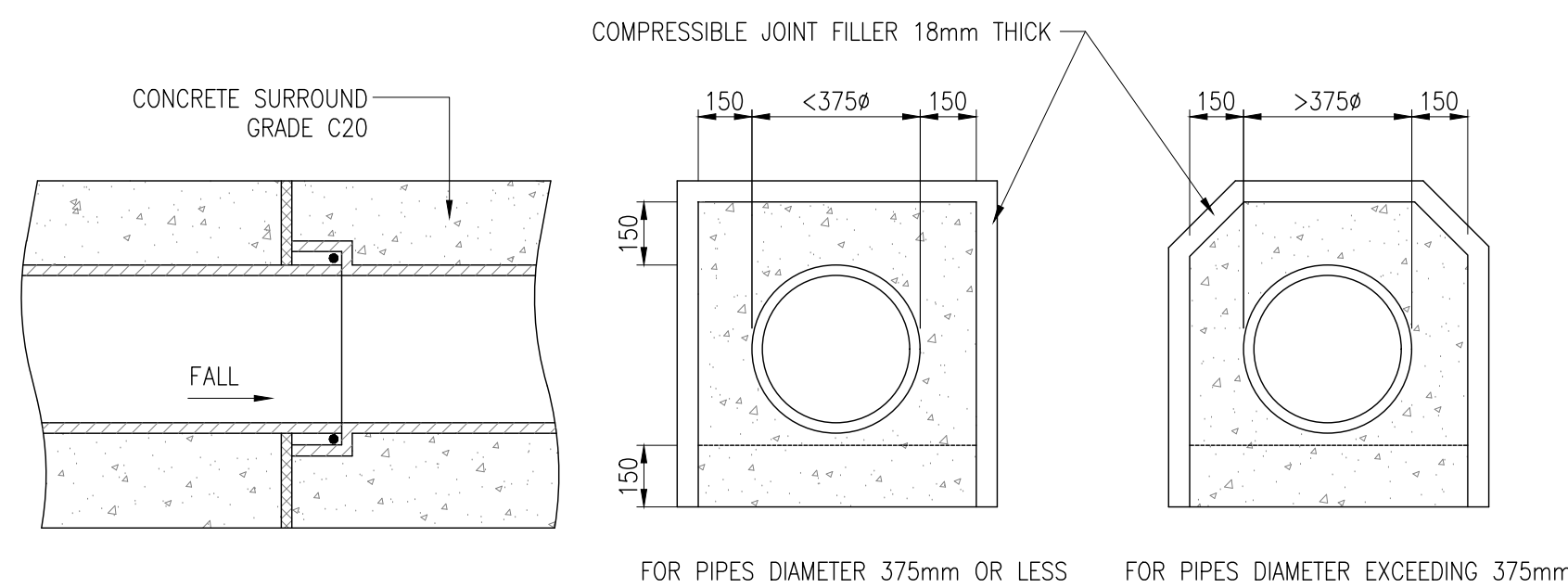
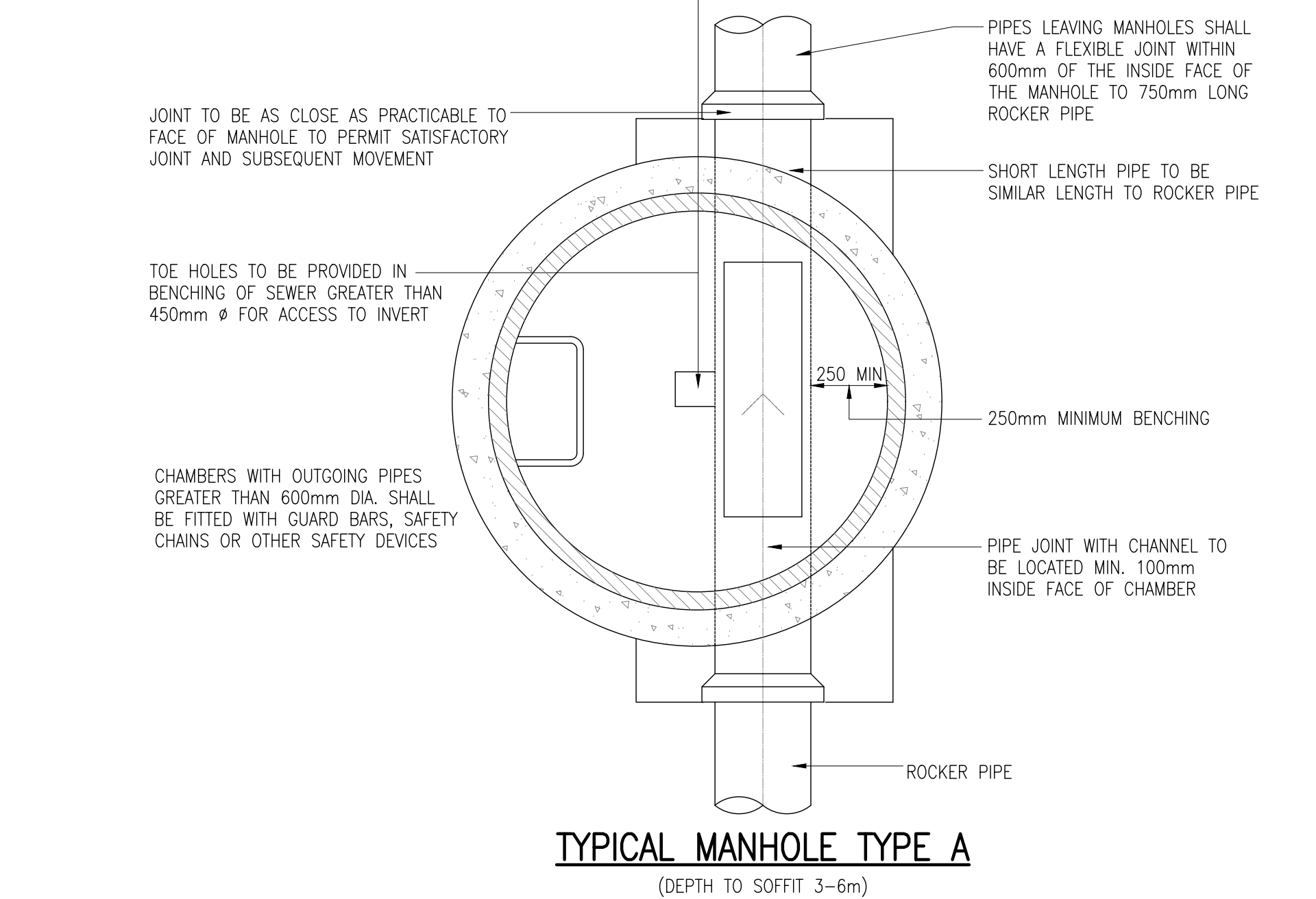
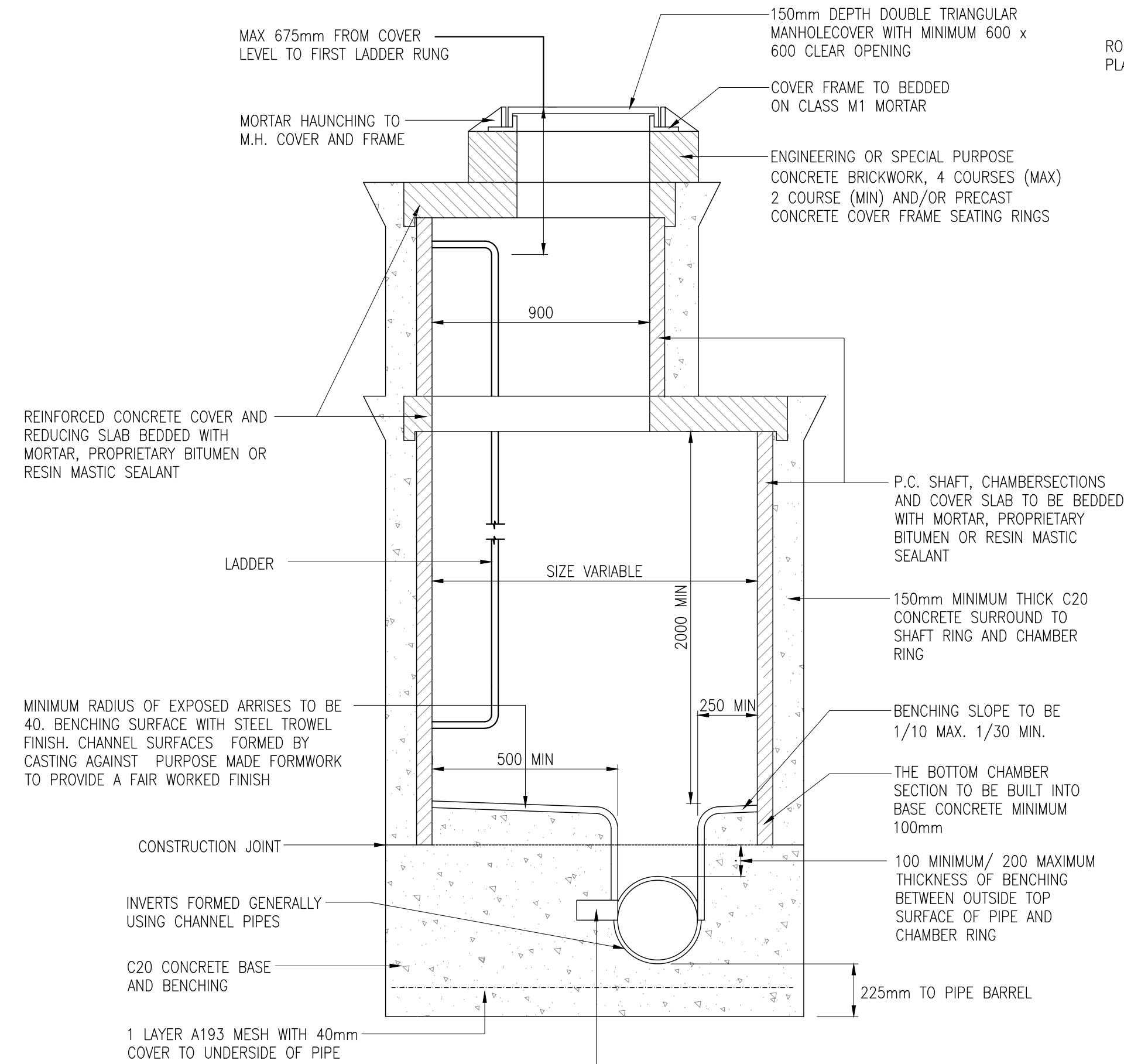
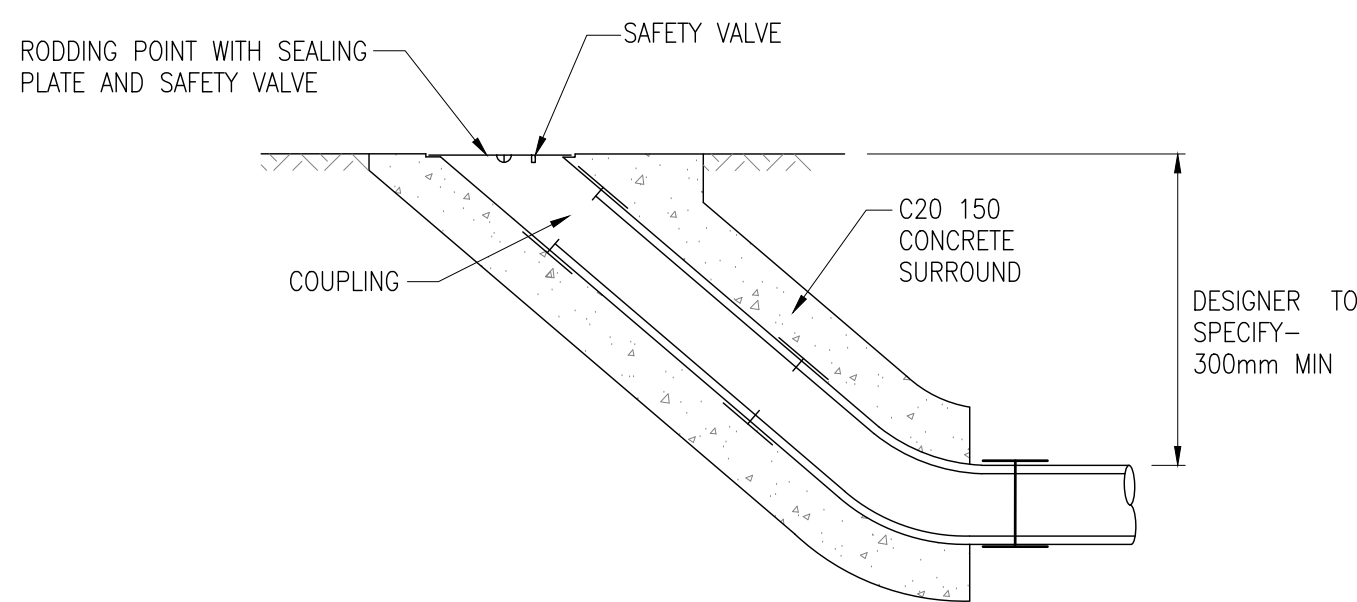
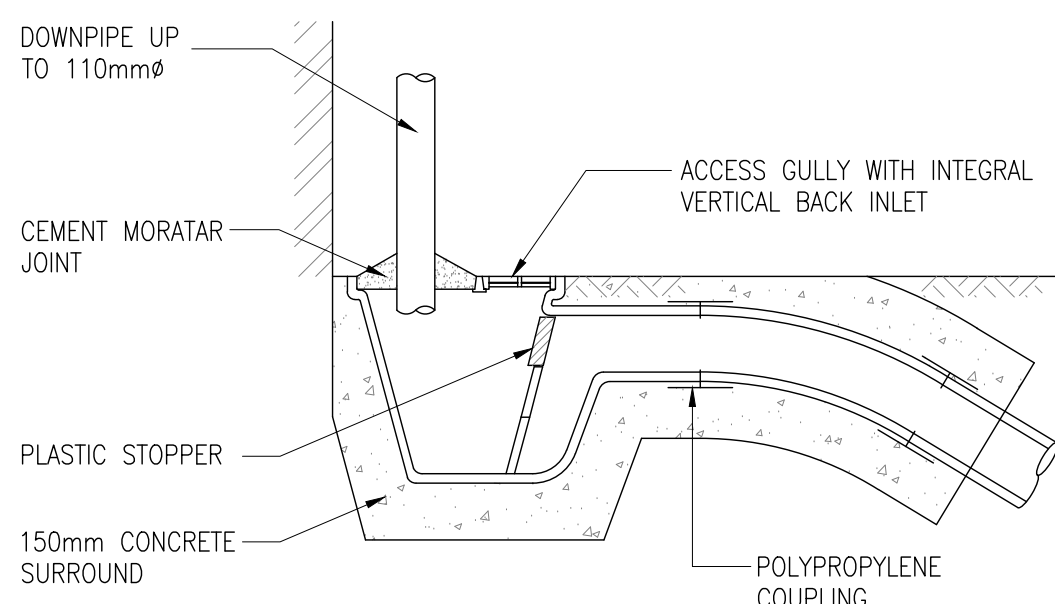




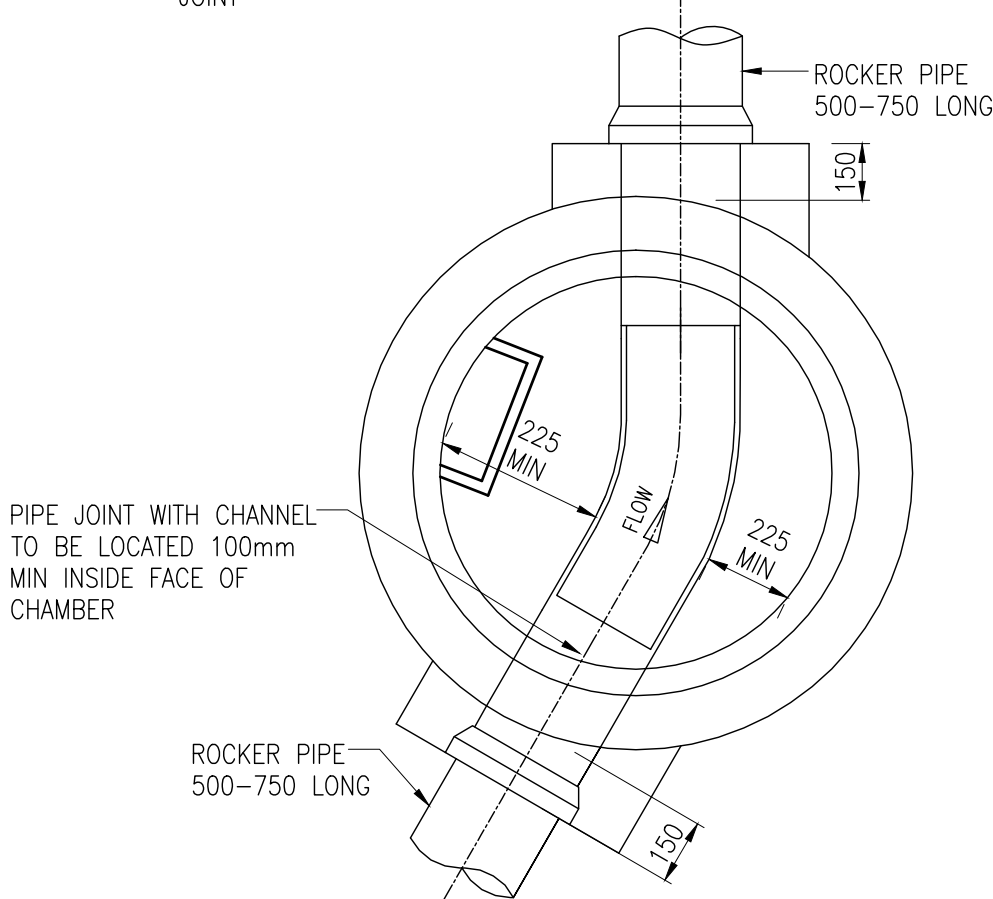
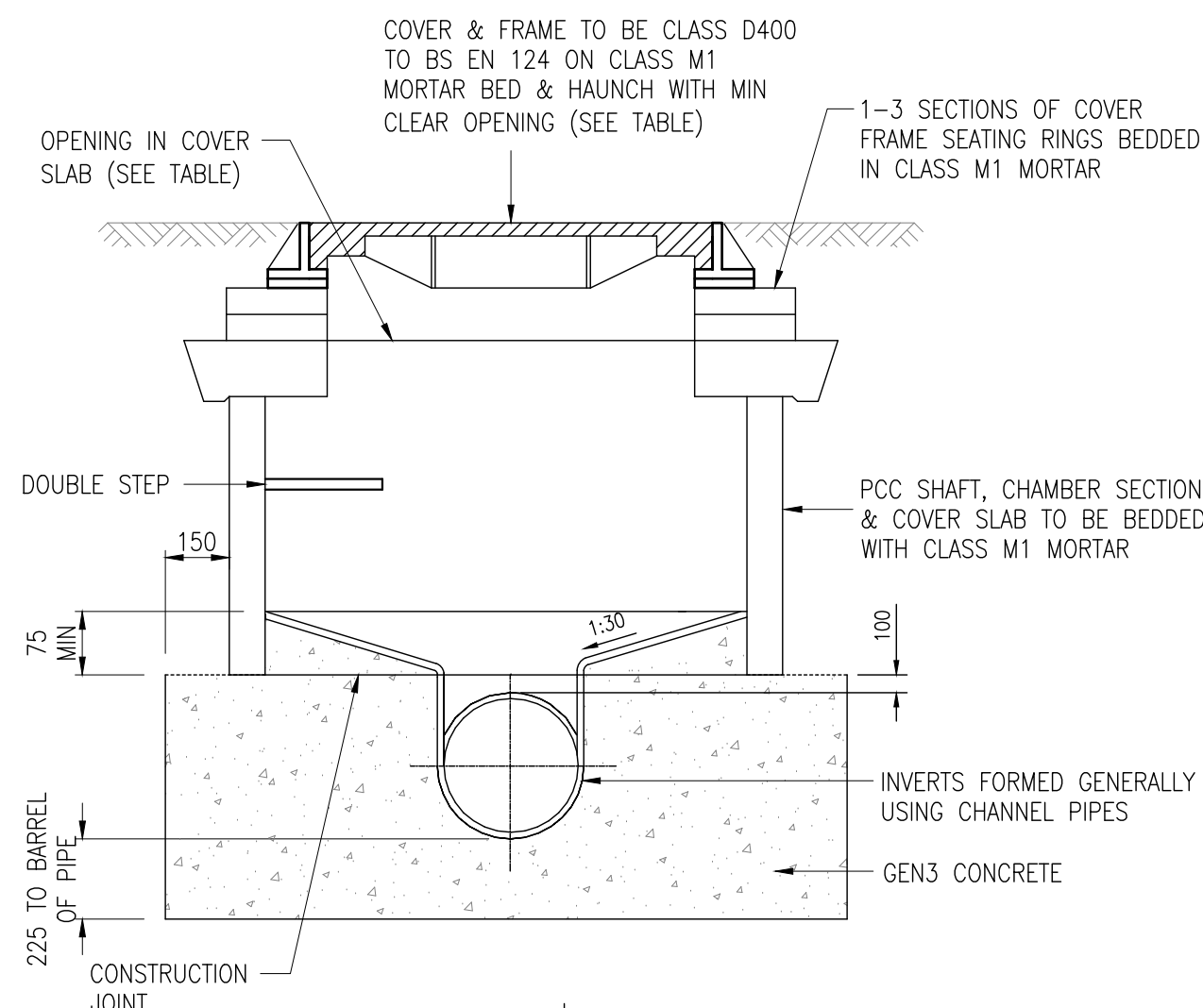
DETAILS OF FLEXIBLE JOINT FOR PIPES WITH CONCRETE SURROUND (150mm THICK) PROVIDED AT EACH PIPE JOINT



RODDING EYE DETAIL

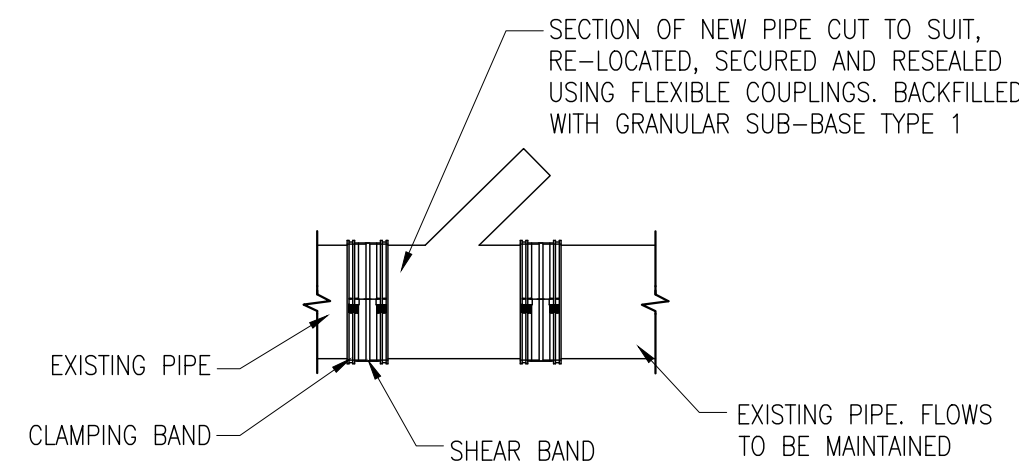


ACCESS GULLY DETAIL



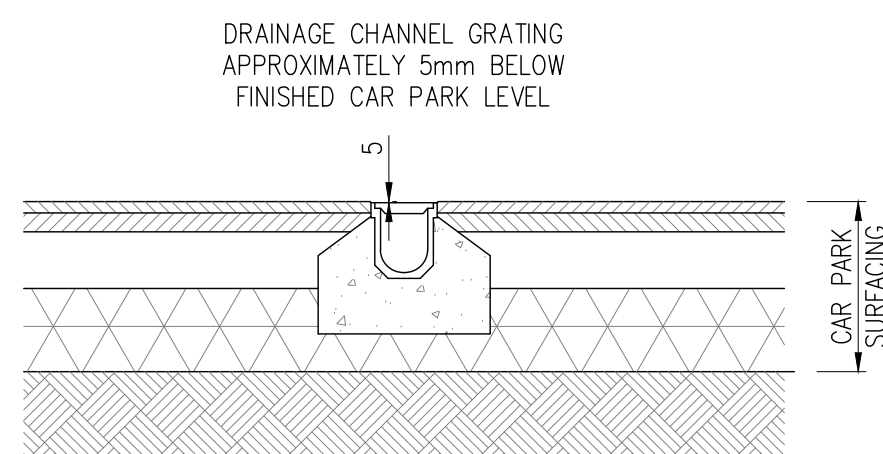
TYPICAL MANHOLE TYPE E

(MAX. DEPTH FROM GROUND LEVEL TO SOFFIT OF PIPE <1.5m)

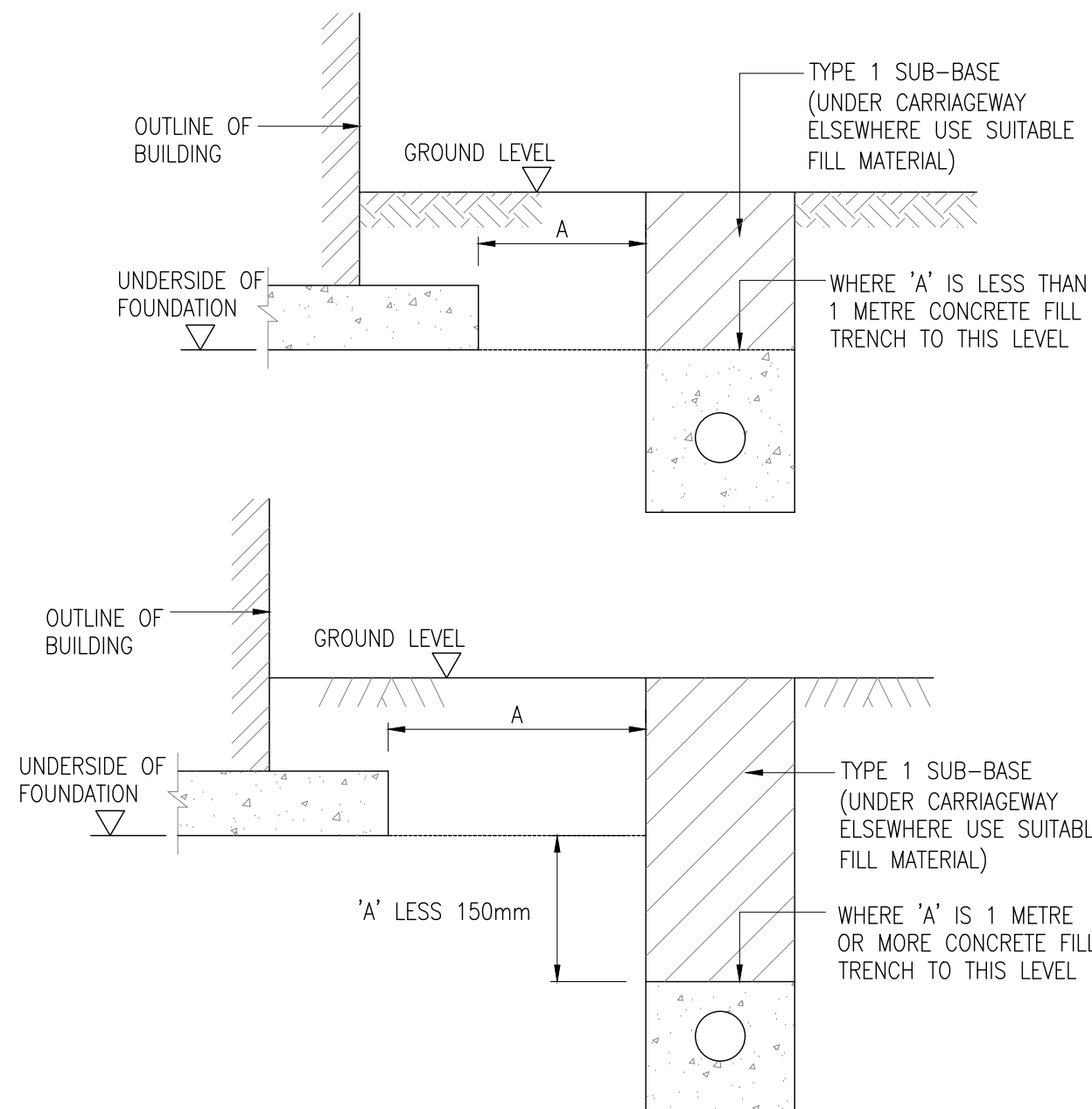


JUNCTION INSERTION

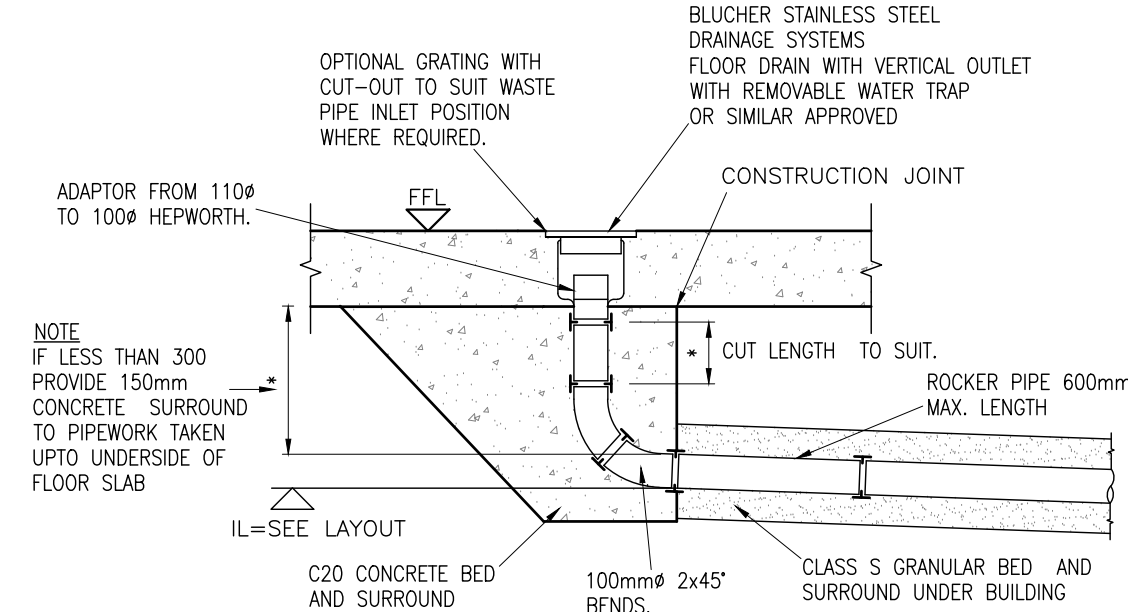
- THE REPLACEMENT PIPE OR JUNCTION SHOULD LEAVE A TOTAL LENGTH OF 20MM LESS THAN THAT BETWEEN THE CUT ENDS OF THE EXISTING PIPELINE.
- COUPLINGS SHOULD BE TIGHTENED EITHER STARTING WITH THE SHEAR BAND FOLLOWED BY THE CLAMPING BANDS OR WORKING ACROSS THE COUPLINGS FROM ONE OF THE CLAMPING BANDS. IT IS IMPORTANT TO ENSURE THAT THE ENDS OF THE PIPES ARE CUT SQUARE AND THAT THERE IS SUFFICIENT CLEARANCE BETWEEN THE ENDS OF THE PIPES TO ALLOW FLEXIBLE MOVEMENT TO TAKE PLACE.



SECTION THROUGH DRAINAGE CHANNEL



TRENCH DETAIL FOR FW AND SW PIPE RUNS NEAR BUILDING FOUNDATIONS



INTERNAL FLOOR DRAIN

(1:20)

GENERAL NOTES

- SETTING OUT SHALL BE UNDERTAKEN USING ONLY THE INFORMATION GIVEN. DISTANCES SHOULD NOT BE SCALED FROM THIS DRAWING.
- ALL SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DESIGN CONSTRUCTION GUIDANCE AND UNITED UTILITIES DETAILS & GUIDELINES.
- THE MINIMUM GRAVITY PIPE DIAMETER UNDER ADOPTABLE HIGHWAYS SHALL BE 150mm.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION GIVEN WITH REGARDS TO EXISTING SERVICES AND DRAINAGE CONNECTIONS ETC. PRIOR TO COMMENCING THE WORKS. THE RATES SHALL INCLUDE FOR HAND DIG AROUND SERVICES WHERE NECESSARY. THE CONTRACTOR SHALL ADHERE TO THE CDM REGULATIONS AT ALL TIMES.
- THE OUTSIDES OF ALL SEWERS SHALL BE A MINIMUM OF 1.0m FROM KERB LINES AND THE OUTSIDE OF MANHOLES SHALL BE A MINIMUM OF 0.5m FROM KERB LINES.
- EXISTING FLOWS IN WATERCOURSES, SEWERS AND LAND DRAINS SHALL BE MAINTAINED AT ALL TIMES.
- ONLY TRAINED PERSONNEL SHALL BE PERMITTED TO ENTER CONFINED SPACES.
- ALL MATERIALS TO BEAR THE RELEVANT B.S. KITEMARK AND COMPLY FULLY WITH THE SPECIFICATIONS. ALL CONCRETE & CONCRETE PRODUCTS MUST USE SULPHATE RESISTANT CEMENT (UNLESS THE SITE INVESTIGATION REPORT PROVES THAT SULPHATE ATTACK FROM SOILS AND GROUNDWATER WILL NOT OCCUR TO WITHSTAND A CLASS.
- ALL OPENING NOTICES ETC. AS REQUIRED UNDER HIGHWAYS ACTS ETC. ARE TO BE OBTAINED PRIOR TO COMMENCEMENT OF WORKS. ALL WORKS ARE TO BE INSPECTED BY L.A., NHBC OR THE NETWORK OPERATOR AS APPLICABLE.
- WHERE 'ULTRA RIB' UPVC PIPES (OR SIMILAR APPROVED) ARE USED IN ADOPTABLE DRAINAGE THEY SHALL STILL BE HANDLED AND LAID IN ACCORDANCE WITH THE SPECIFICATION AND GUIDANCE ISSUED BY THE HIGH PERFORMANCE PIPE ASSOCIATION.
- A CLASS S BED AND SURROUND MUST BE USED FOR SUCH PIPES. TRENCH BACKFILL IN HIGHWAYS TO WITHIN 1M OF HIGHWAY SHALL AS DIRECTED BY THE HIGHWAY AUTHORITY BE A SUITABLE GRANULAR MATERIAL ALL IN ACCORDANCE WITH SEWERS FOR ADOPTION CL 4.3.4.
- SLAB LEVELS SHALL NOT BE VARIED WITHOUT REFERENCE TO THE ENGINEER FOR GUIDANCE.
- ALL GULLY CONNECTIONS TO BE 150mm VITRIFIED CLAY UNLESS NOTED OTHERWISE.
- ALL MANHOLE COVERS TO BE RECESSED TO ACCEPT FINISH AS DETAILED BY LANDSCAPE ARCHITECT.
- SLOW REST BENDS TO BE USED IN ALL LOCATIONS MADE UP FROM 2No. 45 DEG BENDS (450mm TO INVERT FROM FFL).
- MANHOLE POSITIONS AND ACCESS COVERS TO BE ACCURATELY SET-OUT BY LANDSCAPE ARCHITECT TO SUIT EXTERNAL FINISHES.
- ALL DRAINS CAST THROUGH FOUNDATIONS TO HAVE ROCKER PIPES ON BOTH SIDES OF FOUNDATION.
- ALL POP UP POSITIONS TO BE CONFIRMED SET OUT DIMENSIONS TO BE AGREED & PROVIDED BY OTHERS.
- ALL FW DISCHARGE RATES TO BE CONFIRMED BY M&E DESIGNER.
- ALL SURFACE WATER COLLECTION FEATURES TO BE CONFIRMED BY THE LANDSCAPE ARCHITECT.
- STORAGE HAS BEEN PROVIDED IN A CELLULAR STORAGE TANK AND UP-SIZED MANHOLES AND PIPES.
- EXISTING SEWER DEPTHS HAVE BEEN APPROXIMATED FROM LIMITED INFORMATION. NEW CONNECTIONS TO BE CONFIRMED PRIOR TO CONSTRUCTION OF ANY DRAINAGE WORKS.
- LANDSCAPE ARCHITECT TO CONFIRM GULLY AND DRAINAGE CHANNEL LOCATIONS TO LANDSCAPED AREAS.
- FOUL NETWORK TO BE CONFIRMED FOLLOWING CONFIRMATION OF BRANCH CONNECTION POINTS FROM BUILDING M&E DESIGNER.
- CCTV SURVEY OF EXISTING SITE DRAINAGE REQUIRED PRIOR TO THE COMMENCEMENT OF ANY WORKS STARTING ON SITE.
- MINIMUM COVER TO DRAINAGE SOFFIT LEVEL & ACCESS CHAMBERS ;
LANDSCAPING TRAFFICKED AREAS 0.600m
HIGHWAYS 0.900m
1.200m
CLASS 'S' BEDDING AND SURROUND TO BE USED WHERE MINIMUM COVER IS ACHIEVED. WHERE MINIMUM COVER IS NOT ACHIEVED CLASS 'Z' BEDDING AND SURROUND (CONCRETE ENCASEMENT) IS TO BE USED.

C01	26.04.2024	CONSTRUCTION ISSUE	JJR	JCM	PT
P02	12.07.2023	RIBA STAGE 4 ISSUE	JJR	JRS	KOB
P01	04.04.2023	PRELIMINARY ISSUE	MG	PL	KOB
REV	DATE	DESCRIPTION	BY	CHK	APP

DRAWING STATUS:	CONSTRUCTION
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CLIENT:	TILBURY DOUGLAS
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ARCHITECT:	ELLIS WILLIAMS ARCHITECTS
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PROJECT:	SANDILANDS COMMUNITY PRIMARY SCHOOL
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TITLE:	BELOW GROUND DRAINAGE TYPICAL DRAINAGE DETAILS SHEET 2
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STATUS:	PROJECT No:	PROJECT	ORIGINATOR	VOL/SYS	LEVEL	TYPE	ROLE	DRAWING No.	REV:
S3	222-171	SRP1034 - AJP - ZZ - 00 - D - C - 1301	C01						

SCALE @ A1:	DESIGNED:	DRAWN:	CHECKED:	APPROVED:	DATE:
1:250	LS	KB	PL	KOB	MARCH 2023