

PROJECT	DATE	BY	REFERENCE
5031777 – Dig Gate Lane, Rochdale Balance Power BESS site	08/01/2025	CL	5031777-RDG-XX- ST-T-C-112601
TITLE	REV		
Planning Condition 10: Discharge Technical Note	P03		

1. INTRODUCTION

Ridge have been appointed by Balance Power to produce a package of information to discharge several planning conditions associated with the proposed Battery Energy Storage System (BESS) construction at Dig Gate Lane, Rochdale.

This Technical Note provides a summary of the proposed drainage design and levels design to supplement the drawings aimed at discharging the planning conditions, namely:

- Condition 10 – Surface Water Drainage Scheme

Changes have been made to the drainage strategy originally produced by KRS Enviro document reference *KRS.0310.081.R.001.C*, as the updated changes to the design provide a betterment and improvement to both surface water storage and treatment. This reduces the requirements for subterranean storage features such as geo-cellular crates. The changes to the design are in line with the SuDS hierarchy and design best practices.

2. CONDITION 10 – SURFACE WATER DRAINAGE SCHEME

“Prior to the commencement of development, final details of a sustainable surface water drainage scheme shall be submitted to and approved in writing by the Local Planning Authority. The drainage scheme shall be based upon:

Drainage Strategy Plan rev D in Appendix 5 of the FRA & Drainage Strategy by KRS, ref. KRS.0310.081.R.001.C dated March 2025.

The drainage details shall include any typical construction details for the drainage pipework, attenuation tank and flow control chamber and cross-sections of any permeable surfaces that are part of the sustainable drainage system.

The approved scheme shall also be in accordance with the Non-Statutory Technical Standards for Sustainable Drainage Systems (March 2015) or any subsequent replacement national standards. Prior to occupation/ use of the proposed development, the drainage scheme shall be completed in accordance with the approved details and retained thereafter for the lifetime of the development.

Reason: To promote sustainable development, secure proper drainage and to manage the risk of flooding and pollution. To prevent an increased risk of flooding as a result of the development and to ensure satisfactory disposal of surface water from the site in accordance with Policy G8 of the adopted Rochdale Core Strategy, saved Policy EM/7 of the adopted Rochdale Unitary Development Plan and the National Planning Policy Framework.”

The proposed drainage drawings can be found in Appendix A of this report, with the supporting calculations in Appendix B.

It is proposed to drain all hardstanding areas to a permeable sub-base layer that will form the platform on which the BESS units associated plant sit.

This permeable sub-base will provide benefits of both surface water storage and treatment. This reduces the requirements for subterranean storage features such as geocellular crates.

Although there is not expected to be any major sources of contamination associated with the works on the site, the permeable subbase will capture any minor fuel/oil spills or hydrocarbons and allow it to break down aerobically, preventing it entering the drainage network.

The surface water will be collected from the permeable sub-base and conveyed to an outfall via traditional gravity drainage systems.

The surface water will be discharged at a controlled rate of 2.0 l/s into an existing watercourse/ditch on the northwest side of the existing roundabout that connects Dig Gate Lane, John Milne Avenue and the ASDA Distribution Centre. This complies with the revised SuDS hierarchy as closely as possible by discharging to a watercourse.

3. CONCLUSION

Ridge have been appointed by Balance Power to produce a package of information to discharge planning conditions associated with the proposed Battery Energy Storage System construction at Dig Gate Lane, Rochdale.

A proposed drainage design has been produced in order to discharge these conditions.

The proposed surface water drainage design satisfies the planning condition by utilising SuDS features in the form of a permeable sub-base surfacing as the primary method of surface water capture and storage.

The use of permeable paving and a flow control device further the benefits of the design by improving the quality of the water leaving the site, as well as restricting it to greenfield runoff rates, in accordance with the four pillars of SuDS and the SuDS design guidance.

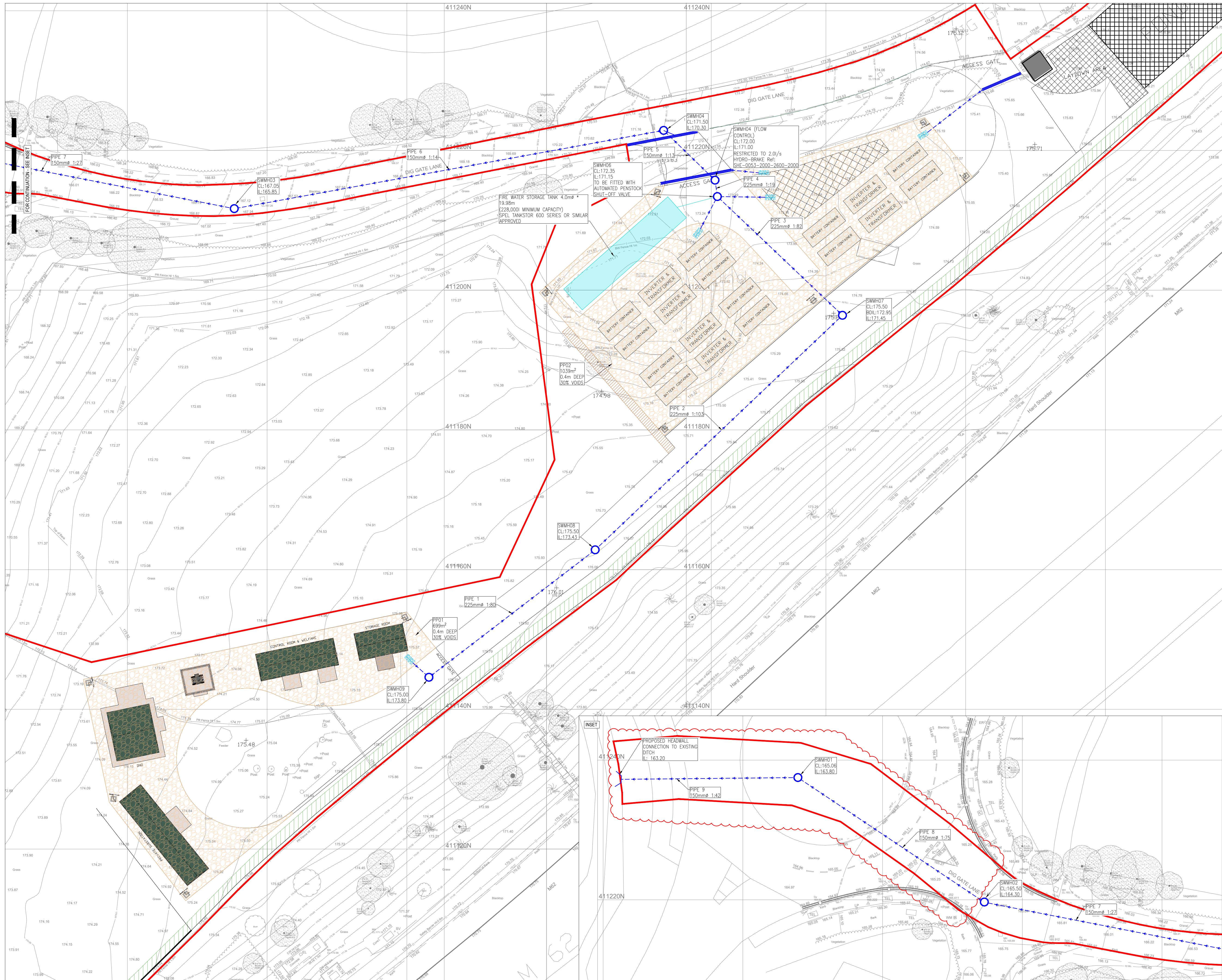
In addition to the above, the proposed outfall location is to a nearby open ditch. Again, according with the SuDS hierarchy and design best practices.

