



Apex House- Plymouth Grove

Pre- Commencement Planning conditions



REPORT ISSUE TABLE

Purpose of Issue	Revision	Date	Prepared By	Checked By
COMMENTS- Condition 9	P01	26/01/2025	NFP	JT
COMMENTS- Condition 9	P02	12/02/2026	NFP	JT



Apex House- Plymouth Grove

Condition 9

First Correspondence – Received 09th January 2026.

Location: Apex House, Plymouth Grove, Manchester, M13 9LU- the site is to the southeast of Manchester City centre and is bounded to the south by Plymouth Grove and the west by Dryden Street.

REF: 13294/FO/2023

Roscoe Comments – Provided 26th January 2026.

Roscoe comments have been provided to each comment in purple.



1.01 Condition 9

Part A

The development shall not commence until a scheme for the drainage of surface water from that phase of the new development shall be submitted for approval in writing by the city council as the local planning authority. This shall include:

1. A finalised drainage layout showing all components, outfalls, levels and connectivity.

ROSCOE Response 1.01

The finalised drainage layout has been attached in Appendix A- this revision includes all components, outfalls, levels and connectivity.



1.02 Condition 9

Part A

The development shall not commence until a scheme for the drainage of surface water from that phase of the new development shall be submitted for approval in writing by the city council as the local planning authority. This shall include:

- Maximised integration of green SuDS components (utilising in infiltration, raingardens or attenuation) if practicable.

ROSCOE Response 1.02

The current proposals involve the utilisation of an attenuation tank and filter drain. We have decided to not opt for other SuDS features due to site constraints- namely that certain SuDS components, such as soakaways, have to be at least 7m away from the proposed building perimeter. The most appropriate green SuDS component for the site would be a filter drain.

Filter drains offer significant biodiversity and amenity benefits alongside their primary role in surface water management. Filter drains can offer significant biodiversity and amenity benefits alongside their primary role in surface water management. Filter drains can enhance biodiversity, especially when designed with vegetation. They create habitats that support insects, pollinators and small mammals, while also acting as linear green corridors that help wildlife move through urban spaces. The stones and gravel within filter drain offer microhabitats for invertebrates, further boosting ecological value. From an amenity perspective, vegetated filter drains improve the visual appeal of a site compared to traditional drainage systems.



1.03 Condition 9

Part A

The development shall not commence until a scheme for the drainage of surface water from that phase of the new development shall be submitted for approval in writing by the city council as the local planning authority. This shall include:

- Runoff volume in the 1 in 100-year, 6 hours rainfall shall be constrained to a value as close as is reasonably practicable to the greenfield runoff volume for the same event, but never to exceed the runoff volume for the same event, but never to exceed the runoff, volume from the development site prior to redevelopment

ROSCOE Response 1.03

The runoff rate is proposed to be 5l/s, which is the greenfield run off rate for the site. This has been modelled in Infodrainage- the results of which have been included in Appendix B.



1.04 Condition 9

Part A

The development shall not commence until a scheme for the drainage of surface water from that phase of the new development shall be submitted for approval in writing by the city council as the local planning authority. This shall include:

- Evidence that the drainage system has been designed (unless an area is designated to hold and/or convey water as part of the design) so that flooding does not occur during a 1 in 100-year rainfall event with allowance for 45% climate change in any part of a building.

ROSCOE Response 1.04

The drainage system has been modelled in infodriange for the 1 in 100 plus 45CC event. This has been included in Appendix B.



1.05 Condition 9

Part A

The development shall not commence until a scheme for the drainage of surface water from that phase of the new development shall be submitted for approval in writing by the city council as the local planning authority. This shall include:

- Assessment of overland flow routes for extreme events that is diverted away from buildings (including basements). Overland flow routes need to be designed to convey the flood water in a safe manner in the event of a blockage or exceedance of the proposed drainage system capacity including inlet structures. A layout with overland flow routes needs to be presented with appreciation of these overland flow routes with regards to the properties on site and adjacent properties off site.

ROSCOE Response 1.05

A drawing detailing the overland flow routes for extreme events has been included in Appendix C.



1.06 Condition 9

Part A

The development shall not commence until a scheme for the drainage of surface water from that phase of the new development shall be submitted for approval in writing by the city council as the local planning authority. This shall include:

1. Progression through the drainage hierarchy shall be evidence based and supported by site investigation. Results of ground investigation carried out under building research establishment digest 365. site investigations should be undertaken in locations and at proposed depths of the proposed infiltration devices. Proposal of the attenuation that is achieving half emptying time within 24 hours. If no ground investigations are possible or in infiltration is not feasible on site, evidence of alternative surface water disposal routes (as follows) is required.

ROSCOE Response 1.06

Infiltration into the Ground

Soakaways and other methods of infiltration into the ground may not be feasible on the site due to the local geology being predominantly made up of cohesive soils. In accordance with best practice and to assess the viability of infiltration. The site is also constrained in terms of size and methods of infiltration such as soakaways require a 7m easement from the perimeter of the building so this is not feasible for our site.

To a surface water body

There are no watercourses around the site that water can be discharged into.

To a Surface water sewer, highway drain, or another drainage system

According to United Utilities Asset survey, there is not a surface water sewer in close proximity to the site- therefore this will not be the intended discharge point.

To a Combined Sewer

There is a combined sewer to the north of the site which we will be connecting into at a restricted flow rate of 5l/s.



1.07 Condition 9

Part A

The development shall not commence until a scheme for the drainage of surface water from that phase of the new development shall be submitted for approval in writing by the city council as the local planning authority. This shall include:

1. Where surface water is connected to the public sewer, agreement in principle from United Utilities is required that there is adequate spare capacity in the existing system taking future development requirements into account. An email of acceptance of proposed flows and/or new connection will suffice.

ROSCOE Response 1.07

The site planning has been agreed, with United Utilities involved throughout the decision-making process. They are aware of and have reviewed the proposed drainage strategy. The planning decision is included in Appendix D.



1.08 Condition 9

Part A

The development shall not commence until a scheme for the drainage of surface water from that phase of the new development shall be submitted for approval in writing by the city council as the local planning authority. This shall include:

1. Hydraulic calculation of the proposed drainage system, including all engineering parameters

ROSCOE Response 1.08

The hydraulic calculations have been modelled in Infodrainage and have been included in Appendix B.



1.09 Condition 9

Part A

The development shall not commence until a scheme for the drainage of surface water from that phase of the new development shall be submitted for approval in writing by the city council as the local planning authority. This shall include:

1. Construction details of flow control and SuDS elements.

ROSCOE Response 1.09

Drainage details have been attached in Appendix E.



1.10 Condition 9

Part A

CCTV survey and routing plan of existing drainage system to understand condition, capacity, connectivity.

ROSCOE Response 1.10

A CCTV drainage survey is not required- there is no existing drainage within the proximity of the building- therefore no CCTV survey has been conducted.



1.11 Condition 9

Part A

Where surface water is connected to the public sewer, agreement in principle from United Utilities is required that there is adequate spare capacity in the existing system taking future development requirements into account. An email of acceptance of proposed flows and/or new connection will suffice

ROSCOE Response 1.11

Plymouth grove has been accepted for planning - United Utiltiies were a statutory consultee in the process- the flow rate and connection points have been agreed.



Appendix A: Proposed Drainage Layout

Important CDM / H&S note

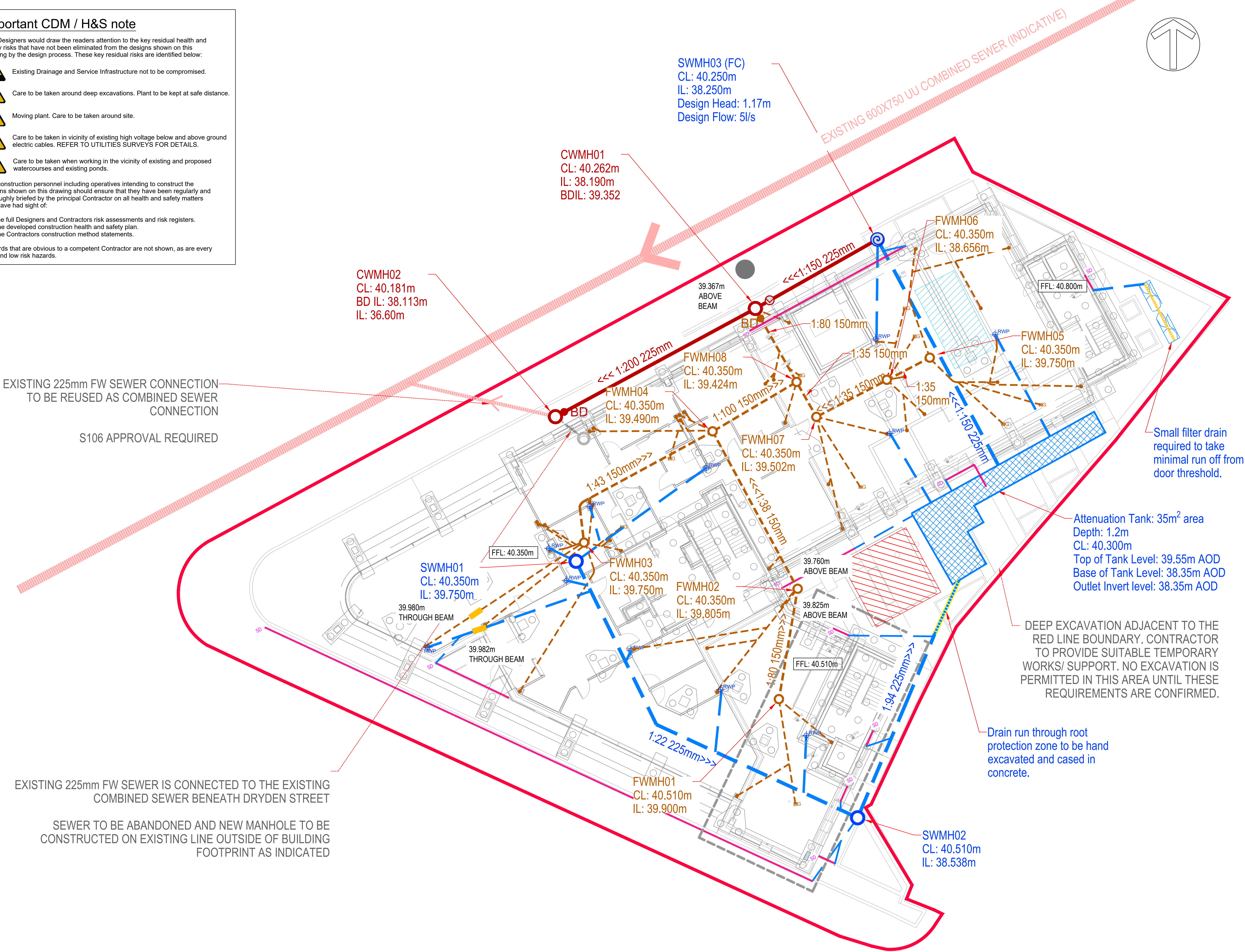
The Designers would draw the readers attention to the key residual health and safety risks that have not been eliminated from the designs shown on this drawing by the design process. These key residual risks are identified below:

- Existing Drainage and Service Infrastructure not to be compromised.
- Care to be taken around deep excavations. Plant to be kept at safe distance.
- Moving plant. Care to be taken around site.
- Care to be taken in vicinity of existing high voltage below and above ground electric cables. REFER TO UTILITIES SURVEYS FOR DETAILS.
- Care to be taken when working in the vicinity of existing and proposed watercourses and existing ponds.

Any construction personnel including operatives intending to construct the designs shown on this drawing should ensure that they have been regularly and thoroughly briefed by the principal Contractor on all health and safety matters and have had sight of:

- The full Designers and Contractors risk assessments and risk registers.
- The developed construction health and safety plan.
- The Contractors construction method statements.

Hazards that are obvious to a competent Contractor are not shown, as are every day and low risk hazards.



DO NOT SCALE

NOTES:

- Foul pop-ups & RWP's shown are based upon DAY Architects drawing 'P662-DAY-XX-00-DR-A-250001, 250002 and 250003'.
- Connections to the public sewer has been agreed with United Utilities. SW Discharge rate agreed through planning and with United Utilities.
- All drainage is to remain private and designed following Building Regulations Part H guidance.
- Any drainage channels to be Gatic Pavement or similar approved.
- Drains with less than 0.6m cover to have concrete surround.
- Existing private drainage on the site not to be re-used to be grubbed out or removed.
- All internal foul gully's to be fitted with non return valves.
- PPIC access opening to be restricted to 350mm diameter or 300x300mm where depth of chamber to inverts is more than 1m
- Location of all surface water pick up points are subject to finalised landscape Architects levels design.
- Attenuation tank location and size shown as per latest design calculation pack.
- All external handstanding designed as impermeable. Drainage design subject to change if area's of permeable surfacing are introduced.
- Drainage design has allowed for the standard 1.2m cover from crown of pipe to ground level at the head of drainage runs in trafficked areas and 0.9m cover in pedestrian zones. All drainage depths are subject to change following detailed design and discussions with the wider construction team.
- Depths for connections offsite are taken from CCTV information provided by Surveys Solutions, April 2023 ref 47361MCUG-01.
- All drainage pop ups to be 150mm diameter unless specified otherwise.
- All external drainage to be 150mm diameter unless specified otherwise.

