
Drainage Statement

College Road, Ardingly, Haywards Heath, RH17 6SA

Client

Remmus Designer Homes Ltd.

Ref: 11109

Date: January 2026

Consulting Engineers

GTA Civils & Transport Ltd

Maple House
192-198 London Road,
Burgess Hill

West Sussex, RH15 9RD

Tel: 01444 871444

Fax: 01444 871401

Index

1	Introduction & Planning Context	2
2	Proposed SuDS & Foul Water Drainage Design	3

Schedule of Appendices

A	BRE365 Infiltration Test Report Excerpts & CCTV Survey
B	Proposed Drainage Design Layout and Drainage Details
C	Flow Drainage Calculations
D	Southern Water Correspondence
E	SuDS Drainage Maintenance & Management Plan

Issue	Issue date	Compiled	Checked
Preliminary Issue	09 December 2025	JP	MB / MR
First Issue	07 January 2026	JP	MB / MR

1 Introduction & Planning Context

- 1.1 This Statement has been prepared for Remmus designer Homes Ltd. in relation to the proposed development at College Road, Ardingly, Haywards Heath, West Sussex, RH17 6SA. No responsibility is accepted to any third party for all or part of this study in connection with this or any other development.
- 1.2 This Drainage Statement has been prepared to assist with the discharge of a planning condition relating to Planning Ref DM/25/0816. This condition reads as follows:

4. The development hereby permitted shall not commence unless and until details of the proposed foul and surface water drainage and means of disposal have been submitted to and approved in writing by the local planning authority. No building shall be occupied until all the approved drainage works have been carried out in accordance with the approved details. The details shall include a timetable for its implementation and a management and maintenance plan for the lifetime of the development which shall include arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime. Maintenance and management during the lifetime of the development should be in accordance with the approved details.

Reason: To ensure that the proposal is satisfactorily drained and to accord with the NPPF requirements and Policy DP41 of the Mid Sussex District Plan (2014 - 2031).

- 1.3 This report has been prepared in accordance with the current National Planning Policy Framework (NPPF) and the relevant planning practice guidance, including Policy DP41 of the Mid Sussex District Plan (2014 - 2031) "Flood Risk and Drainage".
- 1.4 Full Planning Permission was granted under planning ref DM/22/0752 for "Erection of one detached 5 bedroom dwelling and a pair of semi-detached 5 bed dwellings with associated parking and access from College Road." This statement is limited to Phase 2 of this development, namely plots 3, 4 and 5 (with Plots 1 and 2 comprising Phase 1).

2 Proposed SuDS & Foul Water Drainage Design

- 2.1 Policy DP41 includes the following 'preferred hierarchy of managing surface water drainage' from new developments:
1. *Infiltration Measures*
 2. *Attenuation and discharge to watercourses; and if these cannot be met,*
 3. *Discharge to surface water only sewers*
- 2.2 The SuDS hierarchy has been applied. Infiltration was considered feasible due to a positive soil soakage test - refer to excerpts from Ashdown SI's report in Appendix A. The full report is available upon request. The lowest calculated rate of the 3 tests was 1.3×10^{-5} m/s.
- 2.3 A surface water drainage design has been developed – refer to Appendix B for the layout and details. A soakaway is proposed in each of the 3 garden spaces – each to be positioned at least 5m from foundations. The roofs' surface water shall be routed to said soakaways.
- 2.4 All external areas shall be surfaced with permeable materials, eg gravel. As these have - essentially – unchanged green field characteristics, no drainage calculations are needed.
- 2.5 The surface water drainage network has been designed to contain all storm events up to and including 1:100yr + 45% climate change event – refer to the Flow Calculation sheets in Appendix C.
- 2.6 Treatment and water quality: all precipitation from the access road is routed to ground via gravel (coarse fill), which is essentially porous pavings' sub-base. The mitigation indices of porous pavings' sub-base exceed the pollution indices for a residential development. No additional mitigation measures are required.
- 2.7 The proposed foul drainage network shall be routed under gravity to the nearby existing foul network in serving the Phase 1 units: refer to the CCTV survey in Appendix A and drainage design layout in Appendix B. The 2 connections shall be subject to an indirect Section 106 agreement with Southern Water: refer to Southern Water's permission letter in Appendix D.
- 2.8 Maintenance: A SuDS Management and Maintenance Plan is shown in Appendix G. This sets out how the various components of the SuDS drainage network will be inspected and maintained – in line with Industry Standards as per CIRIA's SuDS Manual C753. The responsibility of maintenance, repair, renewal and replacement of the surface water drainage system will be conferred on to the property owners with all costs shared on an equal basis. These arrangements will be administered in the Transfer Document TP1 of each property at the point of sale with the same responsibilities transferring with each property to the successors in title.

- 2.9 It is contended that both drainage networks are fully sustainable and comply with the local and national drainage policies. The items set out in Condition #4 have been addressed in full.

- End of Statement -

Appendix A

BRE365 Infiltration Test Report Excerpts & CCTV Survey

Geology

The investigation found Made Ground of varying populations from ground level to depths between 1.35m and 1.90m bgl, with a fibrous board encountered in WS06 at 0.30m bgl, that was found to not contain asbestos. Petroleum hydrocarbon staining was noted in WS02a from 0.35m to 0.50m bgl, and a membrane was encountered in WS07 at 1.35m bgl.

The Made Ground was found to be underlain by stiff, locally firm and very stiff, slightly gravelly slightly sandy CLAY to depths between 2.60m and 4.20m bgl, where boreholes were terminated due to SPT refusals. This clay is thought to be the Grinstead Clay Member bedrock, located underlying the site in the northwest.

The works were completed on the 17th December 2025 under the supervision of a Geo-Environmental Engineer from iPlant and was carried out in general accordance with BS5930:2015+A1:2020 and BRE Digest 365.

In summary, the investigation undertaken included:

- Excavation of 1no. trial pit (TP01).
- Subsequent infiltration testing.

The location of the exploratory position was selected relative to the proposed development and being free of buried services.

The trial pit was logged in accordance with BS EN ISO 14688 and 14689 with any groundwater conditions noted.

Upon completion, the trial pit was backfilled, compacted and made good to existing levels and finish, with any surplus spoil baqaed up and removed from site.

Ground Conditions

The following ground conditions were encountered during the works:

Made Ground

Made Ground was encountered in TP01 from ground level to a depth of 1.00m bgl and comprised firm light brown sandy gravelly clay with constituents of brick, concrete, geogrid and sandstone.

Probable Grinstead Clay Formation Deposits

Deposits likely to be the Grinstead Clay Formation were encountered in TP01 from a depth of 1.00m bgl to a depth of 1.90m bgl and comprised firm dark grey sandy gravelly CLAY with constituents of sandstone.

Cuckfield Stone Bed

Bedrock deposits were encountered in TP01 from a depth of 1.90m bgl to a depth of 2.30m bgl and comprised extremely weak light brown SANDSTONE residually weathered recovered as clayey sandy angular to subrounded fine to coarse GRAVEL with low cobble content.

Groundwater

Groundwater was not encountered during the investigation. However, based on the results of the soakaway tests it is considered the results indicate that groundwater was encountered within the sandstone layer, which prevented further infiltration of water added to the trial pit.

It should be noted that groundwater levels are dependent upon seasonal variations and can change after periods of prolonged rainfall or drought.

Infiltration Testing

During the soakaway tests the water achieved a fall from 75% to 25% of the effective depth of the storage volume in the pit on all three tests. The results obtained from the soakaway tests are summarised below:

TP and Test Number	Dimensions (m)	Depth (m bgl)	Infiltration Rate (m/sec)	Drainage Characteristics
TP01 Test 1	2.10 x 0.30	2.30	2.8×10^{-5}	Good
TP01 Test 2	2.10 x 0.30	2.30	1.7×10^{-5}	Good
TP01 Test 3	2.10 x 0.30	2.30	1.3×10^{-5}	Good

Conclusion

The soils encountered beneath the site were found to be sandy gravelly Clay overlying clayey sandy gravel of Sandstone. The soakage rates obtained during the investigation were found to be good. Given the data from the test, it is considered that the use of soakaways is likely to be suitable for this site, with water soaking into the weathered sandstone layer rather than into the sandy gravelly clay.



Site Investigation Plan



College Road, Ardingly
IPX1267

15/12/2025



Trial Pit Log

TrialPit No
TP01
Sheet 1 of 1

Project Name: College Road

Project No.
IPX1267

Co-ords: -
Level:

Date
17/12/2025

Location: Ardingly

Dimensions (m): 2.10

Depth
2.30

0.30



Scale
1:25

Logged
JR

Client: GTA Civils

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
				1.00			MADE GROUND: Firm light brown sandy gravelly clay. Gravel is angular to subrounded fine to coarse of brick, concrete, geogrid and sandstone. Sand is fine to coarse.	
				1.90			Firm dark grey sandy gravelly CLAY. Gravel is angular to subrounded fine to coarse of sandstone. Sand is fine to coarse.	1
				2.30			Extremely weak light brown SANDSTONE residually weathered recovered as clayey sandy angular to subrounded fine to coarse GRAVEL with low cobble content.	2
							End of Pit at 2.30m	3
								4
								5

Remarks: Location cleared of services using handheld CAT scanner. Trial pit excavated to 2.30m bgl. No groundwater encountered. Soil infiltration testing carried out. Trial pit backfilled with arisings.

Stability: Stable



IPX1267

Walkover Photos

Site entrance.



Depth of TP01.



TP01



TP01 during the tests.



IPX1267

Walkover Photos

Arisings from TP01.



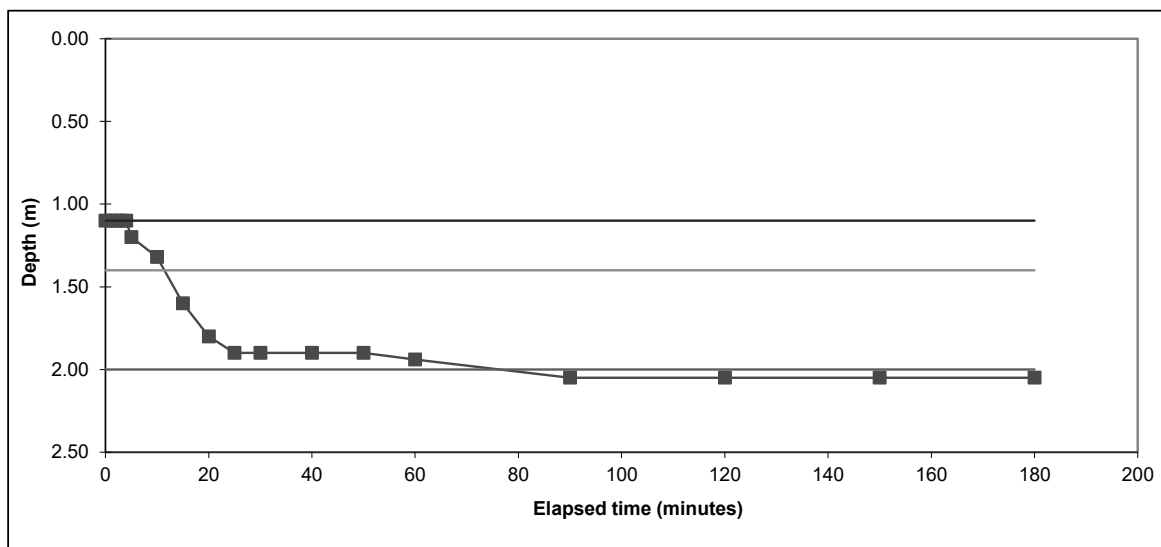
TP01 backfilled.



