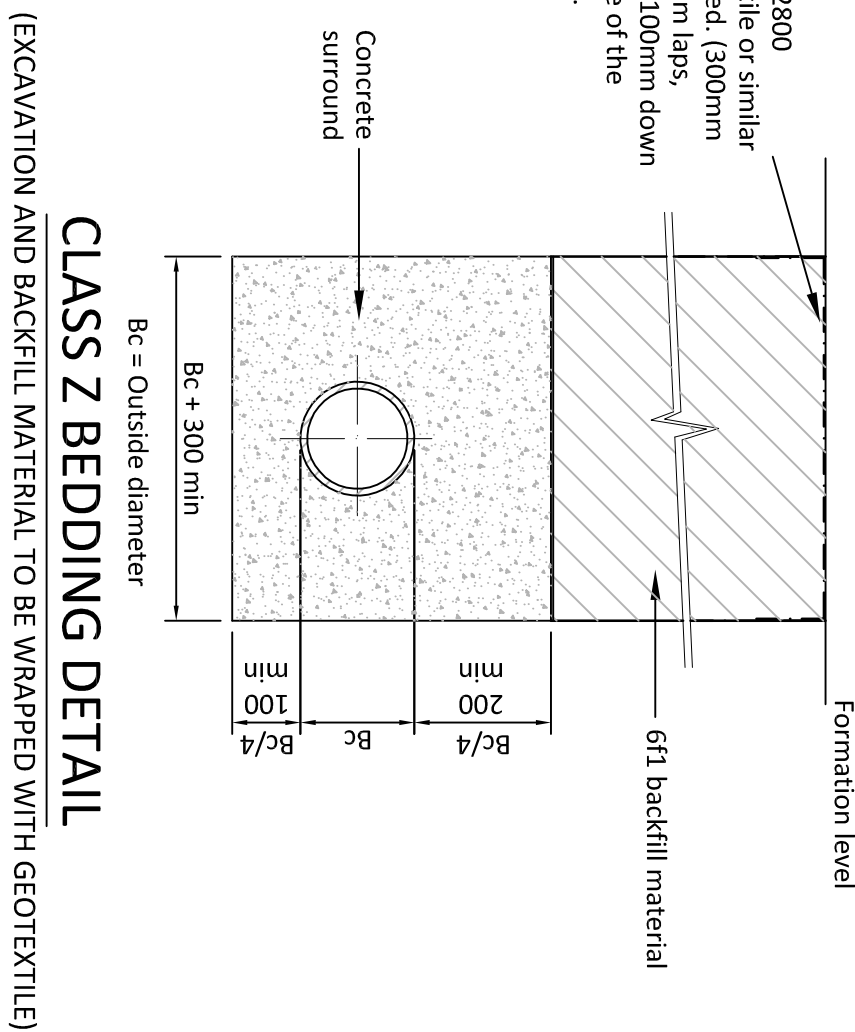
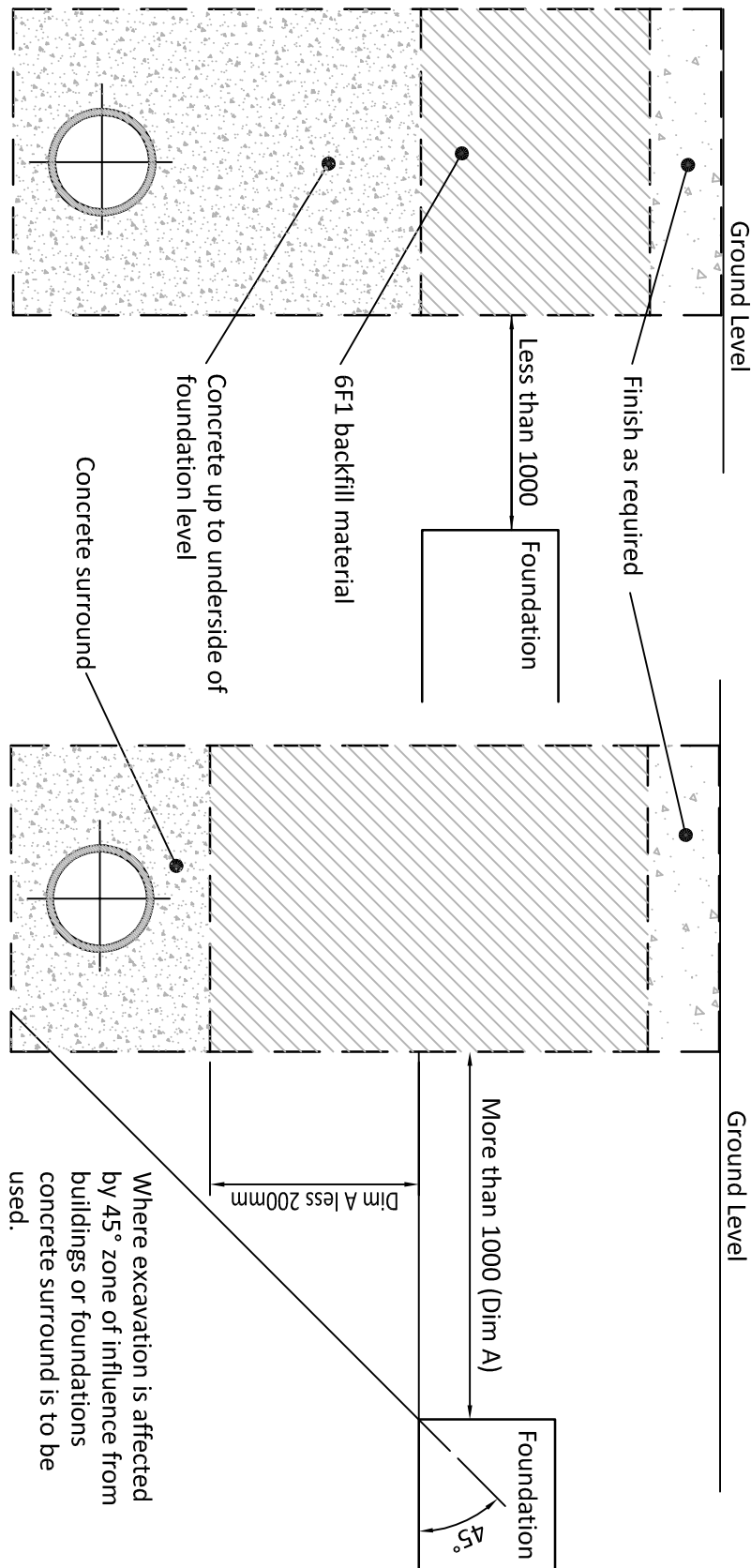


