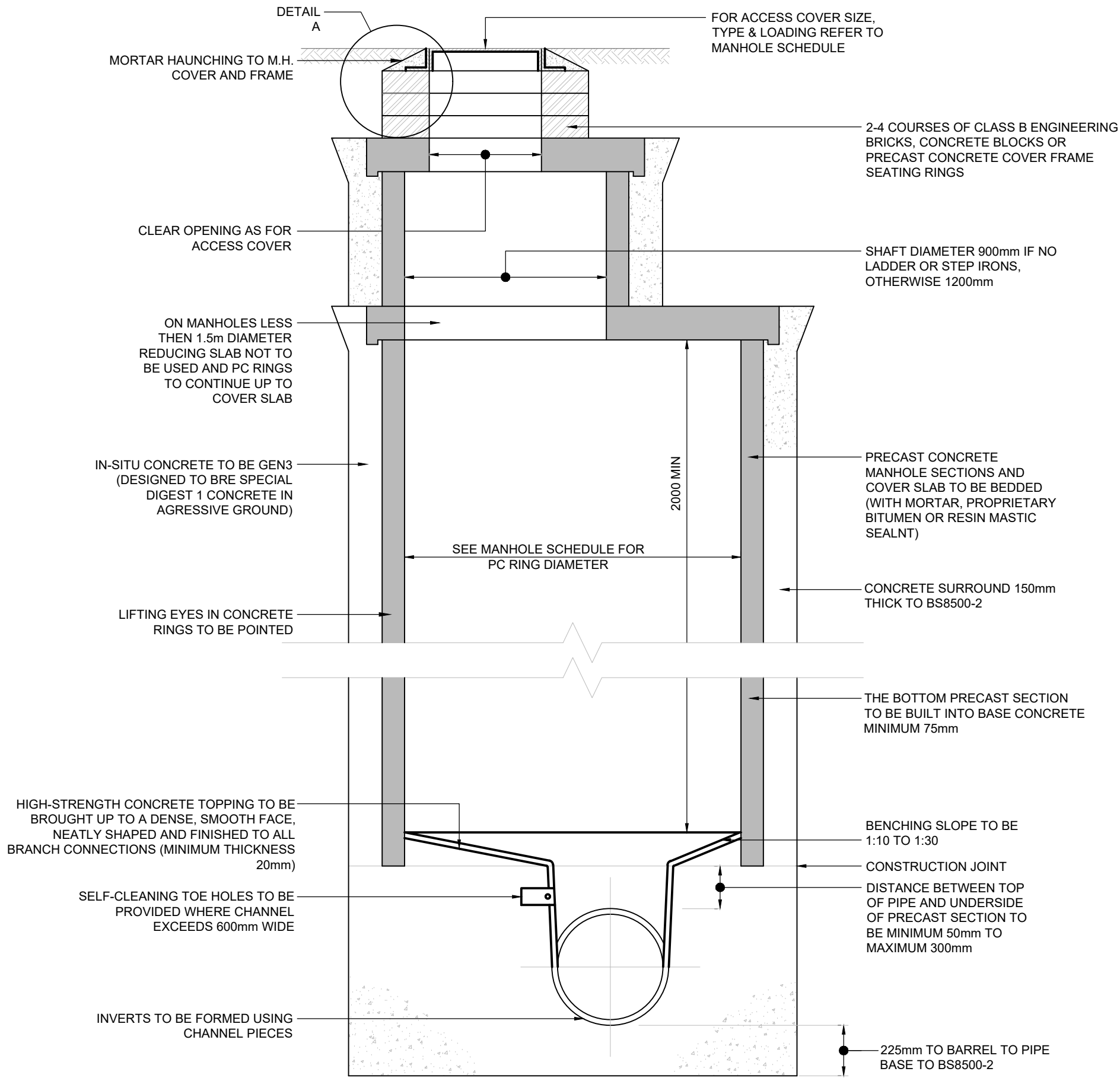
