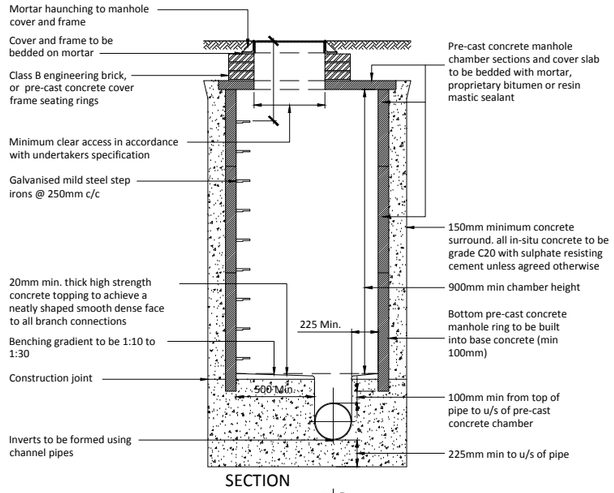
This drawing is copyright. © Beam Consulting Engineers Ltd.

A1

Notes

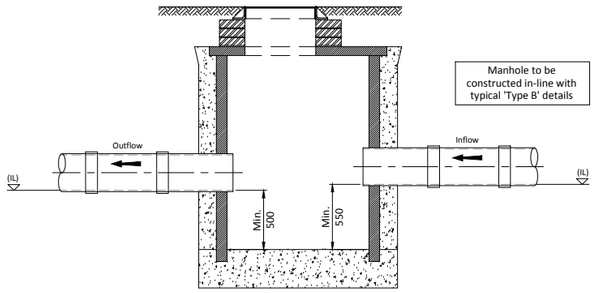
1. For notes refer to drawing No 09-124-500.



The safety policy of individual sewerage undertakers may require a larger minimum clear opening into manholes and the fitting of guard bars, safety chains or other safety devices in manholes with outgoing pipes of less than 600mm ø

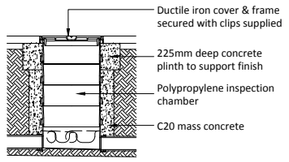
Typical Type B Manhole Detail

3000mm maximum from ground level to soffit of pipe
(Scale 1:25)



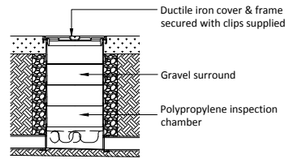
Typical Concrete Silt Trap Manhole Detail

(Scale 1:25)



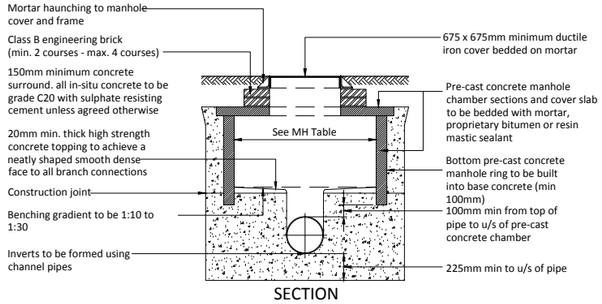
Typical Type 1 - Polypropylene Inspection Chamber In Hard Paved Areas

(Scale 1:25)



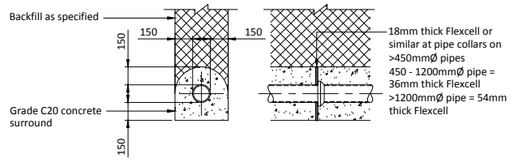
Typical Type 1 - Polypropylene Inspection Chamber In Soft landscaped Areas

Scale 1:25



Type B1/E Manhole Detail

(Scale 1:25)
Depth from ground level to soffit of pipe less than 1500mm
Plan as above (Type B)



Typical concrete surround to all pipe runs beneath buildings

(Scale 1:25)

Table A

Dia. of largest pipe in manhole (mm)	Internal diameter of manhole (mm)
Less than 375	1200
375-700	1500
750-900	1800
Greater than 900	Consult undertaker

Table B

Dia. of drain (mm)	Effective length (m)
150-600	0.6
675-750	1.0
Over 750	1.25

Table C

Chamber Size	Manhole Depth <1.5m	Manhole Depth Equal to or >1.5m
900	675x675 Central	675x675 Central
1050	750x750 Central	675x675 Eccentric
1200	675x675 Eccentric*	675x675 Eccentric
1500	1200x675 Central**	675x675 Eccentric
1800-3000	1200x675 Eccentric	675x675 Eccentric

* 1200x675 Specified in BS EN 752-3 but not recommended
Note: All measurement in mm UNO.
** Openings sited over the channel with double twin 600x600 covers.

