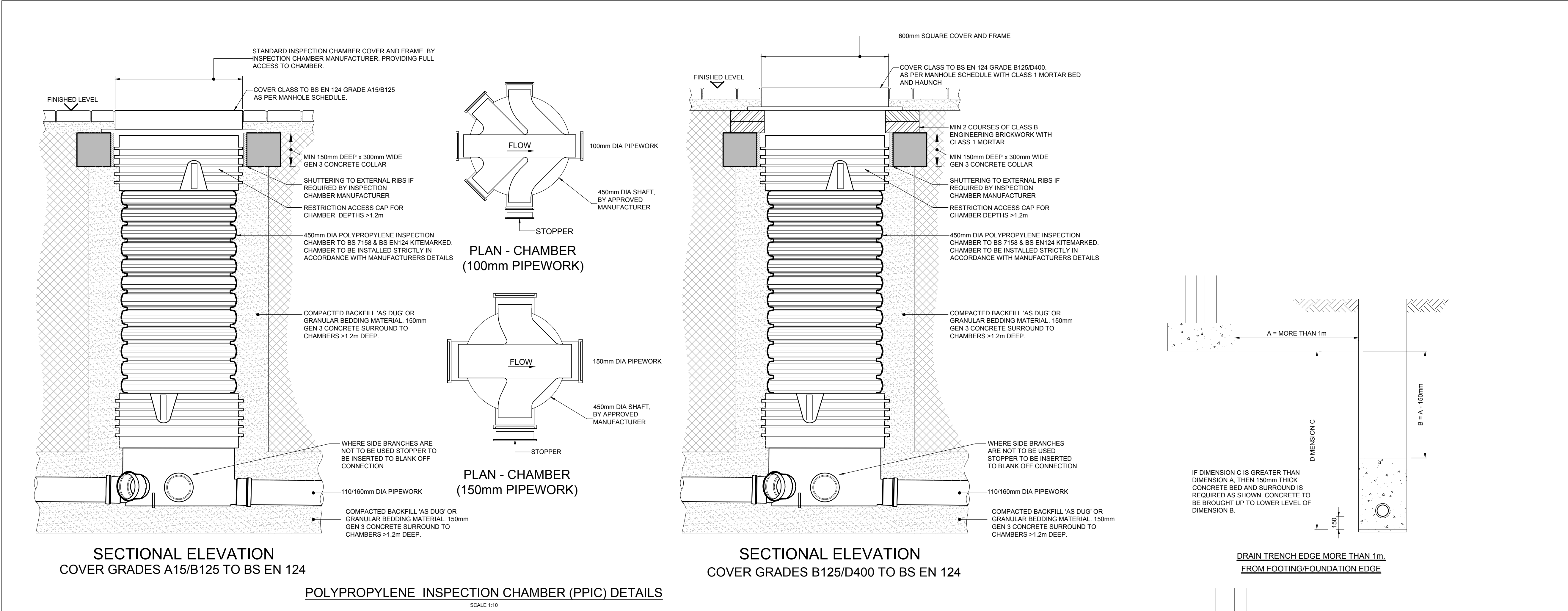
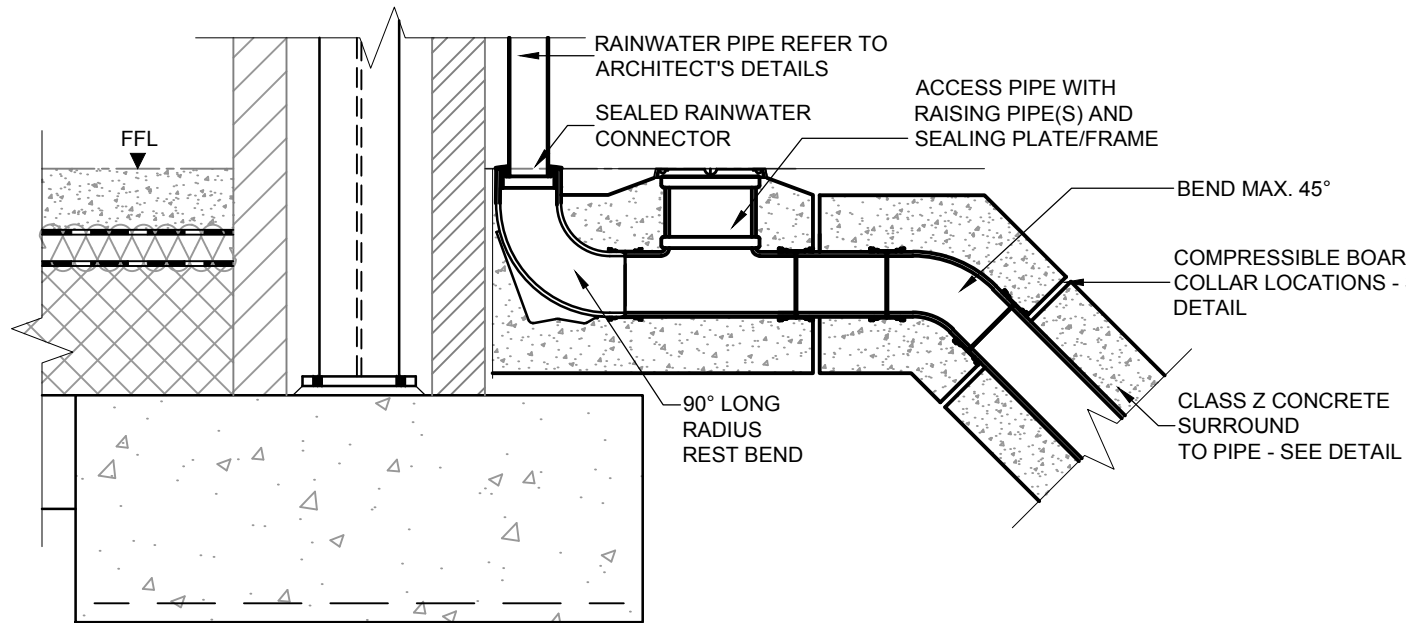