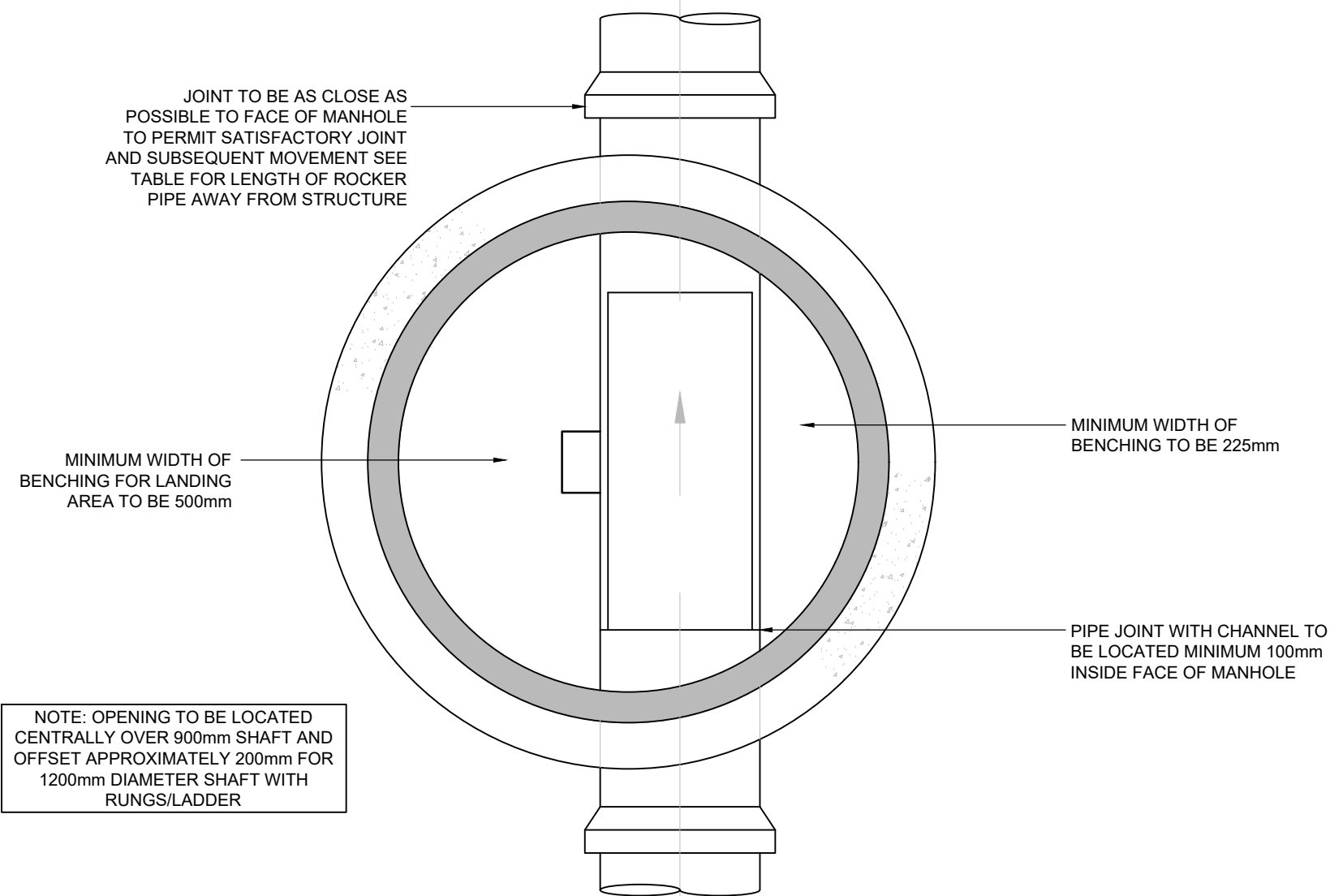


