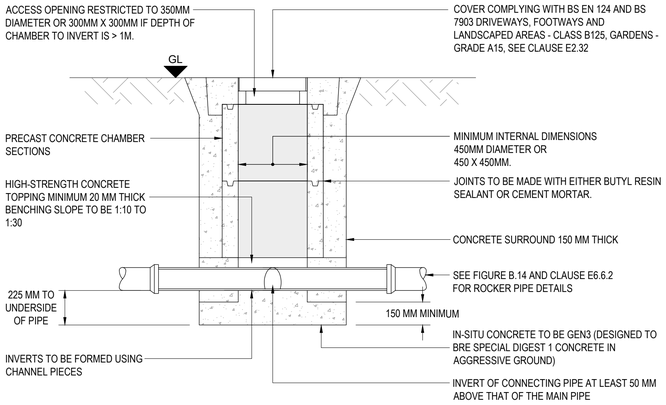
Sheet ACAD - A1 rev. C



TYPICAL INSPECTION CHAMBER DETAIL (RIGID MATERIAL DETAIL) - TYPE 3

ALTERNATIVE MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3M FOR AREAS NOT SUBJECT TO VEHICLE LOADING OR AREAS SUBJECT TO LIGHT VEHICLE LOADING, NON-ENTRY.

N.T.S.

PIPE DIA.	ROCKER PIPE LENGTH
100 - 600	0.60m
675 - 750	1.00m
OVER 750	1.25m

ROCKER PIPE DETAILS

TYPICAL INSPECTION CHAMBER DETAIL (FLEXIBLE MATERIAL) - TYPE 3

NTS

TYPE S BEDDING

GRANULAR BED AND SURROUND UNDER ROAD (BEDDING FACTION = 2.2)
SCALE 1:20

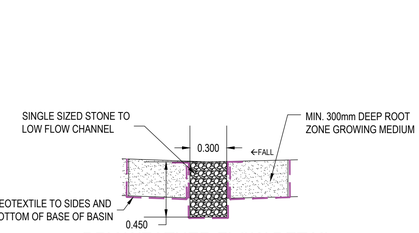
NOTES:
1. REFER TO SHW TABLE 5/3 AND SHW TABLE 6/1
2. BEDDING BENEATH AND AT SIDES OF THE PIPE TO BE WELL COMPACTED IN ACCORDANCE WITH CL 505.
3. CONCRETE CRADLES AND ARCHES MAY BE EXTENDED TO THE SIDES OF THE TRENCH.
4. GEOTEXTILES MAY BE USED WHERE DIRECTED OR APPROVED BY THE ENGINEER TO CONTAIN BEDDING MATERIAL IN CERTAIN SOILS EG. RUNNING SAND.
5. IN VERY WET CONDITIONS, WHERE DIRECTED OR APPROVED BY THE ENGINEER A TEMPORARY LAND DRAIN MAY BE LAID WITHIN THE GRANULAR BED.

TYPE Z BEDDING

CONCRETE BED AND SURROUND (BEDDING FACTION = 2.6)
SCALE 1:20

NOTES: (TYPE Z ONLY)
6. WHERE PIPES WITH FLEXIBLE JOINTS ARE USED, THE 6. CONCRETE PROTECTION IS TO BE INTERRUPTED OVER ITS FULL CROSS SECTION AT INTERVALS NOT EXCEEDING 5 METRES (OR AS DIRECTED BY THE ENGINEER) BY A SHAPED FORMER OF BITUMEN IMPREGNATED COMPRESSIBLE FILLER. THESE INTERRUPTIONS SHALL COINCIDE WITH PIPE JOINTS. SEE DIMENSIONS FOR PIPE BEDDING TABLE FOR THICKNESS OF COMPRESSIBLE FILLER.
7. CONCRETE TO BE GRADE GEN 3. WHERE FLEXIBLE PIPES ARE USED. CARE MUST BE TAKEN
8. TO PREVENT THE PIPES FROM FLOATING.

BEDDING DETAILS

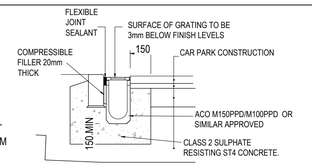


RWP TO GULLY

NTS

DRY WEATHER FLOW DETAIL

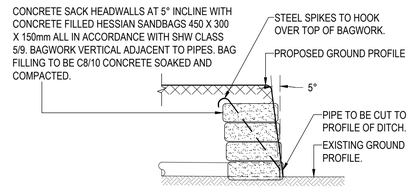
SCALE 1:25



NOTES:
1. DRAINAGE CHANNELS TO BE ACO M150PPD OR SIMILAR APPROVED
2. FOUNDATION FOR CHANNELS TO BE LAID ON A ROLLED SUB-BASE OF 150mm MINIMUM THICKNESS.
3. GRATING LOAD CLASSIFICATION TO BE C250/ D400

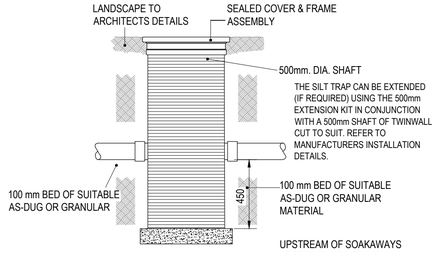
DRAINAGE CHANNEL DETAIL

SCALE 1:NTS



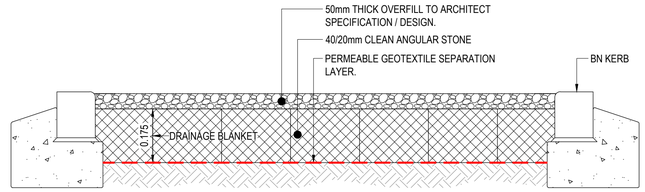
CONCRETE SACK HEADWALL DETAIL

SCALE 1:20



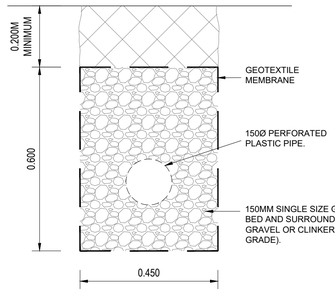
TYPICAL UPVC SILT TRAP CHAMBER INSTALLATION

SCALE 1:20



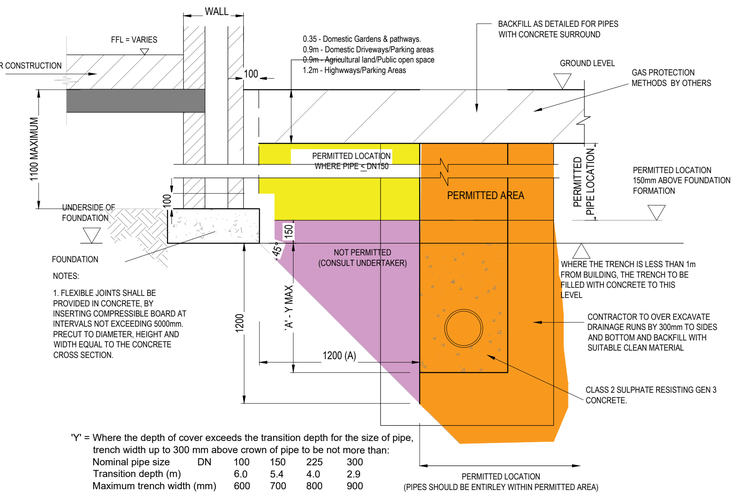
GRAVEL SURFACED PARKING CONSTRUCTION

SCALE 1:10



FILTER DRAIN STANDARD DETAIL

SCALE 1:10

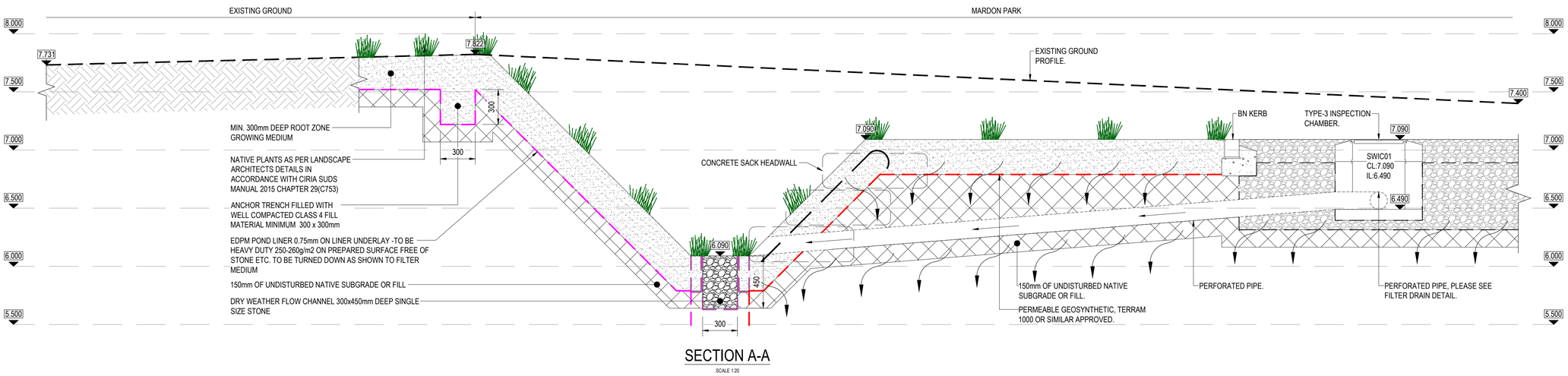


NOTES:
1. FLEXIBLE JOINTS SHALL BE PROVIDED IN CONCRETE, BY INSERTING COMPRESSIBLE BOARD AT INTERVALS NOT EXCEEDING 5000mm. PRECUT TO DIAMETER, HEIGHT AND WIDTH EQUAL TO THE CONCRETE CROSS SECTION.

'Y' = Where the depth of cover exceeds the transition depth for the size of pipe, trench width up to 300 mm above crown of pipe to be not more than:

Nominal pipe size DN	100	150	225	300
Transition depth (m)	6.0	5.4	4.0	2.9
Maximum trench width (mm)	600	700	800	900

TYPICAL DRAINAGE DETAIL IN CLOSE PROXIMITY OF FOUNDATIONS



SECTION A-A

SCALE 1:20

NOTES:

1. MH COVERS AND FRAMES TO CONFORM TO BS EN 124:
 -HIGHWAYS AND FOOTWAYS TO FRONT OF BUILDINGS (D400)
 -FOOTWAYS TO REAR OF BUILDINGS (C250)
2. TYPE S BEDDING AND SURROUND TO ALL PIPES EXCEPT IN THE FOLLOWING CIRCUMSTANCES, IN WHICH TYPE Z BEDDING AND SURROUND ARE TO BE USED:
 -IN BACK GARDENS OF HOUSES WHERE DEPTH TO CROWN OF PIPE IS LESS THAN 0.35m.
 -IN AREAS OF THE REAR OF FLATS AND PARKING WHERE DEPTH TO CROWN IS LESS THAN 0.9m.
 -IN AREAS OF ROAD WHERE DEPTH IS LESS THAN 1.2m.
3. ALL EXISTING MANHOLE INVERTS TO BE CHECKED AND REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF DRAINAGE WORKS. EXISTING PIPE CONNECTIONS ARE TO BE CCTV SURVEYED AND INSPECTED BY THE ENGINEER AND LOCAL AUTHORITY. IF THE PIPE CONNECTION IS FOUND TO BE DAMAGED OR IN DISTRESS, THE CONTRACTOR IS TO CARRY OUT REMEDIAL WORKS OR PROVIDE A NEW CONNECTION TO THE EXISTING SEWER (PIPE SIZE AND GRADIENT TO BE DETERMINED BY THE ENGINEER.
4. THE GRADIENTS INDICATED AGAINST THE DRAIN RUNS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL INSTALL DRAINS TO THE INVERT LEVELS SHOWN FOR EACH MANHOLE OR OTHER INDICATED POSITION.
5. ALL PLOT FOUL DRAINAGE TO BE MINIMUM 100mm DIAMETER UNLESS OTHERWISE NOTED.
6. ALL ADOPTABLE THERMOPLASTIC STRUCTURED WALL SEWER PIPE SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 13476-1 AND WIS 4-35-01 AND BS EN 13476-2 OR BS EN 13476-3. PIPES SHALL BE BSI KITEMARKED OR HAVE EQUIVALENT THIRD PARTY CERTIFICATION. PIPES LESS THAN OR EQUAL TO 500mm DIA. SHALL HAVE A SHORT-TERM RING STIFFNESS OF NOT LESS THAN 8kN/m^2 (SN8).
7. ALL JOINTING IN ACCORDANCE WITH MANUFACTURERS TECHNICAL ADVICE & SPECIFICATION.
8. ALL NON ADOPTABLE DRAINAGE TO BE THE STANDARD UPVC 110mm, 160mm DRAINAGE AND MANUFACTURED TO BS-EN 1401 AND BS 4660 UNLESS NOTED OTHERWISE.
9. ALL PERMEABLE PAVING CELLS TO HOUSE LATERAL FIN DRAIN ALONG LOWER EDGE WITH 150Ø CONNECTION PIPE.
10. ALL STORM WATER DRAINAGE TO BE A MINIMUM OF 150mm DIAMETER UNLESS OTHERWISE NOTED.
11. SOIL & VENT PIPE LOCATION AND NUMBER TO BE CONFIRMED WITH ARCHITECT.
12. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS DRAWINGS, TOGETHER WITH THEIR LATEST SPECIFICATIONS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER (VALE CONSULTANCY) AS SOON AS POSSIBLE.
13. FIGURED DIMENSIONS ONLY TO BE USED. ANY QUERIES OR DISCREPANCIES TO BE REFERRED TO THE ENGINEER (VALE CONSULTANCY) IMMEDIATELY.
14. PRIOR TO ORDERING ANY MATERIALS THE CONTRACTOR IS TO CONFIRM MANUFACTURER/PIPE MATERIAL AND GRADE PROPOSED WITH WATER AUTHORITY.
15. TEMPORARY WORKS DESIGN BY OTHERS.
16. DESIGN RISK ASSESSMENTS AND METHOD STATEMENTS ARE TO BE PROVIDED TO THE PRINCIPLE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY WORKS.

APPROVAL

0 500 1000 1500 2000 2500 mm

SCALE 1:50

rev.	drawn	chkd.	apprvd.	date	description
02	SU	MJ	LR	18.02.21	ISSUED FOR APPROVAL.
01	SU	MJ	LR	18.02.21	ISSUED FOR APPROVAL.

Client
GBV PROPERTIES LTD

Project
MARDON PARK PHASE 3

Title
SAB DRAINAGE CONSTRUCTION DETAILS

Vale Consultancy
CONSULTING CIVIL & STRUCTURAL ENGINEERS
29 Bocam Park, Old Field Road, Pencoed, Bridgend CF35 5LJ.
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date	drawn	checked	approved
18.02.21	SU	MJ 18.02.21	LR 18.02.21

scale @ A1	project no.
1:200	11250

status	drg. no.	rev.
A	11250_SAB_501	02

DRAWING STATUS
A - Approval, AB - As-Built, C - Construction, D - Draft, P - Preliminary, T - Tender

ORIGINAL DRAWING SIZE 841 x 594

10 0 10 20 50 100mm NATURAL SCALE

A1