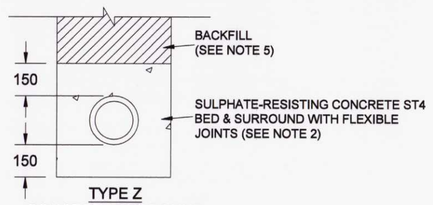


TYPE S
GRANULAR SURROUND



TYPE Z
CONCRETE SURROUND

Nom. pipe Dia.	Max trench width (Bd)	Y	Joint filler board thickness
150	690	200	18
225	690	200	18
300	760	200	18
375	1070	200	18
450	1140	200	36

NOTES

1. PERMITTED PIPE MATERIALS ARE:-
 PRECAST CONCRETE
 VITREOUS CLAY
 RIGIDRAIN (GULLY CONNECTIONS ONLY)

2. FULL CONCRETE SURROUND IS REQUIRED
 (A) TO ALL GULLY CONNECTIONS
 (B) IF COVER IS LESS THAN 1.2M
 (C) IF COVER IS MORE THAN 6M
 (D) 0.6M UNDER THE PROMENADE
 (E) IF TRENCH IS WIDER THAN THE MAXIMUM TRENCH WIDTH AS GIVEN ABOVE.

3. FLEXIBLE JOINTS SHALL BE FORMED FULLY THROUGH THE CONCRETE BED AND SURROUND AT 8M CENTERS OR LESS AND COINCIDING WITH PIPE JOINTS USING COMPRESSIBLE BOARD TO BS 1142:3 THICKNESS AS GIVEN ABOVE.

4.GRANULAR BEDDING MATERIAL SHALL BE AS DEFINED IN DOT SPECIFICATION TABLE 5/5 (WWA GRANULAR BEDDING TYPE A)

5. IN CARRIAGEWAYS, BACKFILL SHALL BE ST1 OR FOAMED CONCRETE. IN FOOTWAYS AND FOOTPATHS, TYPE 1 GRANULAR MATERIAL MAY BE USED. SELECTED EXCAVATED MATERIAL MAY BE USED ELSEWHERE.

6. CLAY PUDDLE WATERSTOPS SHALL BE 300 THICK EXTENDING FULLY THROUGH THE BED AND SURROUND AND BACKFILL IF PERVIOUS IMMEDIATELY DOWNSTREAM OF SUMPS, WHERE REQUIRED.

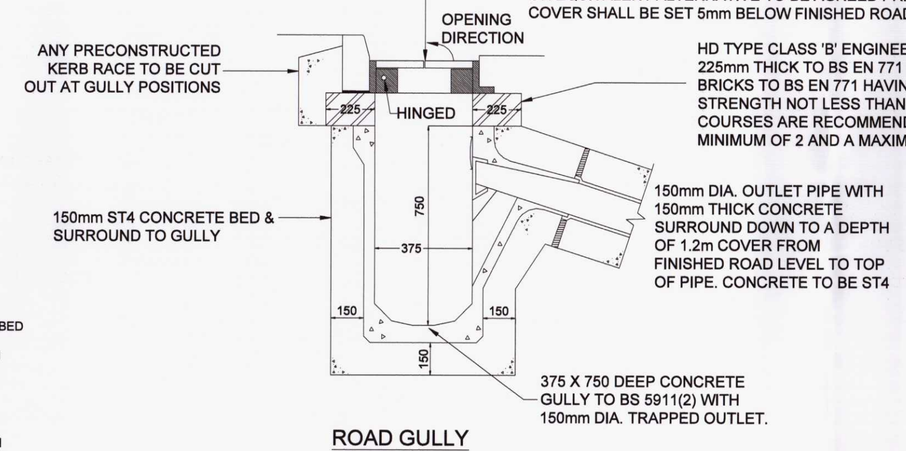
7. IN POOR GROUND IT MAY BE NECESSARY TO WRAP THE BED AND SURROUND IN GEOTEXTILE (WTBURDENS "BONAR" NW8 450 OR SIMILAR) TO PREVENT MIGRATION OF MATERIAL INTO THE GRANULAR BEDDING.

