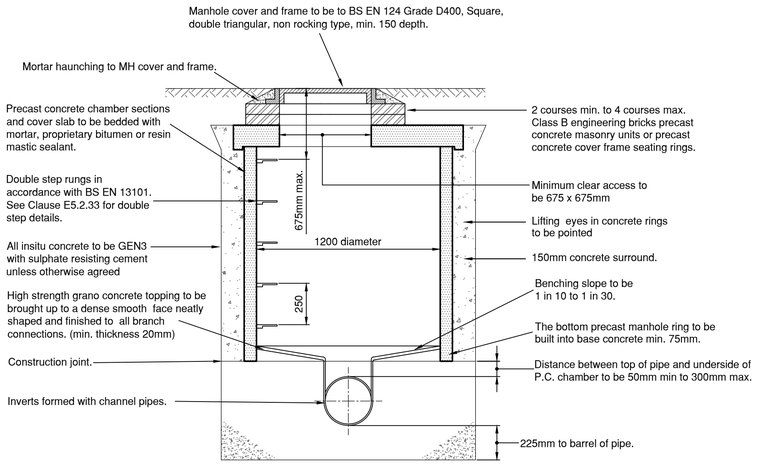
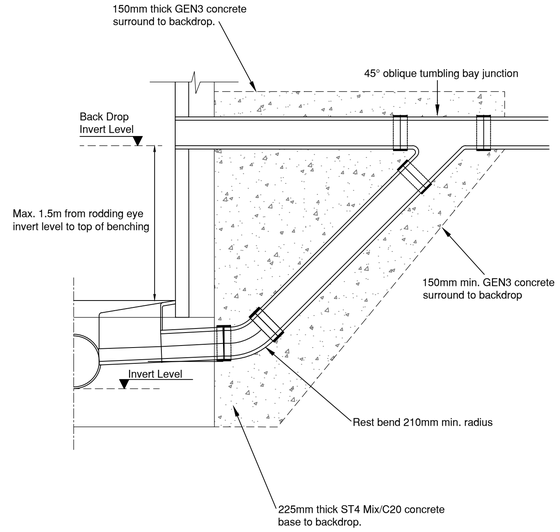


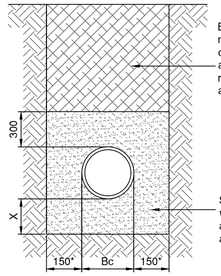
Type E Manhole

Depth to soffit 1.0m to 1.5m
(Maximum sewer diameter of 375mm)

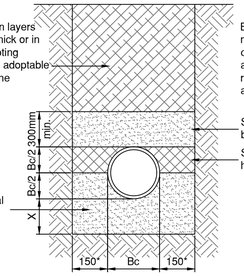
Rocker Pipe Lengths	
Nominal Dia (mm)	Effective Length (m)
150 - 600	0.6
601-750	1.00
over 750	1.25



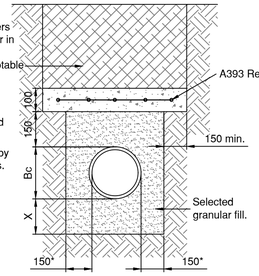
Backdrop Construction Detail



Class S Surround



Class B Haunch



Reinforced Concrete Slab

To be provided where the minimum depth of pipe cover to the crown of gravity pipes is less than:
- domestic driveways, parking areas and yards with height restrictions to prevent entry by vehicles with a gross weight in access of 7.5 tonnes, 0.5m;
- domestic driveways, parking areas and narrow streets without footways (e.g., mews developments) with limited access for vehicles with a gross weight in excess of 7.5 tonnes, 0.9m;
- other highways and parking areas with unrestricted access to vehicles with a gross vehicle weight in excess of 7.5 tonnes, 1.2m.

* = 150mm for pipe diameters up to 300mmØ and 200mm for larger pipes.

Bc = outside dia. of pipe X= 100mm min. for pipes 100mmØ or less, 150mm min for larger pipes or 200mm for trenches in rock.

Concrete to be Grade C16/20 placed in one operation. Where pipes with flexible joints are used, concrete protection shall be interrupted over its full cross section at each joint by a shaped compressible filler.

Concrete to sulphate resisting class DS-1 of Table C2 of BRE Special Digest 1:SD1 Part C (2005) ACEC class AC-1s

CHAMBER DIAMETERS		CRITICAL PIPE LENGTHS (for entering and leaving manholes) First joint as close as practicable		BEDDING MATERIAL SIZE		
PIPE SIZE mm	CHAMBER DIAMETER mm	NOMINAL DIAMETER mm	EFFECTIVE LENGTH m	NOMINAL DIAMETER mm	SINGLE SIZE mm	GRADED mm
< 375	1200	150 to 450	0.5 to 0.75	100 to 125	10	-
375-700	1500	451 to 700	0.75 to 1.0	150 to 200	10 or 14	14 to 5
750-900	1800	750 and over	1 to 2 times the pipe diameter subject to a max. of half the standard pipe length	225 to 300	10,14 or 20	14 to 5 or 20 to 5
900-1200	2100			375 to 500	14 or 20	14 to 5 or 20 to 5
				>500	14,20 or 40	14 to 5 or 20 to 5 or 40 to 5

VITRIFIED CLAY PIPES to be to extra strength to BS EN 295 or BS65 size as shown on section drawing.

CONCRETE PIPES to be to BS5911 Class of pipe and size as shown on section drawing.

Pipe Bedding Details

NOTES

1. This drawing should be read in conjunction with S104 FW Sewer Adoption Layout (FON xxx /xxx to xxx), Foul Water Sewer Longitudinal Sections (FON xxx xx x), Surface Water Sewer Longitudinal Sections (FON xxx xxx xx), Domestic Drainage Layouts (FON xxx xxx xx), Drainage Construction Details (FON xxx xxx xx) and Domestic Drainage Construction Details (FON xxx xxx xx)
2. All dimensions are in millimetres unless stated otherwise.
3. Do not scale from this drawing. Only written dimensions are to be used.
4. All construction to be in accordance with Sewers for Adoption - 6th Edition and the specific requirements of Icosa Water.
5. Refer to geotechnical report for sulphate resisting class and ACEC class.
6. For Manufacturer and specification of pipes and fittings refer to drainage layout and schedule.
7. Drainage pipes and fittings to be Hepworth vitrified clay and PVCu or Wavin Osma PVCu or other equal approved. Refer to drainage layout and schedules for details of manufacturer and specification.
8. For details of size and invert of pipe and top of headwall level etc. see engineering layouts.
9. Completed bagwork to be wetted to ensure bonding.
10. Where the headwall is at the head of a ditch the invert bagwork shall extend 4 bag widths.
11. Alternate courses of bagwork shall be pinned with 12mm dia high yield steel 'U' bars 450mm long.
12. ***Outgoing pipes greater than 600mm diameter should be fitted with guard bars, safety chains [to BS4942:pt 2 and BS 729] or other safety devices in accordance with the Icosa Water safety policy.***

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

Rev.	Date	Details	By	Chkd	Appd

Client:- dandara

Site:-
Fontwell
Eastergate
Arundel

Drawing Title:-
SECTION 104: CONSTRUCTION DETAILS
SHEET 2 OF 2

Date: March 2020 | Scales: H 1:500, V 1:100 at A1
Drawn: GD-I | Checked: LD | Approved: TRS

Drawing No.
FON-181-02

INITIAL TENDER ISSUE
SUBJECT TO PLANNING APPROVAL

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ARUN DISTRICT COUNCIL WA/99/20/DOC