Permeable paving in combination with traditional gravity drainage to improve the water quality from the site and reduce the impact of the proposed development on the existing drainage infrastructure.

The proposed site levels strike a balance between accessibility and safety by reducing retaining wall heights where possible and opting for less intrusive solutions by opting for reinforced embankments, while also maintaining gradients suitable for the construction of the required plant and allowing suitable HGV access.

The risk of flooding is greatly reduced through the use of a permeable surfacing. This is due to water infiltrating straight into the subbase and reducing the extant of hard landscaping on the site. Further satisfying the planning condition in respect to increased flood risk. This is further supported by the results of the calculations that show no flooding in any storm event.

APPENDIX A – PROPOSED DRAINAGE DRAWINGS



DISCLAIMER NOTES:

THIS DOCUMENT IS COPYRIGHT OF THE ORIGINATOR AND MUST BE TREATED AS
CONFIDENTIAL

THIS DOCUMENT MUST NOT BE ALTERED, REPRODUCED OR DISTRIBUTED WITHOUT
PRIOR WRITTEN CONSENT OF THE ORIGINATOR

THIS DOCUMENT MUST NOT BE ALTERED - THE ORIGINATOR ACCEPTS NO RESPONSIBILITY
FOR ANY DISCREPANCIES ARISING AS A RESULT OF THE ORIGINATOR'S INFORMATION
BEING ALTERED

ANY DISCREPANCY MUST BE REPORTED TO THE ORIGINATOR

DO NOT SCALE THIS DOCUMENT - USE FIGURED DIMENSIONS ONLY

ALL DIMENSIONS MUST BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY RELATED
WORK

THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH ALL SUPPORTING DOCUMENTS
PRODUCED BY THE ORIGINATOR AND OTHER PROJECT DISCIPLINES

THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND
INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE
ONLY

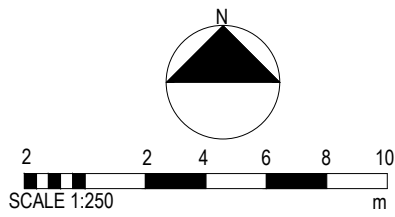
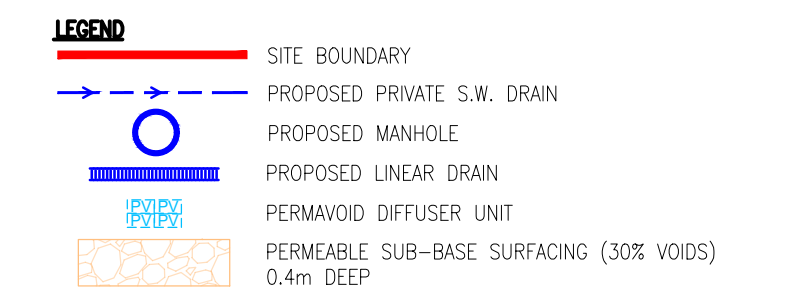
USERS OF THIS DOCUMENT ARE RESPONSIBLE FOR CHECKING WHICH REVISION IS
CURRENT

USE DOCUMENT STATUS "INFORMATION" OR "PRELIMINARY" INDICATES THAT THIS
DRAWING IS FOR REFERENCE PURPOSES ONLY - THE ORIGINATOR WILL ACCEPT NO
RESPONSIBILITY FOR THE COMPLETENESS OF INFORMATION UNDER THIS STATUS

THE DOCUMENT STATUS "RECORD" OR "AS BUILT" HAS BEEN PREPARED, IN PART, BASED
ON INFORMATION PROVIDED BY THE ORIGINATOR. THIS INFORMATION IS BELIEVED TO BE
RELIABLE. THE ORIGINATOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS
"RECORD" OR "AS BUILT" DOCUMENT OR FOR ANY ERRORS OR OMISSIONS THAT MAY HAVE
BEEN INCORPORATED INTO IT AS A RESULT OF INCORRECT INFORMATION PROVIDED TO
THE ORIGINATOR. THE USER OF THIS "RECORD" OR "AS BUILT" DOCUMENT IS
ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY

DRAWING NOTES:

CDM REGULATIONS 2015
SIGNIFICANT OR NON-OBVIOUS RISKS AND RISKS WHICH ARE DIFFICULT TO MANAGE ARE IDENTIFIED ON THIS DRAWING USING THE FOLLOWING SYMBOL. IDENTIFIED TO THE RIGHT WITH BRIEF ACCOMPANYING TEXT. FOR FURTHER DETAILS OF THE RISKS IDENTIFIED BY DESIGNERS, REFERENCE SHOULD BE MADE TO CDM HAZARD REGISTER.



P02	DRAINAGE RUN ADJUSTED WITHIN REDLINE BOUNDARY	18/12/2025	SS	TC
P01	INITIAL ISSUE	02/12/2025	CL	TC
REV	DESCRIPTION	DATE	BY	CHKD
ORIGINATOR: www.ridge.co.uk				

RIDGE

PROJECT NUMBER: 5029223

CLIENT:

BALANCE POWER

N ASSOCIATION WITH:

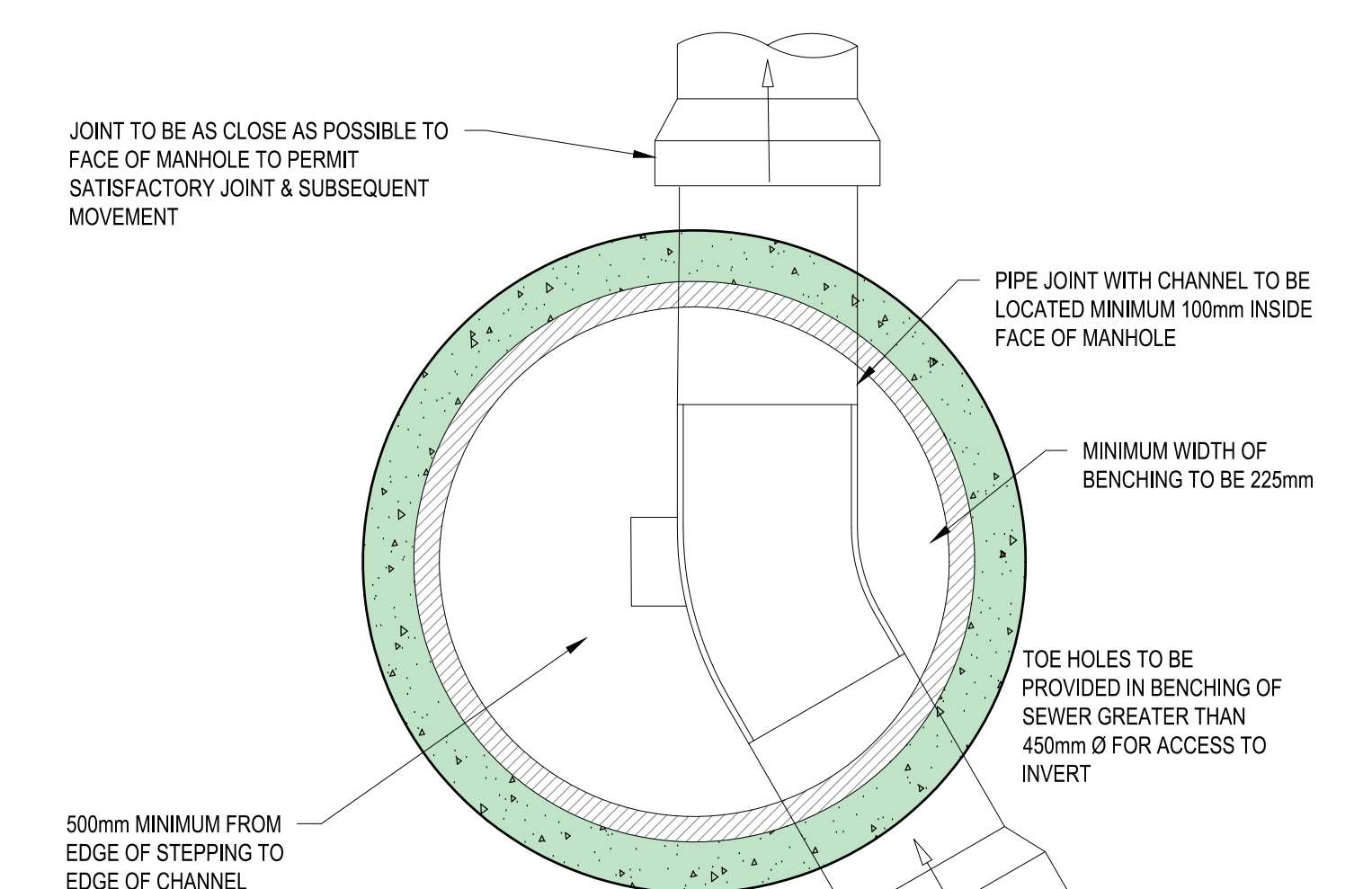
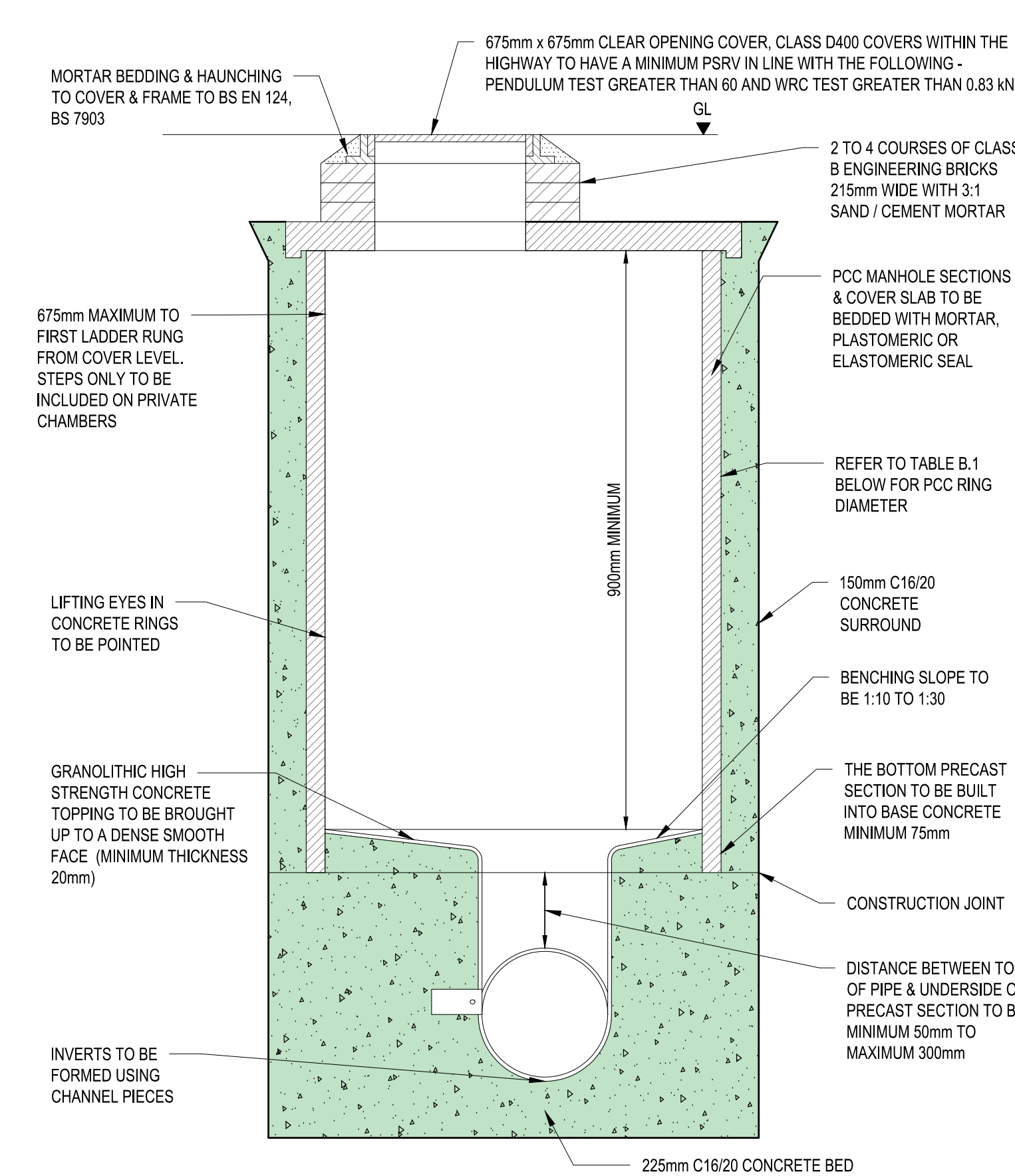
PROJECT:
DIG GATE LANE
GAS PEAKER & BESS SITE
ROCHDALE

TITLE: **PROPOSED DRAINAGE STRATEGY LAYOUT**

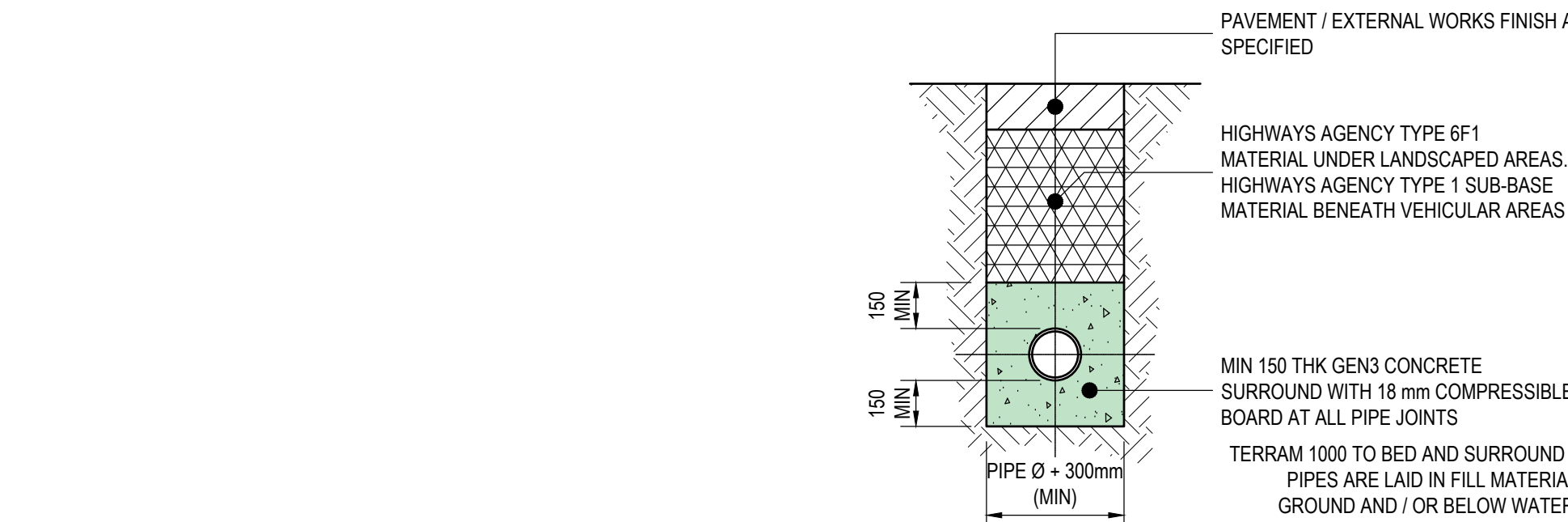
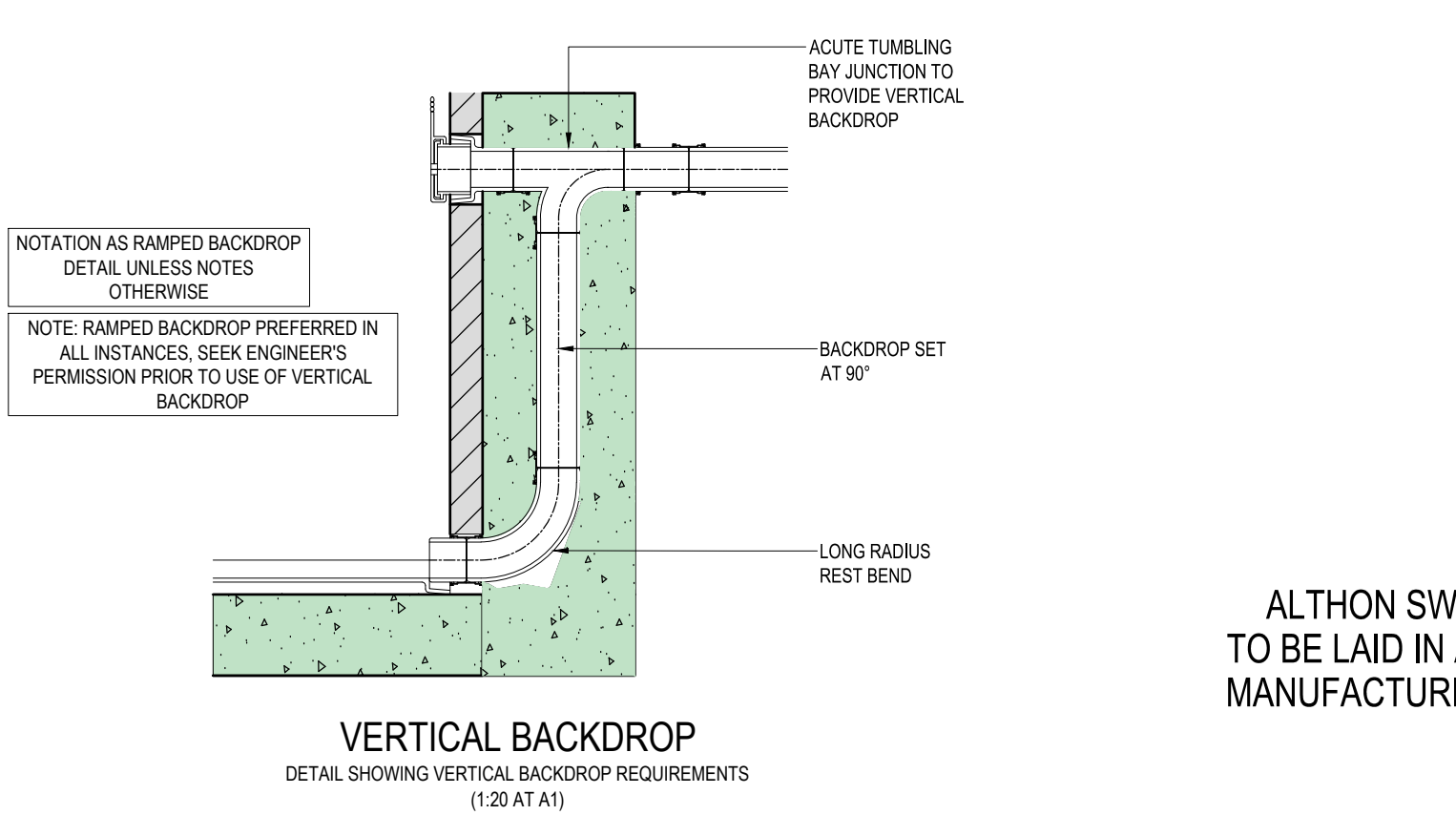
DRAWN BY:	CL	CHECKED BY:	APPROVED BY:
SCALE:	1:250	@ A1	DATE: 02/12/2025

STATUS:	DESCRIPTION:
S3	FOR COMMENT

DRAWING No: 5031777-RDG-XX-ST-D-C-110500							
PROJECT:	ORG:	FUNCTION:	SPATIAL:	FORM:	DISCIPLINE:	NUMBER:	REV:
5031777	RDG	XX	ST	D	C	110500	P02



TYPICAL PCC MANHOLE DETAIL (TYPE B)
DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 1.5m TO 3m
SCALE 1:25



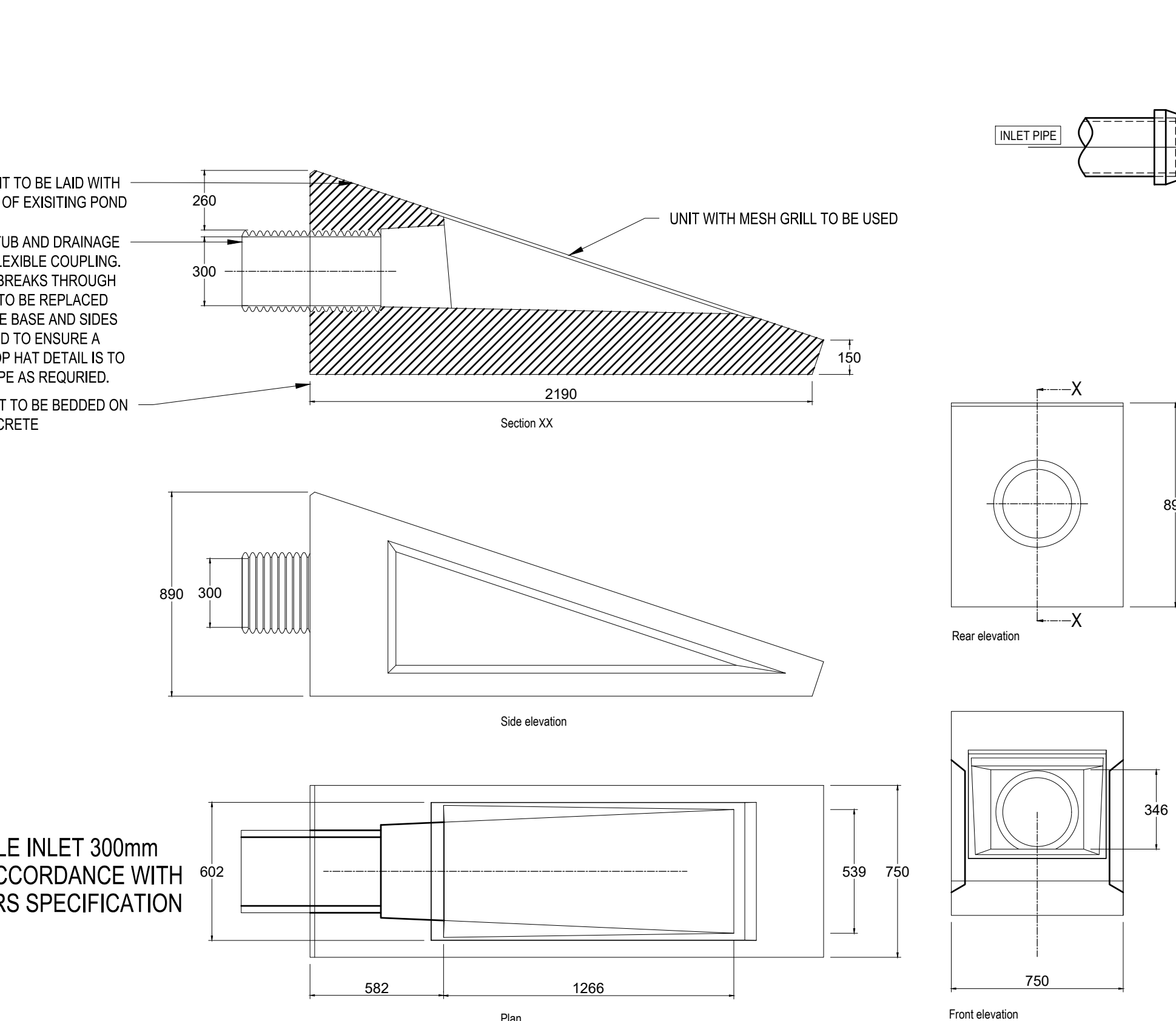
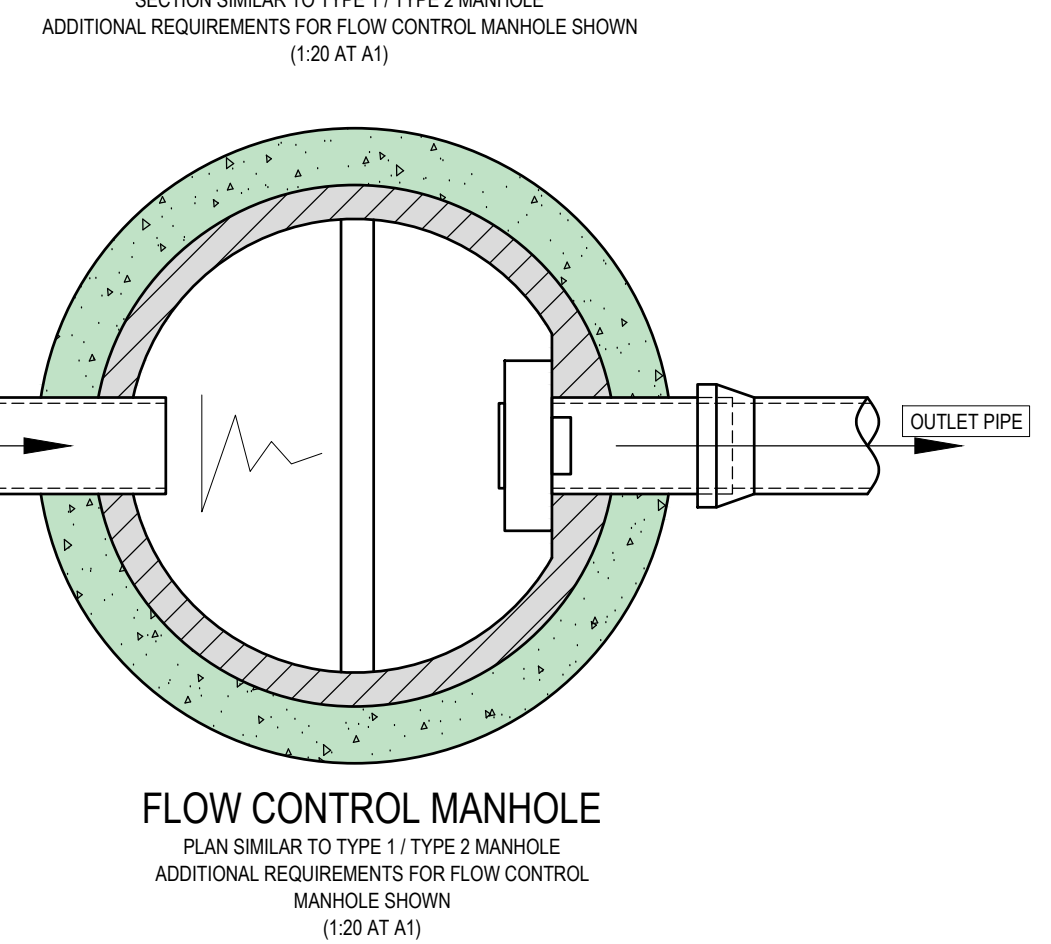
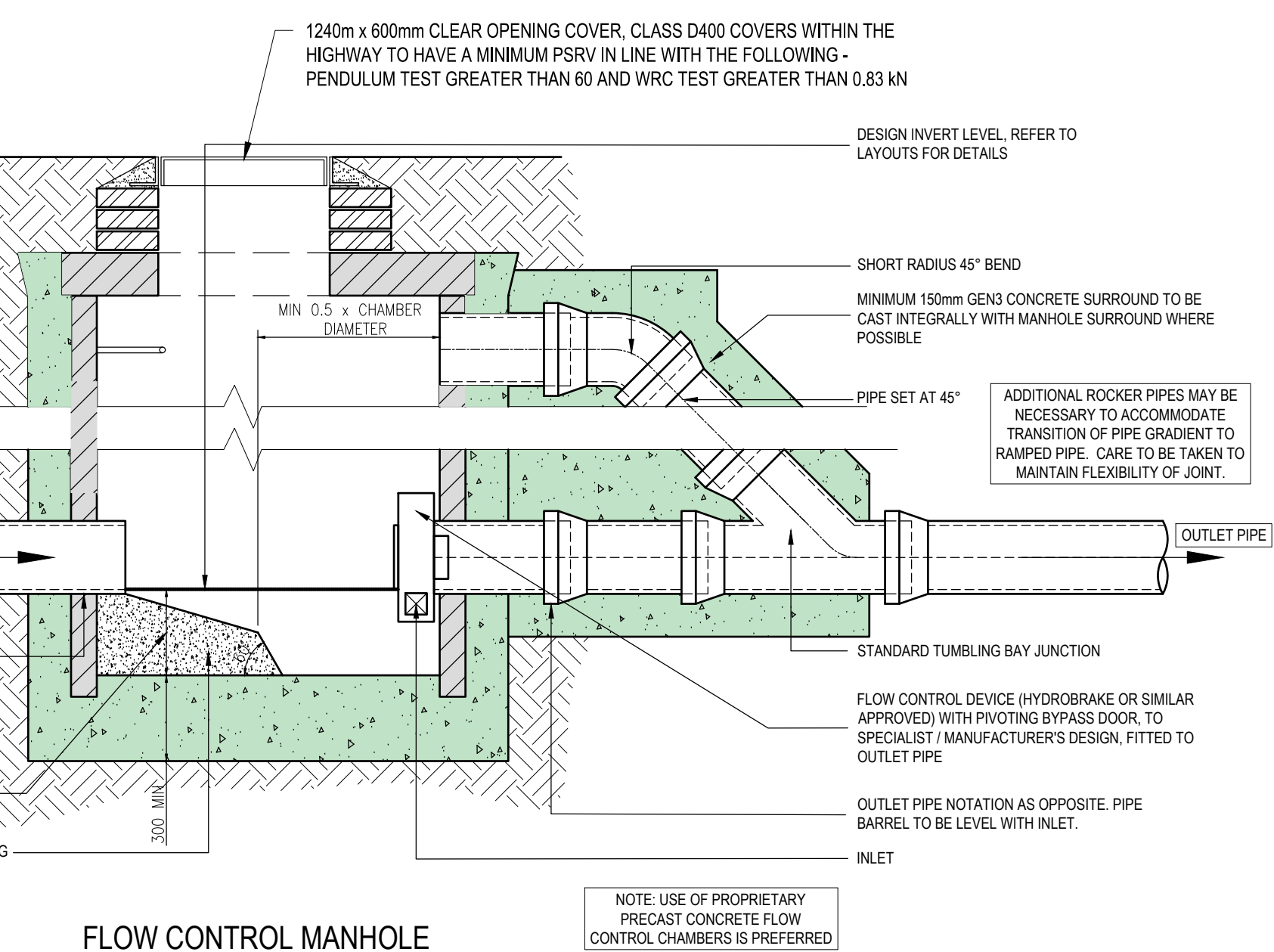
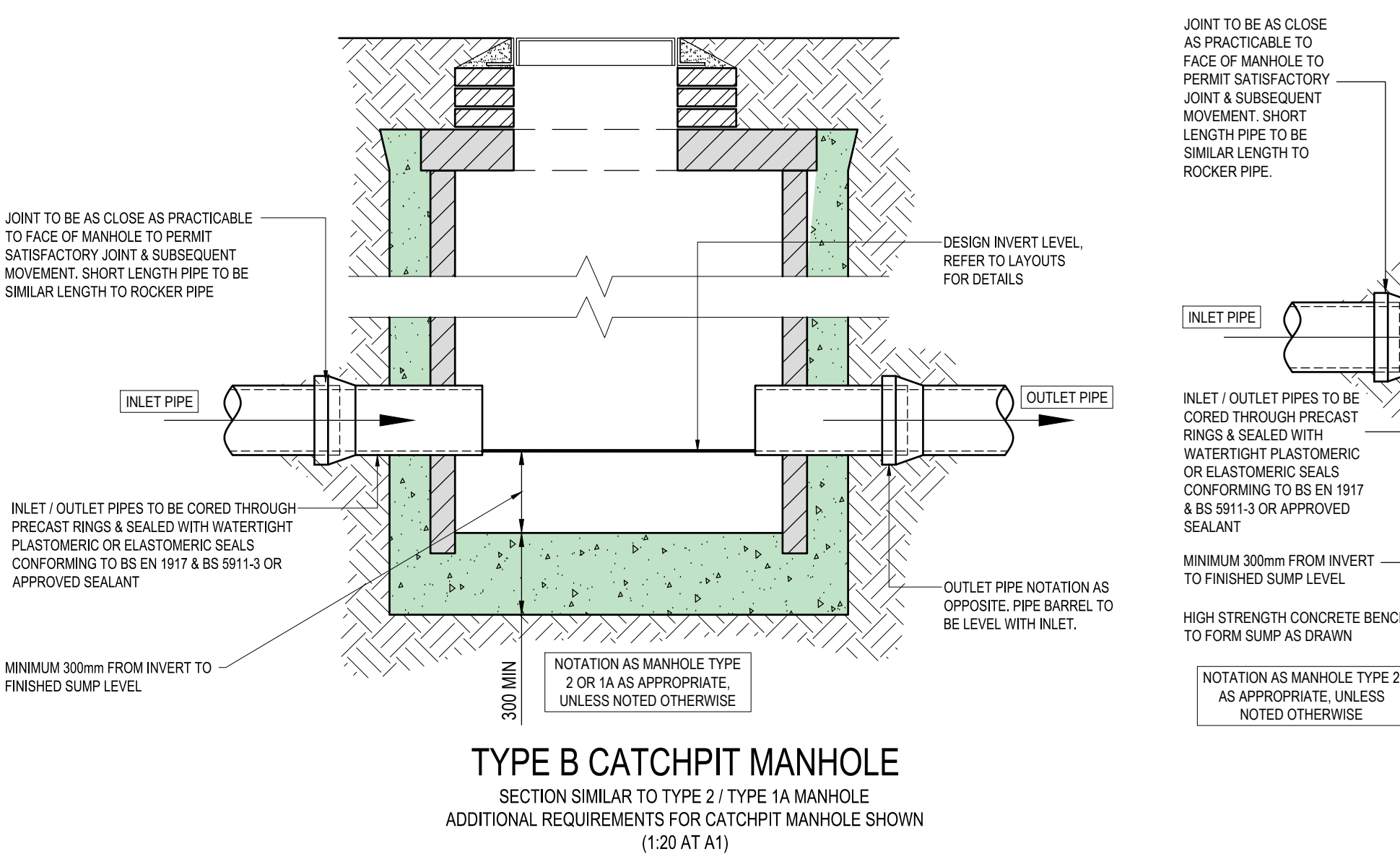
CLASS Z PIPE BEDDING DETAIL
FOR PIPES WITH COVER FROM FINISHED SURFACE TO CROWN LESS THAN 0.9m IN VEHICULAR AREAS OR LESS THAN 0.6m COVER IN LANDSCAPED AREAS OR BENEATH BUILDINGS
(1:20 AT A1)

