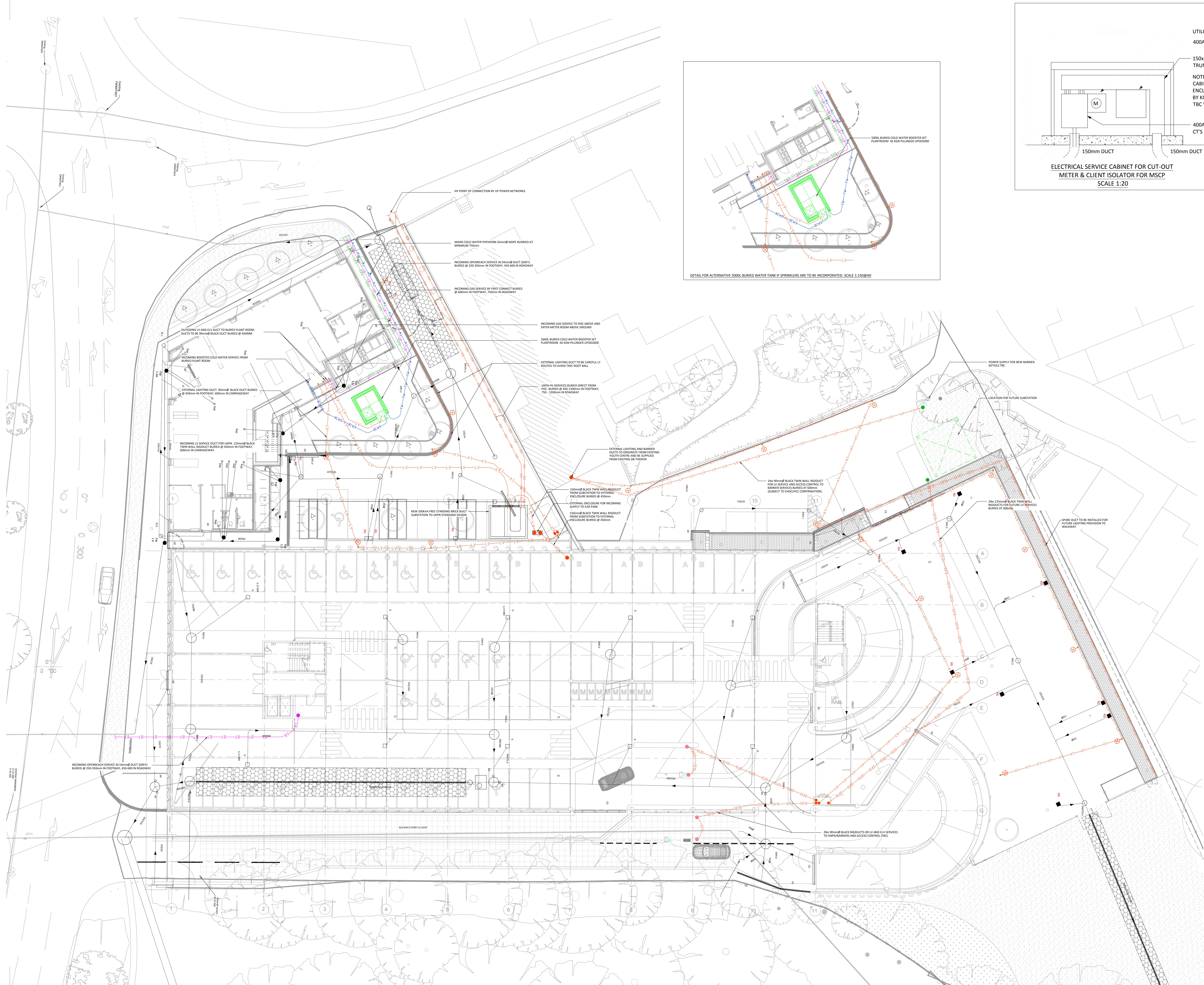
Title number **HD494701**
Ordnance Survey map reference **TL4821NE**
Scale **1:1250**
Administrative area **Hertfordshire : East Hertfordshire**



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Annexure 2 – Drainage Media Works

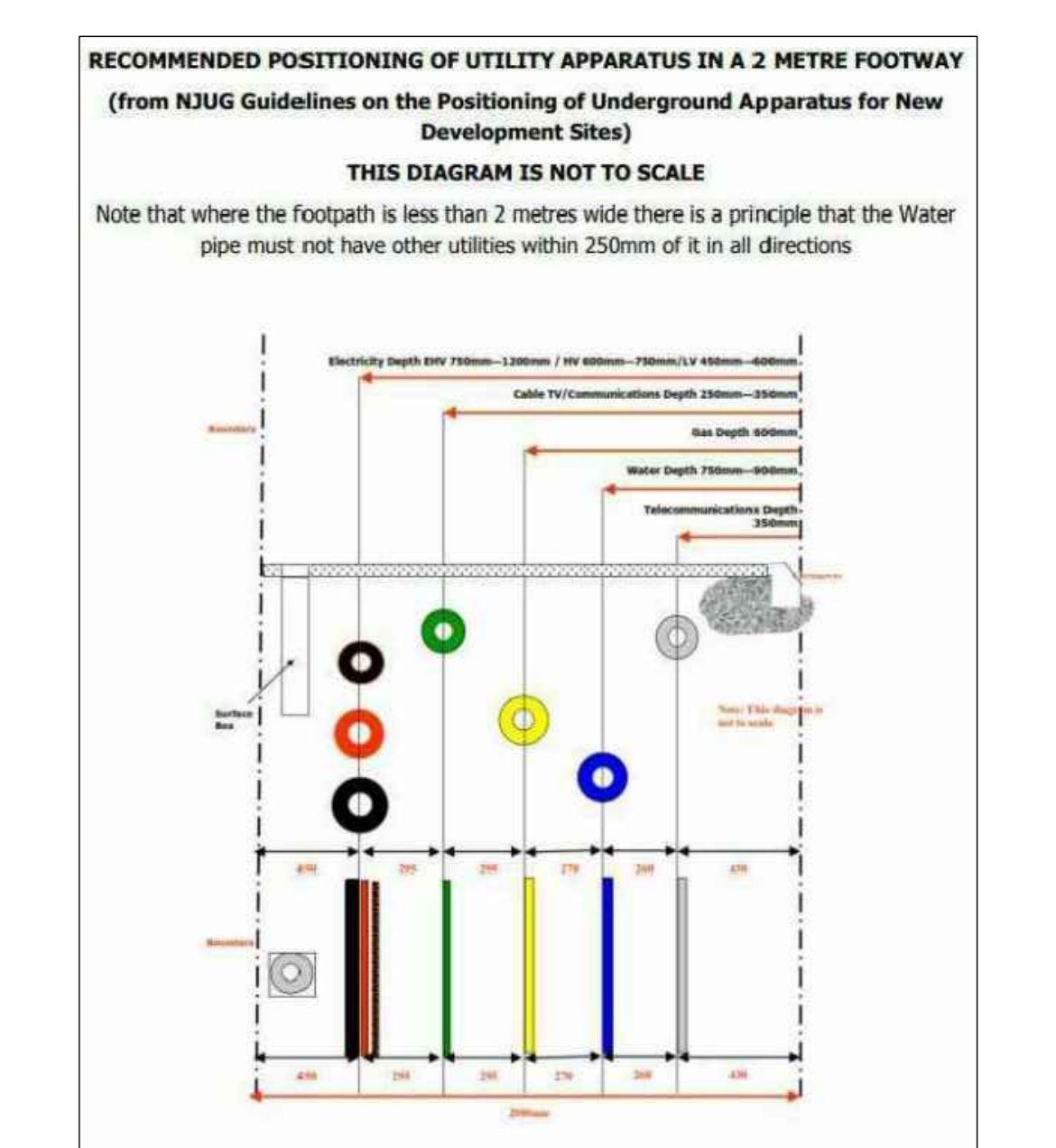


KSUG Guidelines on the Positioning and Colour Coding of Underground Utilities Apparatus

TABLE 1 - Recommended Colour Coding of Underground Utilities Apparatus
All depths are from the surface level to the crown of the apparatus

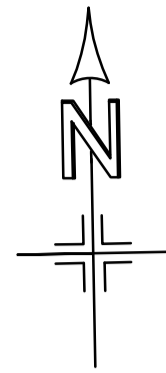
Utility	Duct	Pipe	Colour	Marker System	Apparatus	Minimum Depth
High Voltage	Black or red	Black	Black	Black	Black	100-150mm
	Black or red	Black	Black	Black	Black	150-200mm
Low Voltage	Black or red	Black	Black	Black	Black	100-150mm
	Black or red	Black	Black	Black	Black	150-200mm
Gas	Black or red	Black	Black	Black	Black	100-150mm
	Black or red	Black	Black	Black	Black	150-200mm
Water	Black or red	Black	Black	Black	Black	100-150mm
	Black or red	Black	Black	Black	Black	150-200mm
Other	Black or red	Black	Black	Black	Black	100-150mm
	Black or red	Black	Black	Black	Black	150-200mm

These guidelines describe utility industry practice. However, it should not be assumed that all apparatus will conform to the recommendations for positioning and colour coding contained in this publication.



CO2 Duct routes amended to lighting on HCC land. Spare duct shown on access walkway.
 CO3 Issue for construction 30 relocated. BCWS tank deleted and drainage overlaid for coordination.
 REV DESCRIPTION DATE BY/CHKD

Annexure 3 – Playing Field Work



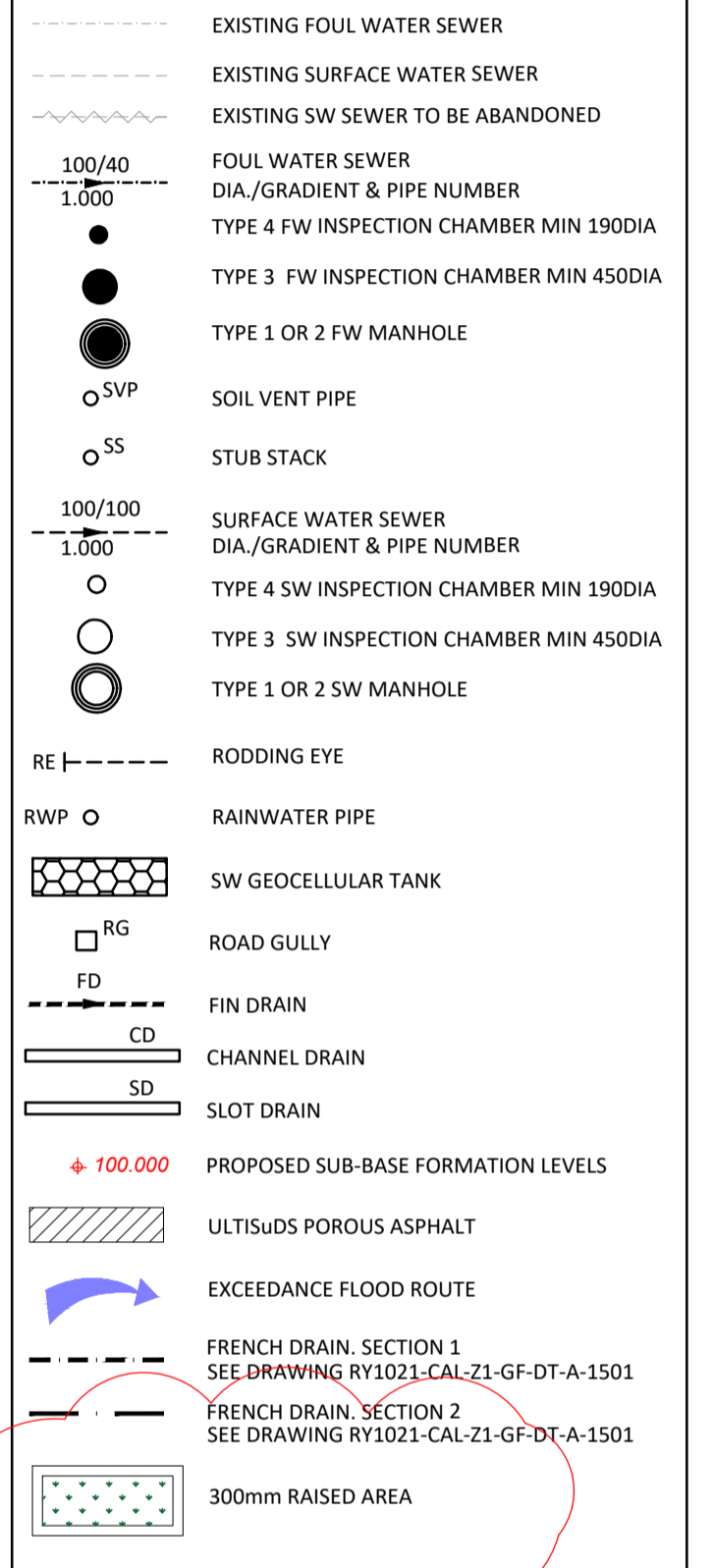
area in red hatching goes through the attenuation tank here and into the culvert. Parking bays in blue are porous tarmac so rain water will seep through into the ground

1. Do not scale from this drawing.
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CDM REGULATIONS 2015 - RESIDUAL RISKS -

1. Existing utility mains & services are present and have been taken from records obtained from the utility companies. There is a risk of uncharted services being present.
2. The contractor must take adequate precautions from the possible presence and contamination from leptospirosis (wells disease)
3. The works will involve the movement of plant and machinery in and around a live carriageway and a residential area. There is a risk of potential conflict between plant and road/pedestrian users.

