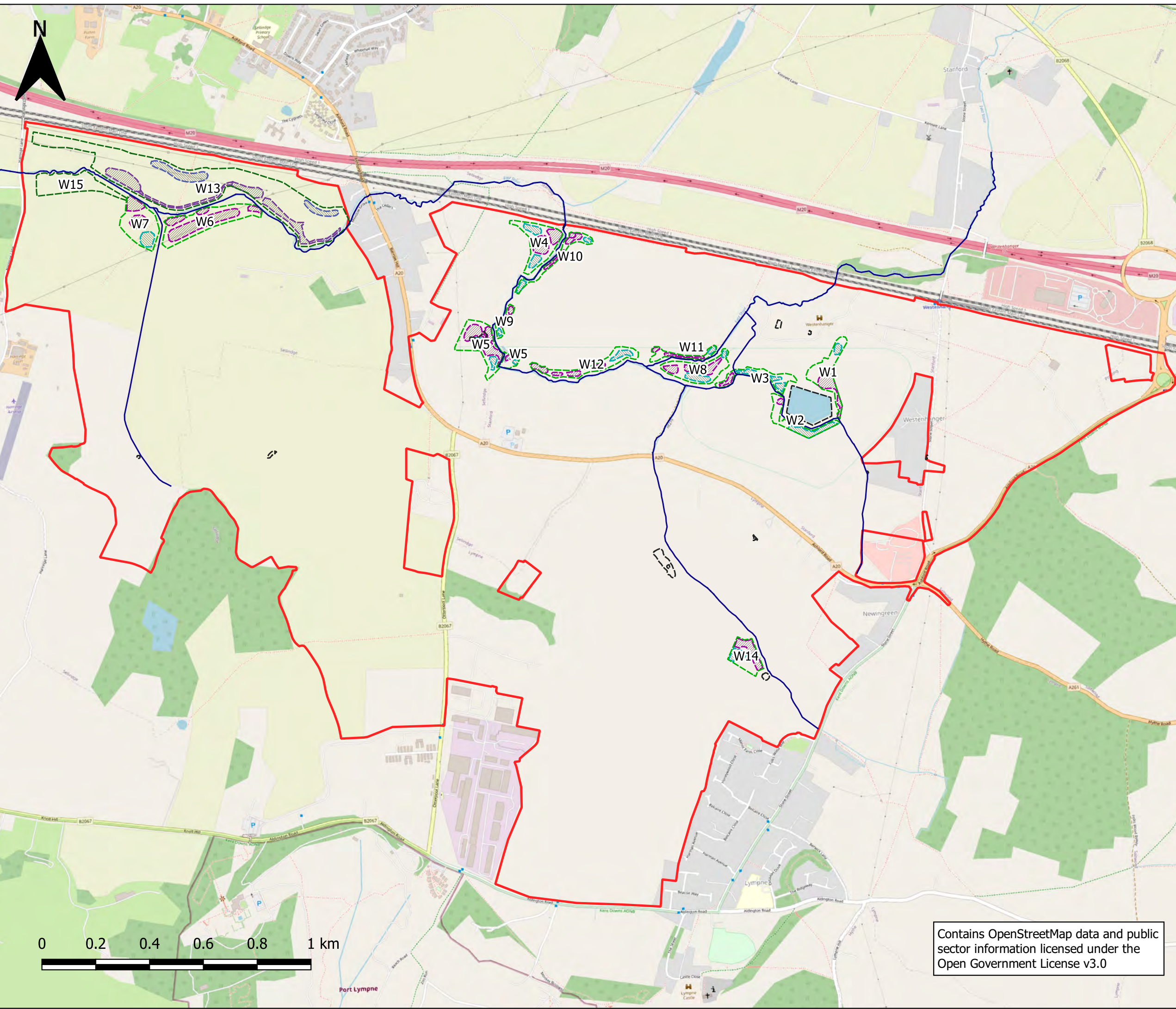


APPENDIX F

Nutrient Neutrality Mitigation Strategy



Legend

- OPA Site Boundary
- Modelled Watercourses
- Existing Ponds/ Lakes
- Proposed stormwater wetland outline
- Deep open water zone
- Open water zone
- Proposed wastewater wetland outline
- Deep open water zone
- Open water zone

Note:

- The nutrient mitigation requirements and mitigation proposals for the OPA and OFMA Development are fully detailed in Arcadis Water Cycle Report 10029956-AUK-XX-XX-RP-CW-0011-P3. This shows that a minimum of 11.7 ha of wastewater wetland area and 13.2 ha of stormwater wetland area would be required for the proposed total development in OFMA plus Sellindge Phase 2 Sites.
- Wastewater Wetland W15 is not required for the current OPA but it will be needed to accommodate the extra 1500 dwellings within the OFMA.
- The proposed nutrient mitigation strategy also includes a minimum of 35 ha of additional woodland planting as shown in the proposed structural planting drawing No. 10029956-AUK-XX-XX-DR-LA-0002-P1. Of these woodland, approximately 8 ha, is likely to be wet woodland planting.

Version	Date	Status	Author	Checker	Approver
P3	03/03/2022	FINAL	MG	RG	RG

80Fen
80 Fenchurch Street
London
EC3M 4BY

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Otterpool Park - Proposed Nutrient Neutrality Mitigation Strategy
10029956-AUK-XX-XX-DR-CW-0041-P3

scale	original size	datum	grid
1:12,500	A3	mAOD	OSGB 27700

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APPENDIX G

Severn Trent Connect Appointment Clarification Letter



OTTERPOOL PARK

COUNTRYSIDE · CONNECTED · CREATIVE

2nd December 2021

Dear Renuka

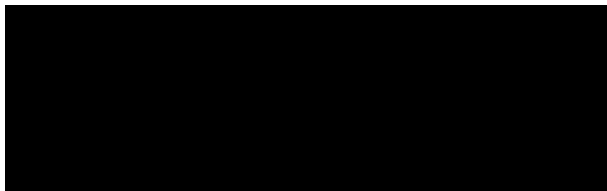
Otterpool Park Garden Town

This correspondence is to confirm that Otterpool Park LLP have appointed Severn Trent Connect to progress the onsite Otterpool WwTW feasibility studies, enhanced outline design and EA discharge permit application. The timeline we are working to is as follows,

- Water quality study to be completed by March 2022 with the final report due in April 2022
- Enhanced outline design due in March 2022
- EA permit application submission due by end of May 2022 (to be drafted during May after the results of the WQ study are available)
- EA permit granted in May 2023

The Ofwat application will then follow.

Yours sincerely



Gary Ridgewell
Construction Director

APPENDIX H

NUTREM® Process Overview



PLANTWORK SYSTEMS
INNOVATION BY NATURE

NUTREM® Process Overview



 **NUTREM**®

Developed by Plantwork Systems Ltd, the NUTREM® process is an advanced activated sludge process which can achieve exceptional levels of nutrient removal from wastewater **without any requirement for chemical dosing.**

Contact: Robert White

Email: robert.white@plantworksystems.com

Tel: +44 (0) 800 310 2073

www.plantworksystems.com



Overview

NUTREM® is an activated sludge process which has been developed to include the integration of advanced process control and configuration with the same basic principles founded by Arden & Lockett over 100 years ago.

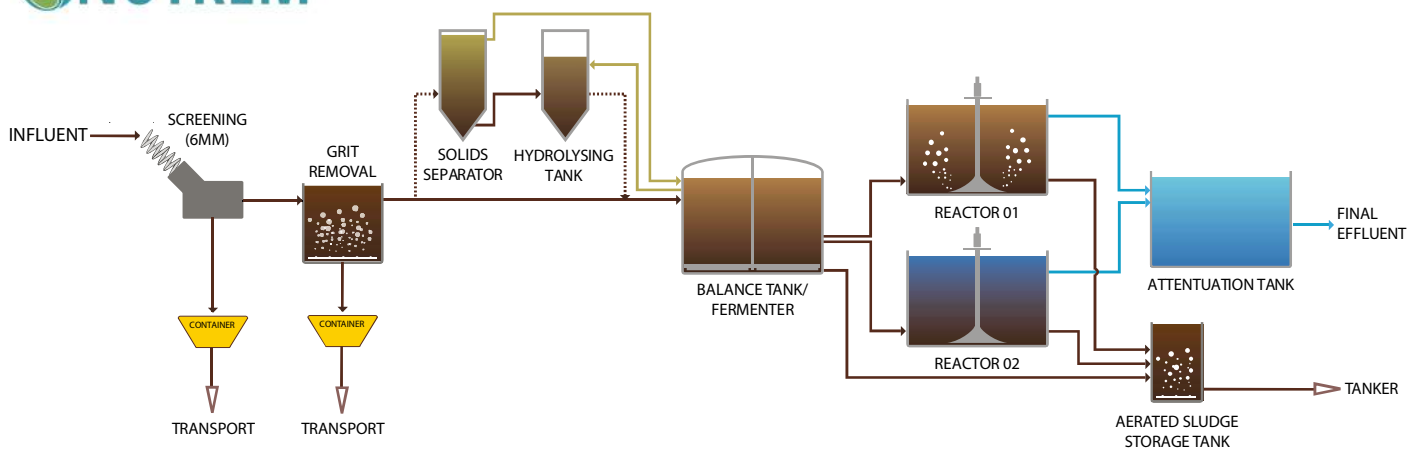
The process is the result of an evolution of our tried and tested Pure SBR technology, updated to meet the emerging needs of our environment.

The control philosophy and several key areas of the plant have been updated to create the perfect conditions for

biological nutrient removal (BNR). Online instrumentation monitors key parameters to maintain these conditions within the system whilst influent parameters vary due to weather and other external factors. This enables tight total phosphorus consents to be met all year round, without the need for chemical dosing.

In addition to the removal of nutrients from the wastewater, the general water quality produced by the system is excellent and offers end users the option to consider water reuse (with some additional disinfection) for their effluent.





General Process Description

The following section provides a general process overview of a NUTREM® system and is not site specific.

01 Inlet Flows

Wastewater can be delivered to the plant via either gravity or pumped sewer mains. Flows pass through 6mm screening and grit removal prior to arriving at the Balance Tank/Fermenter.

02 Balance Tank/Fermenter(s)

No primary settlement is required for the NUTREM® process – all load is delivered to the Balance Tank/Fermenter. The tank is covered and both the depth and settled sludge level are monitored. Tank contents are mixed periodically using a mixing pump located outside the tank. A sludge blanket monitor is used to detect the settled sludge level. If the monitor detects the top of the settled sludge layer then sludge is removed from the tank at preset intervals. Removal of sludge at this stage in the process serves two functions, firstly to maintain the settled sludge level in the tank to avoid excessive build up, and secondly to remove any rag and grit present at the bottom of the tank.

The Balance/Fermenter Tank serves two distinct purposes in the treatment cycle. Firstly, it is used to balance the incoming flows prior to being passed forward for processing in the Reactors. Its second function is to act as an anaerobic fermenter in which incoming rCOD is fermented to VFAs, mainly acetic and propionic. This is crucial to enable the PAOs present in the Reactors to release and then super absorb Phosphorus.

03 Booster System

Where site conditions require it, a hydrolysing system is installed alongside the Balance Tank/Fermenter to provide an offline VFA store for the process. This system includes a solids separation device and a hydrolysing tank.

A portion of the incoming raw sewage is pumped via the solids separation device and the sludge generated is transferred to the hydrolysing tank, whilst the supernatant is gravity fed to the Balance Tank/Fermenter. Liquid from the Balance Tank/Fermenter is pumped to the Hydrolysing Tank and mixed with the hydrolysing solids. A portion of the Hydrolysing Tank contents is then pumped back to the Balance Tank/Fermenter to boost fermentation.

04 Reactor(s)

The NUTREM® Reactors use simultaneous fill and decant, whereby the treated water is discharged using a piston effect created by the introduction of the fermented, raw, screened sewage. This influent is introduced at the bottom of the tank where it is gently mixed with the settled biomass using the hyperboloid mixer. The sludge blanket remains undisturbed, whilst the clean effluent in the top of the tank is discharged via the PWS Siphon Decanter.



During this anaerobic phase at the bottom of the Reactors, the PAOs store VFAs and release Phosphorus. On entering an aerobic treatment phase, they perform luxury uptake of Phosphorus meaning the PAOs absorb a greater amount

of Phosphorus than they released in the first phase of treatment. It is during the aerobic phase at the end of the treatment cycle that Phosphorus rich SAS is removed from the Reactor and transferred to the Aerated Sludge Storage Tank.



Once the fill/decant stage is complete, and the influent has had appropriate contact time with the biomass, the aerobic and anoxic treatment stages are carried out. During these treatment phases, simultaneous nitrification and de-nitrification is achieved using specific DO set points at different stages. A dedicated phase is included within the treatment cycle to ensure de-nitrification can occur, and, in prolonged periods of wet and/or cold weather, the SRT is automatically adjusted to ensure nitrification still occurs. The duration and timing of these phases are varied dependent on specific site conditions and permit requirements relating to which nutrient is being targeted for removal i.e. TP, TN or both.

05 Sludge Thickening

The sludge generated by the process can be thickened using either the PWS Static Sludge Thickener, or alternative sludge thickening equipment dependent on the target thickness required. Thickened sludge is held in the aerated sludge storage tank, whilst supernatant is returned to the head of works.

06 Aerated Sludge Storage Tank

Thickened sludge is stored within this tank and periodically aerated using a coarse bubble aeration grid to prevent the sludge thickening too much at the bottom of the tank and to prevent the sludge becoming septic and causing odour issues.

07 Final Effluent Discharge

The final effluent is discharged via gravity (where site hydraulics allow) from the reactor. The effluent flows through a sample chamber prior to discharging to the receiving water body.

08 Attenuation Tank (Optional)

Should there be a restriction on the discharge flow rate then an attenuation tank can be included. The level is monitored in the tank during discharge to ensure no risk of flooding is encountered if any blockages occur in the discharge pipework.

09 Final Effluent Disinfection and Polishing

Where appropriate, the discharge main to the receiving waters can be fitted with chlorination, ozonation or UV disinfection modules.

NUTREM® produces extremely good quality effluent and further polishing of the FE is not usually required. In cases where TP permit limits below 0.3mg/l are required, additional mechanical filtration units will be installed.

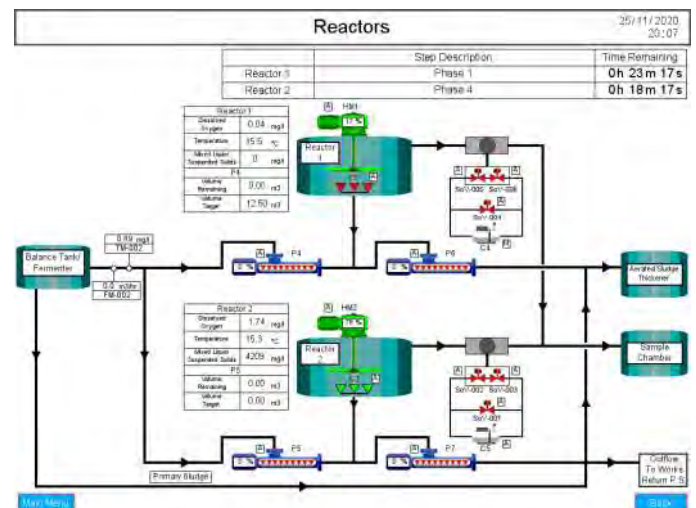
10 Control Kiosk and Panel

PWS install GRP kiosks to house the control panel and, on smaller facilities (<1,500PE), the pumps and other drives. The panel is supplied as standard with the facility to connect a generator in case of prolonged power failure, and a permanent back-up generator can also be installed if required. The kiosk includes lighting, ventilation, heating and baffle boxes for reducing any noise being omitted.

11 Alarm System and Remote Monitoring

NUTREM® plants can be controlled via a remote link to the SCADA system, and includes the use of IP (Internet Protocol) cameras to provide operators with an overview of all the key areas of the plant. This system makes the diagnosis (and in some cases the resolution) of certain issues possible without the need for engineers to attend site.

The screenshot below shows an example of a typical NUTREM® mimic display (control screen). Phase timings, equipment state, instrumentation readings and alarms are displayed on the screen. Multiple mimics depicting the different areas of the plant are then accessible via the main menu, as well as alarm pages and trends.



APPENDIX I

Outline Foul Water Drainage Strategy

Foul Water Design Statement and Criteria

Outline Foul Water Strategy

On-Site Pumping Station Calculations Output Summary

Micro Drainage Schedules of On-site Foul Water Network



DESIGN BASIS STATEMENT (Inc. sources of info/data, assumptions made, standards, etc.)

Source of Data:

1. British Water CoP - Flows and Loads - 4th Edition - Table of Loadings for Sewage Treatment Systems to get the per capita flow rates for various types of developments.

[https://arcadiso365.sharepoint.com/:b:/r/teams/project-10029956/Shared%20Documents/20%20Water/GIS/SHP/FW%20Drainage/Revised%20Design%20-%20Dec2020/British%20Water%20-%20Flows%20and%20Loads%2043%20\(March%202011\).pdf?csf=1&web=1&e=95ISvU](https://arcadiso365.sharepoint.com/:b:/r/teams/project-10029956/Shared%20Documents/20%20Water/GIS/SHP/FW%20Drainage/Revised%20Design%20-%20Dec2020/British%20Water%20-%20Flows%20and%20Loads%2043%20(March%202011).pdf?csf=1&web=1&e=95ISvU)

2. Farrells Otterpool Development yearly phases_10-09-20.xlsx - for getting the occupancy rates for various developments

https://arcadiso365.sharepoint.com/teams/project-10029956/Shared%20Documents/20%20Water/GIS/SHP/FW%20Drainage/Farrells%20Otterpool%20Development%20yearly%20phases_10-09-20.xlsx?web=1

3. Updated Development Accommodation Phasing - Issued 10/09/2020

<https://arcadiso365.sharepoint.com/teams/project-10029956/Shared%20Documents/Forms/AllItems.aspx?viewid=18bbd632%2D4141%2D4e19%2Dacfa%2D3d32d98fc3fe&id=%2Fteams%2Fproject%2D10029956%2FShared%20Documents%2F20%20Water%2FGIS%2FSHP%2FFW%20Drainage>

4. Hydraulic Design of Foul Sewer and Pumping station - From Design and Construction Guidance - Issued 10/03/2020

<https://arcadiso365.sharepoint.com/:b:/r/teams/project-10029956/Shared%20Documents/20%20Water/GIS/SHP/FW%20Drainage/Revised%20Design%20-%20Dec2020/SSG%20Appendix%20C-Design%20and%20Construction%20Guidance%20v2.pdf?csf=1&web=1&e=NbX92o>

5. Southern Water Developer Services – Modelling Criteria

<https://arcadiso365.sharepoint.com/:b:/r/teams/project-10029956/Shared%20Documents/20%20Water/GIS/SHP/FW%20Drainage/Revised%20Design%20-%20Dec2020/DS-Modelling-Criteria.pdf?csf=1&web=1&e=ZS2Dzc>

Assumptions:

Type of Development	NIA		Occupancy Rate			Flow per person/activity/day (unless otherwise specified)		Comments
	%	Unit	Rate	Value	Unit	Rate	Units	
A1 Retail	80%	of GIA	1 per	18	m ² NIA	50	l/p/d	
A2 business, A3 café restaurant, A4 pub,takeway	80%	of GIA	1 per	17	m ² NIA	50	l/p/d	Office / Factory without canteen
B8 Storage business park	95%	of GIA	1 per	81	m ² GIA	50	l/p/d	
B1 Commercial business park	80%	of GIA	1 per	12	m ² NIA	75	l/p/d	Water consumption assumes 50% with canteen (100 l/p/d) and 50% without canteen (50l/p/d) to give an average of 75l/p/d
B1 Commercial business in hubs	70%	of GIA	1 per	12	m ² NIA	50	l/p/d	
B2 Light Industrial business park	90%	of GIA	1 per	36	m ² GIA	60	l/p/d	
D1 Community Centre	80%	of GIA	1 per	100	m ² NIA	40	l/p/d	
D1 Health	80%	of GIA	1 per	30	m ² NIA	50	l/p/d	GEA = 1.1* GIA
D1 Nursery	80%	of GIA	Children + Employed	74	per school	90	l/p/d	Non-residential with canteen cooking on site
D1 Primary School	80%	of GIA	Children + Employed	460	per school	50	l/p/d	Non-residential without a canteen
D1 secondary schools exc GI	80%	of GIA	Children + Employed	1120	per school	90	l/p/d	Non-residential with canteen cooking on site
D2 Indoor sports hall	80%	of GIA	1 per	100	m ² NIA	40	l/p/d	GEA = 1.1* GIA
D2 Sports pavilion	80%	of GIA	1 per	100	m ² NIA	50	l/p/d	GEA = 1.1* GIA
C2, Extra Care Housing	80%	of GIA	1 per	100	m ² NIA	350	l/p/d	Residential old people / nursing - Not used
C1, Hotel	80%	occupancy	Occupant + 58 Employed	2	per room	250	l/p/d	
C1, Hotel	80%	occupancy	1 per	140	m ² NIA	250	l/p/d	
C3, Residential			Occupant	2.4	per dwelling	125	l/p/d	Applied for both C2 & C3 Housing

Hydraulic Design of Pumping Station - Design and Construction Guidance - Version 2.0 March 2020

D5.6 Hydraulic Design of Pumping Stations

1. The design flow rate of the pump units in foul pumping stations serving less than 500 dwellings should be at least the maximum of:

- half the incoming peak design flow rate (see Clause B3.1.1); and
- the flow rate required to achieve a minimum flow velocity in the rising main in accordance with D6.3.1.

For pumping stations serving more than 500 dwellings, the sewerage company should be consulted to determine the pump rate. 2. The pumping station design static head for the pump unit design flow rate should be based on the mid-point of the duty pump stop and start levels in the wet well. Calculations should be provided to confirm capacities of the pumping station based on the hydraulic design.

B3 HYDRAULIC DESIGN

B3.1 Foul Sewers and Lateral Drains

1. The peak design flow rates for dwellings should, at the discretion of the designer, be either:

- calculated in accordance with BS EN 12056-2 System II (this method is recommended for this application in BS EN 16933-2); or
- 4000 litres per dwelling per day (0.05 litres per second per dwelling). Note: This is a design peak flow rate not a daily average water usage, and represents the peak flow rate from a number of appliances. Reducing daily water usage does not necessarily reduce the peak flow rate.

