NOMINAL MAXIMUM AGGREGATE SIZE OF STONE (mm) TO BS 882 GRADING		
PIPE BORE (mm)	AGGREGATE TYPE	GRANULAR BEDDING CLASS 'B' or 'S'
100	SINGLE SIZE GRADED	10 N/A
150	SINGLE SIZE GRADED	10 or 14 5 - 14

PIPE BEDDING MATERIAL

NOTES:
1. 25mm EXPANSION JOINT MATERIAL TO FULL AREA OF CONCRETE BED & SURROUND AT ALL PIPE JOINTS

2. FINAL FORMATION TO BE DISHED TO GIVE FULL DEPTH OF CONCRETE BED AROUND PIPE COLLAR.

3. WHEN USING CONCRETE REFER TO THE SOIL REPORT FOR SULPHATE CONTENT.

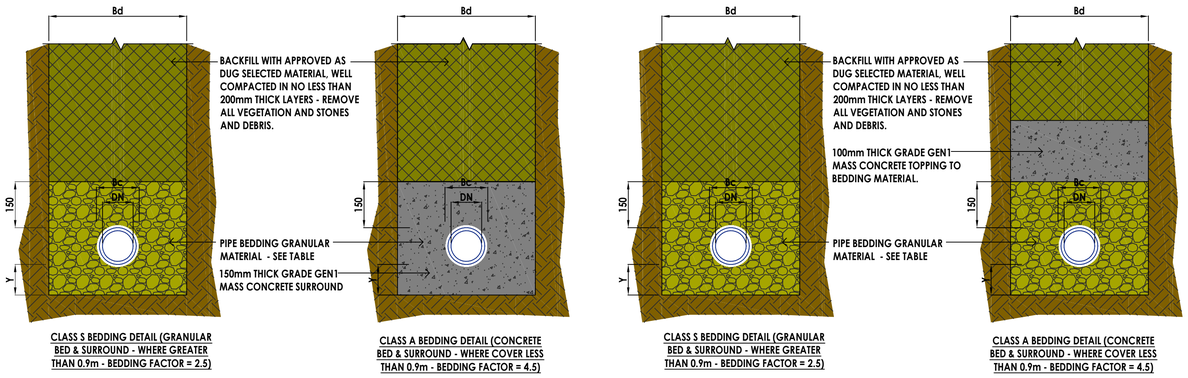
4. ALL TRENCH FILL MATERIAL MUST BE INERT.

5. CONTRACTOR TO SUPPLY GRADING CERTIFICATES FOR ALL GRANULAR MATERIAL TO PROJECT MANAGER FOR APPROVAL.

25mm EXPANSION JOINT MATERIAL TO FULL AREA OF CONCRETE BED & SURROUND AT ALL PIPE JOINTS

FINAL FORMATION TO BE DISHED TO GIVE FULL DEPTH OF CONCRETE BED AROUND PIPE COLLAR

NOMINAL INTERNAL DIA DN (mm)	ASSUMED EXTERNAL DIA Bc (mm)	ASSUMED MAX. PERMISSIBLE TRENCH WIDTH Bd (mm)	DIMENSION 'Y' FOR UNIFORM SOILS (mm)
100	130	550	150
150	190	600	150



CLASS S BEDDING DETAIL (GRANULAR BED & SURROUND - WHERE GREATER THAN 0.9m - BEDDING FACTOR = 2.5)

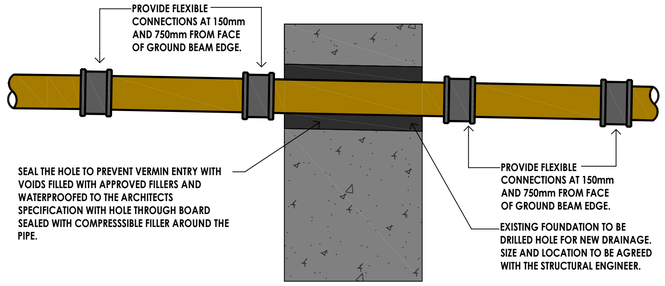
CLASS A BEDDING DETAIL (CONCRETE BED & SURROUND - WHERE COVER LESS THAN 0.9m - BEDDING FACTOR = 4.5)