DRAINAGE KEY:



- Northern car park fin drains to be connected to the gullies.
- The surface water drainage system has been based on the submitted Flood Risk Assessment carried out by EAS reference 1524 dated February 2018 and the Drainage Strategy and SuDS Statement carried out by Elliot Wood reference 2170573 Rev P2 dated February 2018.
- Multistorey car parking drainage within the building designed by others.

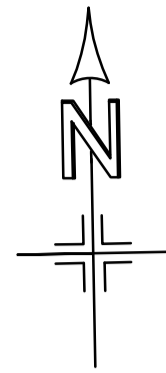
For de-culverting works refer to drawings RY1021-CAL-XX-XX-PL-C-5000 to 5004

C08	RAISED LANDSCAPE AREA ADDED	08.03.22	SGS	CJM
C07	RESIDENTIAL DRAINAGE UPDATED	24.09.21	SGS	CJM
C06	GULLIES ADDED	23.06.21	SGS	CS
C05	UPDATED MH TYPES WITHIN MSCP& 1 RWP REMOVED. EXTERNAL CAR PARKING TANK IL UPDATED	15.04.21	SBR	CJM
C04	MSCP RWP'S AND CD'S UPDATED & PERMEABLE PAVING REMOVED	05.01.21	SGS	CJM
C03	TANK NOTE ADDED	30.11.20	SGS	CJM
C02	FRENCH DRAIN ADDED	10.09.20	SGS	CJM
C01	MSCP GEOCELLULAR STORAGE TANK RELOCATED	27.08.20	SGS	CJM
P06	ARBORIT FIRM REMOVED	12.08.20	SGS	CJM
P05	DRAINAGE LAYOUT UPDATED. MH INFO REMOVED TO BE ADDED TO MH SCHEDULE	11.08.20	SGS	CJM
P04	COMMERCIAL AREA SW & FW DRAINAGE UPDATED	05.08.20	SGS	CJM
P03	NORTHERN CARPARK DRAINAGE UPDATED TO ULTRASUDS POROUS ASPHALT	28.07.20	SGS	CJM
P02	EXCEEDANCE FLOW ARROWS AND NOTE ADDED AND FOR CONSTRUCTION ISSUE	06.07.20	SGS	CJM
P01	ISSUED FOR INFORMATION	21.05.20	SBR	CJM
REV	DESCRIPTION	DATE	INIT	CHK

Client: Rydon Construction
 Project: Northgate End, Bishops Stortford
 Title: RY1021-CAL-ZZ-GF-PL-C-0200-Drainage Layout Sheet 1 of 2
 Scale: 1:250 Date: 21.05.2020 Drawn By: SBR Checked By: CJM Reference No: K200061 Revision: C08

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CONSTRUCTION



1. Do not scale from this drawing.
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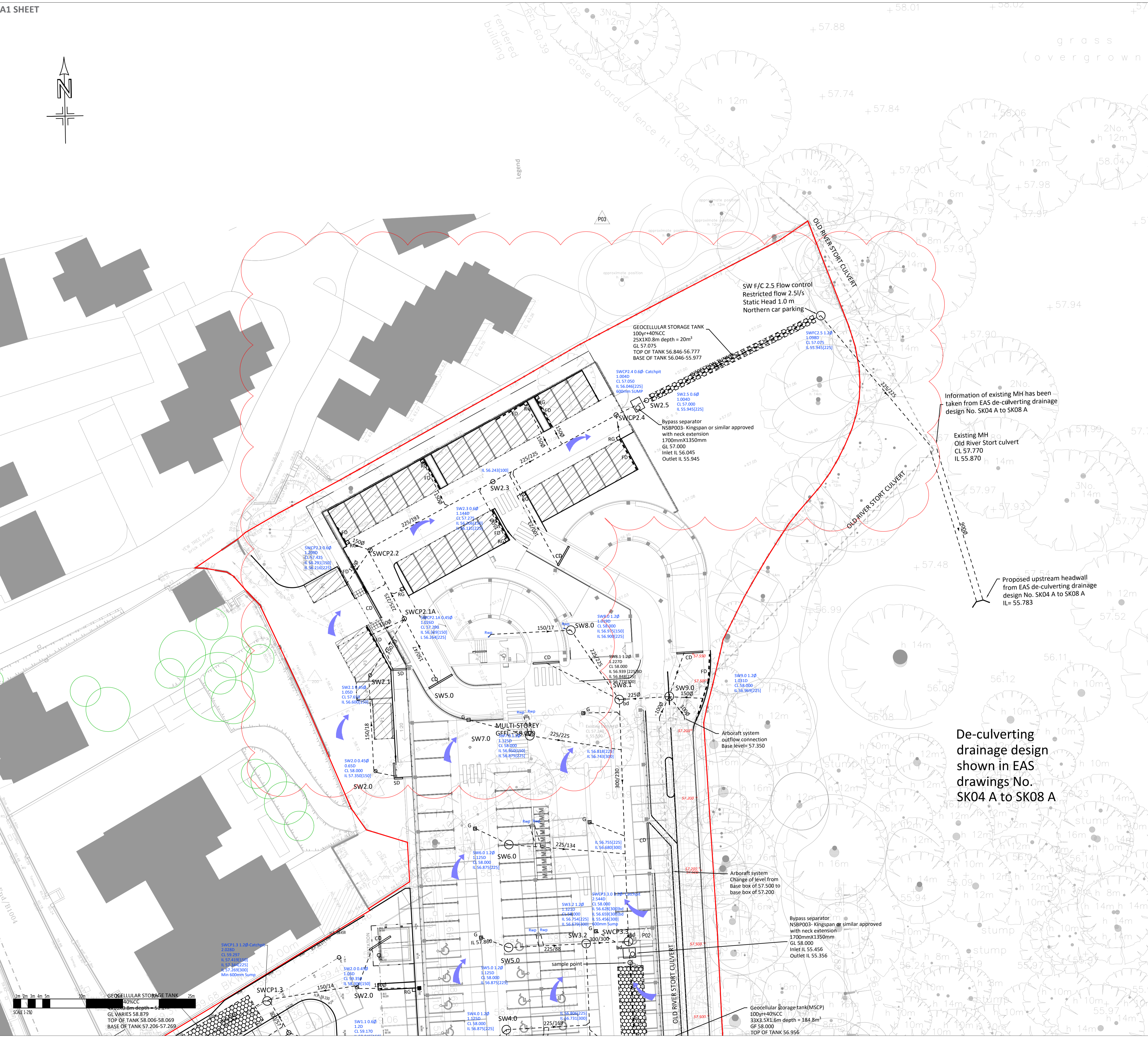
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DRAINAGE KEY:

- EXISTING FOUL WATER SEWER
- EXISTING SURFACE WATER SEWER
- EXISTING SW SEWER TO BE ABANDONED
- FOUL WATER SEWER - DIA./GRADIENT
- TYPE 4 FW INSPECTION CHAMBER MIN 1900IA
- TYPE 3 FW INSPECTION CHAMBER MIN 4500IA
- TYPE 1 OR 2 FW MANHOLE
- SOIL VENT PIPE
- STUB STACK
- SURFACE WATER SEWER - DIA./GRADIENT
- TYPE 4 SW INSPECTION CHAMBER MIN 1900IA
- TYPE 3 SW INSPECTION CHAMBER MIN 4500IA
- TYPE 1 OR 2 SW MANHOLE
- RODDING EYE
- RAINWATER PIPE
- SW GEOCELLULAR TANK
- ROAD GULLY
- FIN DRAIN
- CHANNEL DRAIN
- SLOT DRAIN
- PROPOSED SUB-BASE FORMATION LEVELS
- ARBORAFT SYSTEM
- ULTRISUDS POROUS ASPHALT
- EXCEEDANCE FLOOD ROUTE

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De-culverting drainage design shown in EAS drawings No. SK04 A to SK08 A

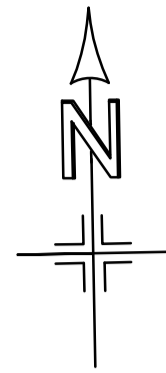
P03	NORTHERN CARPARK DRAINAGE UPDATED TO ULTRISUDS POROUS ASPHALT	28.07.20	SGS	CJM
P02	EXCEEDANCE FLOW ARROWS AND NOTE ADDED AND FOR CONSTRUCTION ISSUE	06.07.20	SGS	SBR
P01	ISSUED FOR INFORMATION	21.05.20	SBR	CJM
REV	DESCRIPTION	DATE	INIT	CHKD



Client
Rydon Construction
Project
Northgate End, Bishops Stortford
Title
RY1021-CAL-ZZ-GF-PL-C-0200-Drainage Layout Sheet 1 of 2
Scale
1:250
Date
21.05.2020
Drawn By
SBR
Checked By
CJM
Reference No.
K200061
Revision
P03

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CONSTRUCTION

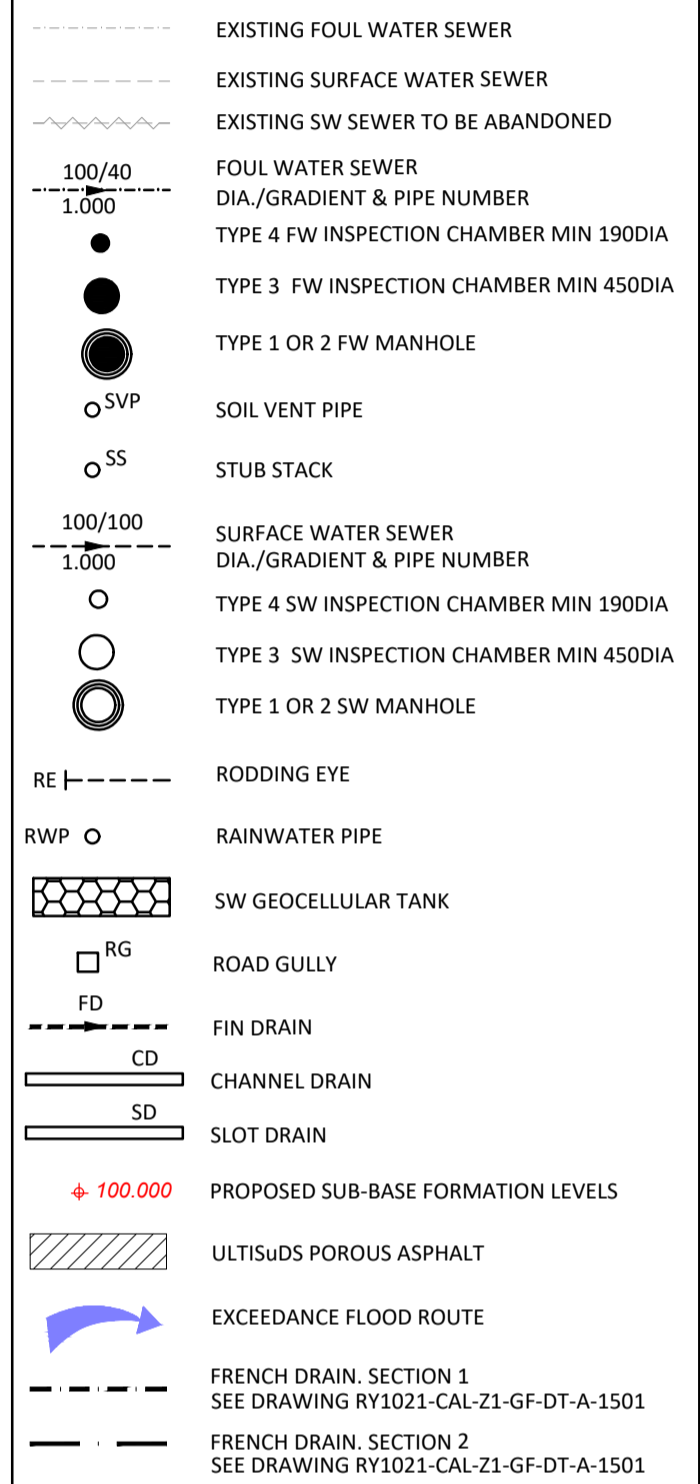


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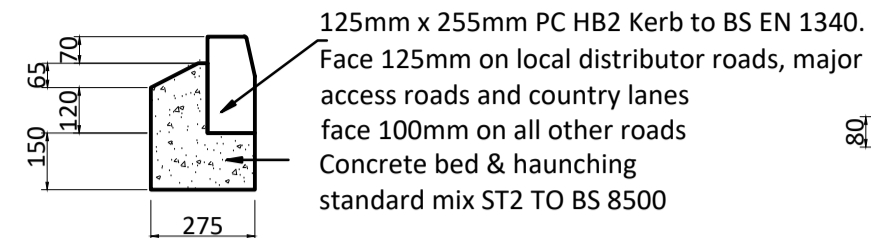
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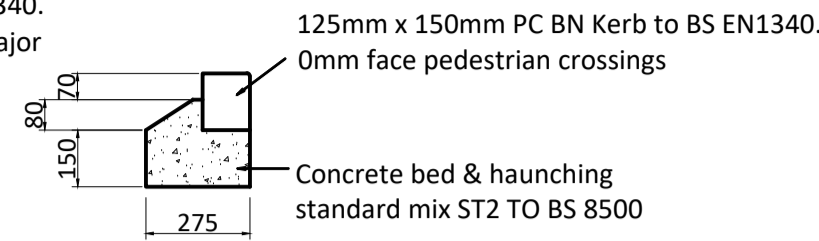


