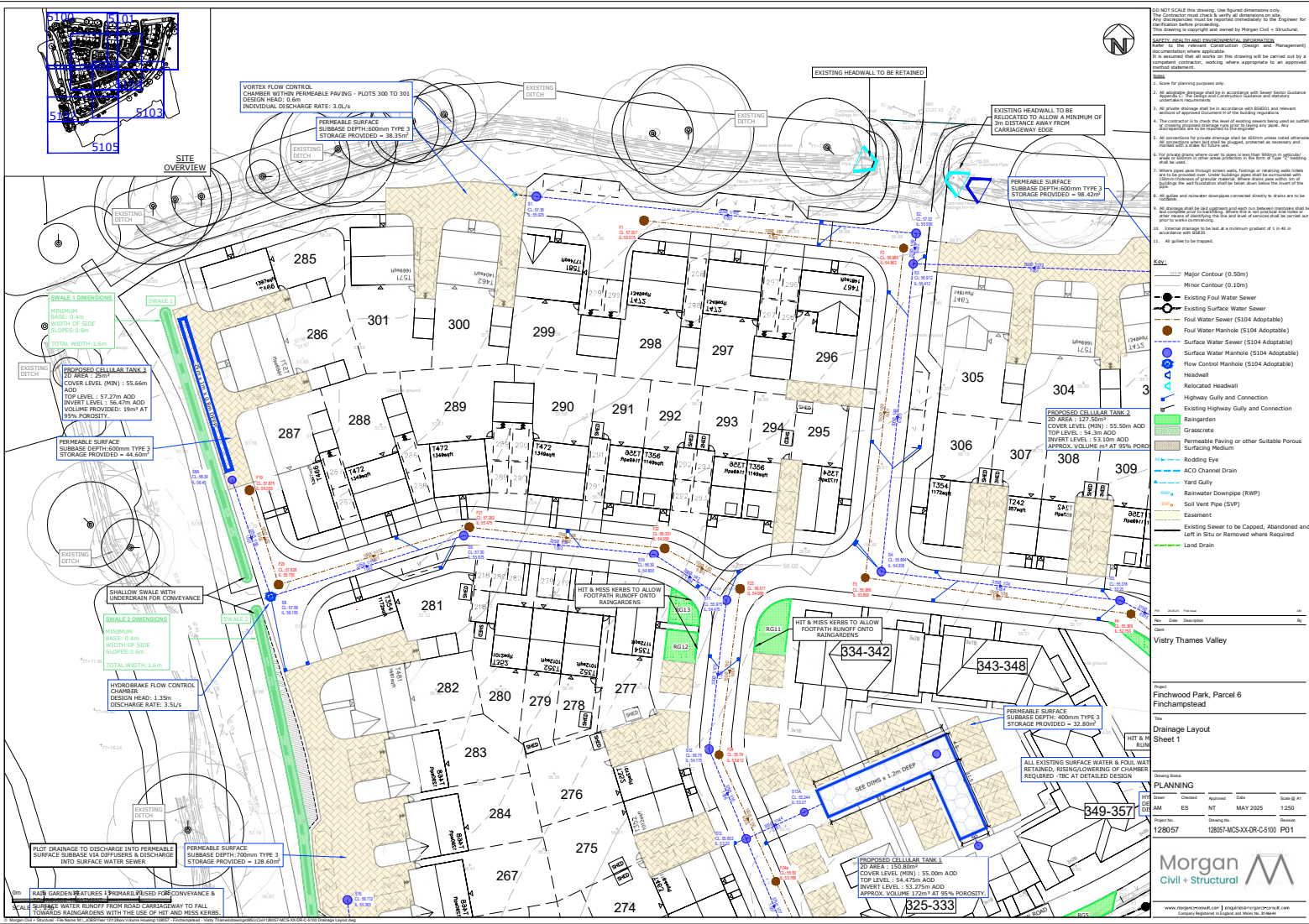




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Refer to the relevant Construction (Design + Management) documentation where applicable.
It is assumed that all works on this drawing will be carried out by a competent contractor, working where appropriate to an approved method statement.