iPlant Geotechnical

Soakaway Test

Trial Pit No:	TP01	Test No:	1	Date:	17/12/2025
Length (m):	2.100	Datum Height:	0.00 m agl		
Width (m):	0.30	Granular infill:	None		
Depth (m):	2.30	Porosity of infill:	1	(assumed)	
Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)		
0	1.100	90	2.050		
1	1.100	120	2.050		
2	1.100	150	2.050		
3	1.100	180	2.050		
4	1.100				
5	1.200				
10	1.320				
15	1.600				
20	1.800				
25	1.900				
30	1.900				
40	1.900				
50	1.900				
60	1.940				



Start water depth for analysis (mbgl)	1.10		
75% effective depth (mbgl):	1.40	Elapsed time (mins):	11.4
50% effective depth (mbgl):	1.70		
25% effective depth (mbgl):	2.00	Elapsed time (mins):	76.4
Base of soakage zone (mbgl):	2.30		
Volume outflow between 75% and 25% effective depth (m ³):	0.378		
Mean surface area of outflow (m ²):	3.51		
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):	65.0		

Soil infiltration rate (m/s):	2.8E-5
-------------------------------	--------

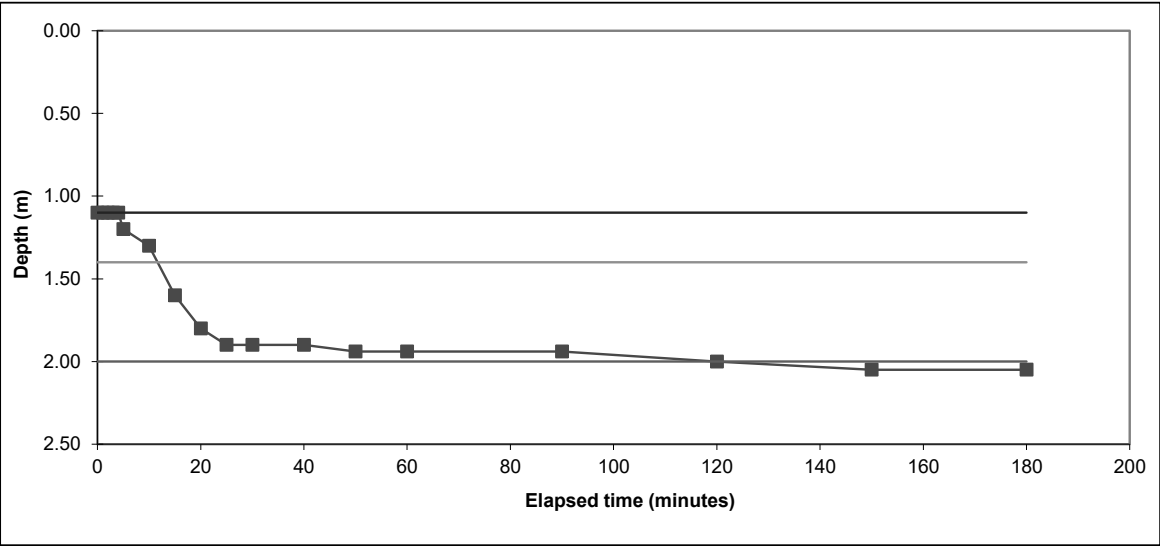
Remarks	Results processed following BRE 365 (2007).
---------	---

Client:	GTA Civils	
Site:	College Road, Ardingly	TP01

iPlant Geotechnical

Soakaway Test

Trial Pit No:	TP01	Test No:	2	Date:	17/12/2025
Length (m):	2.100	Datum Height:	0.00 m agl		
Width (m):	0.30	Granular infill:	None		
Depth (m):	2.30	Porosity of infill:	1	(assumed)	
Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)		
0	1.100	90	1.940		
1	1.100	120	2.000		
2	1.100	150	2.050		
3	1.100	180	2.050		
4	1.100				
5	1.200				
10	1.300				
15	1.600				
20	1.800				
25	1.900				
30	1.900				
40	1.900				
50	1.940				
60	1.940				



Start water depth for analysis (mbgl)	1.10		
75% effective depth (mbgl):	1.40	Elapsed time (mins):	11.7
50% effective depth (mbgl):	1.70		
25% effective depth (mbgl):	2.00	Elapsed time (mins):	120.0
Base of soakage zone (mbgl):	2.30		
Volume outflow between 75% and 25% effective depth (m ³):	0.378		
Mean surface area of outflow (m ²):	3.51		
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):	108.3		

Soil infiltration rate (m/s):	1.7E-5
-------------------------------	--------

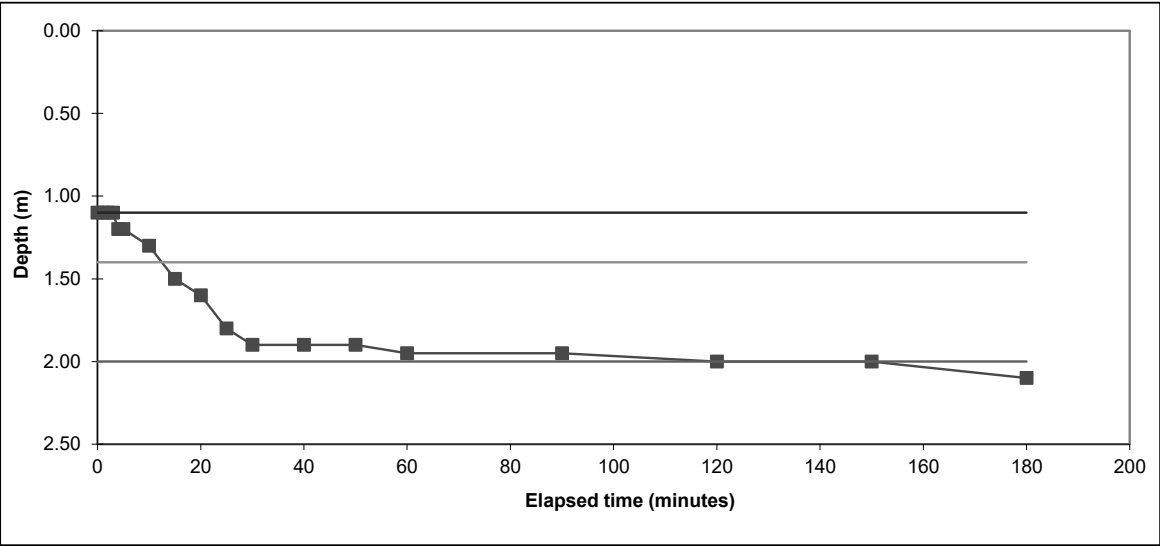
Remarks	Results processed following BRE 365 (2007).
---------	---

Client:	GTA Civils	TP01
Site:	College Road, Ardingly	

iPlant Geotechnical

Soakaway Test

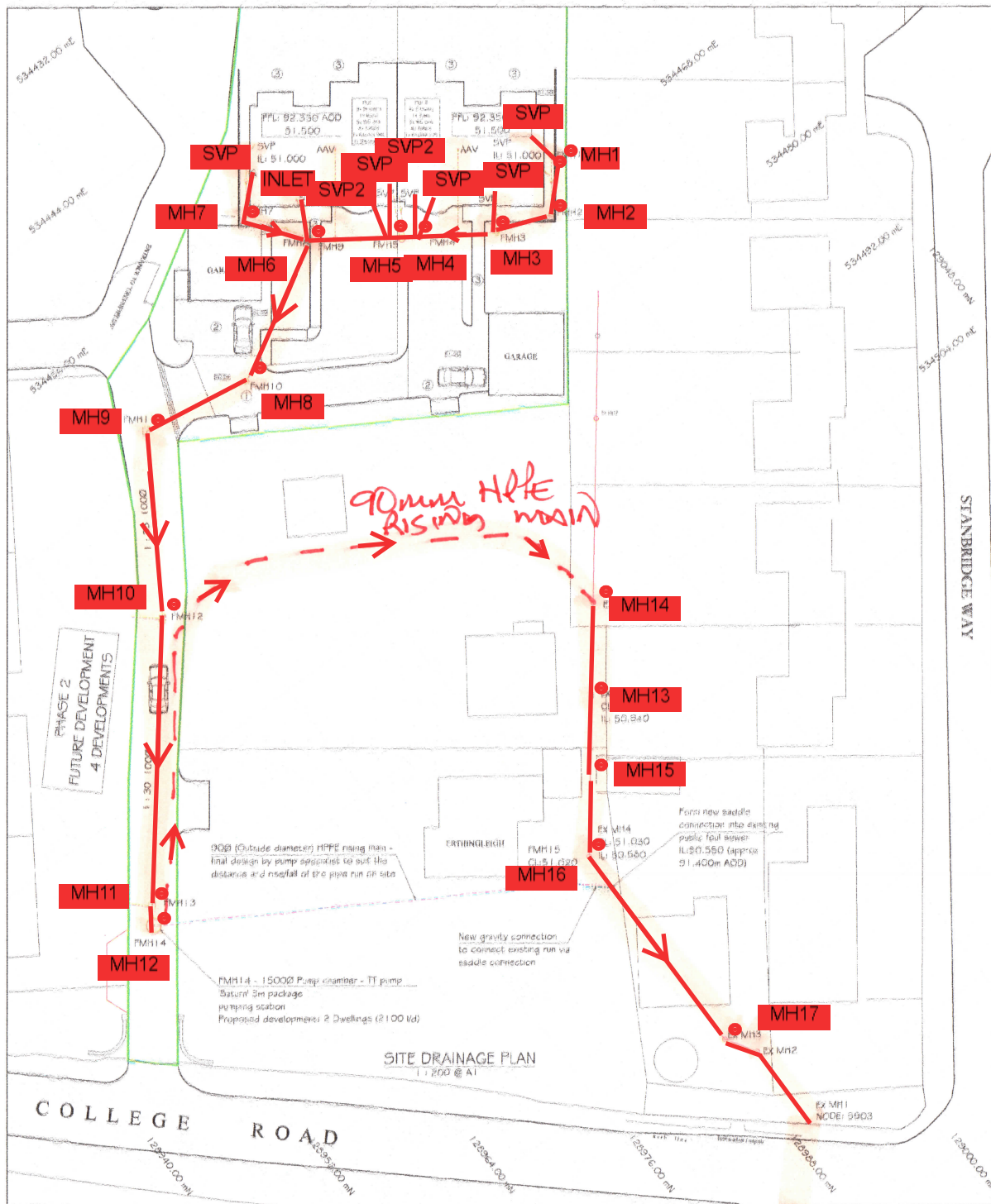
Trial Pit No:	TP01	Test No:	3	Date:	17/12/2025
Length (m):	2.100	Datum Height:	0.00 m agl		
Width (m):	0.30	Granular infill:	None		
Depth (m):	2.30	Porosity of infill:	1	(assumed)	
	Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)	
	0	1.100	90	1.950	
	1	1.100	120	2.000	
	2	1.100	150	2.000	
	3	1.100	180	2.100	
	4	1.200			
	5	1.200			
	10	1.300			
	15	1.500			
	20	1.600			
	25	1.800			
	30	1.900			
	40	1.900			
	50	1.900			
	60	1.950			



Start water depth for analysis (mbgl)	1.10		
75% effective depth (mbgl):	1.40	Elapsed time (mins):	12.5
50% effective depth (mbgl):	1.70		
25% effective depth (mbgl):	2.00	Elapsed time (mins):	150.0
Base of soakage zone (mbgl):	2.30		
Volume outflow between 75% and 25% effective depth (m ³):			0.378
Mean surface area of outflow (m ²):			3.51
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):			137.5

Soil infiltration rate (m/s):	1.3E-5
Remarks	Results processed following BRE 365 (2007).

