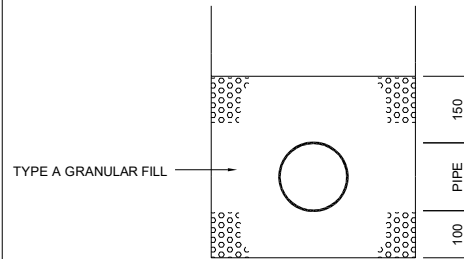


BEDDING FOR RIGID AND FLEXIBLE PIPES

ALL DRAINAGE TO BE SURROUNDED AS SHOWN IF PIPES PASS WITHIN 3m OF NEW OR EXISTING TREES UNLESS PIPE REQUIRES CONCRETE SURROUND

PIPE BEDDING PROTECTION NEAR TREES

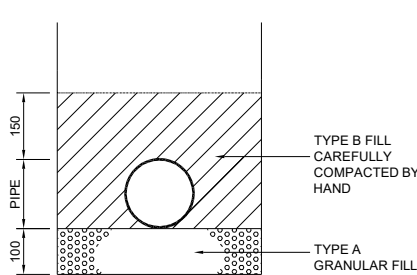


PIPE BEDDING PROTECTION NEAR TREES

ADOPTABLE DRAINAGE TO BE SURROUNDED AS SHOWN IF COVER TO CROWN OF PIPE > 1.2m UNDER ROADS, FOOTWAYS & HARDSTANDINGS AND > 0.6m IN LANDSCAPED AREAS.

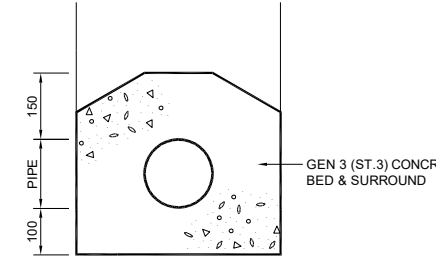
PRIVATE DRAINAGE TO BE SURROUNDED AS SHOWN IF COVER TO CROWN OF PIPE > 0.6m UNDER ROADS, FOOTWAYS AND HARDSTANDINGS.

PIPE BEDDING - CLASS S GRANULAR SURROUND



BEDDING FOR RIGID PIPES

PRIVATE DRAINAGE TO BE SURROUNDED AS SHOWN IF COVER OF PIPE > 0.6m IN LANDSCAPED AREAS.

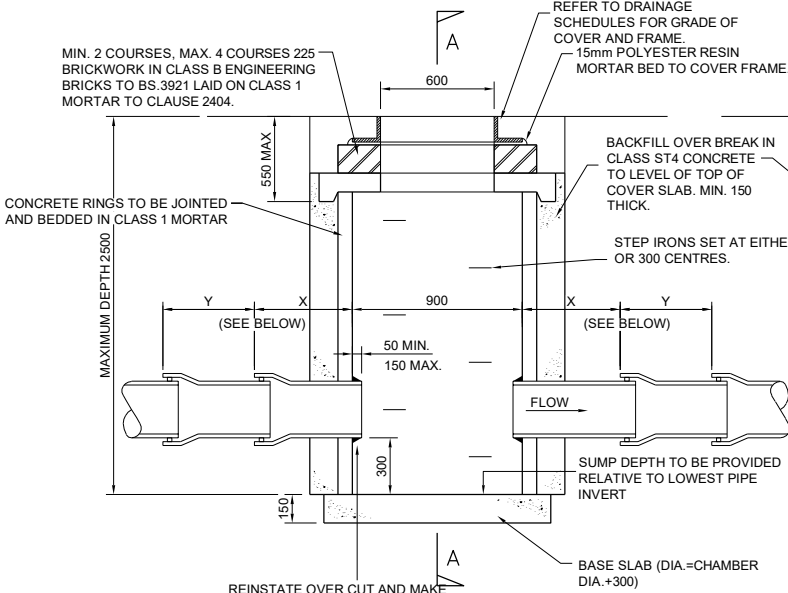


PIPE BEDDING PROTECTION NEAR TREES

ADOPTABLE DRAINAGE TO BE SURROUNDED AS SHOWN IF COVER TO CROWN OF PIPE < 1.2m UNDER ROADS, FOOTWAYS & HARDSTANDINGS AND < 0.6m IN LANDSCAPED AREAS.

