



KEY:

Proposed highway drain.

Proposed gully.

Proposed foul water sewer.

Proposed foul water lateral connection - PPIC.

Proposed highway soakaway.

INFORMATION WITHIN THIS DRAWING IS NOT NECESSARILY PRODUCED TO SCALE.
ALWAYS USE FIGURED DIMENSIONS AND CO-ORDINATES - IF IN DOUBT, ASK.



NOTES

- All pipes shall be either:
A - PVC to have BSI Kitemark status (certified to BS 4356-1 and to BS EN 13476) Wavin or similar approved. Maximum pipe length to be 3m. Plastic channel sections in manholes are not acceptable, clay channel sections shall be used.
Please note that where plastic pipes are installed into the ground prior to obtaining approval, then the Developer will have to provide a Light-line survey and report of the prospectively adoptable sewers, which will be at the Developer's expense.
OR
B - Vitrified clay to BS EN 296 with a minimum crushing strength as follows:-
150 dia - 40 kN/m
225 dia - 45 kN/m
300 dia - 72 kN/m
OR
C - Class 120 concrete to EN 1916 BS 5911-1:2002.
- Pipes of 675mm or greater shall be concrete conforming to BS5911 Part 100.
- Where plastic pipes are proposed for adoptable sewers, structural calculations for the plastic pipes and a site investigation report to prove that the ground condition is suitable for the plastic pipes are to be produced.
- All pipes are to be laid to suit level at manholes unless noted otherwise.
- All adoptable sewer works and materials to be in accordance with "Sewers for Adoption" (6th edition), the relevant British/European standards and Yorkshire Water's standards/requirements/addendum to the Mechanical and Electrical specification and kitemarked.
- Manhole covers shall have a clear opening of 600 and shall be class D400 to BS EN 124 with 150 deep frames in highways. Covers to have closed keyways and are to be bedded on steel shims with 1:3 mortar haunching.
- Pipes entering manholes and road gullies shall have a flexible joint within 600 of the inside the manhole or gully joining with a short Rocker pipe.
- Plastic channel sections in manholes are not acceptable and clayware is preferable. Plastic channels are difficult to set in concrete and a satisfactory finish cannot be obtained on the bedding.
- The adoptable sewers should be a minimum of 1m and outside of manholes 0.5m from kerb faces and service margins.
- Sewers must have 5m clearance from trees and hedges (see also figure 2.3 on page 33 in "Sewers for Adoption" 6th edition for restrictions on tree planting adjacent to sewers).
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- Plastic channel sections in manholes are not acceptable and clayware is preferable. Plastic channels are difficult to set in concrete and a satisfactory finish cannot be obtained on the bedding.
- Cover levels are indicative only. Covers to be set to suit camber/gradient of existing and proposed roads.
- Cover slabs must carry the BSI Kitemark or be rejected by the Yorkshire Water Inspector. Where the clear opening of the Kitemarked product is different to that of the cover and frame, a load bearing slab should be fixed above the cover slab to bring the size down to 600x600 for the Yorkshire Water specified cover size. Refer to CPUSA Technical Bulletin issued autumn 2004 for Kitemarked cover slab opening sizes.
- Demarcation chambers to be a min. 450mm dia chamber for 150mm dia foul and surface water pipes up to 1.2m deep. For depths greater than 1.2m, restricted access opening to 350mm is required for health and safety reasons. The maximum depth of demarcation chamber to be 2.0m, where depth exceeds 2m, manhole to be constructed as a Type B manhole.
- All trenches in roads and paved areas shall be backfilled with Type 1 DOT granular sub-base material, or other granular material approved by the highway authority.
- Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.
- Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
- The chamber size of manholes with more than one connection in them may need to be increased by an increment to accommodate the connections and bends.
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- Any connection into an existing Yorkshire Water Sewer should only be made following the submission of a completed application form and method statement for YW approval. This must be provided giving 21 days notice of the intention to connect to the public sewer.
- Any lateral connections to a storage tank or storage manhole should be connected above the 'springing level' or via a 'backdrop' into the manhole.
- Yorkshire Water is not obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of the land drainage run-off will therefore be required and you will have to liaise with the Local Authority, Land Drainage Section with regard to the disposal of the filter drain/land drainage run-off.
- Bedding and backfill material to conform to the requirement of Water Industry Specification 4-98-02 (Table A2).
- Yorkshire Water policy is not to accept Type "C" manholes ad 150mm dia manhole rings. Instead it is preferred that you use a type "B" manhole with 1200mm dia or 1500mm dia rings, with the opening sized over the channel where depth of cover to pipe soffit is 1-1.5m.
- Where a B125 cover and frame has been approved, this **must not** be coated in plastic and must have lifting eyes suitable sized to accommodate standard lifting keys. Screw down covers are not acceptable.

NOTE:
All FFLs are 150mm above surrounding finished ground levels, thereby protecting dwellings from any flooding resulting from blockage in the system.

REV	DESCRIPTION	SIG	CHK	DATE
A	First Issue.			
F	Updated to suit latest layout.	BJM	CH	27.01.22
G	Revised to suit latest layout.	RJ	CH	18.03.22
H	Updated to suit latest layout.	CTB	CH	24.03.22
J	Revised to suit latest layout.	RJ	CH	01.04.22
K	Revised to suit Barnsley MBC comments.	RJ	CH	18.07.22
L	Revised to suit YW comments.	GH	CH	29.07.22
M	Revised to suit latest layout.	RJ	CH	08.08.22
N	Foul demarcation chambers FD04 & FD08 amended to suit latest layout.	JB	RJ	15.08.22

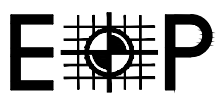
NEWETT HOMES

NEW SMITHY AVENUE,
THURLSTONE

S104 DRAINAGE LAYOUT

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SCALE WHEN PLOTTED AT A1

1:250

DRAWING STATUS

APPROVAL

DRAWN	CHECKED	DATE	DRAWING NUMBER	REV
RJ	CH	15.04.19	43733/020	N