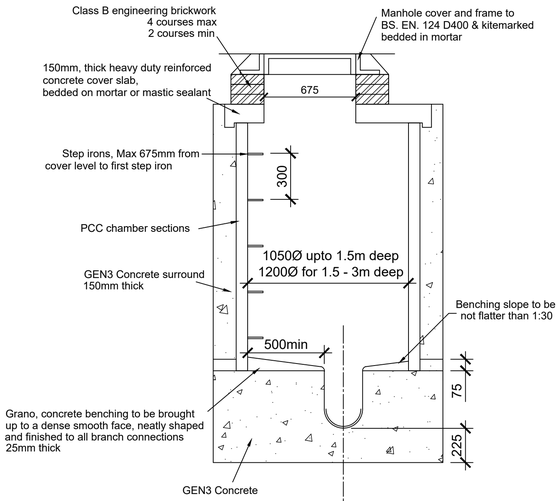
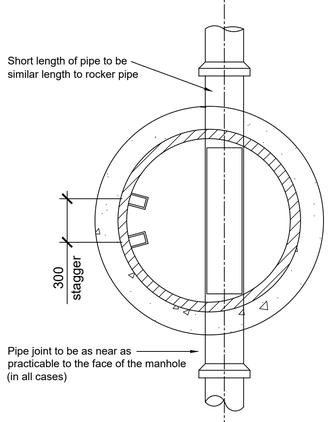
Architectural drawings show design intent in accordance with Lidl International Specification. Site Specific Design Teams should use these drawings for guidance only. Full design responsibility will remain with the Site Specific Team and thus they should ensure their Proposals fully comply with all relevant statutory authority requirements relevant to the individual project.

All deviations from the design intent should be approved by Lidl.



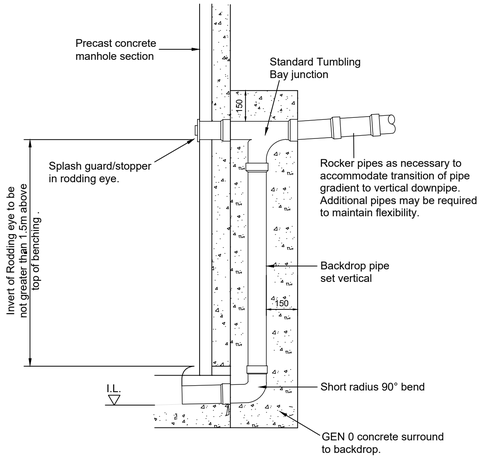


PLAN

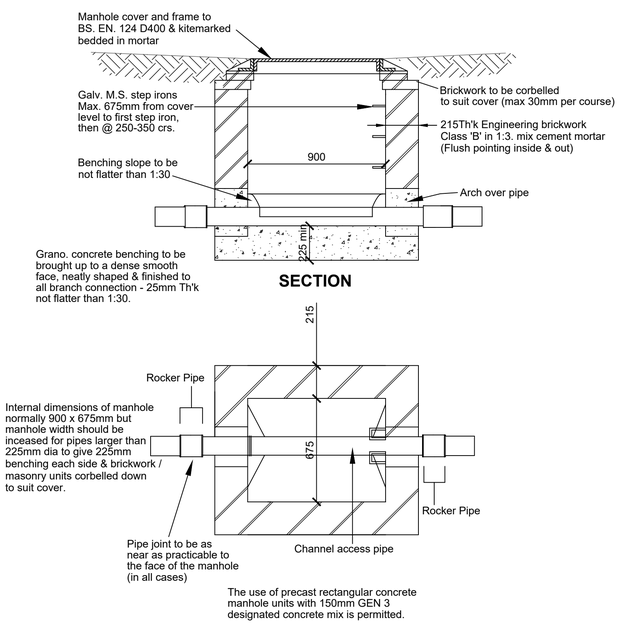
ADOPTABLE MANHOLE DETAIL TYPE 2

Depth from cover level to pipe soffit 3m max

Scale 1:20



EXTERNAL BACKDROP



SECTION

The use of precast rectangular concrete manhole units with 150mm GEN 3 designated concrete mix is permitted.

