

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
			Code	Inverts	Diams		Manhole	Cover
F1	182.900		1	1st lateral	180.750	150	1200	B
	2.150		0	1.000	180.750	150		
F2	180.915		1	1.000	177.582	150	1200	A
	3.333		0	1.001	177.582	150		
F3	181.461		1	1.001	177.270	150	1200	A
	4.191		2	1st lateral	178.750	150		
F4	181.835		1	1.002	176.952	150	1200	A
	4.883		0	1.003	176.952	150		
F5	180.900		1	1.003	175.636	150	2100	Specialist Manhole Construction Refer to drwg E19/7567/012-02 for details
	8.300		2	1st lateral	172.600	150		
F6	178.000		1	1.004	172.457	150	1200	A
	5.543		0	1.005	172.457	150		

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
			Code	Inverts	Diams		Manhole	Cover
F7	171.443		1	1.005	169.893	150	1200	A
	4.593		0	1.006	166.850	150		
F8	165.667		1	existing	164.200	300	1200	C
	1.317		2	1.006	164.350	150		
F9	165.667		1	existing	164.200	300	1200	C
	1.317		2	1.006	164.350	150		

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
			Code	Inverts	Diams		Manhole	Cover
S6a	177.000		0	overflow	173.300	450	1800	C
	1.500		0	storage	173.300	2200		
S6b	176.200		0	storage	173.412	2200	1200	C
	0.588		0	storage	173.412	2200		
S6c	176.200		0	storage	173.451	2200	1200	A
	0.549		0	storage	173.451	2200		
S6d	177.000		0	storage	173.435	2200	1200	A
	1.365		0	storage	173.435	2200		
S6e	180.500		1	overflow	173.278	450	2100	Specialist Manhole Construction Refer to drwg E19/7567/012-01 for details
	6.772		0	overflow	173.278	450		

1. ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH 'CODES 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 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 LOCAL AUTHORITY, LAND DRAINAGE SECTION WITH REGARD TO THE DISPOSAL OF THE FILTER DRAIN/LAND DRAINAGE RUNOFF.
5. COVER SLABS MUST CARRY THE BSI KITEMARK OR WILL BE REJECTED BY 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 CONCRETE PIPE SYSTEMS ASSOCIATION (CPSA), 'TECHNICAL BULLETIN' ISSUED AUTUMN 2004 FOR KITEMARKED COVER SLAB OPENING SIZES.
6. SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
7. THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERB FACES.
8. SEWERS MUST HAVE 5m CLEARANCE FROM TREES AND HEDGES
9. 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 175mm CONCRETE SLAB OVER SEWER SHALL BE PROVIDED.
10. ALL PIPEWORK 300mm DIAM. OR LESS TO BE VITRIFIED CLAY CONFORMING WITH BS 65. MINIMUM CRUSHING STRENGTHS TO BE AS FOLLOWS: 100mm DIA. 40kN/m, 150mm DIA 40kN/m, 225mm DIA 45kN/m, 300mm DIA 72kN/m.
11. ALL PIPEWORK 375mm DIAM. OR GREATER TO BE CONCRETE CLASS 120 TO EN 1916/ BS 5911-1: 2002.
12. THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.
13. YORKSHIRE WATER POLICY IS NOT TO ACCEPT TYPE 'C' BRICK MANHOLES AND 1050mm DIAM. MANHOLE RINGS. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE 'B' MANHOLE WITH 1200mm DIAM. OR 1500mm DIAM. RINGS, WITH THE OPENING SIGHTED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1-1.5m.
14. ALL HIGHWAY WORKS AND MATERIAL TO CONFORM WITH KIRKLEES COUNCIL DESIGN GUIDANCE AND SPECIFICATION.
15. GULLY COVER AND FRAMES SHALL BE D400 DUCTILE IRON AND COMPLY WITH EUROPEAN STANDARD BS EN 124. THOSE SIGHTED IN ACCESSWAYS AND MEWS COURTS MUST BE SUITABLE FOR USE IN PEDESTRIAN AREAS
16. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-2 (TABLE A2).
17. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WOULD PREFER CLAYWARE CHANNELS IN MANHOLES. YORKSHIRE WATER HAVE FOUND THAT PLASTIC CHANNELS ARE DIFFICULT TO SET IN CONCRETE AS THEY FLOAT AND A SATISFACTORY FINISH CANNOT BE OBTAINED ON BENCHING.
18. 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.
19. THERE SHOULD BE ENOUGH CLEARANCE TO ACCOMMODATE THE BEDDING FOR BOTH PIPES, APPROX 300mm : IF CROSSOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY BE INCREASED.