Notes:
 This drawing has been produced by electronics means. Should the scale measurements be taken by means other than electronics (e.g. from a printed copy), the following must be taken into consideration before scaling is undertaken:
 1. Ensure that the copy has been printed/plotted on the stated sheet size with the plotting scale set to a correct ratio.
 2. Ensure that an adequate allowance (dependant on the stated scale) is made for the inevitable distortions introduced by plotting/printing and copying processes.
 3. Marked critical dimensions are to be regarded as having precedence over the scaled values.
 4. This drawing is to be read in conjunction with all other drawings and specifications associated with this project.



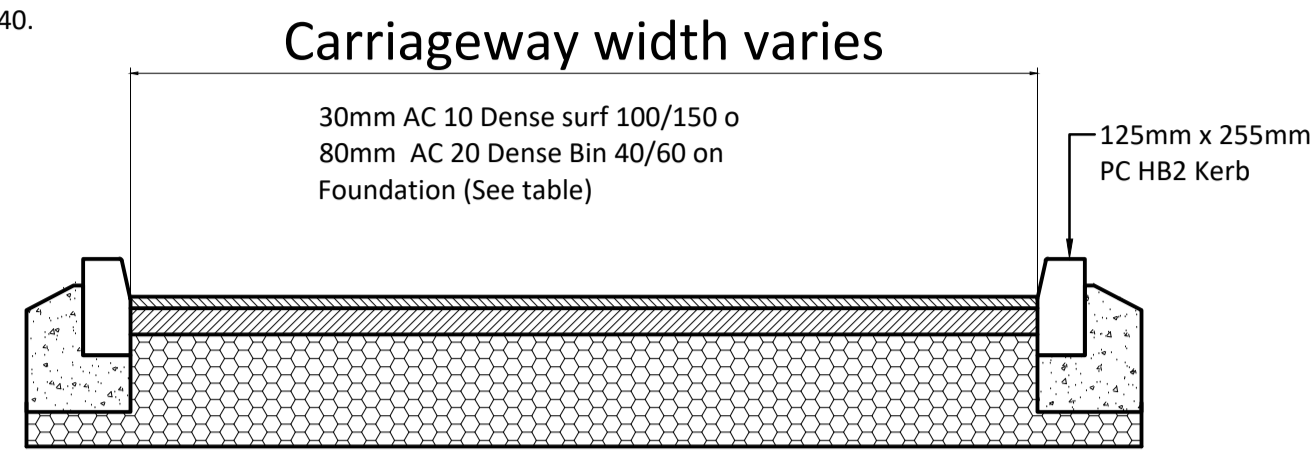
E3-Type HB2 Kerb

Scale 1:20



E2-Type BN Kerb

Scale 1:20



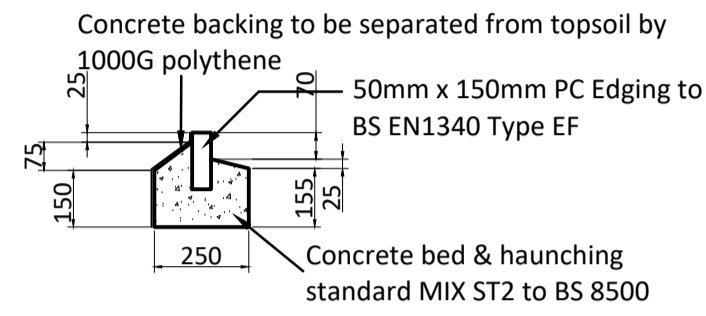
S3 - Typical carriageway Flexible construction

Scale 1-20

CBR Value	Minimum Capping Thickness	Minimum Sub-Base Thickness
< 2.0%	600mm	150mm
2.0% - 5.0%	-	350mm
	350mm	150mm
5.0% - 15.0%	-	225mm
15.0% - 30.0%	-	150mm
> 30.0%	-	-

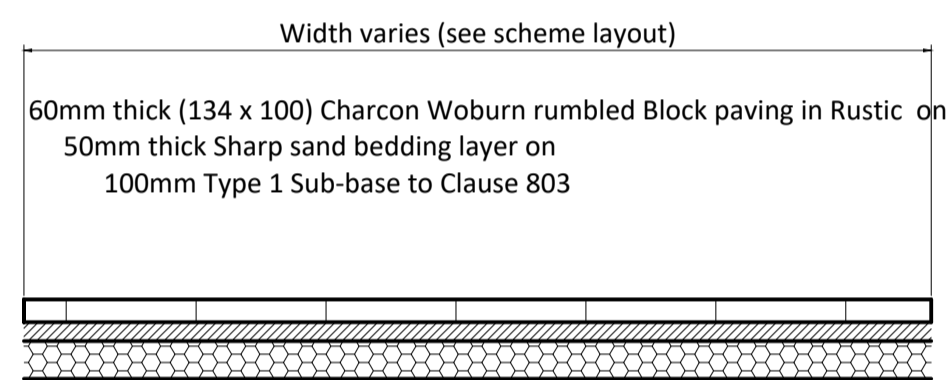
Table 4.1.12.1 Minimum Sub-grade and Capping Thicknesses by CBR value.

HERTFORSHIRE - HIGHWAY DESIGN GUIDE



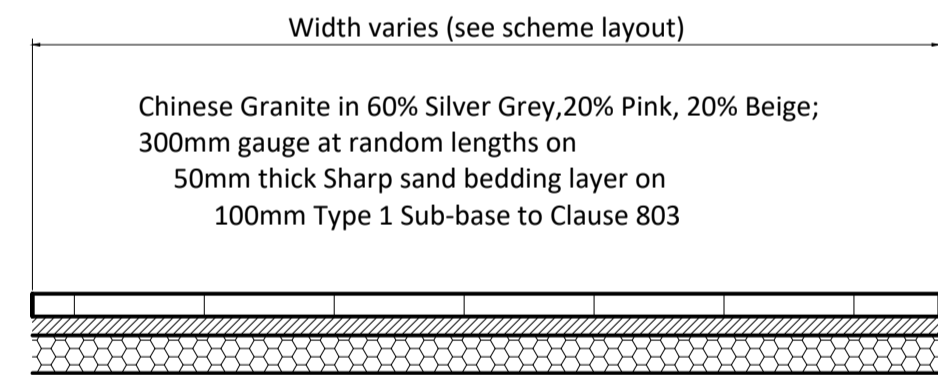
Type EF Edging

Scale 1-20



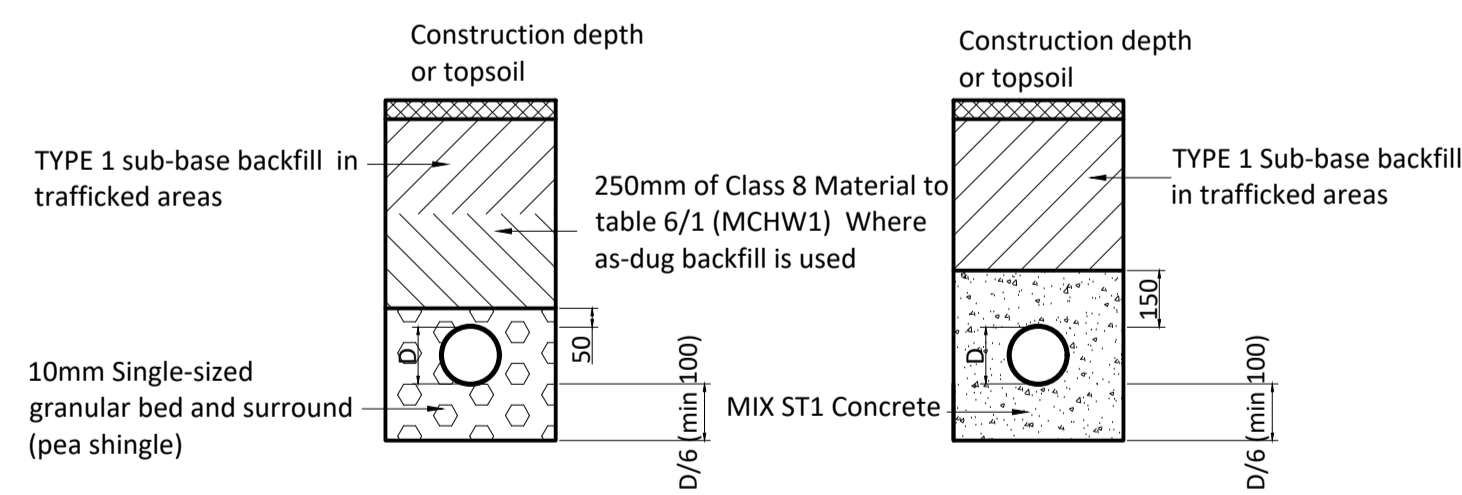
S2- Block Paving (Pedestrian Routes)

Scale 1-20



S1- Chinese Granite path

Scale 1-20



Bed type S

Applies where cover below finished surface level is:
 - under carriageways >1200 and <4500,
 - elsewhere >900 and <4500

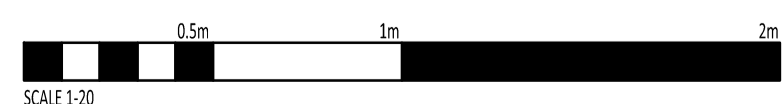
Bed type Z

Applies where cover below finished surface level is:
 - under carriageways <1200 or >4500,
 - elsewhere <900 or >4500