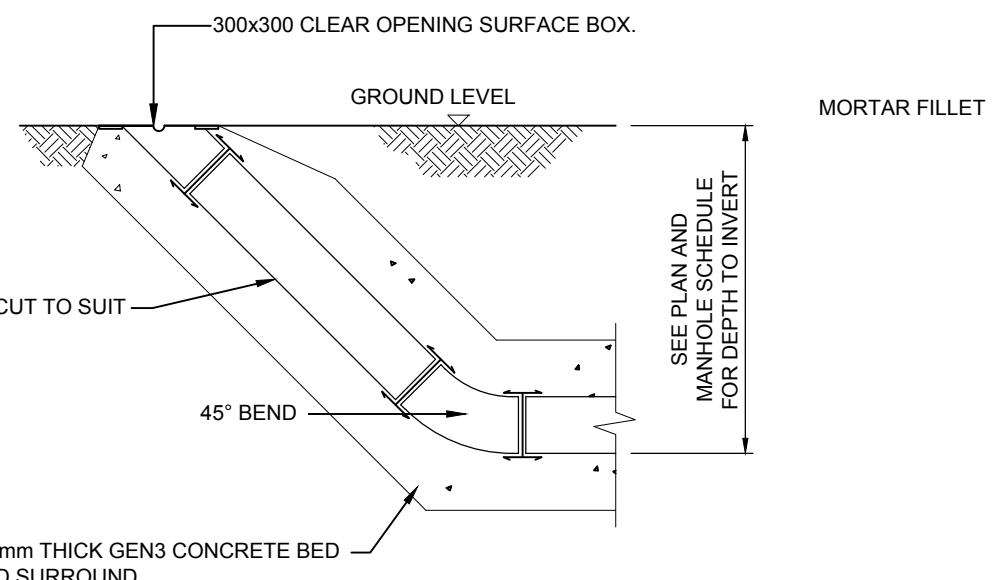




POLYPROPYLENE INSPECTION CHAMBER (PPIC) DETAILS

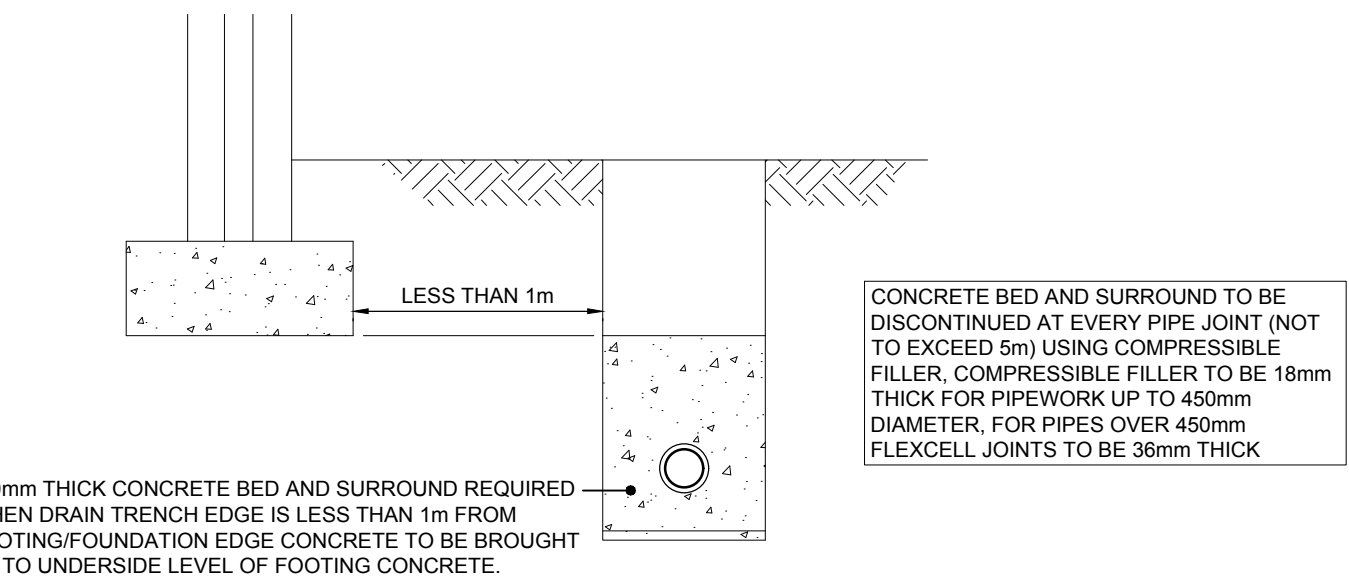


TYPICAL SECTION THROUGH EXTERNAL RWP



TYPICAL RODDING EYE DETAIL

DRAIN TRENCH EDGE MORE THAN 1m.
FROM FOOTING/FOUNDATION EDGE



DRAIN TRENCH EDGE LESS THAN 1m.
FROM FOOTING/FOUNDATION EDGE

PIPE RUNS NEAR BUILDINGS.
FOR CONCRETE BED AND SURROUND MATERIAL
SPECIFICATION REFER TO CLASS Z BEDDING DETAIL.

- CONCRETE NOTES:**
DESIGNATED CONCRETE:
- ALL DESIGNATED CONCRETE TO CONFORM TO BS 8500-2
 - BLINDING CONCRETE:
 - DESIGNATION - GEN 3
 - CEMENT TYPE - SRPC
 - MAXIMUM AGGREGATE SIZE - 20mm
 - CONSISTENCY CLASS - TO BE AGREED ON SITE
 - NOMINAL COVER TO ALL REINFORCEMENT TO BE 50mm (UNLESS NOTED OTHERWISE).
 - ALL HIGH YIELD REINFORCEMENT (H BARS) TO BE GRADE 500.
 - BOTTOM STEEL REINFORCEMENT TO BE SUPPORTED ON 50x50x50mm DEEP CONCRETE BLOCKS OR SIMILAR, WIRED TO THE REINFORCEMENT.
 - TYING WIRE TO BE STAINLESS STEEL.
 - SPACING OF REINFORCEMENT TO BE ADJUSTED LOCALLY AS REQUIRED IN PARTICULAR TO AVOID HOLES, POCKETS, SOCKETS, RECESSES AND HOLDING DOWN BOLTS.
 - ALL EXPOSED EDGES TO HAVE 20x20mm CHAMFER.
 - IMMEDIATELY AFTER LAYING, CONCRETE SHALL BE PROTECTED FROM RAIN, RAPID TEMPERATURE CHANGE, FROST AND FROM DRYING OUT. ALSO MAINTAIN THE CONCRETE ABOVE 2° IN COLD WEATHER. THE METHODS USED SHALL BE IN ACCORDANCE WITH B.S. 5400, OR APPROVED BY THE ENGINEER.
 - ALL FORMWORK TO BE CLASS F.