Notes

1. Refer to planning purposes only.
2. All drainage design shall be in accordance with SUDS and relevant authorities requirements.
3. All surface drainage shall be in accordance with SUDS and relevant authorities requirements.
4. The contractor is to check the level of existing ground being used as outfall.
5. All drainage design shall be in accordance with SUDS and relevant authorities requirements.
6. All drainage design shall be in accordance with SUDS and relevant authorities requirements.
7. Where space over existing roads, footpaths or existing walls exists, the drainage design shall be in accordance with SUDS and relevant authorities requirements.
8. All drainage design shall be in accordance with SUDS and relevant authorities requirements.
9. All drainage design shall be in accordance with SUDS and relevant authorities requirements.
10. All drainage design shall be in accordance with SUDS and relevant authorities requirements.
11. All drainage design shall be in accordance with SUDS and relevant authorities requirements.

Legend

- Major Contour (0.50m)
- Minor Contour (0.10m)
- Existing Foul Water Sewer
- Existing Surface Water Sewer
- Foul Water Manhole (S104 Adoptable)
- Surface Water Manhole (S104 Adoptable)
- Flow Control Manhole (S104 Adoptable)
- Headwall
- Relocated Headwall
- Highway Gully and Connection
- Existing Highway Gully and Connection
- Rainwater
- Grasscrete
- Permeable Paving or other Suitable Porous Surfacing Medium
- Rutting Eye
- ACO Channel Drain
- Yard Gully
- Rainwater Downpipe (RWP)
- Soil Vent Pipe (SVP)
- Existing Sewer to be Capped, Abandoned and Left in Situ or Removed where Required
- Land Drain