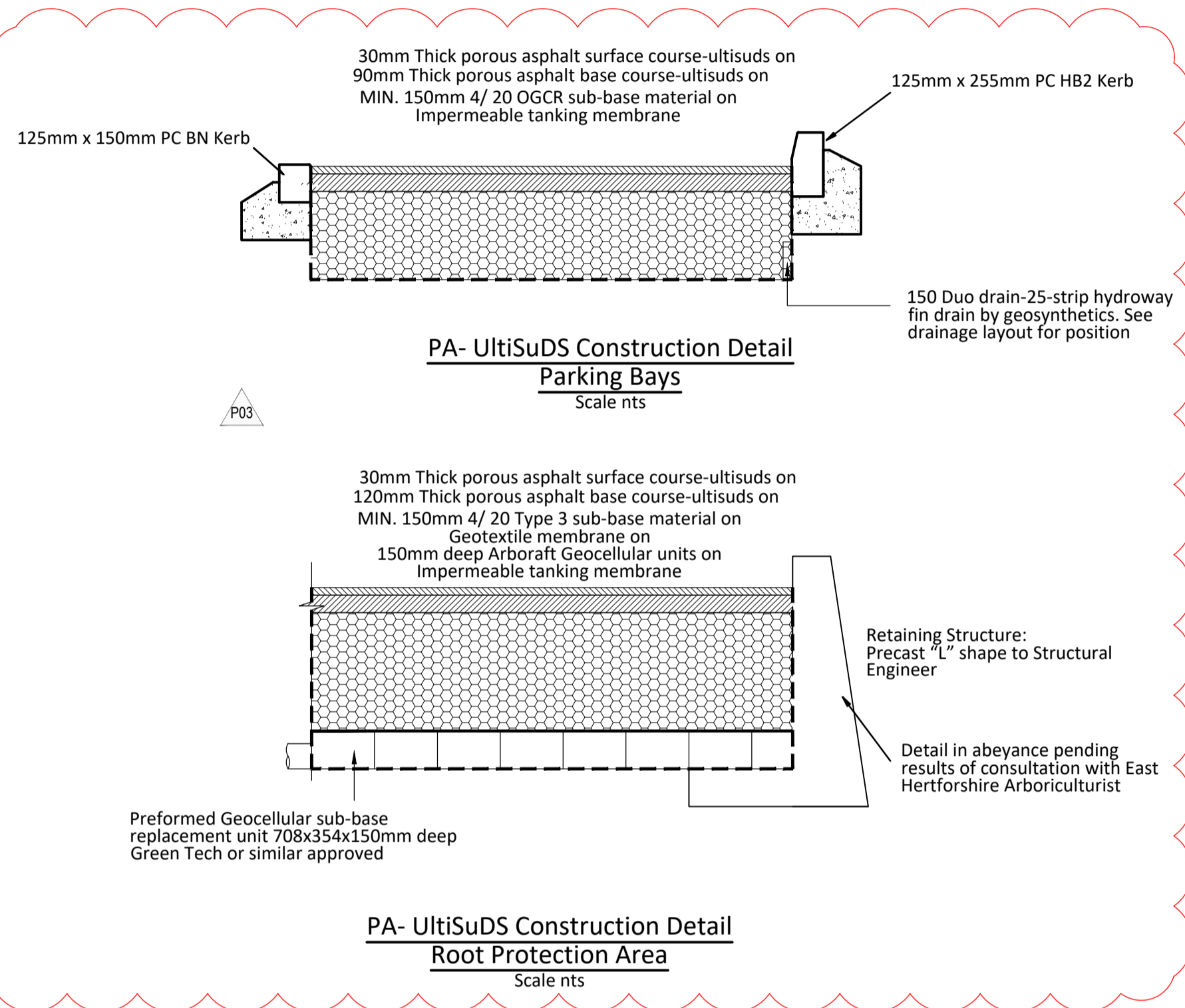
The bore, alignment and joining of all drains and service ducts less than 350mm diameter shall be checked by drawing through each completed length of pipe a mandrel 750mm long and 12mm less in diameter than the nominal bore of the pipe unless an alternative method of checking is agreed by the engineer.

Pipe bedding details

NTS



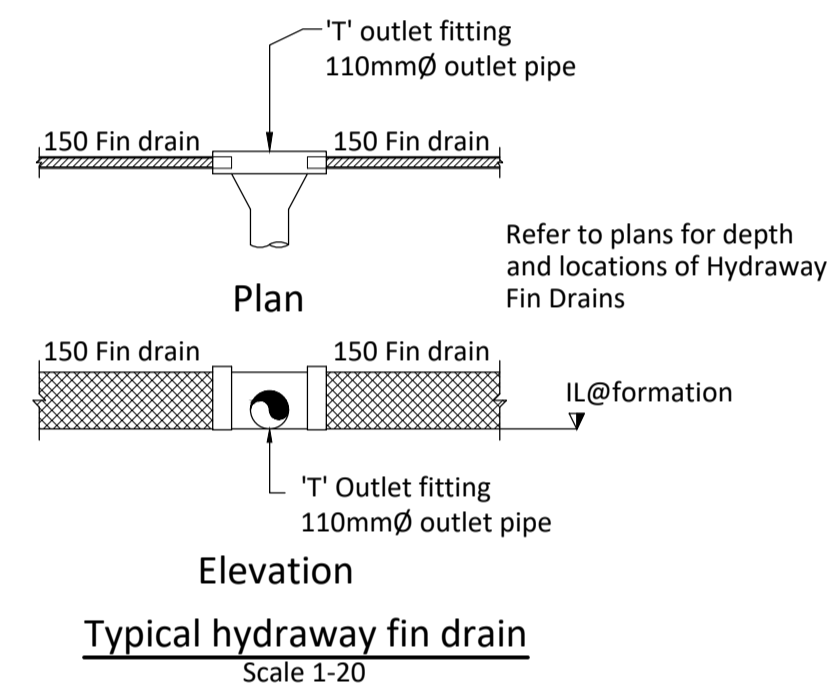
SCALE 1:20



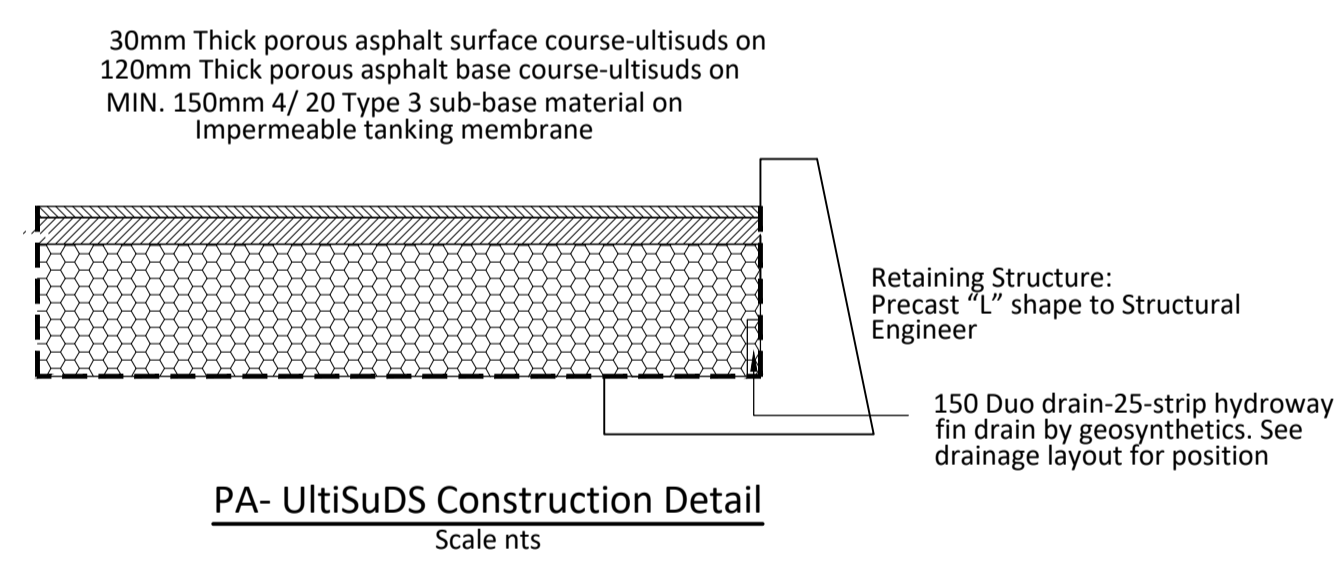
- No dig construction method statement**
- Kill ground vegetation using systemic herbicide and gather dead organic matter. This operation must be carried out by an appropriately trained operative. remove existing hard landscaped areas.
 - The excavation should be limited to the removal of the existing surface and the associated sub-base, to ensure no roots are damaged. Soils in these areas are likely to be compacted already.
 - Remove major protrusions such as rocks and stumps. fill significant hollows with sharp sand.
 - All works to be supervised by qualified arboriculturist.
 - Lay geotextile membrane directly on to the soil.
 - Install edge restraint.
 - Lay 3 dimensional cellular confinement system (arboraft or similar)

- After building work is completed**
- Clean tarmac surface
 - Cut 20/50mm Diameter holes at 1 metre centres through tarmac surface into sub-base
 - Fill holes with 2/6.3mm clean stone

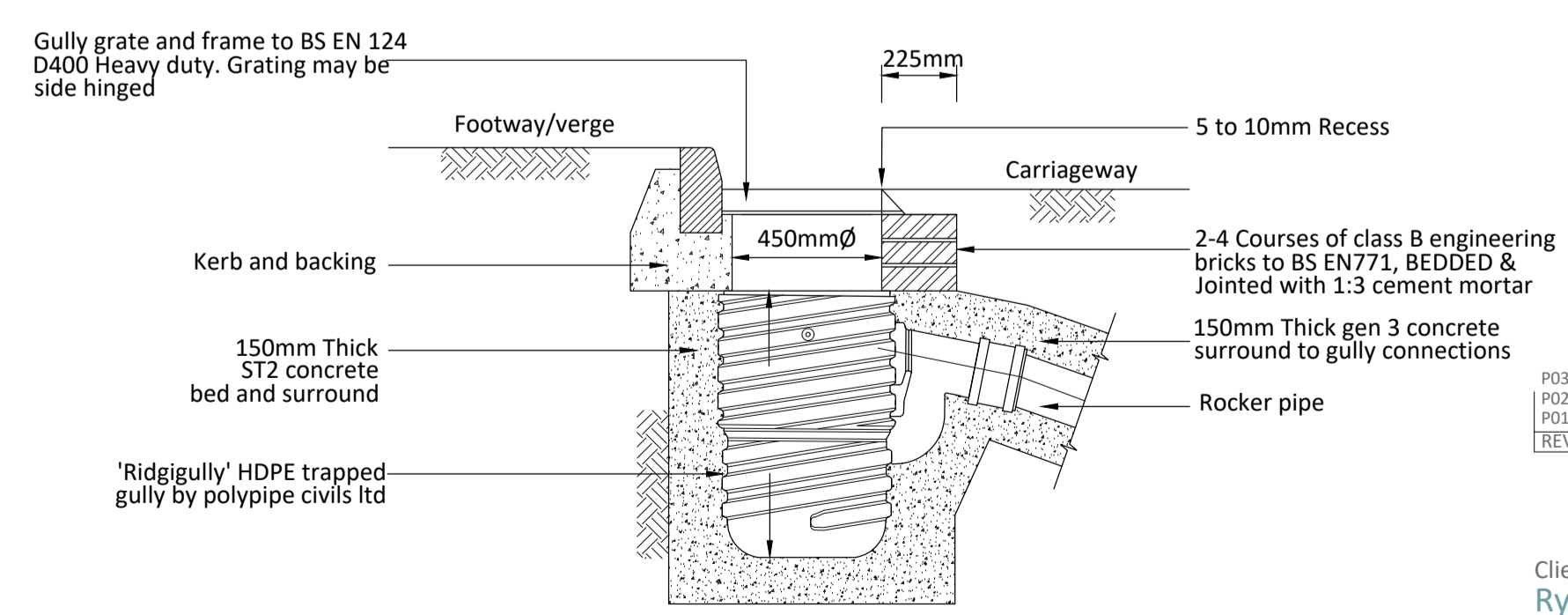
The Ground Investigation Report recommends a CBR value of 5% and further CBR testing once all finished levels are achieved prior to the placement of the sub-base.



Typical hydroway fin drain



PA- UltiSuDS Construction Detail



HDPE Trapped road gully ("Ridgully" by polypipe civils ltd)

Scale 1:20

REV	DESCRIPTION	DATE	INIT	CHKD
P03	ULTISUDS PARKING BAYS CONSTRUCTION DETAIL ADDED	29.07.20	SGS	CJM
P02	FOR CONSTRUCTION ISSUE	06.07.20	SGS	SBR
P01	ISSUED FOR INFORMATION	21.05.20	SBR	CJM