Client:	GTA Civils	TP01
Site:	College Road, Ardingly	



Ponds to be videoed surveyed

Rev	Date	By	Check	Notes
01	19/01/16			CONSTRUCTION
02	19/01/16			Rev. 1st proposed
03	23/01/16			Rev. 2nd proposed
04	23/01/16			REVISED AS CLOURED
05	19/01/16			REVISED AS CLOURED
06	19/01/16			REVISED AS CLOURED
07	19/01/16			REVISED AS CLOURED
08	19/01/16			REVISED AS CLOURED
09	19/01/16			REVISED AS CLOURED
10	19/01/16			REVISED AS CLOURED

ANDREW WARING ASSOCIATES
Consulting Civil and Structural Engineers
The Old Chapel, 100, The Quadrant, Brighton, BN1 1QJ
Tel: 01273 314141 Fax: 01273 314142
Email: andrew.waring@awar.co.uk

JAMES WELLS ARCHITECTS

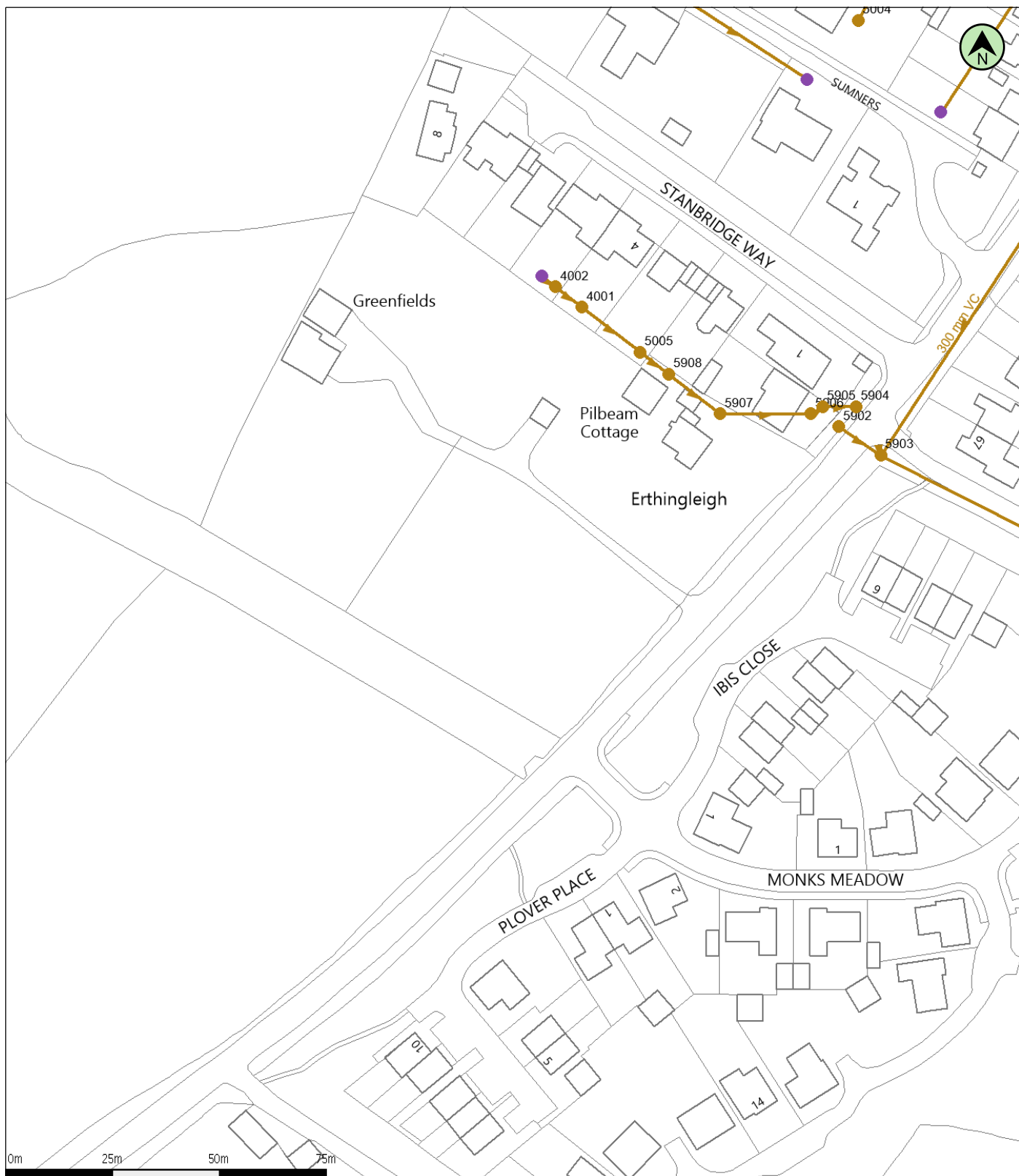
DRAKE DEVELOPMENTS

**ARDINGLY DEVELOPMENT
COLLEGE ROAD
ARDINGLY
WEST SUSSEX**

**SITE
DRAINAGE PLAN**

CONSTRUCTION

Scale	1:200 @ A1	Date	JANUARY 2016	Drawn by	CJB	Checked	DJS
Proj No.	9008/D2	Rev.	P7				



(c) Crown copyright and database rights 2024 Ordnance Survey AC0000808122

Scale: 1:1250

Date: 25/10/24

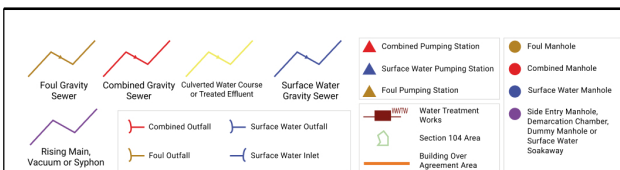
Wastewater Plan A4

Data updated: 24/09/24

Map Centre: 534473,128947

Our Ref: 1604978 - 2

Powered by digdat



utility.reports@technicsgroup.com

GRS16162



The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. This plan is produced by Southern Water Services Ltd (c) Crown copyright and database rights 2024 Ordnance Survey AC0000808122. This map is to be used for the purposes of viewing the location of Southern Water plant only. Any other uses of the map data or further copies is not permitted.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.

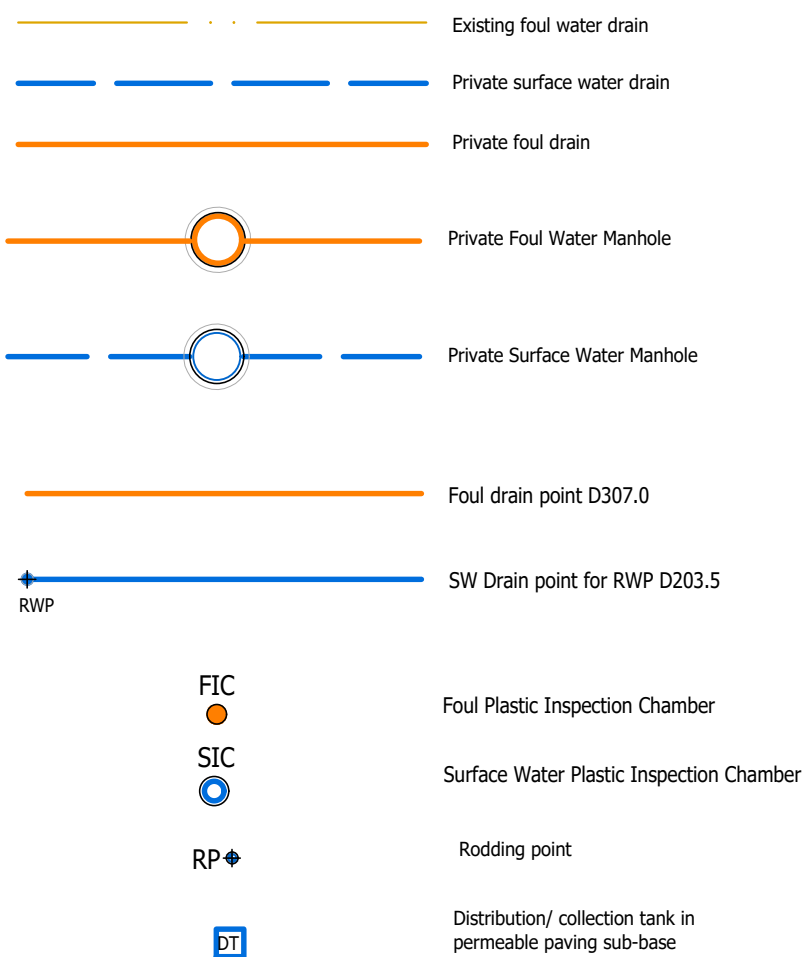
Appendix B

Proposed Drainage Design Layout and Drainage Details

DESIGN NOTES

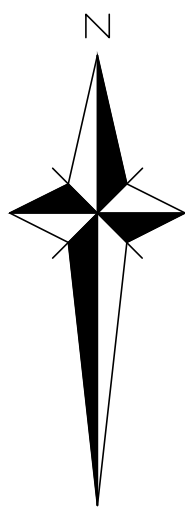
1. SOAKAWAY DESIGN BASED ON 1 IN 100 YR STORM + 45%.
2. SOAKAWAY DESIGN BASED ON LOWEST BRE365 INFILTRATION RATE OF 1.3×10^{-5} m/s FROM IPLANT BRE365 INFILTRATION TEST REPORT DATED DECEMBER 2025.
3. DRAIN POINTS AND LOCATIONS TO BE CONFIRMED BY ARCHITECT.
4. CONTRACTOR TO ESTABLISH LOCATIONS OF ALL EXISTING SERVICES PRIOR TO COMMENCING.
5. EXISTING TREES TO BE PROTECTED WHERE EXCAVATIONS RUN CLOSE.
6. CONTRACTOR TO ALLOW FOR NEW FOUL AND SURFACE WATER SEWER CONNECTIONS INTO PUBLIC SEWER.