CLASS S PIPE BEDDING DETAIL
FOR PIPES WITH COVER FROM FINISHED SURFACE TO CROWN GREATER THAN 0.9m IN VEHICULAR AREAS OR GREATER THAN 0.6m COVER IN LANDSCAPED AREAS OR BENEATH BUILDINGS
(1:20 AT A1)

NOTATION AS CLASS Z UNO

uPVC / THERMOPLASTIC PIPE NOTES

1. PIPES LESS THAN OR EQUAL TO 500 mm DIA TO HAVE A NOMINAL SHORT-TERM RING STIFFNESS OF NOT LESS THAN 8 kN/m² (SN8).
2. PIPES GREATER THAN 500 mm DIA TO HAVE NOMINAL SHORT-TERM RING STIFFNESS OF NOT LESS THAN 2 kN/m² (SN2), WHERE ACCOMPANIED BY MANUFACTURER'S DESIGN LOAD CALCULATIONS FOR THE PROPOSED USE.
3. uPVC PIPEWORK TO BS EN 13476 PARTS 1, 2 & 3 AND WIS 4-35-01.
4. uPVC PIPEWORK TO BE BSI KITEMARKED OR HAVE EQUIVALENT THIRD PARTY CERTIFICATION.
5. PIPES MUST BE CAPABLE OF WITHSTANDING 4000 PSI JETTING PRESSURE, WITH EVIDENCE SUPPLIED TO THE ENGINEER PRIOR TO PROCUREMENT.



DISCLAIMER NOTES:

- THIS DOCUMENT IS COPYRIGHT OF THE ORIGINATOR AND MUST BE TREATED AS CONFIDENTIAL
- THIS DOCUMENT MUST NOT BE ALTERED, REPRODUCED OR DISTRIBUTED WITHOUT PRIOR WRITTEN CONSENT OF THE ORIGINATOR
- THIS DOCUMENT MUST NOT BE ALTERED - THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR ANY DISCREPANCIES ARISING AS A RESULT OF THE ORIGINATOR'S INFORMATION BEING ALTERED BY OTHERS
- ANY DISCREPANCY MUST BE REPORTED TO THE ORIGINATOR
- DO NOT SCALE THIS DOCUMENT - USE FIGURED DIMENSIONS ONLY
- ALL DIMENSIONS MUST BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY RELATED WORKS
- THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH ALL SUPPORTING DOCUMENTS PRODUCED BY THE ORIGINATOR AND OTHER PROJECT DISCIPLINES
- THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY
- USERS OF THIS DOCUMENT ARE RESPONSIBLE FOR CHECKING WHICH REVISION IS CURRENT
- THE DOCUMENT STATUS "INFORMATION" OR "PRELIMINARY", INDICATES THAT THIS DRAWING IS FOR REFERENCE PURPOSES ONLY - THE ORIGINATOR WILL ACCEPT NO RESPONSIBILITY FOR THE COMPLETENESS OF INFORMATION UNDER THIS STATUS
- THE DOCUMENT STATUS "RECORD" OR "AS BUILT" HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE ORIGINATOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS "RECORD" OR "AS BUILT" DOCUMENT OR FOR ANY ERRORS OR OMISSIONS THAT MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT OF INCORRECT INFORMATION PROVIDED TO THE ORIGINATOR. THOSE RELYING ON THE "RECORD" OR "AS BUILT" DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY

DRAWING NOTES:

CDM REGULATIONS 2015

SIGNIFICANT OR NON-OBVIOUS RISKS AND RISKS WHICH ARE DIFFICULT TO MANAGE ARE IDENTIFIED ON THIS DRAWING USING THE FOLLOWING SYMBOL IDENTIFIED TO THE RIGHT WITH BRIEF ACCOMPANYING TEXT. FOR FURTHER DETAILS OF THE RISKS IDENTIFIED BY DESIGNERS, REFERENCE SHOULD BE MADE TO CDM HAZARD REGISTER.

2 2 4 6 8 10
SCALE 1:250
m

P01	INITIAL ISSUE	02/12/2025	CL	TC
REV	DESCRIPTION	DATE	BY	CHKD

ORIGINATOR: www.ridge.co.uk



PROJECT NUMBER: 5029223

CLIENT:

BALANCE POWER

IN ASSOCIATION WITH:

PROJECT:

DIG GATE LANE

GAS PEAKER & BESS SITE

ROCHDALE

TITLE:

PROPOSED DRAINAGE DETAILS

DRAWN BY:	CL	CHECKED BY:	APPROVED BY:
SCALE:	AS SHOWN @ A1	DATE:	02/12/2025
STATUS:	DESCRIPTION:		
	S3 FOR COMMENT		
DRAWING No:	5031777-RDG-XX-ST-D-C-110550		
PROJECT:	ORG: FUNCTION: SPATIAL: FORM: DISCIPLINE: NUMBER: REV:		
5031777	RDG XX ST D C 110550	P01	

APPENDIX B – PROPOSED DRAINAGE CALCULATIONS

SURFACE WATER DRIANAGE CALCULATIONS: DIG GATE LANE ROCHDALE	Date: 02/12/2025			RIDGE
	Designed by: CL	Checked by: TC	Approved By:	
Report Details: Type: Junctions Storm Phase: Phase	RIDGE & PARTNERS LLP: WINCHESTER			

Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
SWMH09	Outlet	Pipe 1	Free Discharge
SWMH08	Outlet	Pipe 2	Free Discharge
SWMH07	Outlet	Pipe 3	Free Discharge
SWMH06	Outlet	Pipe 4	Free Discharge
SWMH05	Outlet	(None)	Hydro-Brake®
	Invert Level (m)	171.000	
	Design Depth (m)	2.600	
	Design Flow (L/s)	2.0	
	Objective	Minimise Upstream Storage Requirements	
	Application	Surface Water Only	
	Sump Available	☒	
	Unit Reference	SHE-0053-2000-2600-2000	
	Outlet (1)	Pipe 5	Free Discharge
SWMH03	Outlet	Pipe 7	Free Discharge
SWMH02	Outlet	Pipe 8	Free Discharge
SWMH01	Outlet	Pipe 9	Free Discharge
SWMH04	Outlet	Pipe 6	Free Discharge

SURFACE WATER DRAINAGE CALCULATIONS: DIG GATE LANE ROCHDALE	Date: 02/12/2025			RIDGE
	Designed by: CL	Checked by: TC	Approved By:	
Report Details: Type: Stormwater Controls Storm Phase: Phase	RIDGE & PARTNERS LLP: WINCHESTER			



PP01

Type : Porous Paving

Dimensions

Exceedance Level (m)	175.000
Depth (m)	0.400
Base Level (m)	174.600
Paving Layer Depth (mm)	1
Membrane Percolation (m/hr)	365.0
Porosity (%)	30
Length (m)	52.077
Long. Slope (1:X)	100.00
Width (m)	13.429
Total Volume (m³)	83.712

Outlets

Outlet

Outgoing Connection	Pipe (10)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	500.0
---------------------	-------



PP02

Type : Porous Paving

Dimensions

Exceedance Level (m)	172.350
Depth (m)	0.400
Base Level (m)	171.950
Paving Layer Depth (mm)	1
Membrane Percolation (m/hr)	365.0
Porosity (%)	30
Length (m)	64.178
Long. Slope (1:X)	100.00
Width (m)	16.195
Total Volume (m³)	124.412

Outlets

Outlet

Outgoing Connection	Pipe (9)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

SURFACE WATER DRIANAGE CALCULATIONS: DIG GATE LANE ROCHDALE	Date: 02/12/2025			RIDGE
	Designed by: CL	Checked by: TC	Approved By:	
Report Details: Type: Inflow Summary Storm Phase: Phase	RIDGE & PARTNERS LLP: WINCHESTER			

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment Area	PP02		Time of Concentration	0.089	100	0	100	0.089
Catchment Area (2)	PP01		Time of Concentration	0.118	100	0	100	0.118
Catchment Area (3)	PP02		Time of Concentration	0.128	100	0	100	0.128
TOTAL		0.0		0.336				0.336

SURFACE WATER DRAINAGE CALCULATIONS: DIG GATE LANE ROCHDALE	Date: 02/12/2025			
	Designed by: CL	Checked by: TC	Approved By:	
Report Title: Rainfall Analysis Criteria	RIDGE & PARTNERS LLP: WINCHESTER			

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall		
FSR	Type: FSR	
Region	England And Wales	
M5-60 (mm)	19.0	
Ratio R	0.270	
Summer	☒	
Winter	☒	

Return Period	
Return Period (years)	Increase Rainfall (%)
1.0	0.000
10.0	0.000
30.0	0.000
30.0	40.000
100.0	0.000
100.0	45.000

Storm Durations	
Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
240	480
360	720
480	960
960	1920
1440	2880

SURFACE WATER DRIANAGE CALCULATIONS: DIG GATE LANE ROCHDALE	Date: 02/12/2025			
	Designed by: CL	Checked by: TC	Approved By:	
Report Details: Type: Inflows Summary Storm Phase: Phase	RIDGE & PARTNERS LLP: WINCHESTER			



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	0.09	45.4	19.679
Catchment Area (2)	FSR: 100 years: +45 %: 15 mins: Summer	0.12	60.3	26.106
Catchment Area (3)	FSR: 100 years: +45 %: 15 mins: Summer	0.13	65.2	28.247

SURFACE WATER DRAINAGE CALCULATIONS: DIG GATE LANE ROCHDALE	Date: 02/12/2025			RIDGE
	Designed by: CL	Checked by: TC	Approved By:	
Report Details: Type: Junctions Summary Storm Phase: Phase			RIDGE & PARTNERS LLP: WINCHESTER	



Critical Storm Per Item: Rank By: Max. Outflow

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
SWMH09	FSR: 100 years: +45 %: 30 mins: Summer	175.000	173.800	173.860	0.060	9.0	0.000	9.0	9.606	OK
SWMH08	FSR: 100 years: +45 %: 30 mins: Summer	175.500	173.425	173.489	0.064	9.0	0.000	8.8	9.442	OK
SWMH07	FSR: 100 years: +45 %: 30 mins: Summer	175.500	171.450	171.509	0.059	8.8	0.000	8.8	9.391	OK
SWMH06	FSR: 100 years: +45 %: 30 mins: Summer	172.350	171.150	171.234	0.084	24.6	0.000	24.4	25.821	OK
SWMH05	FSR: 100 years: +45 %: 30 mins: Summer	172.000	171.000	171.080	0.080	24.4	0.000	24.3	25.783	OK
SWMH03	FSR: 100 years: +45 %: 30 mins: Summer	167.050	165.850	165.939	0.089	23.2	0.000	22.9	24.167	OK
SWMH02	FSR: 100 years: +45 %: 15 mins: Summer	165.500	164.300	164.411	0.111	21.6	0.000	22.7	13.808	OK
SWMH01	FSR: 100 years: +45 %: 15 mins: Summer	164.500	163.300	163.510	0.210	22.7	0.000	23.6	13.687	Surcharged
OUTFALL	FSR: 100 years: +45 %: 15 mins: Summer	164.500	163.200	163.350	0.150	23.6	0.000	23.5	13.687	OK
SWMH04	FSR: 100 years: +45 %: 30 mins: Summer	171.500	170.300	170.374	0.074	23.4	0.000	23.2	24.318	OK

SURFACE WATER DRAINAGE CALCULATIONS: DIG GATE LANE ROCHDALE	Date: 02/12/2025		
	Designed by: CL	Checked by: TC	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	RIDGE & PARTNERS LLP: WINCHESTER		

RIDGE



Critical Storm Per Item: Rank By: Max. Resident Volume

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. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Half Drain Down Time (mins)	Percentage Available (%)	Status
PP01	FSR: 100 years: +45 %: 480 mins: Summer	175.355	174.624	0.234	0.023	13.2	49.500	0.000	4.4	118	40.868	OK
PP02	FSR: 100 years: +45 %: 480 mins: Summer	172.903	171.991	0.311	0.041	24.3	96.075	1.062	7.5	137	22.777	OK

SURFACE WATER DRIANAGE CALCULATIONS: DIG GATE LANE ROCHDALE	Date: 02/12/2025			RIDGE
	Designed by: CL	Checked by: TC	Approved By:	
Report Details: Type: Connections Summary Storm Phase: Phase	RIDGE & PARTNERS LLP: WINCHESTER			



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
Pipe1	FSR: 100 years: +45 %: 30 mins: Summer	Pipe	SWMH09	SWMH08	175.000	173.860	0.062	9.606	1.0	0.15	9.0	OK
Pipe 2	FSR: 100 years: +45 %: 30 mins: Summer	Pipe	SWMH08	SWMH07	175.500	173.489	0.063	9.442	1.0	0.17	8.8	OK
Pipe 3	FSR: 100 years: +45 %: 30 mins: Summer	Pipe	SWMH07	SWMH06	175.500	171.509	0.072	9.391	0.8	0.15	8.8	OK
Pipe 4	FSR: 100 years: +45 %: 30 mins: Summer	Pipe	SWMH06	SWMH05	172.350	171.234	0.082	25.821	1.9	0.2	24.4	OK
Pipe 7	FSR: 100 years: +45 %: 30 mins: Summer	Pipe	SWMH03	SWMH02	167.050	165.939	0.098	24.167	1.9	0.66	22.9	OK
Pipe 9	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	SWMH01	OUTFALL	164.500	163.510	0.150	13.687	1.3	1.12	23.6	Surcharged
Pipe (9)	FSR: 100 years: +45 %: 30 mins: Summer	Pipe	PP02	SWMH06	172.992	172.123	0.072	16.516	1.4	0.15	15.8	OK
Pipe (10)	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	PP01	SWMH09	175.521	174.701	0.048	5.619	1.5	0.05	9.4	OK
Pipe 8	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	SWMH02	SWMH01	165.500	164.411	0.150	13.808	1.3	0.87	22.7	OK
Pipe 5	FSR: 100 years: +45 %: 30 mins: Summer	Pipe	SWMH05	SWMH04	172.000	171.080	0.077	24.406	2.6	0.48	23.4	OK
Pipe 6	FSR: 100 years: +45 %: 30 mins: Summer	Pipe	SWMH04	SWMH03	171.500	170.374	0.082	24.318	2.4	0.49	23.2	OK