Site Overview

Drainage Layout Sheet 1

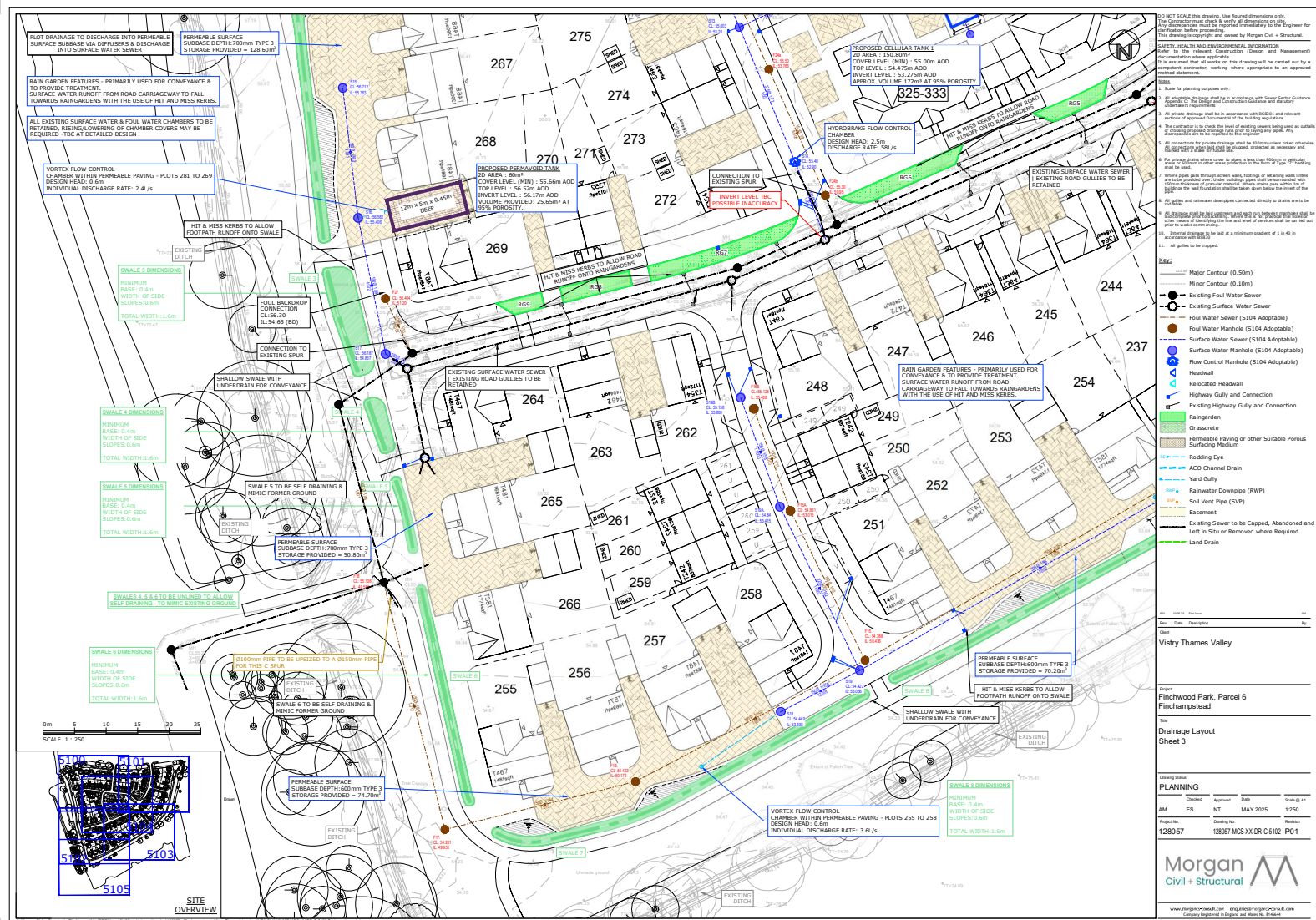
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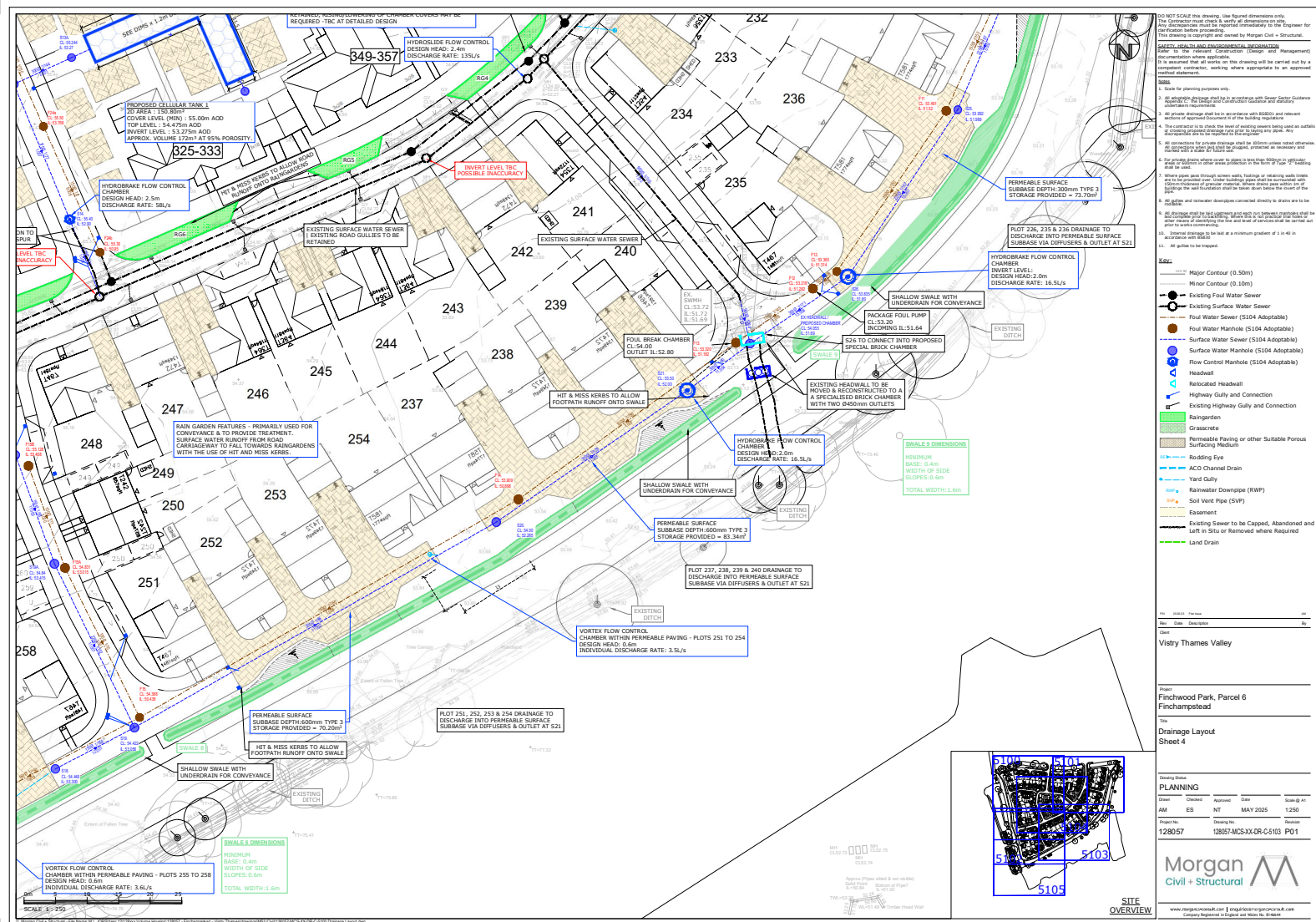
Drawn By	Checked By	Approved By	Date	Scale	Alt
AM	EB	NT	MAY 2015	1:250	

