



Yorkshire Water General Notes

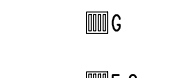
1. This drawing is to be read in conjunction with all relevant OEC Consulting Engineers and Architects drawings and project specifications.
2. All adoptable sewer works and material to be in accordance with "the Code" Version 2.1 2021, the relevant British/European and Yorkshire Water's Standards/Requirements/ Local Practice for the Adoption of Small Submersible Foul and Surface Water Pumping Stations and Kitemarked.
3. The location, size and depth of all existing drains/sewers and services shall be established by the contractor prior to commencement of works on site. Any discrepancies from the information indicated on these drawings shall immediately be brought to the attention of the engineers.
4. All levels and dimensions shall be verified on site prior to commencement of any works. Any discrepancies shall immediately be brought to the attention of the engineers.
5. Sewers must have 5 metres clearance from trees and hedges.
6. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
7. All connections to public sewers to be a minimum of 150mm Ø via a 45 junction.
8. Sewers to be laid in Class "S" bedding (150mm granular bed and surround). Where depth of cover to top of the sewer is less than 1.2m in highways and verges (or less than 900mm in none vehicular access areas) then a concrete slab should be provided above the granular bed and surround.
9. Yorkshire Water policy is not to accept Type "C" brick manhole and 1050mm dia manhole rings. Instead it is preferred that you use a type "B" manhole with 1200mm dia or 1500mm dia, rings, with the opening sited over the channel where depth of cover to pipe soffit is 1-1.5m.
10. The chamber size of manholes with more than one connection in them may need to be increased on increment to accommodate the connections and bends.
11. Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
12. Where a B125 cover and frame has been approved, this must not be coated in plastic and must have lifting eyes suitably sized to accommodate standard lifting keys. Screw down covers are not acceptable.
13. Cover slabs must carry the BSI Kitemark or will 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 loading bearing slab should be fitted above the cover slab to bring the size down to 600x600mm for the Yorkshire Water specified cover size. Please refer to the Concrete Pipe Systems Association (CPSA), 'Technical Bulletin' issued autumn 2004 for kitemarked cover slab opening sizes.
14. Maximum depth of demarcation chamber to be 3m, where depth exceeds 3m, manhole to be constructed as type B manhole.
15. Demarcation chambers to be a min. 450mmØ chambers for 100mmØ foul & 150mmØ surface water pipes up to 1.2m deep. For depths greater than 1.2m, restricted access opening to 350mm is required for safety reasons.
16. 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.
17. Where plastic pipes are installed into the ground prior to getting full technical approval, the developer must provide a CCTV survey of the prospectively adoptable sewers and a deformation test (Light-Line test) of the plastic pipes.
18. If plastic pipes are to be used then the following should apply:-
 - a) All adoptable sewers to be BSI Kitemark (certified to WIS 4-35-01).
 - b) Bedding and backfill material to conform to the requirements of the Water Industry Specification 4-08-02 (Table A2)
19. Adoptable plastic sewer pipes to be BSI Kitemarked (Certified to WIS 4-35-01 and BS/EN13476). Adoptable plastic sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer lengths. Plastic channel sections in manholes are not acceptable and clayware is preferable. Plastic channels are difficult to set in concrete because they float and a satisfactory finish cannot be obtained on the bedding.
20. Filled ground or soft spots must be excavated, backfilled and consolidated under the supervision, and to the satisfaction of Yorkshire Water before any sewer works are carried out.
21. Sulphate resisting cement (C20-DC2) and precast concrete products must be used or a laboratory report proving that such precautions are not necessary.
22. The minimum crushing strength of vitrified clay pipes (if used) should be as follows: 100kN/m, 150kN/m, 225kN/m and 300kN/m. The minimum crushing strength for concrete pipes should be - Class 120 to EN 1916/BS5911-1:2002. Plastic pipes should conform to WIS 4-35-01 and BS EN13476.
23. Surface water and foul rising mains to be provided with marker tape above the rising mains.
24. Yorkshire Water is not obliged to accept filter drain/land drainage runoff into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of the land drainage runoff will therefore be required and you will have to liaise with the Land Drainage Authority/Land Drainage Section with regard to the disposal of the filter drain/land drainage runoff.
25. All excavations in areas of high water tables and granular materials with high sand/silt contents shall be wrapped with a suitable geotextile filter membrane to prevent migration of sands/silts. Full height clay stonks across trenches and/or at manhole locations at 25m intervals to restrict water movement along the excavation shall be provided.
26. All works within the public highway to be reinstated to the highway authority requirements. All drainage connections onto adoptable drainage systems shall be carried out to the water authority's approval.
27. The contractor must allow for any fee's required for road and sewer opening permits, sewer connections and make the appropriate applications.
28. Where there are double road gullies, the gully leads shall be connected onto separate pipe lengths.
29. There must be enough clearance at crossovers to accommodate bedding to both pipes, approx. 300mm : if crossover is near the rooker then the clearance needed may be increased.

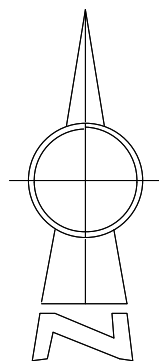
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SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES	
DO NOT SCALE	ORIGINAL DRAWING SIZE A1

KEY

- | | |
|---|--|
| ?? ?? | Finished Floor Level |
|  | Surface Water Manhole |
|  | Foul Water Manhole |
|  | Combined Water Manhole |
|  | Surface Water Demarcation Chamber |
|  | Private Foul Water Demarcation Chamber |
|  | Surface Water Sewer |
|  | Foul Water Sewer |
|  | Combined Water Sewer |
|  | Highway Drain |
|  | Existing Public Combined Sewer |
|  | Existing Public Surface Water Sewer |
|  | Existing Public Foul Water Sewer |
|  | Gully |
|  | Existing Gully |
|  | Easement |



FLOW CONTROL DATA S8

MANUFACTURER	FP MCCANN
TELEPHONE	028 7964 2558
TYPE	STORM BRAKE
FLOW/HEAD	3.5 l/s @ 3.15
UNIT REF	FPM-SB1-03150-00350-0100-PR
To be installed in accordance with manufacturers specifications and recommendations before the manhole cover slab is installed	

F	LS	06.07.23	Aquaspira details updated	AB
E	LS	02.06.23	Updated to suit Yorkshire Water Comments	AB
D	LS	24.05.23	Updated to suit new layout	AB
C	ZA	04.05.23	Existing sewer added and gully lead revised	AB
B	AB	06.04.23	Updated to suit external works designs	AB
A	AB	10.03.23	S9-C2 updated	AB
/	AB	03.03.23	Issued for approval	WW
Rev	Bv	Date	Description	Chk

Client YORKSHIRE CHOICE HOMES

Project WESTFIELD LANE,
WYKE

Title SECTION 104 LAYOUT

Scale 1:250	Drawn AB	Checked WW	Date MARCH.23
Drawing Status			
APPROVAL			
Job No. 124.008	Drawing No. 03	Revision F	