D6.3 Hydraulic Design

1. The diameter of the rising main should be such that the velocity of the discharge is in the range 0.75–1.8 m per second when the pump unit is operating.

Emergency Storage Requirement

D5.5 Storage

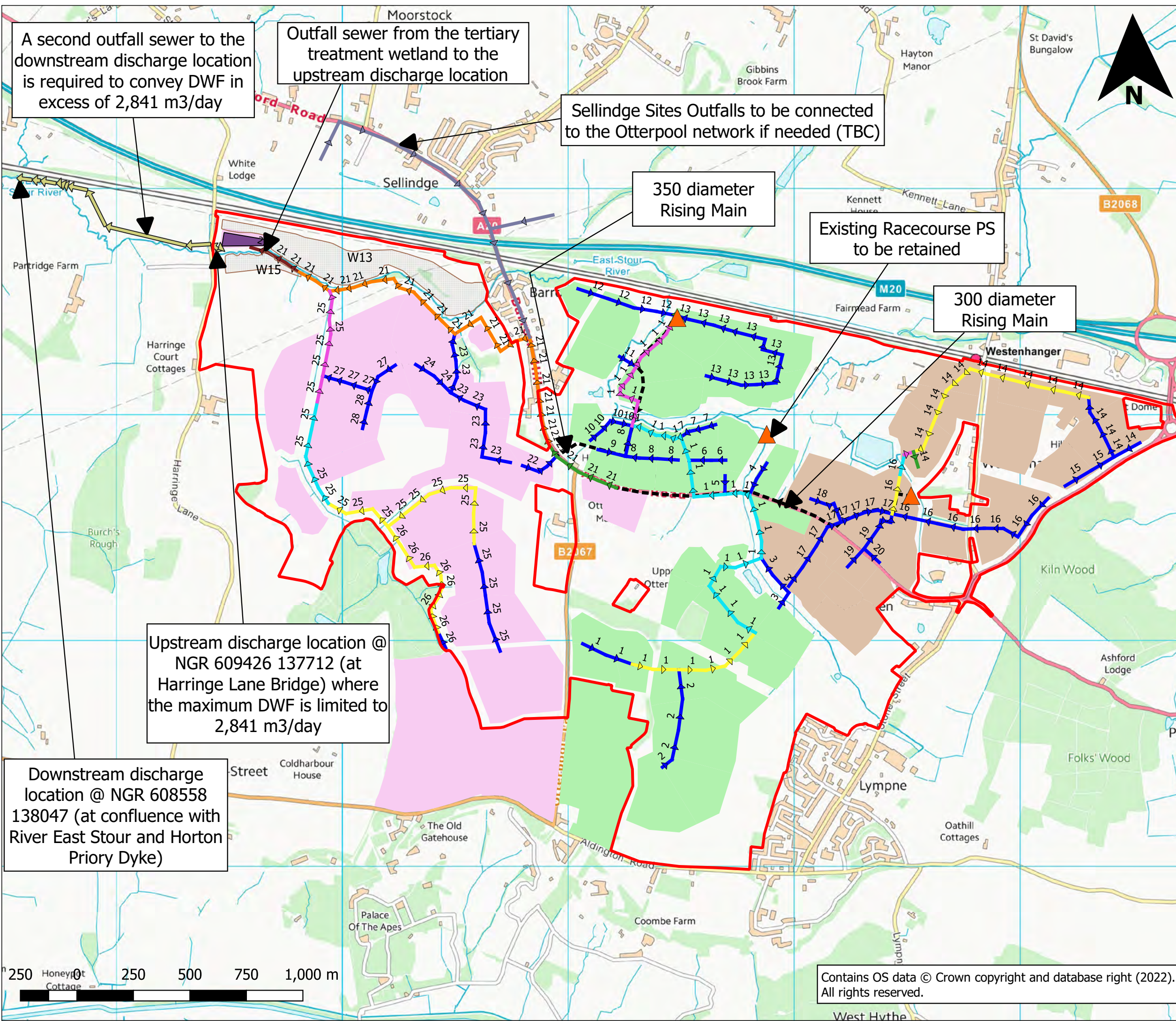
1. To ensure that sewage flooding does not occur at, or upstream of, the pumping station during plant or power failure, additional storage should be provided. The base of this storage should be above the level of the high-level alarm and the top water level of this storage should be below the invert of the lowest lateral drain connection in the upstream network.

2. The plan area of the wet well below the level of the high-level alarm float switch level should not be increased to form any of this required storage provision. Such storage may be provided in:

- any upstream public sewers and public lateral drains and associated manholes and inspection chambers, up to the level of the invert of the upstream end of the lowest public lateral drain (storage should not be provided in private drainage and calculations should be provided); and
- specifically-designed adjacent storage structures that are designed to be self cleansing.

3. For foul pumping stations serving less than 500 dwellings, as a minimum, the storage should equate to 160 litres per dwelling, and for commercial or industrial developments one hour of peak design flow rate. For pumping stations serving 500 dwellings or more, the sewerage company should be consulted to determine the storage requirements.

4. For surface water pumping stations, 125 m³ of storage should be provided per hectare of impermeable surface draining to the pumping station (i.e., 15 minutes of rainfall at 50 mm per hour).



A second outfall sewer to the downstream discharge location is required to convey DWF in excess of 2,841 m³/day

Outfall sewer from the tertiary treatment wetland to the upstream discharge location

Sellindge Sites Outfalls to be connected to the Otterpool network if needed (TBC)

350 diameter Rising Main

Existing Racecourse PS to be retained

300 diameter Rising Main

Upstream discharge location @ NGR 609426 137712 (at Harringe Lane Bridge) where the maximum DWF is limited to 2,841 m³/day

Downstream discharge location @ NGR 608558 138047 (at confluence with River East Stour and Horton Priory Dyke)

Legend

- OPA Site Boundary
- Wastewater Wetlands (W13 & W15)
- Offsite Outfall - Indicative Route
- Onsite WwTW

Gravity Pipe Size (mm)

- ▶ 150
- ▶ 225
- ▶ 300
- ▶ 375
- ▶ 450
- ▶ 600
- ▶ 675

- ▶ Sellindge Sites Outfalls
- ▶ Pumping Station 1
- ▶ Rising Main
- Onsite_WwTW Gravity Catchment
- PS1 Catchment
- PS2 Catchment

Note:
1. Wastewater Wetland W15 is not required for the current OPA but it will be needed to accommodate the extra 1500 dwellings within the OFMA.

Revision	Date	Status	Author	Checker	Approver
P4	03/03/2022	Final	MG	RG	RG



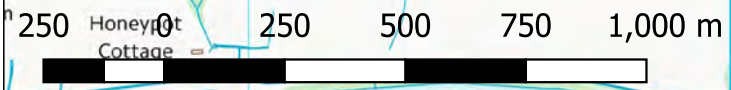
80Fen
80 Fenchurch Street
London
EC3M 4BY




Proposed Foul Water Drainage Strategy
Drawing No: 10029956-AUK-XX-XX-DR-CW-0035-P4

Scale	Original Size	Datum	Grid
Approx. 1:16,000	A3	mAOD	OSGB 27700

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SPS	Design Flow (l/s)	Working Sump Capacity (m ³)	Sump Asm. Dia. (m)	Operating Depth (m)	Incoming Depth at SPS from Design (m)	Min Sump Depth (m)	Local Catchment Emergency Storage (m ³)	Cumulative Emergency Storage (m ³)	Est. Rising Main Dia. (mm)	Comments
PS1	97	8.7	3.0	1.2	2.6	4.4	671	671	300	Assumptions: 1. 0.1m freeboard between i/c pipe invert and pump ON level 2. 0.5m depth between sump floor and pump OFF level 3. Velocity through rising main = 1.4m/s 4. Pump Starts/hour = 10
PS2	105	9.5	3.0	1.3	5.6	7.5	726	726	350	
Sellindge	8	0.7	4.0	0.1	1.2	1.9	-	-	150	

Arcadis SSC Europe B.V		Page 1
P.O. Box 161 AD Arnhem 6800 Netherlands		
Date 09/02/2022 11:45 File 10029956-AUK-XX-XX-M3-CW-0038-Otterpool P...	Designed by aga77500 Checked by	
XP Solutions		Network 2019.1

FOUL SEWERAGE DESIGN



Design Criteria for Foul - Main

Pipe Sizes STANDARD Manhole Sizes STANDARD

Industrial Flow (l/s/ha)	0.00	Domestic (l/s/ha)	0.00	Maximum Backdrop Height (m)	6.000
Industrial Peak Flow Factor	0.00	Domestic Peak Flow Factor	6.00	Min Design Depth for Optimisation (m)	1.200
Flow Per Person (l/per/day)	125.00	Add Flow / Climate Change (%)	10	Min Vel for Auto Design only (m/s)	0.75
Persons per House	2.40	Minimum Backdrop Height (m)	0.200	Min Slope for Optimisation (1:X)	500


Designed with Level Inverts

Network Design Table for Foul - Main









PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.000	113.598	0.848	133.9	0.000	435	0.0	1.500	o	150	Pipe/Conduit	
1.001	124.454	0.929	133.9	0.000	140	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Flow (l/s)	Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.000	99.910	0.000	0.0	435	0.9	97	0.83	0.76	13.4	10.0
1.001	99.062	0.000	0.0	575	1.2	121	0.86	0.76	13.4	13.2


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XP Solutions		Network 2019.1

Network Design Table for Foul - Main










PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.002	94.357	0.607	155.4	0.000	81	0.0	1.500	o	225	Pipe/Conduit	
1.003	114.055	0.491	232.3	0.000	254	0.0	1.500	o	225	Pipe/Conduit	
2.000	53.676	0.660	81.3	0.000	102	0.0	1.500	o	150	Pipe/Conduit	
2.001	134.096	1.630	82.3	0.000	88	0.0	1.500	o	150	Pipe/Conduit	
2.002	138.806	2.280	60.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
2.003	130.667	2.546	51.3	0.000	161	0.0	1.500	o	150	Pipe/Conduit	
1.004	119.687	0.849	141.0	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
1.005	87.665	3.090	28.4	0.000	0	0.0	1.500	o	225	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
1.002	98.132	0.000	0.0	656	1.4	100	0.87	0.92	36.6	15.0
1.003	97.525	0.000	0.0	910	1.9	138	0.81	0.75	29.9	20.9
2.000	104.150	0.000	0.0	102	0.2	38	0.68	0.97	17.2	2.3
2.001	103.490	0.000	0.0	190	0.4	52	0.81	0.97	17.1	4.4
2.002	101.860	0.000	0.0	190	0.4	48	0.90	1.12	19.9	4.4
2.003	99.580	0.000	0.0	351	0.7	63	1.13	1.22	21.6	8.0
1.004	97.034	0.000	0.0	1261	2.6	146	1.06	0.97	38.4	28.9
1.005	96.185	0.000	0.0	1261	2.6	90	1.95	2.16	85.9	28.9

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XP Solutions		Network 2019.1








Network Design Table for Foul - Main

PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.006	87.953	6.020	14.6	0.000	150	0.0	1.500	o	225	Pipe/Conduit	
1.007	110.886	8.045	13.8	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
1.008	89.900	0.269	334.7	0.000	70	0.0	1.500	o	300	Pipe/Conduit	
1.009	131.095	0.392	334.7	0.000	0	0.0	1.500	o	300	Pipe/Conduit	
1.010	72.895	0.218	334.7	0.000	73	0.0	1.500	o	300	Pipe/Conduit	
1.011	99.800	1.392	71.7	0.000	98	0.0	1.500	o	300	Pipe/Conduit	
1.012	64.871	2.590	25.0	0.000	70	0.0	1.500	o	300	Pipe/Conduit	
1.013	122.542	1.490	82.2	0.000	84	0.0	1.500	o	300	Pipe/Conduit	
3.000	79.530	0.594	133.9	0.000	67	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table


PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Flow (l/s)	Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.006	93.095	0.000	0.0	1411	2.9	80	2.56	3.01	119.7	32.3
1.007	87.075	0.000	0.0	1411	2.9	79	2.61	3.10	123.3	32.3
1.008	79.030	0.000	0.0	1481	3.1	174	0.80	0.76	53.4	33.9
1.009	78.761	0.000	0.0	1481	3.1	174	0.80	0.76	53.4	33.9
1.010	78.370	0.000	0.0	1554	3.2	179	0.81	0.76	53.4	35.6
1.011	78.152	0.000	0.0	1652	3.4	118	1.47	1.64	115.8	37.9
1.012	76.760	0.000	0.0	1722	3.6	91	2.17	2.78	196.3	39.5
1.013	74.170	0.000	0.0	1806	3.8	129	1.43	1.53	108.1	41.4
3.000	73.600	0.000	0.0	67	0.1	34	0.50	0.76	13.4	1.5

Network Design Table for Foul - Main








PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
3.001	106.302	0.794	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
3.002	90.026	0.672	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
1.014	74.942	0.224	334.2	0.000	0	0.0	1.500	o	300	Pipe/Conduit	
1.015	102.609	0.307	334.2	0.000	27	0.0	1.500	o	300	Pipe/Conduit	
1.016	115.311	1.259	91.6	0.000	0	0.0	1.500	o	300	Pipe/Conduit	
4.000	77.718	0.580	133.9	0.000	88	0.0	1.500	o	150	Pipe/Conduit	
4.001	70.927	0.530	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse	Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
3.001	73.006	0.000	0.0	67	0.1	34	0.50	0.76	13.4	1.5
3.002	72.212	0.000	0.0	67	0.1	34	0.50	0.76	13.4	1.5
1.014	71.540	0.000	0.0	1873	3.9	204	0.84	0.76	53.5	42.9
1.015	71.316	0.000	0.0	1900	4.0	206	0.84	0.76	53.5	43.5
1.016	71.009	0.000	0.0	1900	4.0	136	1.39	1.45	102.4	43.5
4.000	68.720	0.000	0.0	88	0.2	40	0.54	0.76	13.4	2.0
4.001	68.140	0.000	0.0	88	0.2	40	0.54	0.76	13.4	2.0


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Network Design Table for Foul - Main








PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.017	41.752	0.125	334.2	0.000	61	0.0	1.500	o	300	Pipe/Conduit	
1.018	70.896	0.212	334.2	0.000	0	0.0	1.500	o	300	Pipe/Conduit	
5.000	71.411	0.820	87.1	0.000	9	0.0	1.500	o	150	Pipe/Conduit	
1.019	145.417	0.435	334.2	0.000	0	0.0	1.500	o	300	Pipe/Conduit	
1.020	69.369	0.208	334.2	0.000	0	0.0	1.500	o	300	Pipe/Conduit	
1.021	84.929	1.300	65.3	0.000	0	0.0	1.500	o	300	Pipe/Conduit	
6.000	64.047	1.260	50.8	0.000	41	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse	Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.017	67.610	0.000	0.0	2049	4.3	219	0.85	0.76	53.5	47.0
1.018	67.485	0.000	0.0	2049	4.3	219	0.85	0.76	53.5	47.0
5.000	70.640	0.000	0.0	9	0.0	12	0.31	0.94	16.6	0.2
1.019	67.273	0.000	0.0	2058	4.3	219	0.85	0.76	53.5	47.2
1.020	66.838	0.000	0.0	2058	4.3	219	0.85	0.76	53.5	47.2
1.021	66.630	0.000	0.0	2058	4.3	130	1.61	1.72	121.4	47.2
6.000	70.980	0.000	0.0	41	0.1	21	0.60	1.23	21.7	0.9


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Network Design Table for Foul - Main








PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
6.001	98.197	4.390	22.4	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
1.022	109.460	0.370	295.8	0.000	90	0.0	1.500	o	300	Pipe/Conduit	
7.000	57.723	0.920	62.7	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
7.001	59.162	1.130	52.4	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
7.002	44.046	2.160	20.4	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
1.023	28.390	0.096	295.8	0.000	109	0.0	1.500	o	300	Pipe/Conduit	
1.024	37.720	0.128	295.8	0.000	0	0.0	1.500	o	300	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse	Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
6.001	69.720	0.000	0.0	41	0.1	18	0.80	1.86	32.8	0.9
1.022	65.330	0.000	0.0	2189	4.6	219	0.91	0.80	56.8	50.2
7.000	69.170	0.000	0.0	0	0.0	0	0.00	1.11	19.6	0.0
7.001	68.250	0.000	0.0	0	0.0	0	0.00	1.21	21.4	0.0
7.002	67.120	0.000	0.0	0	0.0	0	0.00	1.95	34.4	0.0
1.023	64.960	0.000	0.0	2298	4.8	229	0.91	0.80	56.8	52.7
1.024	64.864	0.000	0.0	2298	4.8	229	0.91	0.80	56.8	52.7


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PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.025	47.528	0.161	295.8	0.000	59	0.0	1.500	o	300	Pipe/Conduit	
1.026	75.335	0.255	295.8	0.000	0	0.0	1.500	o	300	Pipe/Conduit	
1.027	40.088	0.136	295.8	0.000	84	0.0	1.500	o	300	Pipe/Conduit	
8.000	87.763	0.655	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
8.001	84.538	0.631	133.9	0.000	109	0.0	1.500	o	150	Pipe/Conduit	
8.002	61.315	0.458	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
9.000	124.443	0.929	133.9	0.000	89	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
1.025	64.737	0.000	0.0	2357	4.9	234	0.91	0.80	56.8	54.0
1.026	64.576	0.000	0.0	2357	4.9	234	0.91	0.80	56.8	54.0
1.027	64.321	0.000	0.0	2441	5.1	242	0.91	0.80	56.8	55.9
8.000	67.020	0.000	0.0	0	0.0	0	0.00	0.76	13.4	0.0
8.001	66.365	0.000	0.0	109	0.2	44	0.58	0.76	13.4	2.5
8.002	65.733	0.000	0.0	109	0.2	44	0.58	0.76	13.4	2.5
9.000	68.260	0.000	0.0	89	0.2	40	0.54	0.76	13.4	2.0

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PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
8.003	137.286	1.025	133.9	0.000	102	0.0	1.500	o	150	Pipe/Conduit	
10.000	66.490	1.520	43.7	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
10.001	56.063	1.655	33.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
10.002	49.862	0.367	135.8	0.000	94	0.0	1.500	o	150	Pipe/Conduit	
10.003	48.084	0.354	135.8	0.000	101	0.0	1.500	o	150	Pipe/Conduit	
1.028	112.383	0.248	453.1	0.000	0	0.0	1.500	o	375	Pipe/Conduit	
1.029	85.263	0.188	453.1	0.000	230	0.0	1.500	o	375	Pipe/Conduit	
1.030	26.763	0.059	453.1	0.000	0	0.0	1.500	o	375	Pipe/Conduit	

Network Results Table


PN	US/IL (m)	E Area (ha)	E Base Flow (l/s)	E Hse	Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
8.003	65.275	0.000	0.0	300	0.6	76	0.76	0.76	13.4	6.9
10.000	66.560	0.000	0.0	0	0.0	0	0.00	1.33	23.4	0.0
10.001	65.040	0.000	0.0	0	0.0	0	0.00	1.51	26.7	0.0
10.002	63.385	0.000	0.0	94	0.2	41	0.55	0.75	13.3	2.2
10.003	63.018	0.000	0.0	195	0.4	60	0.68	0.75	13.3	4.5
1.028	62.664	0.000	0.0	2936	6.1	257	0.83	0.75	82.9	67.3
1.029	62.416	0.000	0.0	3166	6.6	272	0.84	0.75	82.9	72.6
1.030	62.228	0.000	0.0	3166	6.6	272	0.84	0.75	82.9	72.6

Network Design Table for Foul - Main









PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.031	53.918	0.119	453.1	0.000	0	0.0	1.500	o	375	Pipe/Conduit	🟢
1.032	65.827	0.145	453.1	0.000	0	0.0	1.500	o	375	Pipe/Conduit	🟢
11.000	56.784	0.424	133.9	0.000	145	0.0	1.500	o	150	Pipe/Conduit	🟢
11.001	29.123	0.217	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	🟢
1.033	45.513	0.100	453.1	0.000	0	0.0	1.500	o	375	Pipe/Conduit	🟢
1.034	96.946	0.214	453.1	0.000	0	0.0	1.500	o	375	Pipe/Conduit	🟢
1.035	55.512	0.123	453.1	0.000	215	0.0	1.500	o	375	Pipe/Conduit	🟢
1.036	92.646	0.204	453.1	0.000	0	0.0	1.500	o	375	Pipe/Conduit	🟢

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.031	62.168	0.000	0.0	3166	6.6	272	0.84	0.75	82.9
1.032	62.049	0.000	0.0	3166	6.6	272	0.84	0.75	82.9
11.000	63.550	0.000	0.0	145	0.3	51	0.63	0.76	13.4
11.001	63.126	0.000	0.0	145	0.3	51	0.63	0.76	13.4
1.033	61.904	0.000	0.0	3311	6.9	283	0.85	0.75	82.9
1.034	61.804	0.000	0.0	3311	6.9	283	0.85	0.75	82.9
1.035	61.590	0.000	0.0	3526	7.3	300	0.85	0.75	82.9
1.036	61.467	0.000	0.0	3526	7.3	300	0.85	0.75	82.9


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PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
12.000	142.163	1.062	133.9	0.000	76	0.0	1.500	o	150	Pipe/Conduit	
12.001	118.587	0.886	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
12.002	99.651	0.744	133.9	0.000	215	0.0	1.500	o	150	Pipe/Conduit	
12.003	91.067	0.680	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
13.000	76.072	0.568	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
13.001	86.966	0.649	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
13.002	62.575	0.467	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
13.003	88.413	0.660	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	E Area (ha)	E Base Flow (l/s)	E Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
12.000	62.859	0.000	0.0	76	0.2	37	0.52	0.76	13.4
12.001	61.797	0.000	0.0	76	0.2	37	0.52	0.76	13.4
12.002	60.912	0.000	0.0	291	0.6	75	0.76	0.76	13.4
12.003	60.167	0.000	0.0	291	0.6	75	0.76	0.76	13.4
13.000	68.440	0.000	0.0	0	0.0	0	0.00	0.76	13.4
13.001	67.872	0.000	0.0	0	0.0	0	0.00	0.76	13.4
13.002	67.222	0.000	0.0	0	0.0	0	0.00	0.76	13.4
13.003	66.755	0.000	0.0	0	0.0	0	0.00	0.76	13.4


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Network Design Table for Foul - Main








PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
13.004	45.122	0.337	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
13.005	81.662	0.610	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
13.006	91.733	0.685	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
13.007	46.713	0.349	133.9	0.000	290	0.0	1.500	o	150	Pipe/Conduit	
13.008	127.588	0.953	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
13.009	43.900	0.328	133.9	0.000	192	0.0	1.500	o	150	Pipe/Conduit	
13.010	64.004	0.478	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
13.011	114.546	0.855	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
13.012	57.907	0.432	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
13.004	66.095	0.000	0.0	0	0.0	0	0.76	13.4	0.0
13.005	65.758	0.000	0.0	0	0.0	0	0.76	13.4	0.0
13.006	65.148	0.000	0.0	0	0.0	0	0.76	13.4	0.0
13.007	64.463	0.000	0.0	290	0.6	75	0.76	13.4	6.6
13.008	64.114	0.000	0.0	290	0.6	75	0.76	13.4	6.6
13.009	63.161	0.000	0.0	482	1.0	104	0.85	13.4	11.0
13.010	62.833	0.000	0.0	482	1.0	104	0.85	13.4	11.0
13.011	62.355	0.000	0.0	482	1.0	104	0.85	13.4	11.0
13.012	61.500	0.000	0.0	482	1.0	104	0.85	13.4	11.0


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Network Design Table for Foul - Main











PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.037	10.364	0.021	500.0	0.000	240	0.0	1.500	o	450	Pipe/Conduit	
14.000	132.014	0.986	133.9	0.000	117	0.0	1.500	o	150	Pipe/Conduit	
15.000	130.976	2.500	52.4	0.000	158	0.0	1.500	o	150	Pipe/Conduit	
15.001	114.840	2.470	46.5	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
14.001	93.223	0.691	134.8	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
14.002	82.358	0.611	134.8	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
14.003	60.724	0.762	79.7	0.000	133	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
1.037	59.487	0.000	0.0	4539	9.5	309	0.89	0.80	127.9	104.0
14.000	79.350	0.000	0.0	117	0.2	46	0.59	0.76	13.4	2.7
15.000	83.540	0.000	0.0	158	0.3	42	0.90	1.21	21.4	3.6
15.001	81.040	0.000	0.0	158	0.3	41	0.94	1.29	22.7	3.6
14.001	78.364	0.000	0.0	275	0.6	73	0.74	0.75	13.3	6.3
14.002	77.673	0.000	0.0	275	0.6	73	0.74	0.75	13.3	6.3
14.003	77.062	0.000	0.0	408	0.9	78	1.00	0.98	17.3	9.4


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Network Design Table for Foul - Main










PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
14.004	66.768	0.498	134.1	0.000	132	0.0	1.500	o	150	Pipe/Conduit	
14.005	112.558	0.484	232.6	0.000	155	0.0	1.500	o	225	Pipe/Conduit	
14.006	118.570	0.510	232.6	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
14.007	112.795	0.485	232.6	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
14.008	117.511	0.505	232.6	0.000	155	0.0	1.500	o	225	Pipe/Conduit	
14.009	77.495	0.333	232.6	0.000	354	0.0	1.500	o	225	Pipe/Conduit	
14.010	70.773	0.304	232.6	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
14.011	72.974	0.314	232.6	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
14.012	71.777	0.315	228.0	0.000	106	0.0	1.500	o	225	Pipe/Conduit	
14.013	85.452	1.798	47.5	0.000	0	0.0	1.500	o	225	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
14.004	76.300	0.000	0.0	540	1.1	114	0.86	0.76	13.4	12.4
14.005	75.802	0.000	0.0	695	1.4	117	0.76	0.75	29.9	15.9
14.006	75.318	0.000	0.0	695	1.4	117	0.76	0.75	29.9	15.9
14.007	74.809	0.000	0.0	695	1.4	117	0.76	0.75	29.9	15.9
14.008	74.324	0.000	0.0	850	1.8	132	0.80	0.75	29.9	19.5
14.009	73.819	0.000	0.0	1204	2.5	171	0.85	0.75	29.9	27.6
14.010	73.486	0.000	0.0	1204	2.5	171	0.85	0.75	29.9	27.6
14.011	73.181	0.000	0.0	1204	2.5	171	0.85	0.75	29.9	27.6
14.012	72.868	0.000	0.0	1310	2.7	184	0.86	0.76	30.2	30.0
14.013	72.553	0.000	0.0	1310	2.7	106	1.63	1.67	66.3	30.0


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Network Design Table for Foul - Main









PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
14.014	118.034	1.090	108.3	0.000	128	0.0	1.500	o	225	Pipe/Conduit	
14.015	87.637	0.665	131.8	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
14.016	89.387	0.267	334.7	0.000	175	0.0	1.500	o	300	Pipe/Conduit	
14.017	81.848	0.181	453.1	0.000	1163	0.0	1.500	o	375	Pipe/Conduit	
16.000	100.227	0.749	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
16.001	110.563	0.826	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
16.002	96.176	1.286	74.8	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
16.003	84.821	4.430	19.1	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
16.004	91.020	1.490	61.1	0.000	370	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	E Area (ha)	E Base Flow (l/s)	E Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
14.014	70.755	0.000	0.0	1438	3.0	146	1.21	1.10	43.9	33.0
14.015	69.665	0.000	0.0	1438	3.0	157	1.12	1.00	39.7	33.0
14.016	69.000	0.000	0.0	1613	3.4	184	0.81	0.76	53.4	37.0
14.017	68.733	0.000	0.0	2776	5.8	247	0.83	0.75	82.9	63.6
16.000	87.300	0.000	0.0	0	0.0	0	0.00	0.76	13.4	0.0
16.001	86.551	0.000	0.0	0	0.0	0	0.00	0.76	13.4	0.0
16.002	85.726	0.000	0.0	0	0.0	0	0.00	1.01	17.9	0.0
16.003	84.440	0.000	0.0	0	0.0	0	0.00	2.01	35.5	0.0
16.004	80.010	0.000	0.0	370	0.8	69	1.08	1.12	19.8	8.5


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Network Design Table for Foul - Main








PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
16.005	110.928	3.610	30.7	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
16.006	116.560	0.867	134.5	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
16.007	95.027	0.707	134.5	0.000	166	0.0	1.500	o	150	Pipe/Conduit	
17.000	104.733	0.782	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
17.001	109.416	0.817	133.9	0.000	187	0.0	1.500	o	150	Pipe/Conduit	
17.002	93.850	0.701	133.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
17.003	58.949	0.440	133.9	0.000	281	0.0	1.500	o	150	Pipe/Conduit	
18.000	86.874	0.890	97.6	0.000	0	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
16.005	78.520	0.000	0.0	370	0.8	57	1.39	1.58	28.0	8.5
16.006	74.910	0.000	0.0	370	0.8	87	0.80	0.75	13.3	8.5
16.007	74.043	0.000	0.0	536	1.1	113	0.86	0.75	13.3	12.3
17.000	75.890	0.000	0.0	0	0.0	0	0.00	0.76	13.4	0.0
17.001	75.108	0.000	0.0	187	0.4	59	0.67	0.76	13.4	4.3
17.002	74.291	0.000	0.0	187	0.4	59	0.67	0.76	13.4	4.3
17.003	73.590	0.000	0.0	468	1.0	102	0.84	0.76	13.4	10.7
18.000	74.620	0.000	0.0	0	0.0	0	0.00	0.89	15.7	0.0


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Network Design Table for Foul - Main








PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
18.001	21.369	0.210	101.8	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
18.002	87.933	0.655	134.2	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
17.004	57.073	0.425	134.2	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
17.005	57.687	0.430	134.2	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
17.006	56.422	0.420	134.2	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
17.007	65.583	0.489	134.2	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
19.000	95.427	2.560	37.3	0.000	310	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
18.001	73.730	0.000	0.0	0	0.0	0.00	0.87	15.3	0.0
18.002	73.520	0.000	0.0	0	0.0	0.00	0.76	13.3	0.0
17.004	72.865	0.000	0.0	468	1.0	0.84	0.76	13.3	10.7
17.005	72.440	0.000	0.0	468	1.0	0.84	0.76	13.3	10.7
17.006	72.010	0.000	0.0	468	1.0	0.84	0.76	13.3	10.7
17.007	71.589	0.000	0.0	468	1.0	0.84	0.76	13.3	10.7
19.000	78.320	0.000	0.0	310	0.6	1.23	1.44	25.4	7.1


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PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
20.000	48.653	1.920	25.3	0.000	44	0.0	1.500	o	150	Pipe/Conduit	
19.001	68.996	1.460	47.3	0.000	62	0.0	1.500	o	150	Pipe/Conduit	
19.002	53.176	0.395	134.5	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
19.003	63.108	0.469	134.5	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
19.004	37.816	0.281	134.5	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
16.008	68.698	0.356	193.2	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
16.009	27.482	0.142	193.2	0.000	0	0.0	1.500	o	225	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
20.000	77.680	0.000	0.0	44	0.1	19	0.79	1.75	30.8	1.0
19.001	75.760	0.000	0.0	416	0.9	68	1.22	1.28	22.6	9.5
19.002	74.300	0.000	0.0	416	0.9	94	0.82	0.75	13.3	9.5
19.003	73.905	0.000	0.0	416	0.9	94	0.82	0.75	13.3	9.5
19.004	73.435	0.000	0.0	416	0.9	94	0.82	0.75	13.3	9.5
16.008	71.101	0.000	0.0	1420	3.0	183	0.94	0.82	32.8	32.5
16.009	70.745	0.000	0.0	1420	3.0	183	0.94	0.82	32.8	32.5

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Network Design Table for Foul - Main

PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
14.018	63.614	0.127	500.0	0.000	0	0.0	1.500	o	450	Pipe/Conduit	
21.000	88.007	0.176	500.0	0.000	4196	0.0	1.500	o	450	Pipe/Conduit	
21.001	92.693	0.974	95.2	0.000	298	0.0	1.500	o	450	Pipe/Conduit	
21.002	120.162	1.020	117.8	0.000	0	0.0	1.500	o	450	Pipe/Conduit	
22.000	77.884	1.520	51.2	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
22.001	42.810	2.500	17.1	0.000	52	0.0	1.500	o	150	Pipe/Conduit	
22.002	60.689	1.670	36.3	0.000	0	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
14.018	68.552	0.000	0.0	4196	8.7	292	0.88	0.80	127.9	96.2
21.000	74.740	0.000	0.0	4196	8.7	292	0.88	0.80	127.9	96.2
21.001	74.564	0.000	0.0	4494	9.4	183	1.69	1.85	294.2	103.0
21.002	73.590	0.000	0.0	4494	9.4	195	1.56	1.66	264.3	103.0
22.000	78.260	0.000	0.0	0	0.0	0	0.00	1.23	21.7	0.0
22.001	76.740	0.000	0.0	52	0.1	19	0.95	2.12	37.5	1.2
22.002	74.240	0.000	0.0	52	0.1	22	0.73	1.46	25.7	1.2

Network Design Table for Foul - Main

PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
21.003	58.409	0.470	124.3	0.000	4539	0.0	1.500	o	450	Pipe/Conduit	
21.004	59.943	0.120	500.0	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.005	62.751	0.126	500.0	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.006	60.280	0.121	500.0	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.007	60.860	0.424	143.5	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.008	103.068	1.430	72.1	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.009	90.980	1.170	77.8	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.010	49.104	1.630	30.1	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.011	66.813	0.134	500.0	0.000	350	0.0	1.500	o	600	Pipe/Conduit	
21.012	77.976	0.186	418.4	0.000	0	0.0	1.500	o	600	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
21.003	72.570	0.000	0.0	9085	18.9	308	1.80	1.62	257.3 208.2
21.004	72.100	0.000	0.0	9085	18.9	393	1.06	0.97	273.6 208.2
21.005	71.980	0.000	0.0	9085	18.9	393	1.06	0.97	273.6 208.2
21.006	71.855	0.000	0.0	9085	18.9	393	1.06	0.97	273.6 208.2
21.007	71.734	0.000	0.0	9085	18.9	266	1.72	1.81	511.9 208.2
21.008	71.310	0.000	0.0	9085	18.9	220	2.22	2.56	723.0 208.2
21.009	69.880	0.000	0.0	9085	18.9	225	2.16	2.46	696.0 208.2
21.010	68.710	0.000	0.0	9085	18.9	174	3.05	3.96	1119.2 208.2
21.011	67.080	0.000	0.0	9435	19.7	404	1.07	0.97	273.6 216.2
21.012	66.946	0.000	0.0	9435	19.7	379	1.15	1.06	299.2 216.2

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PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
21.013	84.630	2.830	29.9	0.000	0	0.0	1.500	o	600	Pipe/Conduit	🟢
21.014	87.822	4.490	19.6	0.000	0	0.0	1.500	o	600	Pipe/Conduit	🟢
21.015	136.739	1.250	109.4	0.000	0	0.0	1.500	o	600	Pipe/Conduit	🟢
23.000	128.194	1.140	112.5	0.000	0	0.0	1.500	o	150	Pipe/Conduit	🟢
23.001	109.491	3.170	34.5	0.000	0	0.0	1.500	o	150	Pipe/Conduit	🟢
23.002	102.151	3.490	29.3	0.000	0	0.0	1.500	o	150	Pipe/Conduit	🟢
23.003	102.006	0.758	134.6	0.000	283	0.0	1.500	o	150	Pipe/Conduit	🟢
23.004	68.491	0.509	134.6	0.000	0	0.0	1.500	o	150	Pipe/Conduit	🟢

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse	Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
21.013	66.760	0.000	0.0	9435	19.7	178	3.09	3.97	1123.3	216.2
21.014	63.930	0.000	0.0	9435	19.7	159	3.60	4.91	1389.3	216.2
21.015	59.440	0.000	0.0	9435	19.7	251	1.92	2.07	586.6	216.2
23.000	79.820	0.000	0.0	0	0.0	0	0.00	0.83	14.6	0.0
23.001	78.680	0.000	0.0	0	0.0	0	0.00	1.49	26.4	0.0
23.002	75.510	0.000	0.0	0	0.0	0	0.00	1.62	28.7	0.0
23.003	72.020	0.000	0.0	283	0.6	74	0.75	0.75	13.3	6.5
23.004	71.262	0.000	0.0	283	0.6	74	0.75	0.75	13.3	6.5


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Network Design Table for Foul - Main










PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
24.000	95.540	1.000	95.5	0.000	116	0.0	1.500	o	150	Pipe/Conduit	
24.001	104.823	0.773	135.6	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
23.005	73.574	1.944	37.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
23.006	74.759	5.440	13.7	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
23.007	73.584	0.930	79.1	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
23.008	47.087	4.250	11.1	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
21.016	80.894	0.290	278.9	0.000	21	0.0	1.500	o	600	Pipe/Conduit	
21.017	85.231	0.170	500.0	0.000	0	0.0	1.500	o	600	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
24.000	76.690	0.000	0.0	116	0.2	42	0.66	0.90	15.8	2.7
24.001	75.690	0.000	0.0	116	0.2	46	0.58	0.75	13.3	2.7
23.005	70.754	0.000	0.0	399	0.8	63	1.31	1.43	25.2	9.1
23.006	68.810	0.000	0.0	399	0.8	48	1.90	2.37	41.9	9.1
23.007	63.370	0.000	0.0	399	0.8	77	1.00	0.99	17.4	9.1
23.008	62.440	0.000	0.0	399	0.8	45	2.04	2.64	46.7	9.1
21.016	58.190	0.000	0.0	9855	20.5	341	1.36	1.30	366.8	225.8
21.017	57.900	0.000	0.0	9855	20.5	417	1.08	0.97	273.6	225.8


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Network Design Table for Foul - Main










PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
21.018	93.315	0.187	500.0	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.019	66.366	0.133	500.0	0.000	263	0.0	1.500	o	600	Pipe/Conduit	
21.020	47.384	0.095	500.0	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.021	100.818	1.685	59.8	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.022	81.883	0.750	109.2	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.023	63.050	0.126	500.0	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.024	43.990	0.115	381.3	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
25.000	133.481	0.997	133.9	0.000	487	0.0	1.500	o	150	Pipe/Conduit	
25.001	121.730	0.966	126.0	0.000	111	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
21.018	57.730	0.000	0.0	9855	20.5	417	1.08	0.97	273.6	225.8
21.019	57.543	0.000	0.0	10118	21.1	425	1.08	0.97	273.6	231.9
21.020	57.410	0.000	0.0	10118	21.1	425	1.08	0.97	273.6	231.9
21.021	57.315	0.000	0.0	10118	21.1	221	2.45	2.81	793.8	231.9
21.022	55.630	0.000	0.0	10118	21.1	262	1.96	2.08	587.2	231.9
21.023	54.880	0.000	0.0	10118	21.1	425	1.08	0.97	273.6	231.9
21.024	54.754	0.000	0.0	10118	21.1	385	1.21	1.11	313.5	231.9
25.000	94.340	0.000	0.0	487	1.0	105	0.85	0.76	13.4	11.2
25.001	93.343	0.000	0.0	598	1.2	122	0.89	0.78	13.8	13.7


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Network Design Table for Foul - Main










PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
25.002	104.933	2.467	42.5	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
25.003	131.560	1.043	126.2	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
25.004	132.635	0.570	232.6	0.000	120	0.0	1.500	o	225	Pipe/Conduit	
25.005	114.381	3.562	32.1	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
25.006	111.193	2.671	41.6	0.000	69	0.0	1.500	o	225	Pipe/Conduit	
25.007	98.617	2.280	43.3	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
25.008	101.663	1.559	65.2	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
25.009	131.041	8.161	16.1	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
26.000	76.165	2.495	30.5	0.000	1064	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
25.002	92.377	0.000	0.0	598	1.2	82	1.39	1.35	23.8	13.7
25.003	89.910	0.000	0.0	598	1.2	122	0.89	0.78	13.8	13.7
25.004	88.867	0.000	0.0	718	1.5	119	0.77	0.75	29.9	16.5
25.005	88.297	0.000	0.0	718	1.5	69	1.59	2.03	80.7	16.5
25.006	84.735	0.000	0.0	787	1.6	77	1.49	1.78	70.9	18.0
25.007	82.064	0.000	0.0	787	1.6	78	1.47	1.75	69.5	18.0
25.008	79.784	0.000	0.0	787	1.6	87	1.27	1.42	56.6	18.0
25.009	78.225	0.000	0.0	787	1.6	60	2.10	2.87	114.2	18.0
26.000	80.780	0.000	0.0	1064	2.2	108	1.79	1.59	28.1	24.4

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Network Design Table for Foul - Main

PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
26.001	69.905	0.580	120.5	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
26.002	35.445	0.410	86.5	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
26.003	66.428	0.286	232.0	0.000	107	0.0	1.500	o	225	Pipe/Conduit	
26.004	44.046	0.190	232.0	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
26.005	55.064	0.237	232.0	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
26.006	52.258	0.225	232.0	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
26.007	88.308	2.442	36.2	0.000	109	0.0	1.500	o	225	Pipe/Conduit	
26.008	115.776	2.210	52.4	0.000	0	0.0	1.500	o	225	Pipe/Conduit	
26.009	99.165	1.640	60.5	0.000	0	0.0	1.500	o	225	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
26.001	78.285	0.000	0.0	1064	2.2	124	1.09	1.05	41.6	24.4
26.002	77.705	0.000	0.0	1064	2.2	112	1.23	1.23	49.1	24.4
26.003	77.295	0.000	0.0	1171	2.4	167	0.85	0.75	29.9	26.8
26.004	77.009	0.000	0.0	1171	2.4	167	0.85	0.75	29.9	26.8
26.005	76.819	0.000	0.0	1171	2.4	167	0.85	0.75	29.9	26.8
26.006	76.581	0.000	0.0	1171	2.4	167	0.85	0.75	29.9	26.8
26.007	76.356	0.000	0.0	1280	2.7	97	1.79	1.91	76.0	29.3
26.008	73.914	0.000	0.0	1280	2.7	108	1.56	1.59	63.1	29.3
26.009	71.704	0.000	0.0	1280	2.7	112	1.48	1.48	58.8	29.3

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Network Design Table for Foul - Main









PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
25.010	103.159	1.824	56.6	0.000	259	0.0	1.500	o	225	Pipe/Conduit	👍
25.011	119.376	2.410	49.5	0.000	88	0.0	1.500	o	225	Pipe/Conduit	👍
25.012	90.908	1.550	58.7	0.000	0	0.0	1.500	o	225	Pipe/Conduit	👍
25.013	80.345	0.920	87.3	0.000	0	0.0	1.500	o	300	Pipe/Conduit	👍
25.014	106.327	0.530	200.6	0.000	81	0.0	1.500	o	300	Pipe/Conduit	👍
25.015	44.448	1.440	30.9	0.000	91	0.0	1.500	o	300	Pipe/Conduit	👍
25.016	122.166	0.730	167.4	0.000	0	0.0	1.500	o	300	Pipe/Conduit	👍
25.017	125.378	0.469	267.2	0.000	0	0.0	1.500	o	300	Pipe/Conduit	👍
25.018	118.041	0.386	305.9	0.000	187	0.0	1.500	o	375	Pipe/Conduit	👍

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
25.010	70.064	0.000	0.0	2326	4.8	164	1.72	1.53	60.8	53.3
25.011	68.240	0.000	0.0	2414	5.0	160	1.83	1.63	64.9	55.3
25.012	65.830	0.000	0.0	2414	5.0	171	1.70	1.50	59.7	55.3
25.013	64.280	0.000	0.0	2414	5.0	155	1.50	1.48	104.9	55.3
25.014	63.360	0.000	0.0	2495	5.2	208	1.09	0.98	69.1	57.2
25.015	62.830	0.000	0.0	2586	5.4	120	2.26	2.50	176.8	59.3
25.016	61.390	0.000	0.0	2586	5.4	200	1.18	1.07	75.7	59.3
25.017	60.660	0.000	0.0	2586	5.4	244	0.96	0.85	59.8	59.3
25.018	60.191	0.000	0.0	2773	5.8	216	0.97	0.91	101.0	63.5


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Network Design Table for Foul - Main









PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
27.000	91.534	1.240	73.8	0.000	38	0.0	1.500	o	150	Pipe/Conduit	
27.001	68.053	0.509	133.8	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
28.000	82.032	0.910	90.1	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
28.001	89.918	0.672	133.8	0.000	36	0.0	1.500	o	150	Pipe/Conduit	
27.002	60.252	2.238	26.9	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
27.003	69.607	3.920	17.8	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
27.004	63.719	4.810	13.2	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
27.005	34.294	4.565	7.5	0.000	0	0.0	1.500	o	150	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
27.000	77.470	0.000	0.0	38	0.1	23	0.52	1.02	18.0
27.001	76.230	0.000	0.0	38	0.1	26	0.42	0.76	13.4
28.000	76.920	0.000	0.0	0	0.0	0	0.00	0.92	16.3
28.001	76.010	0.000	0.0	36	0.1	25	0.41	0.76	13.4
27.002	75.338	0.000	0.0	74	0.2	25	0.91	1.69	29.9
27.003	73.100	0.000	0.0	74	0.2	22	1.04	2.09	36.9
27.004	69.180	0.000	0.0	74	0.2	21	1.16	2.42	42.7
27.005	64.370	0.000	0.0	74	0.2	18	1.40	3.21	56.7