KEY PLAN

- Proposed Surface Water Drainage
- Gully
- Rain Water Pipe
- Surface Water Flow Control Chamber
- Proposed Foul Sewer Drainage
- Foul Pop Up
- Existing Foul Sewer Drainage
- Existing Combined Sewer Drainage
- Proposed Combined Sewer Drainage
- Crane Base Location
- Site Boundary
- Slot Drain - Gatic
- Demolished Drainage
- Cellular Attenuation Tank
- Concrete Surround
- Filter Drain
- Denotes drainage runs to pass through middle third of ground beam.
- Sprinkler Tank Location

P07	23.01.26	NP	STAGE 4 ISSUE	JT	JC
P06	11.12.25	KT	STAGE 4 ISSUE	JT	JC
P05	30.10.25	KT	UPDATED TO SUIT CLIENT COMMENTS	JT	JC
P04	23.10.25	KT	UPDATED TO SUIT CLIENT COMMENTS	JT	JC
P03	08.10.25	KT	UPDATED TO SUIT LATEST POP UP LOCATIONS	JT	JC
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: STAGE 4



CLIENT: PLYMOUTH GROVE PROPERTY DEVELOPMENTS

ARCHITECT: DAY ARCHITECTURAL LTD

PROJECT: APEX HOUSE
PLYMOUTH GROVE

TITLE: PROPOSED DRAINAGE PLAN

SCALE @ A1:	CHECKED:	APPROVED:
1:150	JT	JT
PROJECT NUMBER:	DESIGNED:	DRAWN:
25406	NP	NP
		DATE:
		JULY 2025

DRAWING No:	REV:
P662-ROS-XX-XX-DR-C-0501	P07



Appendix B: Infodrainage Model

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Inflows Summary Storm Phase: Phase	Roscoe Engineering:		



FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
Catchment Area	FSR: 100 years: +45 %: 15 mins: Summer	0.03	22.1	9.715
Catchment Area (1)	FSR: 100 years: +45 %: 15 mins: Summer	0.03	23.6	10.378
Catchment Area (2)	FSR: 100 years: +45 %: 15 mins: Summer	0.04	28.4	12.467
Catchment Area (3)	FSR: 100 years: +45 %: 15 mins: Summer	0.02	11.8	5.183
Catchment Area (4)	FSR: 100 years: +45 %: 15 mins: Summer	0.02	11.8	5.168

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Roscoe Engineering:		



FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
Manhole	FSR: 100 years: +45 %: 15 mins: Summer	40.35 0	39.75 0	39.826	0.076	22.1	0.085	0.000	21.7	9.740	OK
Manhole (1)	FSR: 100 years: +45 %: 120 mins: Winter	40.51 0	38.93 5	39.526	0.591	14.6	0.668	0.000	14.4	42.517	Surcharged
Manhole (2)	FSR: 100 years: +45 %: 120 mins: Winter	40.25 0	38.25 0	39.524	1.274	9.0	1.440	0.000	5.1	62.472	Surcharged
Manhole (3)	FSR: 100 years: +45 %: 15 mins: Summer	40.26 2	38.19 0	38.290	0.100	14.8	0.113	0.000	14.3	11.347	OK
Manhole (4)	FSR: 100 years: +45 %: 60 mins: Winter	40.18 1	38.11 3	38.169	0.056	15.5	0.000	0.000	15.5	47.181	OK

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Roscoe Engineering:		



**FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By:
Max. Avg. Depth**

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Tank	FSR: 100 years: +45 %: 120 mins: Winter	39.525	39.525	1.175	1.175	19.0	39.056	0.000	0.000	4.8	37.042	2.116	OK

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Connections Summary Storm Phase: Phase	Roscoe Engineering:		



FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
Pipe	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	Manhole	Manhole (1)	40.350	39.826	0.106	9.740	1.3	0.24	21.7	OK
Pipe (1)	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	Manhole (1)	Tank	40.510	39.135	0.225	19.377	1.6	0.53	44.2	OK
Pipe (2)	FSR: 100 years: +45 %: 60 mins: Winter	Pipe	Tank	Manhole (2)	39.550	39.495	0.225	9.736	0.1	0.13	4.8	Surcharged
Pipe (3)	FSR: 100 years: +45 %: 120 mins: Winter	Pipe	Manhole (2)	Manhole (3)	40.250	39.524	0.062	56.272	0.6	0.12	5.1	Surcharged
Pipe (4)	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	Manhole (3)	Manhole (4)	40.262	38.290	0.076	11.347	1.2	0.39	14.3	OK

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Phase Management Storm Phase: Phase	Roscoe Engineering:		



Phase
FSR: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Tables

Name	Max. Inflow (L/s)	Total Inflow Volume (m³)	Max. Outflow (L/s)	Total Outflow Volume (m³)
Manhole (4)			26.4	16.515
TOTAL	98.7	42.910	26.4	16.515

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Inflow Results Storm Phase: Phase	Roscoe Engineering:		



Catchment Area

Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Type : Catchment Area

Inflow

Max. Inflow (L/s)	22.1
Total Inflow Volume (m³)	9.715

Tables

Time (mins)	Total Inflow (L/s)
0	0.0
5	4.9
10	22.1
15	5.4
20	0.1
25	0.0
30	0.0

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Inflow Results Storm Phase: Phase	Roscoe Engineering:		



Catchment Area (1)
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Type : Catchment Area

Inflow

Max. Inflow (L/s)	23.6
Total Inflow Volume (m³)	10.378

Tables

Time (mins)	Total Inflow (L/s)
0	0.0
5	5.2
10	23.6
15	5.7
20	0.1
25	0.0
30	0.0

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Inflow Results Storm Phase: Phase	Roscoe Engineering:		


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INSPIRING BUILT ENVIRONMENTS



Catchment Area (2)

Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Type : Catchment Area

Inflow

Max. Inflow (L/s)	28.4
Total Inflow Volume (m³)	12.467

Tables

Time (mins)	Total Inflow (L/s)
0	0.0
5	6.2
10	28.4
15	6.9
20	0.1
25	0.0
30	0.0

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Inflow Results Storm Phase: Phase	Roscoe Engineering:		


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Catchment Area (3)

Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Type : Catchment Area

Inflow

Max. Inflow (L/s)	11.8
Total Inflow Volume (m³)	5.183

Tables

Time (mins)	Total Inflow (L/s)
0	0.0
5	2.6
10	11.8
15	2.9
20	0.1
25	0.0
30	0.0

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Inflow Results Storm Phase: Phase	Roscoe Engineering:		



Catchment Area (4)
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Type : Catchment Area

Inflow

Max. Inflow (L/s)	11.8
Total Inflow Volume (m³)	5.168

Tables

Time (mins)	Total Inflow (L/s)
0	0.0
5	2.6
10	11.8
15	2.8
20	0.1
25	0.0
30	0.0

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Roscoe Engineering:		



Manhole
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Type : Manhole

Tables

Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0
5	4.9	0.035	0.039	0.000	4.7
10	22.1	0.076	0.085	0.000	21.7
15	5.4	0.037	0.042	0.000	6.0
20	0.1	0.012	0.013	0.000	0.5
25	0.0	0.003	0.003	0.000	0.0
30	0.0	0.002	0.003	0.000	0.0

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
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Manhole (1)

Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 120 mins: Winter

Type : Manhole

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Roscoe Engineering:		



Tables

Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0
5	0.9	0.018	0.020	0.000	0.7
10	2.2	0.027	0.031	0.000	2.1
15	2.6	0.027	0.031	0.000	2.6
20	2.6	0.027	0.031	0.000	2.6
25	2.7	0.028	0.032	0.000	2.7
30	3.2	0.030	0.034	0.000	3.2
35	4.3	0.034	0.038	0.000	4.2
40	5.9	0.039	0.044	0.000	5.8
45	8.1	0.045	0.051	0.000	7.9
50	10.5	0.051	0.058	0.000	10.3
55	12.8	0.058	0.065	0.000	12.7
60	14.5	0.062	0.070	0.000	14.4
65	14.6	0.163	0.184	0.000	12.0
70	12.9	0.303	0.343	0.000	11.7
75	10.6	0.418	0.473	0.000	10.1
80	8.2	0.502	0.568	0.000	7.9
85	6.1	0.555	0.627	0.000	5.9
90	4.4	0.582	0.658	0.000	4.3
95	3.3	0.591	0.668	0.000	3.3
100	2.8	0.589	0.666	0.000	2.8
105	2.6	0.583	0.659	0.000	2.7
110	2.6	0.576	0.651	0.000	2.6
115	2.3	0.566	0.641	0.000	2.3
120	1.1	0.546	0.618	0.000	1.2
125	0.1	0.512	0.579	0.000	0.3
130	0.0	0.471	0.533	0.000	0.2
135	0.0	0.431	0.487	0.000	0.2
140	0.0	0.392	0.443	0.000	0.3
145	0.0	0.354	0.401	0.000	0.3
150	0.0	0.317	0.359	0.000	0.3
155	0.0	0.281	0.318	0.000	0.3
160	0.0	0.246	0.278	0.000	0.4
165	0.0	0.212	0.240	0.000	0.4
170	0.0	0.180	0.203	0.000	0.5
175	0.0	0.148	0.168	0.000	0.5
180	0.0	0.117	0.133	0.000	0.5
185	0.0	0.087	0.099	0.000	0.5
190	0.0	0.058	0.065	0.000	0.5
195	0.0	0.028	0.032	0.000	0.4
200	0.0	0.005	0.006	0.000	0.0
205	0.0	0.003	0.004	0.000	0.0
210	0.0	0.003	0.003	0.000	0.0
215	0.0	0.002	0.003	0.000	0.0
220	0.0	0.002	0.003	0.000	0.0
225	0.0	0.002	0.002	0.000	0.0
230	0.0	0.002	0.002	0.000	0.0
235	0.0	0.002	0.002	0.000	0.0
240	0.0	0.002	0.002	0.000	0.0

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Manhole (2)

Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 120 mins: Winter

Type : Manhole

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Roscoe Engineering:		



Tables

Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0
5	0.6	0.031	0.035	0.000	0.2
10	1.6	0.079	0.089	0.000	1.1
15	2.8	0.127	0.143	0.000	2.4
20	2.8	0.141	0.159	0.000	2.7
25	3.1	0.153	0.174	0.000	3.0
30	3.4	0.168	0.190	0.000	3.2
35	3.9	0.190	0.215	0.000	3.6
40	4.5	0.226	0.256	0.000	4.2
45	5.2	0.283	0.321	0.000	4.9
50	6.5	0.378	0.428	0.000	2.8
55	7.9	0.516	0.584	0.000	3.2
60	9.0	0.679	0.768	0.000	3.7
65	9.0	0.834	0.943	0.000	4.1
70	8.0	0.975	1.103	0.000	4.5
75	6.6	1.093	1.237	0.000	4.7
80	5.2	1.181	1.335	0.000	4.9
85	5.2	1.236	1.398	0.000	5.0
90	5.1	1.264	1.430	0.000	5.1
95	5.1	1.274	1.440	0.000	5.1
100	5.1	1.272	1.439	0.000	5.1
105	5.1	1.266	1.432	0.000	5.1
110	5.0	1.259	1.424	0.000	5.1
115	5.0	1.250	1.413	0.000	5.1
120	4.9	1.229	1.390	0.000	5.0
125	4.8	1.195	1.351	0.000	4.9
130	4.7	1.154	1.305	0.000	4.8
135	4.6	1.114	1.260	0.000	4.8
140	4.5	1.075	1.216	0.000	4.7
145	4.4	1.037	1.173	0.000	4.6
150	4.4	1.000	1.131	0.000	4.5
155	4.3	0.964	1.091	0.000	4.4
160	4.2	0.929	1.051	0.000	4.3
165	4.1	0.895	1.013	0.000	4.3
170	4.1	0.863	0.976	0.000	4.2
175	4.0	0.832	0.940	0.000	4.1
180	3.9	0.801	0.906	0.000	4.0
185	3.8	0.771	0.872	0.000	4.0
190	3.8	0.741	0.838	0.000	3.9
195	3.7	0.712	0.805	0.000	3.8
200	3.6	0.681	0.770	0.000	3.7
205	3.5	0.649	0.734	0.000	3.6
210	3.4	0.618	0.699	0.000	3.5
215	3.3	0.588	0.665	0.000	3.4
220	3.2	0.559	0.632	0.000	3.3
225	3.1	0.530	0.599	0.000	3.3
230	3.1	0.502	0.568	0.000	3.2
235	3.0	0.475	0.537	0.000	3.1
240	2.9	0.449	0.507	0.000	3.0

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Roscoe Engineering:		



Manhole (3)
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Type : Manhole

Tables

Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0
5	5.4	0.059	0.067	0.000	5.1
10	14.8	0.100	0.113	0.000	14.3
15	7.0	0.070	0.079	0.000	7.5
20	4.3	0.054	0.062	0.000	4.5
25	4.2	0.053	0.060	0.000	4.2
30	4.1	0.052	0.059	0.000	4.1

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Roscoe Engineering:		



Manhole (4)
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 60 mins: Winter

Type : Manhole

Tables

Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0
5	1.7	0.016	0.000	0.000	1.8
10	4.6	0.036	0.000	0.000	4.6
15	5.7	0.041	0.000	0.000	5.7
20	8.3	0.046	0.000	0.000	8.4
25	11.6	0.047	0.000	0.000	11.5
30	14.6	0.046	0.000	0.000	14.7
35	15.5	0.050	0.000	0.000	15.5
40	12.5	0.051	0.000	0.000	12.5
45	9.3	0.051	0.000	0.000	9.3
50	7.6	0.052	0.000	0.000	7.6
55	7.2	0.052	0.000	0.000	7.2
60	6.4	0.054	0.000	0.000	6.4
65	5.1	0.056	0.000	0.000	5.1
70	4.9	0.055	0.000	0.000	4.9
75	4.8	0.055	0.000	0.000	4.8
80	4.7	0.054	0.000	0.000	4.7
85	4.7	0.054	0.000	0.000	4.7
90	4.6	0.053	0.000	0.000	4.6
95	4.5	0.053	0.000	0.000	4.5
100	4.4	0.052	0.000	0.000	4.4
105	4.3	0.052	0.000	0.000	4.3
110	4.2	0.051	0.000	0.000	4.2
115	4.2	0.051	0.000	0.000	4.2
120	4.1	0.050	0.000	0.000	4.1

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Roscoe Engineering:		