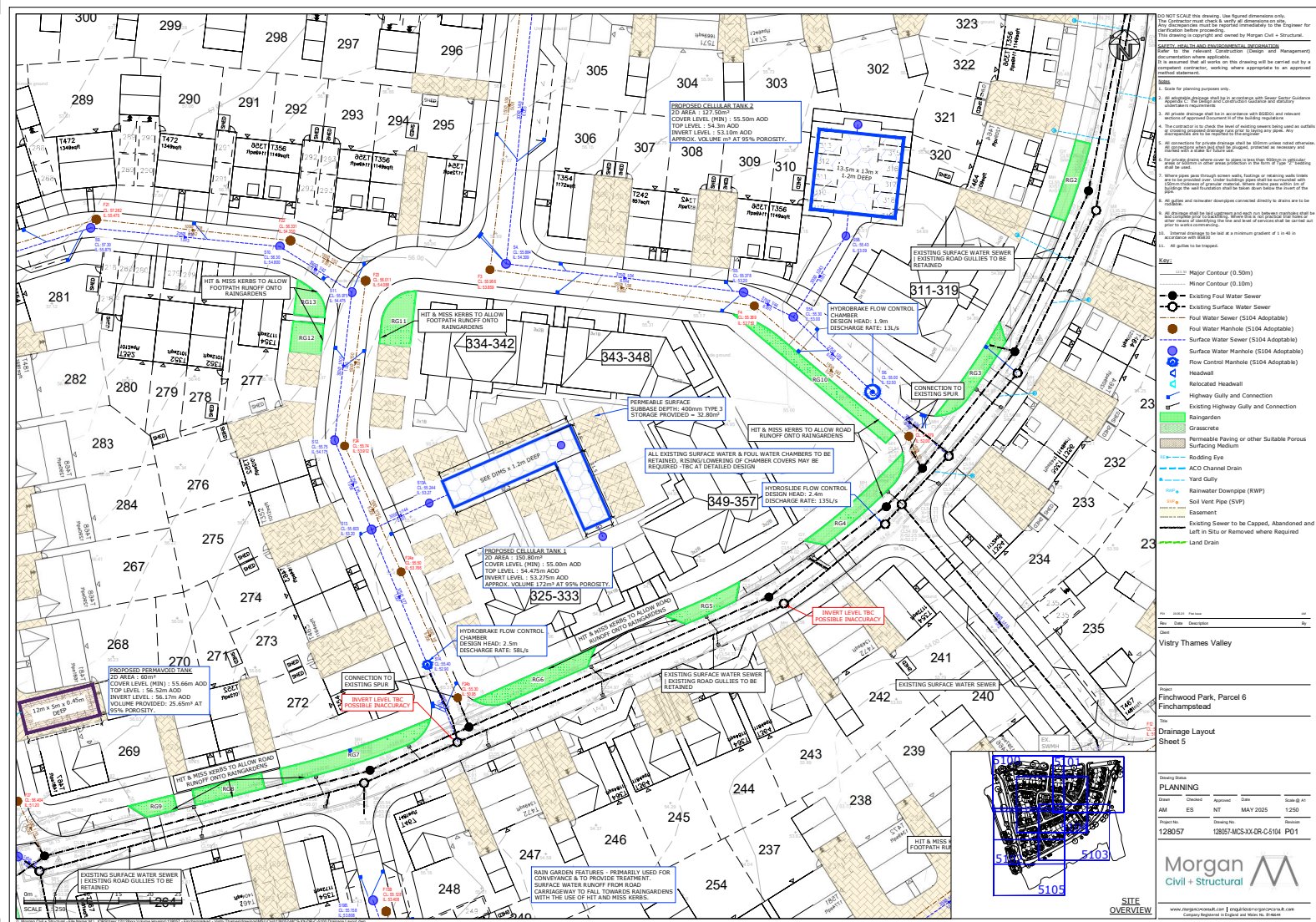
Project No. 128057
Project Name 128057-MCS-KX-DR-C-100 P01