CLASS S BEDDING DETAIL (GRANULAR BED & SURROUND - WHERE GREATER THAN 0.9m - BEDDING FACTOR = 2.5)

CLASS A BEDDING DETAIL (CONCRETE BED & SURROUND - WHERE COVER LESS THAN 0.9m - BEDDING FACTOR = 4.5)

DETAIL No. 9 - EXTERNAL DRAINAGE RIGID PIPE BEDDING DETAILS - VITIRIFIED CLAYWARE & CONCRETE PIPES

DETAIL No. 9 - EXTERNAL DRAINAGE FLEXIBLE PIPE BEDDING DETAILS - PLASTIC & DUCTILE IRON PIPES



DETAIL No. 10 - DRAINAGE PASSING THROUGH EXISTING MASS CONCRETE FOUNDATIONS

BELOW GROUND DRAINAGE SPECIFICATION

- ALL BELOW SLAB PIPES BENEATH THE BUILDING SLAB SHALL BE IN EITHER VITRIFIED CLAYWARE TO BS EN 295 USING PUSHFIT COUPLINGS OR SOCKET AND SPIGOT JOINTING OR PVCu PIPE TO BS EN 13476-2 USING PUSHFIT JOINTS AND ENCASED IN CONCRETE WHERE THE DEPTH OF COVER IS LESS THAN 300mm TO THE SLAB SOFFIT.

- ALL BRANCHES TO MAIN RUNS SHALL BE MADE USING 45° BRANCHES AND BENDS TO SUIT. NO SHARP 90° BENDS WILL BE ACCEPTED. ONLY LONG RADIUS BENDS ARE TO BE USED AT BASE OF DRAINAGE BENDS.

- EXTERNAL DRAINAGE MAY BE RUN IN PVCu TO BS EN 13476-2 OR VITRIFIED CLAYWARE TO BS EN 295 AND RUN IN CLASS S GRANULAR BED AND SURROUND WHERE GREATER THAN 900mm DEPTH OF COVER, WHERE LESS COVER ALWAYS PROVIDE ADDITIONAL PROTECTION AS RECOMMENDED BY SDA DETAILS OR WHERE MORE STRINGENT PIPE MANUFACTURERS RECOMMENDATIONS PREVAIL.

- ALL DRAINAGE INSTALLATION SHALL CONFORM TO BS EN 752, BS EN 12056, APPROVED BUILDING REGULATION DOCUMENT H AND BS 8000 FOR WORKMANSHIP AND ANY PARTICULAR REQUIREMENTS OF THE BUILDING CONTROL OFFICER AND VARIOUS MANUFACTURERS OF THE SPECIFIED PRODUCTS. THE WHOLE DRAINAGE SYSTEM SHALL BE TESTED AND COMMISSIONED TO BS 752, 12056 AND 8000.

- PIPE CONNECTIONS AND BRANCHES MUST USE A MAX ANGLE OF 45 DEGREE BEND AND BRANCH SWEEP INTO THE MAIN DRAINAGE RUNS - SEE DETAILS. CONNECTIONS OF 90 DEG WILL NOT BE PERMITTED BY SDA ONTO THE MAIN RUN.

- ALL BENDS USED MUST HAVE A RADIUS OF 200mm TO THE CENEE LINE OF THE FITTING OR GREATER - TIGHTER RADIUS BENDS WILL NOT BE ACCEPTED BY SDA.

- ALL SVPs AND SSs SHALL HAVE ACCESS 1.0m AFFL TO ENSURE ALL LENGTHS CAN BE RODDED AND MAINTAINED. PROVIDE 300 x 200 MIN SIZE ACCESS DOORS ON STUD WALLS WHERE PIPE ACCESS IS COVERED.

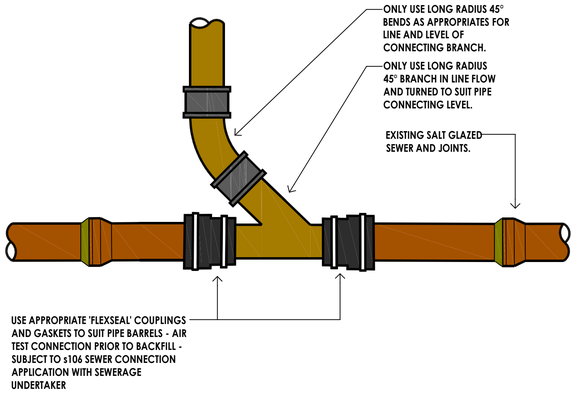
- ALL PIPE TRENCHING SHALL BE STRICTLY MONITORED TO ENSURE NO DELETERIOUS MATERIAL IS BENEATH OR AROUND THE PIPE. ALL BACKFILL TO TRENCHES SHALL BE CAREFULLY COMPACTED IN ACCORD WITH THE RECOMMENDED PASSES FOR THE EQUIPMENT USED - SEE THE SPECIFICATION FOR HIGHWAY WORKS (SHW) TABLE 6/4.

- ALL SOFT SPOTS IN TRENCHES MUST BE MADE GOOD WITH IMPORTED MATERIAL AND GEOTEXTILES USED TO MAINTAIN TRENCH MATERIAL INTEGRITY. WHERE WATER IS PRESENT ALERT SDA TO SEEK ON ACTION TO TAKE.

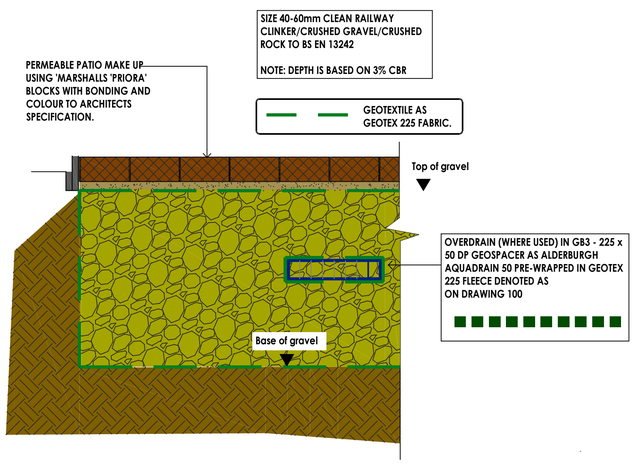
- WHERE PIPE VENTILATION IS SHOWN BY AAV, SDA ONLY RECOMMEND THE MARLEY 'DURGO' VALVE FOR USE AS AN AAV.

- THE CONTRACTOR SHALL CARRY OUT AIR TESTING IN ACCORDANCE WITH BS 8000 FOR ALL DRAINAGE RUNS AND SHALL PRODUCE A CERTIFICATE FOR ISSUE TO THE BUILDING CONTROL OFFICER. THE CONTRACTOR SHALL REQUEST THE BCO WITNESS THE FINAL DRAINAGE PIPEWORK TESTING.