Tank
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 120 mins: Winter

Type : Tank

Tables

Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0
5	0.7	0.002	0.049	0.000	0.0
10	2.1	0.014	0.435	0.000	0.3
15	2.6	0.028	0.932	0.000	1.2
20	2.6	0.042	1.399	0.000	1.2
25	2.7	0.055	1.813	0.000	1.4
30	3.2	0.069	2.278	0.000	1.4
35	4.2	0.090	2.985	0.000	1.2
40	5.8	0.126	4.165	0.000	0.8
45	7.9	0.183	6.092	0.000	0.2
50	13.6	0.277	9.213	0.000	-3.2
55	16.8	0.414	13.782	0.000	-4.1
60	19.0	0.576	19.167	0.000	-4.6
65	16.4	0.732	24.342	0.000	-4.3
70	14.8	0.874	29.067	0.000	-3.0
75	11.5	0.993	33.026	0.000	-1.4
80	7.9	1.081	35.942	0.000	0.1
85	5.9	1.136	37.761	0.000	1.4
90	4.3	1.165	38.731	0.000	2.4
95	3.3	1.175	39.056	0.000	3.1
100	2.8	1.173	39.007	0.000	3.4
105	2.7	1.167	38.808	0.000	3.4
110	2.6	1.160	38.578	0.000	3.4
115	2.3	1.151	38.271	0.000	3.6
120	1.2	1.131	37.629	0.000	4.3
125	0.3	1.097	36.492	0.000	4.8
130	0.2	1.056	35.134	0.000	4.7
135	0.2	1.016	33.800	0.000	4.6
140	0.3	0.977	32.508	0.000	4.5
145	0.3	0.939	31.250	0.000	4.4
150	0.3	0.902	30.024	0.000	4.4
155	0.3	0.866	28.826	0.000	4.3
160	0.4	0.831	27.658	0.000	4.2
165	0.4	0.797	26.521	0.000	4.1
170	0.5	0.764	25.440	0.000	4.1
175	0.5	0.733	24.396	0.000	4.0
180	0.5	0.702	23.376	0.000	3.9
185	0.5	0.672	22.374	0.000	3.8
190	0.5	0.643	21.384	0.000	3.8
195	0.4	0.613	20.398	0.000	3.7
200	0.0	0.582	19.385	0.000	3.6
205	0.0	0.551	18.329	0.000	3.5
210	0.0	0.520	17.296	0.000	3.4
215	0.0	0.489	16.288	0.000	3.3
220	0.0	0.460	15.307	0.000	3.2
225	0.0	0.431	14.351	0.000	3.1
230	0.0	0.403	13.422	0.000	3.1
235	0.0	0.376	12.519	0.000	3.0
240	0.0	0.350	11.628	0.000	2.9

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Connection Results Storm Phase: Phase	Roscoe Engineering:		



Pipe
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Type : Pipe

Tables

Time (mins)	Depth (m)	Flow (L/s)
0	0.000	0.0
5	0.045	4.7
10	0.097	21.7
15	0.104	6.0
20	0.106	0.5
25	0.086	0.0
30	0.070	0.0

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Connection Results Storm Phase: Phase	Roscoe Engineering:		



Pipe (1)
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Type : Pipe

Tables

Time (mins)	Depth (m)	Flow (L/s)
0	0.000	0.0
5	0.046	9.6
10	0.225	44.2
15	0.225	11.3
20	0.225	1.1
25	0.225	0.6
30	0.225	0.6

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Connection Results Storm Phase: Phase	Roscoe Engineering:		



Pipe (2)

Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 60 mins: Winter

Type : Pipe

Tables

Time (mins)	Depth (m)	Flow (L/s)
0	0.000	0.0
5	0.035	0.0
10	0.082	0.0
15	0.119	0.7
20	0.174	-0.4
25	0.225	-5.4
30	0.225	-9.1
35	0.225	-8.7
40	0.225	-4.2
45	0.225	-0.1
50	0.225	2.0
55	0.225	2.5
60	0.225	3.4
65	0.225	4.8
70	0.225	4.7
75	0.225	4.7
80	0.225	4.6
85	0.225	4.5
90	0.225	4.4
95	0.225	4.3
100	0.225	4.3
105	0.225	4.2
110	0.225	4.1
115	0.225	4.0
120	0.225	4.0

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Connection Results Storm Phase: Phase	Roscoe Engineering:		



Pipe (3)

Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 120 mins: Winter

Type : Pipe

Tables

Time (mins)	Depth (m)	Flow (L/s)
0	0.000	0.0
5	0.012	0.1
10	0.029	1.1
15	0.041	2.3
20	0.044	2.7
25	0.046	2.9
30	0.048	3.2
35	0.051	3.6
40	0.056	4.2
45	0.061	4.9
50	0.050	2.8
55	0.054	3.2
60	0.058	3.7
65	0.060	4.1
70	0.061	4.4
75	0.062	4.7
80	0.062	4.9
85	0.061	5.0
90	0.061	5.1
95	0.060	5.1
100	0.060	5.1
105	0.059	5.1
110	0.059	5.1
115	0.059	5.1
120	0.058	5.0
125	0.057	4.9
130	0.056	4.9
135	0.056	4.8
140	0.055	4.7
145	0.055	4.6
150	0.054	4.5
155	0.053	4.4
160	0.053	4.3
165	0.052	4.3
170	0.052	4.2
175	0.051	4.1
180	0.051	4.0
185	0.050	4.0
190	0.050	3.9
195	0.049	3.8
200	0.049	3.7
205	0.048	3.6
210	0.047	3.5
215	0.047	3.4
220	0.046	3.3
225	0.046	3.3
230	0.045	3.2
235	0.044	3.1
240	0.044	3.0

Apex House, Plymouth Grove: 100 year + 45% CC	Date: 10/12/2025		
	Designed by: Adnan Yusuf	Checked by:	Approved By:
Report Details: Type: Connection Results Storm Phase: Phase	Roscoe Engineering:		



Pipe (4)
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Type : Pipe

Tables

Time (mins)	Depth (m)	Flow (L/s)
0	0.000	0.0
5	0.048	5.1
10	0.076	14.3
15	0.060	7.5
20	0.053	4.5
25	0.052	4.2
30	0.051	4.1



Appendix C: Overland Flow Routes

General:

1. This drawing is to be read in conjunction with all relevant Architect's and Engineer's drawings and specifications.
2. Proposed levels based on TPM Landscape drawing 'P662-TPM-XX-00-DR-L-101'.
3. To be read in conjunction with Roscoe Drainage Plan drawings 'P662-ROS-00-XX-DR-C-0501'.

DRAINAGE LEGEND:

→ PROPOSED WATER FLOW ROUTE

+??.?? PROPOSED GROUND LEVEL

P01	26.01.26	KT	STAGE 4 ISSUE	JT	JC
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS:

STAGE 4



CLIENT: PLYMOUTH GROVE PROPERTY DEVELOPMENTS

ARCHITECT: DAY ARCHITECTURAL LTD

PROJECT:

APEX HOUSE
PLYMOUTH GROVE

TITLE: FLOOD EXCEEDANCE PLAN

SCALE @ A1: 1:150	CHECKED: JT		APPROVED: JT
PROJECT NUMBER: 25406	DESIGNED: NP	DRAWN: KT	DATE: JAN 2026

DRAWING No:	REV:
P662-ROS-XX-XX-DR-C-0560	P0



Appendix D- Planning Decision Letter



Planning

Jennifer Atkinson
Telephone: 0161 234 4517
jennifer.atkinson@manchester.gov.uk

P O Box 532 Town Hall
Manchester M60 2LA

Mrs Larna Smith
Avison Young
11 York Street
Manchester
M2 2AW

Date: 2 September 2025

Dear Sir/Madam,

Application under Section 96a of the Town & Country Planning Act 1990 (as amended) for a Non-Material change to a planning permission

Application No: 143768/NMC/2025

Description: Non-material amendment to planning permission referenced 138294/FO/2023, to amend Condition 2 (Approved Plans) to allow for a reduction in floor to floor height and other elevational changes.

Location: Land At Plymouth Grove, Manchester,

I refer to your application for a non-material amendment to planning permission reference 138294/FO/2023.

The proposed seeks to amend Condition 2 (Approved Plans) to allow for a reduction in floor to floor height and other elevational changes.

Following an assessment of the details submitted, I can confirm that the proposed amendments are considered to be of a non-material nature and acceptable to the City Council as the Local Planning Authority. The City Council is satisfied that the proposed changes will not result in any significant material alterations to the planning approval.

Therefore I can confirm that the proposed amendments are hereby **approved**.

It should be noted that this letter of consent does not supersede the decision notice attached to planning permission 138294/FO/2023. These documents should be read in conjunction with one another. Therefore, the conditions previously applied to approval 138294/FO/2023 still apply to this development. However, due to the acceptance of the amendments outlined above, the following amended conditions also now apply:

2) The development hereby approved shall be carried out in accordance with the following drawings and documents:

DAY-XX-00-DR-A-04-0001, Rev C, DAY-XX-XX-DR-A-04-0002, Rev F and DAY-XX-XX-DR-A-04-1001, Rev C received by the City Council, as Local Planning Authority on the 18 August 2025

Reason - To ensure that the development is carried out in accordance with the approved plans. Pursuant to policies SP1 and DM1 of the Core Strategy.

Should you wish to discuss the matter further, please contact Jennifer Atkinson using the details above.

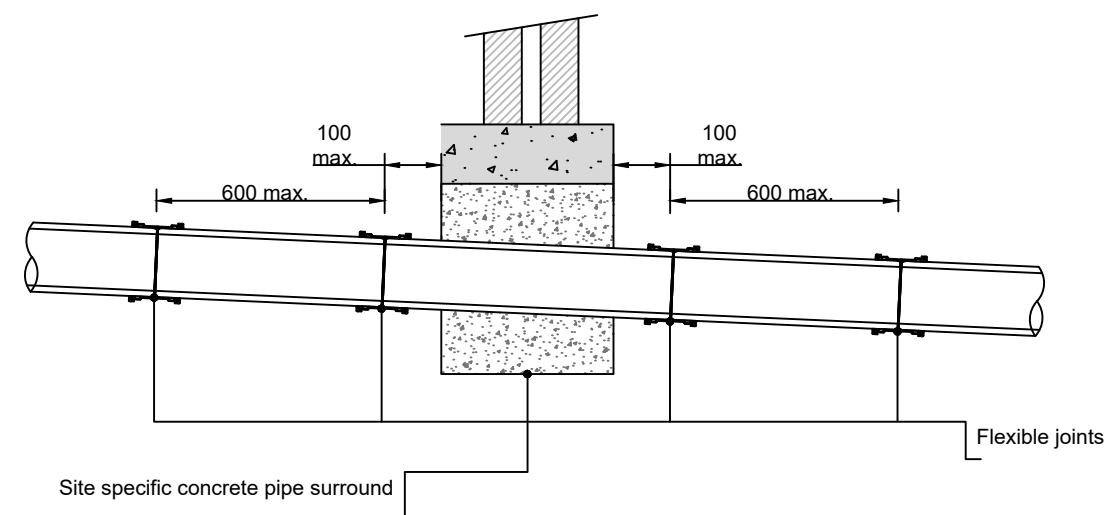
Yours faithfully,

A handwritten signature in black ink, appearing to read 'Julie Roscoe', with a stylized, cursive script.

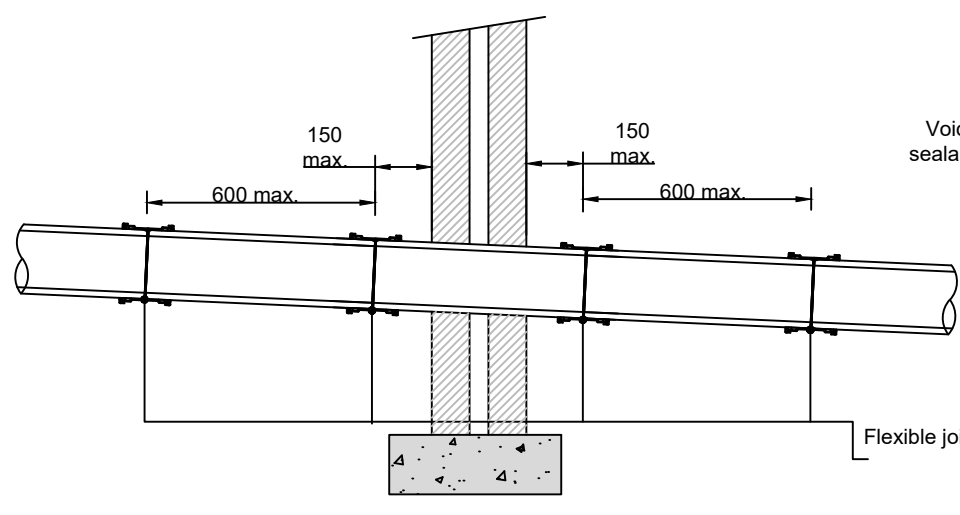
Julie Roscoe
Director of Planning, Building Control & Licensing



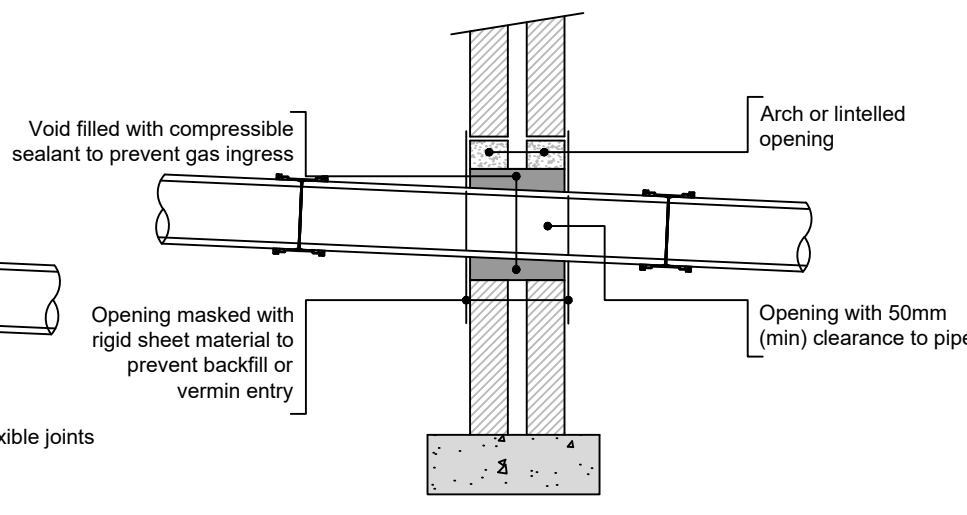
Appendix E- Drainage Details



PIPES CONSTRUCTED BENEATH FOUNDATIONS
(Not to scale)



PIPES CONSTRUCTED THROUGH WALLS
(PIPE BEDDING INTO WALL)
(Not to scale)