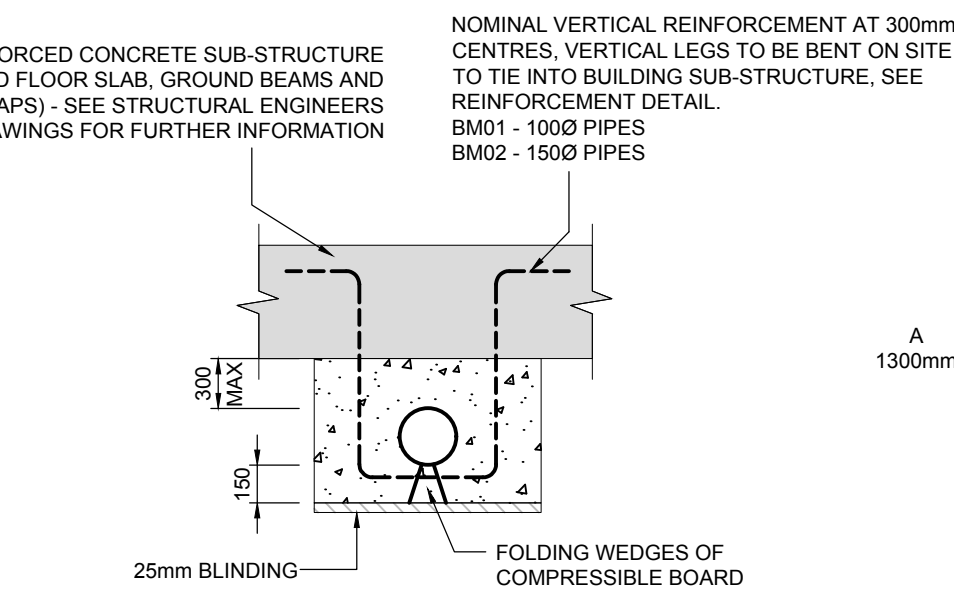
CLASS S BEDDING DETAIL

NOMINAL PIPE DIA (mm)	SINGLE SIZED (mm)	GRADED (mm)
100	10	N/A
OVER 100 TO 150	10 OR 14	14 TO 5
OVER 150 TO 300	10, 14 OR 20	14 TO 5 OR 20 TO 5
OVER 300 TO 525	14 OR 20	14 TO 5 OR 20 TO 5
GREATER THAN 525	14, 20 OR 40	14 TO 5, 20 TO 5 OR 40 TO 5

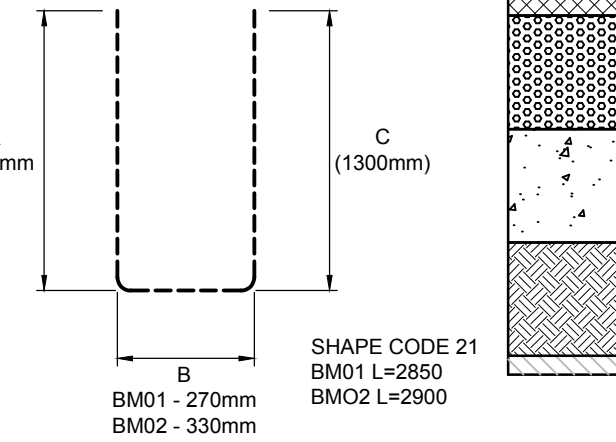
GRANULAR BEDDING MATERIAL TABLE
(ALL AGGREGATES TO BS EN 12342, PD 6682-6:2003 & BS EN 13095-2)

