

NOTE :
 THE USE OF THIS DETAIL ASSUMES
 1. THE GROUNDWATER TABLE IS BELOW THE BASE OF THE MANHOLE.
 CONTRACTOR TO ADVISE ENGINEER WHERE THE WATER TABLE LEVEL IS HIGHER THAN THE BASE OF MANHOLE

D400 LOCKABLE, NON ROCKING DUCTILE IRON COVER AND FRAME TO IS EN 124 "GULLY TOPS AND MANHOLE TOPS FOR VEHICULAR AND PEDESTRIAN AREAS".
 MINIMUM CLEAR OPENING TO 600mm DIA
 RECESSED COVERS WITH PAVING INLAID TO BE USED IN PAVED AREAS TO MATCH THE SURROUNDING FINISH. PLEASE REFER TO 507.8 SR OF THE SITEWORK SPECIFICATION

FRAME TO BE SUPPORTED ON 1-3 COURSES OF CLASS B SOLID ENGINEERING BRICK, 215MM IN WIDTH TO IS EN 771 - PART 2. BRICKS TO BE SET IN MORTAR OF MINIMUM M30 STRENGTH TO IS EN 998 - PART 2:2010

BRICKWORK AND FRAME HAUNCHED USING CEMENT/SAND (1:3 MIX) MORTAR

HEAVY DUTY PRECAST CONCRETE COVER TO COMPLY WITH BS EN 1917: 2002 "CONCRETE MANHOLES AND INSPECTION CHAMBERS, UNREINFORCED, STEEL FIBRE AND REINFORCED" AND BS 5911-3:2012 SPECIFICATION FOR UNREINFORCED AND REINFORCED CONCRETE MANHOLES AND SOAKAWAYS

FRAMES TO SET ON CLASS 1 MORTAR WITH ADMIXTURE RONACRETE "RONAFIX" OR SIMILAR APPROVED

CONCRETE SURROUND TO BE TAKEN UP FLUSH WITH COVER

JOINTING MATERIAL TO BE MORTAR, PROPRIETARY BITUMEN OR RESIN MASTIC SEALANT IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS

GRADE C16/20 CONCRETE SURROUND (VIBRATED), MINIMUM THICKNESS 150mm

LIFTING EYES IN PRECAST RINGS TO BE POINTED

STAGGER CONSTRUCTION JOINTS WITH JOINTS IN PRECAST RINGS BY MIN. 150mm

BENCHING SLOPE TO BE A MAX. 1:10, MIN OF 1:30. FINISH WITH SMOOTH HIGH STRENGTH CONCRETE APPLIED WITH STEEL TROWEL. MINIMUM THICKNESS 20mm BENCHING TO BE NEATLY SHAPED TO ALL BRANCH CONNECTIONS

50mm MINIMUM 300mm MAXIMUM

PRECAST UNITS SHALL COMPLY WITH BS 5911-3:2012 2002 "CONCRETE MANHOLES AND INSPECTION CHAMBERS, UNREINFORCED, STEEL FIBRE AND REINFORCED"

PROPRIETARY CONCRETE SURROUND FORMWORK TO PROVIDE MINIMUM OF 150mm CLEARANCE ALL ROUND OUTSIDE OF PRECAST RINGS

RAKE OF EXCAVATION DEPENDENT ON GROUND CONDITIONS. BACK FILL AROUND CONCRETE SURROUND WITH GRANULAR MATERIAL TYPE B TO CLAUSE 808 OF THE HA SPECIFICATION

CONSTRUCTION JOINT

CONCRETE SURROUND (MAXIMUM POUR HEIGHT = 2m)

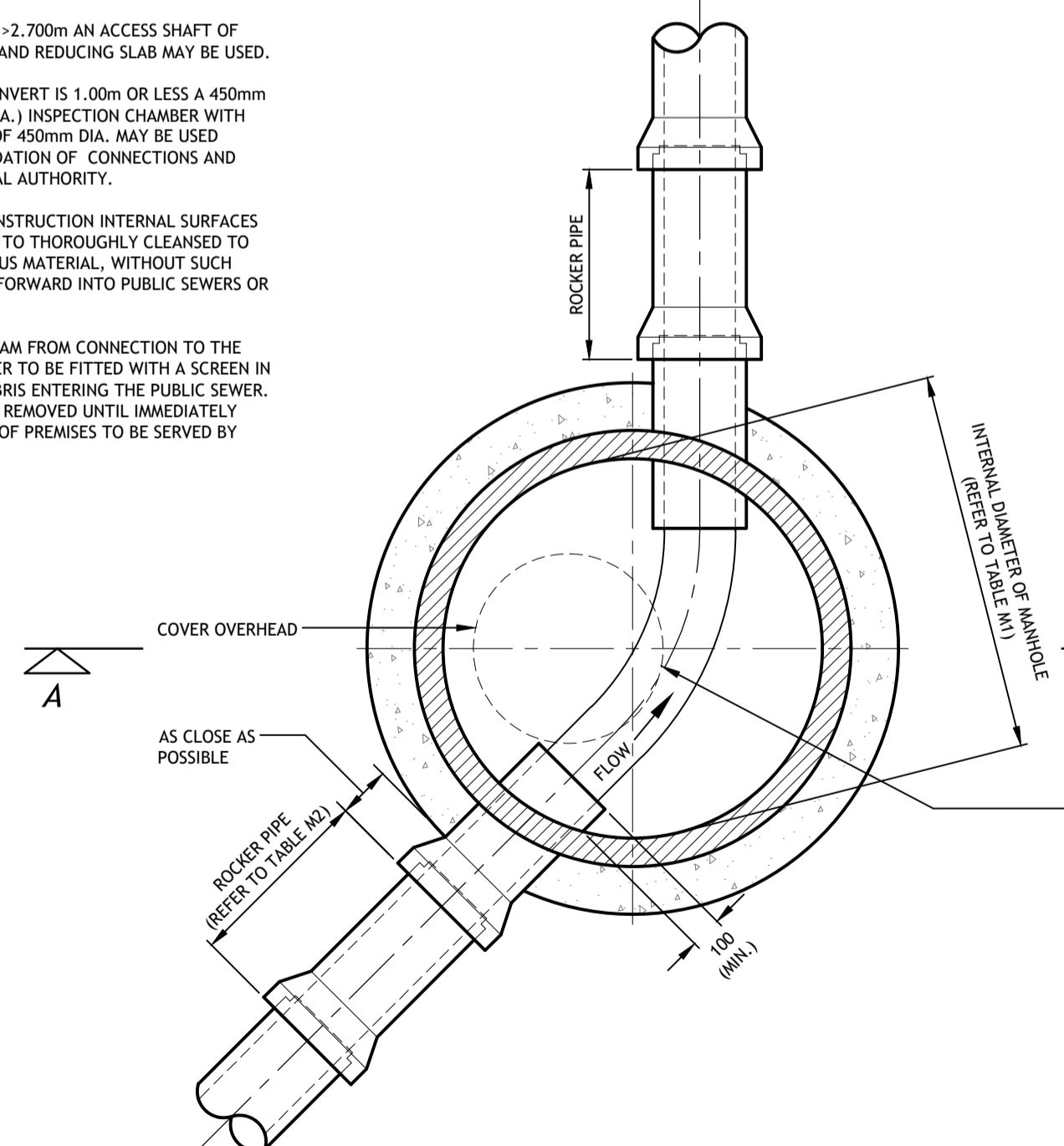
C30/37 IN-SITU CONCRETE BASE

C12/15 BLINDING

MANHOLE STEP TO IS EN 13101: 2002

CONSTRUCTION JOINT

SECTION A-A
 SCALE 1:20



SECTION B-B
 SCALE 1:20

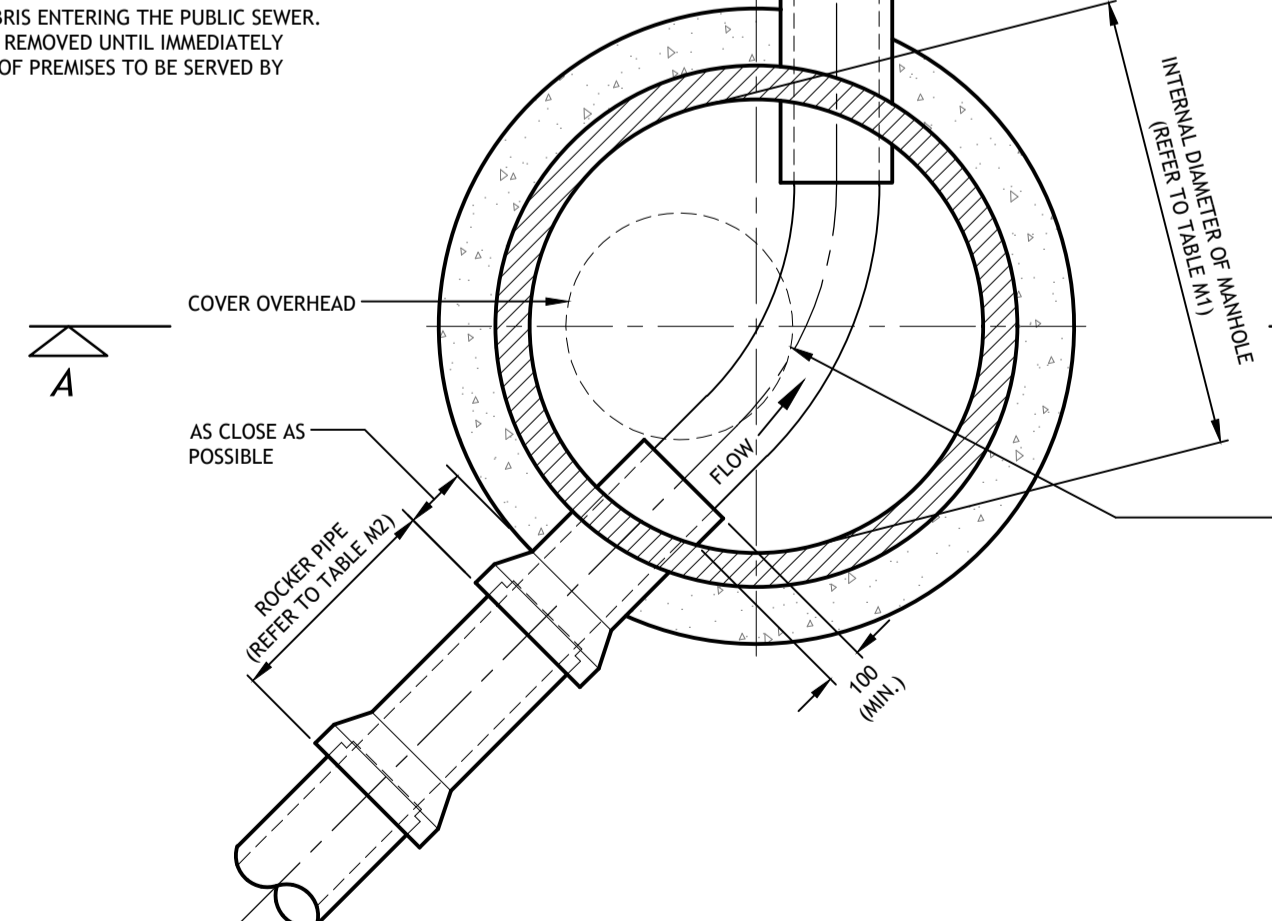


TABLE M1 - INTERNAL DIAMETER OF MANHOLES

DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 - 450	1350
500 - 700	1500
750 - 900	1800
> 900	CONSULT LOCAL AUTHORITY