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Network Design Table for Foul - Main




PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
25.019	123.532	3.490	35.4	0.000	191	0.0	1.500	o	375	Pipe/Conduit	
25.020	64.703	1.160	55.8	0.000	0	0.0	1.500	o	375	Pipe/Conduit	
25.021	63.158	0.230	274.6	0.000	233	0.0	1.500	o	375	Pipe/Conduit	
25.022	94.415	0.209	452.5	0.000	0	0.0	1.500	o	375	Pipe/Conduit	
25.023	35.220	0.078	452.5	0.000	0	0.0	1.500	o	375	Pipe/Conduit	
21.025	76.954	0.809	95.2	0.000	0	0.0	1.500	o	600	Pipe/Conduit	
21.026	93.941	0.188	500.0	0.000	0	0.0	1.500	o	675	Pipe/Conduit	
21.027	60.216	0.120	500.0	0.000	0	0.0	1.500	o	675	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)	
25.019	59.805	0.000	0.0	3038	6.3	123	2.21	2.70	298.1	69.6
25.020	56.315	0.000	0.0	3038	6.3	139	1.87	2.15	237.4	69.6
25.021	55.155	0.000	0.0	3271	6.8	232	1.04	0.97	106.7	75.0
25.022	54.925	0.000	0.0	3271	6.8	280	0.85	0.75	83.0	75.0
25.023	54.716	0.000	0.0	3271	6.8	280	0.85	0.75	83.0	75.0
21.025	54.639	0.000	0.0	13389	27.9	296	2.21	2.22	629.0	306.8
21.026	53.830	0.000	0.0	13389	27.9	468	1.16	1.04	373.3	306.8
21.027	53.642	0.000	0.0	13389	27.9	468	1.16	1.04	373.3	306.8

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Network Design Table for Foul - Main

PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
21.028	91.924	0.477	192.8	0.000	0	0.0	1.500	o	675	Pipe/Conduit	
21.029	75.961	0.152	500.0	0.000	0	0.0	1.500	o	675	Pipe/Conduit	
21.030	11.045	0.022	500.0	0.000	39	0.0	1.500	o	675	Pipe/Conduit	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
21.028	53.522	0.000	0.0	13389	27.9	342	1.69	1.68	306.8
21.029	53.045	0.000	0.0	13389	27.9	468	1.16	1.04	306.8
21.030	52.893	0.000	0.0	13428	28.0	469	1.16	1.04	307.7

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
TR11350901	101.260	1.350	Open Manhole	1200	1.000	99.910	150				
TR11351901	100.830	1.768	Open Manhole	1200	1.001	99.062	150	1.000	99.062	150	
TR11352801	99.860	1.728	Open Manhole	1200	1.002	98.132	225	1.001	98.132	150	
TR11353801	98.950	1.425	Open Manhole	1200	1.003	97.525	225	1.002	97.525	225	
TR11354402	105.500	1.350	Open Manhole	1200	2.000	104.150	150				
TR11354401	104.840	1.350	Open Manhole	1200	2.001	103.490	150	2.000	103.490	150	
TR11354601	103.210	1.350	Open Manhole	1200	2.002	101.860	150	2.001	101.860	150	
TR11355701	100.930	1.350	Open Manhole	1200	2.003	99.580	150	2.002	99.580	150	
TR11354801	98.600	1.566	Junction		1.004	97.034	225	1.003	97.034	225	
								2.003	97.034	150	
TR11356801	97.610	1.425	Open Manhole	1200	1.005	96.185	225	1.004	96.185	225	
TR11356802	94.520	1.425	Open Manhole	1200	1.006	93.095	225	1.005	93.095	225	
TR11357902	88.500	1.425	Open Manhole	1200	1.007	87.075	225	1.006	87.075	225	
TR11368001	80.530	1.500	Open Manhole	1200	1.008	79.030	300	1.007	79.030	225	
TR11367001	81.550	2.789	Open Manhole	1200	1.009	78.761	300	1.008	78.761	300	
TR11366101	86.210	7.840	Open Manhole	1200	1.010	78.370	300	1.009	78.370	300	
TR11366201	80.890	2.738	Open Manhole	1200	1.011	78.152	300	1.010	78.152	300	
TR11366303	78.260	1.500	Open Manhole	1200	1.012	76.760	300	1.011	76.760	300	

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
TR11367301	75.670	1.500	Open Manhole	1200	1.013	74.170	300	1.012	74.170	300	
TR11369101	74.950	1.350	Open Manhole	1200	3.000	73.600	150				
TR11369201	76.800	3.794	Open Manhole	1200	3.001	73.006	150	3.000	73.006	150	
TR11369203	75.740	3.528	Open Manhole	1200	3.002	72.212	150	3.001	72.212	150	
TR11368301	74.180	2.640	Junction		1.014	71.540	300	1.013	72.680	300	1140
								3.002	71.540	150	
TR11368401	73.410	2.094	Open Manhole	1200	1.015	71.316	300	1.014	71.316	300	
TR11368501	73.480	2.471	Open Manhole	1200	1.016	71.009	300	1.015	71.009	300	
TR11368702	70.070	1.350	Open Manhole	1200	4.000	68.720	150				
TR11368701	70.160	2.020	Open Manhole	1200	4.001	68.140	150	4.000	68.140	150	
TR11368601	71.250	3.640	Junction		1.017	67.610	300	1.016	69.750	300	2140
								4.001	67.610	150	
TR11367602	71.070	3.585	Open Manhole	1200	1.018	67.485	300	1.017	67.485	300	
TR11366701	71.990	1.350	Open Manhole	1200	5.000	70.640	150				
TR11366601	71.320	4.047	Junction		1.019	67.273	300	1.018	67.273	300	2397
								5.000	69.820	150	
TR11365601	72.540	5.702	Open Manhole	1200	1.020	66.838	300	1.019	66.838	300	
TR11365702	70.920	4.290	Open Manhole	1200	1.021	66.630	300	1.020	66.630	300	

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
TR11366702	72.330	1.350	Open Manhole	1200	6.000	70.980	150				
TR11366703	71.070	1.350	Open Manhole	1200	6.001	69.720	150	6.000	69.720	150	
TR11365701	66.830	1.500	Junction		1.022	65.330	300	1.021	65.330	300	
								6.001	65.330	150	
TR11366901	70.520	1.350	Open Manhole	1200	7.000	69.170	150				
TR11365903	69.600	1.350	Open Manhole	1200	7.001	68.250	150	7.000	68.250	150	
TR11365902	68.470	1.350	Open Manhole	1200	7.002	67.120	150	7.001	67.120	150	
TR11364902	66.460	1.500	Junction		1.023	64.960	300	1.022	64.960	300	
								7.002	64.960	150	
TR11364801	67.320	2.456	Open Manhole	1200	1.024	64.864	300	1.023	64.864	300	
TR11364901	67.270	2.533	Open Manhole	1200	1.025	64.737	300	1.024	64.737	300	
TR11363901	67.980	3.404	Open Manhole	1200	1.026	64.576	300	1.025	64.576	300	
TR11363902	66.960	2.639	Open Manhole	1200	1.027	64.321	300	1.026	64.321	300	
TR11364701	68.370	1.350	Open Manhole	1200	8.000	67.020	150				
TR11363802	70.070	3.705	Open Manhole	1200	8.001	66.365	150	8.000	66.365	150	
TR11363801	70.320	4.587	Open Manhole	1200	8.002	65.733	150	8.001	65.733	150	
TR11361801	69.610	1.350	Open Manhole	1200	9.000	68.260	150				
TR11362801	69.160	3.885	Junction		8.003	65.275	150	8.002	65.275	150	

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
TR11360802	67.910	1.350	Open Manhole	1200	10.000	66.560	150	9.000	67.331	150	2055
TR11361901	66.390	1.350	Open Manhole	1200	10.001	65.040	150	10.000	65.040	150	
TR11361902	64.735	1.350	Open Manhole	1200	10.002	63.385	150	10.001	63.385	150	
TR11362901	66.580	3.562	Open Manhole	1200	10.003	63.018	150	10.002	63.018	150	
TR11362902	66.820	4.156	Junction		1.028	62.664	375	1.027	64.186	300	1447
								8.003	64.250	150	1361
								10.003	62.664	150	
TR11373001	67.380	4.964	Open Manhole	1350	1.029	62.416	375	1.028	62.416	375	
TR11372002	65.840	3.612	Open Manhole	1350	1.030	62.228	375	1.029	62.228	375	
TR11372102	66.720	4.552	Open Manhole	1350	1.031	62.168	375	1.030	62.168	375	
TR11372103	68.490	6.441	Open Manhole	1350	1.032	62.049	375	1.031	62.049	375	
TR11372202	64.900	1.350	Open Manhole	1200	11.000	63.550	150				
TR11372201	65.090	1.964	Open Manhole	1200	11.001	63.126	150	11.000	63.126	150	
TR11372203	67.730	5.826	Open Manhole	1350	1.033	61.904	375	1.032	61.904	375	
								11.001	62.908	150	779
TR11373201	66.200	4.396	Open Manhole	1350	1.034	61.804	375	1.033	61.804	375	
TR11373301	65.970	4.380	Open Manhole	1350	1.035	61.590	375	1.034	61.590	375	

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	Pipe Out PN	Invert Level (m)	Diameter (mm)	Pipes In PN	Invert Level (m)	Diameter (mm)	Backdrop (mm)
TR11374301	65.940	4.473	Open Manhole	1350	1.036	61.467	375	1.035	61.467	375	
TR11370501	64.209	1.350	Open Manhole	1200	12.000	62.859	150				
TR11371501	66.199	4.402	Open Manhole	1200	12.001	61.797	150	12.000	61.797	150	
TR11372401	64.799	3.887	Open Manhole	1200	12.002	60.912	150	12.001	60.912	150	
TR11373401	62.320	2.153	Open Manhole	1200	12.003	60.167	150	12.002	60.167	150	
TR11376102	69.790	1.350	Open Manhole	1200	13.000	68.440	150				
TR11376101	69.650	1.778	Open Manhole	1200	13.001	67.872	150	13.000	67.872	150	
TR11377103	70.070	2.848	Open Manhole	1200	13.002	67.222	150	13.001	67.222	150	
TR11378102	70.490	3.735	Open Manhole	1200	13.003	66.755	150	13.002	66.755	150	
TR11379101	71.030	4.935	Open Manhole	1200	13.004	66.095	150	13.003	66.095	150	
TR11379102	71.730	5.972	Open Manhole	1200	13.005	65.758	150	13.004	65.758	150	
TR11379201	72.790	7.642	Open Manhole	1200	13.006	65.148	150	13.005	65.148	150	
TR11378201	72.290	7.827	Open Manhole	1200	13.007	64.463	150	13.006	64.463	150	
TR11378301	72.550	8.436	Open Manhole	1200	13.008	64.114	150	13.007	64.114	150	
TR11377301	69.130	5.969	Open Manhole	1200	13.009	63.161	150	13.008	63.161	150	
TR11377302	67.550	4.717	Open Manhole	1200	13.010	62.833	150	13.009	62.833	150	
TR11376301	66.540	4.185	Open Manhole	1200	13.011	62.355	150	13.010	62.355	150	
TR11375401	65.940	4.440	Open Manhole	1200	13.012	61.500	150	13.011	61.500	150	

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
TR11374401	65.280	5.793	Open Manhole	1350	1.037	59.487	450	1.036	61.263	375	1700
								12.003	59.487	150	
								13.012	61.067	150	1280
PS2	65.529	6.062	Open Manhole	0		OUTFALL		1.037	59.467	450	
TR13365801	80.700	1.350	Open Manhole	1200	14.000	79.350	150				
TR13361602	84.890	1.350	Open Manhole	1200	15.000	83.540	150				
TR13363701	82.390	1.350	Open Manhole	1200	15.001	81.040	150	15.000	81.040	150	
TR13364802	79.920	1.556	Junction		14.001	78.364	150	14.000	78.364	150	
								15.001	78.570	150	206
TR13363801	79.990	2.317	Open Manhole	1200	14.002	77.673	150	14.001	77.673	150	
TR13363901	79.060	1.998	Open Manhole	1200	14.003	77.062	150	14.002	77.062	150	
TR13373002	77.650	1.350	Open Manhole	1200	14.004	76.300	150	14.003	76.300	150	
TR13373001	78.040	2.238	Open Manhole	1200	14.005	75.802	225	14.004	75.802	150	
TR13371101	79.750	4.432	Open Manhole	1200	14.006	75.318	225	14.005	75.318	225	
TR13370101	81.460	6.651	Open Manhole	1200	14.007	74.809	225	14.006	74.809	225	
TR12379101	78.945	4.621	Open Manhole	1200	14.008	74.324	225	14.007	74.324	225	
TR12378101	75.860	2.041	Open Manhole	1200	14.009	73.819	225	14.008	73.819	225	

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
TR12377201	75.580	2.094	Open Manhole	1200	14.010	73.486	225	14.009	73.486	225	
TR12377101	75.790	2.609	Open Manhole	1200	14.011	73.181	225	14.010	73.181	225	
TR12376101	75.420	2.552	Open Manhole	1200	14.012	72.868	225	14.011	72.868	225	
TR12376001	74.110	1.557	Open Manhole	1200	14.013	72.553	225	14.012	72.553	225	
TR12366901	72.180	1.425	Open Manhole	1200	14.014	70.755	225	14.013	70.755	225	
TR12365801	71.090	1.425	Open Manhole	1200	14.015	69.665	225	14.014	69.665	225	
100	70.500	1.500	Open Manhole	1200	14.016	69.000	300	14.015	69.000	225	
101	71.400	2.667	Open Manhole	1350	14.017	68.733	375	14.016	68.733	300	
TR13361601	88.650	1.350	Open Manhole	1200	16.000	87.300	150				
TR13360501	90.730	4.179	Open Manhole	1200	16.001	86.551	150	16.000	86.551	150	
TR12369401	87.920	2.194	Open Manhole	1200	16.002	85.726	150	16.001	85.726	150	
TR12369402	85.790	1.350	Open Manhole	1200	16.003	84.440	150	16.002	84.440	150	
TR12368401	81.360	1.350	Open Manhole	1200	16.004	80.010	150	16.003	80.010	150	
TR12367401	79.870	1.350	Open Manhole	1200	16.005	78.520	150	16.004	78.520	150	
TR12366501	76.260	1.350	Open Manhole	1200	16.006	74.910	150	16.005	74.910	150	
TR12365501	75.780	1.737	Open Manhole	1200	16.007	74.043	150	16.006	74.043	150	
TR11369202	77.240	1.350	Open Manhole	1200	17.000	75.890	150				
TR12360301	78.940	3.832	Open Manhole	1200	17.001	75.108	150	17.000	75.108	150	

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Backdrop (mm)
TR12360401	78.340	4.049	Open Manhole	1200	17.002	74.291	150	17.001	74.291	150	
TR12361501	77.890	4.300	Open Manhole	1200	17.003	73.590	150	17.002	73.590	150	
TR12360602	75.970	1.350	Open Manhole	1200	18.000	74.620	150				
TR12361502	75.080	1.350	Open Manhole	1200	18.001	73.730	150	18.000	73.730	150	
TR12361601	74.870	1.350	Open Manhole	1200	18.002	73.520	150	18.001	73.520	150	
TR12362501	76.040	3.175	Junction		17.004	72.865	150	17.003	73.150	150	285
								18.002	72.865	150	
TR12362502	75.580	3.140	Open Manhole	1200	17.005	72.440	150	17.004	72.440	150	
TR12363503	74.780	2.770	Open Manhole	1200	17.006	72.010	150	17.005	72.010	150	
TR12363504	74.410	2.821	Open Manhole	1200	17.007	71.589	150	17.006	71.589	150	
TR12362301	79.670	1.350	Open Manhole	1200	19.000	78.320	150				
TR12363301	79.030	1.350	Open Manhole	1200	20.000	77.680	150				
TR12363401	77.110	1.350	Junction		19.001	75.760	150	19.000	75.760	150	
								20.000	75.760	150	
TR12363505	75.650	1.350	Open Manhole	1200	19.002	74.300	150	19.001	74.300	150	
TR12363501	75.310	1.405	Open Manhole	1200	19.003	73.905	150	19.002	73.905	150	
TR12364501	75.970	2.535	Open Manhole	1200	19.004	73.435	150	19.003	73.435	150	
TR12364502	74.870	3.769	Junction		16.008	71.101	225	16.007	73.336	150	2161

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
								17.007	71.101	150	
								19.004	73.154	150	1978
TR12364601	73.500	2.755	Open Manhole	1200	16.009	70.745	225	16.008	70.745	225	
102	72.700	4.148	Open Manhole	1350	14.018	68.552	450	14.017	68.552	375	
								16.009	70.603	225	1825
PS1	73.600	5.175	Open Manhole	0		OUTFALL		14.018	68.425	450	
TR11362602	76.390	1.650	Open Manhole	1350	21.000	74.740	450				
TR11361701	76.470	1.906	Open Manhole	1350	21.001	74.564	450	21.000	74.564	450	
TR11360702	75.240	1.650	Open Manhole	1350	21.002	73.590	450	21.001	73.590	450	
TR10367702	79.610	1.350	Open Manhole	1200	22.000	78.260	150				
TR10368701	78.090	1.350	Open Manhole	1200	22.001	76.740	150	22.000	76.740	150	
TR10369701	75.590	1.350	Open Manhole	1200	22.002	74.240	150	22.001	74.240	150	
TR10369802	74.220	1.650	Junction		21.003	72.570	450	21.002	72.570	450	
								22.002	72.570	150	
TR10369801	73.900	1.800	Open Manhole	1500	21.004	72.100	600	21.003	72.100	450	
TR10368901	74.160	2.180	Open Manhole	1500	21.005	71.980	600	21.004	71.980	600	
TR10368902	74.390	2.535	Open Manhole	1500	21.006	71.855	600	21.005	71.855	600	

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	Pipe Out PN	Invert Level (m)	Diameter (mm)	Pipes In PN	Invert Level (m)	Diameter (mm)	Backdrop (mm)
TR10378001	74.010	2.276	Open Manhole	1500	21.007	71.734	600	21.006	71.734	600	
TR10378101	73.110	1.800	Open Manhole	1500	21.008	71.310	600	21.007	71.310	600	
TR10378201	71.680	1.800	Open Manhole	1500	21.009	69.880	600	21.008	69.880	600	
TR10378202	70.510	1.800	Open Manhole	1500	21.010	68.710	600	21.009	68.710	600	
TR10378301	68.880	1.800	Junction		21.011	67.080	600	21.010	67.080	600	
TR10377301	69.090	2.144	Open Manhole	1500	21.012	66.946	600	21.011	66.946	600	
TR10376201	68.560	1.800	Open Manhole	1500	21.013	66.760	600	21.012	66.760	600	
TR10376301	65.730	1.800	Open Manhole	1500	21.014	63.930	600	21.013	63.930	600	
TR10376401	61.240	1.800	Open Manhole	1500	21.015	59.440	600	21.014	59.440	600	
TR10367701	81.170	1.350	Open Manhole	1200	23.000	79.820	150				
TR10366801	80.030	1.350	Open Manhole	1200	23.001	78.680	150	23.000	78.680	150	
TR10366901	76.860	1.350	Open Manhole	1200	23.002	75.510	150	23.001	75.510	150	
TR10376001	73.370	1.350	Open Manhole	1200	23.003	72.020	150	23.002	72.020	150	
TR10375001	73.700	2.438	Open Manhole	1200	23.004	71.262	150	23.003	71.262	150	
TR10373201	78.040	1.350	Open Manhole	1200	24.000	76.690	150				
TR10374101	77.040	1.350	Open Manhole	1200	24.001	75.690	150	24.000	75.690	150	
TR10374001	76.370	5.616	Junction		23.005	70.754	150	23.004	70.754	150	
								24.001	74.917	150	4163

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Backdrop (mm)
TR10375101	70.160	1.350	Open Manhole	1200	23.006	68.810	150	23.005	68.810	150	
TR10375201	64.720	1.350	Open Manhole	1200	23.007	63.370	150	23.006	63.370	150	
TR10374301	63.790	1.350	Open Manhole	1200	23.008	62.440	150	23.007	62.440	150	
TR10374302	59.990	1.800	Junction		21.016	58.190	600	21.015	58.190	600	
								23.008	58.190	150	
TR10374401	59.700	1.800	Open Manhole	1500	21.017	57.900	600	21.016	57.900	600	
TR10373401	62.490	4.760	Open Manhole	1500	21.018	57.730	600	21.017	57.730	600	
TR10373501	60.450	2.907	Open Manhole	1500	21.019	57.543	600	21.018	57.543	600	
TR10372501	62.480	5.070	Open Manhole	1500	21.020	57.410	600	21.019	57.410	600	
TR10372601	60.680	3.365	Open Manhole	1500	21.021	57.315	600	21.020	57.315	600	
TR10371502	57.430	1.800	Open Manhole	1500	21.022	55.630	600	21.021	55.630	600	
TR10370501	56.680	1.800	Open Manhole	1500	21.023	54.880	600	21.022	54.880	600	
TR09379501	57.050	2.296	Open Manhole	1500	21.024	54.754	600	21.023	54.754	600	
TR10356901	95.690	1.350	Open Manhole	1200	25.000	94.340	150				
TR10366001	95.480	2.137	Open Manhole	1200	25.001	93.343	150	25.000	93.343	150	
TR10366101	94.090	1.713	Open Manhole	1200	25.002	92.377	150	25.001	92.377	150	
TR10366301	91.260	1.350	Open Manhole	1200	25.003	89.910	150	25.002	89.910	150	
TR10365401	90.660	1.793	Open Manhole	1200	25.004	88.867	225	25.003	88.867	150	