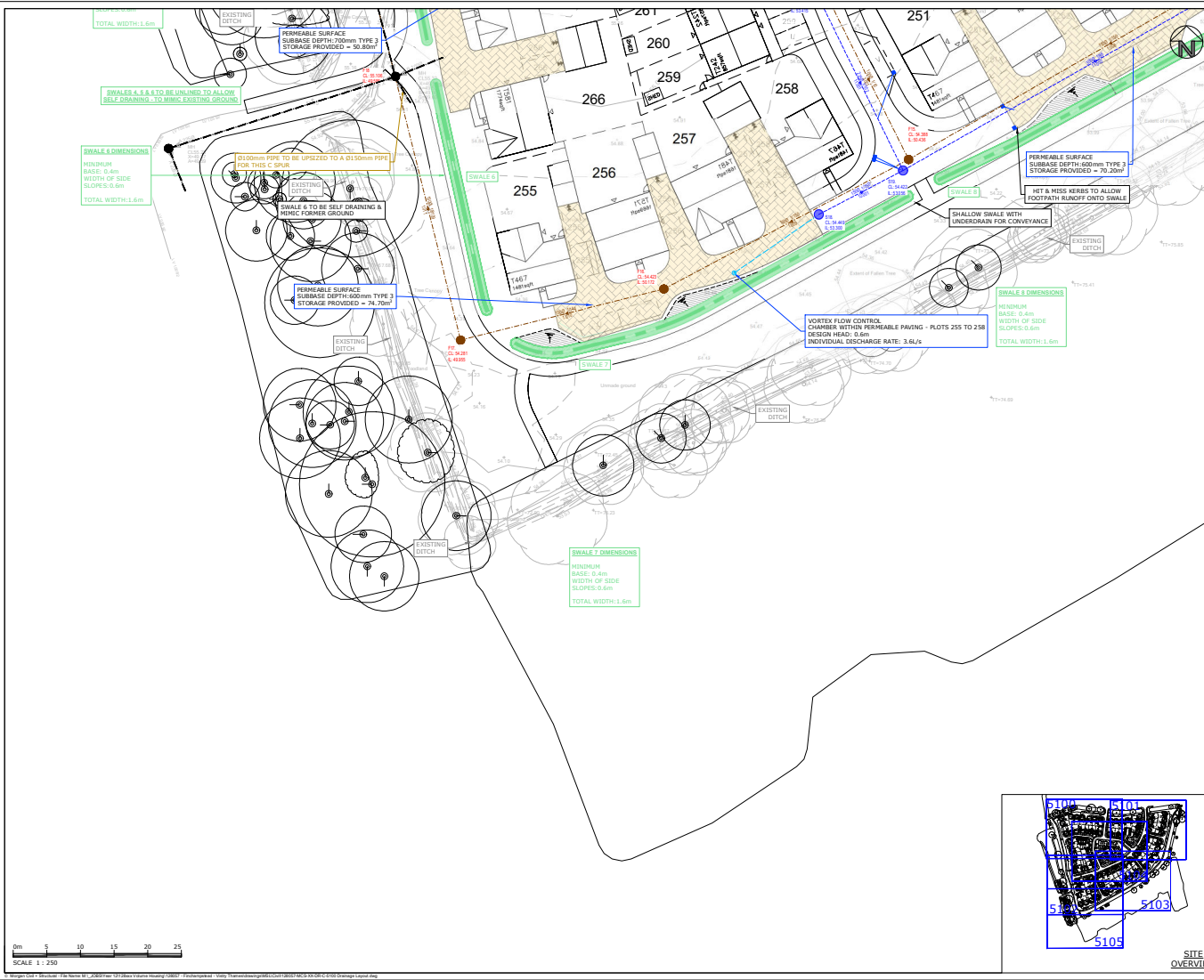
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NOTES