NOTE :
 USE 1050 DIAMETER RINGS FOR PIPES LESS THAN 375mm DIAMETER WHERE DEPTH TO SOFFIT IS 1.35 - 1.5m

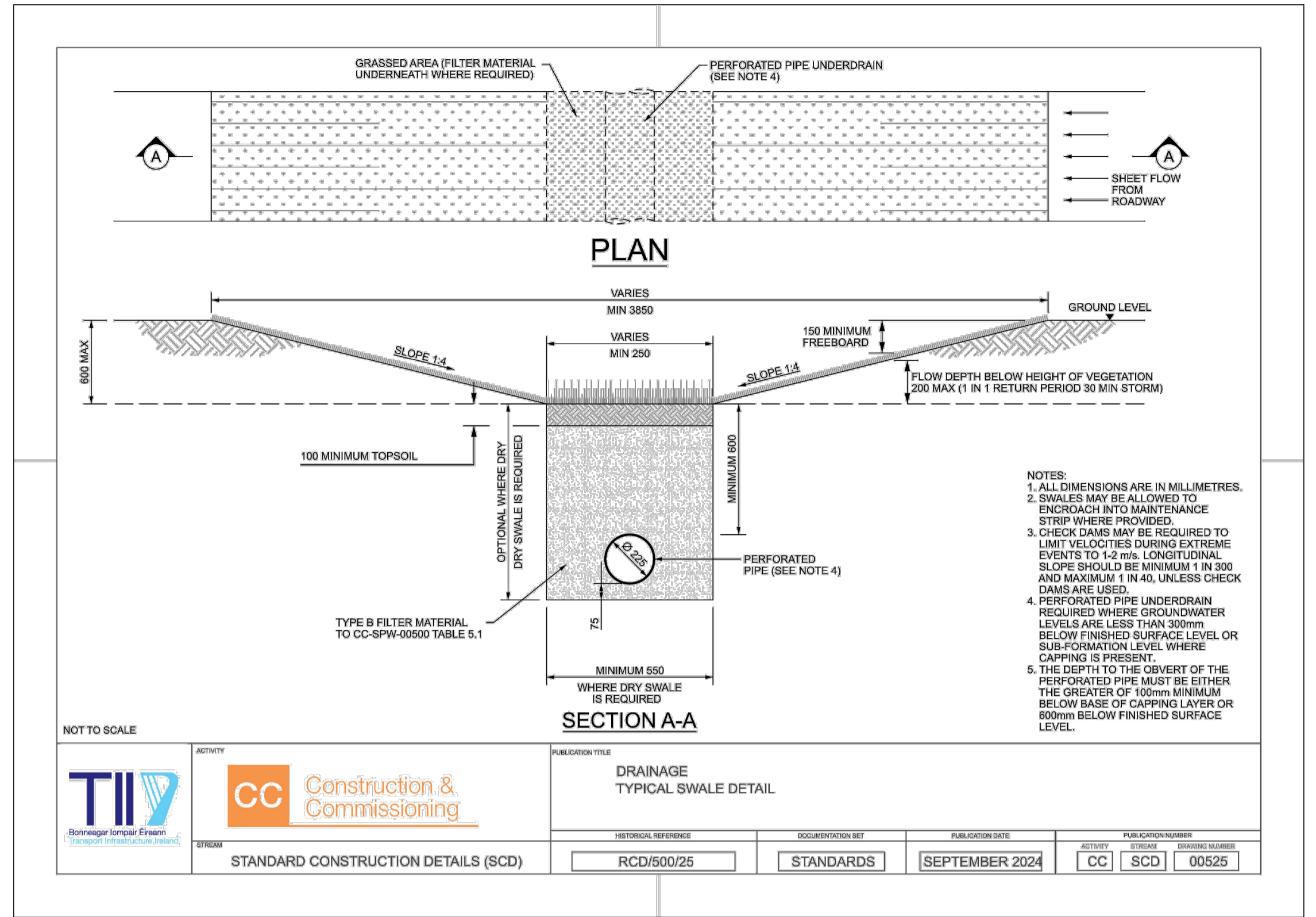
TABLE M2 - ROCKER PIPE LENGTH

NOMINAL PIPE DIAMETER (mm)	EFFECTIVE LENGTH (M)
150 to 600	0.6
675 to 750	1.0
Over 750	1.2

- MANHOLE COVER TO BE HINGED AT RIGHT ANGLES TO KERBLINE SO THAT THEY CLOSE IN DIRECTION OF TRAFFIC.
- MANHOLE COVERS ON ROADS SHOULD BE LOCATED IN THE MIDDLE OF TRAFFICKED LANES INSIDE WHEEL TRACKS
- COVER AND FRAME TO BE INSTALLED SO THAT NO PART OF THE UNIT IS RAISED OR SUNKEN IN A WAY THAT COULD CAUSE A HAZARD TO PEDESTRIAN OR VEHICULAR TRAFFIC

NOTE :

- MANHOLES WITH OUTGOING PIPES GREATER THAN 600mm DIA. SHOULD BE FITTED WITH GUARD BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES.
- FOR DEPTHS TO INVERT > 2.700m AN ACCESS SHAFT OF MIN. 900mm DIAMETER AND REDUCING SLAB MAY BE USED.
- WHERE THE DEPTH TO INVERT IS 1.00m OR LESS A 450mm x 450mm (OR 450mm DIA.) INSPECTION CHAMBER WITH MINIMUM COVER SIZES OF 450mm DIA. MAY BE USED SUBJECT TO ACCOMMODATION OF CONNECTIONS AND APPROVAL OF THE LOCAL AUTHORITY.
- ON COMPLETION OF CONSTRUCTION INTERNAL SURFACES OF MANHOLE & SEWERS TO THOROUGHLY CLEANSED TO REMOVE ALL DELETERIOUS MATERIAL, WITHOUT SUCH MATTER BEING PASSED FORWARD INTO PUBLIC SEWERS OR WATERCOURSES
- FIRST MANHOLE UPSTREAM FROM CONNECTION TO THE (EXISTING) PUBLIC SEWER TO BE FITTED WITH A SCREEN IN ORDER TO PREVENT DEBRIS ENTERING THE PUBLIC SEWER. THE SCREEN NOT TO BE REMOVED UNTIL IMMEDIATELY PRIOR TO OCCUPATION OF PREMISES TO BE SERVED BY SEWER.



