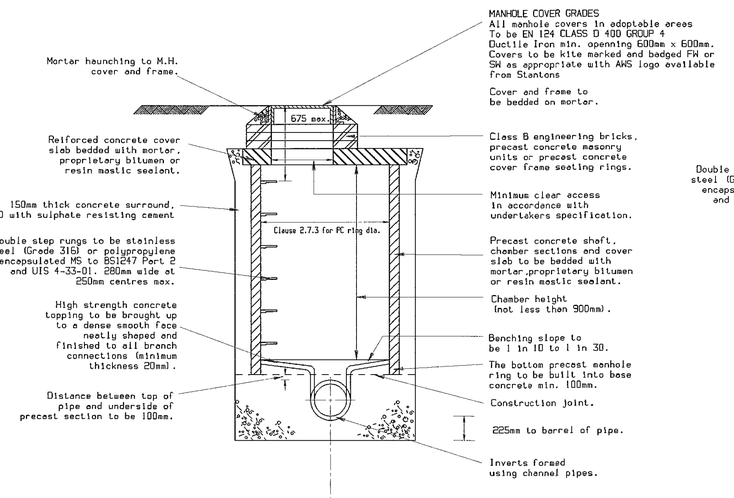
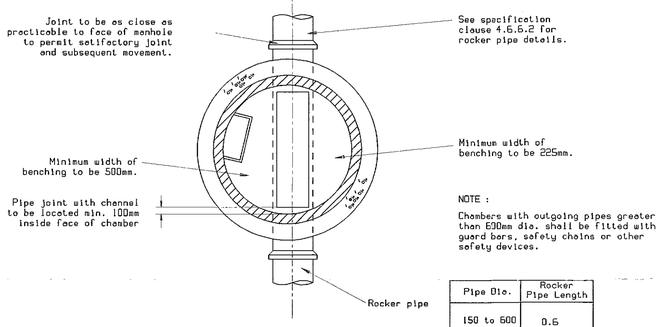
All works to be undertaken to conform to Sewers For Adoption 5th Edition

TYPICAL MANHOLE DETAIL - TYPE B

MAX.DEPTH FROM GROUND LEVEL TO SOFFIT OF PIPE 3.0m.

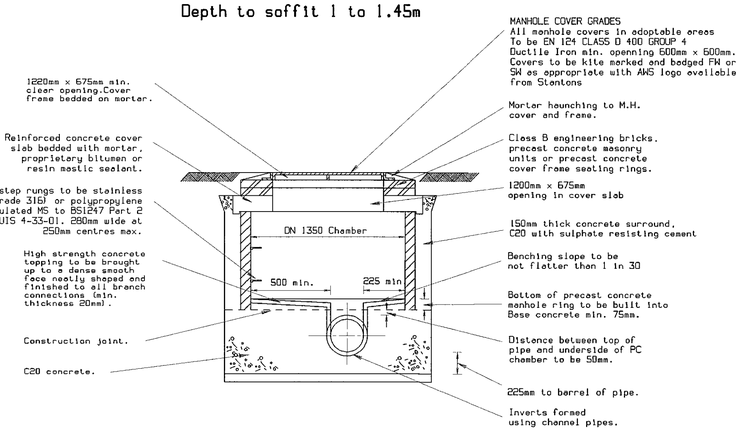


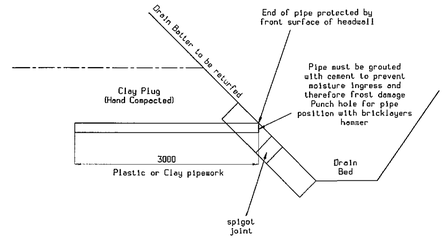


Pipe Dia.	Rocker Pipe Length
150 to 600	0.6
675 to 750	1.0
825 and over	1.25

TYPE E MANHOLE

Depth to soffit 1 to 1.45m





NOTES: -

A. Standard glass reinforced cement headwall supplied by: -

J.K.H drainage units Ltd, Hampstead Ave, Mildenhall, Suffolk. IP28 7AS. Tel: - 01638 713795

Marmax Ltd, Glenwood, North Reston, Louth. Lincs. LN11 8JD. Tel: - 01507 450212

B. Additional 1 metre headwall should be added if necessary to reach bed level

C. Unit should be push fitted into the prepared trench in the dyke batter. Care should be taken not to overdig and the headwall must be flush with the batter on completion to avoid damage by mowing machines.

