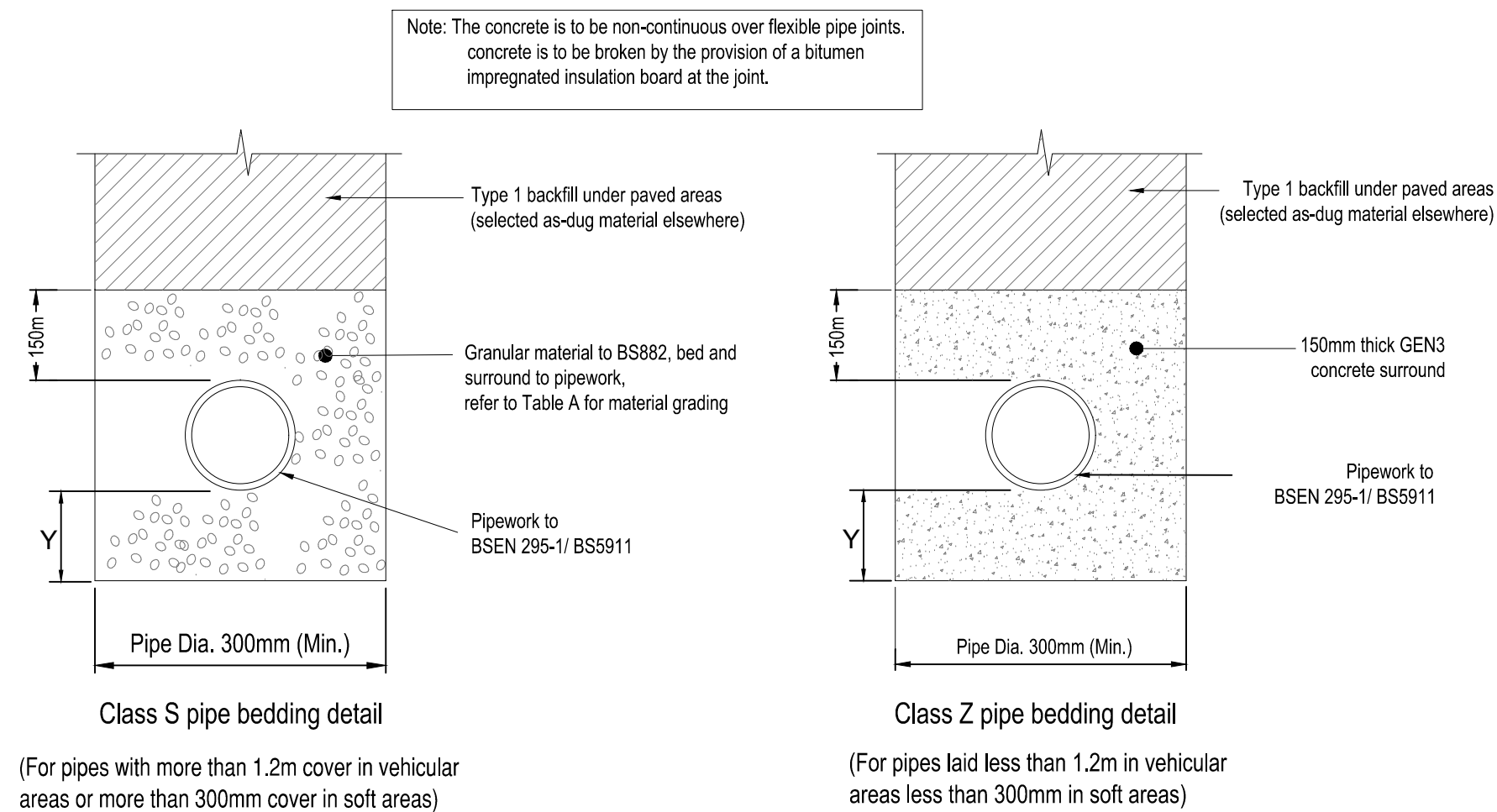




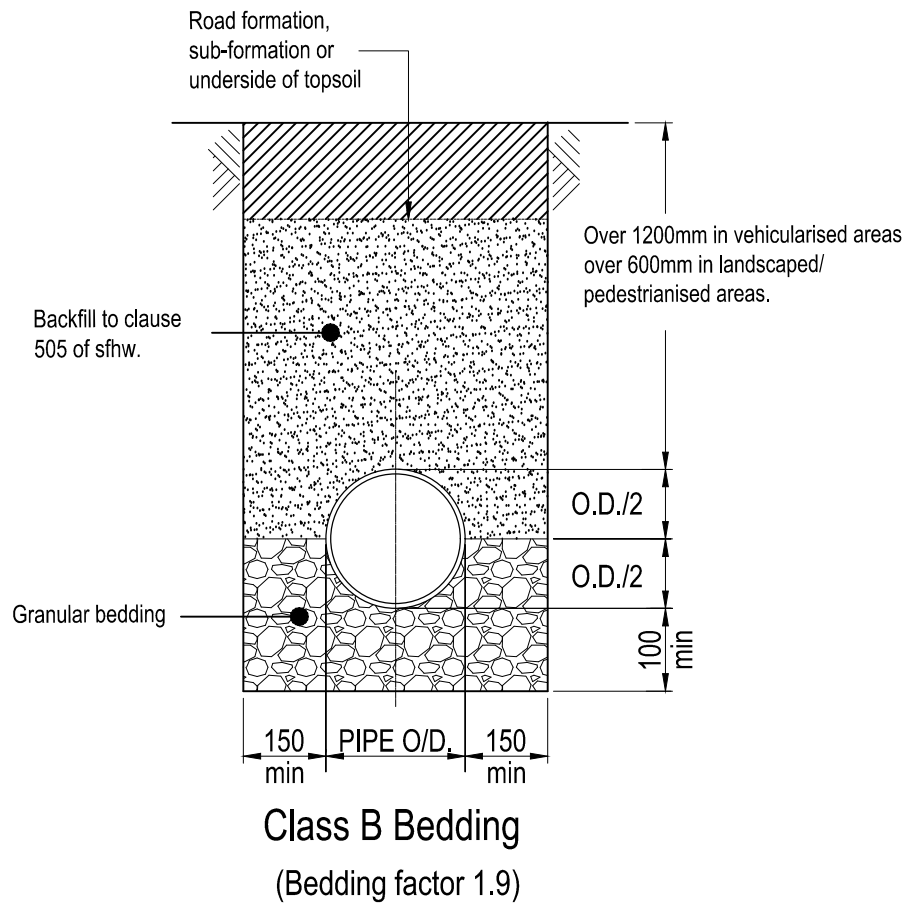
Bedding Details

Table A
granular pipe bedding material Type 'S'

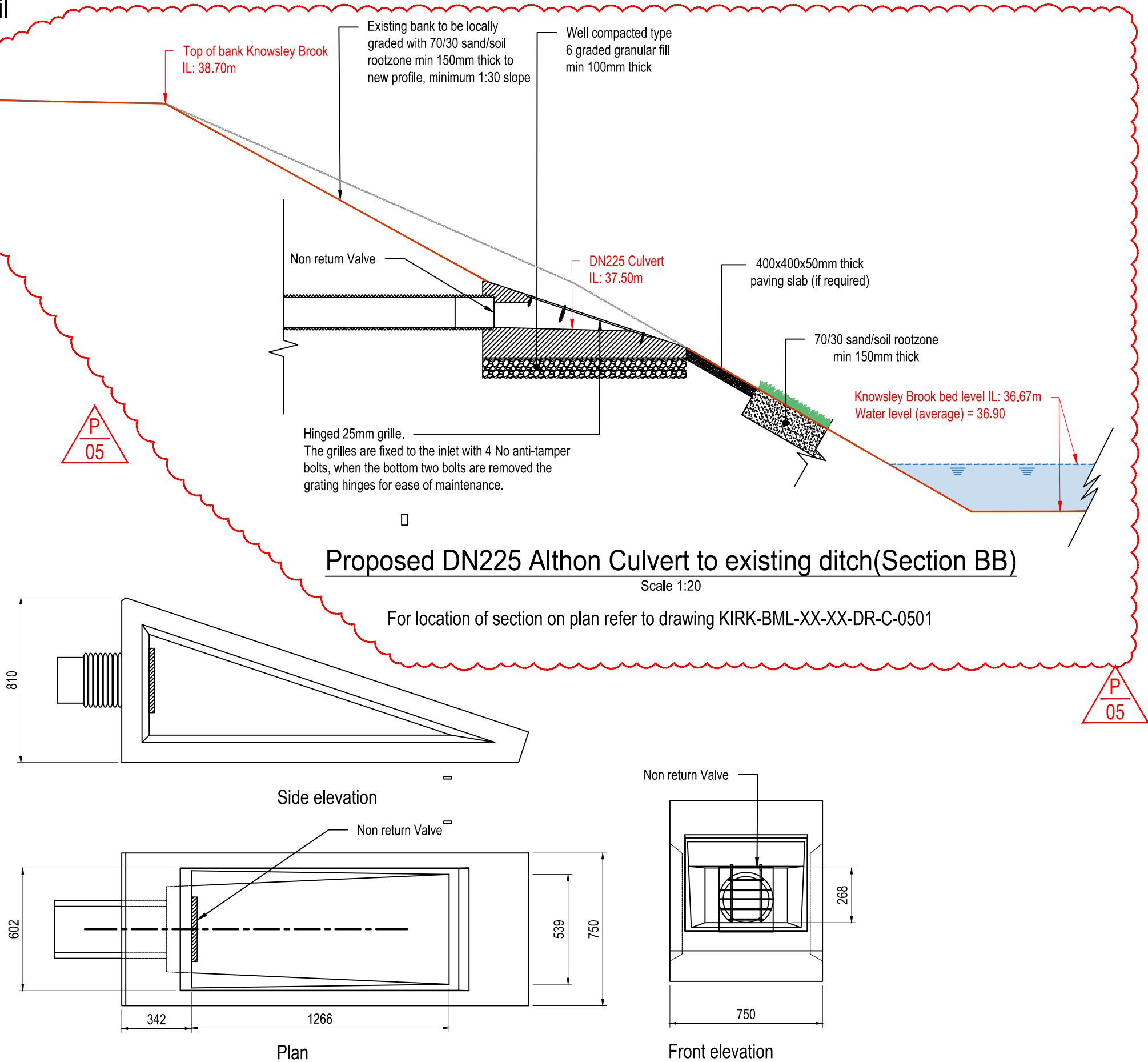
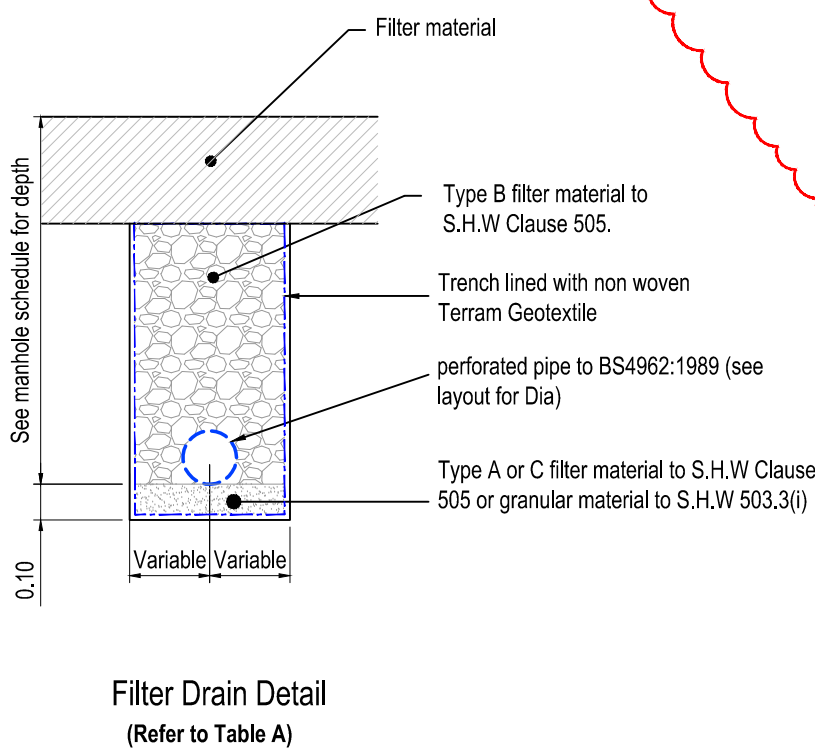
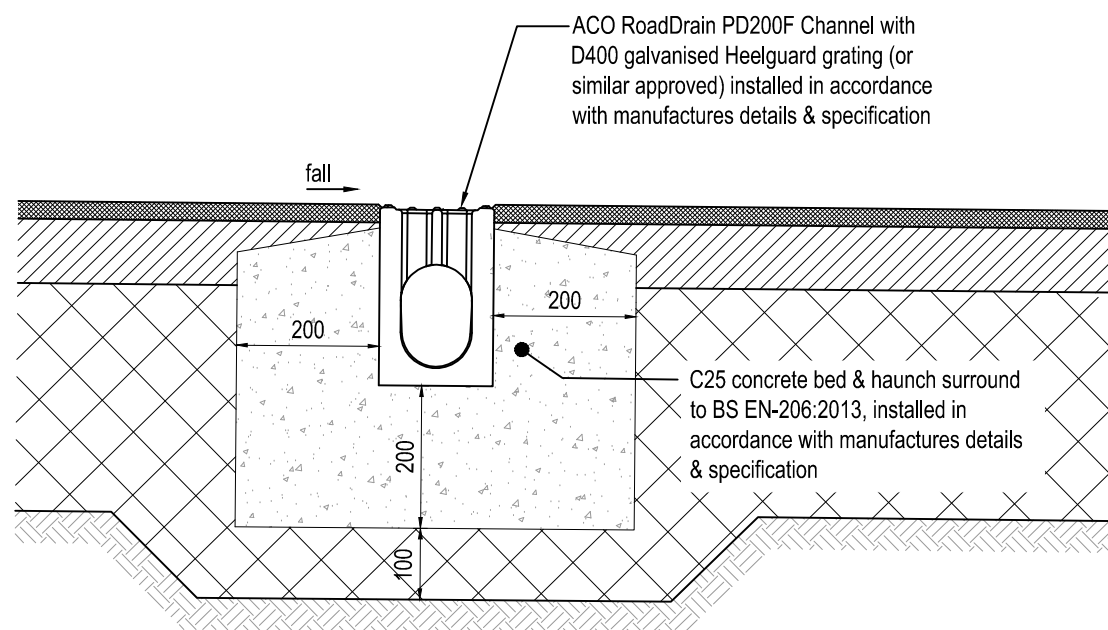
Pipe dia. (mm)	Aggregate size.	
	Graded (mm)	Single sized (mm)
100	-	10
150	14 - 5	10 OR 14
225 - 300	14 - 5 OR 20 - 5	10, 14 OR 20
375 - 525	14 - 5 OR 20 - 5	10, 14 OR 20
EXCEEDING 525	14 - 5 OR 20 - 5 OR 40 - 5	10, 14, 20 OR 40