Sizes are as concrete pipe system association (CPSA) 'Technical Bulletin' issued Autumn 2004 for Kitemarked cover slab opening sizes.

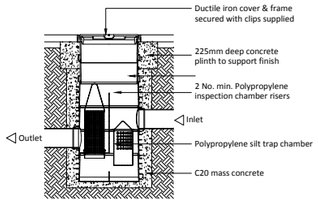
Trench widths

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

Pipe Bedding

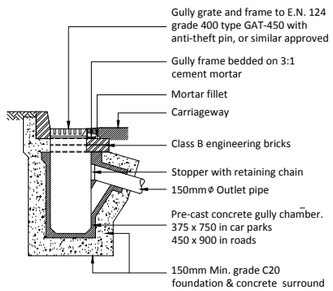
Nominal bore of pipe (mm)	Size (mm) Single sized	Size (mm) Graded
100-125	10	-
150-200	10 to 14	14 to 5
225-300	10, 14 or 20	14 to 5 or 20 to 5
375-500	14 or 20	14 to 5 or 40 to 5
Exceeding 500	14, 20 or 40	14 to 5 or 40 to 5

All granular material to be single sized or graded in accordance with BS 882 : 1983, sintered pulverised-fuel ash to BS : 3797 Pt 2 1976 air-cooled blast furnace slags to BS 1047 : 1983 are suitable



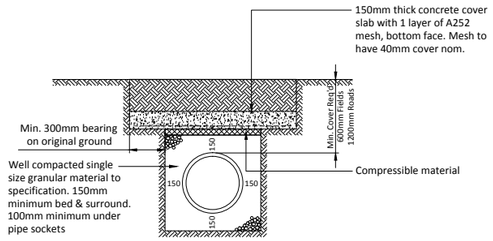
Typical Silt Trap Chamber

Scale 1:25



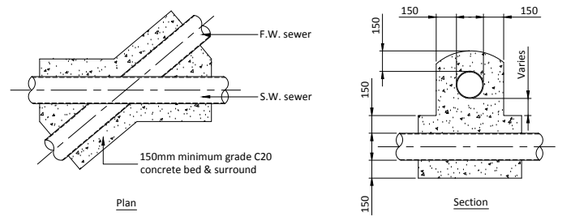
Typical Gully Detail

(Scale 1:25)



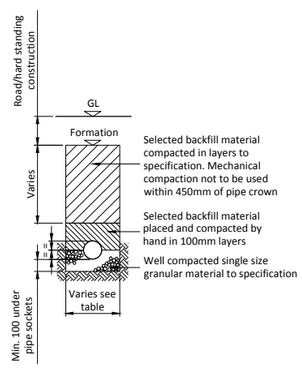
Pipe Protection Detail

(Scale 1:25)



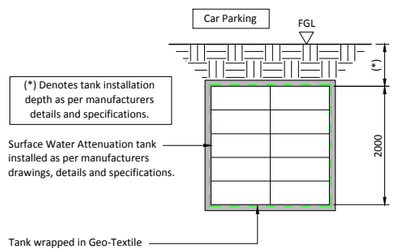
Typical Cross-over Detail to Foul and Surface Water Sewers

(Scale 1:25)



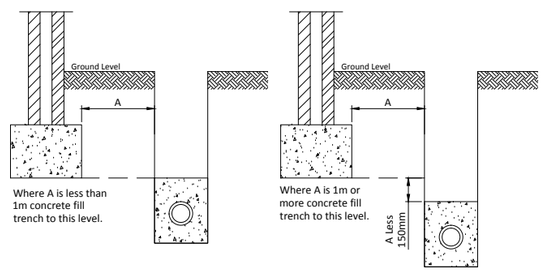
Pipe Bedding Detail

(Scale 1:25)



Typical Section Through Cellular Attentuation Tank

(Scale 1:50)



Typical Concrete Surround To All Pipe Runs Near Buildings & Retraining Structures

(Scale 1:25)

DESCRIPTION	REV	DATE	CHK	APR

beamconsulting
Beam Consulting
14 Bond Street
Wakefield
WF1 2QP
Tel: 01924 361653
Fax: 01924 364631

PROJECT
Lidl Store
Bodhydryd, Wrexham

DRAWING TITLE
Drainage Details

CLIENT
Lidl Great Britain Limited

STATUS
Information

DRAWN	JD	DATE	02/07/19
CHECKED	KA	SCALE	AS SHOWN @ A1
APPROVED	KGP		

DRAWING NUMBER
09-124-511

REVISION
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