1. Make for planning purposes only.
2. All drainage design shall be in accordance with Sewer Design Guidance documents requirements.
3. All private drainage shall be in accordance with SUDS1 and relevant documents requirements.
4. The contractor is to check the level of existing ground being used as outfall to ensure it is suitable for the proposed drainage.
5. All connections for private drainage shall be 150mm unless noted otherwise. All public sewer connections shall be 300mm.
6. All drainage shall be to the public sewer.
7. Where space does not allow for a gully, a manhole or a soakaway shall be used. The soakaway shall be constructed in accordance with the relevant documents.
8. All drainage shall be to the public sewer.
9. All drainage shall be to the public sewer.
10. All drainage shall be to the public sewer.
11. All gullies to be replaced.

LEGEND

- Major Contour (0.50m)
- Minor Contour (0.10m)
- Existing Foul Water Sewer
- Existing Surface Water Sewer
- Foul Water Manhole (S104 Adoptable)
- Surface Water Manhole (S104 Adoptable)
- Flow Control Manhole (S104 Adoptable)
- Headwall
- Relocated Headwall
- Highway Gully and Connection
- Existing Highway Gully and Connection
- Rainwater
- Grasscrete
- Permeable Paving or other Suitable Porous Surfacing Medium
- Roadway
- ACO Channel Drain
- Yard Gully
- Rainwater Downpipe (RWP)
- Soil Vent Pipe (SVP)
- Existing Sewer to be Capped, Abandoned and Left in Situ or Removed where Required
- Land Drain

Site Overview

Project
Finchwood Park, Parcel 6
Finchampsstead

Sheet
Drainage Layout
Sheet 6

Drawing Status
PLANNING

Drawn	Checked	Approved	Date	Scale
AM	EE	NT	MAY 2025	1:250

Project No. 128057
Drawing No. 128057-MCS-XX-DR-C-105
Revision P01

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APPENDIX 5

Causeway Flow Calculations

Design Settings

Rainfall Methodology	FEH-22	Maximum Time of Concentration (mins)	30.00	Preferred Cover Depth (m)	1.200
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0	Include Intermediate Ground	✓
Additional Flow (%)	40	Minimum Velocity (m/s)	1.00	Enforce best practice design rules	x
CV	1.000	Connection Type	Level Soffits		
Time of Entry (mins)	5.00	Minimum Backdrop Height (m)	0.200		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Node Type	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
S8.	0.030	5.00	57.580	Manhole	1200	476660.907	164269.882	1.425
S9.	0.046	5.00	57.300	Manhole	1200	476691.345	164279.496	1.425
S10.	0.117	5.00	56.300	Manhole	1200	476721.336	164276.536	1.500
S11.	0.035	5.00	55.975	Manhole	1200	476732.750	164269.324	1.500
S12.			55.750	Manhole	1200	476730.008	164245.811	1.575
S13A.	0.140	5.00	55.244	Manhole	1200	476744.949	164236.021	1.974
S13.	0.067	5.00	55.603	Manhole	1200	476735.875	164231.644	2.403
S15.			56.712	Manhole	1200	476672.993	164222.014	1.350
S16.			56.582	Manhole	1200	476675.422	164201.407	1.176
S17.			56.187	Manhole	1200	476679.815	164179.784	1.350
EX-SW8	0.066	5.00	55.840	Manhole	1350	476685.996	164163.498	1.440
EX-SW9	0.076	5.00	55.840	Manhole	1200	476683.380	164177.819	1.730
EX-SW10	0.106	5.00	55.540	Manhole	1200	476734.653	164191.490	1.430
EX-SW11	0.047	5.00	55.310	Manhole	1800	476749.570	164198.020	2.800
EX-SW12	0.110	5.00	54.702	Manhole	1800	476801.362	164219.911	2.302
S1.	0.075	5.00	57.350	Manhole	1200	476702.794	164333.006	0.700
S2.	0.070	5.00	57.020	Manhole	1200	476763.368	164327.110	1.449
S3A.			56.620	Manhole	1200	476800.309	164321.640	0.920
S3.			56.912	Manhole	1200	476762.236	164322.404	1.500
S4.	0.069	5.00	55.884	Manhole	1200	476757.206	164273.811	1.454
S5.	0.089	5.00	55.378	Manhole	1200	476794.873	164269.271	2.178
EX-SW1		5.00	56.150	Manhole	1200	476854.663	164347.929	3.750
EX-SW2			55.610	Manhole	1800	476856.887	164316.324	3.360
EX-SW3			55.250	Manhole	1800	476850.884	164282.313	3.040

