

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F1	135.614		1 Lateral F1a	133.500	150	1200	Type B	D400
E. 418346.143	1.964		2 Lateral F1b	133.500	150			
N. 417960.419			0 1.000	133.500	150			
F2	137.264		1 1.000	133.020	150	1200	Type A	D400
E. 418334.387	4.094		2 Lateral F2a	133.020	150			
N. 418009.174			0 1.001	133.020	150			
F3	136.669		1 1.001	132.920	150	1200	Type A	D400
E. 418321.936	3.599							
N. 418007.238			0 1.002	132.920	150			
F4	135.810		1 1.002	132.814	150	1200	Type B	D400
E. 418308.160	2.846							
N. 418010.903			0 1.003	132.814	150			
F5	134.715		1 1.003	132.030	150	1350	Type B	D400
E. 418298.273	2.535		1 1.003	132.030	150			
N. 418019.892			2 Lateral F5b	133.030	150			
F6	131.643		1 1.004	128.720	150	1200	Type B	D400
E. 418278.268	2.773		2 Lateral F6b	128.720	150			
N. 418052.863			3 Lateral F6a	128.720	150			
			0 1.005	128.720	150			

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F7	129.885		1 1.005	128.518	150	1350	Type C	D400
E. 418258.861	1.217		2 Lateral F7a	129.518	150			
N. 418072.082			0 1.006	128.518	150			
F8	127.422		1 1.006	126.072	150	1350	Type C	D400
E. 418228.556	1.200		2 Lateral F8a	126.072	150			
N. 418040.168			0 1.007	126.072	150			
F9	126.452		1 1.007	125.071	150	1350	Type C	D400
E. 418224.715	1.231		2 Lateral F9a	125.071	150			
N. 418028.327			0 1.008	125.071	150			
F10	125.290		1 1.008	123.638	150	1200	Type B	D400
E. 418226.780	1.502		2 Lateral F10a	123.638	150			
N. 418013.399			0 1.009	123.638	150			
F11	125.963		1 1.009	123.325	150	1200	Type B	D400
E. 418248.333	2.488		2 Lateral F11a	123.325	150			
N. 417977.611			0 1.010	123.325	150			
F12	126.651		1 1.010	123.083	150	1200	Type A	D400
E. 418274.416	3.418							
N. 417957.911			0 1.011	123.074	150			

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F13	126.805		1 1.011	123.003	150	1200	Type A	D400
E. 418280.382	3.652		2 Lateral F13b	123.003	150			
N. 417948.937			3 Lateral F13a	123.003	150			
F14	123.862		1 1.012	120.900	150	1200	Type B	D400
E. 418285.932	2.812							
N. 417889.386			0 1.013	120.900	150			
F15	123.100		1 1.013	120.580	150	1200	Type B	D400
E. 418279.344	2.370		2 Lateral F15a	120.580	150			
N. 417878.959			0 1.014	120.580	150			
F16	122.056		1 1.014	119.300	150	1200	Type B	D400
E. 418258.139	2.606							
N. 417870.941			0 1.015	119.300	150			
F17	121.521		1 1.015	118.609	150	1200	Type A	D400
E. 418246.084	2.762		2 Lateral F17a	118.609	150			
N. 417862.756			0 1.016	118.609	150			
F18	115.367		1 1.016	111.901	150	1200	Type A	D400
E. 418185.155	3.316							
N. 417834.706			0 1.017	111.901	150			

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F19	112.562		1 1.017	108.576	150	1200	Type A	D400
E. 418152.092	3.836							
N. 417850.349			0 1.018	108.576	150			
F20	107.817		1 1.018	105.679	150	1200	Type B	D400
E. 418113.537	1.988							
N. 417823.311			0 1.019	105.679	150			
EX.FW.MH.	106.770		1 1.019	105.420	150	1350	Type C	D400
E. 418096.176	1.200							
N. 417826.464								

N O T E S

ATTENTION IS DRAWN TO THE REQUIREMENTS OF THE CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS 2015 AND THE DUTIES AND RESPONSIBILITIES CONTAINED THEREIN

- Yorkshire Water Notes**
- All adoptable sewer works and material to be in accordance with "Code for Adoption". The Relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
 - 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.
 - Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.
 - Yorkshire Water is not obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (directly or in-directly). 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 regarding the disposal of the filter drain/land drainage run-off.
 - The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
 - Sewers must have 5 metres clearance from trees and hedges or the width of the canopy of mature height.
 - 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 nonvehicular access areas) then a concrete slab should be provided above granular bed and surround.
 - Bedding and backfill material to conform to the requirement of Water Industry Specification 4-06-02 (Table A2).
 - Yorkshire Water policy is that Type "C" brick manholes and 1050mm diameter manhole rings are not preferred. Instead, it is preferred that you use a type "B" manhole with 1200mm diameter or 1500mm diameter rings, with the opening sited over the channel where depth of cover to pipe soffit is 1 – 1.5m.
 - Adoptable plastic sewer pipes to be BS1 Kitemarked (certified to WS 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 Yorkshire Water would require clay ware channel in manholes.
 - The minimum crushing strength for clay pipes should be as follows: 100mm dia. 40KN/m, 150mm dia. 40KN/m, 225mm dia. 45KN/m and 300mm dia. 72KN/m. The minimum crushing strength for concrete pipes should be – (Class 120 to EN 1916/BS5911–1 2002). Plastic pipes should conform to WS 4–35–01 and BS EN13476.
 - 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.
 - There must be enough clearance at crossovers to accommodate bedding to both pipes, approx. 300mm ; if crossover is near the rocker then the clearance needed may need to be increased.

General Notes

- Precast concrete manhole units shall comply with the relevant provisions of BS EN 1917 and BS 5911–3 and shall be manufactured from concrete with a Design Chemical Class DC–4 unless the sewerage company can be satisfied that a lower class will resist attack from soils and groundwater. Units which bed into bases shall be manufactured so that imposed vertical loads are transmitted directly via the full wall thickness of the unit. The profiles of joints between units and the underside of slabs shall be capable of withstanding applied loadings from such slabs and spigot–ended sections shall only be used where the soffit of the slab is recessed to receive them.
- All levels of existing drainage to be confirmed prior to work commencing on site.
- The contractor must allow for any fee's required for road and sewer opening permits, sewer connections and make the appropriate applications.

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES

A	IC	05.06.26	Updated to suit road and FFL updates.	MI	MI
/	IC	14.11.25	Preliminary issue	MI	MI
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TITLE		
MANHOLE SCHEDULE FOUL WATER		
PROJECT		
COCKLEY HILL, KIRKHEATON		
CLIENT		
GLEESON HOMES		
DRAWING STATUS		
FOR APPROVAL		
Scale	Date	Drawn
NTS	NOV 25	IC
	Chk.	MI
Drg. No.	Rev	
2298/03/11.02	A	

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