PLAN

ADOPTABLE BRICKWORK MANHOLE DETAIL TYPE 4

Depth to soffit less than 1.0 m

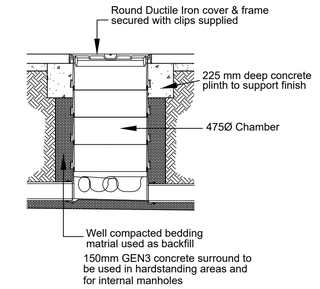
Scale 1:20

Note: Opening to be located centrally over 900 mm shaft and offset approximately 200 mm for 1200 mm diameter shaft with ladder

TYPICAL MANHOLE DETAIL - TYPE 1B

Depth from cover level to soffit of pipe 3 m to 6 m

Not to scale

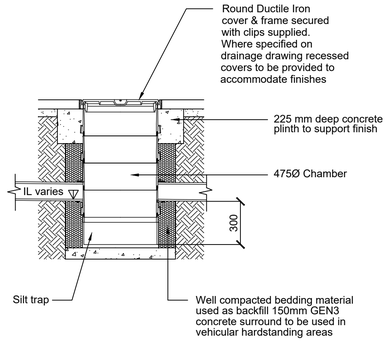


DETAILS OF 'UPVC' MANHOLES TYPE 3

(Hepworth PPIC inspection chamber)

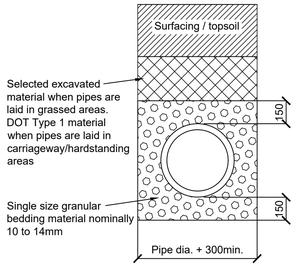
(Max depth 1.2m)

Not to scale



TYPICAL SILT TRAP ARRANGEMENT

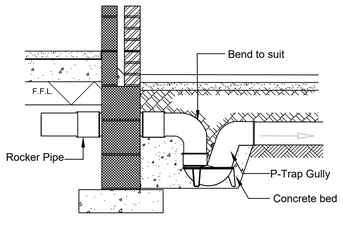
Not to scale



CLASS "S" PIPE BEDDING DETAIL

(Typical unless noted otherwise)

Scale 1:20

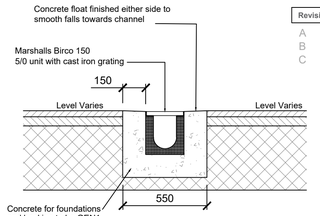


P-TRAP DETAIL

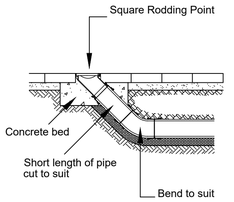
Not to scale

TYPICAL ATTENUATION TANK SECTION

Not to scale

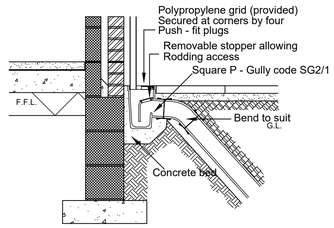


TYPICAL BIRCO 150 CHANNEL DETAIL



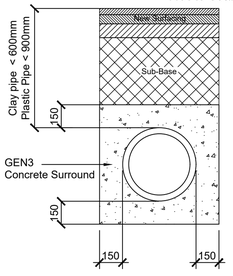
RODDING POINT DETAIL

Not to scale



BACK INLET GULLY DETAIL

Not to scale



CONCRETE SURROUND DETAIL

(HARDSTANDING AREAS)

("Flexcell" compressible board to be used at all pipe join locations)

Scale 1:20

Revision	Description	Author	Checker	Date
A	BBS 2021-REV A-SPECIFICATION ISSUE	O.C.	M.M	25.10.2021
B	BBS 2021-REV B-SPECIFICATION ISSUE	J.H	M.M	-- -- ----
C	BBS 2021-REV C-SPECIFICATION ISSUE	J.H.	M.M	25.10.2021

Notes

The developer should take all necessary precautions to avoid causing any damage to, or interference with flow in existing sewers and shall ensure that debris, silt, mud etc. do not enter

Where works are to be carried out on sewers. the contractor must carry out their works in accordance with "The classification and management of confined spaces" published by Water UK. they must also comply with all other relevant health and safety legislation/ documentation.