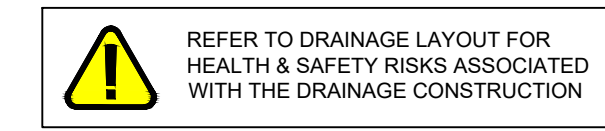


TYPICAL SECTION
(SCALE 1:20)

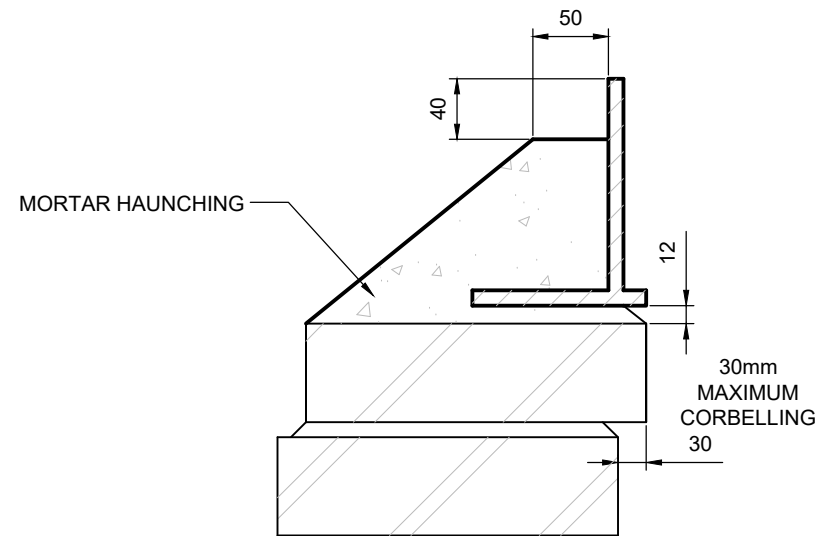


PLAN VIEW
(SCALE 1:20)

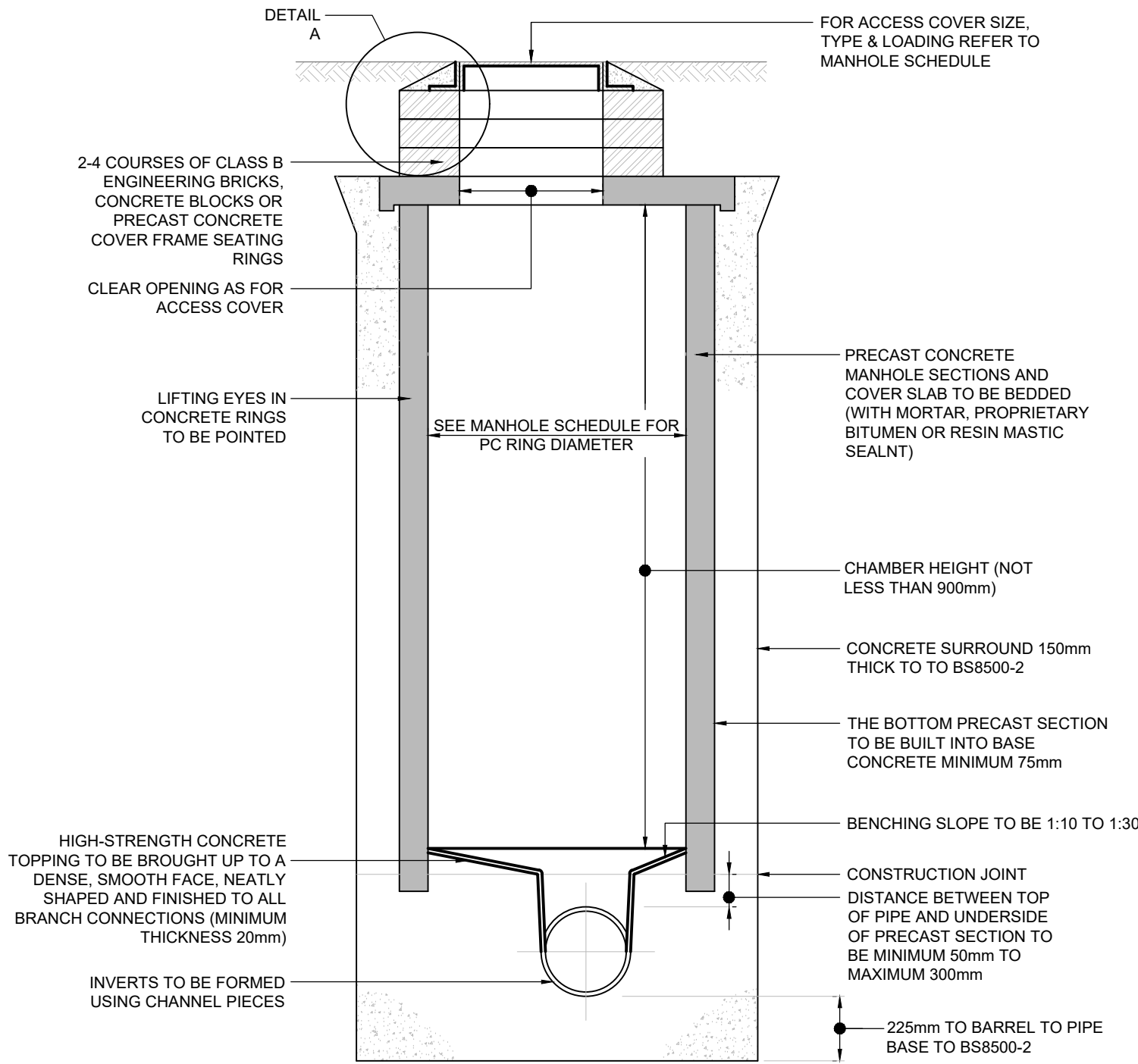
MANHOLE - TYPE A
DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3m TO 6m