NOT TO SCALE

ACTIVITY: CC Construction & Commissioning

PUBLIC WORK TITLE: DRAINAGE TYPICAL SWALE DETAIL

STANDARD CONSTRUCTION DETAILS (SCD)

HISTORICAL REFERENCE: RCD/500/25

DOCUMENTATION SET: STANDARDS

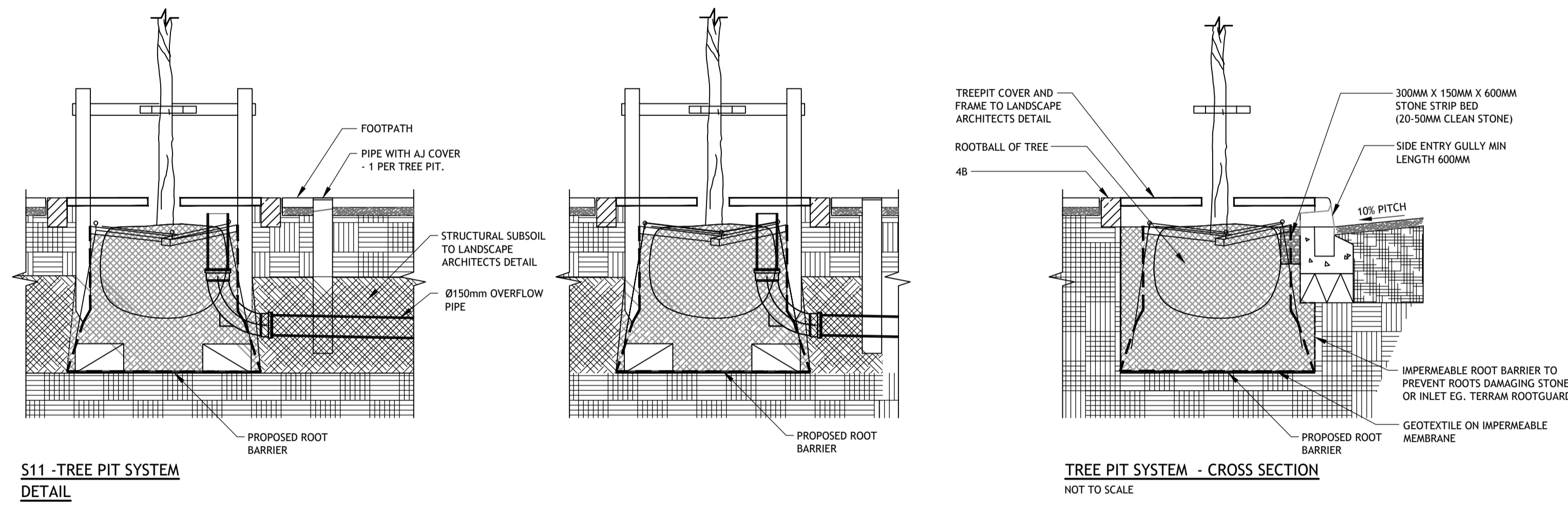
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- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETRES.
 - SWALES MAY BE ALLOWED TO ENDOUR INTO MAINTENANCE STRIP WHERE PROVIDED.
 - CHECK DAMS MAY BE REQUIRED TO LIMIT VELOCITIES DURING EXTREME EVENTS TO 1-2 m/s. LONGITUDINAL SLOPE SHOULD BE MINIMUM 1 IN 300 AND MAXIMUM 1 IN 40, UNLESS CHECK DAMS ARE USED.
 - PERFORATED PIPE UNDERDRAIN REQUIRED WHERE GROUNDWATER LEVELS ARE LESS THAN 300mm BELOW FINISHED SURFACE LEVEL OR SUB-FORMATION LEVEL, WHERE CAPPING IS PRESENT.
 - THE DEPTH TO THE OBJECT OF THE PERFORATED PIPE MUST BE EITHER THE GREATER OF 100mm MINIMUM BELOW BASE OF CAPPING LAYER OR 600mm BELOW FINISHED SURFACE LEVEL.



S11 - TREE PIT SYSTEM
 DETAIL

TREE PIT SYSTEM - CROSS SECTION
 NOT TO SCALE

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ISO 9001 QUALITY MANAGEMENT

ISO 14001 ENVIRONMENTAL MANAGEMENT

ISO 45001 HEALTH & SAFETY MANAGEMENT

NSAI Certified

Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	SK	2026-05-15				

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Project: PARKWAY VALLEY LRD

Title: DRAINAGE DETAILS SHEET 7

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