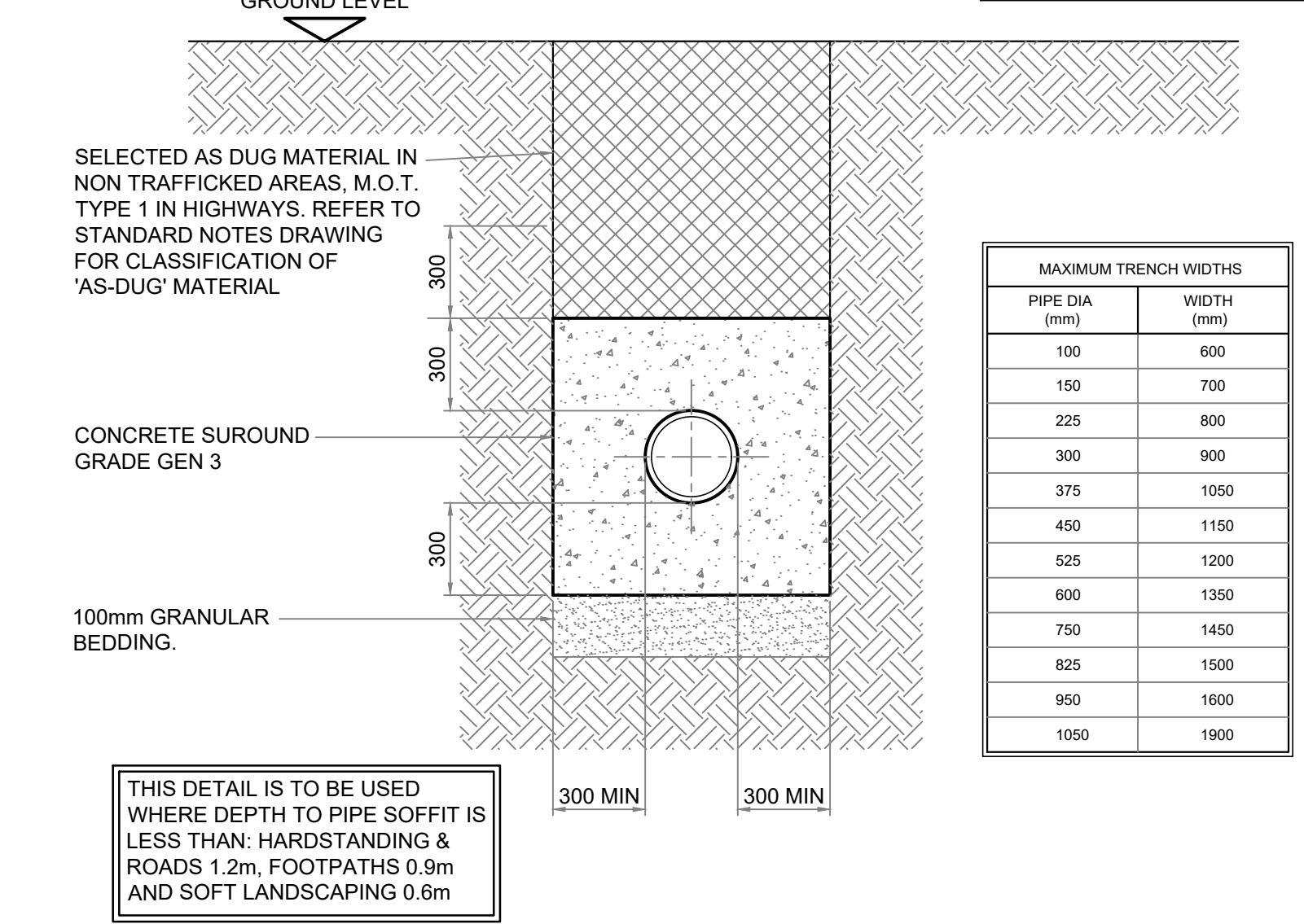


COMPRESSIBLE BOARD OR PREFORMED JOINT FILLER FOR FULL THICKNESS OF CONCRETE BED OR SURROUND

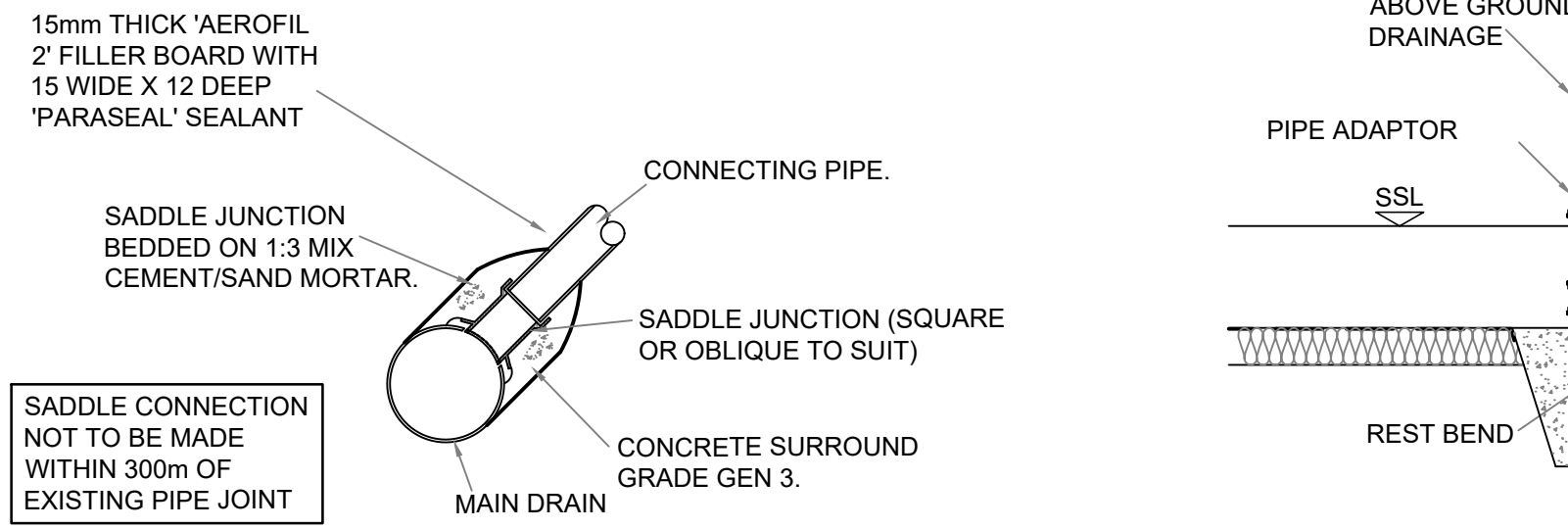
JOINTS REQUIRED AT 5m INTERVALS MAX.

COMPRESSIBLE FILLER IS TO BE USED AT PIPE JOINTS IN CONCRETE PROTECTION TO PIPES. FILLER TO BE USED CAN BE HYDROCELL BY FOSROC, OR APPROVED BITUMEN IMPREGNATED INSULATING BOARD TO B.S. 1142 PART 3. THE COMPRESSIBLE MATERIAL SHALL BE CUT TO MATCH THE PIPELINE SHAPE AND MUST EXTEND THROUGH THE FULL HEIGHT OF THE CONCRETE.

COMPRESSIBLE FILLER FOR PIPE JOINTS		
NOMINAL PIPE DIA	HYDROCELL	Bitumen Impregnated Board
100 - 300	15mm	18mm
350 - 450	20mm	24mm
465 - 750	35mm	36mm