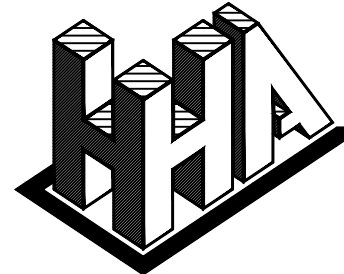
Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
			Code	Inverts	Diams		Manhole	Cover
S1 HIGHWAY	184.050		0	gully	182.504	150	1200	C
	1.621		0	1.000	182.429	225		
S2	182.772		1	1.000	181.200	225	1200	C
	1.572		2	1st lateral	181.350	150		
S3	180.961		1	1.001	181.200	300	1500	A
	4.461		0	1.002	176.500	375		
S4	181.501		1	1.002	176.232	375	1500	A
	5.344		2	1st lateral	179.150	150		
S5	181.971		1	1.003	175.869	450	2100	A
	6.102		2	1st lateral	179.600	150		
S6	181.743		1	1.004	175.869	450	2100	Specialist Manhole Construction Refer to drwg E19/7567/012-01 for details
	8.353		2	overflow	176.120	450		
S7	181.743		1	1.005	173.220	450	2100	Specialist Manhole Construction Refer to drwg E19/7567/012-01 for details
	8.353		2	overflow	176.120	450		

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
			Code	Inverts	Diams		Manhole	Cover
S7 HYDROBRAKE	181.342		1	1.005	173.180	450	2400	Specialist Manhole Construction Refer to drwg E19/7567/011 for details
	8.212		2	gully	173.480	150		
S8 (not adopted by YW)	179.000		1	1.006	173.130	225	1800	A
	6.075		0	1.006	173.000	225		
S9	179.000		1	1.006	173.000	225	1800	A
	6.075		0	1.006	173.000	225		

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
			Code	Inverts	Diams		Manhole	Cover
S10 HIGHWAY	183.220		1	gully	181.600	150	1200	C
	1.695		0	1.000	181.525	225		
S11 HIGHWAY	182.537		1	1.000	180.525	225	1200	B
	2.012		0	1.001	180.505	225		
S12 HIGHWAY	181.710		1	2.000	179.472	225	1200	B
	2.238		2	1.001	179.472	225		
S13	180.800		1	1.002	177.135	225	2100	Specialist Manhole Construction Refer to drwg E19/7567/012-01 for details
	7.367		2	gully	177.210	150		
S14 HYDROBRAKE	179.175		1	1.003	173.300	1500	2400	Specialist Manhole Construction Refer to drwg E19/7567/011 for details
	5.925		2	1st lateral	174.650	150		
S15	178.600		1	1.004	173.081	150	1500	A
	5.519		0	1.005	173.081	150		

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
			Code	Inverts	Diams		Manhole	Cover
C16	175.850		1	1.005	172.911	150	1200	A
	2.939		2	1st lateral	174.550	150		
ExMH	173.430		1	1.006	172.911	150	1500	B
	2.900		2	1.006	172.911	150		
S18 HIGHWAY	181.348		1	1.006	170.605	150	1200	C
	1.548		2	existing	170.530	225		
S19	181.348		1	1.006	170.605	150	1200	C
	1.548		2	existing	170.530	225		

- Rev H. C16 & ExMH amended to suit as built levels 22.11.24 HH
Rev G. Gully connections to S1, S10 & S18 amended 11.10.24 HH
Rev F. Drwg no. added to manhole S6e 10.10.24 HH
Rev E. Manhole greater than 6m amended. FWS amended to suit latest design 26.09.24 HH
Attenuation access details added to suit manufacturers design.
Rev D. S1, S10-S13 & S18 amended to suit Kirklees comments 30.08.24 HH
Rev C. F1 and C16 amended 09.07.24 HH
Rev B. S14 & F5 amended 14.02.24 HH
Rev A. Proposed drainage design updated 13.02.24 HH



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Client
SB HOMES

Project
LINGARD ROAD, SLAITHWAITE

Detail
MANHOLE SCHEDULE

Dwn Chkd Date Scale Dwg No.
HH AUG-23 NTS@A1 E19/7567/007H