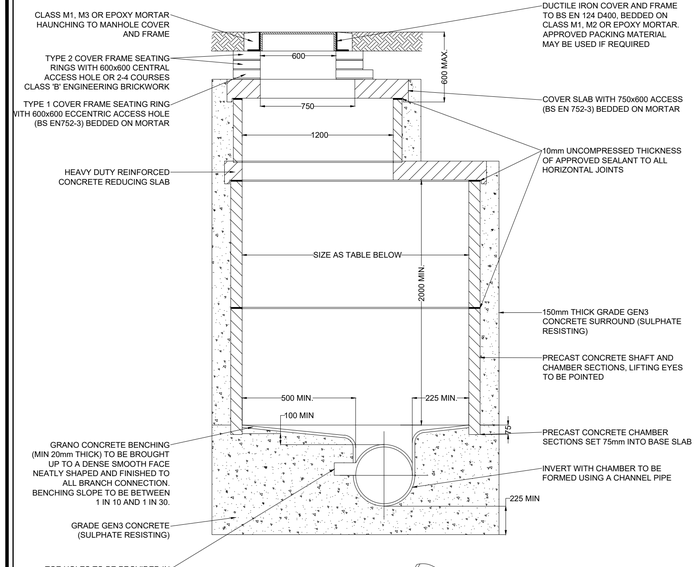
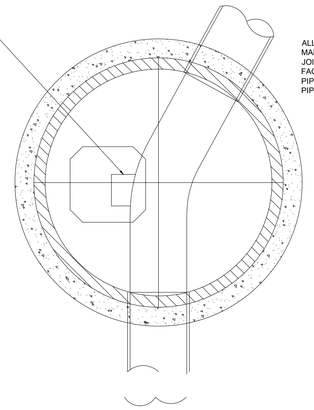
MANHOLE TYPE A
(DEPTH TO SOFFIT 3m-6m)





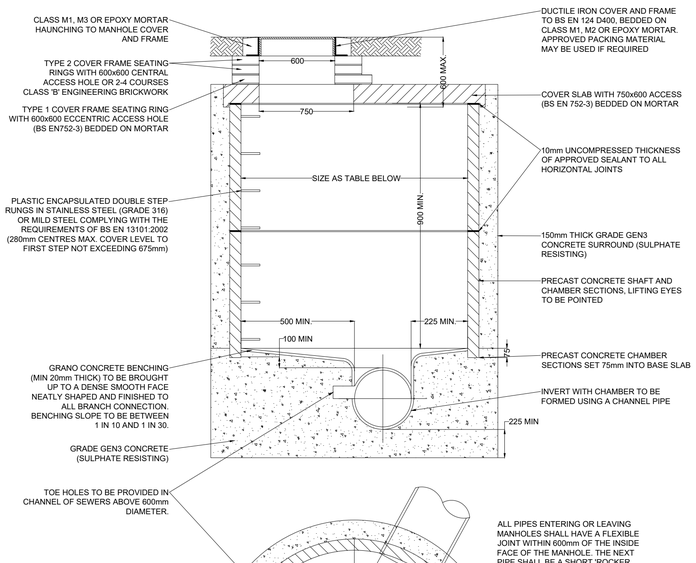
ALL PIPES ENTERING OR LEAVING MANHOLES SHALL HAVE A FLEXIBLE JOINT WITHIN 600mm OF THE INSIDE FACE OF THE MANHOLE. THE NEXT PIPE SHALL BE A SHORT 'ROCKER PIPE' WITH LENGTH AS TABLE BELOW

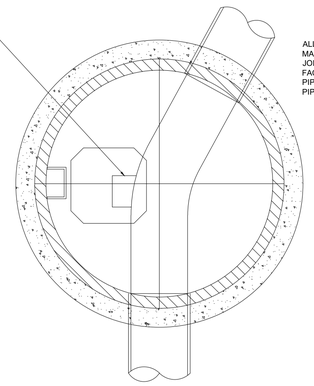
ROCKER PIPES	
SEWER DIAMETER (mm)	EFFECTIVE LENGTH (mm)
150 TO 600	600
675 TO 750	1000
825 AND OVER	1250

SHAFT DIAMETERS	
DIA OF LARGEST PIPE IN MH (mm)	INT. DIA OF MH (mm)
LESS THAN 375	1200
375 TO 700	1500
750 TO 900	1800

NOTE: CHAMBER WITH OUTGOING PIPES 600mm OR GREATER DIAMETER SHALL BE FITTED WITH REMOVABLE SAFETY CHAINS OR POLYPROPYLENE ROPE. MANHOLES GREATER THAN 6m DEPTH SHALL BE SUBJECT TO SPECIFIC DESIGN.