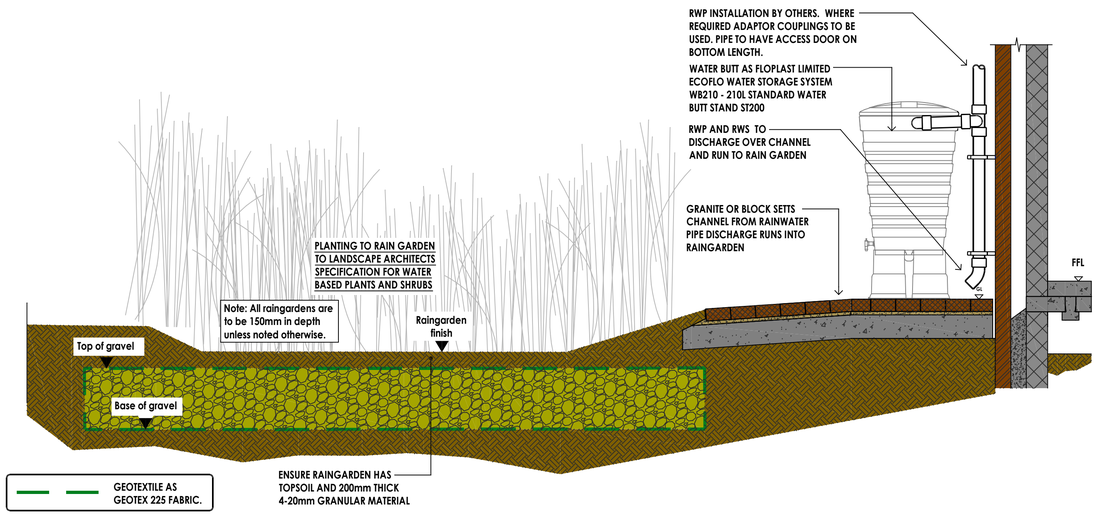
- THE CONTRACTOR SHALL ENSURE A FULL CCTV OF ALL THE INSTALLED DRAINAGE IS RECORDED WITH DVD VIDEO AND REPORT SENT TO THE CLIENT FOLLOWING PRACTICAL COMPLETION AND WITHIN 3 WEEKS OF HANDOVER.



DETAIL No. 11 - CONNECTING NEW DRAINAGE PIPES TO EXISTING PIPES



DETAIL No. 12 - PERMEABLE PAVEMENT AND GRAVEL BLANKET BENEATH



DETAIL No. 13 - RAINGARDEN, RAINWATER PIPE FROM WATER BUTT WITH RAINWATER SHOE & GRAVEL BLANKET CONSTRUCTION MAKE UP (SCALE 1:20)

This is drawing is copyright and remains in the ownership of Simon Dent Associates (SDA)

This drawing should be read in conjunction with the design team's relevant documents, drawings & details.

Existing public & private utility services and drainage locations shown have been derived from non-intrusive survey techniques. Their location is not accurate and the contractor must satisfy himself using open excavation where the location of such plant and apparatus is critical in construction.

If the contractor has constructed from this drawing without necessary approvals from Local Planning Authorities, Building Control, Sewerage Undertakers, Environment Agency etc then any abortive work shall be at his own financial risk and not the responsibility of SDA.

If the contractor has constructed from this drawing whilst the drawing remains 'PRELIMINARY status, then any abortive work shall be at his own financial risk and not the responsibility of SDA.

The contractor should NOT construct any works should there be any doubt with information shown from any of the source. ALWAYS USE GIVEN DIMENSIONS ONLY. ALWAYS ASK IF IN DOUBT.

ALWAYS PRINT THIS DRAWING IN COLOUR

FOR ALL GENERAL NOTES SEE SDA DRAWING No. 100

Rev	Description	Date	Chkd
P3	Detail no. 12 altered and no. 13 added.	14/11/23	SAD
P2	Detail no. 10 title corrected, 11, 12 & 13 added. Drainage Specification added	10/10/23	SAD
P1	PRELIMINARY ISSUE	30/09/23	SAD

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Client: Temple & Co Property Investments

Project: Southdown Inn, 38 Northcourt Road Worthing BN

Drawing title: Drainage Details 2

Drawing status: PRELIMINARY

Project no	Scales	Drawing no	Rev
1807	A1 - 1:10 A3 - 1:20	201	P3