8. CONNECTIONS:- PROPRIETORY CONNECTION UNITS SHALL BE USED TO MAKE CONNECTIONS BETWEEN PIPES. CONNECTIONS SHALL BE PREFERABLY AT RIGHT ANGLES, OR AT AN ANGLE RUNNING WITH THE DIRECTION OF FLOW.

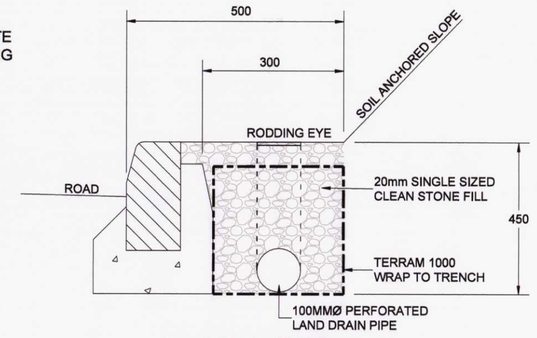
9. SLOW BENDS ONLY SHALL BE USED AT CHANGES OF DIRECTION IN A PIPE, AND MAY ONLY BE USED ON GULLY CONNECTIONS.

TRENCH DETAILS
SCALE 1:20

HEAVY DUTY GRATING AND FRAME, SINGLE PIECE, HINGED, NON-ROCK, KERB SIDE OPENING CLASS D400 TO BS EN 124 AND KITEMARKED, MINIMUM FLANGE THICKNESS OF 75mm. THE CLEAR OPENING SHALL BE 370 X 430 AND A CLEAR WATERWAY AREA OF 980cm AS PER THE WATERSHED D400 OR EQUIVALENT ALTERNATIVE TO BE AGREED PRIOR TO USE. COVER SHALL BE SET 5mm BELOW FINISHED ROAD LEVEL.



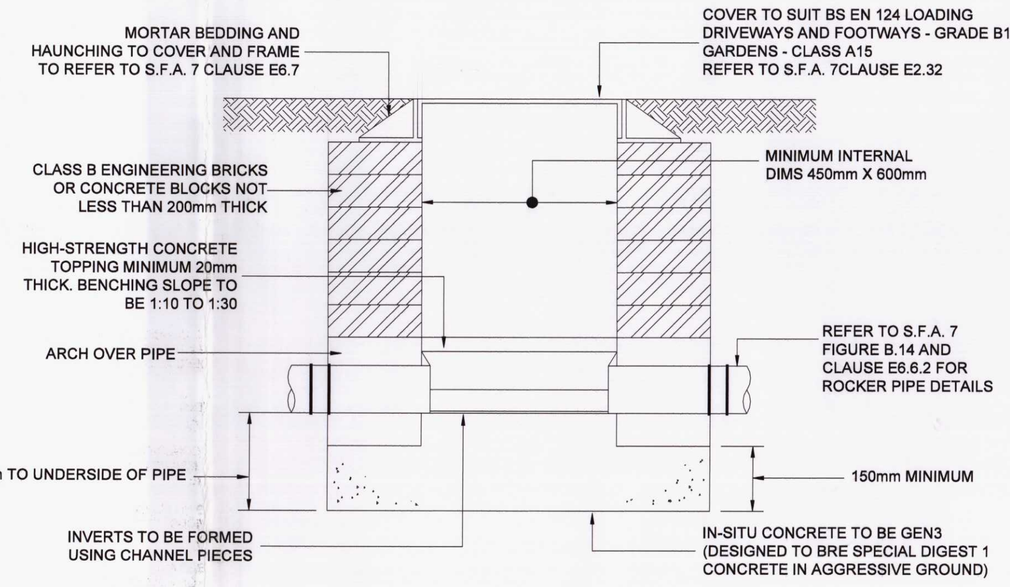
ROAD GULLY
(SCALE 1:20)



