

SURFACE WATER MANHOLE SCHEDULE

Sheet 1 of 2

	Manhole		Connections	Pipe			Manhole Size	Types			
	Number	Cover Level		Code	Inverts	Dimensions (mm)		Manhole	Cover		
Highway Drain	S1			1 2	Lateral Lateral	115.725 115.725	150 150	1500	C	D400	
	E.	414569.274									
	N.	415416.050		0	1.000	115.650	225				
	S2			1 2 3	1.000 Lateral Lateral	113.300 113.375 113.375	225 150 150	1200	B	D400	
	E.	414597.574									
	N.	415399.309		0	1.001	113.300	225				
	S3			1 2	1.001 Lateral	109.500 109.575	225 150	1500	C	D400	
	E.	414640.145									
	N.	415374.127		0	1.002	109.425	300				
Attenuation Tank	S4							1500	C	D400	
	E.	414668.301									
	N.	415393.626		0	2.000	108.250	150				
Attenuation Tank	S5			1	1.002	108.775	300	1500	C	D400	
	E.	414656.016									
	N.	415385.919		0	1.003	108.700	375				
Attenuation Tank	S6_IN			1	1.003	108.650	375	ATTENUATION TANK INLET			
	E.	414650.432									
	N.	415394.818		0	1.004	106.850	TANK				
Attenuation Tank	S6				Carlow Concrete Attenuation tank			ACCESS COVER 1220 x 675	See Carlow Concrete DWG STS3273-001 to STS3272-007	D400	
	E.	414649.399									
	N.	415395.429				106.824	TANK				
Attenuation Tank	S7				Carlow Concrete Attenuation tank			ACCESS COVER 1220 x 675	See Carlow Concrete DWG STS3273-001 to STS3272-007	D400	
	E.	414643.652									
	N.	415464.958				106.803	TANK				
Attenuation Tank	S7_OUT			1	1.004	106.800	TANK	ATTENUATION TANK OUTLET			
	E.	414644.288									
	N.	415401.937		0	1.005	106.800	450				
Flow Control Manhole	S8_FC			1 2	1.005 2.000	106.750 107.050	450 150	5.0 l/s @ 2.200m SHE-0089-5000-2200-5000 HYDROBRAKE MANHOLE MANHOLE DIA 1800mm			
	E.	414646.579									
	N.	415405.811		0	1.006	106.700	225				

SURFACE WATER MANHOLE SCHEDULE

Sheet 2 of 2

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
	Depth To Soffit		Code	Inverts	Dimensions (mm)		Manhole	Cover
S9	111.400		1	1.006	106.615	225	1200	A
E. 414640.852	4.560							
N. 415417.046			0	1.007	106.615	225		
S10	111.696		1	1.008	106.015	225	1200	A
E. 414562.872	5.471							
N. 415461.982			0	1.009	106.015	225		
S11	107.202		1	1.009	105.744	225	1500	C
E. 414582.069	1.233							
N. 415494.640			0	1.010	105.744	225		
S7A	111.300						ACCESS COVER 900 x 600	See Carlow Concrete DWG STS3273-001 to STS3272-007
E. 414639.831	4.111			Carlow Concrete Attenuation tank	106.939	TANK		
N. 415388.047								
S7B	111.300						ACCESS COVER 900 x 600	See Carlow Concrete DWG STS3273-001 to STS3272-007
E. 414635.906	4.120			Carlow Concrete Attenuation tank	106.930	TANK		
N. 415390.369								
C1	106.896		1 2	EX COMB 1.010	105.600 105.675	300 225	JUNCTION	
E. 414582.666	0.996							
N. 415498.790			0	EX COMB	105.600	300		

FOUL WATER MANHOLE SCHEDULE

Sheet 1 of 1

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F1	116.937		1 2	Lateral	114.950 114.950	150 150	1200	B
E. 414572.857	1.837							
N. 415411.688			0	1.000	114.950	150		
F2	112.580		1 2	1.000 Lateral	111.200 111.200	150 150	1500	C
E. 414627.493	1.230							
N. 415379.869			0	1.001	111.200	150		
F3	111.350		1	1.001	110.000	150	1500	C
E. 414643.780	1.200							
N. 415407.413			0	1.002	110.000	150		
F4	111.450		1	1.002	109.882	150	1500	C
E. 414636.725	1.418							
N. 415420.964			0	1.003	109.882	150		
F5	111.400		1	1.003	109.246	150	1200	B
E. 414565.956	2.004							
N. 415463.706			0	1.004	109.246	150		
C2	110.550		1 2	EX COMB 1.004	108.930 109.080	300 150	JUNCTION	
E. 414565.926	1.320							
N. 415472.127			0	EX COMB	108.930	300		

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 at 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 4-08-02 (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.

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES

J	JMG	04.02.25	Updated to suit Yorkshire Water Comments	MD	MI
H	MD	16.01.25	Updated to suit Yorkshire Water Comments	MI	MI
G	MD	16.12.24	MH details revised to offsite drainage layout.	MI	MI
F	MD	29.05.24	MH details revised to new drainage layout	MI	MI
E	RJ	23.06.22	Manhole details updated	MI	MI
D	RJ	13.05.22	Amended to new site layout	MI	MI
C	RJ	14.03.22	Amended to suit section 104 comments	MI	MI
B	MB	04.11.21	Amended to suit section 104 comments	MI	MI
A	BHB	07.06.21	Amended to Yorkshire Water Comments	RJ	MI
/	JG	12.04.21	Preliminary	RJ	MI
Rev	By	Date	Revision	Chk	Apd

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TITLE	
MANHOLE SCHEDULE	
PROJECT	
PLANE STREET, HUDDERSFIELD	
CLIENT	
UNITY HOUSING ASSOCIATION	
DRAWING STATUS	
FOR APPROVAL	
Scale	Date
NTS	APR 21
Drawn	RJ
Chk.	MI
Drg. No.	Rev
0257/05/11.00	J

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES