

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

NOMINAL MAXIMUM AGGREGATE SIZE OF STONE (mm) TO BS 682 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

NOTES:

- 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.
- WHEN USING CONCRETE REFER TO THE SOIL REPORT FOR SULPHATE CONTENT.
- ALL TRENCH FILL MATERIAL MUST BE INERT.
- 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

ROOT PROTECTION

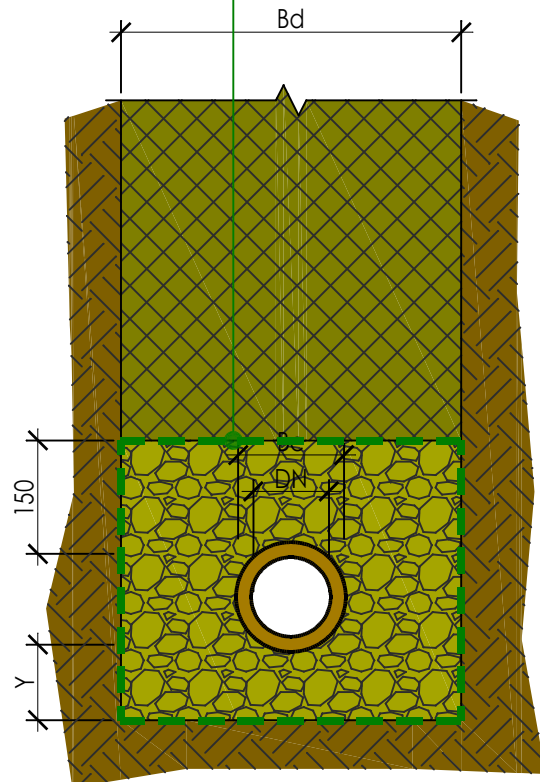
WHERE SHOWN, IF THE MAIN DRAINAGE LAYOUT INDICATES ROOT PROTECTION ADD ROOT BARRIER AS SPECIFIED AROUND THE CLASS S DETAIL.

BACKFILL WITH APPROVED AS DUG SELECTED MATERIAL, WELL COMPACTED IN NO LESS THAN 200mm THICK LAYERS - REMOVE ALL VEGETATION AND STONES AND DEBRIS.

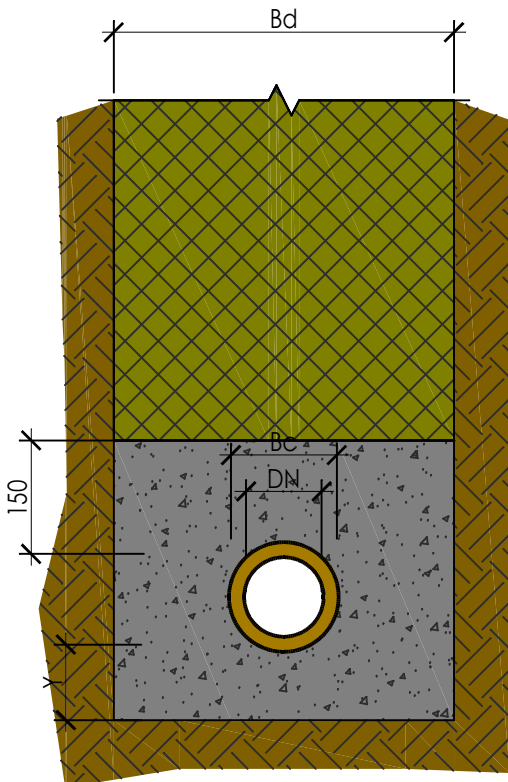
PIPE BEDDING GRANULAR MATERIAL - SEE TABLE

150mm THICK GRADE GEN1 MASS CONCRETE SURROUND

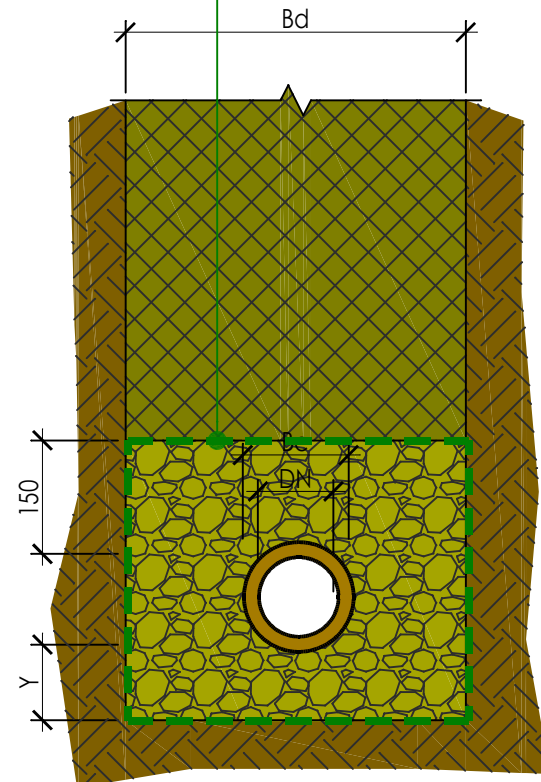
IF TREE PROTECTION IS REQUIRED USE GEO SYNTHETIC LTD 'ROOTBLOCK' ROOT BARRIER SYSTEM FITTED TO MANUFACTURERS STRICT INSTRUCTIONS



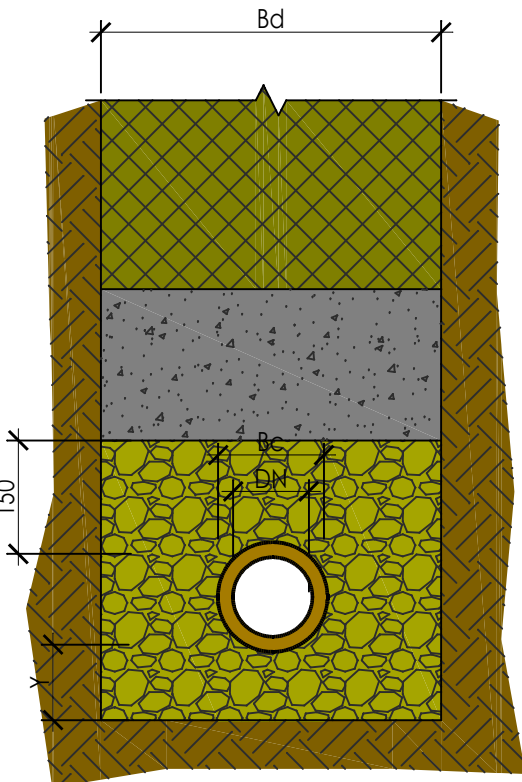
CLASS S BEDDING DETAIL (GRANULAR BED & SURROUND - WHERE GREATER THAN 0.9m - BEDDING FACTOR = 2.5)



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



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

DETAIL No. 1A - EXTERNAL DRAINAGE RIGID PIPE BEDDING DETAILS - VITRIFIED CLAYWARE & CONCRETE PIPES

DETAIL No. 1B - EXTERNAL DRAINAGE FLEXIBLE PIPE BEDDING DETAILS - PLASTIC & DUCTILE IRON PIPES

GEOCELL SOAKWAY TO HAVE FOLLOWING DUTIES TO SUIT AREAS:-

PATIOS / GARDENS 200 KNM²
LIGHT CAR PARKS 650 KNM²
ROADS / MED-HEAVY CAR PARK 900 KNM²

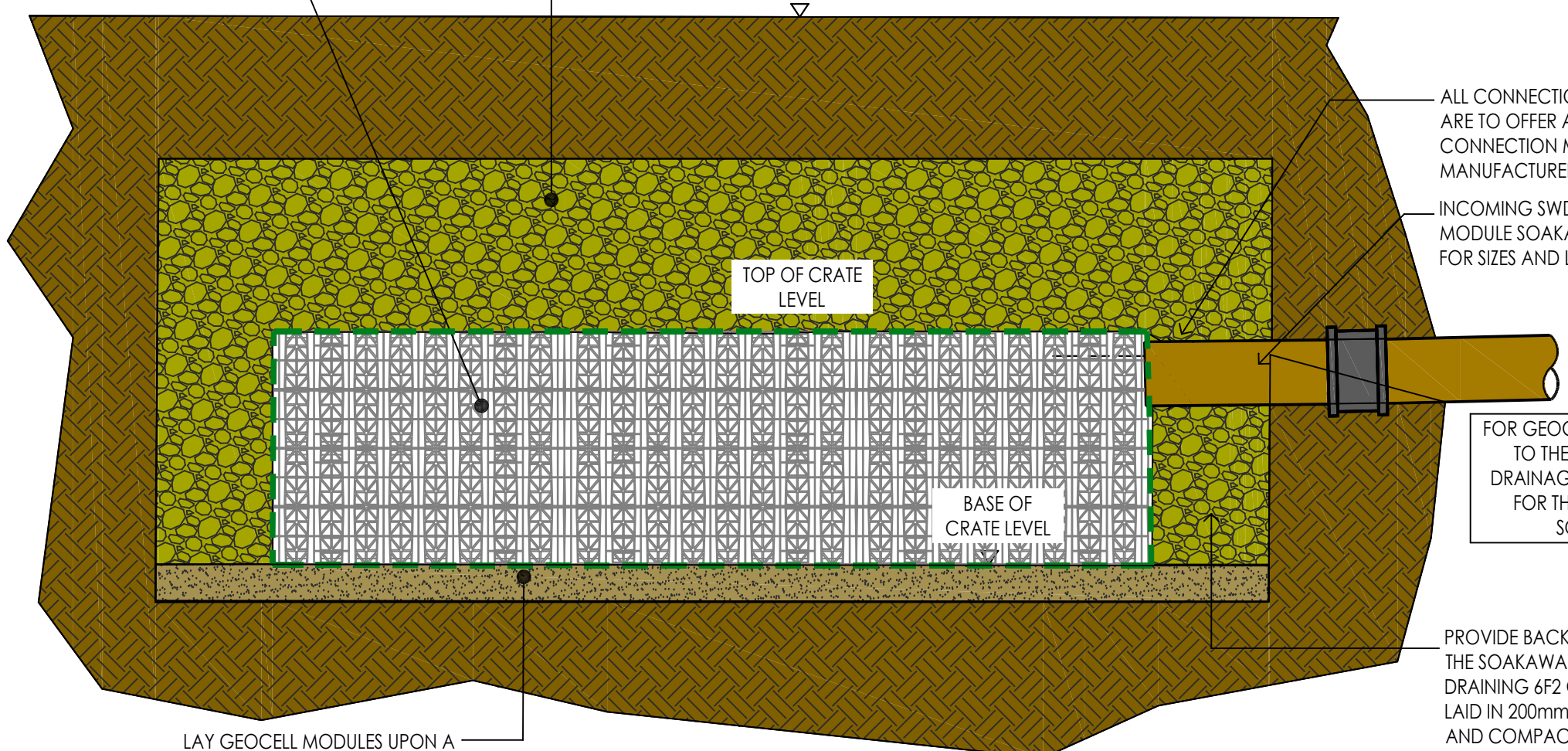
TYPE: USE ALDERBURGH, WAVIN OR POLYPIPE UNITS WITH ACCESSIBLE MAIN CHANNEL THROUGHOUT TANK FOR JETTING CAPABILITY.
REFER MAIN PROJECT DRAWING FOR DEPTH AND SIZE OF MODULES REQUIRED FOR PROVIDING THE REQUIRED STORAGE.
ALL UNITS TO BE BEDDED ON MIN 200mm THICK 10-20mm REGULATING STONE LAYER AND SURROUNDED IN FREE DRAINING MATERIAL AND WRAPPED IN GEOMEMBRANE AND GEOTEXTILE AS KEY

FOR PATIO AND GARDEN AREAS - BACKFILL ABOVE ATTENUATION TANK IN LAYERS OF 200mm MIN USING SELECTED AS DUG MATERIAL.

FOR LIGHT CAR PARKS AND ROADS - BACKFILL ABOVE ATTENUATION TANK IN LAYERS OF 200mm MIN USING Dtp TYPE 1 MATERIAL UP TO THE CAR PARK OR ROAD CONSTRUCTION

GROUND LEVEL

GEOTEXTILE AS GEOTEX 225 FABRIC.



DETAIL No. 4 - GEOCELLULAR SOAKAWAY (SCALE = 1:20)

ALL CONNECTIONS TO THE SOAKAWAY ARE TO OFFER A PROPRIETARY CONNECTION MADE BY THE GEOCRATE MANUFACTURER.
INCOMING SWD INTO GEOCELL MODULE SOAKAWAY - SEE MAIN PLAN FOR SIZES AND LEVELS

FOR GEOCRATE LEVELS REFER TO THE PROJECT MAIN DRAINAGE PLAN DATA BOX FOR THAT PARTICULAR SOAKAWAY

PROVIDE BACKFILL AND SIDEFILL TO THE SOAKAWAY USING FREE DRAINING 6/2 GRANULAR MATERIAL LAID IN 200mm THICKNESS LAYERS AND COMPACTED TO SPECIFICATION FOR HIGHWAY WORKS TABLE 6/2.

LAY GEOCELL MODULES UPON A 100mm LAYER OF SIZE 10-40mm CLINKER STONE OR RAILWAY BALLAST

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

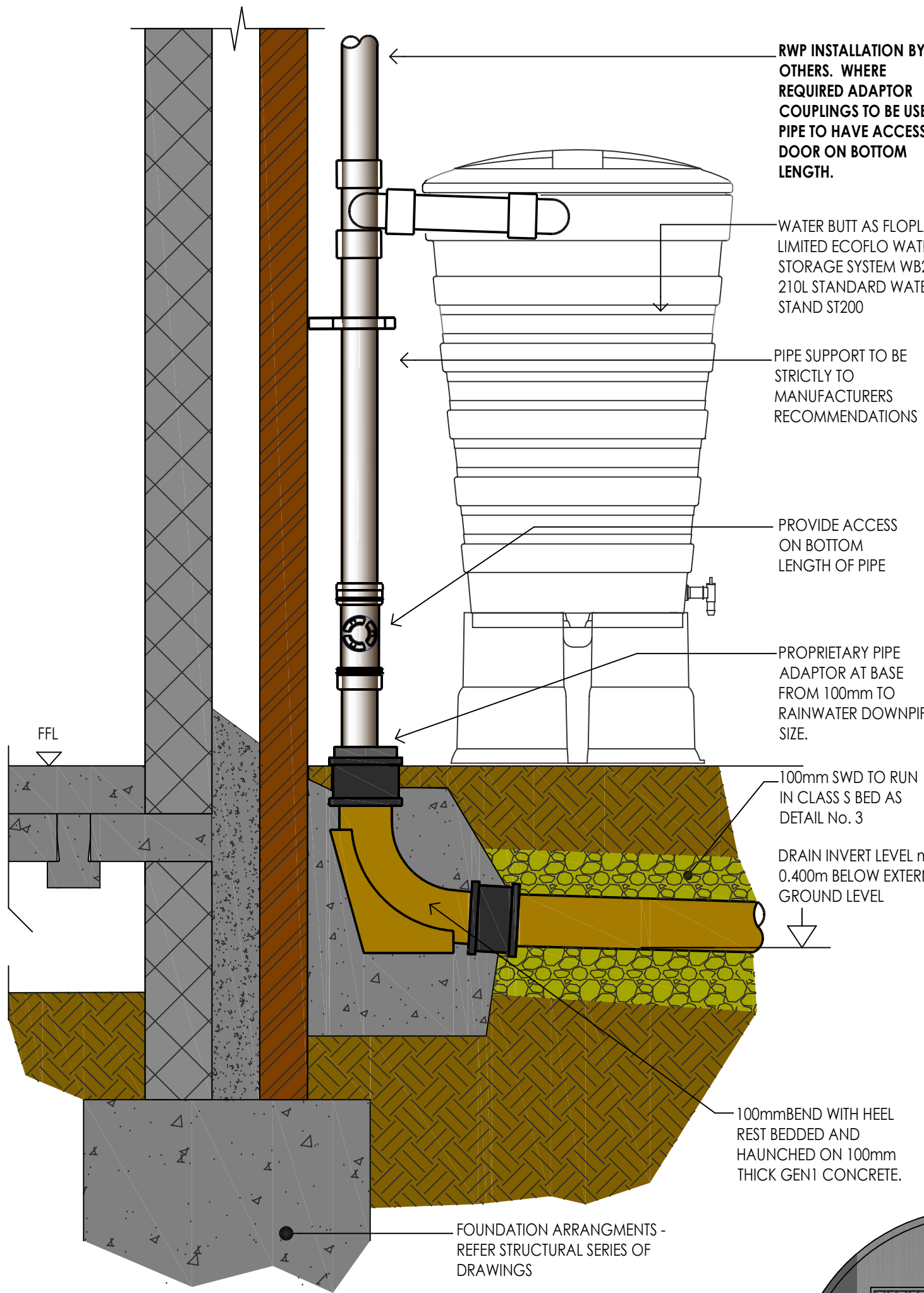
Existing public & private utility services and drainage locations shown have been derived from non-intrusive survey techniques. Their location is not accurate and the contractor must satisfy himself using open excavation where the location of such plant and apparatus is critical in construction.

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



DETAIL No. 2 - WATER BUTT AND EXTERNAL RAINWATER PIPE (RWP)

100Ø DUCT FROM HOUSE POWER TO BLOWER HOUSING TO SIP LAID AT min 450mm BGL IN SAND BED AND SURROUND WITH WARNING TAPE OVER

60w AIR BLOWER HOUSING POSITIONED TO SUIT ON SITE TO MANUFACTURERS RECOMMENDATIONS.

100Ø DUCT FROM BLOWER HOUSING TO SIP LAID AT min 450mm BGL IN SAND BED AND SURROUND WITH WARNING TAPE OVER

PIPE BEDDING AS DETAIL No. 2

200mm THICK BASE AND 150mm MIN THICK BED AND SURROUND OF GEN1 CONCRETE.

200mm THICK C20 CONCRETE BASE WITH C252 MESH IN BOTTOM 75mm.
200mm BASE OF HARCORE TO MANUFACTURERS RECOMMENDATIONS.

CLENVIRO 'MATRIX' P6 - SEWAGE TREATMENT PLANT COMPLETE WITH HOUSING, AIR BLOWER, CONNECTIONS FOR INLET, OUTLET, AIR DUCT AND INSPECTION COVER.

CLENVIRO TEL: 01952 676666

DETAIL No. 5 - SEWAGE TREATMENT PLANT (CLENVIRO MATRIX P9)

PROVIDE REMOVABLE 600mm DEEP Baffle BOARD ON CENTRE OF CHAMBER IN SLOT AND BASE GMS FINISGS BOLTED TO SIDE WALL USING GMS M12 THREADED BOLT, WASHER AND NUT, BOARD TO BE MAX 400mm FROM COVER LEVEL.

IMPORTANT NOTE:

PROVIDE 87.5° PVCu ACCESS TEE ON THE OUTLET AS OSMA 4D193 or 6D193 WITH ACCESS AS 4D292 or 6D292

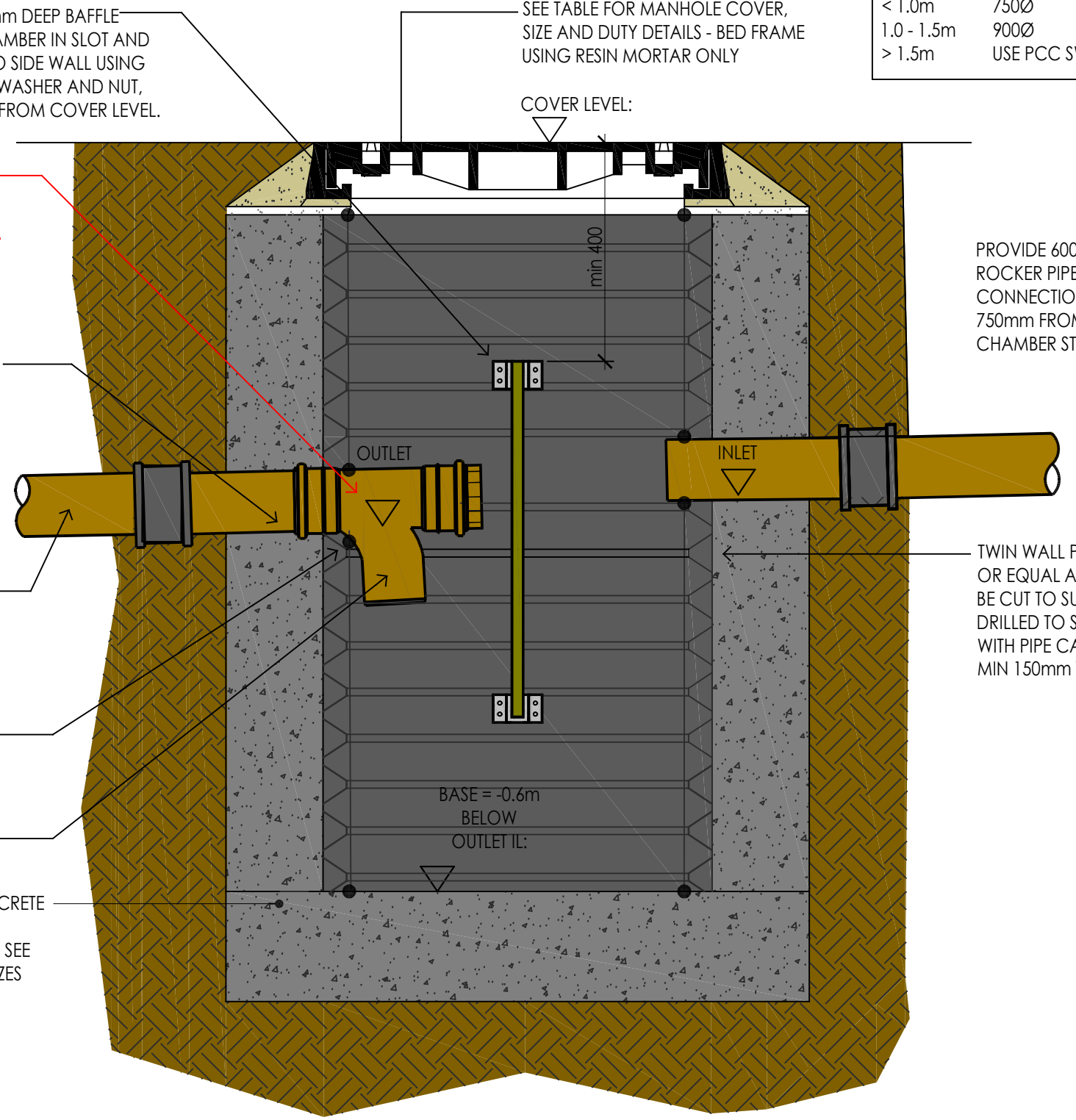
OUTLET LEVEL TO BE 50mm BELOW THE INLET AND BELOW WATER LEVEL.