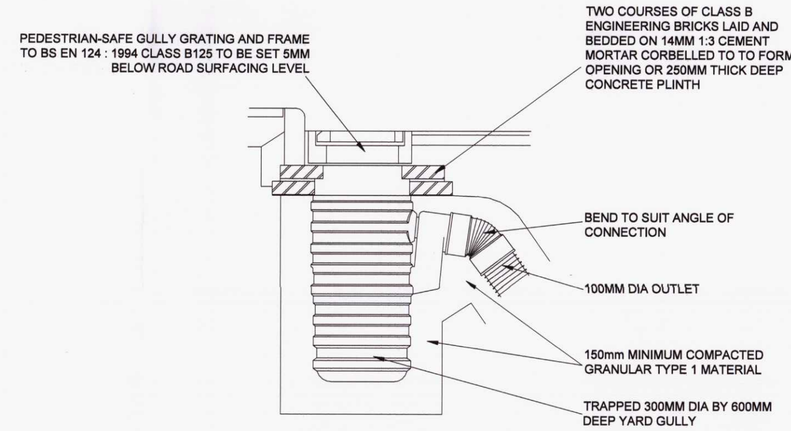
Land Drain Detail
(SCALE 1:10)

TYPICAL INSPECTION CHAMBER DETAIL TYPE 4 (RIGID MATERIAL DETAIL)

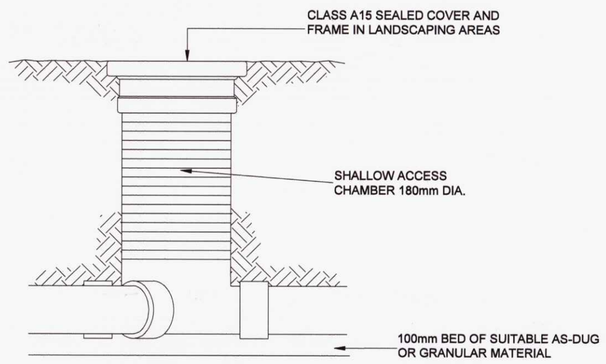
MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 1M, NON ENTRY



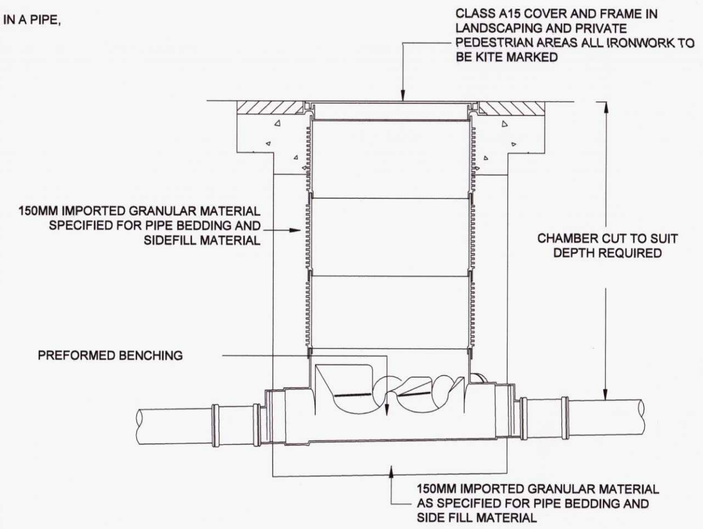
NOTE: THE USE OF PRECAST RECTANGULAR CONCRETE MANHOLE UNITS WITH 150MM GRADE GEN3 CONCRETE SURROUND (DESIGNED TO BRE SPECIAL DIGEST 1 CONCRETE IN AGGRESSIVE GROUND) IS PERMITTED



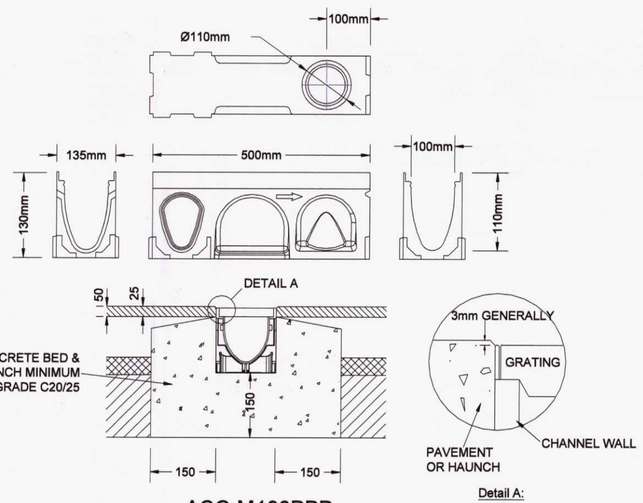
YARD GULLY
(SCALE 1:20)



