

DWG No. 231664/510/02

| FOUL MANHOLE SCHEDULE | | | | | | | | FOUL PIPE SCHEDULE | | | | | | | | | |
|-----------------------|----------------------|-------------|-------------|---------|--|--|----------|--------------------|----------|----------|-------|----------|----------|------------------|-----------------|--------------------|-------------------|
| MH Ref | MH Internal Diameter | Cover Level | Depth of MH | MH Type | MH Cover | Pipe Connections | Comments | Pipe Name | Diameter | Length | Slope | Material | Pipe Bed | Upstream Manhole | Upstream Invert | Downstream Manhole | Downstream Invert |
| FW 1 | 450 mm | 52.150 m | 0.720 m | PVC | Min Opening 430 x 430 Grade B125 | No of pipe connections 4 FW 1.00 100 mm Dia IL=51.430 m FW 2.00 100 mm Dia IL=51.430 m FW 3.00 100 mm Dia IL=51.430 m FW 1.01 100 mm Dia IL=51.430 m | | FW 1.00 | 100 mm | 2.254 m | 1:32 | PVC | Class S | Gully | 51.500 m | FW 1 | 51.430 m |
| | | | | | | | | FW 1.01 | 100 mm | 4.220 m | 1:38 | PVC | Class S | FW 1 | 51.430 m | FW 2 | 51.320 m |
| | | | | | | | | FW 1.02 | 100 mm | 2.532 m | 1:39 | PVC | Class S | FW 2 | 51.320 m | FW 3 | 51.255 m |
| FW 2 | 450 mm | 52.150 m | 0.830 m | PVC | Min Opening 430 x 430 Grade B125 | No of pipe connections 4 FW 1.01 100 mm Dia IL=51.320 m FW 4.00 100 mm Dia IL=51.320 m FW 5.00 100 mm Dia IL=51.320 m FW 1.02 100 mm Dia IL=51.320 m | | FW 1.03 | 100 mm | 13.167 m | 1:39 | PVC | Class S | FW 3 | 51.255 m | FW 4 | 50.920 m |
| | | | | | | | | FW 1.04 | 100 mm | 11.695 m | 1:19 | PVC | Class S | FW 4 | 50.920 m | MH 4 | 50.300 m |
| | | | | | | | | FW 2.00 | 100 mm | 2.623 m | 1:37 | PVC | Class S | SVP04 | 51.500 m | FW 1 | 51.430 m |
| FW 3 | 450 mm | 52.063 m | 0.808 m | PVC | Min Opening 430 x 430 Grade B125 | No of pipe connections 2 FW 1.02 100 mm Dia IL=51.255 m FW 1.03 100 mm Dia IL=51.255 m | | FW 3.00 | 100 mm | 1.075 m | 1:15 | PVC | Class S | Gully | 51.500 m | FW 1 | 51.430 m |
| | | | | | | | | FW 4.00 | 100 mm | 2.711 m | 1:15 | PVC | Class S | SVP03 | 51.500 m | FW 2 | 51.320 m |
| | | | | | | | | FW 5.00 | 100 mm | 1.075 m | 1:6 | PVC | Class S | Gully | 51.500 m | FW 2 | 51.320 m |
| FW 4 | 450 mm | 51.975 m | 1.055 m | PVC | Min Opening 430 x 430 Grade D400 | No of pipe connections 4 FW 1.03 100 mm Dia IL=50.920 m FW 6.00 100 mm Dia IL=50.920 m FW 7.00 100 mm Dia IL=50.920 m FW 1.04 100 mm Dia IL=50.920 m | | FW 6.00 | 100 mm | 11.243 m | 1:19 | PVC | Class S | SVP02 | 51.500 m | FW 4 | 50.920 m |
| | | | | | | | | FW 7.00 | 100 mm | 11.143 m | 1:19 | PVC | Class S | SVP01 | 51.500 m | FW 4 | 50.920 m |
| | | | | | | | | | | | | | | | | | |