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
TR10365501	90.270	1.973	Open Manhole	1200	25.005	88.297	225	25.004	88.297	225	
TR10365601	86.160	1.425	Open Manhole	1200	25.006	84.735	225	25.005	84.735	225	
TR10364601	83.489	1.425	Open Manhole	1200	25.007	82.064	225	25.006	82.064	225	
TR10363601	81.209	1.425	Open Manhole	1200	25.008	79.784	225	25.007	79.784	225	
TR10363501	79.650	1.425	Open Manhole	1200	25.009	78.225	225	25.008	78.225	225	
TR10354901	82.130	1.350	Open Manhole	1200	26.000	80.780	150				
TR10364001	79.710	1.425	Open Manhole	1200	26.001	78.285	225	26.000	78.285	150	
TR10363101	79.130	1.425	Open Manhole	1200	26.002	77.705	225	26.001	77.705	225	
TR10363102	78.720	1.425	Open Manhole	1200	26.003	77.295	225	26.002	77.295	225	
TR10364101	80.260	3.251	Open Manhole	1200	26.004	77.009	225	26.003	77.009	225	
TR10364201	78.720	1.901	Open Manhole	1200	26.005	76.819	225	26.004	76.819	225	
TR10364202	79.540	2.959	Open Manhole	1200	26.006	76.581	225	26.005	76.581	225	
TR10364301	78.919	2.563	Open Manhole	1200	26.007	76.356	225	26.006	76.356	225	
TR10363301	75.339	1.425	Open Manhole	1200	26.008	73.914	225	26.007	73.914	225	
TR10362401	73.129	1.425	Open Manhole	1200	26.009	71.704	225	26.008	71.704	225	
TR10362501	71.489	1.425	Junction		25.010	70.064	225	25.009	70.064	225	
								26.009	70.064	225	
TR10361501	69.740	1.500	Open Manhole	1200	25.011	68.240	225	25.010	68.240	225	

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
TR10360501	67.330	1.500	Open Manhole	1200	25.012	65.830	225	25.011	65.830	225	
TR09369601	65.780	1.500	Open Manhole	1200	25.013	64.280	300	25.012	64.280	225	
TR09368601	64.860	1.500	Open Manhole	1200	25.014	63.360	300	25.013	63.360	300	
TR09368702	64.330	1.500	Open Manhole	1200	25.015	62.830	300	25.014	62.830	300	
TR09368801	62.890	1.500	Open Manhole	1200	25.016	61.390	300	25.015	61.390	300	
TR09368901	62.160	1.500	Open Manhole	1200	25.017	60.660	300	25.016	60.660	300	
TR09378001	62.110	1.919	Open Manhole	1350	25.018	60.191	375	25.017	60.191	300	
TR10372201	78.820	1.350	Open Manhole	1200	27.000	77.470	150				
TR10371102	77.580	1.350	Open Manhole	1200	27.001	76.230	150	27.000	76.230	150	
TR10360901	78.270	1.350	Open Manhole	1200	28.000	76.920	150				
TR10371001	77.360	1.350	Open Manhole	1200	28.001	76.010	150	28.000	76.010	150	
TR10371101	77.200	1.862	Junction		27.002	75.338	150	27.001	75.721	150	383
								28.001	75.338	150	
TR10370101	74.450	1.350	Open Manhole	1200	27.003	73.100	150	27.002	73.100	150	
TR10370102	70.530	1.350	Open Manhole	1200	27.004	69.180	150	27.003	69.180	150	
TR09379101	65.720	1.350	Open Manhole	1200	27.005	64.370	150	27.004	64.370	150	
TR09379103	61.380	1.575	Junction		25.019	59.805	375	25.018	59.805	375	
								27.005	59.805	150	

Manhole Schedules for Foul - Main

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	Pipe Out			Pipes In			Backdrop (mm)
					PN	Invert Level (m)	Diameter (mm)	PN	Invert Level (m)	Diameter (mm)	
TR09379201	57.890	1.575	Open Manhole	1350	25.020	56.315	375	25.019	56.315	375	
TR09379301	56.730	1.575	Open Manhole	1350	25.021	55.155	375	25.020	55.155	375	
TR09379401	56.500	1.575	Open Manhole	1350	25.022	54.925	375	25.021	54.925	375	
TR09379503	56.450	1.734	Open Manhole	1350	25.023	54.716	375	25.022	54.716	375	
TR09379502	56.840	2.201	Junction		21.025	54.639	600	21.024	54.639	600	
								25.023	54.639	375	
TR09378601	55.780	1.950	Open Manhole	1500	21.026	53.830	675	21.025	53.830	600	
TR09377602	56.330	2.688	Open Manhole	1500	21.027	53.642	675	21.026	53.642	675	
TR09377601	57.510	3.988	Open Manhole	1500	21.028	53.522	675	21.027	53.522	675	
TR09376601	54.920	1.875	Open Manhole	1500	21.029	53.045	675	21.028	53.045	675	
TR09375602	55.330	2.437	Open Manhole	1500	21.030	52.893	675	21.029	52.893	675	
Onsite_WwTW	55.970	3.099	Open Manhole	0		OUTFALL		21.030	52.871	675	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR11350901	611062.671	135984.967	611062.671	135984.967	Required	
TR11351901	611164.889	135935.408	611164.889	135935.408	Required	
TR11352801	611282.401	135894.423	611282.401	135894.423	Required	
TR11353801	611373.978	135871.689	611373.978	135871.689	Required	
TR11354402	611415.857	135438.931	611415.857	135438.931	Required	
TR11354401	611457.891	135472.311	611457.891	135472.311	Required	
TR11354601	611486.326	135603.358	611486.326	135603.358	Required	
TR11355701	611504.589	135740.957	611504.589	135740.957	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR11354801	611488.028	135870.570	611488.028	135870.570	Required	
TR11356801	611607.681	135867.705	611607.681	135867.705	Required	
TR11356802	611693.216	135886.912	611693.216	135886.912	Required	
TR11357902	611755.408	135949.104	611755.408	135949.104	Required	
TR11368001	611826.511	136034.193	611826.511	136034.193	Required	
TR11367001	611749.114	136079.928	611749.114	136079.928	Required	
TR11366101	611666.791	136181.952	611666.791	136181.952	Required	
TR11366201	611623.167	136240.352	611623.167	136240.352	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR11366303	611673.475	136326.544	611673.475	136326.544	Required	
TR11367301	611738.208	136322.322	611738.208	136322.322	Required	
TR11369101	611931.130	136144.513	611931.130	136144.513	Required	
TR11369201	611974.749	136211.014	611974.749	136211.014	Required	
TR11369203	611903.243	136289.671	611903.243	136289.671	Required	
TR11368301	611853.248	136364.539	611853.248	136364.539	Required	
TR11368401	611854.303	136439.474	611854.303	136439.474	Required	
TR11368501	611832.492	136539.738	611832.492	136539.738	Required	

Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR11368702	611865.411	136783.929	611865.411	136783.929	Required	
TR11368701	611822.027	136719.448	611822.027	136719.448	Required	
TR11368601	611802.829	136651.169	611802.829	136651.169	Required	
TR11367602	611761.668	136658.168	611761.668	136658.168	Required	
TR11366701	611692.830	136728.612	611692.830	136728.612	Required	
TR11366601	611690.778	136657.231	611690.778	136657.231	Required	
TR11365601	611545.983	136643.802	611545.983	136643.802	Required	
TR11365702	611544.549	136713.156	611544.549	136713.156	Required	

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MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR11366702	611695.509	136797.824	611695.509	136797.824	Required	
TR11366703	611631.465	136797.202	611631.465	136797.202	Required	
TR11365701	611533.268	136797.333	611533.268	136797.333	Required	
TR11366901	611646.760	136953.389	611646.760	136953.389	Required	
TR11365903	611591.277	136937.467	611591.277	136937.467	Required	
TR11365902	611533.510	136924.697	611533.510	136924.697	Required	
TR11364902	611496.703	136900.504	611496.703	136900.504	Required	
TR11364801	611469.661	136891.861	611469.661	136891.861	Required	

Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR11364901	611434.393	136905.239	611434.393	136905.239	Required	
TR11363901	611386.962	136908.279	611386.962	136908.279	Required	
TR11363902	611320.074	136942.940	611320.074	136942.940	Required	
TR11364701	611484.726	136798.445	611484.726	136798.445	Required	
TR11363802	611397.155	136804.249	611397.155	136804.249	Required	
TR11363801	611312.669	136807.214	611312.669	136807.214	Required	
TR11361801	611130.832	136844.161	611130.832	136844.161	Required	
TR11362801	611251.898	136815.366	611251.898	136815.366	Required	

Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR11360802	611097.516	136886.388	611097.516	136886.388	Required	
TR11361901	611148.595	136928.954	611148.595	136928.954	Required	
TR11361902	611185.080	136971.520	611185.080	136971.520	Required	
TR11362901	611233.726	136960.574	611233.726	136960.574	Required	
TR11362902	611280.548	136949.629	611280.548	136949.629	Required	
TR11373001	611308.520	137058.475	611308.520	137058.475	Required	
TR11372002	611228.862	137088.879	611228.862	137088.879	Required	
TR11372102	611229.470	137115.635	611229.470	137115.635	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR11372103	611264.731	137156.425	611264.731	137156.425	Required	
TR11372202	611225.959	137256.324	611225.959	137256.324	Required	
TR11372201	611274.540	137226.924	611274.540	137226.924	Required	
TR11372203	611299.674	137212.212	611299.674	137212.212	Required	
TR11373201	611320.517	137252.672	611320.517	137252.672	Required	
TR11373301	611394.081	137315.814	611394.081	137315.814	Required	
TR11374301	611432.089	137356.274	611432.089	137356.274	Required	
TR11370501	611041.920	137556.090	611041.920	137556.090	Required	

Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR11371501	611176.999	137511.773	611176.999	137511.773	Required	
TR11372401	611288.793	137472.213	611288.793	137472.213	Required	
TR11373401	611387.208	137456.570	611387.208	137456.570	Required	
TR11376102	611610.726	137180.608	611610.726	137180.608	Required	
TR11376101	611684.069	137160.416	611684.069	137160.416	Required	
TR11377103	611768.106	137138.036	611768.106	137138.036	Required	
TR11378102	611830.413	137132.249	611830.413	137132.249	Required	
TR11379101	611918.454	137140.350	611918.454	137140.350	Required	

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
Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR11379102	611927.432	137184.570	611927.432	137184.570	Required	
TR11379201	611946.520	137263.970	611946.520	137263.970	Required	
TR11378201	611857.918	137287.729	611857.918	137287.729	Required	
TR11378301	611870.292	137332.773	611870.292	137332.773	Required	
TR11377301	611746.495	137363.642	611746.495	137363.642	Required	
TR11377302	611704.214	137375.456	611704.214	137375.456	Required	
TR11376301	611643.354	137395.269	611643.354	137395.269	Required	
TR11375401	611531.702	137420.856	611531.702	137420.856	Required	

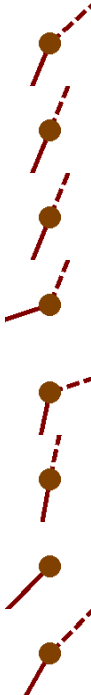
Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR11374401	611476.297	137437.692	611476.297	137437.692	Required	
PS2	611480.932	137428.422			No Entry	
TR13365801	613534.279	136867.319	613534.279	136867.319	Required	
TR13361602	613214.781	136665.976	613214.781	136665.976	Required	
TR13363701	613325.351	136736.182	613325.351	136736.182	Required	
TR13364802	613420.029	136801.177	613420.029	136801.177	Required	
TR13363801	613378.661	136884.719	613378.661	136884.719	Required	
TR13363901	613341.359	136958.145	613341.359	136958.145	Required	

Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR13373002	613307.809	137008.759	613307.809	137008.759	Required	
TR13373001	613301.871	137075.262	613301.871	137075.262	Required	
TR13371101	613192.280	137100.937	613192.280	137100.937	Required	
TR13370101	613075.941	137123.831	613075.941	137123.831	Required	
TR12379101	612966.763	137152.167	612966.763	137152.167	Required	
TR12378101	612852.371	137179.061	612852.371	137179.061	Required	
TR12377201	612778.297	137201.830	612778.297	137201.830	Required	
TR12377101	612726.189	137153.939	612726.189	137153.939	Required	

Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR12376101	612672.460	137104.558	612672.460	137104.558	Required	
TR12376001	612645.370	137038.089	612645.370	137038.089	Required	
TR12366901	612613.119	136958.957	612613.119	136958.957	Required	
TR12365801	612569.071	136849.450	612569.071	136849.450	Required	
100	612485.870	136821.920	612485.870	136821.920	Required	
101	612467.517	136734.437	612467.517	136734.437	Required	
TR13361601	613133.613	136617.006	613133.613	136617.006	Required	
TR13360501	613063.308	136545.572	613063.308	136545.572	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR12369401	613009.190	136449.159	613009.190	136449.159	Required	
TR12369402	612924.755	136495.208	612924.755	136495.208	Required	
TR12368401	612839.942	136496.386	612839.942	136496.386	Required	
TR12367401	612749.988	136510.274	612749.988	136510.274	Required	
TR12366501	612641.309	136532.495	612641.309	136532.495	Required	
TR12365501	612525.024	136540.506	612525.024	136540.506	Required	
TR11369202	611974.340	136240.161	611974.340	136240.161	Required	
TR12360301	612035.989	136324.827	612035.989	136324.827	Required	

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MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR12360401	612105.590	136409.252	612105.590	136409.252	Required	
TR12361501	612165.080	136481.837	612165.080	136481.837	Required	
TR12360602	612072.925	136626.154	612072.925	136626.154	Required	
TR12361502	612154.902	136597.400	612154.902	136597.400	Required	
TR12361601	612174.479	136605.965	612174.479	136605.965	Required	
TR12362501	612206.291	136523.988	612206.291	136523.988	Required	
TR12362502	612258.818	136546.310	612258.818	136546.310	Required	
TR12363503	612312.739	136566.812	612312.739	136566.812	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR12363504	612368.410	136575.988	612368.410	136575.988	Required	
TR12362301	612273.944	136292.882	612273.944	136292.882	Required	
TR12363301	612370.764	136336.654	612370.764	136336.654	Required	
TR12363401	612333.254	136367.638	612333.254	136367.638	Required	
TR12363505	612377.835	136420.297	612377.835	136420.297	Required	
TR12363501	612411.728	136461.272	612411.728	136461.272	Required	
TR12364501	612425.917	136522.764	612425.917	136522.764	Required	
TR12364502	612432.035	136560.082	612432.035	136560.082	Required	

Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR12364601	612448.552	136626.765	612448.552	136626.765	Required	
102	612453.335	136653.827	612453.335	136653.827	Required	
PS1	612515.515	136640.395			No Entry	
TR11362602	611211.115	136675.433	611211.115	136675.433	Required	
TR11361701	611129.403	136708.118	611129.403	136708.118	Required	
TR11360702	611044.513	136745.342	611044.513	136745.342	Required	
TR10367702	610796.149	136773.478	610796.149	136773.478	Required	
TR10368701	610869.286	136746.704	610869.286	136746.704	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR10369701	610904.695	136770.764	610904.695	136770.764	Required	
TR10369802	610946.458	136814.798	610946.458	136814.798	Required	
TR10369801	610915.421	136864.279	610915.421	136864.279	Required	
TR10368901	610894.237	136920.354	610894.237	136920.354	Required	
TR10368902	610881.153	136981.726	610881.153	136981.726	Required	
TR10378001	610873.676	137041.540	610873.676	137041.540	Required	
TR10378101	610866.511	137101.977	610866.511	137101.977	Required	
TR10378201	610853.503	137204.221	610853.503	137204.221	Required	

Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR10378202	610837.228	137293.733	610837.228	137293.733	Required	
TR10378301	610827.838	137341.931	610827.838	137341.931	Required	
TR10377301	610763.365	137324.404	610763.365	137324.404	Required	
TR10376201	610699.084	137280.266	610699.084	137280.266	Required	
TR10376301	610656.520	137353.414	610656.520	137353.414	Required	
TR10376401	610612.352	137429.321	610612.352	137429.321	Required	
TR10367701	610742.264	136787.570	610742.264	136787.570	Required	
TR10366801	610616.433	136812.074	610616.433	136812.074	Required	

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MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR10366901	610631.869	136920.471	610631.869	136920.471	Required	
TR10376001	610632.037	137022.622	610632.037	137022.622	Required	
TR10375001	610537.913	137061.940	610537.913	137061.940	Required	
TR10373201	610323.452	137220.998	610323.452	137220.998	Required	
TR10374101	610404.470	137170.362	610404.470	137170.362	Required	
TR10374001	610478.683	137096.334	610478.683	137096.334	Required	
TR10375101	610506.129	137164.597	610506.129	137164.597	Required	
TR10375201	610501.203	137239.193	610501.203	137239.193	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR10374301	610485.017	137310.975	610485.017	137310.975	Required	
TR10374302	610496.534	137356.631	610496.534	137356.631	Required	
TR10374401	610439.268	137413.765	610439.268	137413.765	Required	
TR10373401	610378.930	137473.963	610378.930	137473.963	Required	
TR10373501	610314.567	137541.529	610314.567	137541.529	Required	
TR10372501	610251.216	137561.305	610251.216	137561.305	Required	
TR10372601	610226.040	137601.448	610226.040	137601.448	Required	
TR10371502	610126.196	137587.470	610126.196	137587.470	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR10370501	610048.317	137562.176	610048.317	137562.176	Required	
TR09379501	609986.255	137551.060	609986.255	137551.060	Required	
TR10356901	610697.085	135952.641	610697.085	135952.641	Required	
TR10366001	610648.795	136077.081	610648.795	136077.081	Required	
TR10366101	610632.004	136197.648	610632.004	136197.648	Required	
TR10366301	610617.531	136301.577	610617.531	136301.577	Required	
TR10365401	610581.867	136428.211	610581.867	136428.211	Required	
TR10365501	610579.465	136560.824	610579.465	136560.824	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR10365601	610589.171	136674.793	610589.171	136674.793	Required	
TR10364601	610477.980	136675.497	610477.980	136675.497	Required	
TR10363601	610383.678	136646.643	610383.678	136646.643	Required	
TR10363501	610304.156	136583.306	610304.156	136583.306	Required	
TR10354901	610455.821	135967.020	610455.821	135967.020	Required	
TR10364001	610423.390	136035.935	610423.390	136035.935	Required	
TR10363101	610399.067	136101.472	610399.067	136101.472	Required	
TR10363102	610389.608	136135.632	610389.608	136135.632	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR10364101	610424.742	136192.008	610424.742	136192.008	Required	
TR10364201	610440.281	136233.222	610440.281	136233.222	Required	
TR10364202	610434.200	136287.949	610434.200	136287.949	Required	
TR10364301	610406.198	136332.071	610406.198	136332.071	Required	
TR10363301	610318.230	136324.330	610318.230	136324.330	Required	
TR10362401	610256.301	136422.150	610256.301	136422.150	Required	
TR10362501	610200.002	136503.784	610200.002	136503.784	Required	
TR10361501	610132.548	136581.833	610132.548	136581.833	Required	

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MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR10360501	610014.918	136561.491	610014.918	136561.491	Required	
TR09369601	609936.172	136606.914	609936.172	136606.914	Required	
TR09368601	609892.915	136674.620	609892.915	136674.620	Required	
TR09368702	609849.098	136771.498	609849.098	136771.498	Required	
TR09368801	609836.628	136814.161	609836.628	136814.161	Required	
TR09368901	609862.225	136933.615	609862.225	136933.615	Required	
TR09378001	609887.823	137056.352	609887.823	137056.352	Required	
TR10372201	610232.902	137218.019	610232.902	137218.019	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR10371102	610156.649	137167.383	610156.649	137167.383	Required	
TR10360901	610088.141	136938.029	610088.141	136938.029	Required	
TR10371001	610107.031	137017.856	610107.031	137017.856	Required	
TR10371101	610129.842	137104.832	610129.842	137104.832	Required	
TR10370101	610072.229	137122.468	610072.229	137122.468	Required	
TR10370102	610006.060	137144.074	610006.060	137144.074	Required	
TR09379101	609944.618	137160.954	609944.618	137160.954	Required	
TR09379103	609912.107	137171.868	609912.107	137171.868	Required	

Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR09379201	609936.216	137293.025	609936.216	137293.025	Required	
TR09379301	609947.263	137356.778	609947.263	137356.778	Required	
TR09379401	609940.822	137419.607	609940.822	137419.607	Required	
TR09379503	609954.493	137513.028	609954.493	137513.028	Required	
TR09379502	609942.539	137546.157			No Entry	
TR09378601	609880.000	137591.000	609880.000	137591.000	Required	
TR09377602	609797.000	137635.000	609797.000	137635.000	Required	
TR09377601	609748.000	137670.000	609748.000	137670.000	Required	

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Manhole Schedules for Foul - Main

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TR09376601	609669.000	137717.000	609669.000	137717.000	Required	
TR09375602	609596.000	137738.000	609596.000	137738.000	Required	
Onsite_WwTW	609595.000	137749.000			No Entry	

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.000	o	150	TR11350901	101.260	99.910	1.200	Open Manhole	1200
1.001	o	150	TR11351901	100.830	99.062	1.618	Open Manhole	1200
1.002	o	225	TR11352801	99.860	98.132	1.503	Open Manhole	1200
1.003	o	225	TR11353801	98.950	97.525	1.200	Open Manhole	1200
2.000	o	150	TR11354402	105.500	104.150	1.200	Open Manhole	1200
2.001	o	150	TR11354401	104.840	103.490	1.200	Open Manhole	1200
2.002	o	150	TR11354601	103.210	101.860	1.200	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.000	113.598	133.9	TR11351901	100.830	99.062	1.618	Open Manhole	1200
1.001	124.454	133.9	TR11352801	99.860	98.132	1.578	Open Manhole	1200
1.002	94.357	155.4	TR11353801	98.950	97.525	1.200	Open Manhole	1200
1.003	114.055	232.3	TR11354801	98.600	97.034	1.341	Junction	
2.000	53.676	81.3	TR11354401	104.840	103.490	1.200	Open Manhole	1200
2.001	134.096	82.3	TR11354601	103.210	101.860	1.200	Open Manhole	1200
2.002	138.806	60.9	TR11355701	100.930	99.580	1.200	Open Manhole	1200