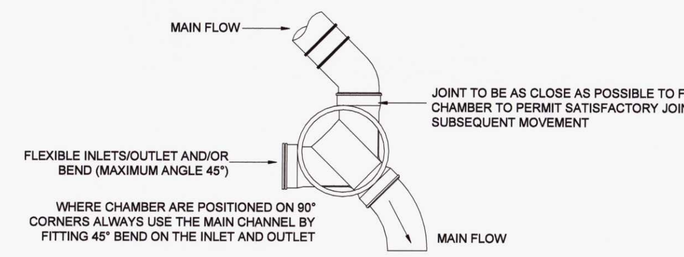
TYPICAL 180mm FOUL ACCESS CHAMBER
(SCALE 1:20)



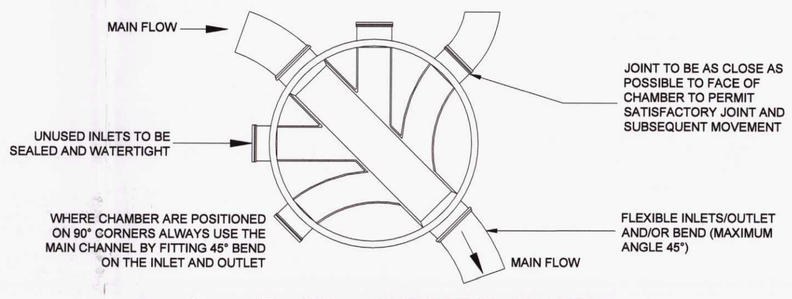
TYPICAL 450mm INSPECTION CHAMBER DETAIL
MAX. DEPTH 1.2m
(SCALE 1:20)



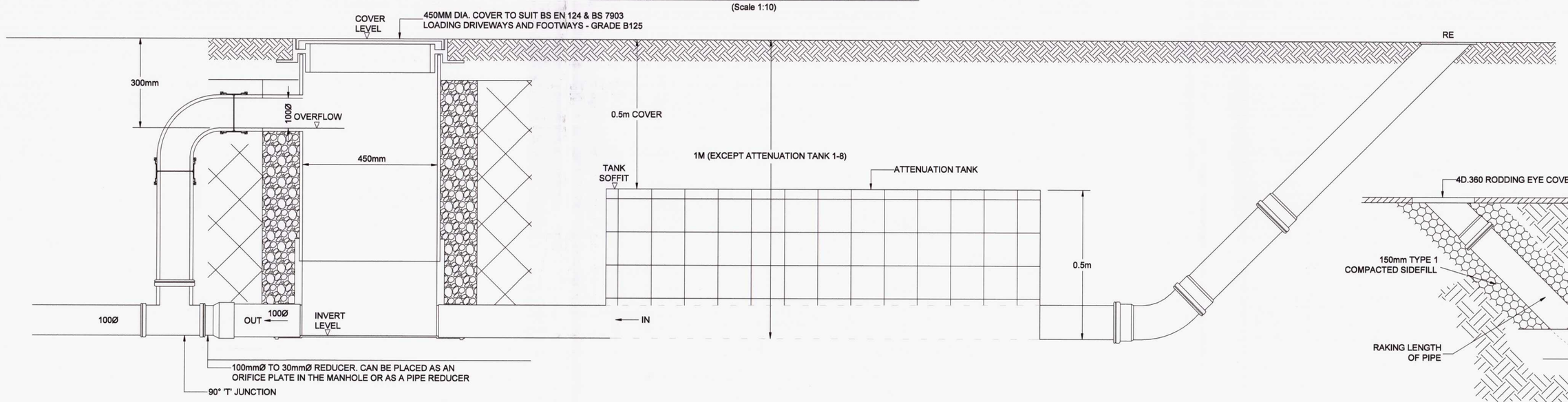
ACO M100PPD
(Scale 1:10)



BASE LAYOUT FOR 180mm FOUL ACCESS CHAMBER
(Scale 1:10)

