



Wokingham Major Highways Programme - South Wokingham Distributor Road (SWDR) - Western Gateway Phase 2 (WG2)

Specification Appendices - Drainage Schedule

WMHP-TG-WG2-SH-DD-0501

(Revision P02, Date 30/07/2021)

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Wokingham Borough Council

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APPENDIX 5/1 - DRAINAGE SCHEDULES

1 Manholes and Catchpits

Notes:

- Chamber depth identified does not include the sump. The minimum sump depth for catchpits shall be 300mm, except where noted.
- Gully connections are not defined within the chamber schedule.
- C – Carrier, F – Filter.

1.1 TW Network

Chamber Reference	Coordinates		Drawing No.: WMHP-TG-WG2-DR-DD-	Cover Level	Chamber Depth (m)	MH Diameter							Additional Notes
	x	y				L*W							
						Pipe Out			Pipe In				
						Dia (mm)	Pipe No.	US IL	Dia (mm)	Pipe No.	DS IL	Dia (mm)	
C1-1.000	480765.457	167788.445	0501	54.534	1.425	1200	PN 1-1.000-F	53.109	225				Catchpit access with solid cover, D400 minimum, 675x675 mm opening
C1-2.000	480802.064	167788.932	0501	54.255	1.565	1200	PN 1-2.000-F	52.690	225				Catchpit access with solid cover, D400 minimum, 675x675 mm opening
C1-2.001	480790.191	167793.097	0501	54.419	1.804	1200	PN 1-2.001-C	52.615	225	PN 1-2.000-F	52.615	225	Catchpit access with solid cover, D400 minimum, 675x675 mm opening

C1-3.000	480802.306	167804.444	0501	54.162	1.425	1200	PN 1-3.000-F	52.737	225				Catchpit access with solid cover, D400 minimum, 675x675 mm opening
C1-2.002	480786.287	167804.054	0501	54.344	2.060	1350	PN 1-2.002-F	52.285	450	PN 1-2.001-C	52.510	225	Catchpit access with solid cover, D400 minimum, 675x675 mm opening
										PN 1-3.000-F	52.510	225	Catchpit access with solid cover, D400 minimum, 675x675 mm opening
C1-2.003	480767.720	167812.198	0501	53.849	1.656	1350	PN 1-2.003-C	52.193	225	PN 1-2.002-F	52.193	450	Catchpit access with solid cover, D400 minimum, 675x675 mm opening
C1-1.001	480754.937	167809.548	0501	53.660	2.543	1800	PN 1-1.001-F	51.117	750	PN 1-1.000-F	51.642	225	Catchpit access with solid cover, D400 minimum, 675x675 mm opening
										PN 1-2.003-C	51.642	225	Catchpit access with solid cover, D400 minimum, 675x675 mm opening
C1-1.002	480746.117	167820.079	0501	52.920	1.849	1800	PN 1-1.002-F	51.071	750	PN 1-1.001-F	51.071	750	Catchpit access with solid cover, D400 minimum, 675x675 mm opening
C1-1.003	480731.327	167829.523	0501	52.323	1.310	1800	PN 1-1.003-F	51.013	450	PN 1-1.002-F	51.013	750	Catchpit access with solid cover, D400 minimum, 675x675 mm opening
C1-1.004	480702.244	167841.233	0501	51.900	0.992	1500	PN 1-1.004-F	50.908	450	PN 1-1.003-F	50.908	450	Vortex flow control chamber with Hydrobrake (see drawing no. WMHP-TG-WG2-DR-DD-0511)
C1-1.005	480700.452	167842.734	0501	51.950	1.050	1350		OUTFALL		PN 1-1.004-F	50.900	450	Catchpit access with solid cover, D400 minimum, 675x675 mm opening

1.2 WBC Network

Proposed CKD outlets and gullies to connect to existing carrier pipe as per drawing no. WMHP-TG-WG2-DR-DD-0501.

2 Pipe lengths and beddings

Notes:

- Bedding type for carrier pipes to be Z beneath carriageway if less than 1.2m cover and S, T beneath verge. Pipe lengths are indicative only.
- All pipe bedding classes shall be in accordance with the MCHW Volume 3 Highway Construction Detail drawings F1 & F2.
- Backfill for carrier drains shall be in accordance with SHW Clause 505.2. Under existing and proposed roads this shall be taken to the underside of formation and the remainder brought up with the required thickness of sub-base and asphaltic concrete.
- Pipe Types – Carrier, Filter or Combined. Combined pipe type refers to a combined surface and subsurface drain i.e. collection from gully chambers and subsurface filter drains.

2.1 TW Network

Pipe Number	Dia (mm)	Length (m)	Pipe Type	Pipe Material	Bedding Class
PN 1-1.000	225	23.580	Combined	PVCu Thermoplastic	H, K, M or I
PN 1-2.000	225	12.583	Combined	PVCu Thermoplastic	H, K, M or I
PN 1-2.001	225	11.632	Carrier Pipe	PVCu Thermoplastic	S,T
PN 1-3.000	225	16.024	Combined	PVCu Thermoplastic	H, K, M or I
PN 1-2.002	450	20.275	Combined	PVCu Thermoplastic	H, K, M or I
PN 1-2.003	225	13.055	Carrier Pipe	PVCu Thermoplastic	S,T
PN 1-1.001	750	13.737	Combined	PVCu Thermoplastic	H, K, M or I
PN 1-1.002	750	17.548	Combined	PVCu Thermoplastic	H, K, M or I
PN 1-1.003	450	31.352	Combined	PVCu Thermoplastic	H, K, M or I
PN 1-1.004	450	2.338	Carrier Pipe	PVCu Thermoplastic	Z
PN 1-1.005	300	2 approx.	Carrier Pipe	PVCu Thermoplastic	S,T

3 Road Gullies

3.1 TW Network

Gully Reference	Co-ordinates		Min outlet Dia (mm)
	x	y	
GU1-01A	480756.706	167801.514	150
GU1-01	480766.301	167790.111	150
GU1-02	480758.412	167805.989	150
GU1-03	480743.013	167824.307	150
GU1-04	480728.511	167832.510	150
GU1-05	480741.745	167833.946	150
GU1-06	480761.200	167819.723	150
GU1-07	480767.550	167810.530	150
GU1-08	480777.656	167802.861	150
PGU1-01	480761.579	167826.336	150
PGU1-02	480780.259	167818.236	150

3.2 WBC Network

Gully Reference	Co-ordinates		Min outlet Dia (mm)
	x	y	
GU2-01	480814.783	167804.702	150
GU2-02	480821.325	167805.448	150
GU2-03	480826.546	167806.926	150
GU2-04	480826.204	167793.556	150
PGU2-01	480832.896	167795.424	150

4 Combined Kerbs and Drainage Systems

Kerb Reference	String	Chainage		Combined Kerb and Drainage Unit
		Start	End	
CKD01	South West Kerbline	3.6	47.9	ACO Kerbdrain HB 255
CKD02	North Kerbline	27.5	51.5	ACO Kerbdrain HB 255
CKD03	East Kerbline	0	38.5	ACO Kerbdrain HB 255
CKD05	Roundabout Island (chainage from HP in clockwise direction)	0	49.5	ACO Kerbdrain HB 305
CKD06	Roundabout Island (chainage from HP in clockwise direction)	75.3	49.5	ACO Kerbdrain HB 305

Outlet Reference	Co-ordinates		Min outlet Dia (mm)
	x	y	
OUT01	480770.743	167781.197	225
OUT02	480804.626	167803.732	225
OUT03	480819.266	167788.213	225
OUT05	480803.061	167789.626	225