PRIVATE DRAINAGE TO BE SURROUNDED AS SHOWN IF COVER TO CROWN OF PIPE < 0.6m UNDER IF COVER TO CROWN OF PIPE < 0.6m UNDER LANDSCAPED AREAS.

PIPE BEDDING - CLASS Z CONCRETE SURROUND

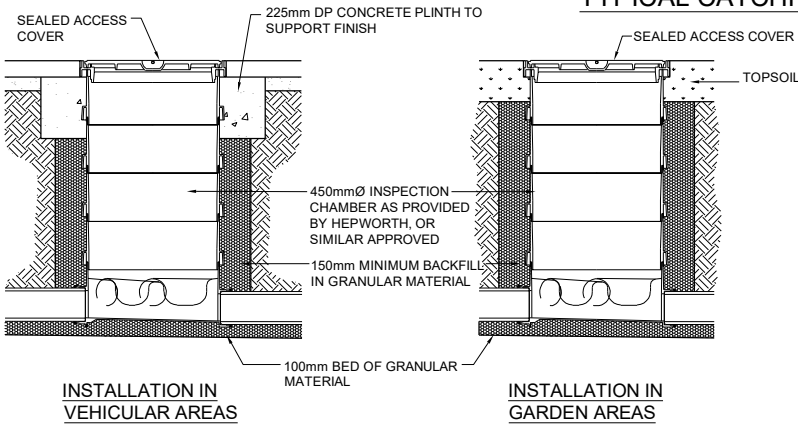


NOTES ON JOINTING AND PIPE LENGTHS AT CATCHPITS

THE TWO PIPE JOINTS NEAREST TO THE CATCHPIT MUST BE FLEXIBLE DIMENSION X THE FIRST PIPE SHALL HAVE A FLEXIBLE JOINT WITHIN 600mm OF THE INSIDE FACE OF THE CATCHPIT AND SHALL CONNECT TO A SHORT "ROCKER" PIPE.

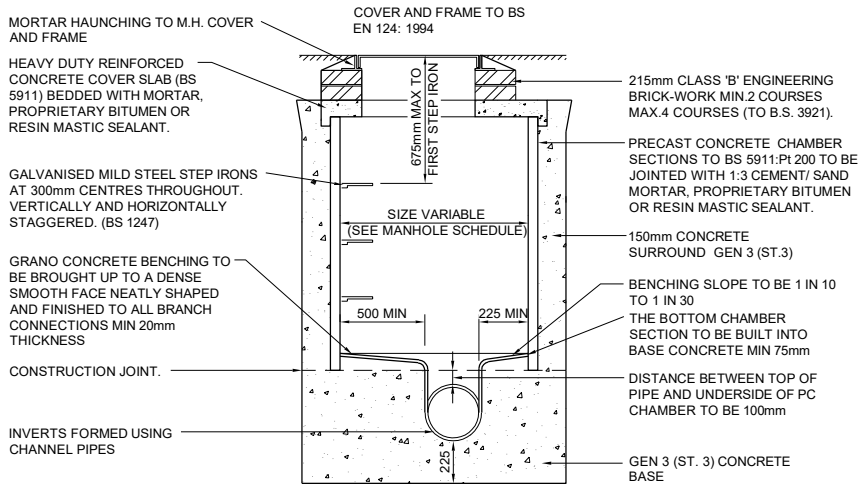
DIMENSION Y THE ROCKER PIPE SHALL BE OF MINIMUM LENGTH EQUAL TO THE RESPECTIVE NOMINAL PIPE DIAMETER AND A MAXIMUM LENGTH EQUAL TO:

FOR PIPE NOMINAL DIA. UP TO:	Y MAX.
450	0.75m
750	1.00m
EXCEEDING 750	2 X NOMINAL DIA.



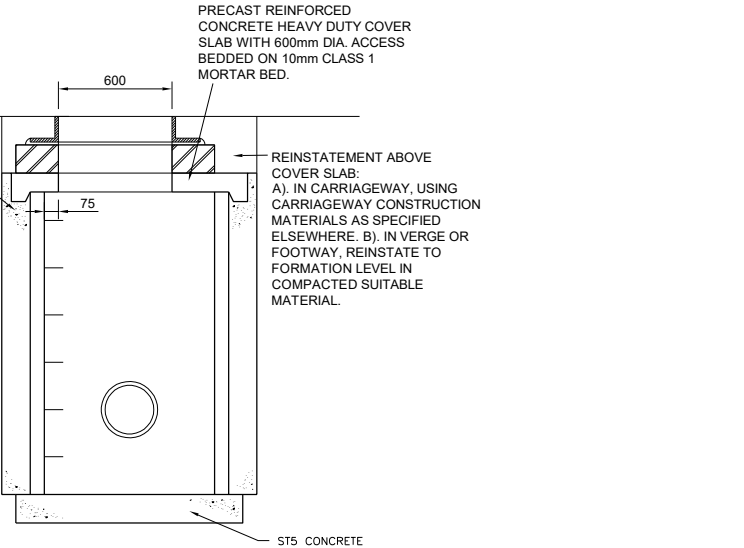
TYPICAL CATCHPIT DETAIL

INSPECTION CHAMBER (450Ø)