PROVIDE 600mm LONG ROCKER PIPE WITH FLEXIBLE CONNECTION 150mm AND 750mm FROM FACE OF CHAMBER STRUCTURE

MAKE GOOD ALL HOLES AND JOINTS WITH HYDROPHILIC SEALANT.

DIPPED ACCESS TEE FOR WATER TRAP

MIN 150mm THICK ST2 CONCRETE SURROUND UPON A 200mm THICK ST2 CONCRETE BASE - SEE PROJECT DRAWINGS FOR SIZES



DETAIL No. 3 - STORM WATER POLYPROPYLENE CATCHPIT (SW PP CP) & SAMPLING CHAMBER

BACK FILL TRENCH WITH AS DUG SELECTED MATERIAL IN 200mm THICK LAYERS

SEPARATE GRANULAR MATERIAL AND BACKFILL LAYER WITH TERRAM 1000 OR GEOTEX 225 GEOTEXTILE FABRIC

FILTER MEDIUM TO BE 20-40mm CLEAN STONE OR CRUSHED ROCK OR STONE - NO FINES BENEATH AND AROUND PIPE AS SHOWN TO 100mm ABOVE PIPE BARREL.

DETAIL No. 6 - SEWAGE TREATMENT PERFORATED PIPE IN FIELD DRAINAGE TRENCH

IMPORTANT NOTE:

ORDER THE MATRIX UNIT TO SUIT THE INVERT LEVELS OF THE INLET AND OUTLET TO ENSURE THEY ARE MADE TO SUIT.

IF EXTENSION TURRETT IS NEEDED AFTER ORDER, THESE CAN BE FITTED BUT STRUCTURAL WARRANTY IS INVALID WITH CLENVIRO.

CLENVIRO TEL: 01952 676666

FOR ALL GENERAL NOTES SEE SDA DRAWING No. 100

GENERAL SIZING OF CHAMBER (SEE PROJECT DRAWINGS FOR ACTUAL SIZES)

DEPTH < 1.0m INT SIZE 7500
1.0 - 1.5m 9000
> 1.5m USE PCC SW CP DETAIL

PROVIDE 600mm LONG ROCKER PIPE WITH FLEXIBLE CONNECTION 150mm AND 750mm FROM FACE OF CHAMBER STRUCTURE

TWIN WALL PLASTIC PIPE AS POLYPIPE OR EQUAL APPROVED PRODUCTS TO BE CUT TO SUIT WITH PIPE HOLES DRILLED TO SUIT LEVELS REQUIRED WITH PIPE CAST AND SURROUNDED IN MIN 150mm THICK GEN1 CONCRETE.

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