KEY



ABBREVIATIONS

D307.0	DETAIL NUMBER - SEE DRAINAGE DETAIL SHEET
FD	FOUL DRAIN
SWD	SURFACE WATER DRAIN
FWS	ADOPTABLE FOUL WATER SEWER
SWS	ADOPTABLE SURFACE WATER SEWER
MH	MANHOLE
IC	INSPECTION CHAMBER
SA	SOAKAWAY
FIC	450mm DIA. FOUL INSPECTION CHAMBER - D202.6
SIC	450mm DIA. SURFACE WATER INSPECTION CHAMBER - D202.6
FAC	300mm DIA. FOUL ACCESS CHAMBER - D202.18
SAC	300mm DIA. SURFACE WATER ACCESS CHAMBER - D202.18
CI	CAST IRON
VC	VITRIFIED CLAY
CONC	CONCRETE
PVC-U	POLYVINYL CHLORIDE - UNPLASTICISED
G	SMALL GULLY - D209.0
YG	YARD GULLY - D209.2
RG	ROAD GULLY - D208.1
CPG	CAR PARK GULLY - D208.2
DP	BELOW GROUND DRAIN POINT
SVP	SOIL VENT PIPE DROP
SS	STUB STACK OR DIRECT DRAIN CONNECTION
RP	EXTERNAL RODDING POINT - D213.1
DT	SURFACE WATER DISTRIBUTION TANK
FFL	FINISHED FLOOR LEVEL
SSL	STRUCTURAL SLAB LEVEL
GL	GROUND LEVEL
CL	COVER LEVEL
IL	INVERT LEVEL
SL	SUMP LEVEL
BL	BASE LEVEL
HL	HIGH LEVEL
BD	BACKDROP
CBS	CONCRETE BED & SURROUND
CLASS 5	GRANULAR BED & SURROUND
CLASS 8	GRANULAR BED



GENERAL NOTES

1. The location, size, depth and identification of existing services that may be shown or referred to on this drawing have been assessed from non intrusive observations, record drawings or the like. The contractor shall safely carry out intrusive investigations, trial holes or soundings prior to commencing work to satisfy himself that it is safe to proceed and that the assessments are accurate. Any discrepancies shall be notified to gta prior to works commencing.
2. Tender or billing drawings shall not be used for construction or the ordering of materials.
3. Do not scale. All dimensions and levels to be site confirmed.
4. This drawing shall be read in conjunction with all relevant architects, consultants drawings and specifications, together with H&S plan requirements.
5. Copyright : This drawing must not be copied, amended nor reproduced without the prior written agreement of gta.
6. All drawings specifications and recommendations made by gta are subject to Local Authority and other relevant Statutory Authorities approval. Any works or services made abortive due to the client proceeding prior to these approvals is considered wholly at the Clients risk. gta hold no responsibility for resulting abortive works or costs.
7. If viewing this drawing as an Autocad file (.dwg) in digital format then it is done so with this Disclaimer due to the fact that it can be altered and manipulated following its issue by GTA Civils & Transport and therefore, any alteration or modification of DWG data files provided by GTA Civils & Transport, by you or a third party, without GTA Civils and Transport's express written approval, is done so entirely at your own risk. Modification includes (but is not limited to) turning layers on and off, unfreezing layers and reloading, turning on and off print functions and unloading x-refs.
8. Your attention is also drawn to the fact that the information contained within this file may be subject to alteration at any time, pending technical approval from an approving authority or at the client's instruction. It is therefore strongly recommended that multiple and regular cross checks are made against the current contract drawings. It is your responsibility to ensure that the correct issue or revision of the DWG data file is being used and requests for updated information made accordingly.
9. Should any apparent discrepancies between the data obtained within the DWG file and the current contract drawings become evident, it must be reported back to GTA Civils & Transport as soon as reasonably practicable. Precedence should be given to the current contract drawings (PDF) unless advised otherwise.

SPECIFICATION NOTES

All drainage shall be constructed and commissioned in accordance with BS EN 205 & BS EN752, Building Regulations Doc. H and any particular requirements of the Building Control Officer.

Drainage pipelines shall be in PVC-u below ground as Marley or similar approved, or vitrified clay. All sewer pipelines to be VC only.

This drawing shall be read in conjunction with all other relevant drainage drawings, architectural drawings and structural drawings.

For manhole details, gully details, bedding etc, refer to gta detail sheets.

All foul water drain runs shall have a fall of 1:40 or steeper, unless noted otherwise.

All cement used for concrete drainage installations shall be sulphate resistant to class 3 of BRE Digest 363. (Grade S15)

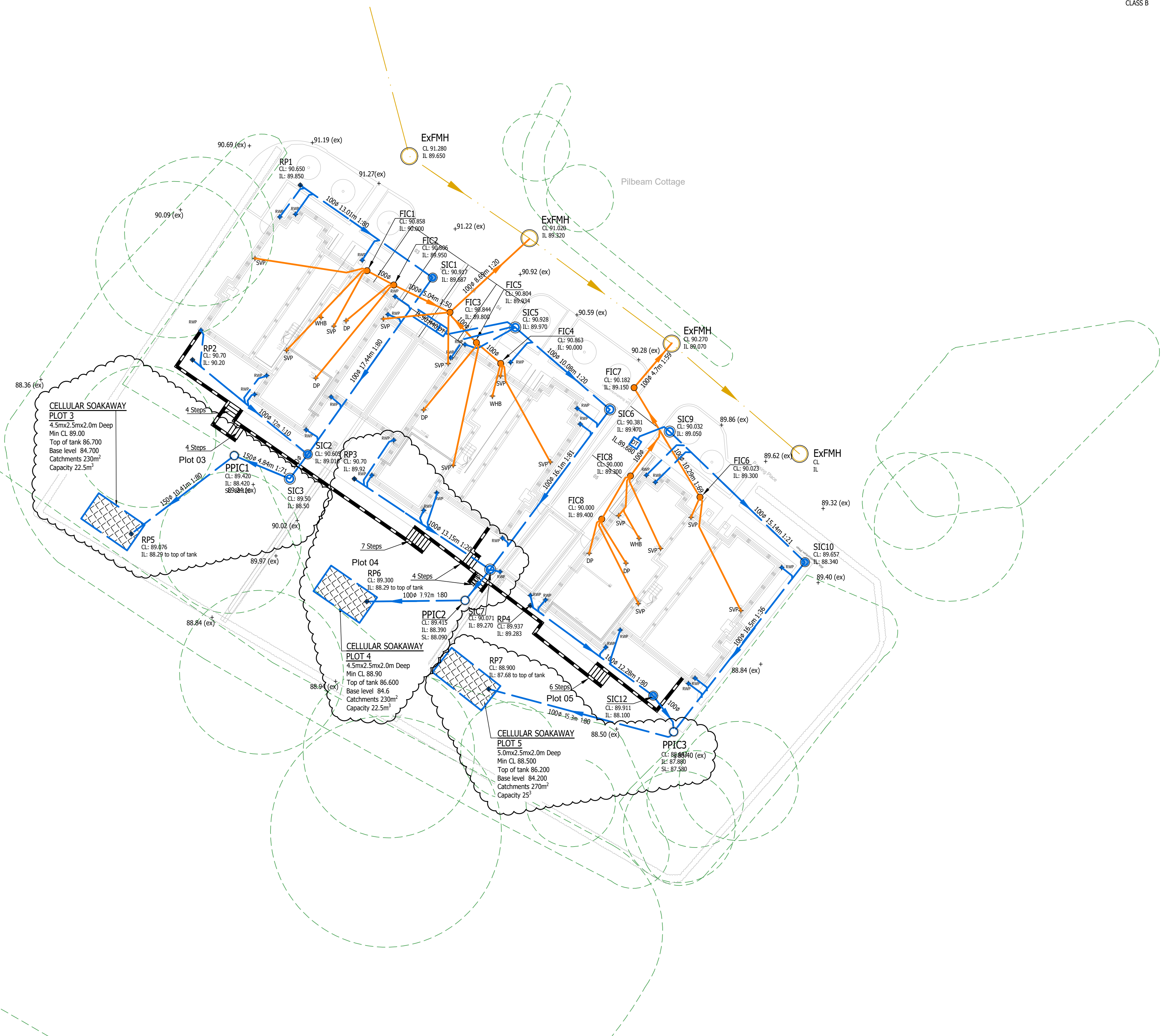
The use of short radius or 90° bends for changes in direction is not permitted, only long or medium radius 45° bends shall be used. All junctions shall be 45°.

All drains shall have granular bed and surround as class 'S' bedding, unless noted otherwise.

All drainage works shall commence from the downstream end first unless agreed otherwise. Outfall level to be checked by contractor prior to any works commencing and any discrepancy identified to engineer prior to laying and drainage.

NOTE

THIS DRAWING IS SUBJECT TO TREE OFFICER APPROVAL, ANY WORKS CARRIED OUT PRIOR TO WRITTEN APPROVAL ARE AT RISK



T3	Soakaways revised to BRE365 soakage test	07/01/26	AE	MB
T2	Design note added	08/12/25	AE	MB
T1	INITIAL ISSUE	03/12/25	GS	MB
Rev	Amendments	Date	Don	Chk

Status TENDER

Client REMMUS DESIGNER HOMES LTD

Architect

Project

COLLEGE ROAD ARDINGLY

Title

DRAINAGE LAYOUT

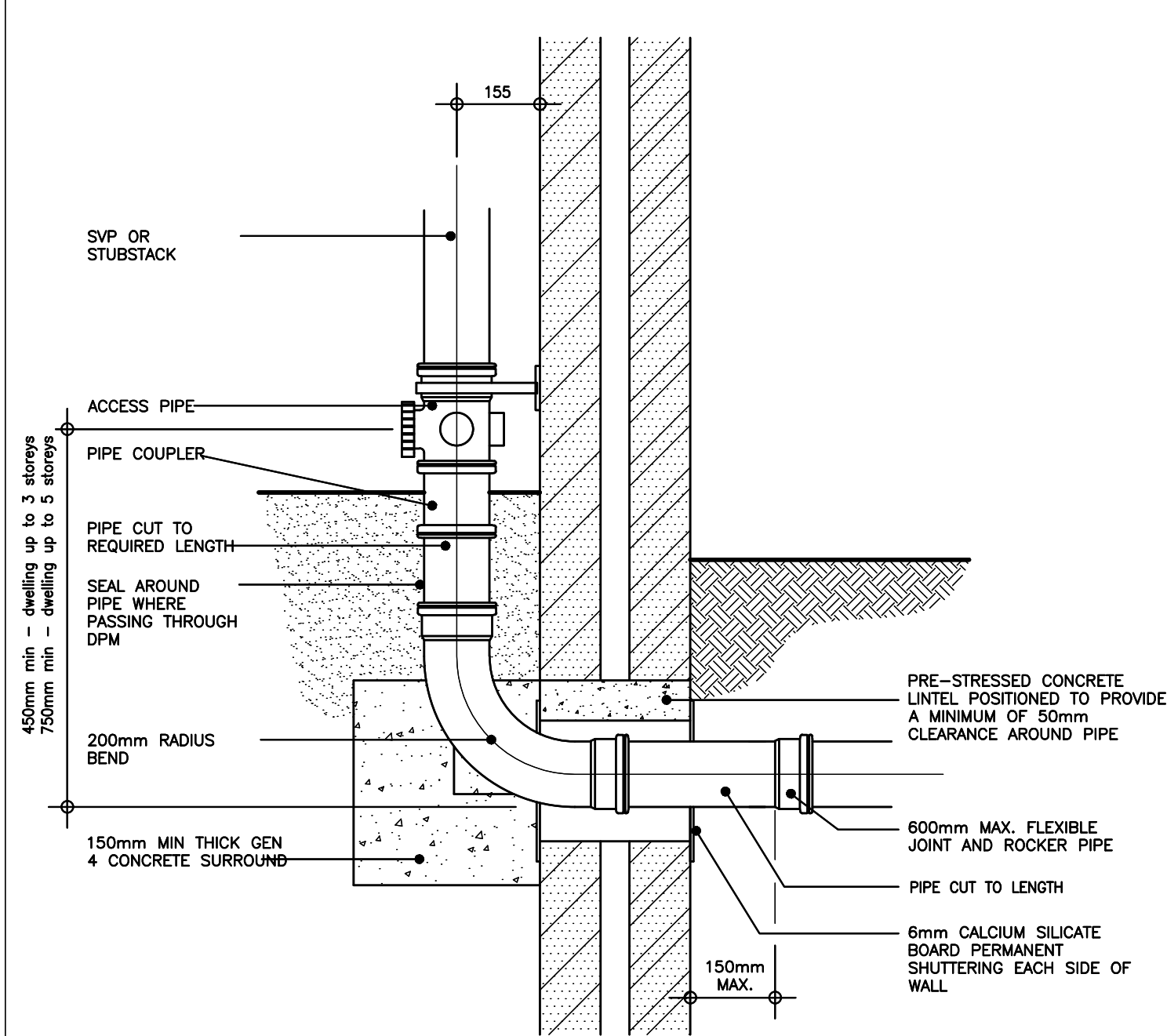
Date DECEMBER 2025 Scale @ A1 1 : 200

Clients Ref. Project Ref.