- NOTES**
- A) Bc = OUTSIDE DIAMETER OF PIPE BARREL.
- B) Y = FOR UNIFORM SOILS:
- SLEEVE JOINTED PIPES, MIN. 50mm OR 1/8Bc, WHICHEVER IS THE GREATER. SOCKETED PIPE, MIN. 100mm OR 1/8Bc, WHICHEVER IS THE GREATER UNDER BARRELS, NOT LESS THAN 50mm UNDER SOCKETS. FOR ROCK OR MIXED SOILS CONTAINING ROCK BANDS, BOULDERS, STONES OR OTHER IRREGULAR HARD SPOTS: SLEEVE JOINTED PIPES, MIN. 150mm OR 1/4Bc, WHICHEVER IS THE GREATER. SOCKETED PIPE, MIN. 200mm OR 1/4Bc, WHICHEVER IS THE GREATER UNDER BARRELS, NOT LESS THAN 150mm UNDER SOCKETS.
- CONCRETE BED AND SURROUND TO BE DISCONTINUED AT EVERY PIPE JOINT (NOT TO EXCEED 5m) USING COMPRESSIBLE FILLER. COMPRESSIBLE FILLER TO BE 18mm THICK FOR PIPEWORK UP TO 450mm DIAMETER, FOR PIPES OVER 450mm FLEXCELL JOINTS TO BE 36mm THICK

CLASS Y CONCRETE BEDDING DETAIL
(WHERE COVER TO PIPE CROWN UNDER BUILDING SUB-STRUCTURE IS LESS THAN 300mm)



CLASS Y BEDDING REINFORCEMENT DETAIL



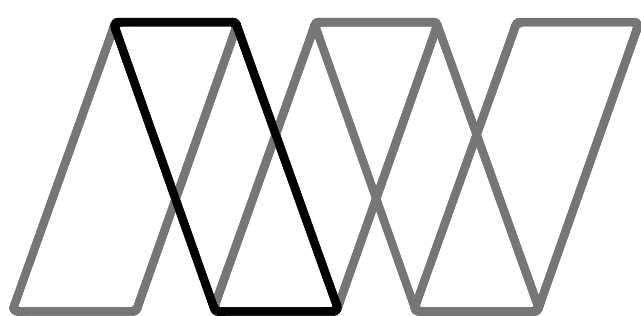
PIPE BEDDING DETAIL KEY

- SELECTED BACKFILL - SEE NOTE B2.
- BACK FILL - TO STRUCTURAL ENGINEERS SPECIFICATION UNDER BUILDING & NOTES B3, B4 ELSEWHERE
- GRANULAR MATERIAL - REFER TO GRANULAR BEDDING MATERIAL TABLE & NOTE B1
- CONCRETE BEDDING - DESIGNATION GEN 3 - SEE NOTE B5.
- UNDISTURBED NATURAL STRATA/FILL MATERIAL, TO STRUCTURAL ENGINEERS SPECIFICATION UNDER BUILDING
- CONCRETE BLINDING - DESIGNATION GEN 1 - SEE NOTE B5.

- Notes**
- A01. THESE NOTES ARE INTENDED TO AUGMENT DRAWINGS AND SPECIFICATIONS. WHERE CONFLICT OF REQUIREMENTS EXISTS THE ORDER OF PRECEDENCE SHALL BE AS SHOWN IN THE SPECIFICATION. OTHERWISE THE STRICTEST PROVISION SHALL GOVERN.
- A02. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERS AND ARCHITECTS DRAWINGS.
- A03. DRAWINGS NOT TO BE SCALED. ALL DIMENSIONS TO BE CHECKED ON SITE BY THE CONTRACTOR. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER AND FURTHER INSTRUCTIONS OBTAINED BEFORE WORK IS COMMENCED.
- A04. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE AND ENSURE THAT THE BUILDING AND ITS COMPONENTS ARE SAFE DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS WHICH MAY BE NECESSARY, SUCH MATERIAL REMAINING THE PROPERTY OF THE CONTRACTOR ON COMPLETION, AND FOR ENSURING THAT THE WORKS AND ANY ADJACENT PROPERTIES ARE SAFE IN THE TEMPORARY CONDITION.
- NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT PRIOR PERMISSION IN WRITING FROM ALAN WOOD & PARTNERS.**

