Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F1	136.198		1 Lateral F1a 2 Lateral F1b	134.200 134.200	150 150	1200	Type B	D400
E. 418346.143	1.848		0 1.000	134.200	150			
N. 417960.419								
F2	137.686		1 1.000 2 Lateral F2a	133.573 135.073	150 150	1200	Type A	D400
E. 418334.387	3.963		0 1.001	133.573	150			
N. 418009.174								
F3	137.111		1 1.001	133.480	150	1200	Type A	D400
E. 418321.936	3.481		0 1.002	133.480	150			
N. 418007.238								
F4	136.340		1 1.002	133.374	150	1200	Type B	D400
E. 418308.160	2.816		0 1.003	133.374	150			
N. 418010.903								
F5	135.427		1 1.003 1 1.003 2 Lateral F5b 3 Lateral F5a	132.787 132.787 133.787 133.787	150 150 150 150	1350	Type B	D400
E. 418298.273	2.490		0 1.004	132.787	150			
N. 418019.892								
F6	132.873		1 1.004 2 Lateral F6b 3 Lateral F6a	130.037 130.037 130.037	150 150 150	1200	Type B	D400
E. 418278.268	2.686		0 1.005	130.037	150			
N. 418052.863								

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F7	131.385		1 1.005 2 Lateral F7a	128.007 129.507	150 150	1200	Type A	D400
E. 418258.861	3.228		0 1.006	128.007	150			
N. 418072.082								
F8	129.190		1 1.006 2 Lateral F8a	126.023 127.423	150 150	1200	Type A	D400
E. 418228.556	3.017		0 1.007	126.023	150			
N. 418040.168								
F9	128.383		1 1.007 2 Lateral F9a	125.066 126.566	150 150	1200	Type A	D400
E. 418224.715	3.167		0 1.008	125.066	150			
N. 418028.327								
F10	127.406		1 1.008 2 Lateral F10a	123.625 125.125	150 150	1200	Type A	D400
E. 418226.780	3.631		0 1.009	123.625	150			
N. 418013.399								
F11	127.364		1 1.009 2 Lateral F11a	123.316 123.316	150 150	1200	Type A	D400
E. 418248.333	3.898		0 1.010	123.316	150			
N. 417977.611								
F12	127.851		1 1.010	123.074	150	1200	Type A	D400
E. 418274.416	4.627		0 1.011	123.074	150			
N. 417957.911								

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F13	127.888		1 1.011 2 Lateral F13b 3 Lateral F13a	122.994 124.494 124.494	150 150 150	1200	Type A	D400
E. 418280.382	4.744		0 1.012	122.994	150			
N. 417948.937								
F14	124.207		1 1.012	122.066	150	1200	Type B	D400
E. 418285.932	1.991		0 1.013	122.066	150			
N. 417889.386								
F15	123.357		1 1.013 2 Lateral F15a	120.833 122.133	150 150	1200	Type B	D400
E. 418279.344	2.374		0 1.014	120.833	150			
N. 417878.959								
F16	122.058		1 1.014	118.566	150	1200	Type A	D400
E. 418258.139	3.342		0 1.015	118.566	150			
N. 417870.941								
F17	121.521		1 1.015 2 Lateral F17a	117.109 118.609	150 150	1200	Type A	D400
E. 418246.084	4.262		0 1.016	117.109	150			
N. 417862.756								
F18	115.367		1 1.016	110.401	150	1200	Type A	D400
E. 418185.155	4.816		0 1.017	110.401	150			
N. 417834.706								

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F19	112.562		1 1.017	107.076	150	1200	Type A	D400
E. 418152.092	5.336		0 1.018	107.076	150			
N. 417850.349								
F20	107.817		1 1.018	105.200	150	1200	Type B	D400
E. 418113.537	2.467		0 1.019	105.200	150			
N. 417823.311								
F21	106.770		1 1.019	104.800	150	1200	Type B	D400
E. 418096.176	1.820							
N. 417826.464								

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES

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

1. 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.
2. 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.
3. Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.
4. 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.
5. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
6. Sewers must have 5 metres clearance from trees and hedges or the width of the canopy at mature height.
7. 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.
8. Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
9. 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.
10. 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 Yorkshire Water would require clay ware channel in manholes.
11. 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 WIS 4-35-01 and BS EN13476.
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. 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

14. 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.
15. All levels of existing drainage to be confirmed prior to work commencing on site.
16. 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

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/	IC	14.11.25	Preliminary issue	MI	MI

ARP ASSOCIATES
Chartered Consulting Engineers
Northwest House ● 5 & 6 Northwest Business Park ● Servia Hill, Leeds ● LS6 2QH
☎ 0113 245 8498 ✉ 0113 244 3864 ✉ leeds@arpassociates.co.uk ⊕ www.arpassociates.co.uk

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	/