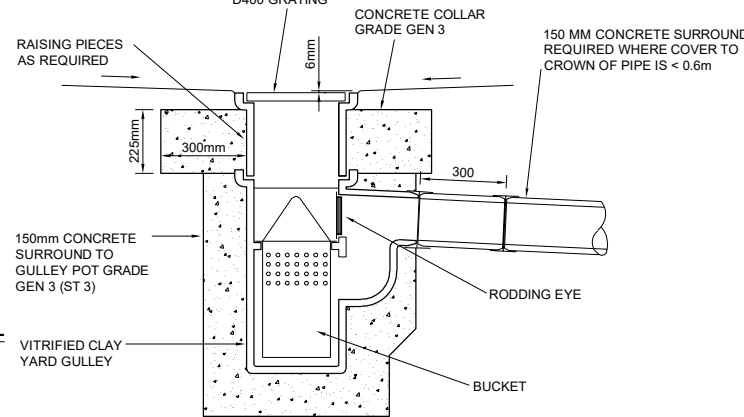


SECTION

PRECAST CONCRETE RING MANHOLE (SHALLOW) MAX 3m DEEP

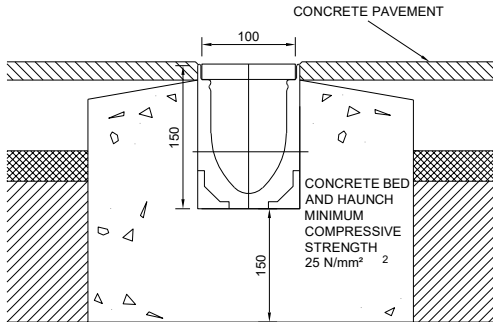


SECTION A-A

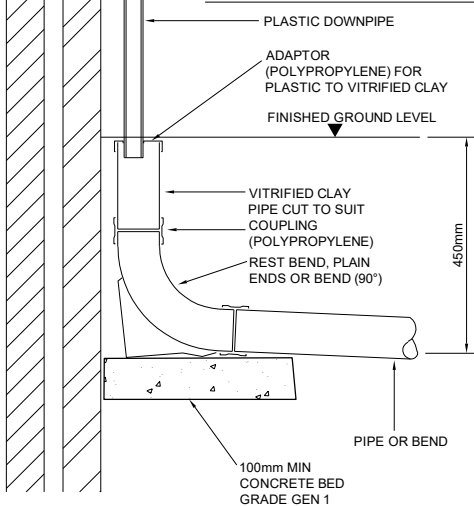


SECTION

TRAPPED YARD GULLEY WITH BUCKET



ACO DRAIN SECTION



SECTION DOWNPIPE REST BEND DETAIL

Notes

GENERAL

- This drawing is to be read in conjunction with all relevant Engineers and Architects drawings and with the Specification.
- For setting out refer to Architects drawings.
- All dimensions are in millimetres and levels are in metres unless noted otherwise.
- Contractor to take all relevant dimensions on site. Any discrepancies to be advised to the Engineer.
- Contractor to check/scan for services prior to construction to avoid any damage during works.

DRAINAGE

- Any information given on this drawing regarding existing services is believed to be correct. The contractor must check this information and determine the nature and location of other existing services from the various statutory authorities before commencing excavation works.
- Drainage works to be constructed in accordance with BS EN 752 and Approved Document H
- All soft spots and unacceptable material encountered in drainage excavations is to be removed and replaced with granular material to the requirements of the building control officer.
- Pipes to be installed to manufacturers recommendations.
- Pipes under buildings to be laid to a fall of 1:40 minimum unless noted otherwise.
- Plastic plain wall pipes to be PVC-U to BS EN 1401-1, class SN4, with flexible joints, Kitemark certified. Structured wall plastic pipes to be to WIS 04-35-01, Kitemark certified
- Clay pipes to be vitrified clay to BS EN 295-1, with flexible joints, Kitemark certified. Clayware pipes must be extra strength classification protected in accordance with the specified details.
- Concrete pipes to be precast concrete to BS 5911-1 and BS EN 1916, with flexible joints.
- Bedding of pipes to be in accordance with approved document H1.
- Rocker pipes with flexible joints are to be provided at a distance of 150mm and 750mm from the face of construction to manholes, where pipes pass above, below or through ground beams or foundations; at gully connections and soil stack ends.
- Manhole access covers are to be located at the outgoing side of manholes.
- Cover levels are to be fixed on site to suit finished levels. Covers and frames to BS EN124, Grade D to be used in areas subject to heavy vehicular loading. Grade C in areas subject to light vehicular loading and Grade B to be used elsewhere.
- All materials to comply with BS EN 14227-1:2004 "Hydraulically bound mixtures specification - Part 1 : cement bound granular mixtures.
- Course graded aggregate type 4/20. CGA to comply with requirements of BS EN 13242 : 2002 "Aggregates for unbound and hydraulically bound materials for use in Civil Engineering work and road construction.
- Material to comply with requirements of material type 2/6.3 Gc 80/20 according to BS EN 13242:2002 "Aggregates for unbound and hydraulically bound materials for use in Civil Engineering Works and Road Construction".

PERMEABLE BLOCK PAVING BUILD UP NTS

PRELIMINARY - NOT FOR CONSTRUCTION

P01	Preliminary	OG	PP	PP	05.06.19
Rev.	Amendment	Drn.	Chkd.	Appd.	Date

Project
Meadway Precinct,
Honey End Lane
Tilehurst, Reading
Drawing
Typical Drainage Details

Client
BUXTON

Structural Engineering
Civil Engineering
Sustainability and BREEM
CDM Consultancy

St Nicholas House, St Nicholas Road, Sutton, Surrey SM1 1EL
T: +44 (0)20 8773 3131 W: www.swh.co.uk E: info@sw.co.uk

Scale at A1 - 1:100
L01441-SWH-ZZ-XX-DR-D-0201 P01
Project | Originator | Zone | Level | Type | Role | Number | Rev.