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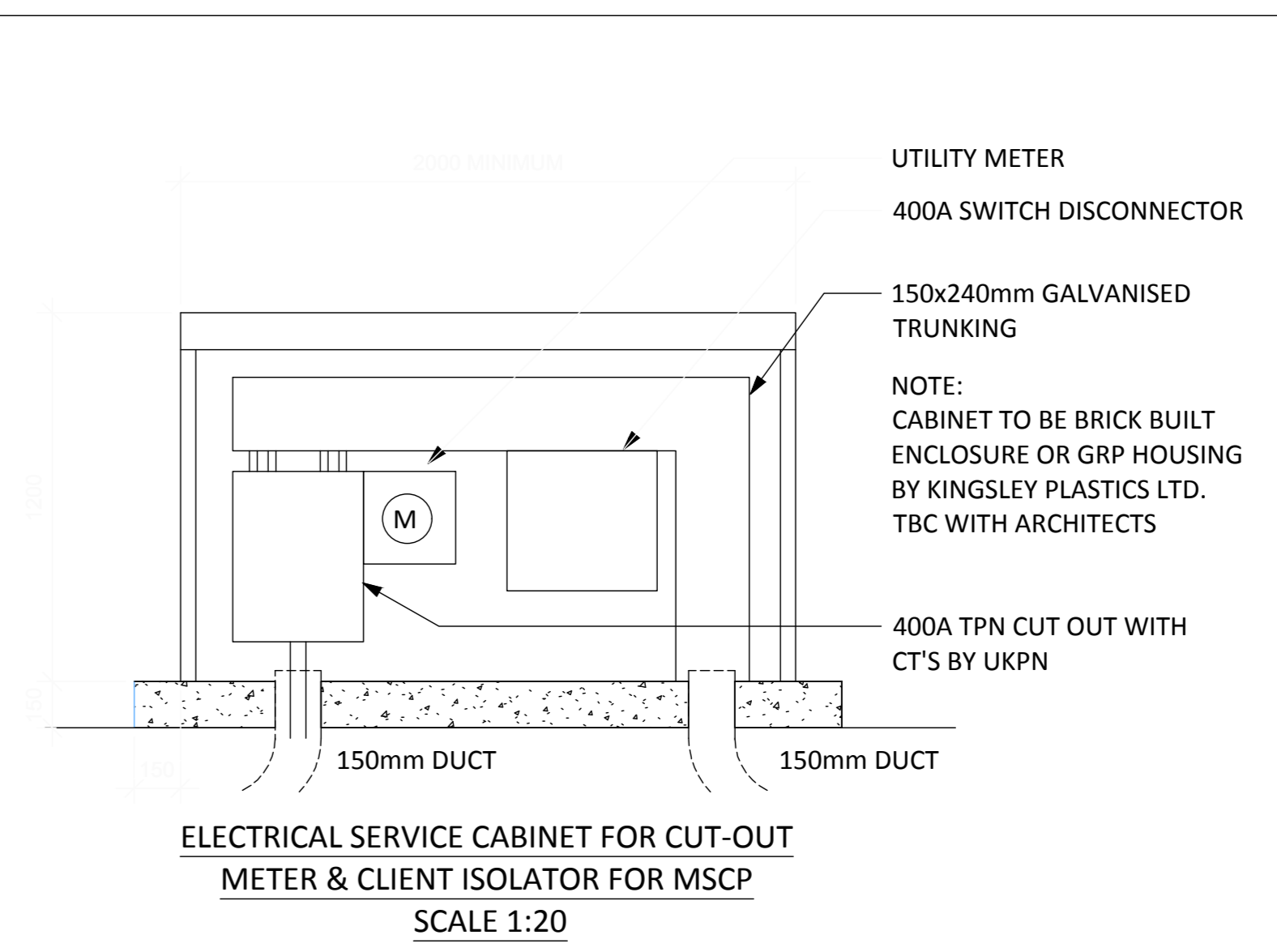
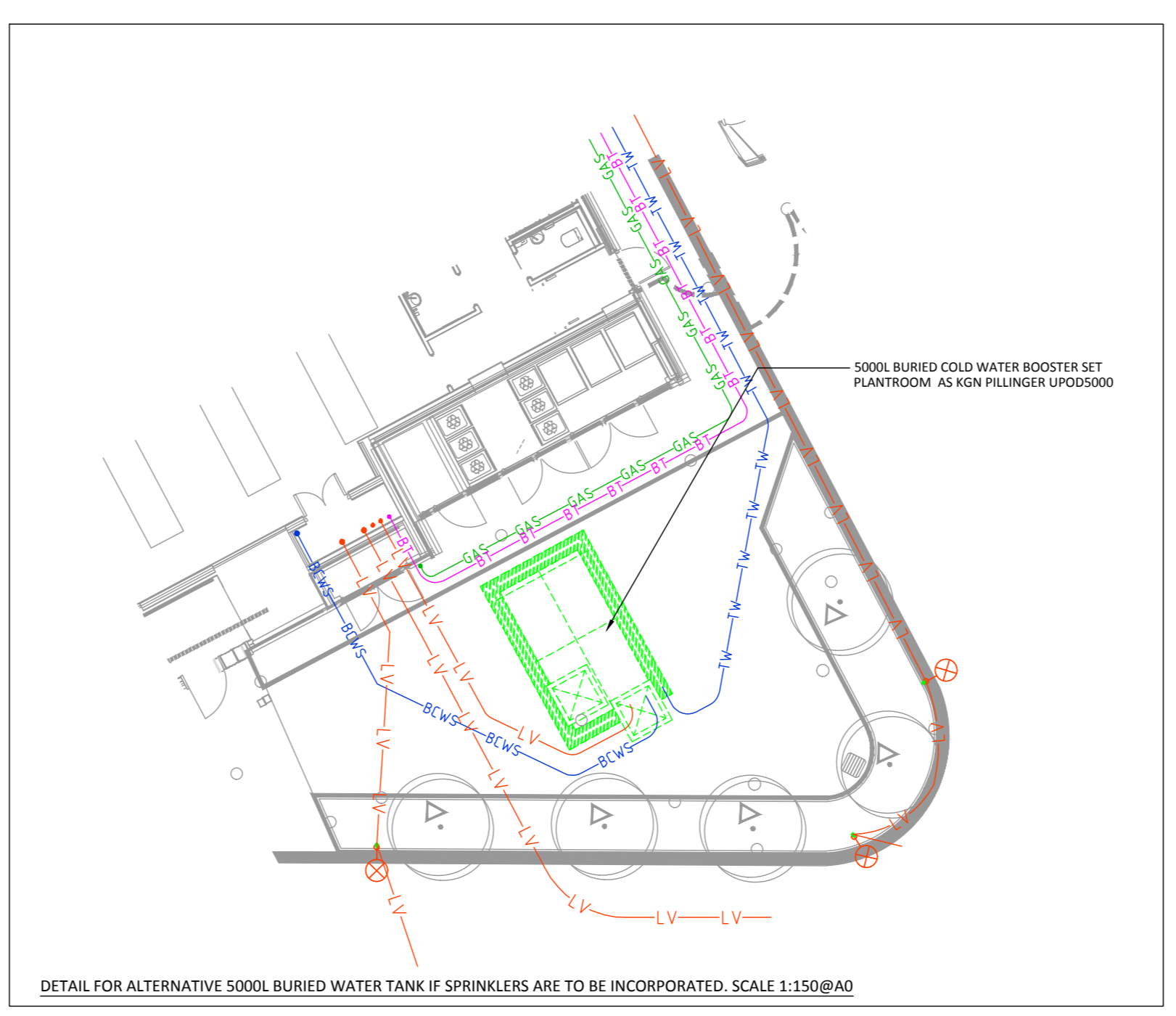
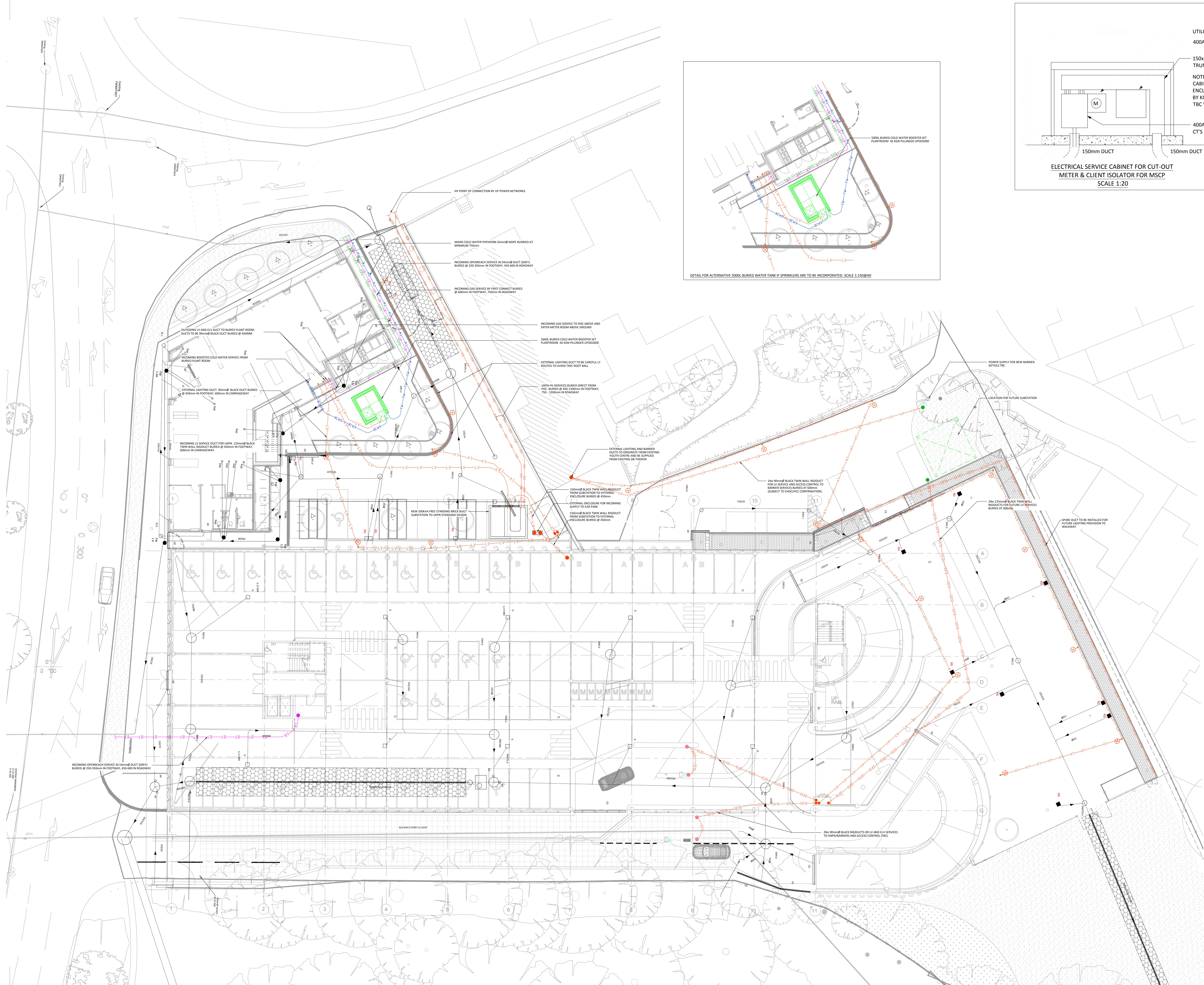
Client: Rydon Construction
 Project: Northgate End, Bishops Stortford
 Title: RY1021-CAL-ZZ-GF-DT-C-0110-External Works Surfacing Details
 Scale: 1:250
 Date: 21.05.2020
 Drawn By: SBR
 Checked By: CJM
 Reference No: K200061

St Johns House 1A Knoll Rise Orpington Kent BR6 0JX
 01689 888222 orpington@calfordseaden.com
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CONSTRUCTION