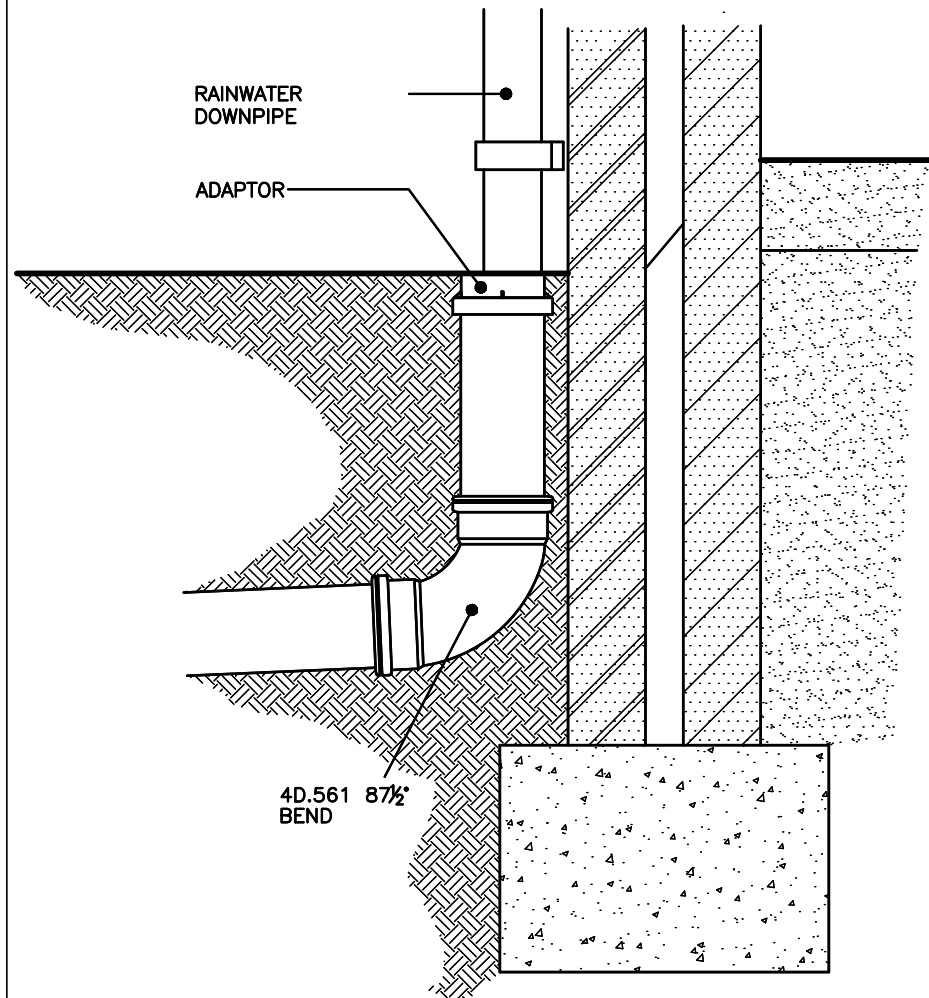
gta Civils & Transport

Maple House, 192-198 London Road, Burgess Hill, West Sussex, RH15 9RD. Tel.01444 871444 Web: www.gtacivils.co.uk

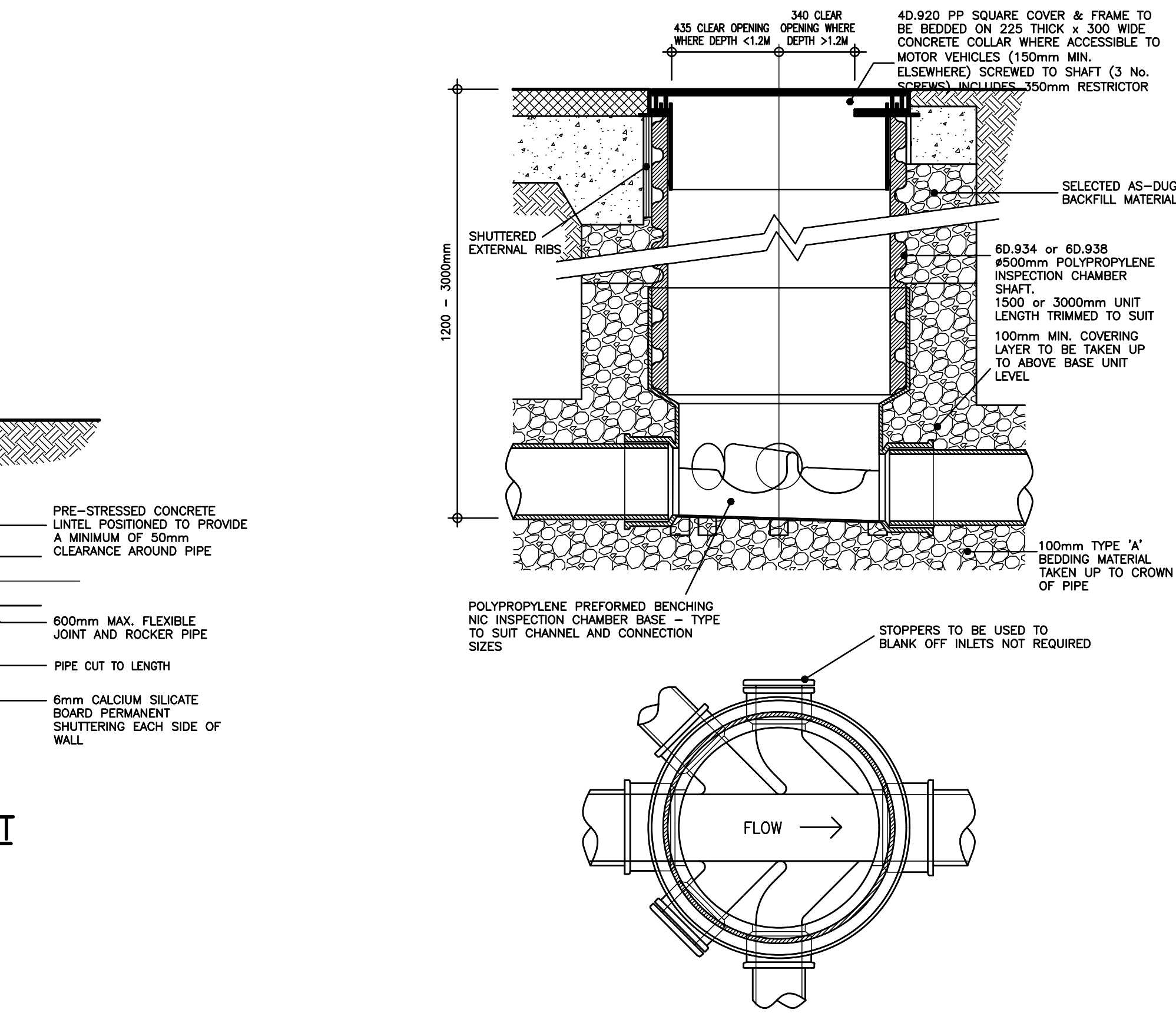
Drawing Number 11109/1601 Rev. T3



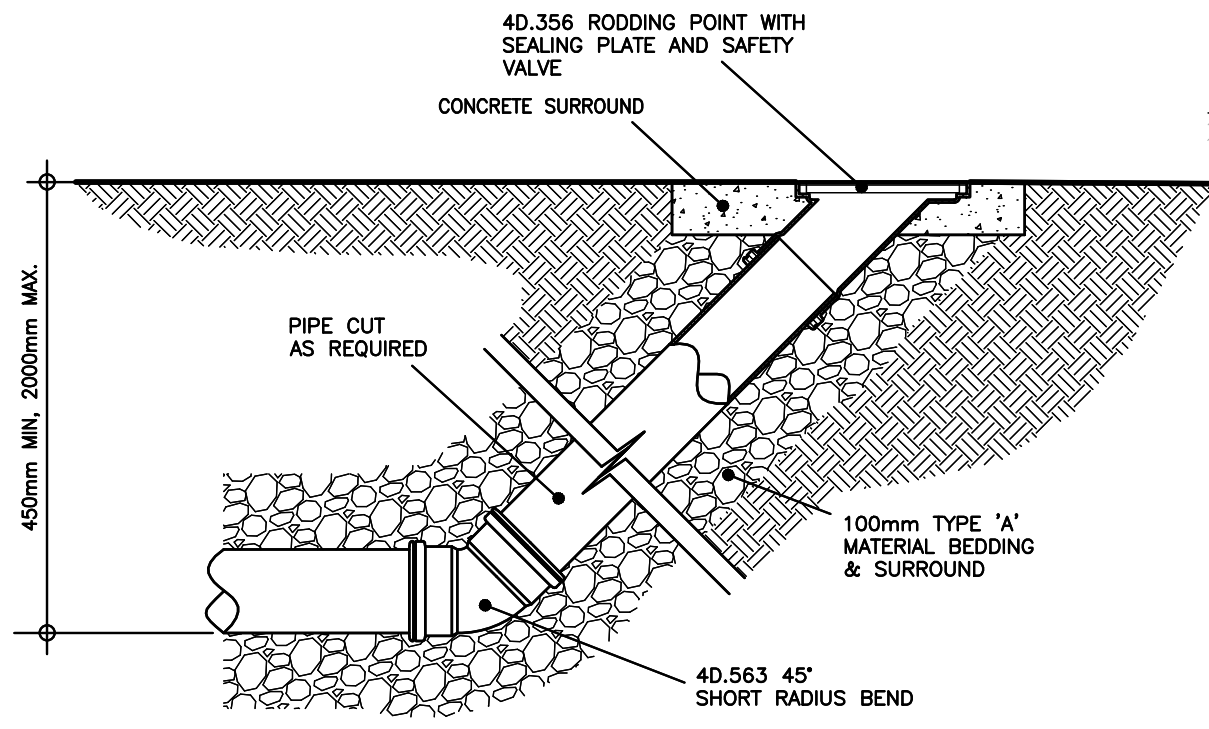
INTERNAL SVP/SS OUTLET
(1:10 typical)



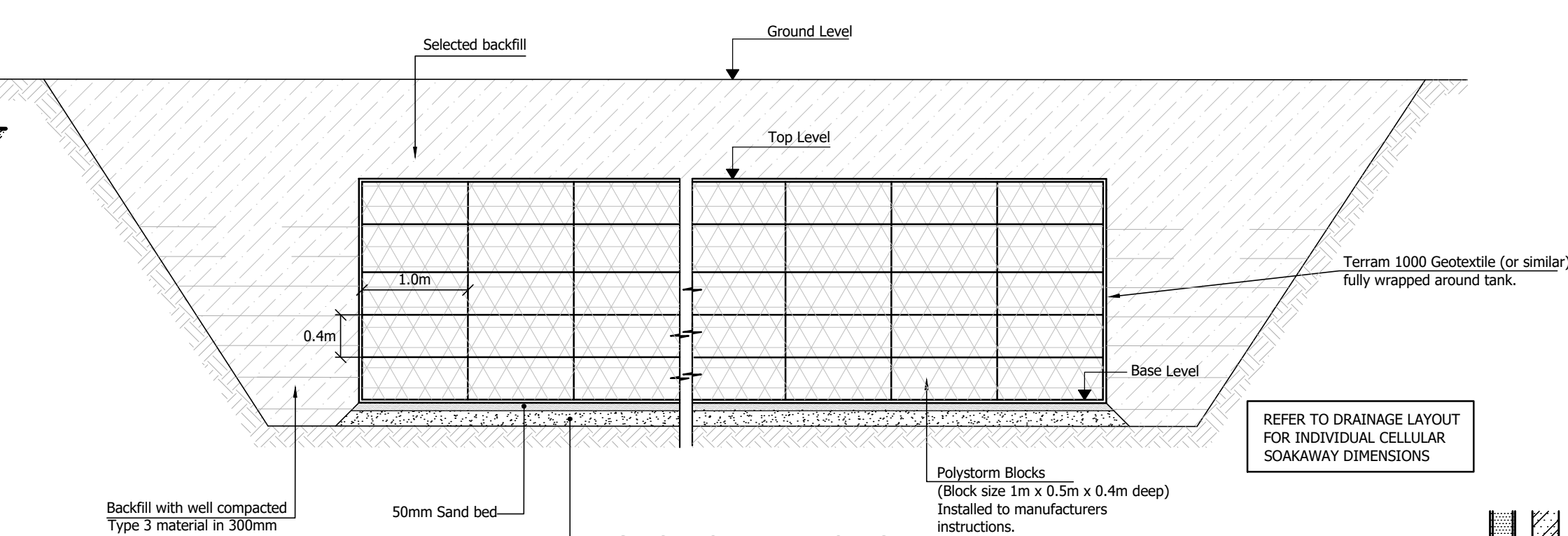
EXTERNAL RAINWATER DOWNPIPE TO DRAIN (1:10 typical)