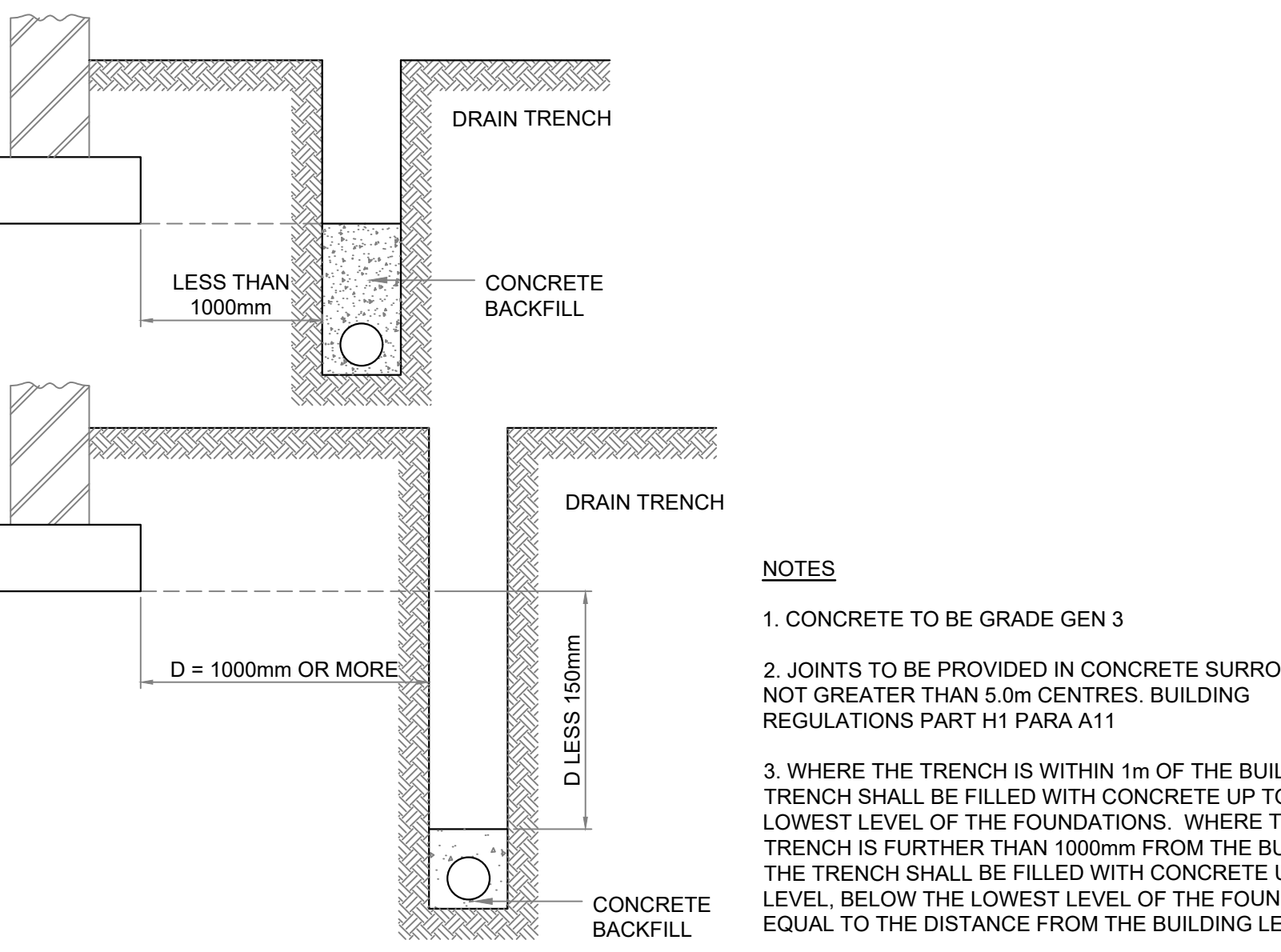


CLASS 'Z' PIPE BEDDING



SADDLE CONNECTION DETAIL

(DIAMETER OF MAIN DRAIN TO BE A MINIMUM OF DOUBLE THE SIZE OF THE CONNECTING PIPE. IN ALL OTHER CASES A PRE-FORMED JUNCTION IS TO BE USED.)