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
2.003	o	150	TR11355701	100.930	99.580	1.200	Open Manhole	1200
1.004	o	225	TR11354801	98.600	97.034	1.341	Junction	
1.005	o	225	TR11356801	97.610	96.185	1.200	Open Manhole	1200
1.006	o	225	TR11356802	94.520	93.095	1.200	Open Manhole	1200
1.007	o	225	TR11357902	88.500	87.075	1.200	Open Manhole	1200
1.008	o	300	TR11368001	80.530	79.030	1.200	Open Manhole	1200
1.009	o	300	TR11367001	81.550	78.761	2.489	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
2.003	130.667	51.3	TR11354801	98.600	97.034	1.416	Junction	
1.004	119.687	141.0	TR11356801	97.610	96.185	1.200	Open Manhole	1200
1.005	87.665	28.4	TR11356802	94.520	93.095	1.200	Open Manhole	1200
1.006	87.953	14.6	TR11357902	88.500	87.075	1.200	Open Manhole	1200
1.007	110.886	13.8	TR11368001	80.530	79.030	1.275	Open Manhole	1200
1.008	89.900	334.7	TR11367001	81.550	78.761	2.489	Open Manhole	1200
1.009	131.095	334.7	TR11366101	86.210	78.370	7.540	Open Manhole	1200

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.010	o	300	TR11366101	86.210	78.370	7.540	Open Manhole	1200
1.011	o	300	TR11366201	80.890	78.152	2.438	Open Manhole	1200
1.012	o	300	TR11366303	78.260	76.760	1.200	Open Manhole	1200
1.013	o	300	TR11367301	75.670	74.170	1.200	Open Manhole	1200
3.000	o	150	TR11369101	74.950	73.600	1.200	Open Manhole	1200
3.001	o	150	TR11369201	76.800	73.006	3.644	Open Manhole	1200
3.002	o	150	TR11369203	75.740	72.212	3.378	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.010	72.895	334.7	TR11366201	80.890	78.152	2.438	Open Manhole	1200
1.011	99.800	71.7	TR11366303	78.260	76.760	1.200	Open Manhole	1200
1.012	64.871	25.0	TR11367301	75.670	74.170	1.200	Open Manhole	1200
1.013	122.542	82.2	TR11368301	74.180	72.680	1.200	Junction	
3.000	79.530	133.9	TR11369201	76.800	73.006	3.644	Open Manhole	1200
3.001	106.302	133.9	TR11369203	75.740	72.212	3.378	Open Manhole	1200
3.002	90.026	133.9	TR11368301	74.180	71.540	2.490	Junction	

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.014	o	300	TR11368301	74.180	71.540	2.340	Junction	
1.015	o	300	TR11368401	73.410	71.316	1.794	Open Manhole	1200
1.016	o	300	TR11368501	73.480	71.009	2.171	Open Manhole	1200
4.000	o	150	TR11368702	70.070	68.720	1.200	Open Manhole	1200
4.001	o	150	TR11368701	70.160	68.140	1.870	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.014	74.942	334.2	TR11368401	73.410	71.316	1.794	Open Manhole	1200
1.015	102.609	334.2	TR11368501	73.480	71.009	2.171	Open Manhole	1200
1.016	115.311	91.6	TR11368601	71.250	69.750	1.200	Junction	
4.000	77.718	133.9	TR11368701	70.160	68.140	1.870	Open Manhole	1200
4.001	70.927	133.9	TR11368601	71.250	67.610	3.490	Junction	

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.017	o	300	TR11368601	71.250	67.610	3.340	Junction	
1.018	o	300	TR11367602	71.070	67.485	3.285	Open Manhole	1200
5.000	o	150	TR11366701	71.990	70.640	1.200	Open Manhole	1200
1.019	o	300	TR11366601	71.320	67.273	3.747	Junction	
1.020	o	300	TR11365601	72.540	66.838	5.402	Open Manhole	1200
1.021	o	300	TR11365702	70.920	66.630	3.990	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.017	41.752	334.2	TR11367602	71.070	67.485	3.285	Open Manhole	1200
1.018	70.896	334.2	TR11366601	71.320	67.273	3.747	Junction	
5.000	71.411	87.1	TR11366601	71.320	69.820	1.350	Junction	
1.019	145.417	334.2	TR11365601	72.540	66.838	5.402	Open Manhole	1200
1.020	69.369	334.2	TR11365702	70.920	66.630	3.990	Open Manhole	1200
1.021	84.929	65.3	TR11365701	66.830	65.330	1.200	Junction	

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
6.000	o	150	TR11366702	72.330	70.980	1.200	Open Manhole	1200
6.001	o	150	TR11366703	71.070	69.720	1.200	Open Manhole	1200
1.022	o	300	TR11365701	66.830	65.330	1.200	Junction	
7.000	o	150	TR11366901	70.520	69.170	1.200	Open Manhole	1200
7.001	o	150	TR11365903	69.600	68.250	1.200	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
6.000	64.047	50.8	TR11366703	71.070	69.720	1.200	Open Manhole	1200
6.001	98.197	22.4	TR11365701	66.830	65.330	1.350	Junction	
1.022	109.460	295.8	TR11364902	66.460	64.960	1.200	Junction	
7.000	57.723	62.7	TR11365903	69.600	68.250	1.200	Open Manhole	1200
7.001	59.162	52.4	TR11365902	68.470	67.120	1.200	Open Manhole	1200

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
7.002	o	150	TR11365902	68.470	67.120	1.200	Open Manhole	1200
1.023	o	300	TR11364902	66.460	64.960	1.200	Junction	
1.024	o	300	TR11364801	67.320	64.864	2.156	Open Manhole	1200
1.025	o	300	TR11364901	67.270	64.737	2.233	Open Manhole	1200
1.026	o	300	TR11363901	67.980	64.576	3.104	Open Manhole	1200
1.027	o	300	TR11363902	66.960	64.321	2.339	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
7.002	44.046	20.4	TR11364902	66.460	64.960	1.350	Junction	
1.023	28.390	295.8	TR11364801	67.320	64.864	2.156	Open Manhole	1200
1.024	37.720	295.8	TR11364901	67.270	64.737	2.233	Open Manhole	1200
1.025	47.528	295.8	TR11363901	67.980	64.576	3.104	Open Manhole	1200
1.026	75.335	295.8	TR11363902	66.960	64.321	2.339	Open Manhole	1200
1.027	40.088	295.8	TR11362902	66.820	64.186	2.334	Junction	

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
8.000	o	150	TR11364701	68.370	67.020	1.200	Open Manhole	1200
8.001	o	150	TR11363802	70.070	66.365	3.555	Open Manhole	1200
8.002	o	150	TR11363801	70.320	65.733	4.437	Open Manhole	1200
9.000	o	150	TR11361801	69.610	68.260	1.200	Open Manhole	1200
8.003	o	150	TR11362801	69.160	65.275	3.735	Junction	

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
8.000	87.763	133.9	TR11363802	70.070	66.365	3.555	Open Manhole	1200
8.001	84.538	133.9	TR11363801	70.320	65.733	4.437	Open Manhole	1200
8.002	61.315	133.9	TR11362801	69.160	65.275	3.735	Junction	
9.000	124.443	133.9	TR11362801	69.160	67.331	1.679	Junction	
8.003	137.286	133.9	TR11362902	66.820	64.250	2.420	Junction	

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
10.000	o	150	TR11360802	67.910	66.560	1.200	Open Manhole	1200
10.001	o	150	TR11361901	66.390	65.040	1.200	Open Manhole	1200
10.002	o	150	TR11361902	64.735	63.385	1.200	Open Manhole	1200
10.003	o	150	TR11362901	66.580	63.018	3.412	Open Manhole	1200
1.028	o	375	TR11362902	66.820	62.664	3.781	Junction	
1.029	o	375	TR11373001	67.380	62.416	4.589	Open Manhole	1350
1.030	o	375	TR11372002	65.840	62.228	3.237	Open Manhole	1350

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
10.000	66.490	43.7	TR11361901	66.390	65.040	1.200	Open Manhole	1200
10.001	56.063	33.9	TR11361902	64.735	63.385	1.200	Open Manhole	1200
10.002	49.862	135.8	TR11362901	66.580	63.018	3.412	Open Manhole	1200
10.003	48.084	135.8	TR11362902	66.820	62.664	4.006	Junction	
1.028	112.383	453.1	TR11373001	67.380	62.416	4.589	Open Manhole	1350
1.029	85.263	453.1	TR11372002	65.840	62.228	3.237	Open Manhole	1350
1.030	26.763	453.1	TR11372102	66.720	62.168	4.177	Open Manhole	1350

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.031	o	375	TR11372102	66.720	62.168	4.177	Open Manhole	1350
1.032	o	375	TR11372103	68.490	62.049	6.066	Open Manhole	1350
11.000	o	150	TR11372202	64.900	63.550	1.200	Open Manhole	1200
11.001	o	150	TR11372201	65.090	63.126	1.814	Open Manhole	1200
1.033	o	375	TR11372203	67.730	61.904	5.451	Open Manhole	1350
1.034	o	375	TR11373201	66.200	61.804	4.021	Open Manhole	1350

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.031	53.918	453.1	TR11372103	68.490	62.049	6.066	Open Manhole	1350
1.032	65.827	453.1	TR11372203	67.730	61.904	5.451	Open Manhole	1350
11.000	56.784	133.9	TR11372201	65.090	63.126	1.814	Open Manhole	1200
11.001	29.123	133.9	TR11372203	67.730	62.908	4.672	Open Manhole	1350
1.033	45.513	453.1	TR11373201	66.200	61.804	4.021	Open Manhole	1350
1.034	96.946	453.1	TR11373301	65.970	61.590	4.005	Open Manhole	1350

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.035	o	375	TR11373301	65.970	61.590	4.005	Open Manhole	1350
1.036	o	375	TR11374301	65.940	61.467	4.098	Open Manhole	1350
12.000	o	150	TR11370501	64.209	62.859	1.200	Open Manhole	1200
12.001	o	150	TR11371501	66.199	61.797	4.252	Open Manhole	1200
12.002	o	150	TR11372401	64.799	60.912	3.737	Open Manhole	1200
12.003	o	150	TR11373401	62.320	60.167	2.003	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.035	55.512	453.1	TR11374301	65.940	61.467	4.098	Open Manhole	1350
1.036	92.646	453.1	TR11374401	65.280	61.263	3.642	Open Manhole	1350
12.000	142.163	133.9	TR11371501	66.199	61.797	4.252	Open Manhole	1200
12.001	118.587	133.9	TR11372401	64.799	60.912	3.737	Open Manhole	1200
12.002	99.651	133.9	TR11373401	62.320	60.167	2.003	Open Manhole	1200
12.003	91.067	133.9	TR11374401	65.280	59.487	5.643	Open Manhole	1350

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
13.000	o	150	TR11376102	69.790	68.440	1.200	Open Manhole	1200
13.001	o	150	TR11376101	69.650	67.872	1.628	Open Manhole	1200
13.002	o	150	TR11377103	70.070	67.222	2.698	Open Manhole	1200
13.003	o	150	TR11378102	70.490	66.755	3.585	Open Manhole	1200
13.004	o	150	TR11379101	71.030	66.095	4.785	Open Manhole	1200
13.005	o	150	TR11379102	71.730	65.758	5.822	Open Manhole	1200
13.006	o	150	TR11379201	72.790	65.148	7.492	Open Manhole	1200
13.007	o	150	TR11378201	72.290	64.463	7.677	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
13.000	76.072	133.9	TR11376101	69.650	67.872	1.628	Open Manhole	1200
13.001	86.966	133.9	TR11377103	70.070	67.222	2.698	Open Manhole	1200
13.002	62.575	133.9	TR11378102	70.490	66.755	3.585	Open Manhole	1200
13.003	88.413	133.9	TR11379101	71.030	66.095	4.785	Open Manhole	1200
13.004	45.122	133.9	TR11379102	71.730	65.758	5.822	Open Manhole	1200
13.005	81.662	133.9	TR11379201	72.790	65.148	7.492	Open Manhole	1200
13.006	91.733	133.9	TR11378201	72.290	64.463	7.677	Open Manhole	1200
13.007	46.713	133.9	TR11378301	72.550	64.114	8.286	Open Manhole	1200

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
13.008	o	150	TR11378301	72.550	64.114	8.286	Open Manhole	1200
13.009	o	150	TR11377301	69.130	63.161	5.819	Open Manhole	1200
13.010	o	150	TR11377302	67.550	62.833	4.567	Open Manhole	1200
13.011	o	150	TR11376301	66.540	62.355	4.035	Open Manhole	1200
13.012	o	150	TR11375401	65.940	61.500	4.290	Open Manhole	1200
1.037	o	450	TR11374401	65.280	59.487	5.343	Open Manhole	1350

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
13.008	127.588	133.9	TR11377301	69.130	63.161	5.819	Open Manhole	1200
13.009	43.900	133.9	TR11377302	67.550	62.833	4.567	Open Manhole	1200
13.010	64.004	133.9	TR11376301	66.540	62.355	4.035	Open Manhole	1200
13.011	114.546	133.9	TR11375401	65.940	61.500	4.290	Open Manhole	1200
13.012	57.907	133.9	TR11374401	65.280	61.067	4.063	Open Manhole	1350
1.037	10.364	500.0	PS2	65.529	59.467	5.612	Open Manhole	0

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
14.000	o	150	TR13365801	80.700	79.350	1.200	Open Manhole	1200
15.000	o	150	TR13361602	84.890	83.540	1.200	Open Manhole	1200
15.001	o	150	TR13363701	82.390	81.040	1.200	Open Manhole	1200
14.001	o	150	TR13364802	79.920	78.364	1.406	Junction	
14.002	o	150	TR13363801	79.990	77.673	2.167	Open Manhole	1200
14.003	o	150	TR13363901	79.060	77.062	1.848	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
14.000	132.014	133.9	TR13364802	79.920	78.364	1.406	Junction	
15.000	130.976	52.4	TR13363701	82.390	81.040	1.200	Open Manhole	1200
15.001	114.840	46.5	TR13364802	79.920	78.570	1.200	Junction	
14.001	93.223	134.8	TR13363801	79.990	77.673	2.167	Open Manhole	1200
14.002	82.358	134.8	TR13363901	79.060	77.062	1.848	Open Manhole	1200
14.003	60.724	79.7	TR13373002	77.650	76.300	1.200	Open Manhole	1200

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
14.004	o	150	TR13373002	77.650	76.300	1.200	Open Manhole	1200
14.005	o	225	TR13373001	78.040	75.802	2.013	Open Manhole	1200
14.006	o	225	TR13371101	79.750	75.318	4.207	Open Manhole	1200
14.007	o	225	TR13370101	81.460	74.809	6.426	Open Manhole	1200
14.008	o	225	TR12379101	78.945	74.324	4.396	Open Manhole	1200
14.009	o	225	TR12378101	75.860	73.819	1.816	Open Manhole	1200
14.010	o	225	TR12377201	75.580	73.486	1.869	Open Manhole	1200
14.011	o	225	TR12377101	75.790	73.181	2.384	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
14.004	66.768	134.1	TR13373001	78.040	75.802	2.088	Open Manhole	1200
14.005	112.558	232.6	TR13371101	79.750	75.318	4.207	Open Manhole	1200
14.006	118.570	232.6	TR13370101	81.460	74.809	6.426	Open Manhole	1200
14.007	112.795	232.6	TR12379101	78.945	74.324	4.396	Open Manhole	1200
14.008	117.511	232.6	TR12378101	75.860	73.819	1.816	Open Manhole	1200
14.009	77.495	232.6	TR12377201	75.580	73.486	1.869	Open Manhole	1200
14.010	70.773	232.6	TR12377101	75.790	73.181	2.384	Open Manhole	1200
14.011	72.974	232.6	TR12376101	75.420	72.868	2.327	Open Manhole	1200

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
14.012	o	225	TR12376101	75.420	72.868	2.327	Open Manhole	1200
14.013	o	225	TR12376001	74.110	72.553	1.332	Open Manhole	1200
14.014	o	225	TR12366901	72.180	70.755	1.200	Open Manhole	1200
14.015	o	225	TR12365801	71.090	69.665	1.200	Open Manhole	1200
14.016	o	300	100	70.500	69.000	1.200	Open Manhole	1200
14.017	o	375	101	71.400	68.733	2.292	Open Manhole	1350
16.000	o	150	TR13361601	88.650	87.300	1.200	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
14.012	71.777	228.0	TR12376001	74.110	72.553	1.332	Open Manhole	1200
14.013	85.452	47.5	TR12366901	72.180	70.755	1.200	Open Manhole	1200
14.014	118.034	108.3	TR12365801	71.090	69.665	1.200	Open Manhole	1200
14.015	87.637	131.8	100	70.500	69.000	1.275	Open Manhole	1200
14.016	89.387	334.7	101	71.400	68.733	2.367	Open Manhole	1350
14.017	81.848	453.1	102	72.700	68.552	3.773	Open Manhole	1350
16.000	100.227	133.9	TR13360501	90.730	86.551	4.029	Open Manhole	1200

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
16.001	o	150	TR13360501	90.730	86.551	4.029	Open Manhole	1200
16.002	o	150	TR12369401	87.920	85.726	2.044	Open Manhole	1200
16.003	o	150	TR12369402	85.790	84.440	1.200	Open Manhole	1200
16.004	o	150	TR12368401	81.360	80.010	1.200	Open Manhole	1200
16.005	o	150	TR12367401	79.870	78.520	1.200	Open Manhole	1200
16.006	o	150	TR12366501	76.260	74.910	1.200	Open Manhole	1200
16.007	o	150	TR12365501	75.780	74.043	1.587	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
16.001	110.563	133.9	TR12369401	87.920	85.726	2.044	Open Manhole	1200
16.002	96.176	74.8	TR12369402	85.790	84.440	1.200	Open Manhole	1200
16.003	84.821	19.1	TR12368401	81.360	80.010	1.200	Open Manhole	1200
16.004	91.020	61.1	TR12367401	79.870	78.520	1.200	Open Manhole	1200
16.005	110.928	30.7	TR12366501	76.260	74.910	1.200	Open Manhole	1200
16.006	116.560	134.5	TR12365501	75.780	74.043	1.587	Open Manhole	1200
16.007	95.027	134.5	TR12364502	74.870	73.336	1.384	Junction	

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
17.000	o	150	TR11369202	77.240	75.890	1.200	Open Manhole	1200
17.001	o	150	TR12360301	78.940	75.108	3.682	Open Manhole	1200
17.002	o	150	TR12360401	78.340	74.291	3.899	Open Manhole	1200
17.003	o	150	TR12361501	77.890	73.590	4.150	Open Manhole	1200
18.000	o	150	TR12360602	75.970	74.620	1.200	Open Manhole	1200
18.001	o	150	TR12361502	75.080	73.730	1.200	Open Manhole	1200
18.002	o	150	TR12361601	74.870	73.520	1.200	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
17.000	104.733	133.9	TR12360301	78.940	75.108	3.682	Open Manhole	1200
17.001	109.416	133.9	TR12360401	78.340	74.291	3.899	Open Manhole	1200
17.002	93.850	133.9	TR12361501	77.890	73.590	4.150	Open Manhole	1200
17.003	58.949	133.9	TR12362501	76.040	73.150	2.740	Junction	
18.000	86.874	97.6	TR12361502	75.080	73.730	1.200	Open Manhole	1200
18.001	21.369	101.8	TR12361601	74.870	73.520	1.200	Open Manhole	1200
18.002	87.933	134.2	TR12362501	76.040	72.865	3.025	Junction	

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
17.004	o	150	TR12362501	76.040	72.865	3.025	Junction	
17.005	o	150	TR12362502	75.580	72.440	2.990	Open Manhole	1200
17.006	o	150	TR12363503	74.780	72.010	2.620	Open Manhole	1200
17.007	o	150	TR12363504	74.410	71.589	2.671	Open Manhole	1200
19.000	o	150	TR12362301	79.670	78.320	1.200	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
17.004	57.073	134.2	TR12362502	75.580	72.440	2.990	Open Manhole	1200
17.005	57.687	134.2	TR12363503	74.780	72.010	2.620	Open Manhole	1200
17.006	56.422	134.2	TR12363504	74.410	71.589	2.671	Open Manhole	1200
17.007	65.583	134.2	TR12364502	74.870	71.101	3.619	Junction	
19.000	95.427	37.3	TR12363401	77.110	75.760	1.200	Junction	

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
20.000	o	150	TR12363301	79.030	77.680	1.200	Open Manhole	1200
19.001	o	150	TR12363401	77.110	75.760	1.200	Junction	
19.002	o	150	TR12363505	75.650	74.300	1.200	Open Manhole	1200
19.003	o	150	TR12363501	75.310	73.905	1.255	Open Manhole	1200
19.004	o	150	TR12364501	75.970	73.435	2.385	Open Manhole	1200
16.008	o	225	TR12364502	74.870	71.101	3.544	Junction	

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
20.000	48.653	25.3	TR12363401	77.110	75.760	1.200	Junction	
19.001	68.996	47.3	TR12363505	75.650	74.300	1.200	Open Manhole	1200
19.002	53.176	134.5	TR12363501	75.310	73.905	1.255	Open Manhole	1200
19.003	63.108	134.5	TR12364501	75.970	73.435	2.385	Open Manhole	1200
19.004	37.816	134.5	TR12364502	74.870	73.154	1.566	Junction	
16.008	68.698	193.2	TR12364601	73.500	70.745	2.530	Open Manhole	1200

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
16.009	o	225	TR12364601	73.500	70.745	2.530	Open Manhole	1200
14.018	o	450	102	72.700	68.552	3.698	Open Manhole	1350
21.000	o	450	TR11362602	76.390	74.740	1.200	Open Manhole	1350
21.001	o	450	TR11361701	76.470	74.564	1.456	Open Manhole	1350
21.002	o	450	TR11360702	75.240	73.590	1.200	Open Manhole	1350

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
16.009	27.482	193.2	102	72.700	70.603	1.872	Open Manhole	1350
14.018	63.614	500.0	PS1	73.600	68.425	4.725	Open Manhole	0
21.000	88.007	500.0	TR11361701	76.470	74.564	1.456	Open Manhole	1350
21.001	92.693	95.2	TR11360702	75.240	73.590	1.200	Open Manhole	1350
21.002	120.162	117.8	TR10369802	74.220	72.570	1.200	Junction	

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
22.000	o	150	TR10367702	79.610	78.260	1.200	Open Manhole	1200
22.001	o	150	TR10368701	78.090	76.740	1.200	Open Manhole	1200
22.002	o	150	TR10369701	75.590	74.240	1.200	Open Manhole	1200
21.003	o	450	TR10369802	74.220	72.570	1.200	Junction	
21.004	o	600	TR10369801	73.900	72.100	1.200	Open Manhole	1500
21.005	o	600	TR10368901	74.160	71.980	1.580	Open Manhole	1500
21.006	o	600	TR10368902	74.390	71.855	1.935	Open Manhole	1500