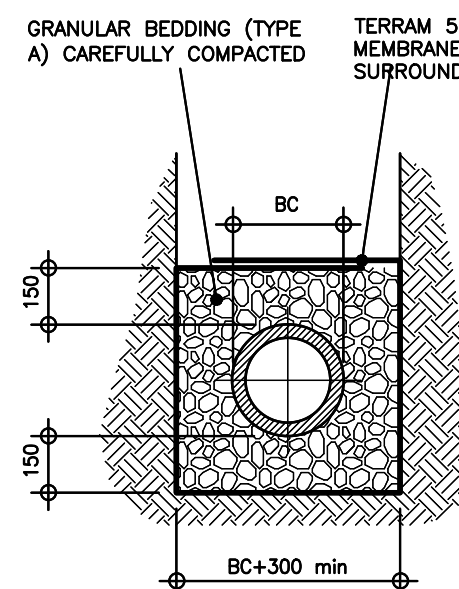
TYPICAL 'NON ENTRY' TYPE INSPECTION CHAMBER (1:10 typical)



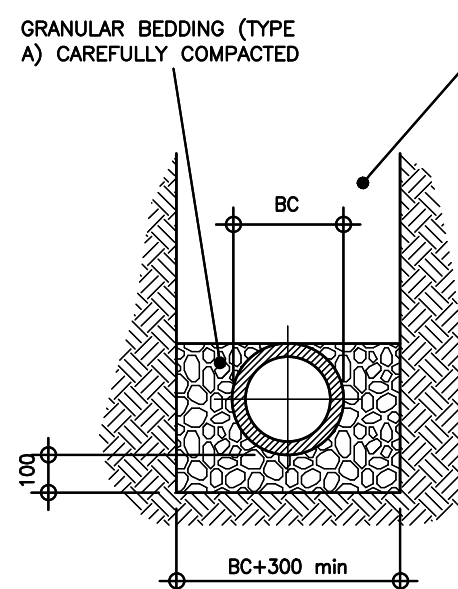
TYPICAL RODDING POINT DETAIL
(1:10 typical)



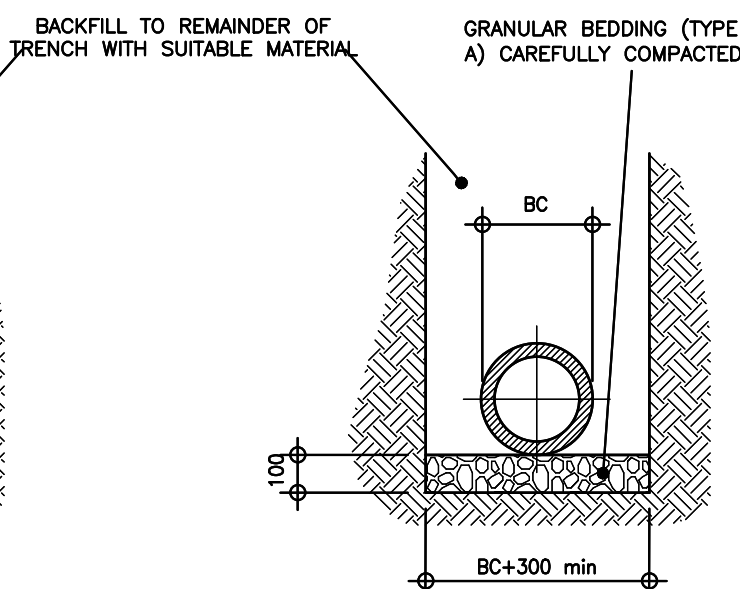
SECTION THROUGH CELLULAR SOAKAWAY



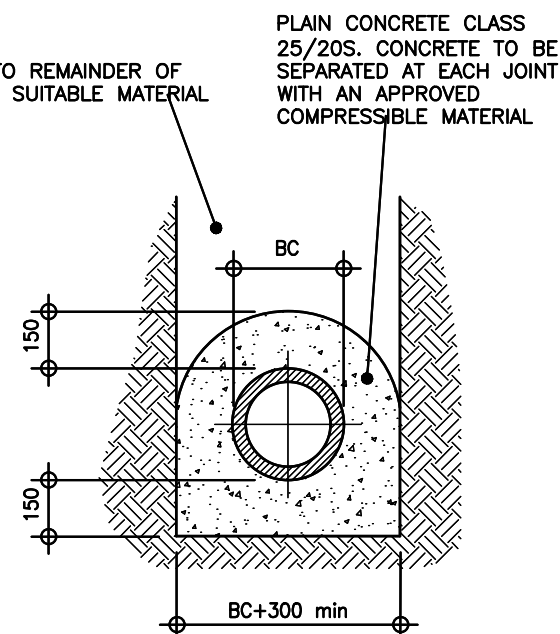
GRANULAR SURROUND
TO BE USED WHERE PIPE PASSES WITHIN 3M OF NEW OR EXISTING TREES UNLESS PIPE REQUIRED CONCRETE SURROUND



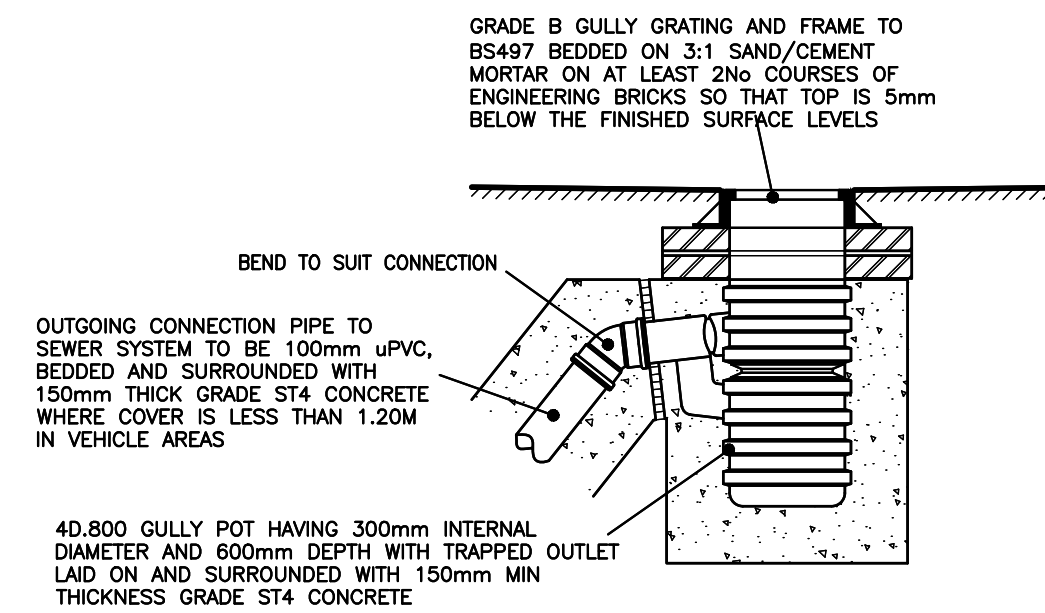
GRANULAR SIDE FILL
TO BE USED WHERE COVER TO CROWN OF PIPE IS GREATER THAN 900mm UNDER ROADS, FOOTWAYS & HARDSTANDINGS



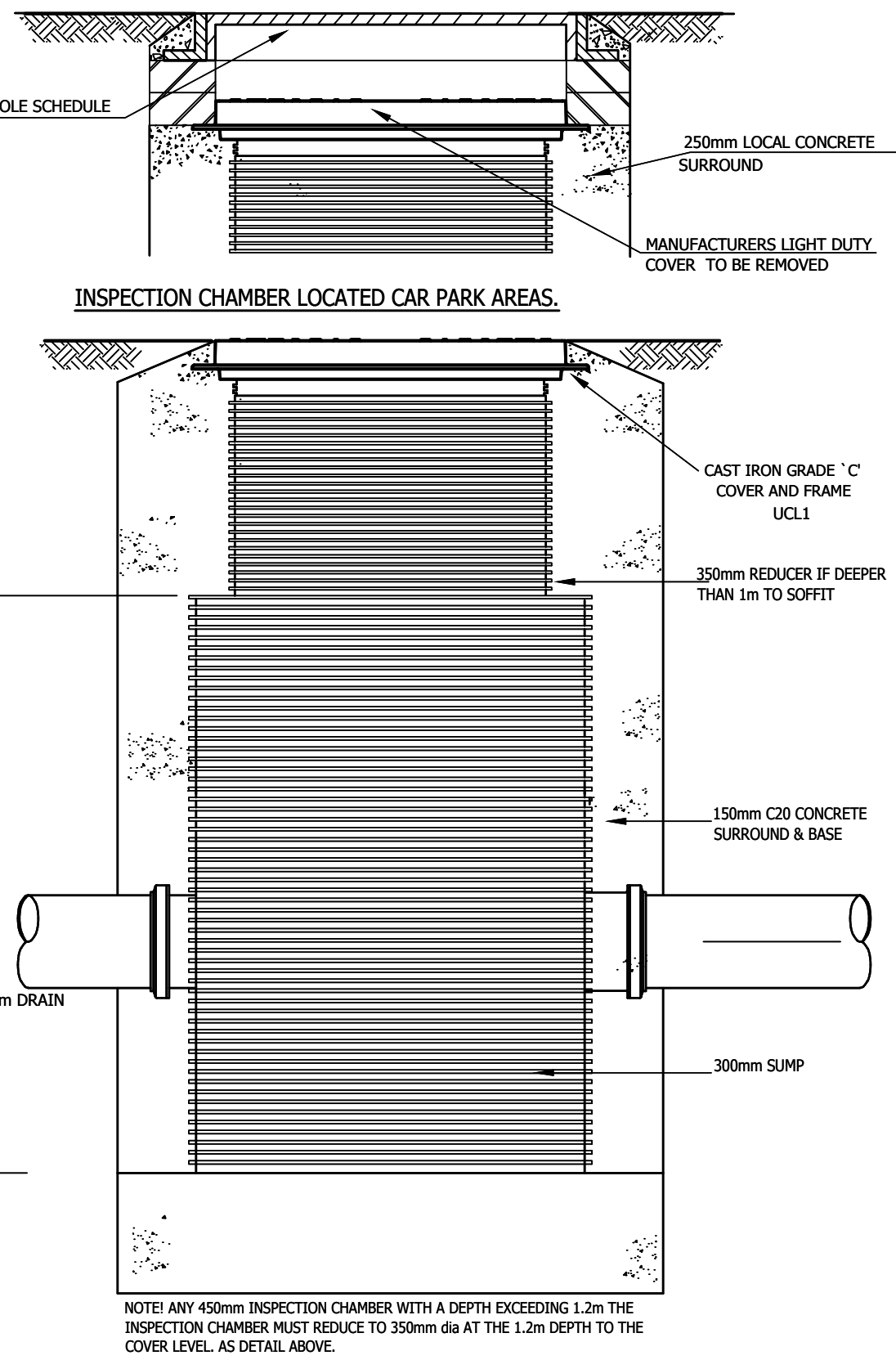
GRANULAR BED
TO BE USED WHERE COVER TO CROWN OF PIPE IS GREATER THAN 600mm IN LANDSCAPED AREAS