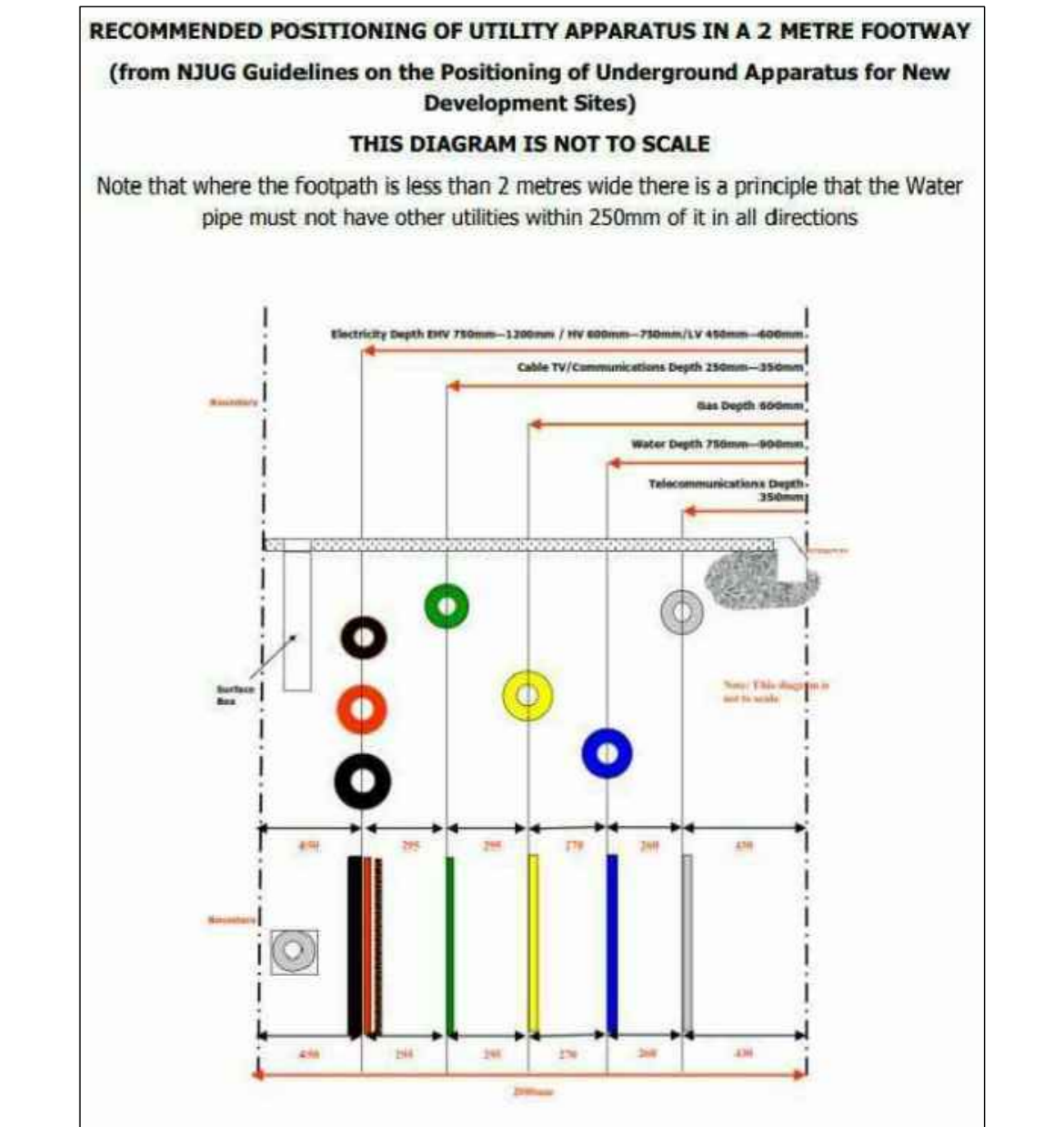


- GENERAL NOTES:**
1. ALL DIMENSIONS IN MILLIMETERS, UNLESS OTHERWISE STATE
 2. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE EMPLOYERS REQUIREMENTS SPECIFICATION AND ALL OTHER CONTRACT INFORMATION
 3. THIS DRAWING IS BASED ON ARCHITECTS DRAWING
 4. THIS DRAWING IS TO BE USED IN CO-ORDINATION WITH STRUCTURAL ENGINEERS AND ARCHITECTS LAYOUTS
 5. INCOMING GAS, ELECTRICAL, BT AND WATER SUPPLIES ARE INDICATIVE FOR INFORMATION PURPOSES ONLY. FOR SPECIFICATION DETAILS, REFER TO UTILITIES QUOTATIONS
 6. REFER TO INDIVIDUAL UTILITY QUOTATIONS FOR DESIGN REQUIREMENTS, INCLUDING INCOMING DUCTS, SWEEPING BENDS, ACCESS PITS ETC.
 7. ALL DUCTS TO BE LAID WITH LONG RADIUS BENDS AND DRAW WIRES
 8. ALL EXCAVATION AND BACK FILL ON SITE TO BE BY GROUND WORKER
 9. SERVICE CROSS OVERS TO BE CO-ORDINATED ON SITE
 10. SERVICE DUCTS TO BE CO-ORDINATED WITH EXISTING TREE PROTECTION ORDERS ON SITE
 11. FINAL POSITION OF GRP SUBSTATION TO BE AGREED WITH ALL STAKEHOLDERS
- LEGEND:**
- HV—HV—HV— HV ELECTRICAL SERVICES DUCT
 - LV—LV—LV— LV ELECTRICAL SERVICES DUCT
 - ELEC—ELEC—ELEC— ELECTRICAL SERVICES DUCT
 - BT—BT—BT— BT DUCT
 - GAS—GAS—GAS— GAS SERVICES
 - BCWS—BCWS—BCWS— BOOSTED COLD WATER SERVICES
 - TW—TW—TW— THAMES WATER

KSUG Guidelines on the Positioning and Colour Coding of Underground Utilities Apparatus
TABLE 1 - Recommended Colour Coding of Underground Utilities Apparatus
 All depths are from the surface level to the crown of the apparatus

Utility	Duct	Pipe	Cable	Marker System	Apparatus	Minimum Depth
High Voltage	Black or red	Black	Black	Black	Black	100-150mm
	Black or red	Black	Black	Black	Black	100-150mm
Low Voltage	Black or red	Black	Black	Black	Black	100-150mm
	Black or red	Black	Black	Black	Black	100-150mm
Gas	Yellow	Yellow	Yellow	Yellow	Yellow	100-150mm
	Yellow	Yellow	Yellow	Yellow	Yellow	100-150mm
Water	Blue	Blue	Blue	Blue	Blue	100-150mm
	Blue	Blue	Blue	Blue	Blue	100-150mm
BT	Black	Black	Black	Black	Black	100-150mm
	Black	Black	Black	Black	Black	100-150mm
ELEC	Black	Black	Black	Black	Black	100-150mm
	Black	Black	Black	Black	Black	100-150mm
Water	Blue	Blue	Blue	Blue	Blue	100-150mm
	Blue	Blue	Blue	Blue	Blue	100-150mm
Water	Blue	Blue	Blue	Blue	Blue	100-150mm
	Blue	Blue	Blue	Blue	Blue	100-150mm

These guidelines describe utility industry practice. However, it should not be assumed that all apparatus will conform to the recommendations for positioning and colour coding contained in this publication.



CO2 Duct routes amended to lighting on HCC land. Spare duct shown on access walkway.
 CO3 Issue for construction 30 relocated. BCWS tank detailed and drainage overlaid for coordination.
 REV DESCRIPTION DATE BY/CHKD

SALES QUOTE



Quote No: HQT-082838

Quote Date: 31/05/2021

Sell To: Seb Khan
Keyline Nationals
Elgar Road South

Site Address: Northgate End Enabling Works
Northgate End
Bishops Stortford
CM23 2BA

Reading
RG2 0DP

Account No: CUS-001960

Hydro Ref: 21_21_3064 Northgate End Enabling Works

Item No	Description	Quantity	Unit Price	Amount
PQT1460.S	SWFC1.5 S-Type Flow Control 61mm S-Type Vortex Flow Control Design Flow = 2.5l/s; Design Head = 1m Material Thickness: 3 mm Mounting Style: Lugs Rope Length: 3m as standard if required Manhole ref: SWFC2.5	1.00		
PQT1460.S	S-Type Flow Control 61mm S-Type Vortex Flow Control Design Flow = 2.5l/s; Design Head = 1m Material Thickness: 3 mm Mounting Style: Lugs Rope Length: 3m as standard if required Manhole ref: SWFC3.5	1.00		
PQT1460.S	S-Type Flow Control 78mm S-Type Vortex Flow Control Design Flow = 5l/s; Design Head = 1.6m Material Thickness: 3 mm Mounting Style: Lugs Rope Length: 3m as standard if required	1.00		

TOTAL GBP Excl. VAT



Tips!

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Off-loading (unless specified) and equipment installation at site excluded.
Prices valid for 30 days from issue, standard payment terms 100% due with order unless alternative credit terms have been agreed in writing.

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Victoria Road, Clevedon, BS21 7RD
Tel: +44 (0)1275 878371 Fax: +44 (0)1275 874979 Web: www.hydro-int.com

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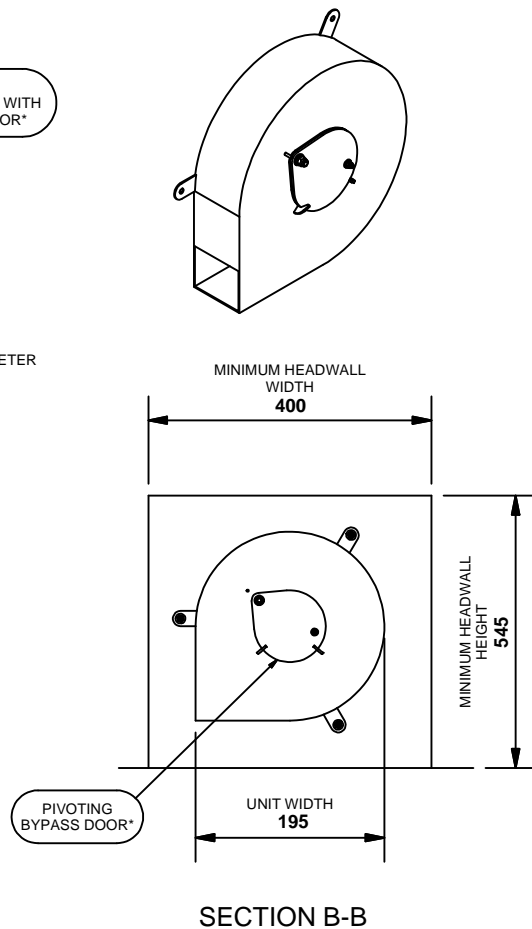
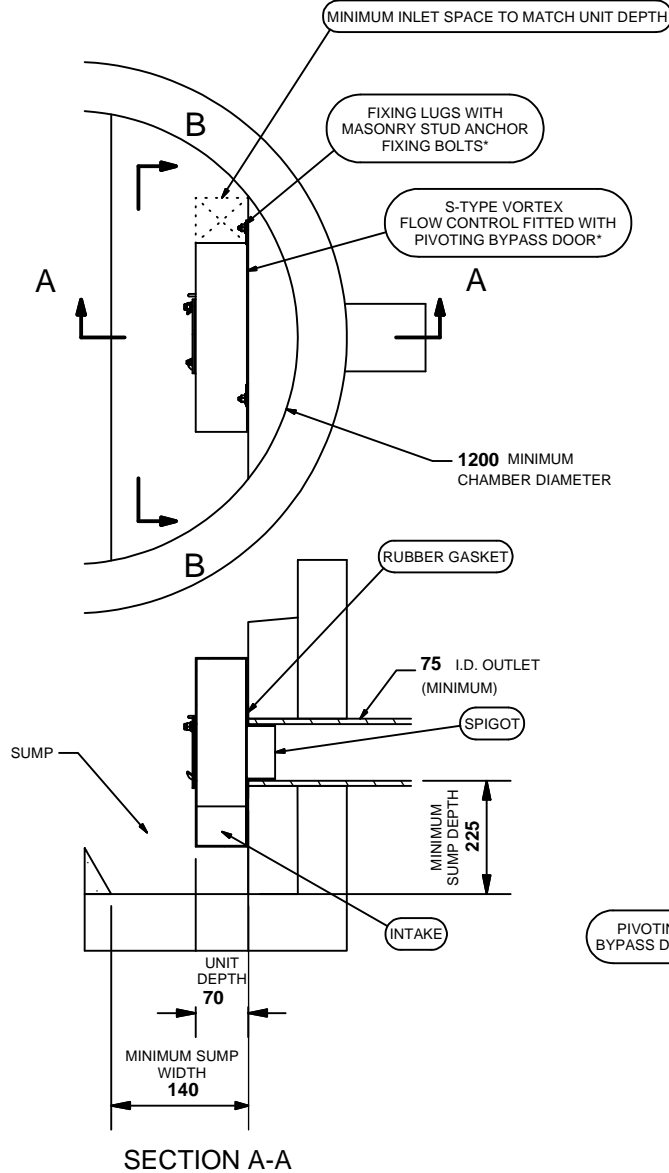
Flow control lead time 2 to 3 working weeks (unless stated otherwise) from receipt of approved drawings and checklists.
Lead time for all other products is longer and should be confirmed before ordering.
Product warranty - one year from date of purchase, only considered for those defects or faults reported in writing.