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DETAIL A
(SCALE 1:10)



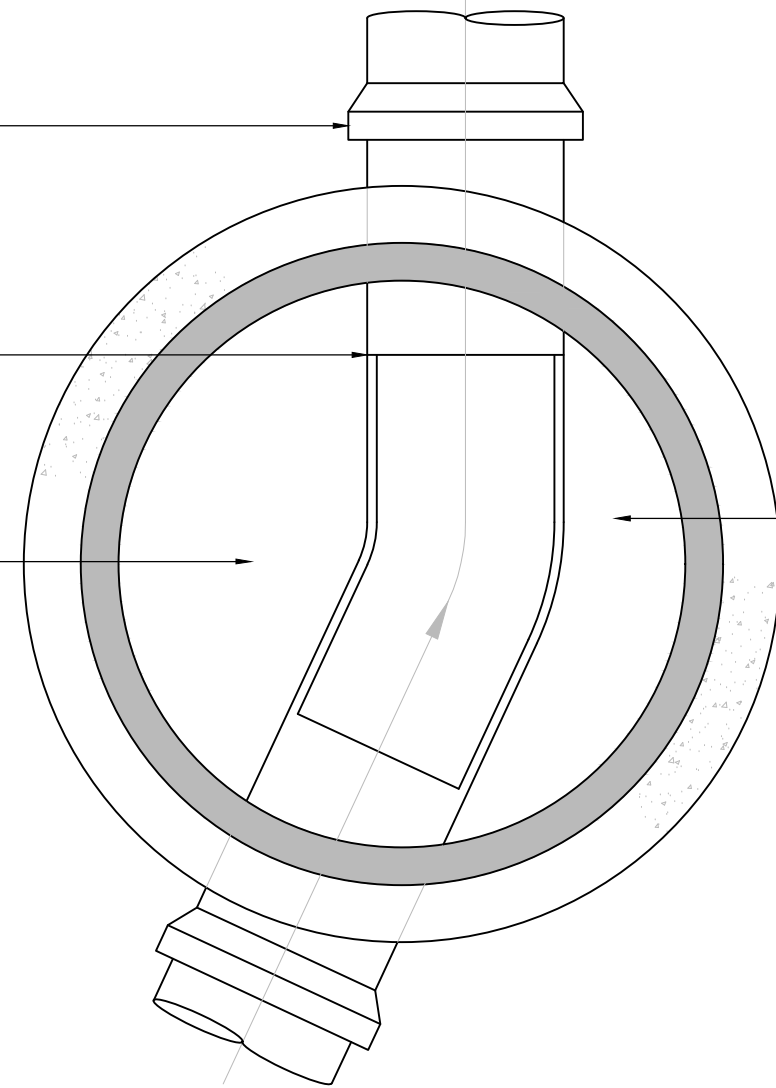
TYPICAL SECTION
(SCALE 1:20)

JOINT TO BE AS CLOSE AS POSSIBLE TO FACE OF MANHOLE TO PERMIT SATISFACTORY JOINT AND SUBSEQUENT MOVEMENT SEE TABLE FOR LENGTH OF ROCKER PIPE AWAY FROM STRUCTURE

PIPE JOINT WITH CHANNEL TO BE LOCATED MINIMUM 100mm INSIDE FACE OF MANHOLE

MINIMUM WIDTH OF BENCHING TO BE 500mm

MINIMUM WIDTH OF BENCHING TO BE 225mm



PLAN VIEW
(SCALE 1:20)

MANHOLE - TYPE B
MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3m

- B1 COVER ARRANGEMENT -

MANHOLE OF CHAMBER DIAMETER 1200 & 1500 TO HAVE SINGLE 600x600 COVER LOCATED CENTRALLY OR ECCENTRICALLY OVER CHANNEL WHEN MANHOLE IS LESS THAN 1.5m FROM COVER TO SOFFIT

MANHOLE CHAMBERS GREATER THAN 1500Ø TO HAVE 1200x675 OPENING LOCATED CENTRALLY OR ECCENTRICALLY OVER CHANNEL REDUCING SLAB AND DOUBLE TWIN 600x600 COVERS TO BE INSTALLED.