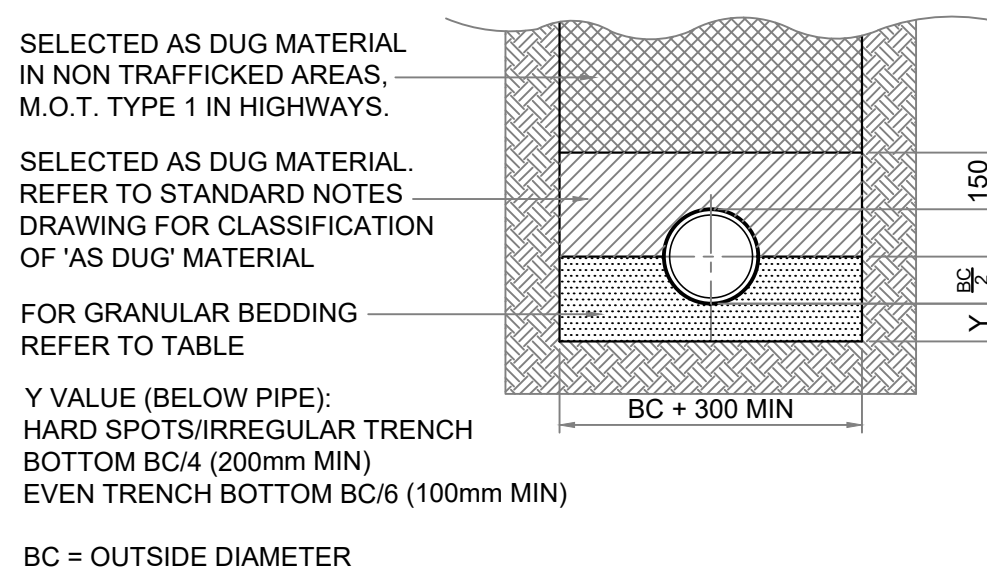


PIPE RUNS ADJACENT TO BUILDING

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

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



PIPE BEDDING CLASS B

BEDDING FACTOR 1.9

BACKFILL OPTIONS ABOVE THE MODULAR UNIT FOR FIRST 100mm :

- MIN 100mm THICK SELECTED EXCAVATED MATERIAL IF SEEN SUITABLE BY THE SITE ENGINEER.
- 100 mm THICK COARSE SAND OR CLASS 6H SELECTED GRANULAR MATERIAL.
- BACKERBOARD HD (IS A PREMOULDED BOARD FOR USE AS PROTECTION AGAINST BACKFILL)

BACKFILL MATERIAL WITHIN 300mm OF THE TANK TO BE FREE FROM PARTICLES EXCEEDING 40mm IN DIAMETER, IN ACCORDANCE WITH CLASS 8 MATERIAL TO SERIES 600, VOLUME 1, MCHW. BACKFILLING TO BE CARRIED OUT IN ACCORDANCE WITH THE MANUFACTURER'S GUIDANCE.

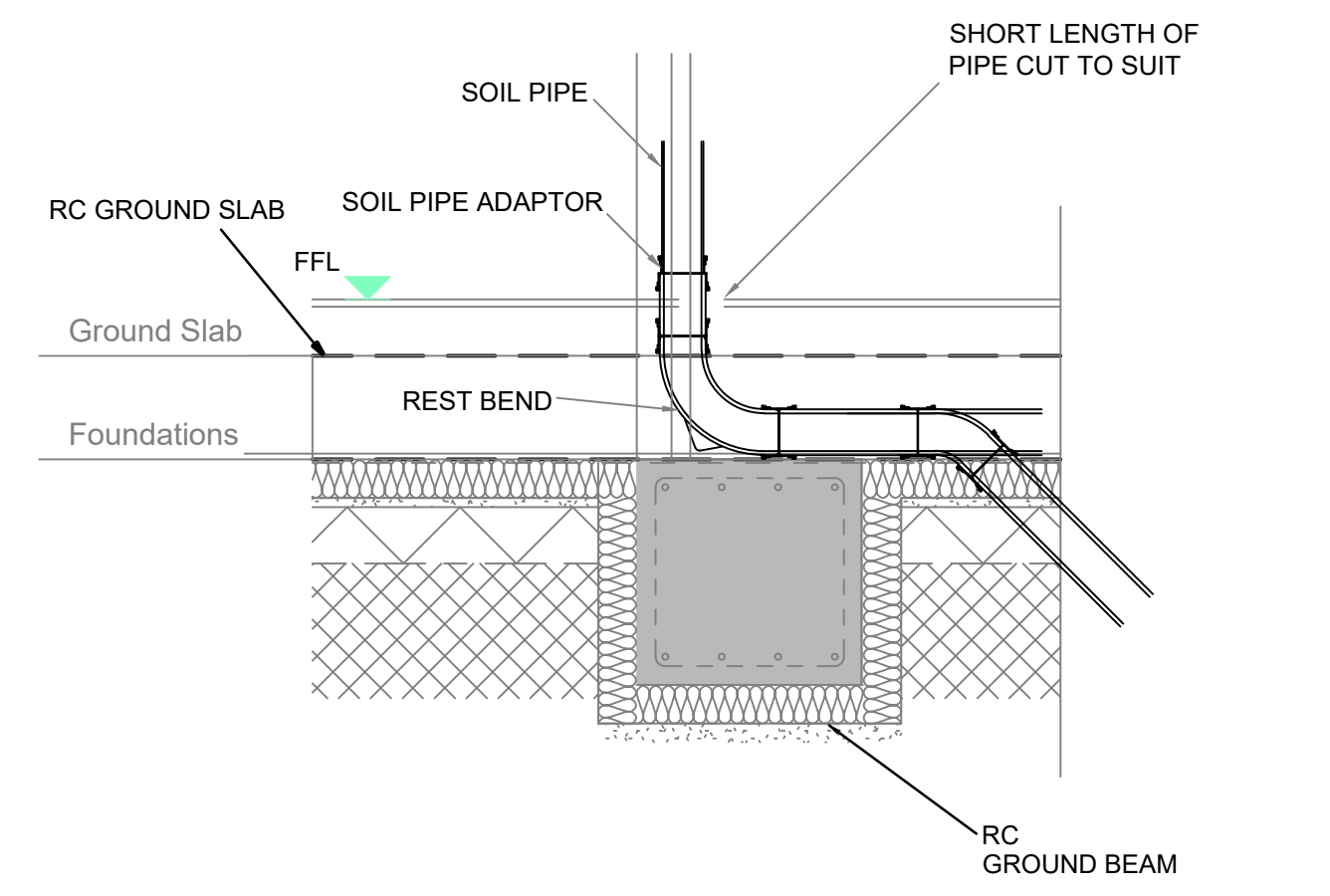
TO PROTECT THE WATERPROOF TUFLEX GEOMEMBRANE DURING BACKFILLING OPERATION, OVERLAY THE TOP AND SIDES WITH GEOTEX 300 PP NEEDLE PUNCHED NON-WOVEN PROTECTION GEOTEXTILE WITH A LAPPED JOINTS (AS SUPPLIED BY ALDERBURGH LIMITED).