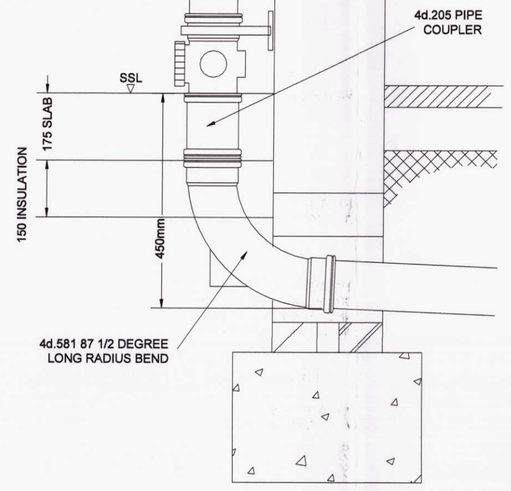


Base Layout For 450mm INSPECTION CHAMBER
(Scale 1:10)

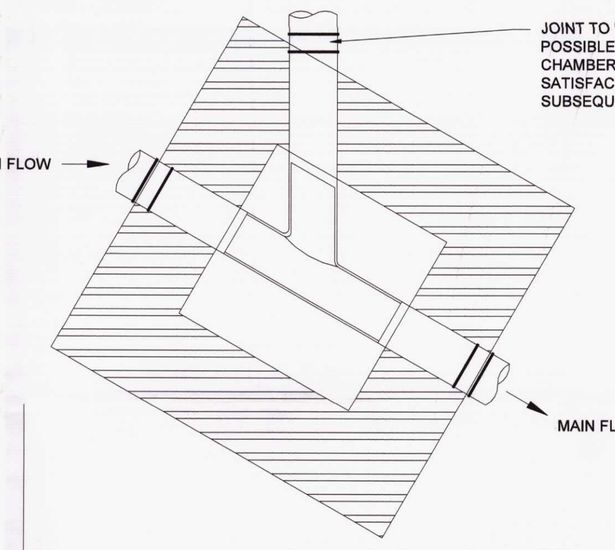


Access Chamber Flow Control Detail (Flexible Material)
(Scale 1:10)

Rodding Eye
(Scale 1:10)

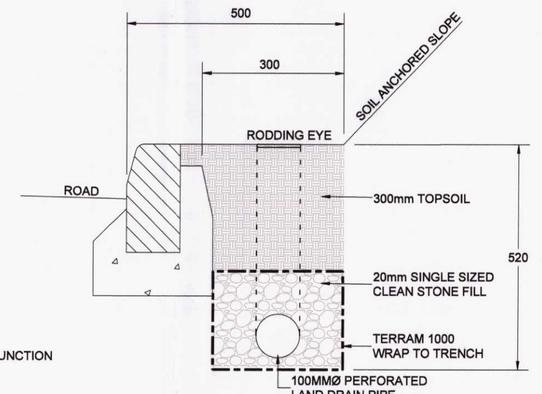


S.V.P. To drain
(N.T.S)



WHERE CHAMBER ARE POSITIONED ON 90° CORNERS ALWAYS USE THE MAIN CHANNEL BY FITTING 45° BEND ON THE INLET AND OUTLET

NTS



Land Drain with Topsoil Detail
(SCALE 1:10)

Notes:
All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications. This drawing is copyright.

Rev	Date	Description	By	Ckd
B	25/07/16	Added Landrain with Topsoil Detail and Type 4 manhole Detail	SJ	RB
A	28/06/16	First Issue	SJ	RB

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MERTHYR TYDFIL COUNTY BOROUGH COUNCIL
Town & Country Planning Act 1990
PERMISSION GRANTED SUBJECT TO CONDITIONS
20 MAR 2020
J. JONES
BA(Hons) BTP M.R.T.P.I.
HEAD OF TOWN PLANNING

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Client:
WALES AND WEST HOUSING ASSOCIATION

Project:
FORMER LABOUR EXCHANGE MERTHYR TYDFIL

Project Number: C161041

Drawing Title:
DRAINAGE DETAILS

Drawn:	Checked:	Scale @ A1:	Drawn Date:	First Issue:
SJ	RB	As Shown	27/06/2016	28/06/2016

Drawing Status. CONSTRUCTION

Drawing No. C002-03 Revision B