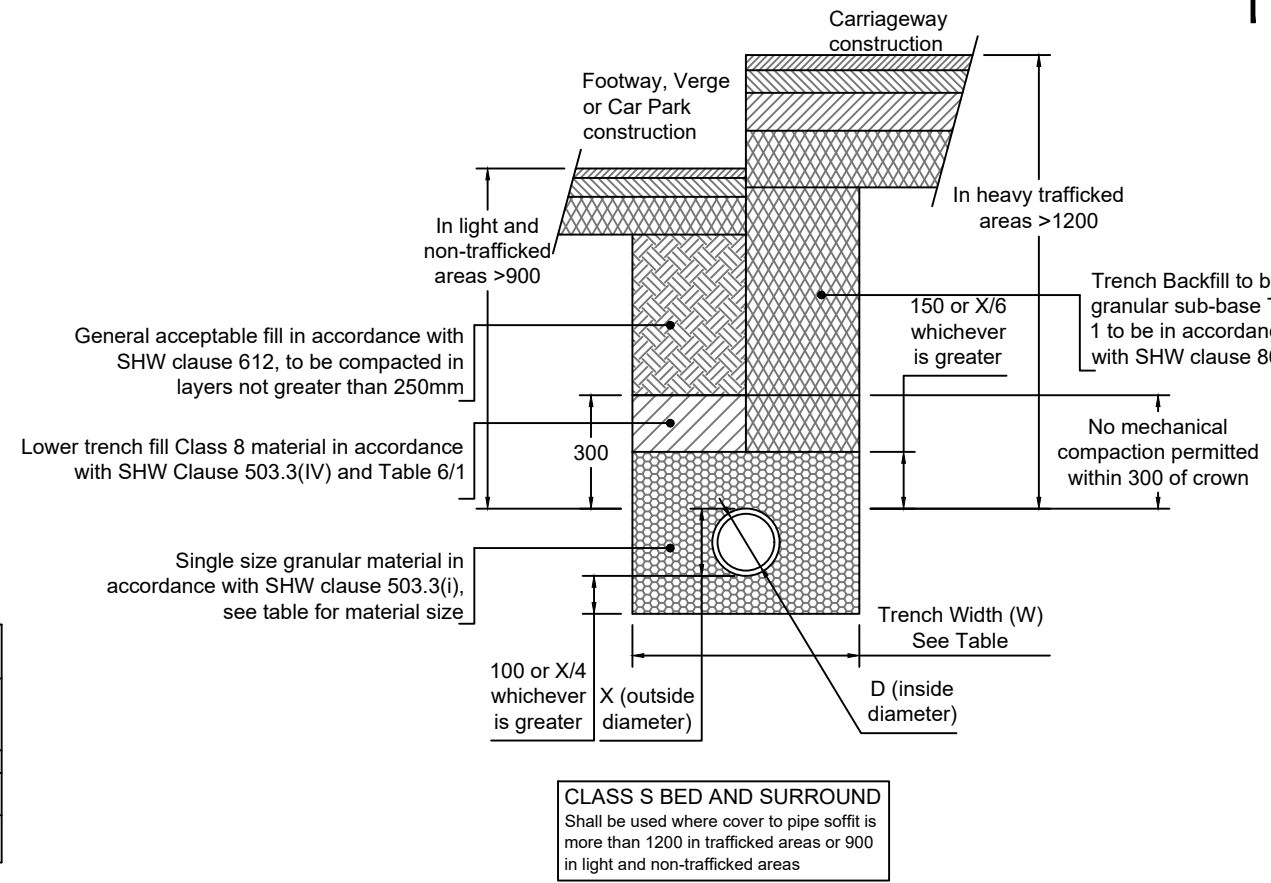
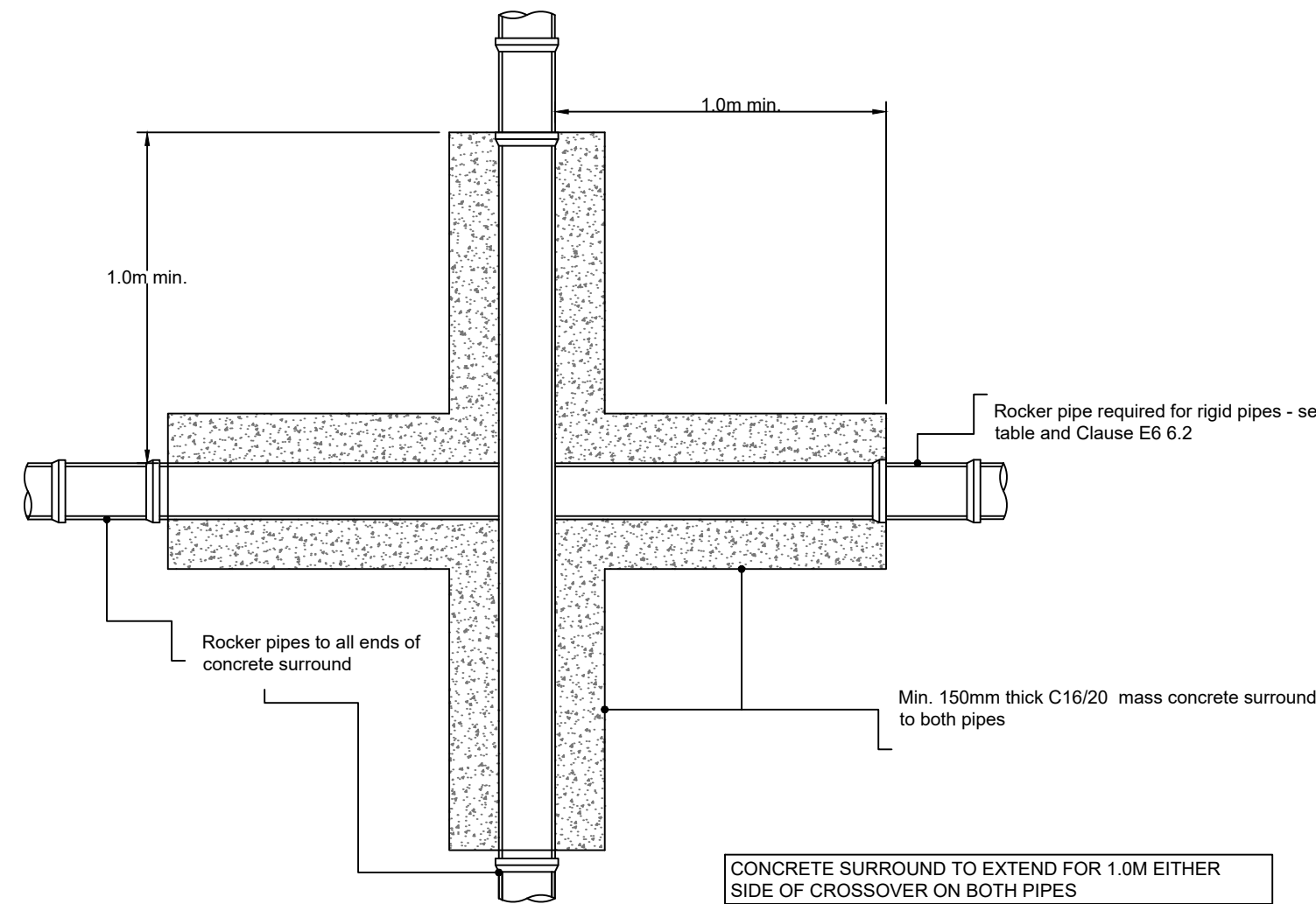
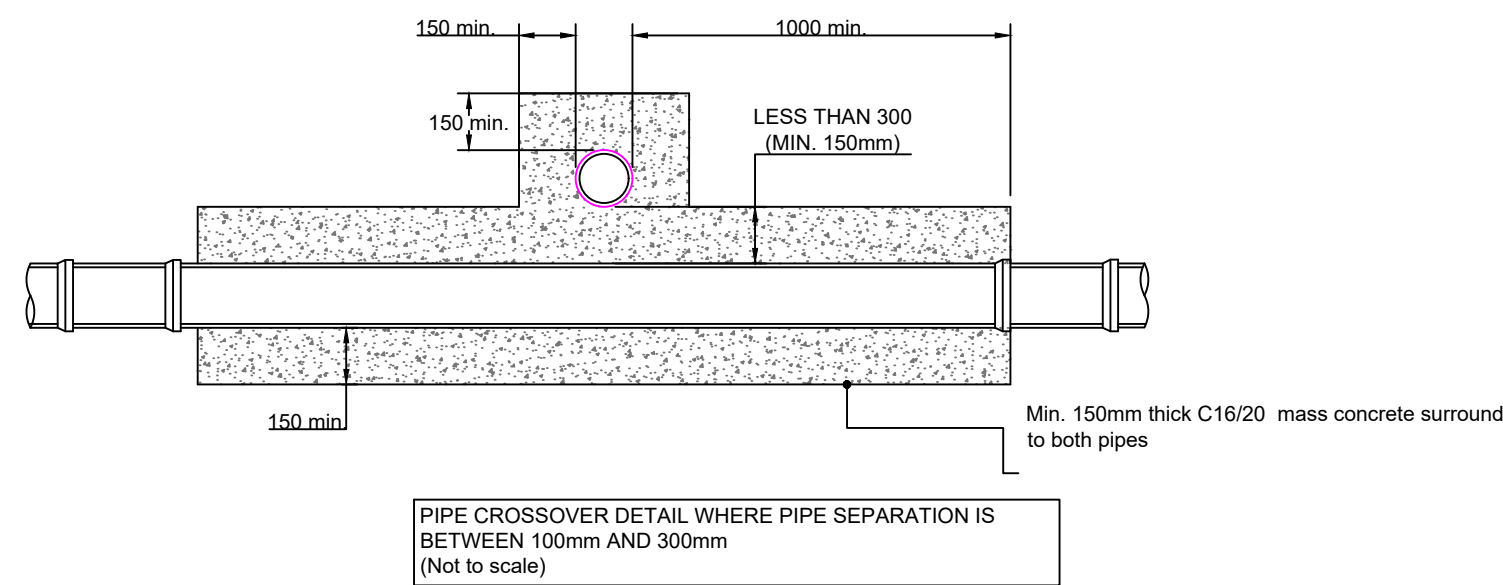
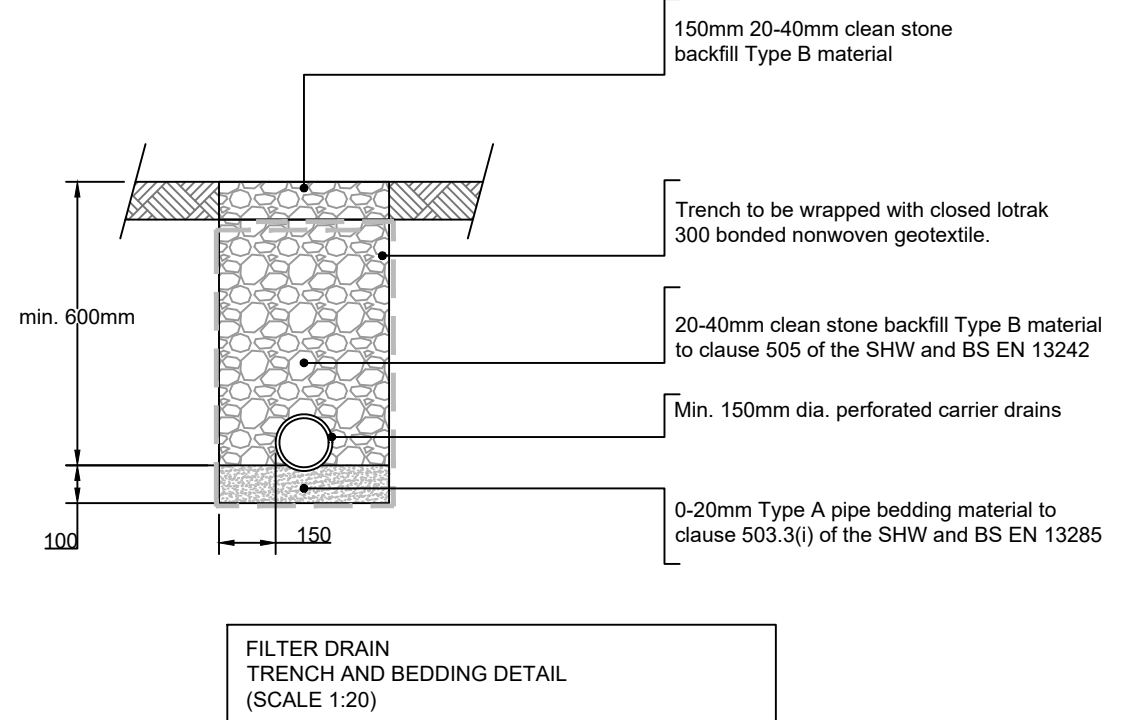
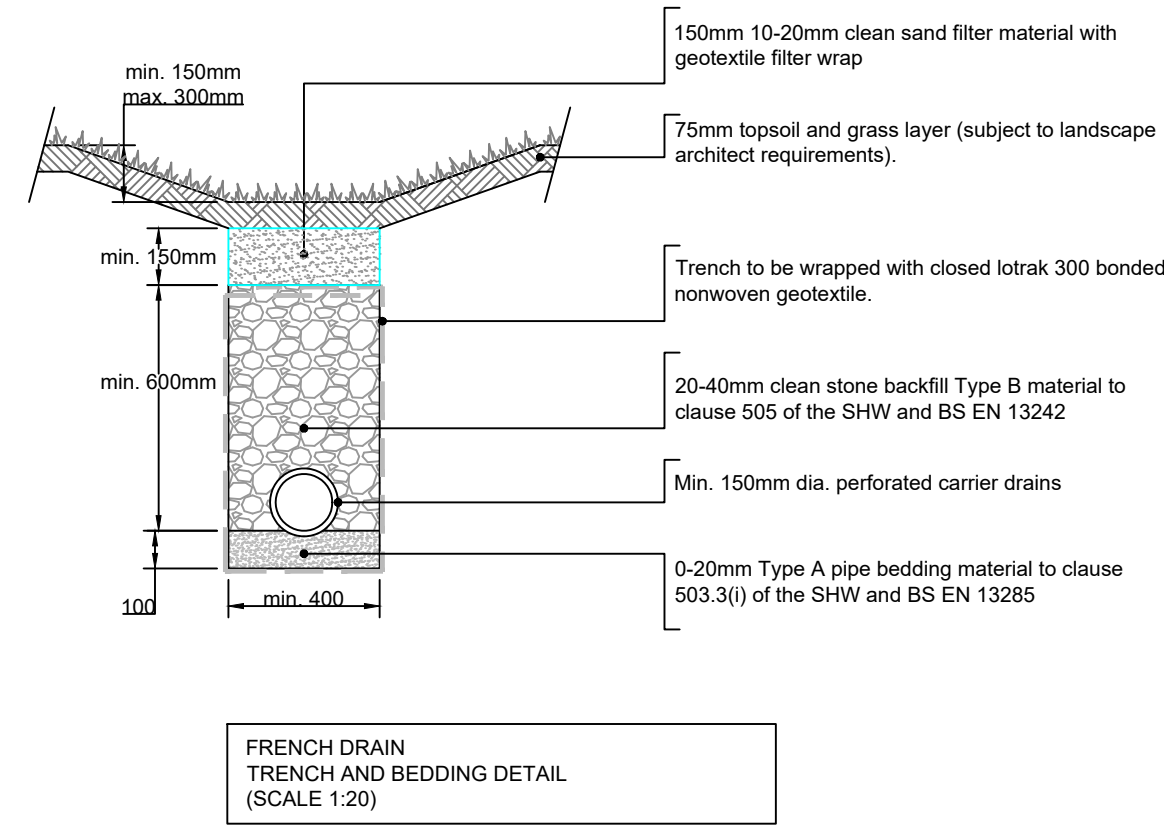
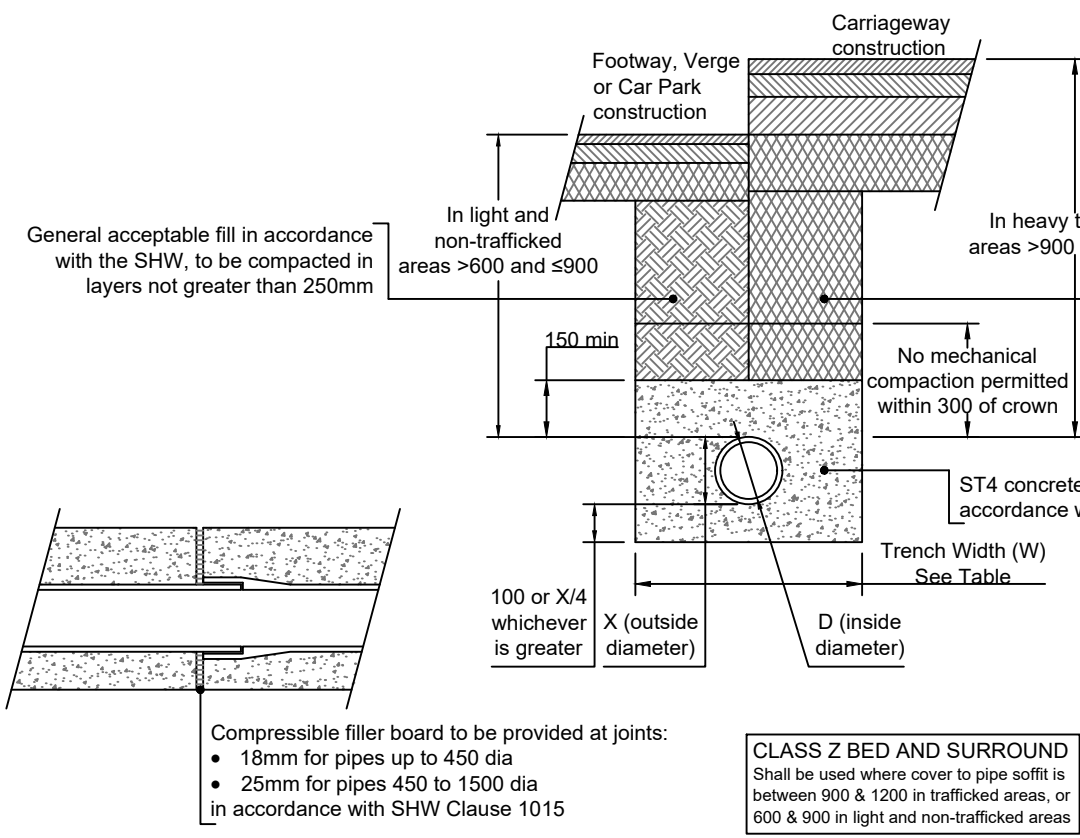