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
22.000	77.884	51.2	TR10368701	78.090	76.740	1.200	Open Manhole	1200
22.001	42.810	17.1	TR10369701	75.590	74.240	1.200	Open Manhole	1200
22.002	60.689	36.3	TR10369802	74.220	72.570	1.500	Junction	
21.003	58.409	124.3	TR10369801	73.900	72.100	1.350	Open Manhole	1500
21.004	59.943	500.0	TR10368901	74.160	71.980	1.580	Open Manhole	1500
21.005	62.751	500.0	TR10368902	74.390	71.855	1.935	Open Manhole	1500
21.006	60.280	500.0	TR10378001	74.010	71.734	1.676	Open Manhole	1500

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
21.007	o	600	TR10378001	74.010	71.734	1.676	Open Manhole	1500
21.008	o	600	TR10378101	73.110	71.310	1.200	Open Manhole	1500
21.009	o	600	TR10378201	71.680	69.880	1.200	Open Manhole	1500
21.010	o	600	TR10378202	70.510	68.710	1.200	Open Manhole	1500
21.011	o	600	TR10378301	68.880	67.080	1.200	Junction	
21.012	o	600	TR10377301	69.090	66.946	1.544	Open Manhole	1500
21.013	o	600	TR10376201	68.560	66.760	1.200	Open Manhole	1500
21.014	o	600	TR10376301	65.730	63.930	1.200	Open Manhole	1500

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
21.007	60.860	143.5	TR10378101	73.110	71.310	1.200	Open Manhole	1500
21.008	103.068	72.1	TR10378201	71.680	69.880	1.200	Open Manhole	1500
21.009	90.980	77.8	TR10378202	70.510	68.710	1.200	Open Manhole	1500
21.010	49.104	30.1	TR10378301	68.880	67.080	1.200	Junction	
21.011	66.813	500.0	TR10377301	69.090	66.946	1.544	Open Manhole	1500
21.012	77.976	418.4	TR10376201	68.560	66.760	1.200	Open Manhole	1500
21.013	84.630	29.9	TR10376301	65.730	63.930	1.200	Open Manhole	1500
21.014	87.822	19.6	TR10376401	61.240	59.440	1.200	Open Manhole	1500

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
21.015	o	600	TR10376401	61.240	59.440	1.200	Open Manhole	1500
23.000	o	150	TR10367701	81.170	79.820	1.200	Open Manhole	1200
23.001	o	150	TR10366801	80.030	78.680	1.200	Open Manhole	1200
23.002	o	150	TR10366901	76.860	75.510	1.200	Open Manhole	1200
23.003	o	150	TR10376001	73.370	72.020	1.200	Open Manhole	1200
23.004	o	150	TR10375001	73.700	71.262	2.288	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
21.015	136.739	109.4	TR10374302	59.990	58.190	1.200	Junction	
23.000	128.194	112.5	TR10366801	80.030	78.680	1.200	Open Manhole	1200
23.001	109.491	34.5	TR10366901	76.860	75.510	1.200	Open Manhole	1200
23.002	102.151	29.3	TR10376001	73.370	72.020	1.200	Open Manhole	1200
23.003	102.006	134.6	TR10375001	73.700	71.262	2.288	Open Manhole	1200
23.004	68.491	134.6	TR10374001	76.370	70.754	5.466	Junction	

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
24.000	o	150	TR10373201	78.040	76.690	1.200	Open Manhole	1200
24.001	o	150	TR10374101	77.040	75.690	1.200	Open Manhole	1200
23.005	o	150	TR10374001	76.370	70.754	5.466	Junction	
23.006	o	150	TR10375101	70.160	68.810	1.200	Open Manhole	1200
23.007	o	150	TR10375201	64.720	63.370	1.200	Open Manhole	1200
23.008	o	150	TR10374301	63.790	62.440	1.200	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
24.000	95.540	95.5	TR10374101	77.040	75.690	1.200	Open Manhole	1200
24.001	104.823	135.6	TR10374001	76.370	74.917	1.303	Junction	
23.005	73.574	37.9	TR10375101	70.160	68.810	1.200	Open Manhole	1200
23.006	74.759	13.7	TR10375201	64.720	63.370	1.200	Open Manhole	1200
23.007	73.584	79.1	TR10374301	63.790	62.440	1.200	Open Manhole	1200
23.008	47.087	11.1	TR10374302	59.990	58.190	1.650	Junction	

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
21.016	o	600	TR10374302	59.990	58.190	1.200	Junction	
21.017	o	600	TR10374401	59.700	57.900	1.200	Open Manhole	1500
21.018	o	600	TR10373401	62.490	57.730	4.160	Open Manhole	1500
21.019	o	600	TR10373501	60.450	57.543	2.307	Open Manhole	1500
21.020	o	600	TR10372501	62.480	57.410	4.470	Open Manhole	1500
21.021	o	600	TR10372601	60.680	57.315	2.765	Open Manhole	1500
21.022	o	600	TR10371502	57.430	55.630	1.200	Open Manhole	1500
21.023	o	600	TR10370501	56.680	54.880	1.200	Open Manhole	1500

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
21.016	80.894	278.9	TR10374401	59.700	57.900	1.200	Open Manhole	1500
21.017	85.231	500.0	TR10373401	62.490	57.730	4.160	Open Manhole	1500
21.018	93.315	500.0	TR10373501	60.450	57.543	2.307	Open Manhole	1500
21.019	66.366	500.0	TR10372501	62.480	57.410	4.470	Open Manhole	1500
21.020	47.384	500.0	TR10372601	60.680	57.315	2.765	Open Manhole	1500
21.021	100.818	59.8	TR10371502	57.430	55.630	1.200	Open Manhole	1500
21.022	81.883	109.2	TR10370501	56.680	54.880	1.200	Open Manhole	1500
21.023	63.050	500.0	TR09379501	57.050	54.754	1.696	Open Manhole	1500

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
21.024	o	600	TR09379501	57.050	54.754	1.696	Open Manhole	1500
25.000	o	150	TR10356901	95.690	94.340	1.200	Open Manhole	1200
25.001	o	150	TR10366001	95.480	93.343	1.987	Open Manhole	1200
25.002	o	150	TR10366101	94.090	92.377	1.563	Open Manhole	1200
25.003	o	150	TR10366301	91.260	89.910	1.200	Open Manhole	1200
25.004	o	225	TR10365401	90.660	88.867	1.568	Open Manhole	1200
25.005	o	225	TR10365501	90.270	88.297	1.748	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
21.024	43.990	381.3	TR09379502	56.840	54.639	1.601	Junction	
25.000	133.481	133.9	TR10366001	95.480	93.343	1.987	Open Manhole	1200
25.001	121.730	126.0	TR10366101	94.090	92.377	1.563	Open Manhole	1200
25.002	104.933	42.5	TR10366301	91.260	89.910	1.200	Open Manhole	1200
25.003	131.560	126.2	TR10365401	90.660	88.867	1.643	Open Manhole	1200
25.004	132.635	232.6	TR10365501	90.270	88.297	1.748	Open Manhole	1200
25.005	114.381	32.1	TR10365601	86.160	84.735	1.200	Open Manhole	1200

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
25.006	o	225	TR10365601	86.160	84.735	1.200	Open Manhole	1200
25.007	o	225	TR10364601	83.489	82.064	1.200	Open Manhole	1200
25.008	o	225	TR10363601	81.209	79.784	1.200	Open Manhole	1200
25.009	o	225	TR10363501	79.650	78.225	1.200	Open Manhole	1200
26.000	o	150	TR10354901	82.130	80.780	1.200	Open Manhole	1200
26.001	o	225	TR10364001	79.710	78.285	1.200	Open Manhole	1200
26.002	o	225	TR10363101	79.130	77.705	1.200	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
25.006	111.193	41.6	TR10364601	83.489	82.064	1.200	Open Manhole	1200
25.007	98.617	43.3	TR10363601	81.209	79.784	1.200	Open Manhole	1200
25.008	101.663	65.2	TR10363501	79.650	78.225	1.200	Open Manhole	1200
25.009	131.041	16.1	TR10362501	71.489	70.064	1.200	Junction	
26.000	76.165	30.5	TR10364001	79.710	78.285	1.275	Open Manhole	1200
26.001	69.905	120.5	TR10363101	79.130	77.705	1.200	Open Manhole	1200
26.002	35.445	86.5	TR10363102	78.720	77.295	1.200	Open Manhole	1200

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
26.003	o	225	TR10363102	78.720	77.295	1.200	Open Manhole	1200
26.004	o	225	TR10364101	80.260	77.009	3.026	Open Manhole	1200
26.005	o	225	TR10364201	78.720	76.819	1.676	Open Manhole	1200
26.006	o	225	TR10364202	79.540	76.581	2.734	Open Manhole	1200
26.007	o	225	TR10364301	78.919	76.356	2.338	Open Manhole	1200
26.008	o	225	TR10363301	75.339	73.914	1.200	Open Manhole	1200
26.009	o	225	TR10362401	73.129	71.704	1.200	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
26.003	66.428	232.0	TR10364101	80.260	77.009	3.026	Open Manhole	1200
26.004	44.046	232.0	TR10364201	78.720	76.819	1.676	Open Manhole	1200
26.005	55.064	232.0	TR10364202	79.540	76.581	2.734	Open Manhole	1200
26.006	52.258	232.0	TR10364301	78.919	76.356	2.338	Open Manhole	1200
26.007	88.308	36.2	TR10363301	75.339	73.914	1.200	Open Manhole	1200
26.008	115.776	52.4	TR10362401	73.129	71.704	1.200	Open Manhole	1200
26.009	99.165	60.5	TR10362501	71.489	70.064	1.200	Junction	

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
25.010	o	225	TR10362501	71.489	70.064	1.200	Junction	
25.011	o	225	TR10361501	69.740	68.240	1.275	Open Manhole	1200
25.012	o	225	TR10360501	67.330	65.830	1.275	Open Manhole	1200
25.013	o	300	TR09369601	65.780	64.280	1.200	Open Manhole	1200
25.014	o	300	TR09368601	64.860	63.360	1.200	Open Manhole	1200
25.015	o	300	TR09368702	64.330	62.830	1.200	Open Manhole	1200
25.016	o	300	TR09368801	62.890	61.390	1.200	Open Manhole	1200
25.017	o	300	TR09368901	62.160	60.660	1.200	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
25.010	103.159	56.6	TR10361501	69.740	68.240	1.275	Open Manhole	1200
25.011	119.376	49.5	TR10360501	67.330	65.830	1.275	Open Manhole	1200
25.012	90.908	58.7	TR09369601	65.780	64.280	1.275	Open Manhole	1200
25.013	80.345	87.3	TR09368601	64.860	63.360	1.200	Open Manhole	1200
25.014	106.327	200.6	TR09368702	64.330	62.830	1.200	Open Manhole	1200
25.015	44.448	30.9	TR09368801	62.890	61.390	1.200	Open Manhole	1200
25.016	122.166	167.4	TR09368901	62.160	60.660	1.200	Open Manhole	1200
25.017	125.378	267.2	TR09378001	62.110	60.191	1.619	Open Manhole	1350

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
25.018	o	375	TR09378001	62.110	60.191	1.544	Open Manhole	1350
27.000	o	150	TR10372201	78.820	77.470	1.200	Open Manhole	1200
27.001	o	150	TR10371102	77.580	76.230	1.200	Open Manhole	1200
28.000	o	150	TR10360901	78.270	76.920	1.200	Open Manhole	1200
28.001	o	150	TR10371001	77.360	76.010	1.200	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
25.018	118.041	305.9	TR09379103	61.380	59.805	1.200	Junction	
27.000	91.534	73.8	TR10371102	77.580	76.230	1.200	Open Manhole	1200
27.001	68.053	133.8	TR10371101	77.200	75.721	1.329	Junction	
28.000	82.032	90.1	TR10371001	77.360	76.010	1.200	Open Manhole	1200
28.001	89.918	133.8	TR10371101	77.200	75.338	1.712	Junction	

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Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
27.002	o	150	TR10371101	77.200	75.338	1.712	Junction	
27.003	o	150	TR10370101	74.450	73.100	1.200	Open Manhole	1200
27.004	o	150	TR10370102	70.530	69.180	1.200	Open Manhole	1200
27.005	o	150	TR09379101	65.720	64.370	1.200	Open Manhole	1200
25.019	o	375	TR09379103	61.380	59.805	1.200	Junction	
25.020	o	375	TR09379201	57.890	56.315	1.200	Open Manhole	1350
25.021	o	375	TR09379301	56.730	55.155	1.200	Open Manhole	1350

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
27.002	60.252	26.9	TR10370101	74.450	73.100	1.200	Open Manhole	1200
27.003	69.607	17.8	TR10370102	70.530	69.180	1.200	Open Manhole	1200
27.004	63.719	13.2	TR09379101	65.720	64.370	1.200	Open Manhole	1200
27.005	34.294	7.5	TR09379103	61.380	59.805	1.425	Junction	
25.019	123.532	35.4	TR09379201	57.890	56.315	1.200	Open Manhole	1350
25.020	64.703	55.8	TR09379301	56.730	55.155	1.200	Open Manhole	1350
25.021	63.158	274.6	TR09379401	56.500	54.925	1.200	Open Manhole	1350

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PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
25.022	o	375	TR09379401	56.500	54.925	1.200	Open Manhole	1350
25.023	o	375	TR09379503	56.450	54.716	1.359	Open Manhole	1350
21.025	o	600	TR09379502	56.840	54.639	1.601	Junction	
21.026	o	675	TR09378601	55.780	53.830	1.275	Open Manhole	1500
21.027	o	675	TR09377602	56.330	53.642	2.013	Open Manhole	1500
21.028	o	675	TR09377601	57.510	53.522	3.313	Open Manhole	1500
21.029	o	675	TR09376601	54.920	53.045	1.200	Open Manhole	1500

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
25.022	94.415	452.5	TR09379503	56.450	54.716	1.359	Open Manhole	1350
25.023	35.220	452.5	TR09379502	56.840	54.639	1.826	Junction	
21.025	76.954	95.2	TR09378601	55.780	53.830	1.350	Open Manhole	1500
21.026	93.941	500.0	TR09377602	56.330	53.642	2.013	Open Manhole	1500
21.027	60.216	500.0	TR09377601	57.510	53.522	3.313	Open Manhole	1500
21.028	91.924	192.8	TR09376601	54.920	53.045	1.200	Open Manhole	1500
21.029	75.961	500.0	TR09375602	55.330	52.893	1.762	Open Manhole	1500

Arcadis SSC Europe B.V		Page 104
P.O. Box 161 AD Arnhem 6800 Netherlands		
Date 09/02/2022 11:45 File 10029956-AUK-XX-XX-M3-CW-0038-Otterpool P...	Designed by aga77500 Checked by	
XP Solutions		Network 2019.1

PIPELINE SCHEDULES for Foul - Main

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
21.030	o	675	TR09375602	55.330	52.893	1.762	Open Manhole	1500

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
21.030	11.045	500.0	Onsite_WwTW	55.970	52.871	2.424	Open Manhole	0

APPENDIX J

Surface Water Drainage Concept Strategy

Drainage Zone Name	Positively Drained Area (ha)	Remaining Permeable Area (ha)	Drainage Zone Name	Positively Drained Area (ha)	Remaining Permeable Area (ha)
DR-WH1	10.90	21.90	DR-S06	0.00	9.88
DR-WH2	18.41	12.07	DR-W01	13.10	14.68
DR-WH3	7.25	2.97	DR-W02	10.30	10.59
DR-WH4	5.42	10.37	DR-W03	11.74	10.42
DR-WH5	5.00	3.42	DR-W04	5.31	1.11
DR-E01	11.51	18.09	DR-BH1	3.07	9.31
DR-E02	4.26	13.74	DR-BH2	2.56	10.19
DR-E03	2.95	15.66	DR-BH3	10.96	9.81
DR-E04	5.55	2.51	DR-BH4	5.42	15.62
DR-E05	0.00	4.84	DR-BH5	1.06	11.70
DR-WN1	8.40	9.52	DR-BH6	10.00	8.64
DR-WN2	5.16	1.39	DR-BH7	4.19	9.61
DR-ET1	4.43	4.20	DR-BH8	0.00	19.77
DR-ET2	19.88	11.41	DR-BH9	1.36	3.35
DR-ETS	4.89	4.42	DR-RS1	9.44	3.29
DR-S01	7.18	7.04	DR-RS2	1.71	6.90
DR-S02	12.68	13.50	DR-RS3	6.48	5.70
DR-S03	3.02	2.68	DR-RS4	1.29	0.96
DR-S04	4.02	5.48	DR-RS5	12.45	7.01
DR-S05	1.68	2.23	TOTAL	253.01	335.99

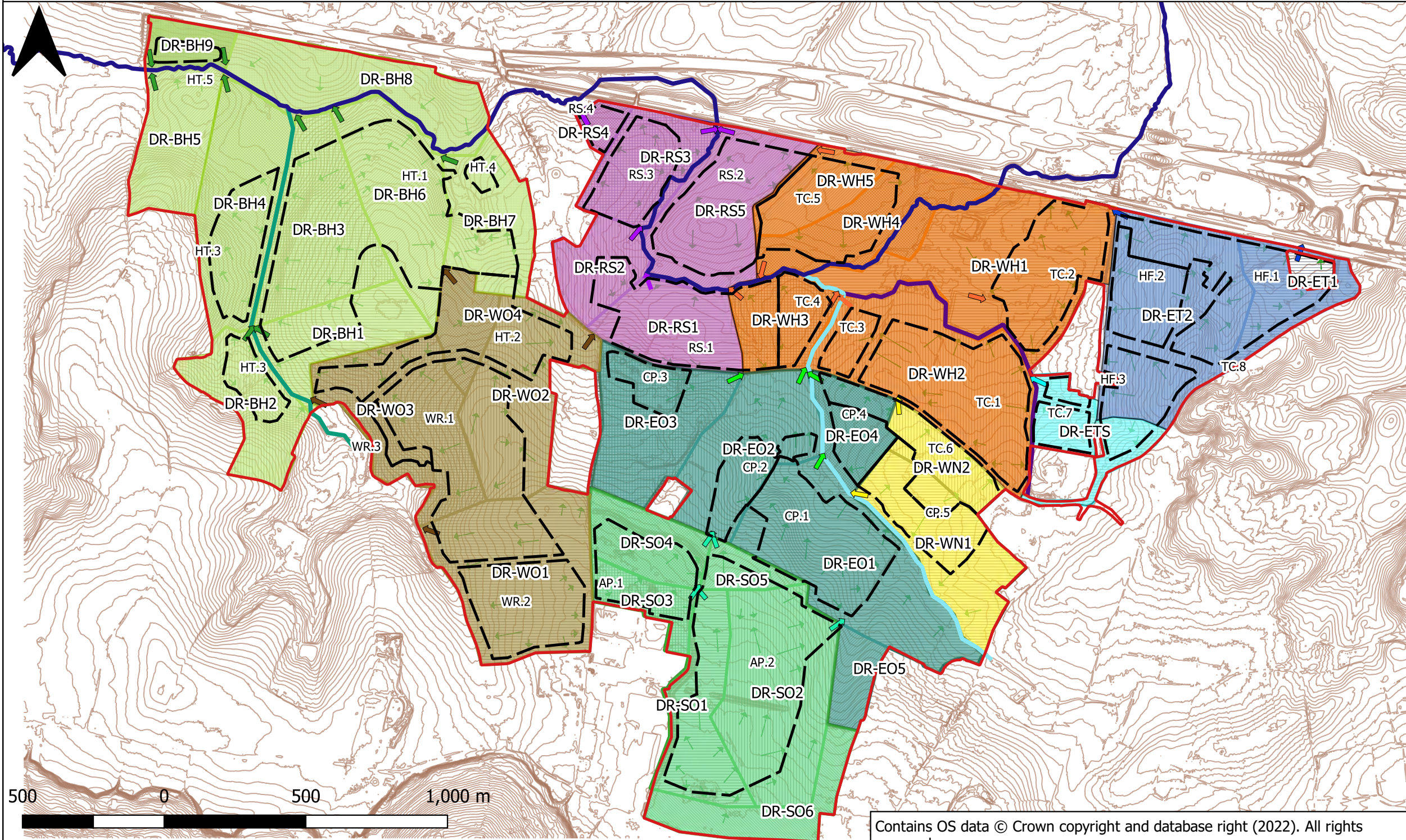
Post-Development Case													
Drainage Zone	Allowable Positively Drained Runoff			Runoff From Permeable Areas			Drainage Zone	Allowable Positively Drained Runoff			Runoff From Permeable Areas		
	1 in 1 year (l/s)	1 in 30 year (l/s)	1 in 100 year (l/s)	1 in 1 year (l/s)	1 in 30 year (l/s)	1 in 100 year (l/s)		1 in 1 year (l/s)	1 in 30 year (l/s)	1 in 100 year (l/s)	1 in 1 year (l/s)	1 in 30 year (l/s)	1 in 100 year (l/s)
DR-WH1	9.8	22.9	32.7	19.7	46.0	65.7	DR-S06	0.0	0.0	0.0	8.9	20.7	19.8
DR-WH2	16.6	38.7	55.2	10.9	25.3	36.2	DR-W01	11.8	27.5	26.2	13.2	30.8	29.4
DR-WH3	6.5	15.2	21.8	2.7	6.2	8.9	DR-W02	9.3	21.6	20.6	9.5	22.2	21.2
DR-WH4	4.9	11.4	16.3	9.3	21.8	31.1	DR-W03	10.6	24.6	23.5	9.4	21.9	20.8
DR-WH5	4.5	10.5	15.0	3.1	7.2	10.3	DR-W04	4.8	11.2	10.6	1.0	2.3	2.2
DR-E01	10.4	24.2	23.0	16.3	38.0	36.2	DR-BH1	2.8	6.4	6.1	8.4	19.6	18.6
DR-E02	3.8	8.9	8.5	12.4	28.9	27.5	DR-BH2	2.3	5.4	5.1	9.2	21.4	20.4
DR-E03	2.7	6.2	5.9	14.1	32.9	31.3	DR-BH3	9.9	23.0	21.9	8.8	20.6	19.6
DR-E04	5.0	11.7	11.1	2.3	5.3	5.0	DR-BH4	4.9	11.4	10.8	14.1	32.8	31.2
DR-E05	0.0	0.0	0.0	4.4	10.2	9.7	DR-BH5	1.0	2.2	2.1	10.5	24.6	23.4
DR-WN1	7.6	17.6	25.2	8.6	20.0	28.6	DR-BH6	9.0	21.0	20.0	7.8	18.2	17.3
DR-WN2	4.6	10.8	15.5	1.3	2.9	4.2	DR-BH7	3.8	8.8	8.4	8.7	20.2	19.2
DR-ET1	4.0	9.3	13.3	3.8	8.8	12.6	DR-BH8	0.0	0.0	0.0	17.8	41.5	39.5
DR-ET2	17.9	41.8	59.6	10.3	24.0	34.2	DR-BH9	1.2	2.9	2.7	3.0	7.0	6.7
DR-ETS	4.4	10.3	14.7	4.0	9.3	13.3	DR-RS1	8.5	19.8	28.3	3.0	6.9	9.9
DR-S01	6.5	15.1	14.4	6.3	14.8	14.1	DR-RS2	1.5	3.6	5.1	6.2	14.5	20.7
DR-S02	11.4	26.6	25.4	12.2	28.4	27.0	DR-RS3	5.8	13.6	19.4	5.1	12.0	17.1
DR-S03	2.7	6.3	6.0	2.4	5.6	5.4	DR-RS4	1.2	2.7	3.9	0.9	2.0	2.9
DR-S04	3.6	8.5	8.0	4.9	11.5	11.0	DR-RS5	11.2	26.1	37.3	6.3	14.7	21.0
DR-S05	1.5	3.5	3.4	2.0	4.7	4.5	TOTAL	227.7	531.3	627.1	302.4	705.6	777.5