MANHOLE TYPE B
(DEPTH TO SOFFIT 1.5m-3m)





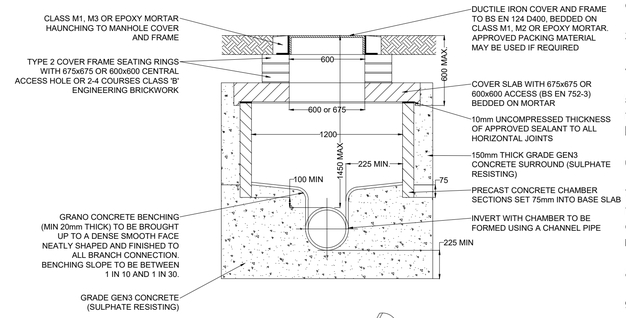
ALL PIPES ENTERING OR LEAVING MANHOLES SHALL HAVE A FLEXIBLE JOINT WITHIN 600mm OF THE INSIDE FACE OF THE MANHOLE. THE NEXT PIPE SHALL BE A SHORT 'ROCKER PIPE' WITH LENGTH AS TABLE BELOW

ROCKER PIPES	
SEWER DIAMETER (mm)	EFFECTIVE LENGTH (mm)
150 TO 600	600
675 TO 750	1000
825 AND OVER	1250

SHAFT DIAMETERS	
DIA OF LARGEST PIPE IN MH (mm)	INT. DIA OF MH (mm)
LESS THAN 375	1200
375 TO 700	1500
750 TO 900	1800

NOTE: CHAMBER WITH OUTGOING PIPES 600mm OR GREATER DIAMETER SHALL BE FITTED WITH REMOVABLE SAFETY CHAINS OR POLYPROPYLENE ROPE. MANHOLES GREATER THAN 6m DEPTH SHALL BE SUBJECT TO SPECIFIC DESIGN.

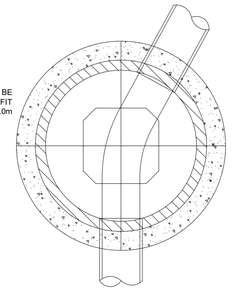
MANHOLE TYPE E
(DEPTH TO SOFFIT 1.0m-1.5m)
PIPES NO GREATER THAN 375mm DIAMETER



DOUBLE STEP RUNGS ARE TO BE PROVIDED WHERE DEPTH TO SOFFIT IS GREATER THAN 1.0m

SHAFT DIAMETERS	
DIA OF LARGEST PIPE IN MH (mm)	INT. DIA OF MH (mm)
UP TO 375	1200

NOTE: IF PIPE DIAMETER EXCEEDS 375mm USE MANHOLE TYPE B OR C



ALL PIPES ENTERING OR LEAVING MANHOLES SHALL HAVE A FLEXIBLE JOINT WITHIN 600mm OF THE INSIDE FACE OF THE MANHOLE. THE NEXT PIPE SHALL BE A SHORT 'ROCKER PIPE' 600mm LONG

NOTES

1. All works shall be in accordance with Sewers for Adoption 6th Edition and Anglian Waters Addendum.

2. This drawing is intended for guidance only, is not fully comprehensive and must be read in conjunction with the above documents, which will supersede this drawing in the event of a conflict.

3. All dimensions are in millimetres unless otherwise stated

4. All materials for use in the contract must be BS kitemarked

5. The contractor must allow within his rates for compliance at all times with the Health and Safety at Work Act 1974 and the CDM Regulations 2015

6. Flows in existing sewers shall be maintained at all times

7. Manholes with outgoing pipes 600mm diameter or greater shall be fitted with safety chains, guard bars or similar. However, the contractor shall note that the safety policy of the relevant authority may require such measures on smaller diameter pipes.

8. All lifting eyes in p.c.c products shall be pointed smooth after fixing.

9. Corbelling of brickwork shall not exceed 30mm per course.

10. Cut pipes to be machine cut and ground smooth

11. All cement and concrete products to use sulphate resisting cement unless noted otherwise.

12. All pipework to have spigot and socket flexible joints unless otherwise specified. All pipes and fittings shall be extra strength vitrified clay to BS EN 295 and BS 65 or Class 120 concrete to BS EN 1916 and BS 5911 unless otherwise stated.

13. The manhole diameter to largest pipe relationship is for guidance only and relates to minimum chamber sizes. Individual manholes must always be sized to accommodate all incoming branches separately within the available benching whilst maintaining the minimum 500x500mm landing area.

