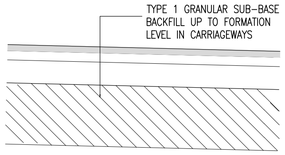
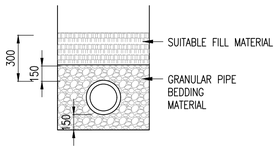
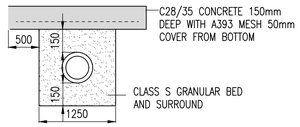
GENERAL NOTES

1. REFER TO C-00-100 FOR GENERAL NOTES AND C-00-200 FOR DRAINAGE DETAIL NOTES.

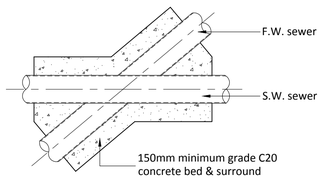


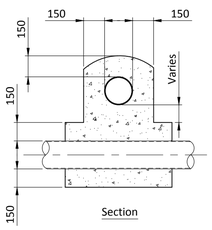


CLASS S BEDDING DETAIL



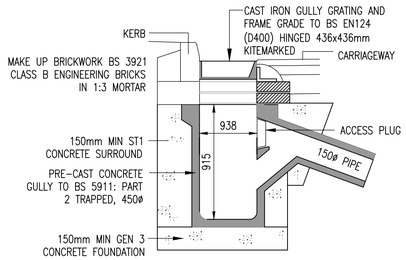
CONCRETE PROTECTION DETAIL



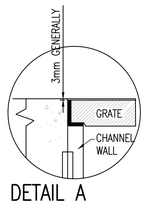


Typical Cross-over Detail to Foul and Surface Water Sewers

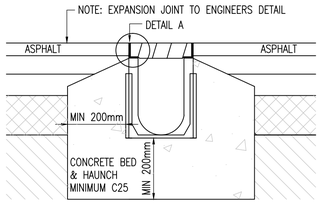
MANHOLE TYPE B
(DEPTH TO SOFFIT 3m - 6m)



TYPICAL PRECAST CONCRETE ROAD GULLY DETAIL



DETAIL A



ACO CHANNEL DETAIL

INDICATIVE DETAIL
REFER TO ACO MULTI-DRAIN LITERATURE FOR TYPICAL DETAILS AND INSTALLATION INSTRUCTION TO SUIT PAVING OPTIONS

SUITABLE FILL:- THE SUITABLE FILL SHALL BE SUITABLE FOR THE LOCATION AND SHALL BE CAREFULLY COMPACTED TO PROVIDE STABILITY WITHOUT DAMAGING THE PIPE.
FILL UNDER CAR PARKING AREAS AND PRIVATE ROADS TO BE WELL COMPACTED GRADED MATERIAL. FILL UNDER ADOPTED ROADS TO BE TYPE 1 GRANULAR SUB-BASE.

WHERE THE PIPES ARE TO BE ADOPTED CLASS S BEDDING TO BE USED FOR EITHER RIGID OR FLEXIBLE PIPES

SIZE OF BEDDING MATERIAL - ALL GRANULAR MATERIAL TO BE SINGLE SIZED OR GRADED IN ACCORDANCE WITH BS 882.BS1047,BS3797		
PIPE DIAMETER	NOMINAL SINGLE SIZED	GRADED
UP TO 100mm	10mm	
OVER 100mm TO 150mm	10mm or 14mm	5mm to 14mm
OVER 150mm TO 300mm	10mm,14mm or 20mm	5mm to 14mm or 5mm to 20mm
OVER 300mm TO 550mm	14mm or 20mm	5mm to 14mm or 5mm to 20mm
OVER 550mm	14mm, 20mm or 40mm	5mm to 14mm or 5mm to 20mm or 5mm to 40mm

Trench widths	
Dia. of drain	Width
100 150 225	450 600 700
300 375 450	750 1050 1150
525 600 675	1200 1350 1450
750 825 900	1500 1600 1900
975 1050 1200	2000 2300 2300
Over 1200	Dia. + 1000

LIMITS OF COVER IN ANY WIDTH OF TRENCH			
NOMINAL SIZE	LAID IN FIELDS	LAID IN LIGHT ROADS	LAID IN MAIN ROADS
CLASS 120 CLAYWARE PIPES (CLASS B BEDDING)			
100-150mm	0.6m - 8.0m	1.2m - 8.0m	1.2m - 8.0m
225mm	0.6m - 5.0m	1.2m - 5.0m	1.2m - 4.5m
400mm	0.6m - 4.5m	1.2m - 4.5m	1.2m - 4.0m
600mm	0.6m - 4.5m	1.2m - 4.5m	1.2m - 4.0m
CLASS M CONCRETE PIPES (CLASS B BEDDING)			
300mm	0.6m - 3.0m	1.2m - 3.0m	1.2m - 2.5m
450mm	0.6m - 3.5m	1.2m - 3.5m	1.2m - 2.5m
600mm	0.6m - 3.5m	1.2m - 3.5m	1.2m - 3.0m
THERMOPLASTIC PIPES (CLASS S BEDDING)			
100 - 300mm	0.6m - 7.0m	0.9m - 7.0m	0.9m - 7.0m

WHERE COVER IS LESS THAN THE ALLOWABLE DEPTH PIPES TO HAVE A CLASS Z CONCRETE SURROUND OR CONCRETE COVER SLAB PROTECTION

CONCRETE PROTECTION	
CLASS 1 SULPHATE CONDITIONS	
ADOPTABLE STANDARDS AND AREAS SUBJECT TO HEAVY LOADING	GEN3 OR GEN 3
AREAS SUBJECT TO LIGHT LOADING eg. PRIVATE DRIVES, SMALL CAR PARKS	GEN1 OR ST2
FOR BURIED CONCRETE EXPOSED TO SULPHATE CONDITIONS	
CLASS 2 CLASS 3 CLASS 4A CLASS 4B	FND 2 FND 3 FND 4A FND 4B

PRODUCT NAME	DIAMETER (mm)	MANUFACTURER	MATERIAL
Supersleve	100&150 (I.D)	Hepworth	Vitrified Clay
Superseal	100&225 (I.D)	Hepworth	Vitrified Clay
Densleeve	100,150&225 (I.D)	Naylor	Vitrified Clay
Denseal	100,150&225 (I.D)	Naylor	Vitrified Clay
Ultra-Drain	110&160 (O.D)	Uponor	uPVC
Piastidrain	110&160 (O.D)	Hepworth	uPVC
Osmadrain	110&160 (O.D)	Wavin	uPVC
Osma Ultrarib	150&225 (I.D)	Wavin	uPVC
Solid Wall	110&160 (O.D)	Marley	uPVC
Quantum	150&225 (I.D)	Marley	uPVC
Underground Drain	110&160 (O.D)	Polypipe	uPVC
Ridgisewer	150&225 (I.D)	Polypipe	uPVC

MANUFACTURER	PRODUCT NAME	MATERIAL	MAX DEPTH
Naylor	Plastic Inspection Chamber	Polypropylene	Up to 1200mm
Hepworth	PPIC	Polypropylene	Up to 1200mm
Uponor	Inspection Chamber (450mmØ)	Polypropylene	Up to 1200mm
Marshalls	Inspection Chamber To BS5911 pt2	Precast concrete	Up to 1000mm
Wavin	Osma Ultrarib Inspection Chamber	Polypropylene	Up to 1200mm
Wavin	OsmaDrain Universal Inspection Chamber	Polypropylene	Up to 1200mm
Wavin	Non Entry Inspection Chamber	Polypropylene	Up to 2000mm
Marley	Inspection Chamber (450mmØ)	Polypropylene	Up to 1200mm
Polypipe	110mm Inspection Chamber (460mmØ)	Polypropylene	Up to 1200mm

REV	DATE	PURPOSE	DRN	CHK
P01	28.03.18	STAGE 3	PC	KG

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Manchester
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PROJECT
THOMAS STREET, MANCHESTER

TITLE
DRAINAGE DETAILS SHEET 1

PROJECT NO. 1507-15

DRAWING	REV	SCALE@A1
C-00-201	P01	NTS

STATUS
STAGE 3

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