Legend

- OPA Site Boundary
- East Stour River
- Key Site Tributaries**
- Harringe Brook
- North Lympe Drain
- Racecourse Drain
- Surface Flow Direction
- ↑ Indicative Key Drainage Outfall Locations
- XX.X Proposed Development Area Reference
- Proposed Development Boundary
- Drainage Zones**
- Barrow Hill (DR-BH1 to DR-BH9)
- East Otterpool (DR-EO1 to DR-EO5)
- East Triangle (DR-ET1 to DR-ET2)
- East Triangle South (DR-ETS)
- River Stour (DR-RS1 to DR-RS5)
- South Otterpool (DR-SO1 to DR-SO6)
- West Newingreen (DR-WN1 to DR-WN2)
- West Otterpool (DR-WO1 to DR-WO4)
- Westhanger (DR-WH1 to DR-WH5)

- Notes:
- The indicative outfall locations and discharge rates may be refined during the detailed design stage, using the principles set out in this drawing and associated Arcadis report 10029956-AUK-XX-XX-RP-CW-0010-P3-Flood Risk Assessment and Surface Water Drainage Strategy.
 - Allowable runoff rates (l/s/ha) from all positively drained areas where good infiltration is feasible in permeable soil types subject to further soakaway testing and ensuring suitable 50% storage drain-down time: Q1 = 0.9; Q30 = 2.1; Q100 = 2.0.
 - Allowable runoff rates (l/s/ha) from all positively drained areas where infiltration is infeasible due to impermeable soil types: Q1 = 0.9; Q30 = 2.1; Q100 = 3.0.
 - Proposed positive drainage outfalls must have a suitable staged discharge arrangement to limit the above allowable runoff rates for Q1, Q30 and Q100.
 - All permeable areas that are not positively drained will continue to discharge at the existing greenfield runoff rates (l/s/ha): Q1 = 0.9; Q30 = 2.1; Q100 = 3.0.
 - The outline drainage strategy demonstrates that post-development runoff for Q1 and Q30 are unchanged whereas as a minimum there will be a reduction of 362 l/s for Q100 when compared with the pre-development runoff.

Revision	Date	Status	Author	Checker	Approver
P7	03/03/2022	FINAL	JP	AG	RG



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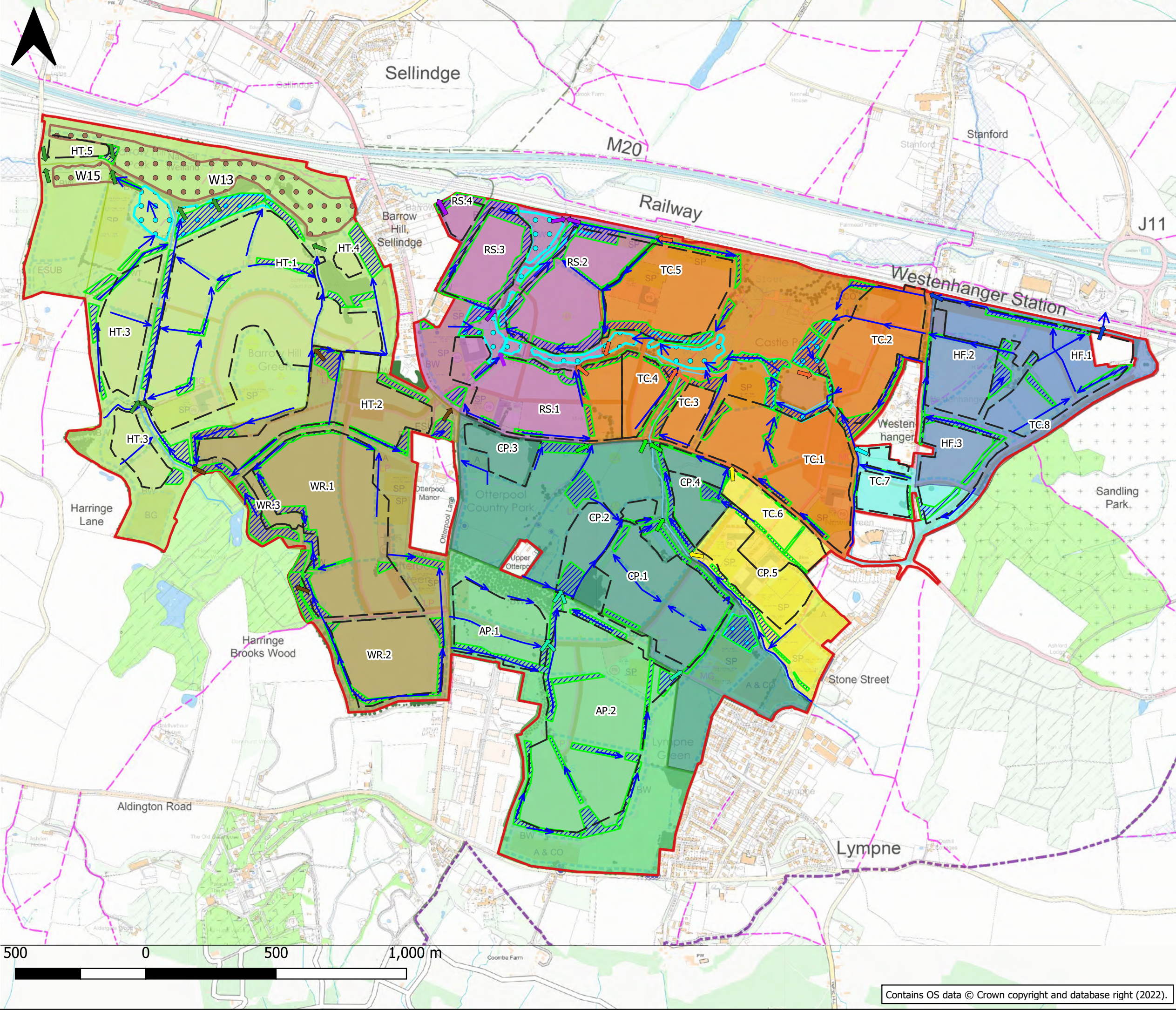


80Fen
80 Fenchurch Street
London
EC3M 4BY



Surface Water Drainage Zones & Runoff Rates
Drawing: 10029956-AUK-XX-XX-DR-CW-0007-P7

Scale	Original Size	Datum	Grid
1:15000	A3	mAOD	OSGB 27700



- Legend**
- OPA Site Boundary
 - Proposed SuDS
 - Proposed Conveyance Swales / SuDS Flow Direction
 - ↑ Indicative Key Drainage Outfall Locations
 - Existing Watercourses
 - Proposed Development Boundaries
 - XX.X Proposed_Development_Area_Ref
 - Wetlands Stormwater
 - Wetlands Wastewater

- Drainage Zones**
- Barrow Hill
 - East Otterpool
 - East Triangle
 - East Triangle South
 - River Stour
 - South Otterpool
 - West Newingreen
 - West Otterpool
 - Westenhangar

Note:

1. The nutrient mitigation requirements and mitigation proposals for the OPA and OFMA Development are fully detailed in Arcadis Water Cycle Report 10029956-AUK-XX-XX-RP-CW-0011-P3 and Proposed Nutrient Neutrality Mitigation Strategy Drawing 10029956-AUK-XX-XX-DR-CW-0041-P3.
2. Wastewater Wetland W15 is not required for the current OPA but it will be needed to accommodate the extra 1500 dwellings within the OFMA.

Revision	Date	Status	Author	Checker	Approver
P4	03/03/2022	FINAL	MG	AG	RG

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OTTERPOOL PARK
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Surface Water Drainage Strategy Overview
Drawing: 10029956-AUK-XX-XX-DR-CW-0014-P4

Scale	Original Size	Datum	Grid
1:13,500	A3	mAOD	OSGB 27700

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Micro drainage storage estimate outputs with 40% climate change allowance and 50% drain down time

Drainage Zone	Drainage Sub-Zone	Infiltration Rate (m/hr)	Average Attenuation Storage Requirement, including 40% climate change allowance (m ³)		SuDS Space Requirement with 1.0m Average Depth (ha)		Available Strategic SuDS Space on Site (ha)	SuDS Area Surplus/ Shortfall for 1 in 100 annual chance (ha)	1 in 100 annual chance 50% Drain-down Time (hrs)
			1 in 100 annual chance	1 in 30 annual chance	1 in 100 annual chance	1 in 30 annual chance			
Westenhanger	DR-WH1	0.00000	16,436	12,374	2.14	1.61	4.80	2.66	23.2
	DR-WH2	0.00000	27,765	20,896	3.61	2.72	2.83	-0.78	42.2
	DR-WH3	0.00000	10,927	8,235	1.42	1.07	1.55	0.13	49.5
	DR-WH4	0.00000	8,168	6,151	1.06	0.80	2.03	0.97	23.9
	DR-WH5	0.00000	7,540	5,677	0.98	0.74	0.91	-0.07	41.5
East Otterpool	DR-EO1	0.00763	14,284	10,245	1.86	1.33	2.86	1.00	16.6
	DR-E02	0.00156	6,343	4,427	0.82	0.58	1.98	1.15	19.8
	DR-E03	0.00156	4,391	30,69	0.57	0.40	0.73	0.16	15.1
	DR-E04	0.00156	8,260	5,771	1.07	0.75	1.74	0.67	48.5
	DR-E05	0.00763	0	0	0.00	0.00		0.00	0.0
West Newingreen	DR-WN1	0.00000	12,667	9,543	1.65	1.24	0.85	-0.80	32.7
	DR-WN2	0.00000	7,779	5,864	1.01	0.76	0.64	-0.37	55.0
	DR-ET1	0.00006	6,658	5,009	0.87	0.65	0.80	-0.07	35.5

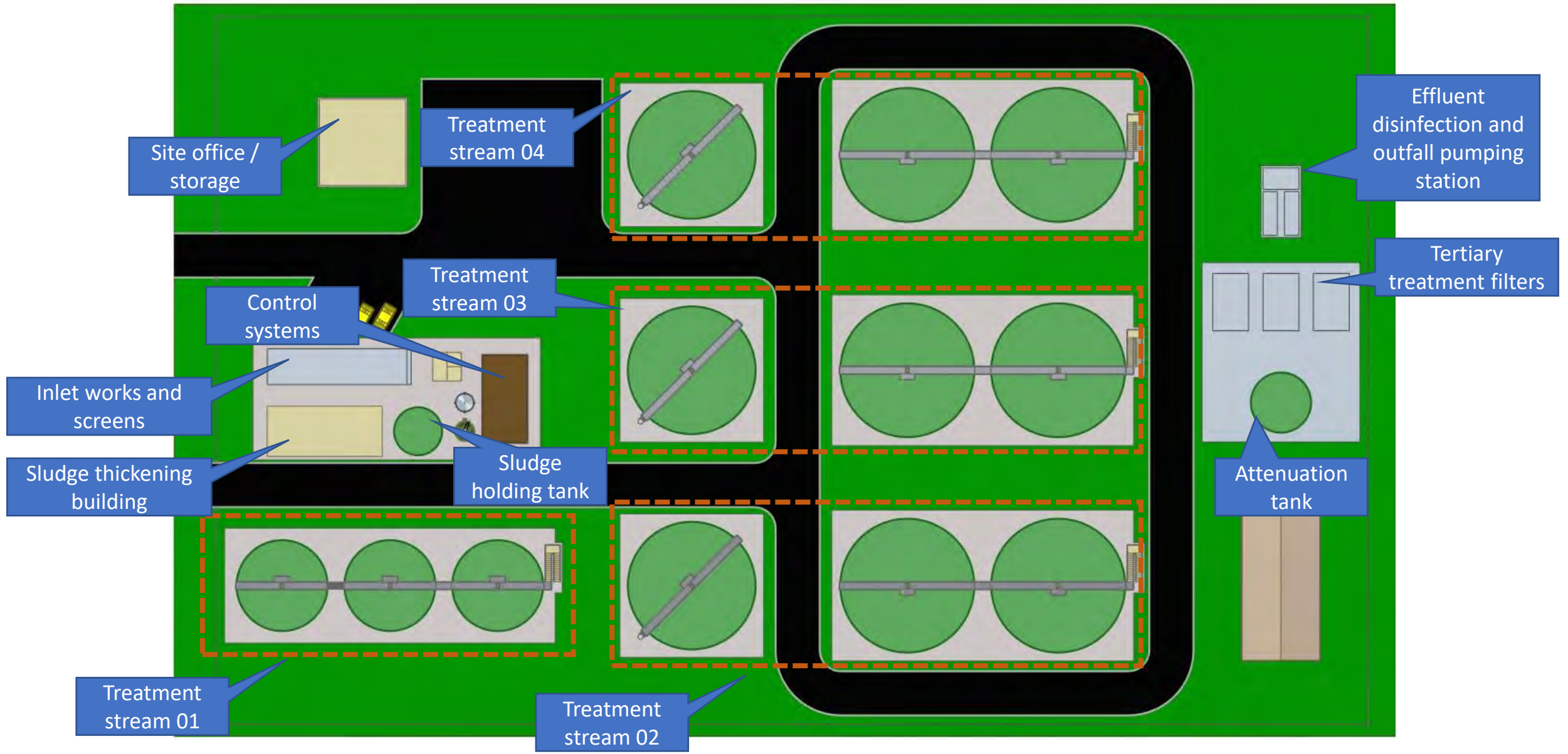
Drainage Zone	Drainage Sub-Zone	Infiltration Rate (m/hr)	Average Attenuation Storage Requirement, including 40% climate change allowance (m ³)		SuDS Space Requirement with 1.0m Average Depth (ha)		Available Strategic SuDS Space on Site (ha)	SuDS Area Surplus/ Shortfall for 1 in 100 annual chance(ha)	1 in 100 annual chance 50% Drain-down Time (hrs)
			1 in 100 annual chance	1 in 30 annual chance	1 in 100 annual chance	1 in 30 annual chance			
East Triangle	DR-ET2	0.00006	29,890	22,477	3.89	2.92	3.52	-0.36	43.9
East Triangle South	DR-ETS	0.00006	7,348	5,526	0.96	0.72	0.89	-0.07	36.3
South Otterpool	DR-S01	0.00763	8,907	6,391	1.16	0.83	2.35	1.19	15.8
	DR-S02	0.00763	15,731	11,292	2.05	1.47	2.90	0.85	19.2
	DR-S03	0.00763	3,751	2,693	0.49	0.35	0.80	0.31	18.4
	DR-S04	0.00763	4,984	3,574	0.65	0.46	0.32	-0.33	26.9
	DR-S05	0.00763	2,082	1,498	0.27	0.19	0.78	0.51	11.9
	DR-S06	0.00763	0	0	0.00	0.00		0.00	0.0
West Otterpool	DR-W01	0.00075	20,452	14,143	2.66	1.84	3.07	0.41	45.9
	DR-W02	0.00075	16,081	11,123	2.09	1.45	1.69	-0.41	49.3
	DR-W03	0.00075	18,326	12,668	2.38	1.65	5.39	3.01	45.9
	DR-W04	0.00075	8,293	57,26	1.08	0.74	1.01	-0.07	77.1
	DR-BH1	0.01555	3,404	2,431	0.44	0.32	0.98	0.54	7.1
	DR-BH2	0.01555	2,838	2,023	0.37	0.26	0.32	-0.05	10.0

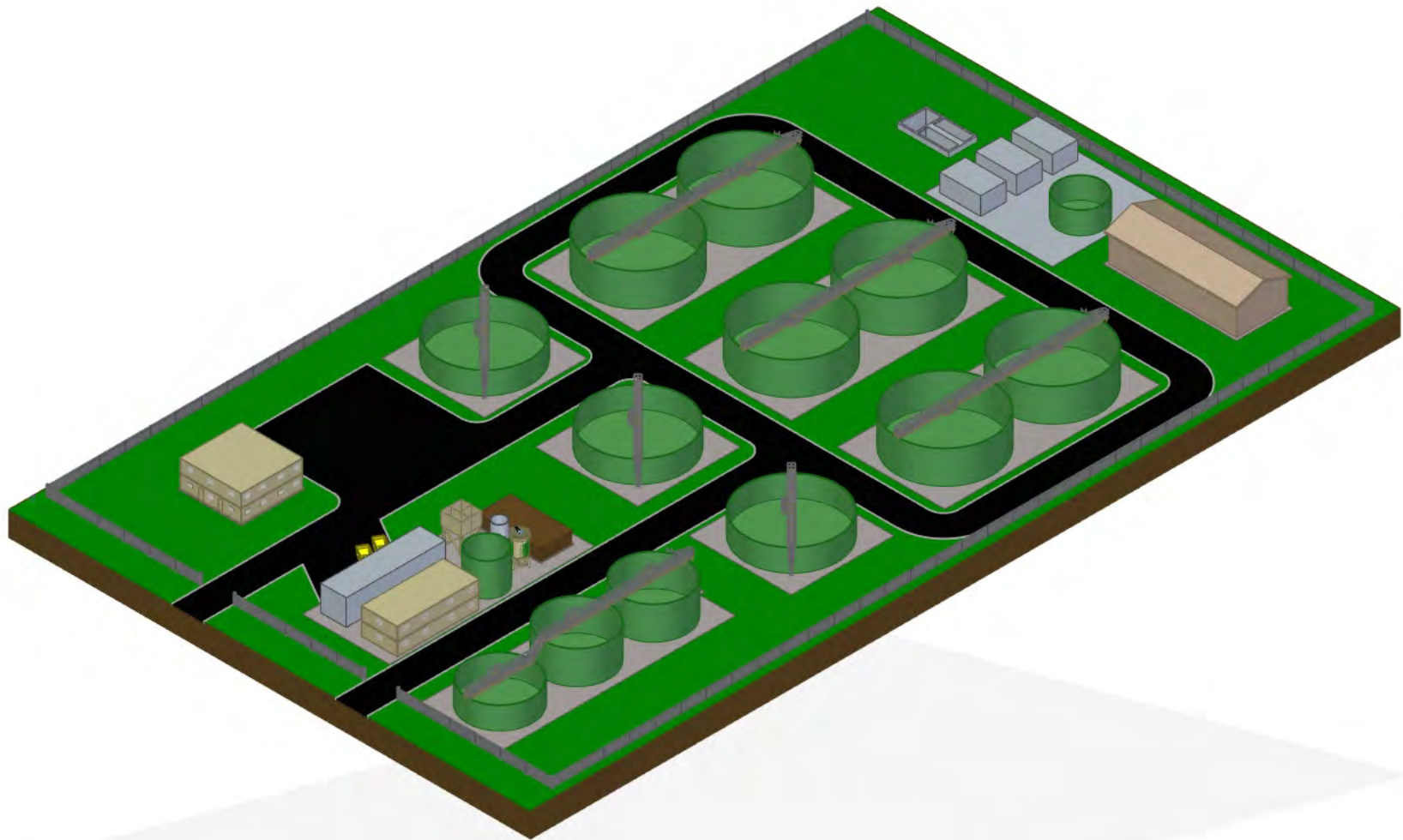
Drainage Zone	Drainage Sub-Zone	Infiltration Rate (m/hr)	Average Attenuation Storage Requirement, including 40% climate change allowance (m ³)		SuDS Space Requirement with 1.0m Average Depth (ha)		Available Strategic SuDS Space on Site (ha)	SuDS Area Surplus/ Shortfall for 1 in 100 annual chance(ha)	1 in 100 annual chance 50% Drain-down Time (hrs)
			1 in 100 annual chance	1 in 30 annual chance	1 in 100 annual chance	1 in 30 annual chance			
Barrow Hill	DR-BH3	0.01555	12,147	8,669	1.58	1.13	2.62	1.04	10.9
	DR-BH4	0.01555	6,008	4,285	0.78	0.56	1.44	0.66	8.0
	DR-BH5	0.01555	1,176	840	0.15	0.11	0.01	-0.15	6.3
	DR-BH6	0.01555	11,082	7,908	1.44	1.03	2.33	0.89	11.1
	DR-BH7	0.01555	4,643	3,314	0.60	0.43	1.57	0.97	6.8
	DR-BH8	0.01555	0	0	0.00	0.00	0.04	0.04	0.0
	DR-BH9	0.00000	1,508	1,074	0.30	0.14	0.25	0.06	4.3
River Stour	DR-RS1	0.00000	14,238	10,721	1.85	1.39	1.11	-0.75	51.8
	DR-RS2	0.00000	2,583	1,940	0.34	0.25	0.98	0.64	13.9
	DR-RS3	0.00000	9,777	7,359	1.27	0.96	2.93	1.66	37.2
	DR-RS4	0.00000	1,942	1,466	0.25	0.19	0.56	0.31	40.0
	DR-RS5	0.00000	18,780	14,142	2.44	1.84	4.61	2.17	44.7
TOTAL * SITE	N/A	N/A	357,177	260,536	46.43	33.87	64.15	17.72	N/A

* Totals are slightly different to sums of individual values due to rounding effects not shown

APPENDIX K

Preliminary Onsite WwTW Plant Proposals







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