Technical Specification


Control Point	Head (m)	Flow (l/s)
Primary Design	1.000	2.500

S-Type Vortex Flow Control including:

- 3 mm grade 304L stainless steel
- Integral stainless steel pivoting bypass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Bead blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet
- Identification plate on operating handle



* All measurements are in millimetres unless otherwise specified

IMPORTANT:  LIMIT OF HYDRO INTERNATIONAL SUPPLY
 THE DEVICE WILL BE HANDED TO SUIT SITE CONDITIONS
 FOR SITE SPECIFIC DETAILS AND MINIMUM CHAMBER SIZE REFER TO HYDRO INTERNATIONAL
 ALL CIVIL AND INSTALLATION WORK BY OTHERS * WHERE SUPPLIED

THIS DESIGN LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

DESIGN ADVICE



The head/flow characteristics of this S-Type Vortex Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve.
The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

Hydro
 International 

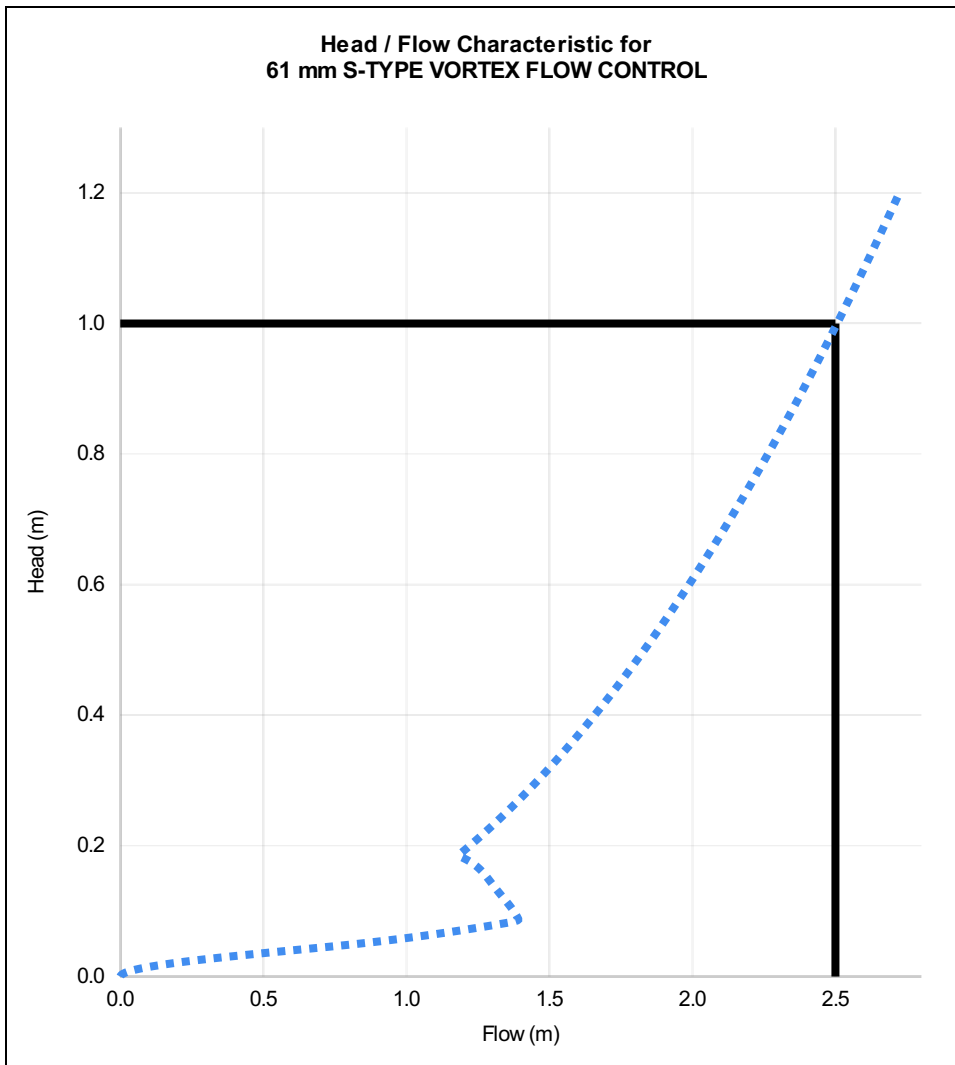
DATE	5/28/2021 1:27 PM
SITE	21_21_3064 Northgate End Enabling Works
DESIGNER	
REF	HQT-082780

61 mm
 S-Type Vortex Flow Control®

61 mm S-TYPE VORTEX FLOW CONTROL SPECIFICATION SHEET

Project Information			
Date:	28/05/2021 13:27	Site Ref:	HQT-082780
Site Name:	21_21_3064 Northgate End Enabling Works		

Primary Design Point			
Flow (l/s)	2.50	Head (m)	1.00



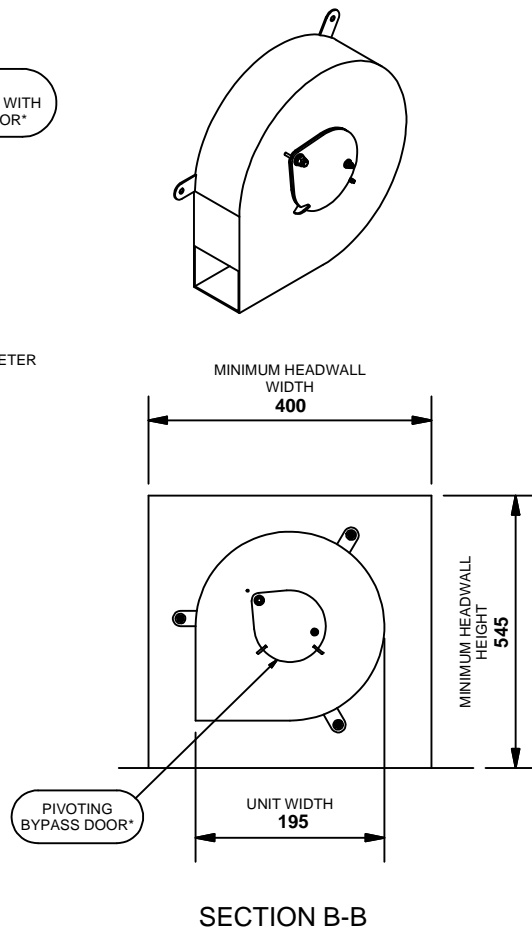
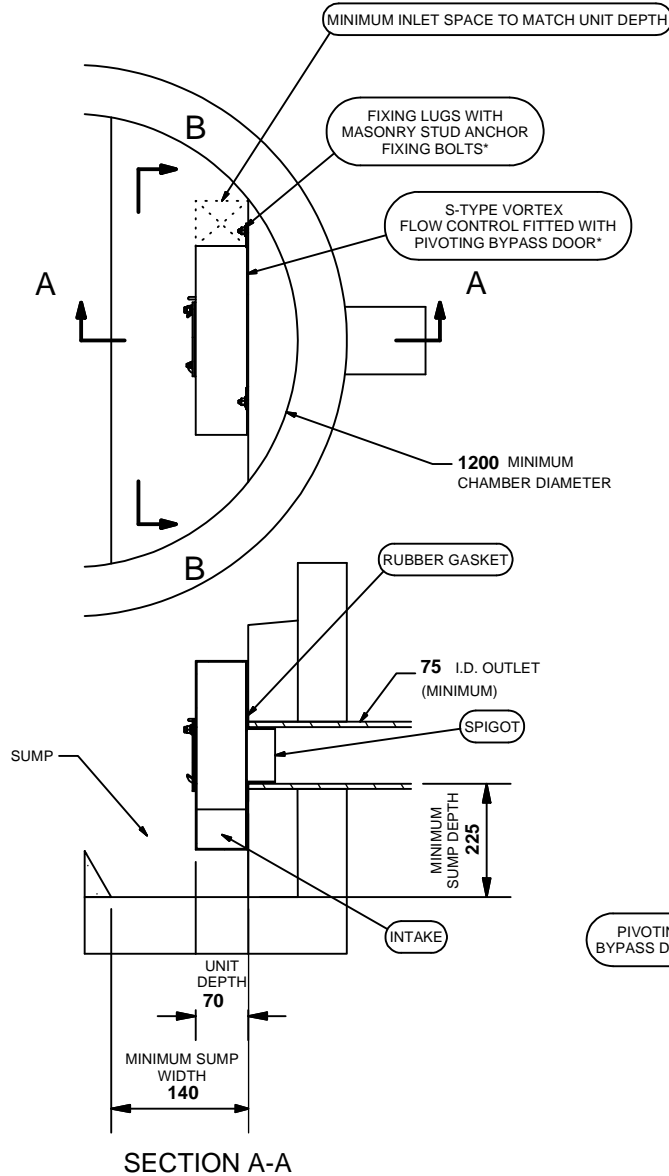
Head (m)	Flow (m)
0.000	0.000
0.034	0.469
0.069	1.165
0.103	1.370
0.138	1.307
0.172	1.235
0.207	1.239
0.241	1.326
0.276	1.406
0.310	1.481
0.345	1.552
0.379	1.619
0.414	1.683
0.448	1.744
0.483	1.803
0.517	1.860
0.552	1.914
0.586	1.967
0.621	2.018
0.655	2.068
0.690	2.117
0.724	2.164
0.759	2.210
0.793	2.255
0.828	2.299
0.862	2.342
0.897	2.384
0.931	2.425
0.966	2.466
1.000	2.506

Technical Specification


Control Point	Head (m)	Flow (l/s)
Primary Design	1.000	2.500

S-Type Vortex Flow Control including:

- 3 mm grade 304L stainless steel
- Integral stainless steel pivoting bypass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Bead blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet
- Identification plate on operating handle



* All measurements are in millimetres unless otherwise specified

IMPORTANT:  LIMIT OF HYDRO INTERNATIONAL SUPPLY
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 FOR SITE SPECIFIC DETAILS AND MINIMUM CHAMBER SIZE REFER TO HYDRO INTERNATIONAL
 ALL CIVIL AND INSTALLATION WORK BY OTHERS * WHERE SUPPLIED

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DESIGN ADVICE



The head/flow characteristics of this S-Type Vortex Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve.
The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

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DATE	5/28/2021 1:28 PM
SITE	21_21_3064 Northgate End Enabling Works
DESIGNER	
REF	HQT-082780 SWFC2.5

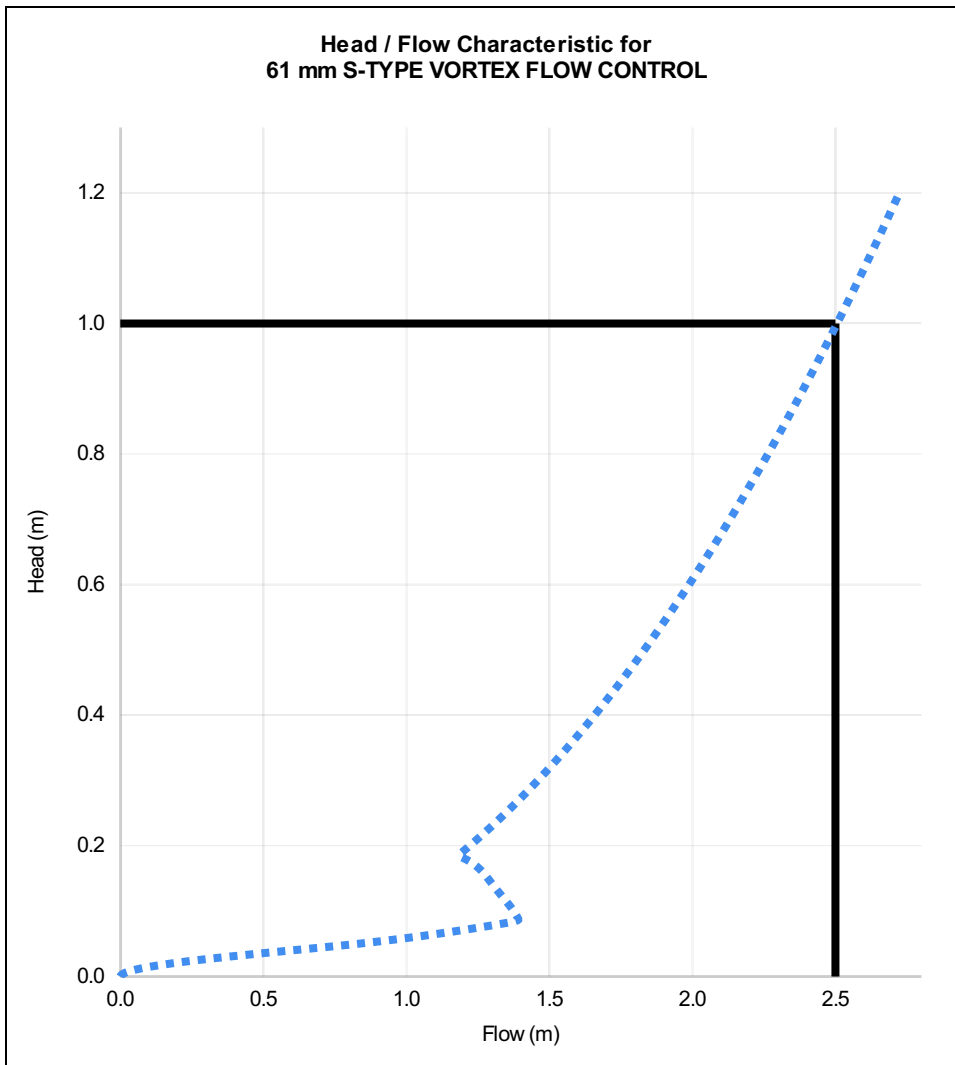
61 mm
 S-Type Vortex Flow Control®



61 mm S-TYPE VORTEX FLOW CONTROL SPECIFICATION SHEET

Project Information			
Date:	28/05/2021 13:28	Site Ref:	HQT-082780 SWFC2.5
Site Name:	21_21_3064 Northgate End Enabling Works		

Primary Design Point			
Flow (l/s)	2.50	Head (m)	1.00



Head (m)	Flow (m)
0.000	0.000
0.034	0.469
0.069	1.165
0.103	1.370
0.138	1.307
0.172	1.235
0.207	1.239
0.241	1.326
0.276	1.406
0.310	1.481
0.345	1.552
0.379	1.619
0.414	1.683
0.448	1.744
0.483	1.803
0.517	1.860
0.552	1.914
0.586	1.967
0.621	2.018
0.655	2.068
0.690	2.117
0.724	2.164
0.759	2.210
0.793	2.255
0.828	2.299
0.862	2.342
0.897	2.384
0.931	2.425
0.966	2.466
1.000	2.506