All materials are to be stored in such a manner as to preserve their quality as to the standard specified in the specification.
contaminants.
All concrete to be produced on site must be mixed with only potable water, to ensure that it is clean from dirt.

Aggregates for concretes shall comply with the relevant provisions of BS EN 12620 and PD 6682-1.

Sands for mortar and grouts shall be washed sand, complying with BS EN 13139 and PD 6682-3.
All other sands are to comply with BS EN 12620 and PD 6682-1 or BS EN 13139 and PD 6682-3.

Pulverised-fuel ash (PFA) for use as a component material in cementitious grout our non structural concrete shall comply with BS 3892-2 & 3.

Virtified clay pipes and fittings for sewers shall have flexible mechanical joints. Pipes for foul sewers and surface water sewers shall comply with the relevant requirements of BS EN295 and BS65 (Surface water pipes only)

Pre-cast concrete manhole units of circular cross section for manholes, chambers and wet wells shall comply with the relevant provisions of BS EN 1917 and BS 5911-3.

Ladders for manholes in a vertical plane are to be mild steel and comply with BS4211, Class A and PD 970.

GRP ladders shall be manufactured in accordance with BS EN 131, and from glass-reinforced polyester using an appropriate resin for the ladder location. Unidirection reinforcement shall be provided in the GRP matrix to maximise strength.

All Manhole covers and frames shall comply with the relevant provisions of BS EN 124, BS 7903 and Highways Agency guidance document HA 104/02. They shall be of a non-rocking design which do not rely on the use of cushion inserts. D400 Covers to be used in all carpark areas.

Clay bricks to be used within manholes are to be solid, Class B Engineering bricks complying to BS 3921.

All bricks shall be frost resistant category F.

Standard concrete mixes should be in accordance with BS EN 206-1 and BS 8500 and shall be used with a 20mm nominal maximum size of aggregate and a slump class of S2 for a target of 70mm.

GEN1 concrete to be used for; fillings, blindings, soft spots and drainage slumps.
GEN3 concrete to be used for; all other applications. U.N.O.

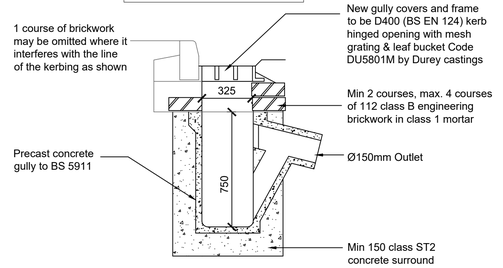
Admixtures (including calcium chloride and pigments) shall not be used in the production of concrete.

High strength concrete topping shall be produced, laid and finished in accordance with the relevant provisions of BS 8204: part 2 and the following approximate mix proportions shall be used: 1part cement, 1 part natural sand and 2 parts single-sized coarse aggregate.

All mortar mixes shall be in accordance with BS 5628-1:2005.

All pipes to be either extra strength VC to BS 65 or PVC to BS 4660 or BS 5481 "UPONOR ULTRARIB"

Gully grating and frame to be set 5mm below carriageway surface and flush with kerb face. Any gap to be filled with class 1 mortar



TYPICAL PRECAST CONCRETE ROAD GULLY

Scale 1:20

Project: BBS 2021 Lidl Corporate Specification				
Drawing Title: Typical Drainage Details				
Project No.	Drawing No.	Suitability	Revision	Scale at A1
LD (14)	SP - 06	SO	01	AS INDICATED

This drawing is Copyright - Check all dimensions on site - Inform originator of any discrepancies - Work to figured dimensions only - Do not scale