| SURFACE WATER MANHOLE SCHEDULE | | | | | | | | | SURFACE WATER PIPE SCHEDULE | | | | | | | | | |
|--------------------------------|----------------------|-------------|-------------|------------|---------------------------|-------------------------------------|---|--|-----------------------------|----------|----------|-------|----------|----------------|------------------|-----------------|--------------------|-------------------|
| MH Ref | MH Internal Diameter | Cover Level | Depth of MH | Sump Depth | MH Type | MH Cover | Pipe Connections | Comments | Pipe Name | Diameter | Length | Slope | Material | Pipe Bed | Upstream Manhole | Upstream Invert | Downstream Manhole | Downstream Invert |
| 5601 | 1,500 mm | 51.130 m | 0.960 m | 0.000 m | Existing | Existing | No of pipe connections 1 SW 1.07 100 mm Dia IL=50.170 m | Existing Thames Water manhole | SW 1.00 | 100 mm | 14.272 m | 1:95 | PVC | Class S | RWP | 51.600 m | SW 1 | 51.450 m |
| SW 1 | RWH Tank | 52.141 m | RWH Tank | RWH Tank | Rainwater Harvesting Tank | Min Opening 430 x 430 Grade B125 | No of pipe connections 3 SW 1.00 100 mm Dia IL=51.450 m SW 2.00 100 mm Dia IL=51.450 m SW 1.01 100 mm Dia IL=51.450 m | Rainwater Harvesting Tank for garden irrigation GRAF Platin flat tank or F-Line Flat Tank, min 3000 L storage | SW 1.01 | 100 mm | 2.474 m | 1:82 | PVC | Class S | SW 1 | 51.450 m | SW 2 | 51.420 m |
| | | | | | | | | | SW 1.02 | 100 mm | 19.247 m | 1:96 | PVC | Class S | SW 2 | 51.420 m | SW 3 | 51.220 m |
| | | | | | | | | | SW 1.03 | 100 mm | 10.742 m | 1:98 | PVC | Class S | SW 3 | 51.220 m | SW 5 | 51.110 m |
| SW 2 | 450 mm | 52.150 m | 0.730 m | 0.000 m | PVC | Min Opening 430 x 430 Grade B125 | No of pipe connections 2 SW 1.01 100 mm Dia IL=51.420 m SW 1.02 100 mm Dia IL=51.420 m | | SW 1.04 | 150 mm | 1.000 m | 1:50 | PVC | Class S | SW 5 | 50.770 m | Tank | 50.750 m |
| SW 3 | 450 mm | 51.993 m | 0.773 m | 0.000 m | PVC | Min Opening 430 x 430 Grade D400 | No of pipe connections 2 SW 1.02 100 mm Dia IL=51.220 m SW 1.03 100 mm Dia IL=51.220 m | | SW 1.04A | 150 mm | 1.000 m | 1:50 | PVC | Class S | SW 5 | 51.020 m | Tank | 51.000 m |
| | | | | | | | | | SW 1.05 | 150 mm | 1.000 m | 1:50 | PVC | Class S | Tank | 50.750 m | SW 6 | 50.730 m |
| | | | | | | | | SW 1.06 | 100 mm | 4.000 m | 1:33 | PVC | Class S | SW 6 (Orifice) | 50.730 m | SW 7 | 50.610 m | |
| SW 4 | 450 mm | 52.000 m | 0.540 m | 0.000 m | PVC | Min Opening 430 x 430 Grade B125 | No of pipe connections 2 SW 3.00 100 mm Dia IL=51.460 m SW 3.01 100 mm Dia IL=51.460 m | | SW 1.06A | 100 mm | 4.000 m | 1:33 | PVC | Class S | SW 6 | 51.370 m | SW 7 | 51.250 m |
| | | | | | | | | | SW 1.07 | 100 mm | 15.634 m | 1:36 | PVC | Class S | SW 7 | 50.610 m | 5601 | 50.170 m |
| | | | | | | | | | SW 2.00 | 100 mm | 3.824 m | 1:25 | PVC | Class S | RWP | 51.600 m | SW 1 | 51.450 m |
| SW 5 | 1,200 mm | 51.974 m | 1.504 m | 0.300 m | Concrete | Min Opening 600 x 600 Grade D400 | No of pipe connections 6 SW 1.03 100 mm Dia IL=51.110 m SW 3.01 100 mm Dia IL=51.370 m SW 4.00 100 mm Dia IL=51.500 m SW 5.00 100 mm Dia IL=51.525 m SW 1.04 150 mm Dia IL=50.770 m SW 1.04A 150 mm Dia IL=51.020 m | Catchpit | SW 3.00 | 100 mm | 11.148 m | 1:80 | PVC | Class S | RE | 51.600 m | SW 4 | 51.460 m |
| | | | | | | | | | SW 3.01 | 100 mm | 7.259 m | 1:81 | PVC | Class S | SW 4 | 51.460 m | SW 5 | 51.370 m |
| | | | | | | | | | SW 4.00 | 100 mm | 4.223 m | 1:42 | PVC | Class S | RWP | 51.600 m | SW 5 | 51.500 m |
| | | | | | | | | | SW 5.00 | 100 mm | 2.962 m | 1:39 | PVC | Class S | RWP | 51.600 m | SW 5 | 51.525 m |
| SW 6 | 1,200 mm | 51.878 m | 1.448 m | 0.300 m | Concrete | Min Opening 750 x 675 Grade D400 | No of pipe connections 5 SW 1.05 150 mm Dia IL=50.730 m SW 6.00 150 mm Dia IL=51.195 m SW 7.00 150 mm Dia IL=51.035 m SW 1.06 100 mm Dia IL=50.730 m SW 1.06A 100 mm Dia IL=51.370 m | Control Chamber 40mm Dia orifice on outlet SW 1.06 Pipe SW 1.06A to act as overflow | SW 6.00 | 150 mm | 4.096 m | 1:41 | PVC | Class S | ACO | 51.295 m | SW 6 | 51.195 m |
| | | | | | | | | | SW 7.00 | 150 mm | 5.503 m | 1:39 | PVC | Class S | ACO | 51.175 m | SW 6 | 51.035 m |
| | | | | | | | | | | | | | | | | | | |
| SW 7 | 450 mm | 51.928 m | 1.318 m | 0.000 m | PVC | Max Opening 300 x 300 Grade B125 | No of pipe connections 3 SW 1.06 100 mm Dia IL=50.610 m SW 1.06A 100 mm Dia IL=51.250 m SW 1.07 100 mm Dia IL=50.610 m | | | | | | | | | | | |