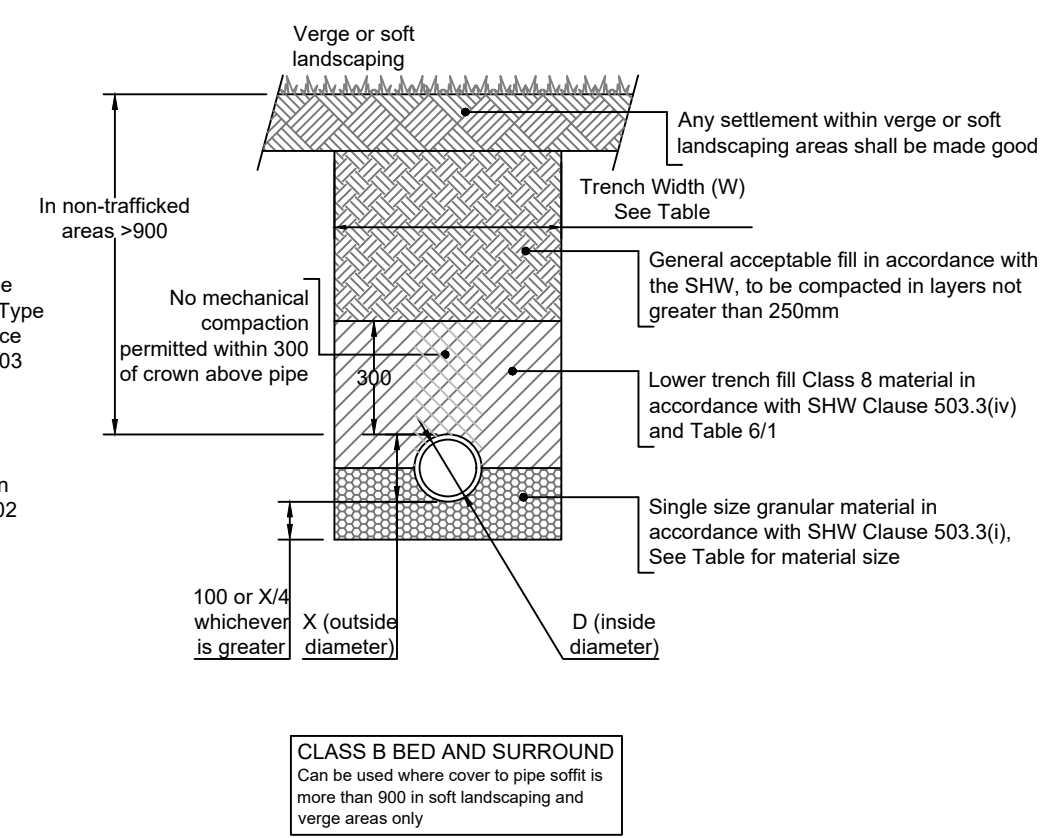
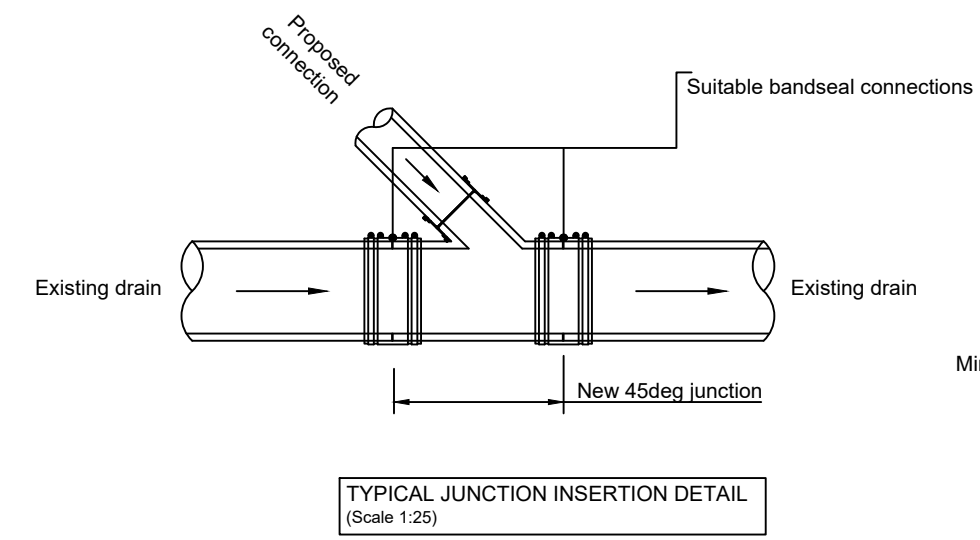
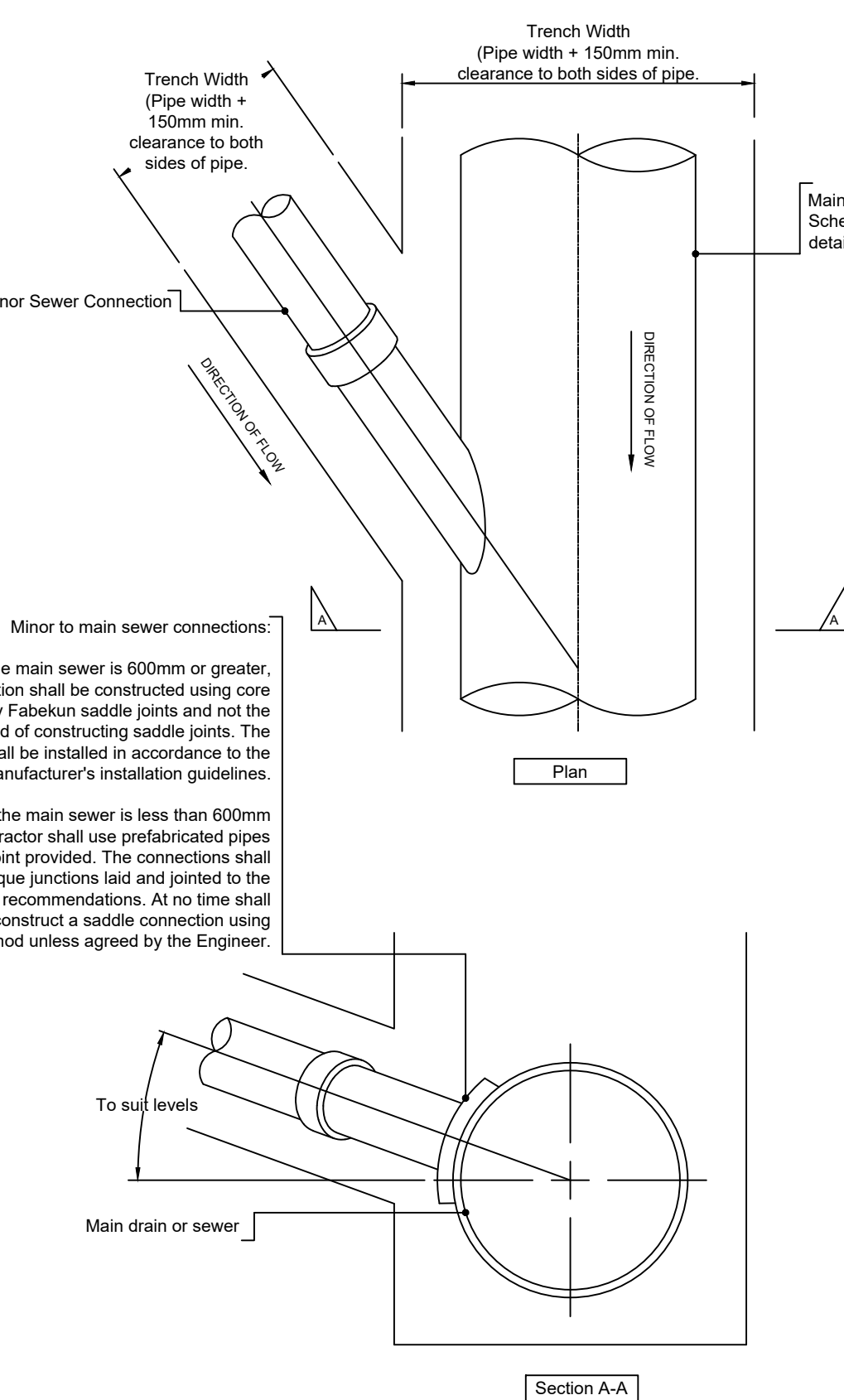
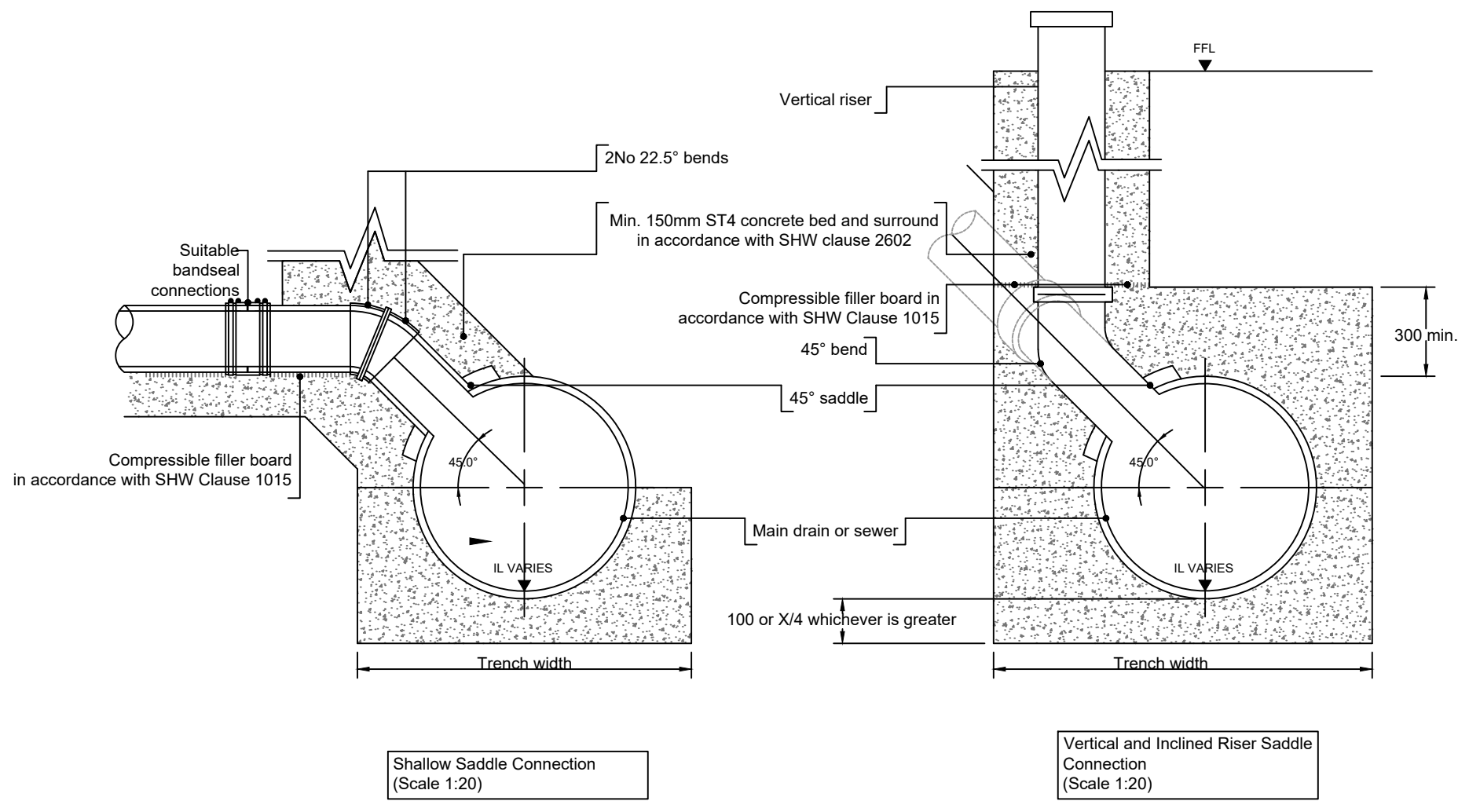
PIPES CONSTRUCTED THROUGH WALLS
(WITH ARCH / LINTEL PROTECTION)
(Not to scale)

Pipe Diameter (D) (mm)	Min Trench Width (Wmin) (mm)	Max Trench Width (Wmax) (mm)
100	420	720
150	480	780
225	580	880
300	710	1010
375	790	1090
450	880	1180
525	970	1270
600	1070	1370
675	1130	1430
750	1210	1510
800	1280	1580
900	1380	1680
1050	1560	1860
1200	1740	2040
>1200	X+300	X+600

BED & SURROUND NOTES

- Minimum trench width is X+300, maximum trench width is X+600, where X is the outside diameter of the pipe. These values are set in order for the trench to comply with BS EN 1295. Min and max values are provided in order to give flexibility to the Contractor to select appropriate bucket sizes.
- No mechanical compaction permitted within 300mm of top of pipe.
- This detail does not apply under buildings - see structural engineering drawings for trench reinstatements under buildings.

Pipe Diameter (D) (mm)	Single Size granular material Aggregate to BS EN 13242 (mm)
≤140	4/10
>140 and ≤400	4/10, 6/10 or 10/20
>400	4/10, 6/14 10/20 or 20/40



DO NOT SCALE

- Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
- This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
- All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
- Any discrepancies noted on site are to be reported to the engineer immediately.
- This drawing is to be read in conjunction with the latest drainage layout drawing.
- Unless noted otherwise, all clauses relate to Sewer Sector Guidance Notes or Building Regulations Part H.
- To be read in conjunction with Roscoe drawing 'P662-ROS-ZZ-XX-DR-C-0900'

P02	11.12.25	KT	STAGE 4 ISSUE	JT	JC
P01	30.06.25	KT	STAGE 3 ISSUE	JT	JC
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS:	STAGE 4
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CLIENT: PLYMOUTH GROVE PROPERTY DEVELOPMENTS

ARCHITECT: DAY ARCHITECTURAL LTD

PROJECT: APEX HOUSE PLYMOUTH GROVE

TITLE: DRAINAGE STANDARD DETAILS SHEET 2

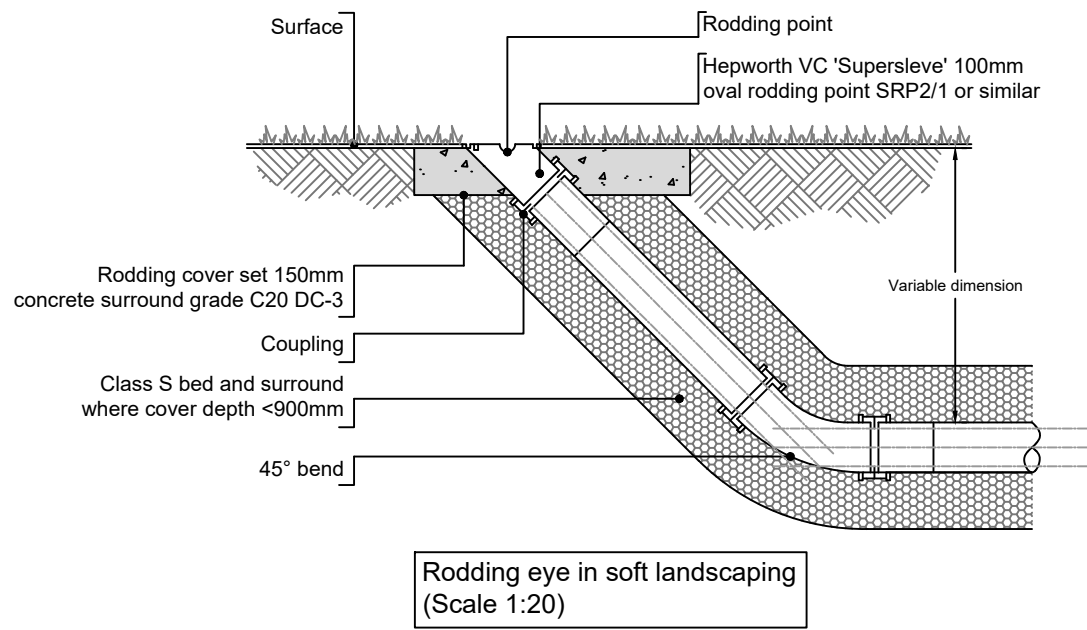
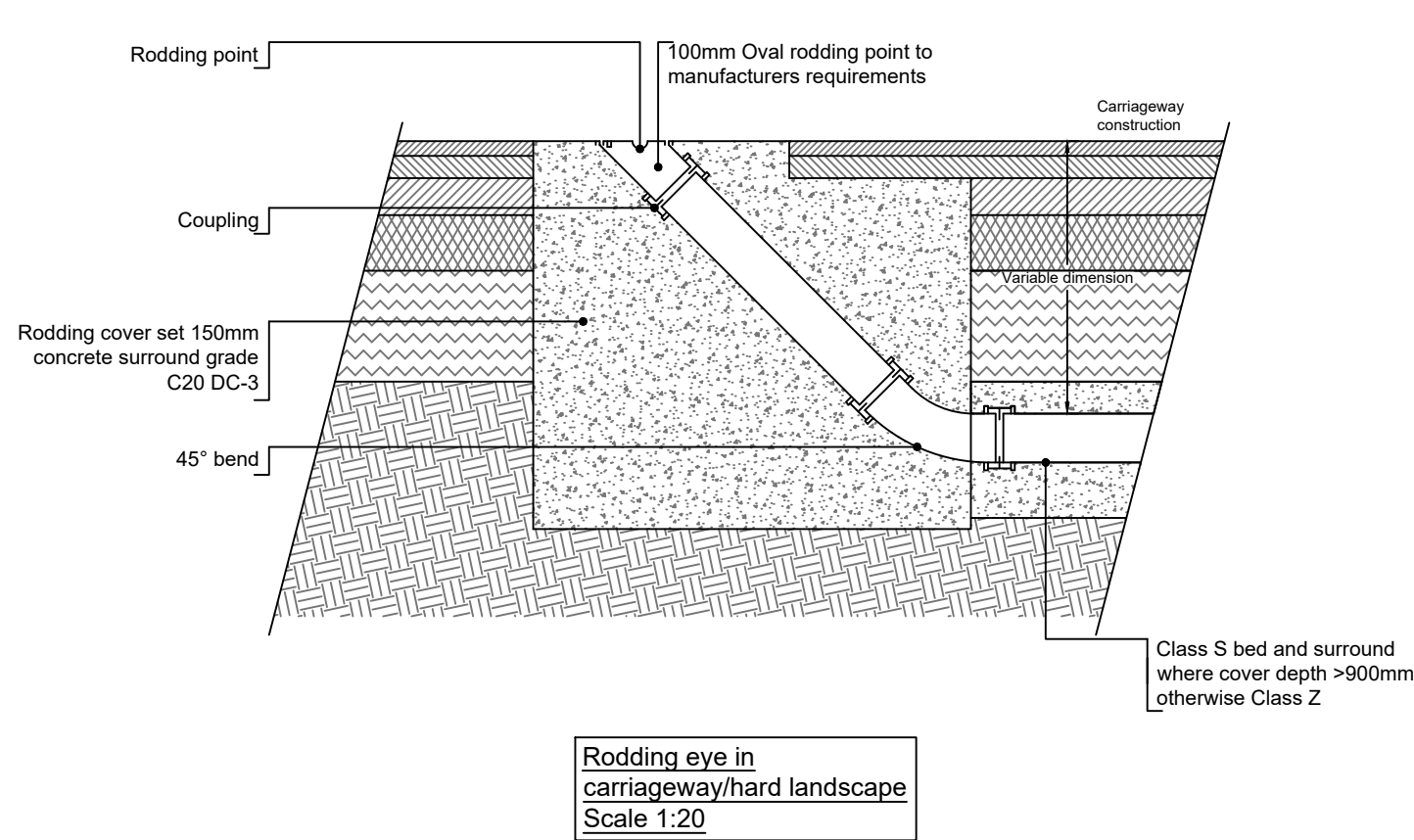
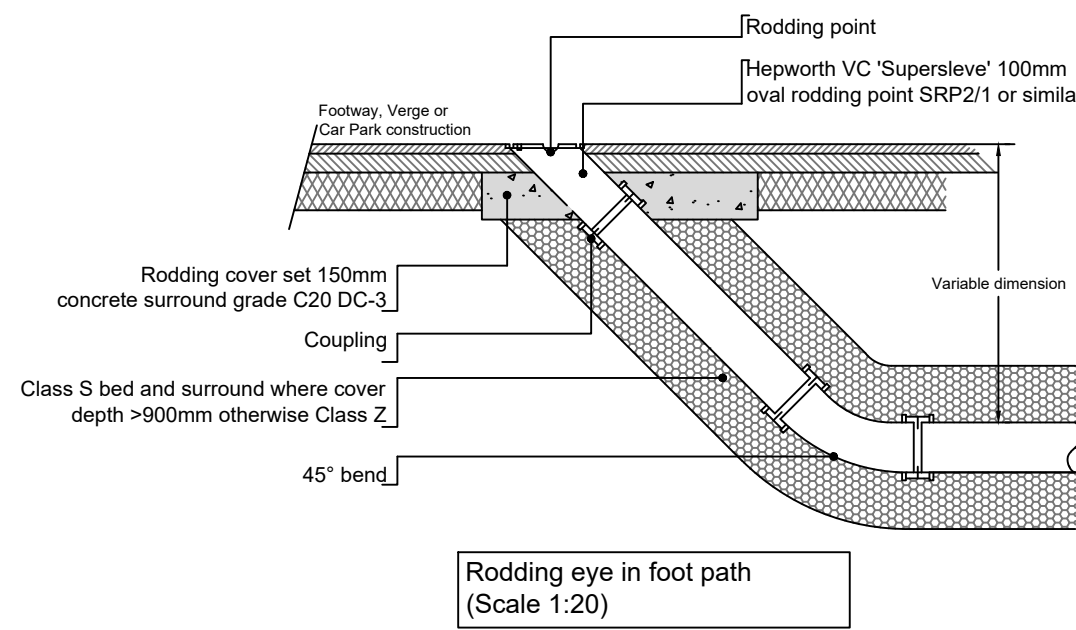
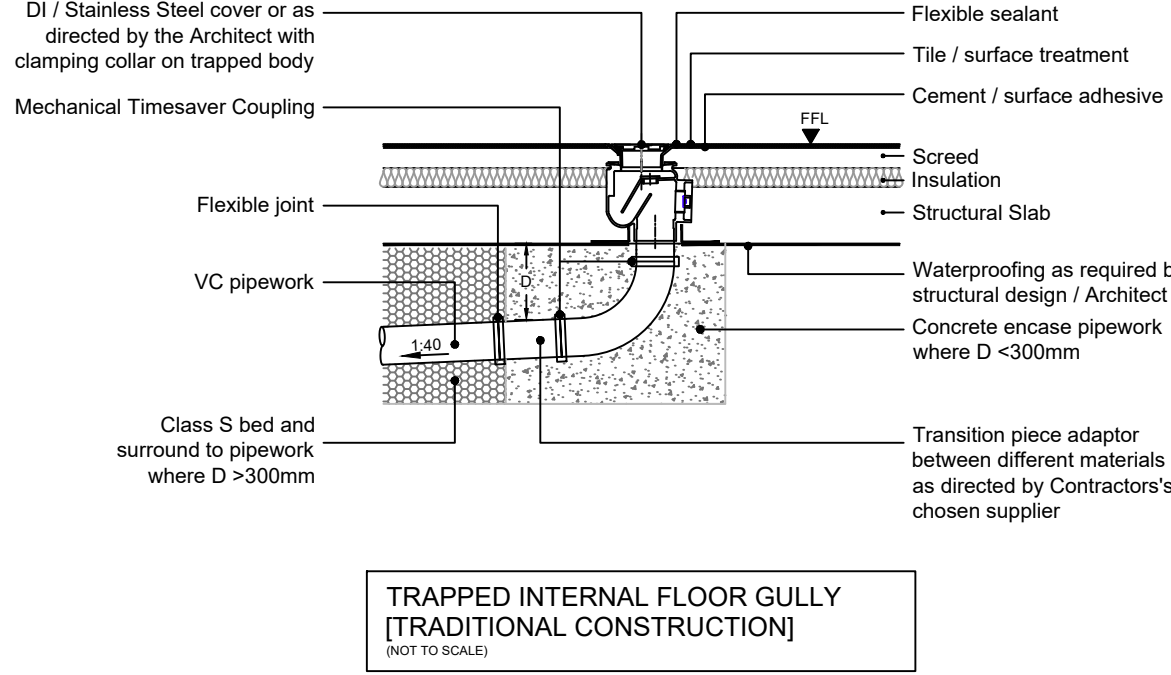
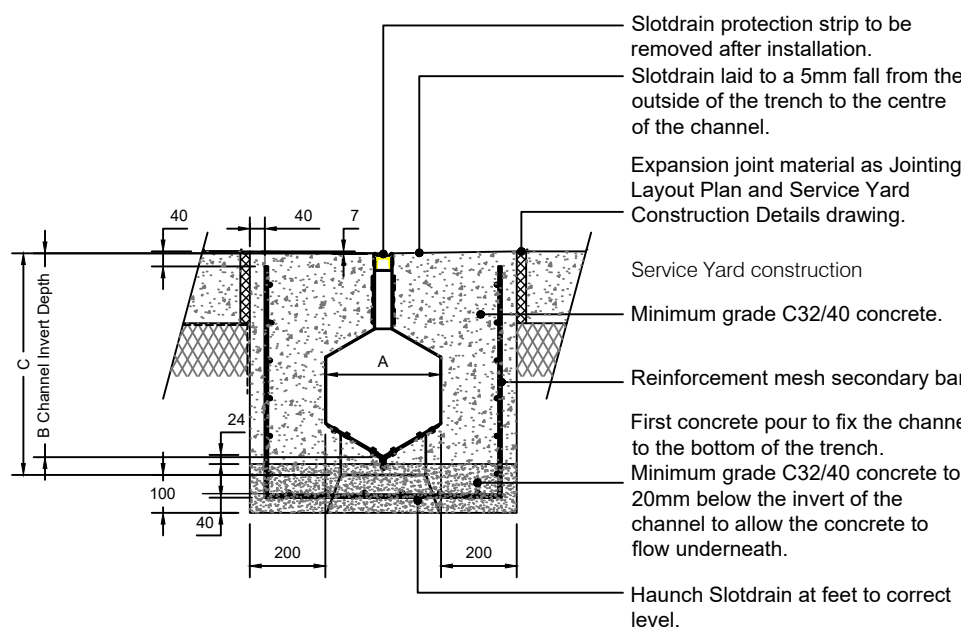
SCALE @ A1:	CHECKED:	JT	APPROVED:	JC
N.T.S	DESIGNED:	AY	DRAWN:	KT
PROJECT NUMBER:	25406	DATE:	JUNE 2025	REV:

DRAWING No: P662-ROS-XX-XX-DR-C-0961

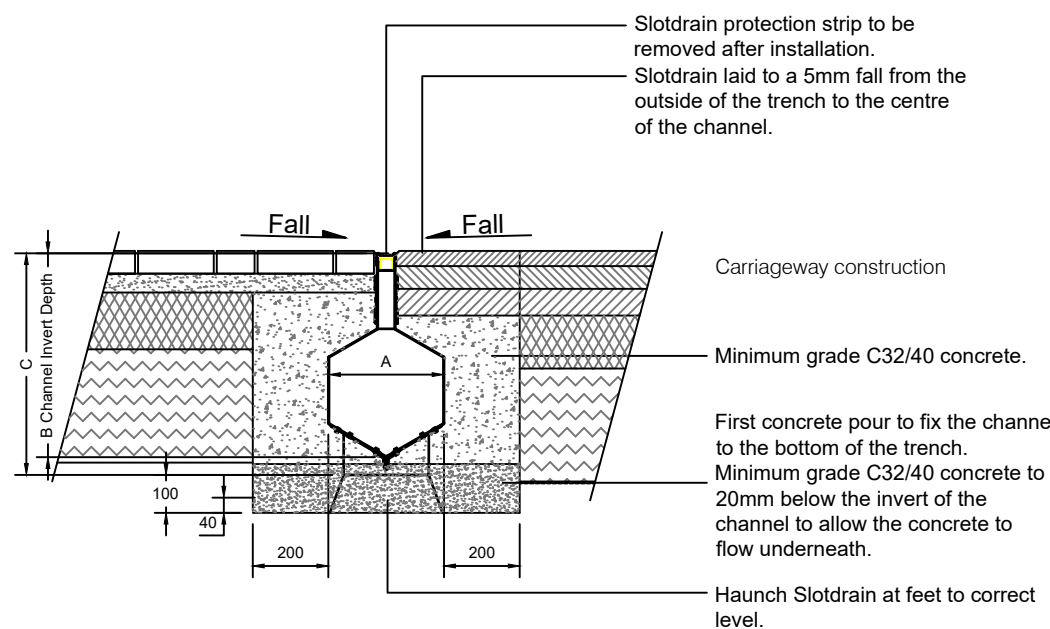
P02

DO NOT SCALE

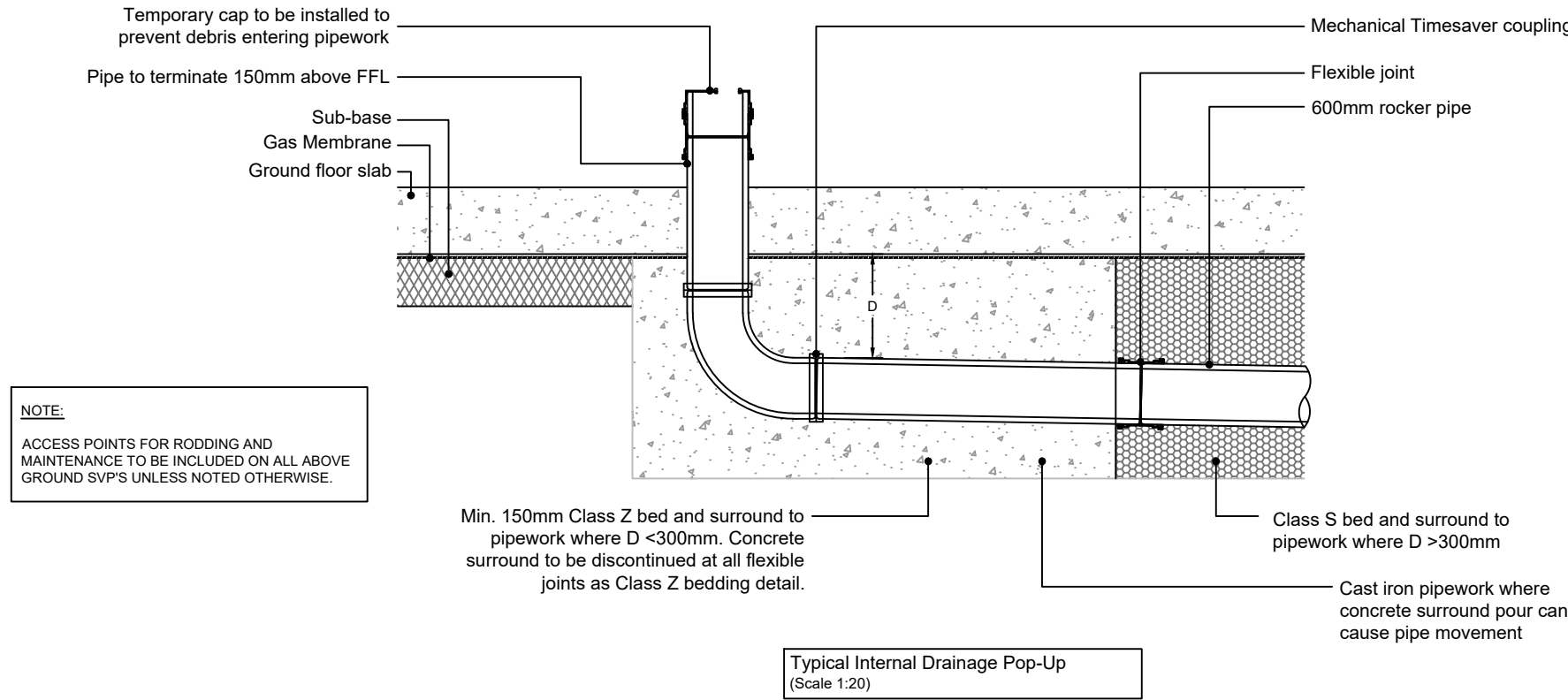
1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.
5. This drawing is to be read in conjunction with the latest drainage layout drawing.
7. Unless noted otherwise, all clauses relate to Sewer Sector Guidance Notes or Building Regulations Part H.
8. To be read in conjunction with Roscoe drawing 'P662-ROS-ZX-XX-DR-C-0900'



CASTSLOT SLOTDRAIN		
WIDTH 'A'	INVERT 'B'	DEPTH 'C'
100	308	357
150	366	415
225	452	501
300	538	587
350	596	645
400	652	712
500	768	828
600	1031	1091



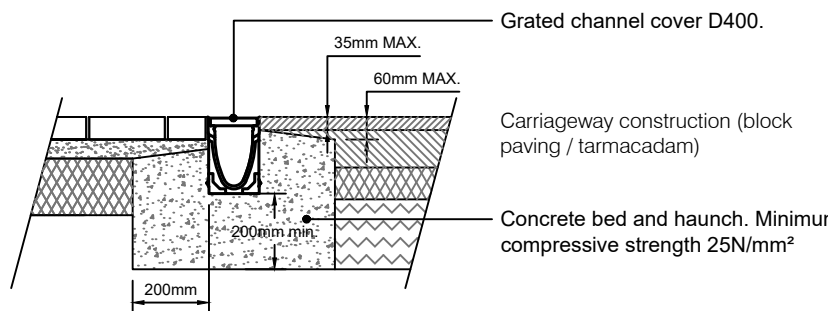
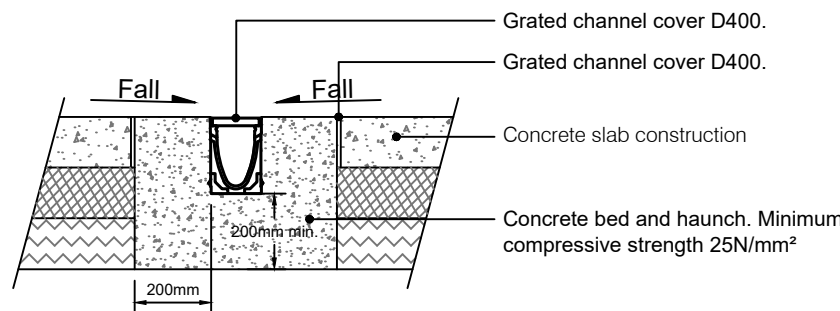
PAVESLOT SLOTDRAIN		
WIDTH 'A'	INVERT 'B'	DEPTH 'C'
100	308	357
150	366	415
225	452	501
300	538	587
350	596	645
400	652	712
500	768	828
600	1031	1091



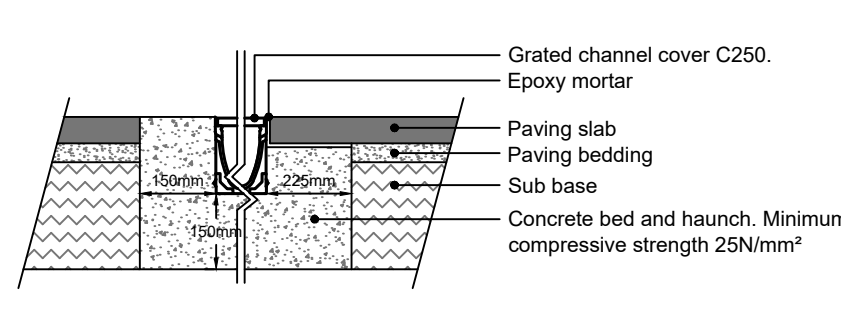
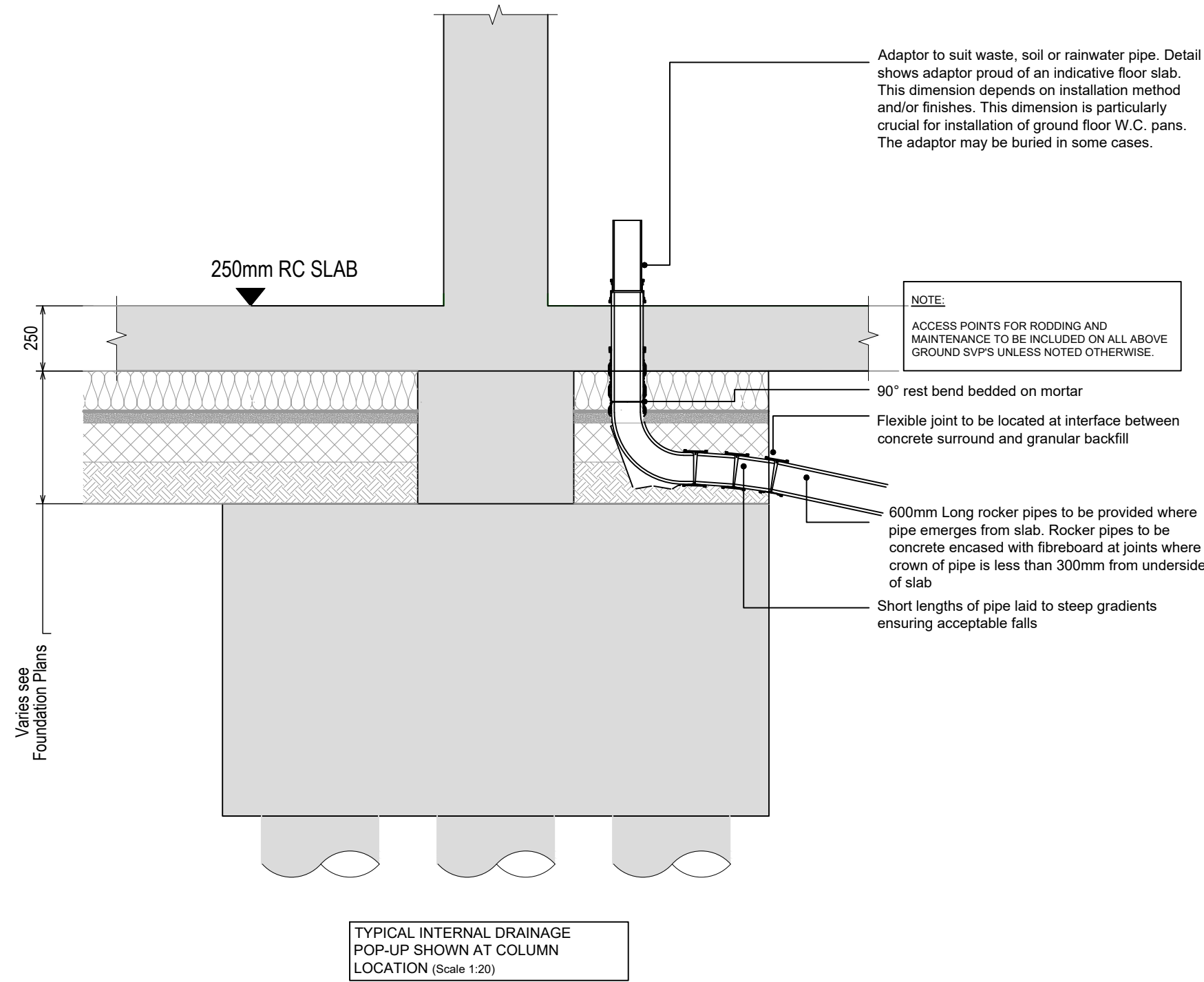
GATIC CAST SLOT DRAIN IN SERVICE YARD (NOT TO SCALE)

REINFORCEMENT MESH				
MESH	MAIN BAR Ø	MAIN BAR C/s	SECONDARY BAR Ø	SECONDARY BAR C/s
B785	10mm	100mm	8mm	200mm
B1131	12mm	100mm	8mm	200mm

GATIC PAVE SLOT DRAIN (NOT TO SCALE)



GRATED CHANNEL DRAIN (NOT TO SCALE)



P02	11.12.25	KT	STAGE 4 ISSUE	JT	JC
P01	30.06.25	KT	STAGE 3 ISSUE	JT	JC
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: STAGE 4



CLIENT: PLYMOUTH GROVE PROPERTY DEVELOPMENTS

ARCHITECT: DAY ARCHITECTURAL LTD

PROJECT: APEX HOUSE, PLYMOUTH GROVE

TITLE: DRAINAGE STANDARD DETAILS SHEET 3

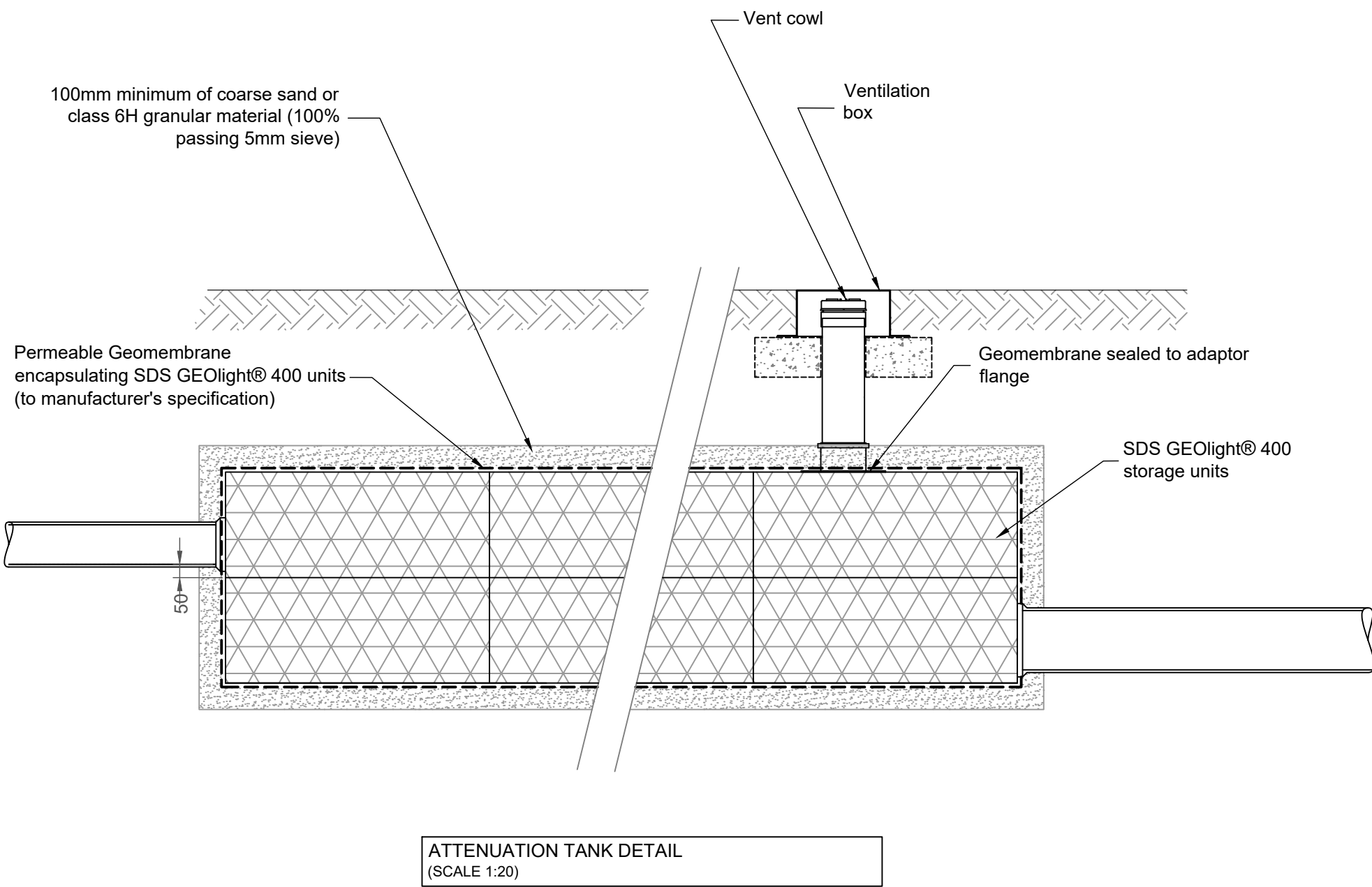
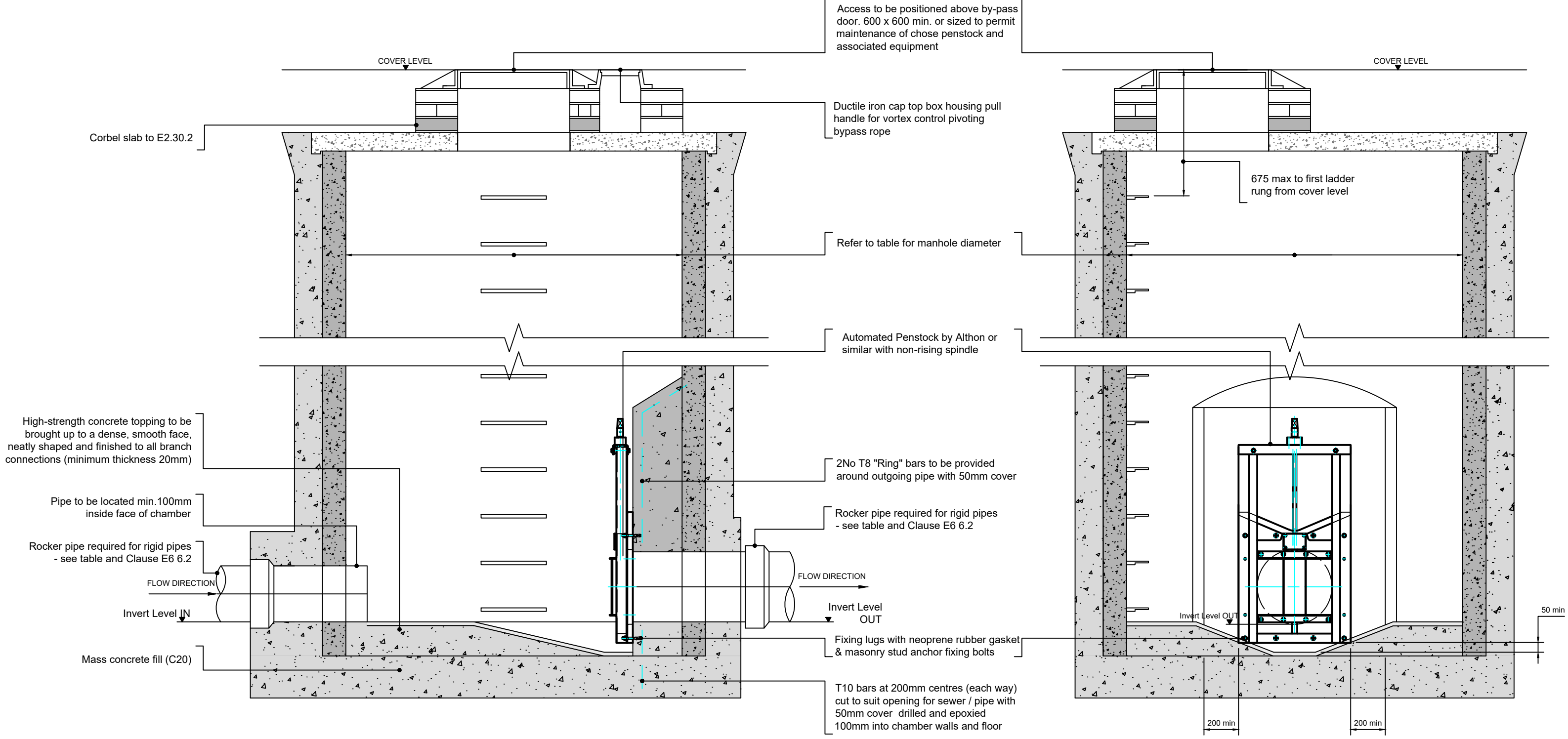
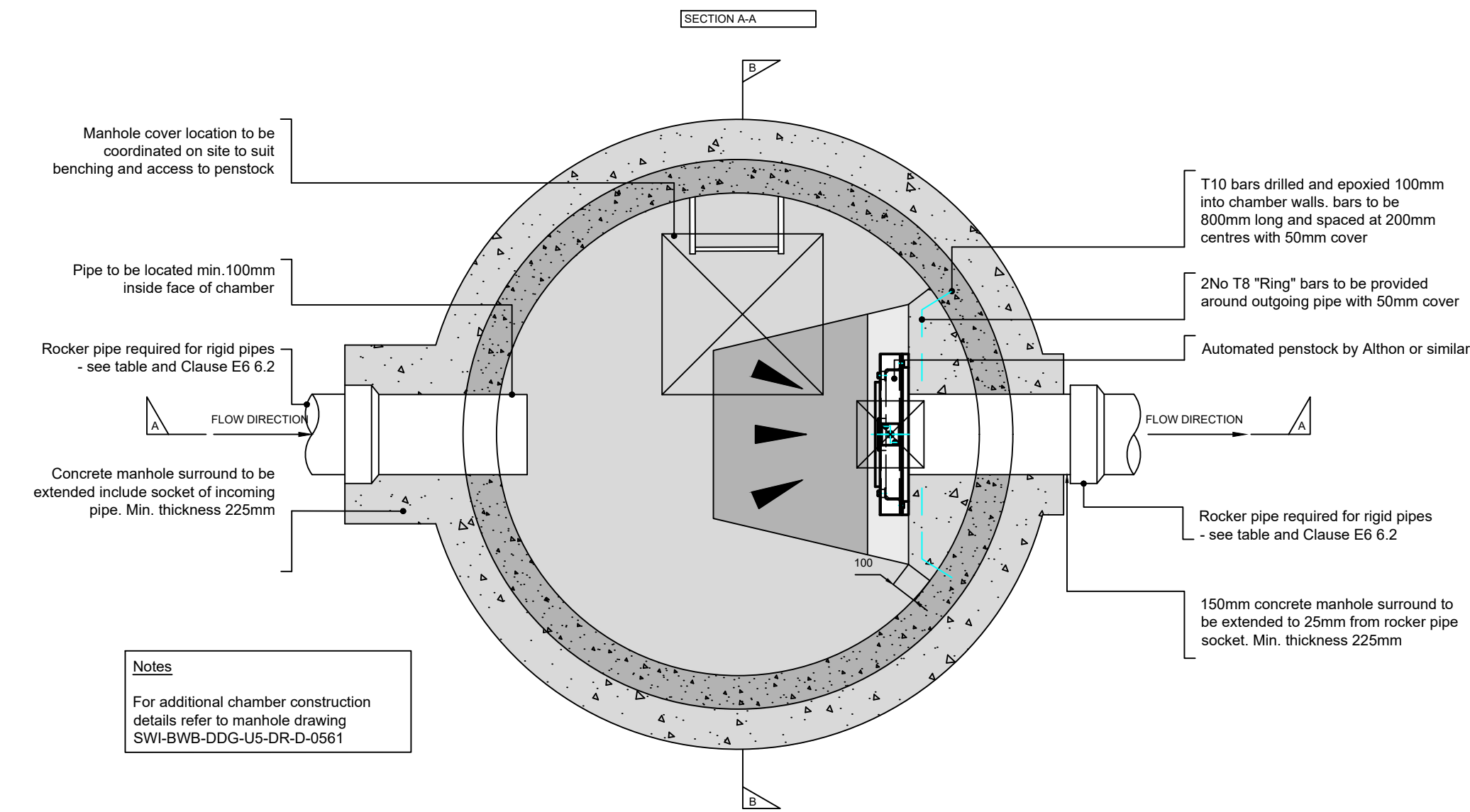
SCALE @ A1: N.T.S. CHECKED: JT APPROVED: JC

PROJECT NUMBER: 25406 DESIGNED: AY DRAWN: KT DATE: JUNE 2025

DRAWING No: P662-ROS-ZX-XX-DR-C-0962 REV: P02

DO NOT SCALE

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
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4. Any discrepancies noted on site are to be reported to the engineer immediately.
5. This drawing is to be read in conjunction with the latest drainage layout drawing.
7. Unless noted otherwise, all clauses relate to Sewer Sector Guidance Notes or Building Regulations Part H.
8. To be read in conjunction with Roscoe drawing 'P662-ROS-ZZ-XX-DR-C-0900'.



TYPICAL FLOW CONTROL CHAMBER
(SCALE 1:20)

SECTION B-B

Notes
For additional chamber construction details refer to manhole drawing SWI-BWB-DDG-US-DR-D-0561

P01	11.12.25	KT	STAGE 4 ISSUE	JT	JC
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: STAGE 4



CLIENT: PLYMOUTH GROVE PROPERTY DEVELOPMENTS

ARCHITECT: DAY ARCHITECTURAL LTD

PROJECT: APEX HOUSE
PLYMOUTH GROVE

TITLE: DRAINAGE STANDARD DETAILS
SHEET 4

SCALE @ A1:	N.T.S	CHECKED:	JT	APPROVED:	JC
PROJECT NUMBER:	25406	DESIGNED:	AY	DRAWN:	KT
				DATE:	DEC 2025

DRAWING No: P662-ROS-XX-XX-DR-C-0963
REV: P01