WHERE SURCHARGING IN THE TEMPORARY CASE IS LIKELY TO OCCUR TEMPORARY WORKS DESIGNER MAY OPT TO SUBSTITUTE BACKFILL MATERIAL FOR 300mm THK ST1 LEAN MIX CONCRETE.

OTHERWISE BACKFILL OPTIONS AROUND THE SIDES OF MODULAR UNIT MAY BE:

- 100mm THICK SELECTED EXCAVATED MATERIAL IF SEEN SUITABLE BY THE SITE ENGINEER.
- BACKERBOARD HD (IS A PREMOULDED BOARD FOR USE AS PROTECTION AGAINST BACKFILL)

INLET/OUTLET PIPES MUST BE SUPPORTED WITH CONCRETE TO PROTECT IT DURING BACKFILLING

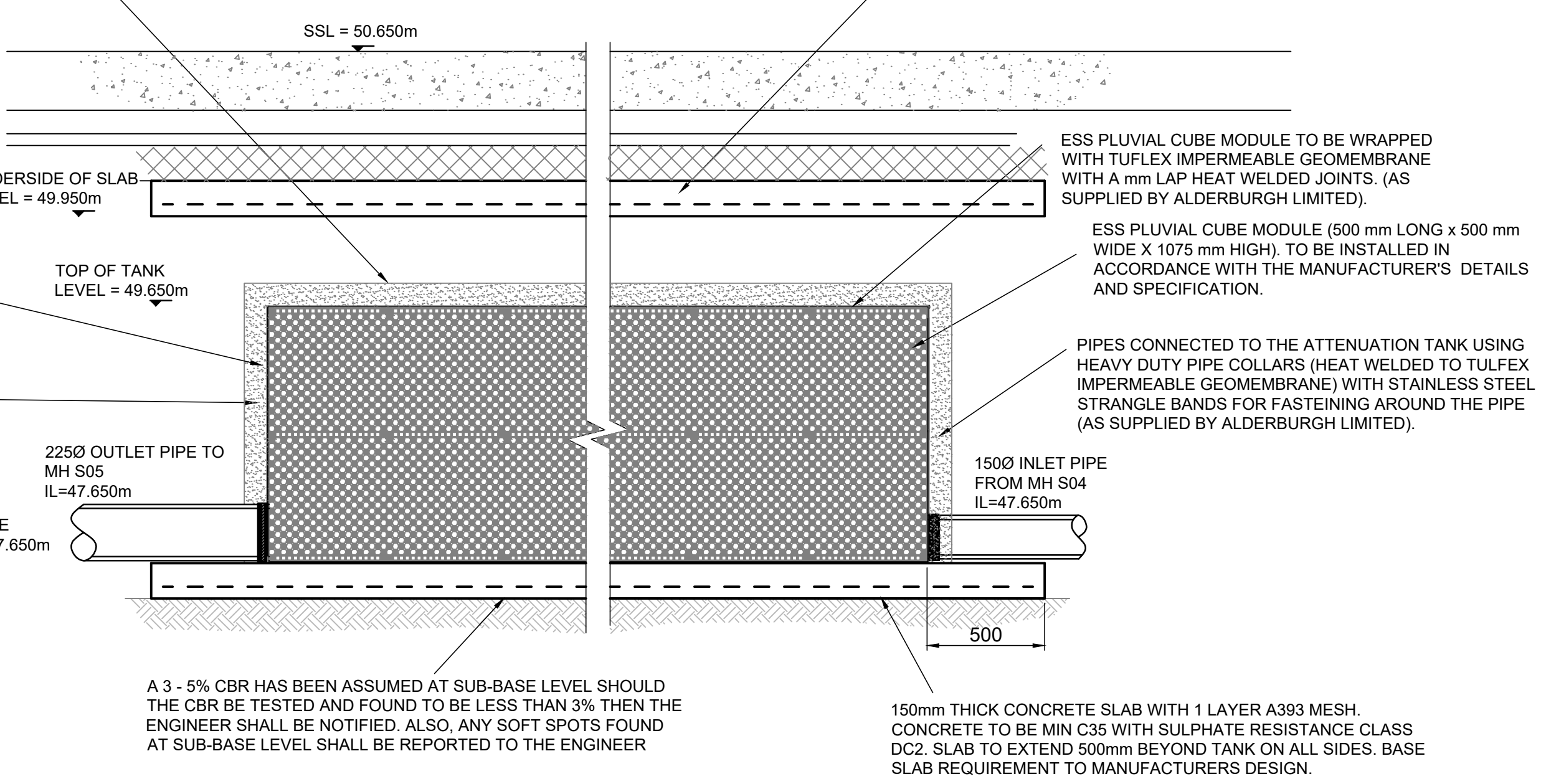


RWP CONNECTION DETAIL

TYPICAL RC WALL

PENETRATION DETAIL

1:20



TYPICAL DETAILS OF ATTENUATION TANK BASED ON ALDERBURGH PLUVIAL CUBE MODULE UNITS

GENERAL NOTES

- DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT SPECIFICATIONS, ENGINEERS, ARCHITECTS & SERVICES DRAWINGS, INCLUDING APPROVED BUILDERS WORK DRAWINGS. CONTRACTOR TO NOTIFY ENGINEER OF DISCREPANCIES BETWEEN STRUCTURAL DRAWINGS AND SPECIFICATIONS OR OTHER DRAWINGS.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- DO NOT SCALE FROM THIS DRAWING. WORK TO DIMENSIONS OR CO-ORDINATES PROVIDED. ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS OTHERWISE NOTED. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS, SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY.