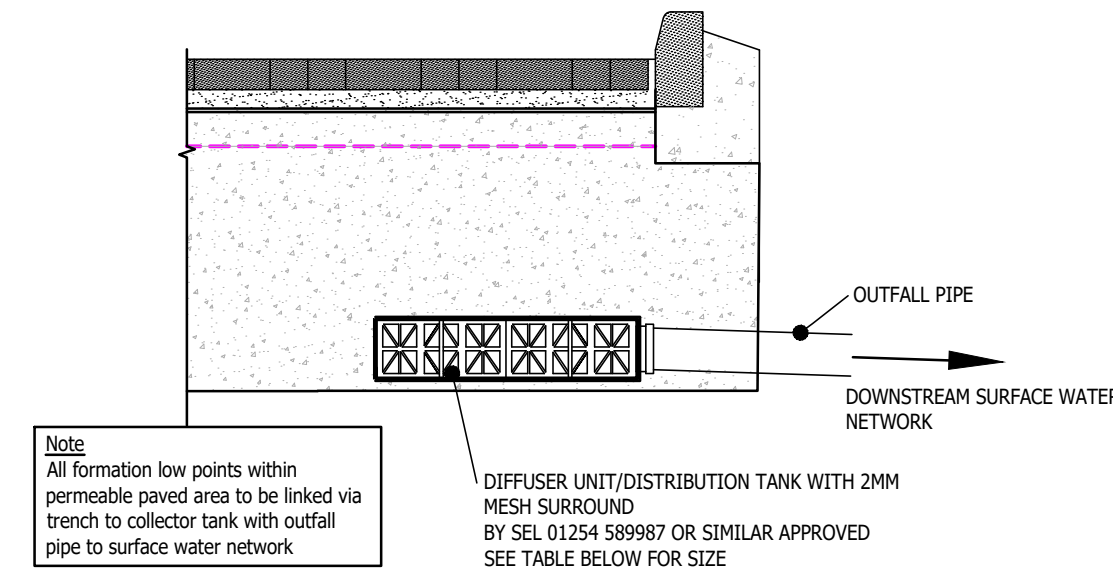
CONCRETE SURROUND
TO BE USED WHERE COVER TO CROWN OF PIPE IS LESS THAN 900mm UNDER ROADS, FOOTWAYS & HARDSTANDINGS AND LESS THAN 600mm IN LANDSCAPED AREAS



YARD GULLY DETAIL (TYPE 1)
(1:20 Typical)



PIC CATCHPIT

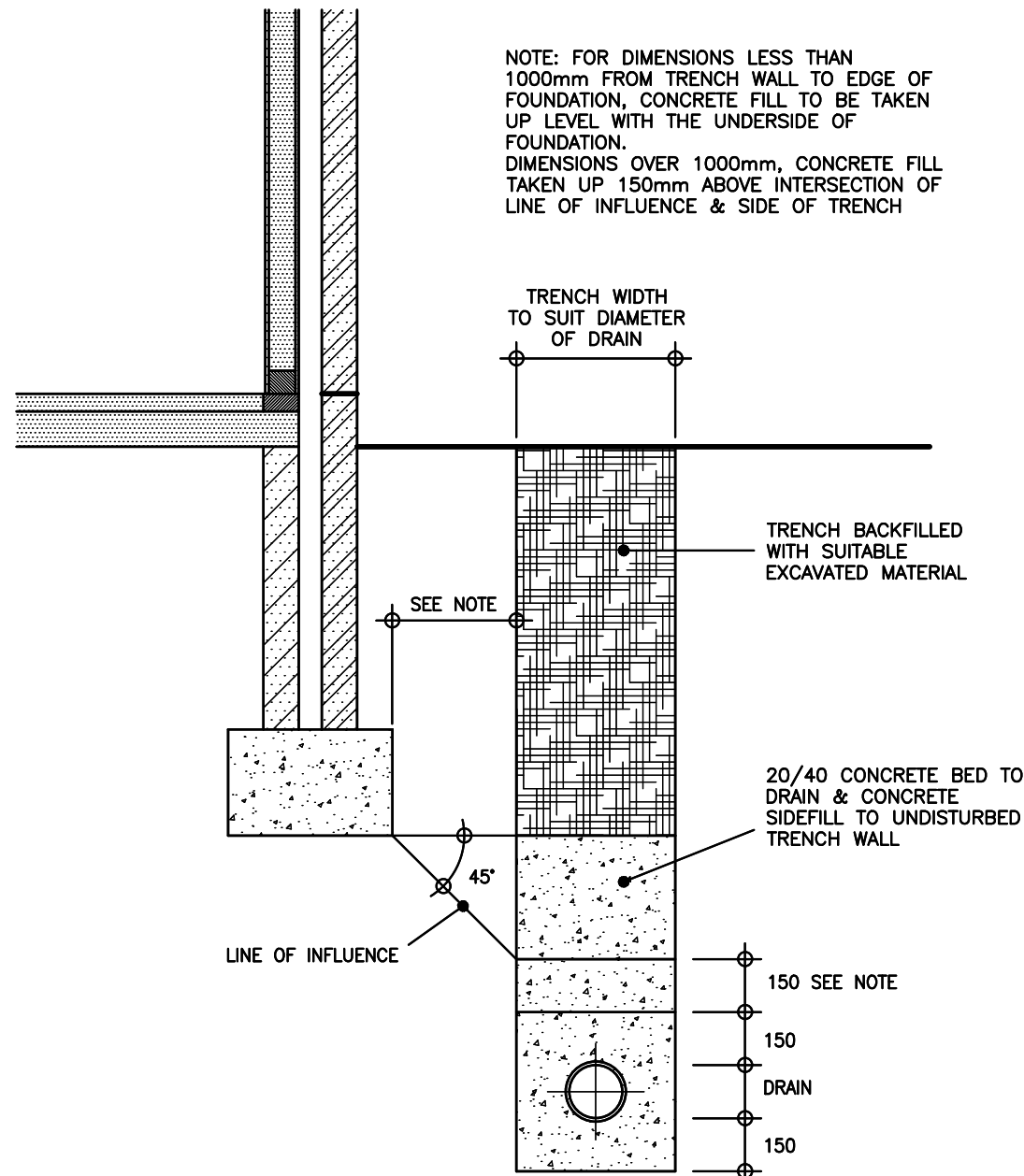


DISTRIBUTION/COLLECTOR TANKS				
Type	Size	Pipe connection dia	Max. Drained Area m²	Max. Flow rate from DT
1	710mm x 710mm x 150mm thick	110/160	100	3 l/s
2	710mm x 355mm x 300mm thick	110/160/2250	162	4.8 l/s
3	2130mm x 355mm x 300mm thick	110/160/2250	250	6.3 l/s

NOTES:
Maximum flow rates and areas in this table are based on the infiltration rate of open graded aggregate sub-base to be 7×10^{-7} m/s in a 1 in 100 year storm.
Min spacing on plan between DT's to be 2m for Type 1, 3m for a Type 2, and 4m for a Type 3.
If the roof drained has syphonic RWP's then the size of the DT's should be based on the designed flow rate for each RWP given by the M&E engineer.

DT Type 1 specification reference - SEL: PV0005101 with 110/10 pipe connection. DT Type 2 specification reference - SEL: PV0005010 with 110/10 pipe connection (Bespoke order). DT Type 3 specification reference - SEL: PV0005201 with 110/10 pipe connection. All other bespoke DT sizes need to be manufactured to order.

DISTRIBUTION/COLLECTOR TANK DETAIL WITHIN TANKED PERMEABLE PAVING (MARKED DT ON LAYOUT)



CONCRETE BACKFILL IN TRENCHES ADJACENT TO FOUNDATIONS(1:20 typical)

- GENERAL NOTES**
- The location, size, depth and identification of existing services that may be shown or referred to on this drawing have been assessed from non intrusive observations, record drawings or the file. The contractor shall safely carry out intrusive investigations, trial holes or soundings prior to commencing work to satisfy himself that it is safe to proceed and that the assessments are accurate. any discrepancies shall be notified to gta prior to works commencing.
 - Tender or billing drawings shall not be used for construction or the ordering of materials.
 - Do not scale. All dimensions and levels to be site confirmed.
 - This drawing shall be read in conjunction with all relevant architects, consultants drawings and specifications, together with H&S plan requirements.
 - Copyright : This drawing must not be copied, amended nor reproduced without the prior written agreement of gta.
 - All drawings specifications and recommendations made by gta are subject to Local Authority and other relevant Statutory Authorities approval. Any works or services made abortive due to the client proceeding prior to these approvals is considered wholly at the Clients risk. gta hold no responsibility for resulting abortive works or costs.
 - If viewing this drawing as an Autocad file (.dwg) in digital format then it is done so with this Disclaimer due to the fact that it can be altered and manipulated following its issue by GTA Civils & Transport and therefore, any alteration or modification of DWG data files provided by GTA Civils & Transport, by you or a third party, without GTA Civils and Transport's express written approval, is done so entirely at your own risk. Modification includes (but is not limited to) turning layers on and off, unfreezing layers and reloading, turning on and off print functions and unloading x-refs.
 - Your attention is also drawn to the fact that the information contained within this file may be subject to alteration at any time, pending technical approval from an approving authority or at the client's instruction. It is therefore strongly recommended that multiple and regular cross checks are made against the current contract drawings.
 - It is your responsibility to ensure that the correct issue or revision of the DWG data file is being used and requests for updated information made accordingly.
 - Should any apparent discrepancies between the data contained within the DWG file and the current contract drawings become evident, it must be reported back to GTA Civils & Transport as soon as reasonably practicable. Precedence should be given to the current contract drawings (PDF) unless advised otherwise.