PRIVATE NON-ADOPTABLE HEADWALL CONSTRUCTION DETAILS

Not To Scale

THE CONTRACTOR IS TO ENSURE THAT THE MANHOLE DIAMETER QUOTED ON THE LONGITUDINAL SECTIONS ARE LARGE ENOUGH TO ACCOMMODATE ALL INCOMING PIPES AND STILL CONFORM TO SEWERS FOR ADOPTION 5TH EDITION

SULPHATE RESISTANT CONCRETE MUST BE USED AS STANDARD

MANHOLE SCHEDULE FOR MINIMUM DIAMETER					
Diameter of largest pipe	Diameter of chamber	Diameter of largest pipe	Diameter of chamber	Diameter of largest pipe	Diameter of chamber
150	1200	450	1350	750	1800
225	1200	525	1500	825	1800
300	1200	600	1500	900 - 975	1800
375	1350	675	1500	> 975	2400

GENERAL NOTE: -
The details on this drawing are to comply with the Water Authorities Association Design Guide - Sewers For Adoption 5th Edition

NOTE: -
These are the recommended diameters, contractors are advised to check against individual manholes to ensure diameters comply with Sewers For Adoption 5th Edition.

NOTES: -

1. The centre of any manhole is not necessarily co-incidental with the centre line of the main pipe.
2. Positioning of the manhole covers and step irons to be directed on site.
3. Construction joints in the concrete surround must not coincide with the joints in the precast concrete chamber rings.
4. The benching is to be formed to direct flow from side connections into the main flow.
5. Sulphate resisting cement is required in all concrete products used for Section 104 works on the site.
6. All lateral crossings to twin sewers shall be to the bedding and backfill standards described on the drawings, and protected as necessary. The high level sewer shall not be undermined by the low level lateral and connection. All end caps to laterals shall be painted 'F' or 'SW' as appropriate.

NOTES:

Flap valve required for 375ø outlet. Bluetor Plastigate lightweight corrosion resistant flap valve or similar approved.

Toe to be deepened depending on site conditions,to be at least 600mm below river bed level

All exposed edges to have 40 x 40 chamfers

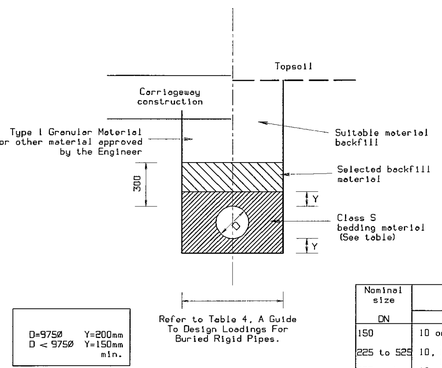
SECTION

PLAN

OUTFALL TO PENNYGATE DRAIN
VIA CONCRETE HEADWALL HW20

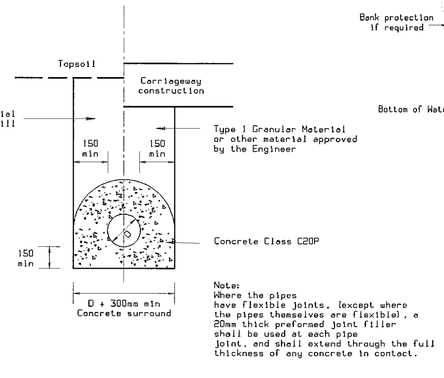
HEADWALL CONSTRUCTION DETAILS

Not To Scale



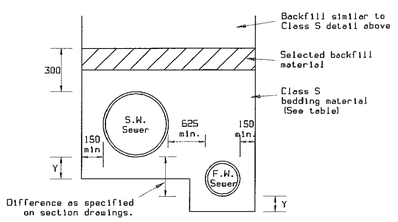
Class S Bedding
(Fm. - 2.2)

Nominal size DN	Pipe Bedding Requirement mm
150	10 or 14 nominal single size or 14 to 5 graded
225 to 525	10, 14 or 20 nominal single size or 14 to 5 graded or 20 to 5 graded
600 and above	10, 14, 20 or 40 nominal single size crushed rock or 14 to 5 graded or 20 to 5 graded or 40 to 5 graded

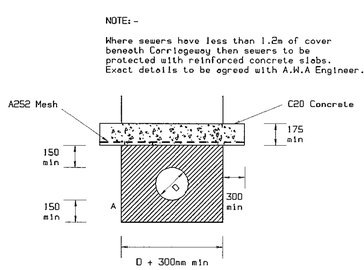


Note:
Where the pipes have flexible joints, (except where the pipes themselves are flexible), a 20mm thick preformed joint filler shall be used at each pipe joint, and shall extend through the full thickness of any concrete in contact.

Concrete Bed and Surround
(to Gully connections only)

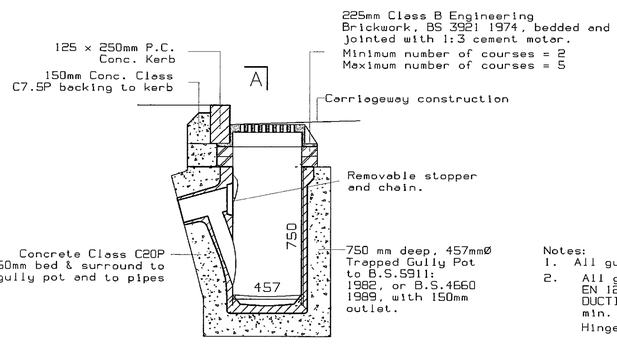


Dual Trench Detail

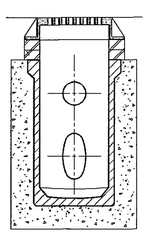


Protection Slab

PIPE BEDDING DETAILS



Notes:
1. All gully pots to B.S.5911 or 4660
2. All grates and frames to be to EN 124 CLASS D 400 GROUP 4 DUCTILE IRON 450mm x 450mm opening min. waterway area 900 sq cm. Hinged non removeable



Section A-A.

TYPICAL CHANNEL GULLY DETAILS

Rev. No.	REVISION	Date	Drawn By	Checked By
A	Headwall construction details added. Note for manhole covers to have AWS logo, available from Stantons.	21/8/01	HGC	WD
B	Private headwall detail revised	5.9.02	MPW	WD

Written dimensions to be taken. Do not scale off the drawing.

Any discrepancies, written or scaled, should be brought to the attention of the engineer immediately.

This drawing to be read in conjunction with the relevant Bills of Quantities and Local Authority Specification.

CDM NOTE: The design has been undertaken as far as possible to avoid risks to health and safety or to reduce and control the effects of any unavoidable risks.

All relevant information identifying the unavoidable risks has been passed to the planning supervisor for inclusion in the Health & Safety plan.

The Health & Safety plan will be issued by the planning supervisor with these drawings.

WORMALD, BURROWS PARTNERSHIP
Civil Engineering Consultants
12a & 14a Hitchin Street, Tel 01767 317244
Biggleswade, Beds SG18 8AX, U.K. Fax 315434

Project
Proposed Development at: -
Wygate Park - Phase 9
Spalding, Lincolnshire

Planning & Development
29 SEP 2004
Rec'd 129504

Drawing Description
Typical Drainage Construction Details

Client
Allison Homes Eastern Ltd
Banbury Close
West Elloe Avenue
Spalding
Lincolnshire PE11 2BS

Drawing Number
E1481/5/B

Drawn By HGC Date 9.7.02

Scale N.T.S.

Architect

Checked By AJMB Date 30.7.02

EQA REGISTERED COMPANY ISO 9001:1994 CERT NO.99 UKAS QUALITY MANAGEMENT 002