14. For manholes within the carriageway the manhole cover slab must be designed to accept 112kN (main road) wheel loadings. These are available from CPM Group Ltd.

15. Do note scale from this drawing.

DIMENSION a

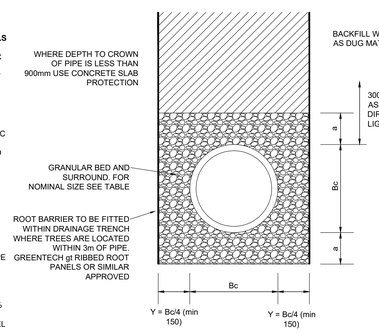
IN MACHINE DUG UNIFORM SOILS
SLEEVE JOINTED PIPES, MIN 50mm. SOCKETTED PIPES 1/6 BC OR 100mm, WHICHEVER IS THE GREATER UNDER BARRELS BUT NOT LESS THAN 50MM UNDER SOCKETS (400mm MAX)

IN ROCK OR MIXED SOILS
SLEEVE JOINTED PIPES, MIN 150mm. SOCKETTED PIPES 1/4 BC OR 200mm WHICHEVER IS THE GREATER UNDER BARRELS AND 150MM MIN UNDER SOCKETS (400mm MAX)

WITH CONCRETE BEDDING
100mm MIN FOR ALL TYPES OF PIPE

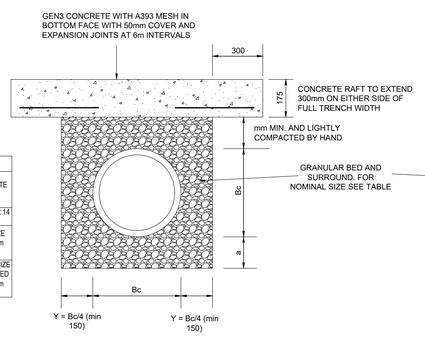
CLASS A1, A2 AND A3
PRECAST CONCRETE SETTING BLOCKS AS SEWERS FOR ADOPTION TO BE USED FOR PIPE SUPPORT.

FOR CLASS A REINFORCEMENT CONCRETE CRADLE ARE ARCH: TRANSVERSE STEEL TO BE 0.4% MIN OF CONCRETE CROSS SECTIONAL AREAS. IF THE STEEL IS INCREASED UP TO 1%, THE BEDDING FACTOR MAY INCREASE UP TO 4.8.

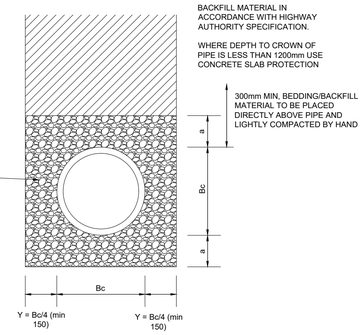


PIPE BEDDING MATERIALS TABLE	
INT PIPE DIAMETER	PIPE BEDDING MATERIAL AGGREGATE SIZE
150	10 or 14mm NOMINAL SINGLE SIZE OR 14 to 5mm GRADED
225 TO 525	10, 14 or 20mm NOMINAL SINGLE SIZE OR 14 to 5mm GRADED OR 20 to 5mm GRADED
OVER 525	10, 14, 20 or 40mm NOMINAL SINGLE SIZE CRUSHED ROCK OR 14 to 5mm GRADED OR 20 to 5mm GRADED OR 40 to 5mm GRADED

CLASS S BED AND SURROUND
For pipes outside of public highway



CONCRETE SLAB PROTECTION



CLASS S BED AND SURROUND
For pipes within public highway

Rev	Description	Date	Drawn	Checked

Drawing Approval Status:-

N/A Section 104 N/A Section 38 N/A Section 278

FOR TENDER

Wormald Burrows
Civil Engineering Consultants
12a - 18a Hitchin Street, Biggleswade, SG18 8AX
Tel: (01767) 317244
Web: www.wormburp.com
Email: engineer@wormburp.com

Project:
Damgate, Holbeach

Drawing Description:
Drainage Construction Details - Sheet 1 of 2

Client:
Seagate Homes
Pudding Lane
Pinchbeck, Spalding
Lincolnshire
PE11 3TJ

Drawing Number:
E4237/560

Client Reference:

Scale:
NTS @ A1
NTS @ A3

Designed By:	Drawn By:	Checked By:
AG	JMW	AG
Date: 08.03.24	Date: 07.11.19	Date: 08.03.24

afaq ISO 9001 Quality — UKAS MANAGEMENT SYSTEMS 022
Certified by Afnor UK

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