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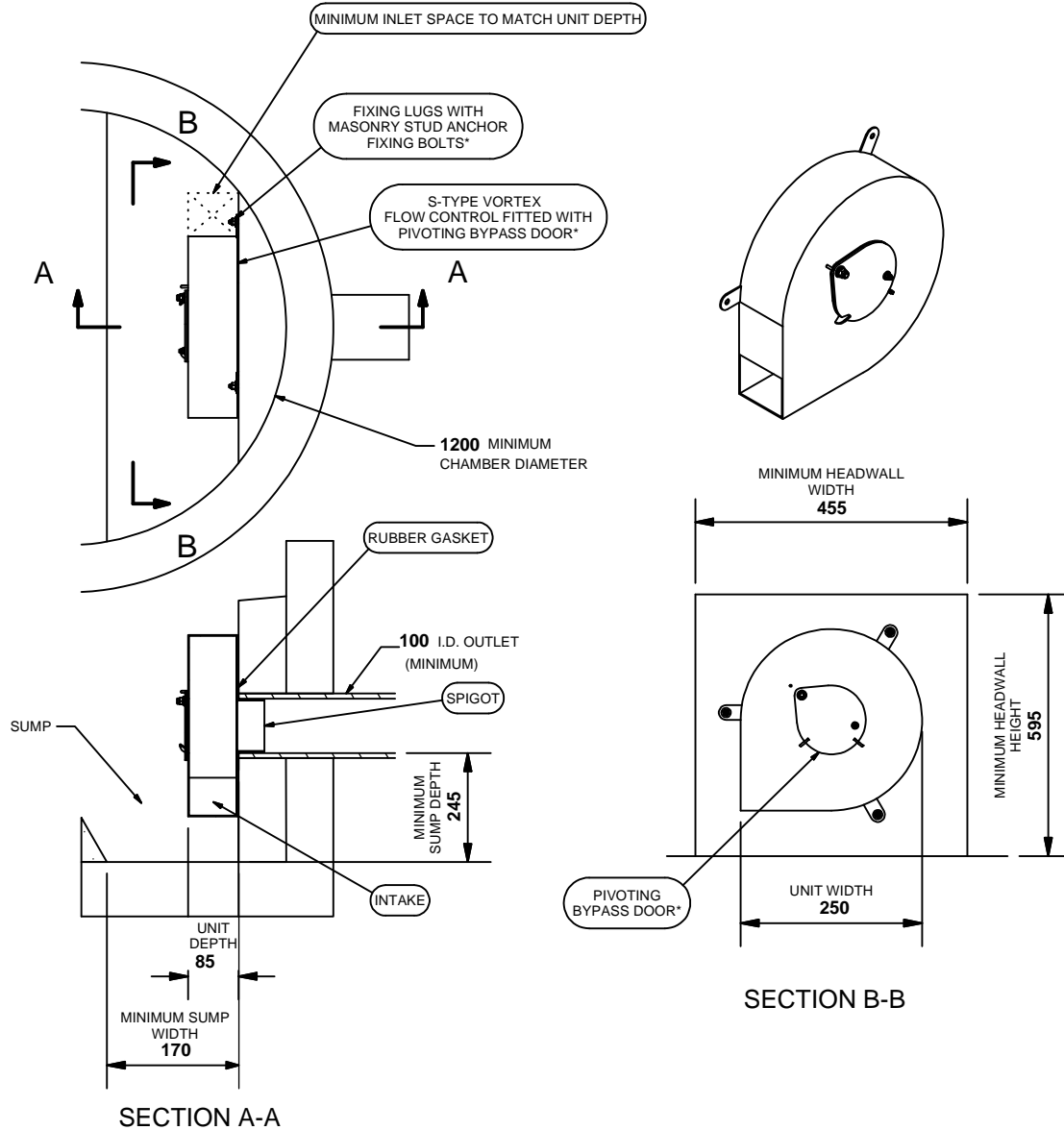
Tel: 01275 878371 · Fax: 01275 874979 · www.hydro-int.com

Technical Specification


Control Point	Head (m)	Flow (l/s)
Primary Design	1.600	5.000

S-Type Vortex Flow Control including:

- 3 mm grade 304L stainless steel
- Integral stainless steel pivoting bypass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Bead blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet
- Identification plate on operating handle



* All measurements are in millimetres unless otherwise specified

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DESIGN ADVICE



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DATE	5/28/2021 1:29 PM
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DESIGNER	
REF	HQT-082780 SWFC3.5

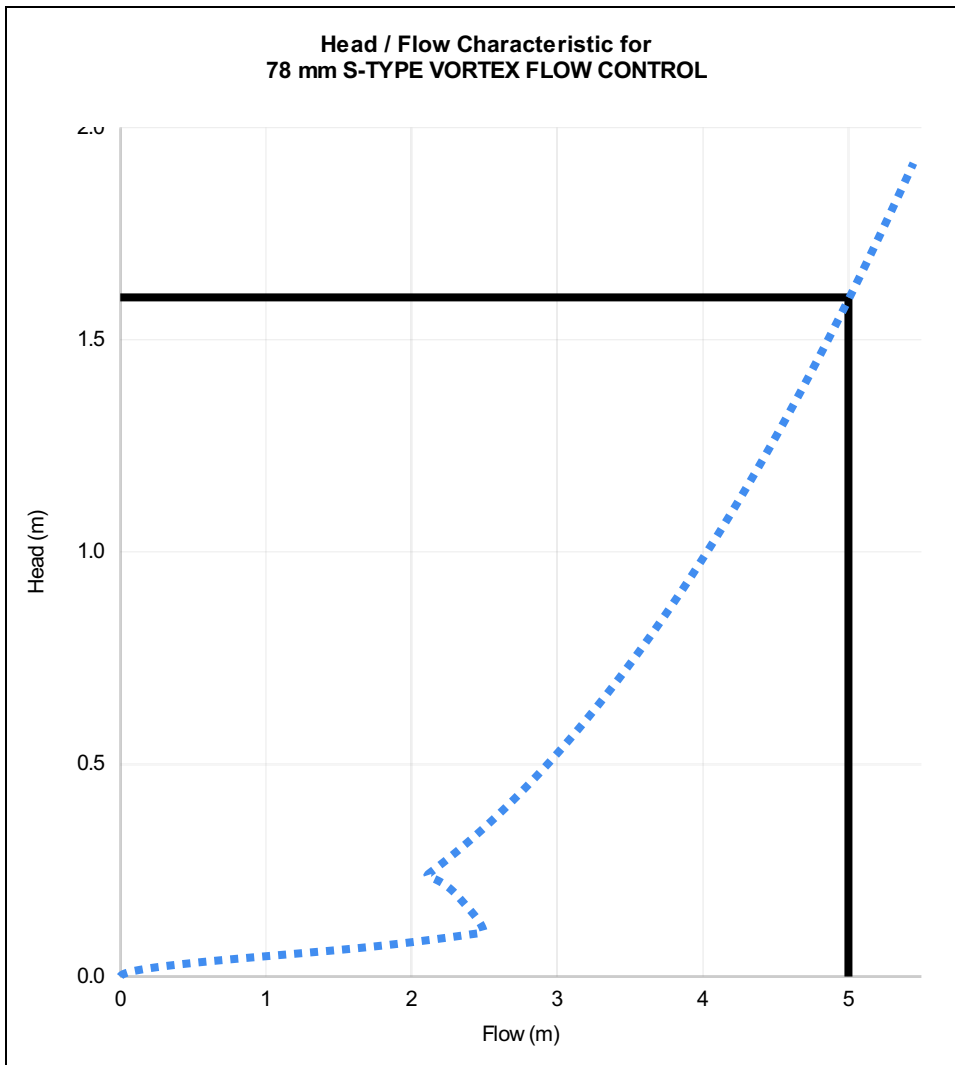
78 mm
 S-Type Vortex Flow Control®



78 mm S-TYPE VORTEX FLOW CONTROL SPECIFICATION SHEET

Project Information			
Date:	28/05/2021 13:29	Site Ref:	HQT-082780 SWFC3.5
Site Name:	21_21_3064 Northgate End Enabling Works		

Primary Design Point			
Flow (l/s)	5.00	Head (m)	1.60



Head (m)	Flow (m)
0.000	0.000
0.055	1.250
0.110	2.492
0.166	2.379
0.221	2.210
0.276	2.244
0.331	2.435
0.386	2.610
0.441	2.772
0.497	2.924
0.552	3.068
0.607	3.204
0.662	3.334
0.717	3.458
0.772	3.577
0.828	3.692
0.883	3.803
0.938	3.911
0.993	4.015
1.048	4.117
1.103	4.215
1.159	4.311
1.214	4.405
1.269	4.497
1.324	4.586
1.379	4.674
1.434	4.760
1.490	4.844
1.545	4.926
1.600	5.007

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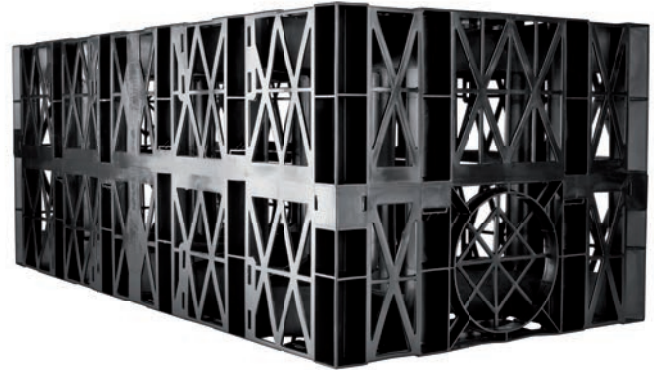
Tel: 01275 878371 · Fax: 01275 874979 · www.hydro-int.com

PRODUCT INFORMATION SHEET

AquaCell Eco

Description

AquaCell Eco is manufactured from specially reformulated, recycled material and has been specifically designed for shallow, non-trafficked, landscaped applications. AquaCell Eco is NOT suitable for locations subject to high water tables.



Technical specification

Cat code	6LB025	Void ratio	95%
Colour	Black	Material	Recycled PP
Dimensions	1m x 0.5m x 0.4m	Vertical loading	21.3 tonnes/m ² (213 kN/m ²)
Weight	7kg	Lateral loading	5.2 tonnes/m ² (52 kN/m ²)
Storage volume	190 litres	BBA approval	Certificate 03/4018

Maximum installation depths

Typical soil type	Maximum depth of installation – to base of units (m) ¹		
	Soil weight kN/m ³	Angle of internal friction φ (degrees) ^{2,3}	Landscaped areas
Over consolidated stiff clay	20	24	1.53
Silty sandy clay	19	26	1.68
Loose sand and gravel	18	30	2.08
Medium dense sand and gravel	19	34	2.35
Dense sand and gravel	20	38	2.68

Minimum cover depths

Landscaped areas	
Minimum cover depth (m)	0.30 ³

1. These values relate to installations where the groundwater is a minimum of one metre below the base of the excavation.

2. AquaCell Eco units should not be used where groundwater is present.

3. 0.5m cover is required where a ride-on mower may be used.

Assumptions made:

- Ground surface is horizontal
- Shear planes or other weaknesses are not present within the structure of the soil

Source: BBA



FILE MESSAGE

Ignore X Delete Reply Reply All Forward More Meeting

Client To Manager Done Create New Team Email Reply & Delete

Rules OneNote Actions Move

Assign Policy Mark Unread Categorize Follow Up

Translate Find Related Select Editing

Zoom Zoom



Wed 02/06/2021 08:29

Chris Mellett <CMellett@calfordseaden.com>

Re: Fw: flow controls

To Phil Delafosse; Group Five

Cc Bob Terry; Andres Gajjar; David Barton; Justin.Halls@gallagher-group.co.uk; Paul Peverall; James.Mutton@gallagher-group.co.uk

You replied to this message on 02/06/2021 08:40.

Hi Phil,

All flow controls meet our design requirements.

<https://webmail.calfordseaden.co.uk/owa/3d999330-aa09-4ec5-a043-93d6dda8698c/Xmas 2019.1.PNG><http://>

Chris Mellett IEng MICE
Senior Civil Engineer

for and on behalf of calfordseaden LLP:

[\[cid:image262b9a.PNG@c9dd314e.439f7033\]](cid:image262b9a.PNG@c9dd314e.439f7033)

- St John's House, 1A Knoll Rise, Orpington, Kent, BR6 0JX

Office: 0800 997 8896 Direct: 0800 997 8896

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[80 Years]<<https://calfordseaden.com/>> [Link to covid statement] <<https://calfordseaden.com/news/statement-from-calfordseaden-covid-19-0-3/>>