NOTES

1. All dimensions are in meters unless expressed otherwise and all levels are shown in meters above Ordnance Datum.
2. This drawing shall be read in conjunction with the drainage schedules and standard details.
3. All existing sewer routes are to be proved on site by the contractor and any discrepancies notified to engineer.
4. All sewers shall be constructed in accordance with Part H of the Building Regulations and Sewers for Adoption 7th Edition.
5. It is the contractors responsibility to ensure compliance with current building regulations and codes of practice.
6. Reference should be made to the structural engineers details for all aspects of foundation design and construction.
7. The contractor should check all dimensions on site. Any discrepancies shall be reported to the engineer immediately.
8. Connections to the adopted drainage authority sewers shall be made under the supervision of the authority. The contractor shall be responsible for obtaining the necessary consents required from the drainage authority.
9. Bed type B,F and N shall be used for rigid pipes. Bed type Z shall be used for all gully connections and pipes under proposed carriageways with less than 700mm cover. The concrete bed and surround is to extend to the side of the trench or be of minimum width and voids filled with well compacted selected backfill.
10. All precast concrete manhole units are to conform to B.S. 5911. Precast concrete cover slabs are to be heavy duty.
11. Downstream exit pipes of 600mm dia. and over should be fitted with heavy duty safety chains across their mouths.
12. Where large differential settlement is probable, several short lengths of pipe with flexible joints should be laid on either side of the chamber.
13. Where drains pass through foundations, a flexible joint should be provided within 150mm of the face of the structure.
14. Fast setting resin mortars may be used in lieu of cement mortar for bedding manhole frames where agreed with the Engineer to enable early cover loading.
15. The concrete base slab shall be 225mm minimum thickness for chambers up to 4500mm deep. Manholes over 4500mm deep require a slab 450mm thick.
16. All manholes over 2000mm deep are to be fitted with a "DANGER TEST FOR OXYGEN" sign
17. Appropriate measures (to be agreed with the district council's building control section) are to be taken to discourage rodent entry into the properties.
18. The contractor is to keep a record of any variations made on site, including the relocation of sewers or drains, so that an as built drawing can be prepared upon completion of the project.
19. Location of RWP's and SVP's to be confirmed by the architect, Sub Stacks shall not be used unless connected to a ventilated section of the sewer in accordance with Building Regulations.



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Drainage Layout
Manhole & Sewer Schedules

Sheet 2 of 3

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|---------|---------------|---------|--------|----------|--------|
| DRAWN | RS | CHECKED | KBL | APPROVED | KBL |
| DATE | May-23 | DATE | May-23 | DATE | May-23 |
| SCALE | N/A | PRJ No. | 231664 | SIZE | REV |
| DWG No. | 231664/510/02 | | | A1 | - |