Table B
(Trench widths and other dimensions)

PIPE DIA.(MM)	WIDTH BC		Y		Z
	MAX.	MIN.	Y1 (UNIFORM SOIL)	Y2 (ROCK) *	MIN.
100	550	450	100	200	100
150	600	490	100	200	100
225	700	580	150	200	100
300	750	680	150	200	100
375	1050	950	150	200	100
450	1150	1030	150	200	150
525	1200	1120	150	200	150
600	1350	1240	150	200	150
675	1450	1330	150	200	225
750	1500	1400	150	200	225
825	1600	1490	150	225	225
900	2100	1900	150	225	225
975	2150	1950	175	250	300
1050	2250	2050	175	275	300
1200	2500	2250	200	300	300
OVER 1200	O.D. + 1000	O.D. + 800	I.D./6	I.D./4	400



Bedding beneath and at the sides of the pipe to be well compacted the first 300mm of fill above the crown of the pipe is to be lightly tamped by hand. Mechanical compaction may be used only above this level. Geotextiles may be used where directed or approved by the engineer to contain bedding material in certain soils e.g. running sand in very wet conditions, where directed or approved by the engineer a temporary land drain may be laid within the granular bed.



Sectional Plan

Rigid pipes built into manhole should have a flexible joint as close as feasible to the external face of the structure and the length of the next rocker pipe should be as shown.

Nominal diameter (mm)	Maximum effective length (m)
150 - 600	0.6
601 - 750	1.00
over 750	1.25

All pipes entering the bottom of the manhole to have soffits level.
Provision of Rocker Pipes at Manhole Locations for Rigid Pipes

Safety, Health & Environmental Information:

In addition to the hazards and risks normally associated with the types of work detailed on this drawing, please note the significant hazards identified by symbols below,

INDICATES A RESIDUAL RISK AS A WARNING

INDICATES A RESIDUAL RISK FOR INFORMATION

and described below:

Construction/Maintenance/Cleaning/Demolition
Refer to Drawing:

General Notes:

- Do not scale from this drawing.
- All dimensions are in meters (m), all levels in metres (m) unless noted otherwise.
- Discrepancies or omissions are to be reported to the Engineer prior to work commencing.
- Materials and workmanship are to comply in all respects with current British Standard Specifications, Codes of Practice, and Building Regulations Approved Documents.
- The copyright of this drawing is vested in the Engineer and must not be copied or reproduced without written consent.
- The Contractor is to check and verify all building and site dimensions, levels and sewer invert levels at connection points before work commences.
- This drawing is to be read in conjunction with all relevant specifications and drawings issued by the Engineer, Architect and other Specialists.

P05	DHNS	08.01.2026	Updated to external design review comments.
P04	DHNS	06/10/2025	Headwall detail updated
P03	DHNS	11/06/2025	Drainage detail updated
P02	NS/AM	17/12/2024	Filter material updated
P01	DHNU	13/11/2024	Preliminary issue
Rev	By / Ch'd	Date	Description

PRELIMINARY DRAWING
This drawing is not to be used for construction

Client: **HVGS** High Voltage Grid Services
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Web: www.barnsleymarshall.co.uk

Project: **Battery Energy Storage System, Kirkby Substation, Coopers Lane, Liverpool, L33 7TT**

Drawing: **Drainage Details 02
Pipe Bedding Details**

By: SLW/JP	Date: 08/08/2024
Drawing No. KIRK-BML-XX-XX-DR-C-0511	Revision P05
BML Job No. 1126-01	Status -
Drawing Scale at A1: 1:250	
CAD Filename: Y:\Projects\1126-01\Omni Projects\Kirkby04 - Working Information\05 - DWG\Drawings\BML-XX-XX-DR-C-0511-0514 Drainage Details.dwg	