CONSTRUCTION RECORD DRAWING

THE INFORMATION SHOWN ON THIS CONSTRUCTION RECORD DRAWING IS BASED ON THE LATEST ISSUED CONSTRUCTION DRAWINGS WHICH HAVE BEEN MODIFIED AS NECESSARY WITH INFORMATION SUPPLIED BY THE CONTRACTOR TO INCORPORATE CHANGES MADE DURING CONSTRUCTION. INFORMATION OBTAINED FROM THIRD PARTIES HAS NOT BEEN INDEPENDENTLY VERIFIED BY SCOTT HUGHES DESIGN AND MAY NOT BE WHOLLY ACCURATE. ANY PARTY SEEKING TO USE THIS DRAWING MUST FIRST VERIFY ITS FITNESS FOR THE INTENDED PURPOSE WITH SUITABLE SITE INSPECTIONS/INVESTIGATIONS AS DEEMED APPROPRIATE.

C3	01.06.23	AS	EDM	CONSTRUCTION RECORD
C2	02.08.21	AS	ED	WALL PENETRATION DETAIL ADDED
C1	12.05.21	AS	ED	ISSUED FOR CONSTRUCTION
No	DATE	DRAWN	REV'D ENG.	AMENDMENT

STATUS	PURPOSE OF ISSUE
CR	CONSTRUCTION RECORD

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RIDGE			
CLIENT GMI CONSTRUCTION			
PROJECT NEW CROSS - OLDHAM ROAD			
DRAFTER AS		ENGINEER EDM	
TITLE DRAINAGE DETAILS SHEET 2		PROJECT REFERENCE:	
SCALE NTS	SHEET A1	DRAWING No D464-RDG-00-ZR-DD-C-0103	REV C3