DRAINAGE

- DRAINAGE SYSTEMS TO COMPLY WITH THE FOLLOWING STANDARDS:
BS EN 752:2008
BUILDING REGULATIONS APPROVED DOCUMENT PART H, 2015 EDITION
- ALL COMPONENTS USED IN DRAINAGE SYSTEMS TO COMPLY WITH THE FOLLOWING: BS EN 476:2011
- ALL DRAINAGE SYSTEMS AND COMPONENTS TO BE CONSTRUCTED AND TESTED TO THE FULL SATISFACTION OF BOTH BUILDING REGULATIONS AND WARRANTY PROVIDER INSPECTORS. ALL DRAINAGE TO BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH BS EN 1610:2015.
- V.C. DENOTES VITRIFIED CLAY, VITRIFIED CLAY PIPES AND FITTINGS TO COMPLY WITH THE RELEVANT PROVISIONS OF BS EN295-1:2013, 2:2013, 3:2012 AND BS 65 RESPECTIVELY AND BE KITEMARKED. ALL PIPES SHALL BE EXTRA STRENGTH TO BS 65 OR EQUIVALENT BS EN295 PIPE CRUSHING STRENGTH.
- PVC-U DENOTES UNPLASTISISED POLYVINYL CHLORIDE. PVC-U PIPES AND FITTINGS TO COMPLY WITH THE RELEVANT PROVISIONS OF BS EN1401, BS EN13476-2 AND BS4660:1989/2000 RESPECTIVELY AND BE KITEMARKED.
- PRECAST CONCRETE MANHOLES TO BE IN ACCORDANCE WITH BS EN 1917:2002 AND BS 5911-3:2010, 4:2002 AND TO BE KITEMARKED. PRECAST CONCRETE RINGS AND COVER SLABS TO CONCRETE PIPES TO BE JOINTED WITH CEMENT MORTAR UNLESS NOTED OTHERWISE.
- IN-SITU AND PRECAST CONCRETE UNITS SHALL HAVE SULPHATE RESISTING PORTLAND CEMENT TO BS EN 197-1:2011.
- POLYPROPYLENE INSPECTION CHAMBERS TO COMPLY WITH BS EN 13598-1:2010, 2:2016 AND BS 7158:2001 AND TO BE KITEMARKED.
- MANHOLE COVERS AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015. MANHOLE COVERS AND FRAMES TO BE OF A NON-ROCKING DESIGN WITH CUSHION INSERTS AND KITEMARKED. LOAD CLASS A15 COVERS TO BE USED IN AREAS INACCESSIBLE TO VEHICLES; LOAD CLASS B125 COVERS TO BE USED IN FOOTWAYS; LOAD CLASS D400 COVERS TO BE USED IN PRIVATE ROADS. 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.
- POLYPROPYLENE INSPECTION CHAMBER COVERS AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015. COVERS AND FRAMES TO BE OF A NON-ROCKING DESIGN WITH CUSHION INSERTS AND KITEMARKED. LOAD CLASS A15 COVERS TO BE USED IN AREAS INACCESSIBLE TO VEHICLES; LOAD CLASS B125 COVERS TO BE USED IN FOOTWAYS; LOAD CLASS D400 COVERS TO BE USED IN PRIVATE ROADS.
- ROAD GULLY GRATES AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015 AND BE OF A NON-ROCKING DESIGN WITH LEFT HANDED CAPTIVE HINGE ACCESS AND BE KITEMARKED. LOAD CLASS D400 GRATES TO BE USED IN PRIVATE ROADS. TYPE D400.450 GRATE AND FRAME. MINIMUM AREA OF WATERWAY TO BE 1010cm².
- DRAINAGE CHANNELS TO BE ACO M100D 0.0 MULTIDRAIN CHANNEL (O.S.A) FITTED WITH SLOTTED DUCTILE IRON GRATING. GRATES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015 AND BE KITEMARKED. LOAD CLASS A15 GRATES TO BE USED IN AREAS INACCESSIBLE TO VEHICLES; LOAD CLASS B125 GRATES TO BE USED IN FOOTWAYS; LOAD CLASS D400 GRATES TO BE USED IN PRIVATE ROADS. SUMP UNIT AND SILT BUCKET UNITS TO BE USED ON ALL GULLIES.
- CLASS Z BEDDING DETAIL SHALL BE PROVIDED:
WHERE COVER TO PIPE BARREL IS:
- <1.2m IN VEHICULAR TRAFFICKED AREAS
- <0.9m IN AREAS INACCESSIBLE TO VEHICLES
- AT ALL ROAD GULLY, RWP, SVP AND DRAINAGE CHANNEL BRANCHES.
- AREAS OF DEEP ROOTING VEGETATION.
- PIPE RUNS NEAR BUILDINGS IN ACCORDANCE WITH TYPICAL SECTIONS ON AWP DRAWINGS.
- WHERE TWO PIPES CROSS WITH A CLEAR GAP OF <300mm. CLASS Z SURROUND TO EXTEND A MINIMUM OF 1.0m FROM THE CENTRE OF THE CROSSING POINT & EXTENDED TO WITHIN 150mm OF THE NEAREST FLEXIBLE JOINT, WHERE REQUIRED.
- CLASS 'Y' BEDDING DETAIL TO BE PROVIDED TO ALL PIPEWORK BENEATH BUILDING FOOTPRINT WITH ROCKER PIPES PROVIDED AS CLOSE AS POSSIBLE TO BUILDING STRUCTURE WHERE PIPE EXITS.
- NO MECHANICAL COMPACTION OF FILL MATERIAL WITHIN 300mm OF THE CROWN OF ANY PIPE.
- PIPE DIAMETERS SHALL BE 100MM MINIMUM, UNLESS NOTED OTHERWISE. MINIMUM FALLS SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:
100Ø FW PIPE 1:40;
100Ø SW PIPE 1:80;
150Ø SW PIPE 1:125;
225Ø SW PIPE 1:200;
300Ø+ SW PIPE 1:PIPEØ.
- ACCESS CHAMBERS, CONNECTIONS AND PIPEWORK ARE SHOWN APPROXIMATELY. FINAL POSITIONS & LEVELS TO BE ADJUSTED TO SUIT INTERNAL AND EXTERNAL FINISHES.
- THRESHOLD DRAINAGE CHANNELS TO BE PROVIDED TO ALL DOOR OPENINGS AND SHALL BE CONNECTED INTO THE SITE SURFACE WATER NETWORK.
- ALL INTERNAL MANHOLES & MANHOLES NEAR WINDOWS & DOORS TO RECEIVE GAS TIGHT DOUBLE SEALED LOCKABLE COVERS.
- ALL RAINWATER PIPES AND SOIL AND VENT PIPES TO INCLUDE LOW LEVEL RODDING POINTS. EXTERNAL GULLIES TO BE FITTED WITH SILT BUCKETS.

NOTES:

- THESE NOTES ARE INTENDED TO AUGMENT DRAWINGS AND SPECIFICATIONS. WHERE CONFLICT OF REQUIREMENTS EXIST THE ORDER OF PRECEDENCE SHALL BE AS SHOWN IN THE SPECIFICATION. OTHERWISE THE STRICTEST PROVISION SHALL GOVERN.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERS AND ARCHITECTS DRAWINGS.
- 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.
- 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.



REFER TO DRAINAGE LAYOUT FOR HEALTH & SAFETY RISKS ASSOCIATED WITH THE DRAINAGE CONSTRUCTION

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www.alanwood.co.uk

Locations:

Hull
Leeds
Lincoln
Scarborough
Sheffield
Stockton-on-Tees
York

Issuing Office:

Scarborough Office
Kingsley House
7 Pickering Road
West Ayton
Scarborough
YO13 9JE

eng@alanwood.co.uk
T. 01723 865484

Project:	YIF, OMYOP DEPOT - MCC - MAULDETH ROAD, MANCHESTER M20 3FG				
Client:	PREMIER MODULAR LIMITED				
Drawing:	TYPICAL DRAINAGE DETAILS SHT1				
Role:	CIVIL ENGINEER				
Drawing Status:	FOR INFORMATION			Suitability Code:	S2
Job. no.	52753	Scale@ A1:	AS NOTED	Rev.	P01
Project	Originator	Zone	Level	Type	Role
52753 - AWP - ZZ - XX - D - C - 3700					

100mm at A1