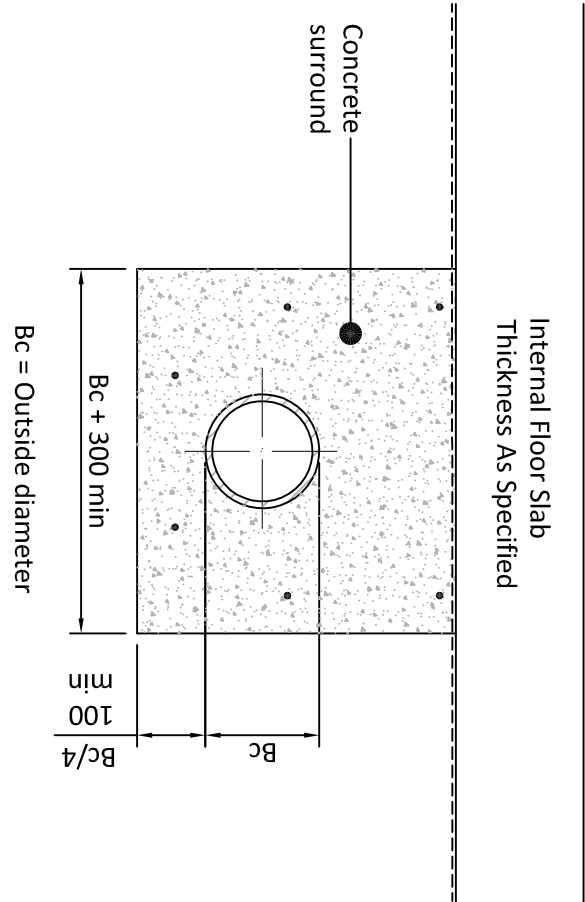
Notes:

1. All dimensions are to be checked on site before the commencement of any excavation. Dimensions should be reported to the Engineer for confirmation. Signed dimensions only are to be taken from this drawing.
2. This drawing is to be read in conjunction with all relevant Engineers' and Services Engineers' drawings and specifications.

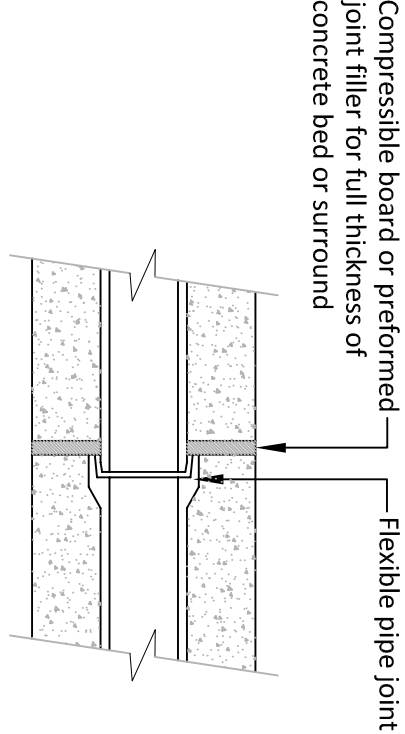
SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
IN ADDITION TO THE DRAFTER'S FORCE, USUALLY ASSOCIATED WITH THE TYPES OF WORK DETAILLED ON THIS DRAWING, NOTE THE FOLLOWING:
CONSTRUCTION
MAINTENANCE / CLEANING
DECOMMISSIONING / DEMOLITION
IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT



CLASS Y BEDDING DETAIL
(CAST INTEGRAL WITH FLOOR SLAB, INCLUDING INTERNAL INSPECTION CHAMBERS)



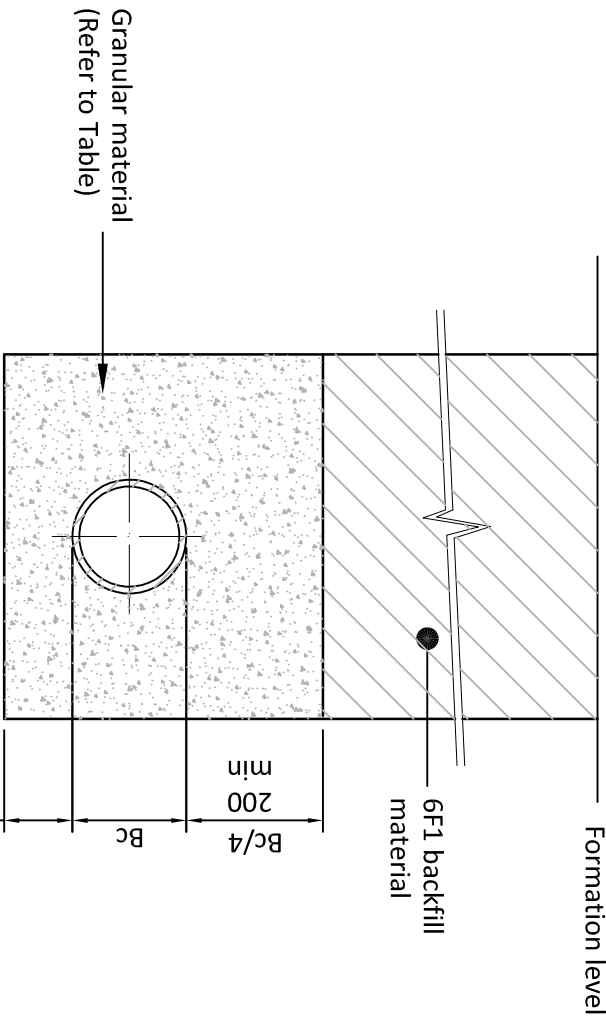
DETAIL INDICATING CONCRETE BACKFILLING TO TRENCHES IN CLOSE PROXIMITY TO BUILDING AND FOUNDATIONS



JOINTS FOR CONCRETE SURROUND TO PIPES
(To occur at each pipe joint)

Pipe Ø	Joint thickness
< 450	18mm
450-1200	36mm
1200 >	54mm

COMPRESSIBLE FILLER TABLE
(BITUMEN IMPREGATED INSULATING BOARD TO BS 1142: PART 3)



CLASS S BEDDING DETAIL

BS EN 1610 : 1997 Annex B Table B.15 Coarse Aggregate - Pipe Bedding					
Sieve Size (mm)	Percentage by mass passing BS sieves for nominal sizes		Single-sized Aggregate (mm)		
	Graded Aggregate (mm)		40	20	14
40 to 5	20 to 5	14 to 5	40	20	14
50.0	100	100	100	100	100
37.5	90 - 100	100	85 - 100	100	100
20.0	35 - 70	90 - 100	0 - 25	85 - 100	100
14.0	10 - 40	30 - 60	0 - 5	0 - 25	0 - 50
10.0	10 - 40	30 - 60	0 - 5	0 - 25	0 - 50
5.0	0 - 5	0 - 10	0 - 10	0 - 10	0 - 25
2.36	0 - 5	0 - 10	0 - 10	0 - 10	0 - 5

RIGID PIPES BEDDING GRADING

Based on BS EN 1610 : 1997 Table B.15. For rigid pipes the bedding should be single size material or graded material from 5mm up to a max size of 10mm for 100mm pipes, 14mm for 150mm pipes, 20mm for 225mm to 600mm pipes, 40mm for over 675mm pipes

TRENCH WIDTHS	
PIPE I.D	OVERALL TRENCH WIDTH
100	550
150	600
225	700
300	850
375	1050
450	1150
525	1200
600	1350
675	1450
750	1500
825	1600
900	1600
1050	1900
1200	2100
1350	2300
1450	2500
1500	2700
1800	3100

BSEN 13242, Coarse Aggregate (clause 4.3.2)

BSEN 13242, Coarse Aggregate (clause 4.3.2)	
Category for general grading requirements	Gc80-20
Category for tolerances at mid-size sieves	GTrr (no requirements)
Category of maximum values of fines contents	Gravel - FL5 Crushed rock, recycled aggregate - f4
Nominal pipe diameter, mm	Aggregate size, mm
Not exceeding 140	Graded
Exceeding 140 but not exceeding 400	Single sized
Exceeding 400	4/10
	2/14 or 4/20
	4/10, 6/14 or 10/20
	2/14, 4/20 or 4/40
	4/10, 6/14, 10/20 or 20/40

TABLE 5/3 BSEN 13242 COURSE AGGREGATE CLAUSE 4.3.2
FOR PIPE BEDDING, HAUNCHING AND SURROUNDING MATERIAL.

Rev	Date	Description	By	Ckd
T1	22.08.14	ISSUED FOR TENDER	RB	JH
Architect:				
MICHAEL SPARKS ASSOCIATES				
Client:				
Hydrack Hydrack Consultants Ltd 239 Ashley Road Walsby, Doncaster T: 0114 231 0706 www.hydrack.com				
Project Title:				
OLDLANDS FARM, BOGNOR REGIS				
Drawing Title:				
DRAINAGE AND EXTERNAL WORKS DETAILS (Sheet 3 of 4)				
Drawing Status:				
TENDER				
Hydrack Job No:				
C14443				
Drawn	Checked	Scale @ A1	Date	Issue Date
RWB	JH	As shown	14.08.14	22.08.14
Drawing Number:	218			Revision:
				T1