P1	INITIAL ISSUE	03/12/25	GS	MB
Rev	Amendments	Date	Dsn	Chk
Status	PRELIMINARY			
Client	REMMUS DESIGNER HOMES			
Architect				
Project	COLLEGE ROAD ARDINGLY			
Title	PRIVATE DRAINAGE DETAILS			
Date	DECEMBER 2025	Scale @ A1	NTS	
Clients Ref		Project Ref.	11109	
 Maple House, 192-198 London Road, Burgess Hill, West Sussex, RH15 9RD Tel:01444 871444 Web: www.gtacivils.co.uk				
Drawing Number	11109/1701			Rev.
				P1

Appendix C

Flow Drainage Calculations

Design Settings

Rainfall Methodology	FEH-22	Maximum Time of Concentration (mins)	30.00	Preferred Cover Depth (m)	1.200
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0	Include Intermediate Ground	✓
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00	Enforce best practice design rules	x
CV	1.000	Connection Type	Level Soffits		
Time of Entry (mins)	5.00	Minimum Backdrop Height (m)	0.200		

Nodes

Name	Area (ha)	T of E (mins)	Add Inflow (l/s)	Cover Level (m)	Diameter (mm)	Depth (m)	Invert Level (m)
SA Plot 3	0.023	5.00	0.0	86.700	1200	2.000	84.700

Simulation Settings

Rainfall Methodology	FEH-22	Winter CV	1.000	Drain Down Time (mins)	240	Check Discharge Rate(s)	x
Rainfall Events	Singular	Analysis Speed	Normal	Additional Storage (m³/ha)	20.0	Check Discharge Volume	x
Summer CV	1.000	Skip Steady State	x	Starting Level (m)			

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)	Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0	100	45	0	0
30	0	0	0				

Node SA Plot 3 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.04680	Porosity	0.95	Pit Width (m)	2.500	Inf Depth (m)	
Side Inf Coefficient (m/hr)	0.04680	Invert Level (m)	84.700	Pit Length (m)	4.500	Number Required	1
Safety Factor	2.0	Time to half empty (mins)	1006	Depth (m)			

Results for 2 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	SA Plot 3	495	85.104	0.404	0.7	4.8642	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
720 minute summer	SA Plot 3	Infiltration	0.1

Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	SA Plot 3	570	85.594	0.894	1.0	10.7719	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
600 minute winter	SA Plot 3	Infiltration	0.2

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	SA Plot 3	1110	86.464	1.764	0.9	21.2570	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
1440 minute winter	SA Plot 3	Infiltration	0.2

Design Settings

Rainfall Methodology	FEH-22	Maximum Time of Concentration (mins)	30.00	Preferred Cover Depth (m)	1.200
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0	Include Intermediate Ground	✓
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00	Enforce best practice design rules	x
CV	1.000	Connection Type	Level Soffits		
Time of Entry (mins)	5.00	Minimum Backdrop Height (m)	0.200		

Nodes

Name	Area (ha)	T of E (mins)	Add Inflow (l/s)	Cover Level (m)	Diameter (mm)	Depth (m)	Invert Level (m)
SA Plot 4	0.023	5.00	0.0	86.600	1200	2.000	84.600

Simulation Settings

Rainfall Methodology	FEH-22	Winter CV	1.000	Drain Down Time (mins)	240	Check Discharge Rate(s)	x
Rainfall Events	Singular	Analysis Speed	Normal	Additional Storage (m³/ha)	20.0	Check Discharge Volume	x
Summer CV	1.000	Skip Steady State	x	Starting Level (m)			

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)	Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0	100	45	0	0
30	0	0	0				

Node SA Plot 4 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.04680	Porosity	0.95	Pit Width (m)	2.500	Inf Depth (m)	
Side Inf Coefficient (m/hr)	0.04680	Invert Level (m)	84.600	Pit Length (m)	4.000	Number Required	1
Safety Factor	2.0	Time to half empty (mins)	984	Depth (m)			

Results for 2 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	SA Plot 4	495	85.061	0.461	0.7	5.0080	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
720 minute summer	SA Plot 4	Infiltration	0.1

Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	SA Plot 4	585	85.609	1.009	1.0	10.9589	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
600 minute winter	SA Plot 4	Infiltration	0.2

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	SA Plot 4	1110	86.584	1.984	0.9	21.5474	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
1440 minute winter	SA Plot 4	Infiltration	0.2

Design Settings

Rainfall Methodology	FEH-22	Maximum Time of Concentration (mins)	30.00	Preferred Cover Depth (m)	1.200
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0	Include Intermediate Ground	✓
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00	Enforce best practice design rules	x
CV	1.000	Connection Type	Level Soffits		
Time of Entry (mins)	5.00	Minimum Backdrop Height (m)	0.200		

Nodes

Name	Area (ha)	T of E (mins)	Add Inflow (l/s)	Cover Level (m)	Diameter (mm)	Depth (m)	Invert Level (m)
SA Plot 5	0.027	5.00	0.0	86.200	1200	2.000	84.200

Simulation Settings

Rainfall Methodology	FEH-22	Winter CV	1.000	Drain Down Time (mins)	240	Check Discharge Rate(s)	x
Rainfall Events	Singular	Analysis Speed	Normal	Additional Storage (m³/ha)	20.0	Check Discharge Volume	x
Summer CV	1.000	Skip Steady State	x	Starting Level (m)			

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)	Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0	100	45	0	0
30	0	0	0				

Node SA Plot 5 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.04680	Porosity	0.95	Pit Width (m)	2.500	Inf Depth (m)	
Side Inf Coefficient (m/hr)	0.04680	Invert Level (m)	84.200	Pit Length (m)	5.000	Number Required	1
Safety Factor	2.0	Time to half empty (mins)	1025	Depth (m)			

Results for 2 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	SA Plot 5	336	84.626	0.426	0.9	5.6493	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
360 minute winter	SA Plot 5	Infiltration	0.1

Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	SA Plot 5	570	85.144	0.944	1.2	12.5360	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
600 minute winter	SA Plot 5	Infiltration	0.2

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	SA Plot 5	1110	86.081	1.881	1.1	24.9696	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
1440 minute winter	SA Plot 5	Infiltration	0.3

Appendix D

Southern Water Correspondence



Mr David Badger
24 Greenways
Haywards Heath
West Sussex
RH16 2DT

Your ref
1042

Our ref
DSA000003700

Date
14 July 2025

Contact
Tel 07460 644246

Dear Mr Badger,

Application to Connect to the Public Sewerage System - Section 106 Water Industry Act 1991.

Location: Land North West of Earthingleigh, College Road, Ardingly, Haywards Heath, West Sussex, RH17 6SA.

The inspection of your sewer connection has been carried out and we are pleased to confirm that your connection to the public sewer complies with Southern Water's requirements.

We are always keen to receive feedback from our customers to understand what you think we do well and where we can do better. We would be grateful if you completed this quick survey to inform our continuous improvement activities.

southernwater.co.uk/developing-building/feedback

Yours sincerely,

Dale Hughes
Technical Coordinator
Wastewater
Developer Services
07460 644246

Appendix E

SuDS Drainage Maintenance & Management Plan

1. Maintenance Responsibilities

It is the overarching responsibility of each site owner to ensure the SuDS Drainage Infrastructure is maintained in accordance with this Maintenance Plan. (The foul drainage network shall be Southern Water's responsibility – where this is in shared ownership.)

The responsibility of maintenance, repair, renewal and replacement of the surface water drainage system will be conferred on to the property owners with all costs shared on an equal basis. These arrangements will be administered in the Transfer Document TP1 of each property at the point of sale with the same responsibilities transferring with each property to the successors in title.

2. Contamination or Dilution of Spillage

The Environment Agency would prefer all spillages to be contained to prevent any downstream contamination. However, this cannot always be achieved, depending on the nature of the spillage. In all circumstances involving the spillage of substances into the water environment it is important that the Environment Agency are notified as soon as possible so that they can provide advice and take appropriate action.

Prompt action following a spillage can prevent or reduce its effects, whilst inappropriate action may cause or worsen the pollution effects. In the event of a spillage on site it is the responsibility of the site staff to clear up any spillage before it enters the drainage system. The primary method of dealing with any spillage of Hydrocarbons should be to use sand to soak up the leak and prevent any Hydrocarbons entering the drainage system. Once sand has been contaminated it should not be washed into the drainage system but disposed of by a Licensed Contractor.

Environment Agency – Emergency Contact Number

In the event of a spillage the Environment Agency should be contacted to notify the event and seek advice. The Environment Agency's Incident Hotline is **0800 80 70 60** (Freephone 24hrs).

3. Health and Safety

All those responsible for and involved in the maintenance of the site drainage systems should be safety-conscious and comply with the relevant health and safety legislation. This includes:

- The Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999
- The Workplace (Health, Safety and Welfare) Regulations 1992

Each freeholder is responsible for suitable risk assessment and management to ensure safe working conditions and practices. Measures to protect potential visitors also need to be considered.

Specialist contractors used should work to industry guidelines and be able to demonstrate safe working practices.

Employers have a duty to employees to inform them about the risks of their work environment and to decrease the risk as far as reasonably practicable. Appropriate personal protective equipment (PPE) should be provided and policies implemented based on risk assessment.

Operatives should be trained for working near water. Risks of contaminated water should be considered. Checking for open cuts and using nitrile gloves, waterproof plasters etc is advised.

Entry of pipes, chambers, tanks and culverts should be avoided wherever possible. Work should be carried out from the surface using appropriate equipment. In the event that entry cannot be avoided to perform a critical task, the required safety training, protection measures and precautions must be implemented prior to entry. Lone working should never be attempted.

For further information refer to Section 36 of The SuDS Manual (CIRIA C753).

4. Schedule A – Sewers, Manholes, Gullies, Channel Drains

Regular inspection and maintenance are required to ensure the effective long-term operation of private drains, manholes, gullies & channel drains.

Schedule	Action	Frequency
Regular Maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action	6 Monthly intervals
	Hardstanding areas to be swept clear of debris, to prevent possibility of blockages to the receiving drainage systems	Monthly
	Debris removal from gullies & channel drains (where may cause risks to performance)	6 monthly intervals, after autumn leaf fall, or as required based on specific observations
	Debris removal from silt buckets where draining into a permeable sub-base	Every 3 months, after autumn leaf fall, or as required based on specific observations
	Lift and inspect receiving manholes to check for any blockages.	Monthly
Remedial Actions	Repair any damaged gully or channel drain gratings	As required
	Replace / fix any loose channel drain covers	As required
Monitoring	Carry out full CCTV survey to confirm ongoing integrity of <u>all</u> drains. Inspect all gullies, silt pits & drainage channels during the survey	10-yearly intervals

Where appropriate refer also to specialist drainage manufacturer's information and maintenance requirements. In all instances, inspection and cleaning should be carried out only by a specialist contractor and in accordance with the guidelines given in 'Safe Working in Sewers and at Sewage Works' published by National Joint Health and Safety Committee for the Water Services.

5. Cellular Soakaways

Make: Modular crates manufacturer to be determined.

Each soakaway's maintenance and monitoring requirements are as follows:

Schedule	Action	Frequency
Regular Maintenance	Inspect for sediment and debris in pre-treatment components and floor of inspection tube/chamber	Annually
	Cleaning of gutters and any filters on downpipes	Annually (or as required based on inspections)
	Trimming any roots that may be causing blockages	Annually (or as required based on inspections)
Occasional Maintenance	Removal of sediment from pre-treatment devices (silt traps)	Six monthly
	Remove tree roots or trees that are close to the soakaway	As required
Remedial Actions	Rehabilitate infiltration or filtration surfaces	As required
	Inspect inlets and inspection points for blockages, clogging, standing water and structural damage	Monthly
Monitoring	Inspect pre-treatment systems / inlets and ground surface for silt accumulation. Establish appropriate silt removal frequencies	Half-yearly

Sediments excavated from upstream pre-treatment devices that receive runoff from residential or standard road and roof areas are generally not toxic or hazardous material and can be safely disposed of by either land application or landfilling. However, consultation should take place with the environmental regulator to confirm appropriate protocols. Sediment testing may be required before sediment excavation to determine its classification and appropriate disposal method.



Civil Engineering - Transport Planning - Flood Risk

GTA Civils & Transport, Maple House, 192-198 London Road, Burgess Hill, West Sussex, RH15 9RD
T: 01444 871444 E: enquiries@gtacivils.co.uk [www: gtacivils.co.uk](http://www.gtacivils.co.uk)
 GTA Civils & Transport Limited, Registered in England No. 11917461. VAT Registration No. 319 2609 02



Certificate No.89542021