- DRAINAGE**
1. ALL BUILDING DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT BRITISH/EUROPEAN STANDARDS BS EN 752 (SUPERSEDING BS 8301 "BUILDING DRAINAGE"), THE CURRENT BUILDING REGULATIONS AND THE LOCAL AUTHORITY BUILDING CONTROL, OR NHBC SPECIFICATIONS AND REQUIREMENTS.
2. THIS DRAWING TO BE READ IN ACCORDANCE WITH ALL OTHER RELEVANT AWP DRAWINGS, ARCHITECTS DRAWINGS AND M AND E CONSULTANTS DRAWINGS.
3. ALL PIPEWORK TO BE VITRIFIED CLAY. VITRIFIED CLAY PIPES AND FITTINGS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 252 AND BS 65 RESPECTIVELY AND BE KITEMARKED. ALL PIPES SHALL BE EXTRA STRENGTH TO BS 65 OR EQUIVALENT BS EN 252 PIPE CRUSHING STRENGTH
4. MANHOLE COVERS AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124, 150 DEEP FRAMES UNLESS OTHERWISE SPECIFIED. MANHOLE COVERS AND FRAMES TO BE OF A NON-ROCKING DESIGN WITH CUSHION INSERTS AND KITEMARKED. LOAD CLASS D400 IN VEHICULAR TRAFFICKED AREAS AND LOAD CLASS D400 IN FOOTWAYS WITH CHERRY PICKER ACCESS AND CLASS B125 IN OTHER FOOTWAYS AND PEDESTRIAN AREAS. ALL COVERS TO BE BADGED "FW" OR "SW" AS APPROPRIATE. MANHOLE COVER SLABS AND ACCESS TO BE IN ACCORDANCE WITH CONCRETE PIPE ASSOCIATION TECHNICAL BULLETIN ISSUED SEPTEMBER 2001.
5. CLASS Z BEDDING DETAIL SHALL BE PROVIDED WHERE COVER TO THE PIPE BARREL IS LESS THAN 1.2M IN VEHICULAR TRAFFICKED AREAS AND 0.9M ELSEWHERE. TO ALL ROAD & YARD GULLY, DRAINAGE CHANNEL & RAINWATER PIPE CONNECTIONS AND WITHIN AREAS OF DEEP ROOTING VEGETATION AND BENEATH BUILDING FOOTPRINT WHERE COVER TO PIPE UNDER BUILDING SUBSTRUCTURE IS GREATER THAN 300mm AND CLASS Y WHERE COVER TO PIPE IS LESS THAN 300mm.
6. WHERE CLASS Z TRENCH BEDDING DETAIL IS USED, THE CONCRETE BED AND SURROUND SHALL BE DISCONTINUED AT EACH PIPE JOINT OVER THE FULL CROSS SECTION BY MEANS OF A SHAPED COMPRESSIBLE FILLER. (SEE TABLE) REFER TO CL 3.2.28. "SEWERS FOR ADOPTION" BACKFILLING AND REINSTATEMENT TO TRENCHES IN EXISTING.

Rev	Description	Date	Drm	Chk
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Project:	BETTER BARNSELY NEW PUBLIC LIBRARY				
Client:	BARNSELY METROPOLITAN DISTRICT COUNCIL				
Drawing:	TYPICAL DRAINAGE DETAILS (SHEET 1)				
Date:	20.01.17	Scale@A1:	1:20 u.n.o.		
Drawn By:	TW	Check By:	JG	Approved By:	JG
Drawing Status:	PRELIMINARY				
Job. no.	37200	Dwg. no.	101	Rev.	-