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Node Type	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
EX-SW4			54.980	Manhole	1800	476838.166	164256.543	2.870
EX-SW5	0.000	5.00	54.810	Manhole	1800	476827.278	164243.477	2.800
EX-SW6			54.730	Manhole	1800	476820.119	164235.718	2.720
EX-SW7			53.720	Manhole	1800	476850.854	164198.212	2.030
EX HEADWALL / PROPOSED CHAMBER			54.055	Manhole	1350	476852.623	164190.491	2.365
S19B.	0.019	5.00	55.158	Manhole	1200	476736.085	164172.862	1.269
S19A.	0.043	5.00	54.840	Manhole	1200	476742.323	164155.568	1.348
S18.			54.449	Manhole	1200	476718.271	164110.392	1.350
S19.	0.044	5.00	54.422	Manhole	1200	476754.991	164129.611	1.366
S20.			54.000	Manhole	1200	476812.368	164162.189	1.715
EX-SLUICE GATE	0.065	5.00	54.690	Manhole	1800	476817.460	164232.445	2.465
S28.			54.010	Manhole	1200	476905.818	164287.875	1.350
S22.		5.00	54.962	Manhole	1200	476865.446	164282.445	1.435
S23.	0.050	5.00	53.819	Manhole	1200	476902.746	164274.219	1.507
S24.			53.459	Manhole	1200	476894.032	164247.636	1.340
S25.			53.992	Manhole	1200	476885.543	164227.606	2.003
S26.	0.015	5.00	53.835	Manhole	2100	476867.832	164201.521	2.035
227 to 228	0.038	5.00	53.450	Junction		476887.675	164246.695	1.510
222 to 225	0.097	5.00	54.300	Junction		476906.158	164296.711	0.530
235 to 236	0.041	5.00	53.330	Junction		476866.468	164212.784	0.730
237 to 240	0.092	5.00	53.386	Junction		476835.051	164192.027	0.600
255 to 258	0.090	5.00	54.375	Junction		476713.310	164107.235	0.730
281 to 268	0.148	5.00	56.290	Junction		476676.866	164235.325	0.830
285 to 287	0.044	5.00	58.000	Junction		476646.661	164296.482	1.530
300 to 301	0.044	5.00	57.395	Junction		476693.488	164334.716	0.730
302 to 305	0.093	5.00	56.600	Junction		476806.149	164323.217	0.730
252 to 254	0.084	5.00	53.970	Junction		476779.124	164137.541	0.730
dummy outlet			54.000	Manhole	1800	476854.107	164183.285	2.400
264 to 266	0.028	5.00	55.150	Junction		476686.285	164144.676	0.580
325 to 357 Car Park	0.062	5.00	55.000	Junction		476774.646	164246.823	0.530
S21.			53.500	Manhole	1800	476842.680	164183.075	1.500

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Node Type	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
S6.	0.070	5.00	55.000	Manhole	2100	476815.327	164253.498	2.500
S14.	0.060	5.00	55.400	Manhole	3000	476744.737	164210.214	2.500
ATT TANK 1		5.00	55.100	Junction		476776.255	164243.043	1.825
ATT TANK 2		5.00	55.500	Junction		476812.874	164288.108	2.400
S5B.			55.430	Manhole	1200	476811.092	164278.217	2.340
S5A.			55.300	Manhole	1350	476802.767	164265.361	2.300
PP 218 to 221, 229 to 234, 320 to 323	0.155	5.00	54.900	Junction		476865.992	164303.571	0.600
S8A			58.300	Manhole	1200	476654.812	164288.302	1.850

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.001	S8.	S9.	30.431	0.600	56.155	55.875	0.280	108.7	225	6.01	50.0
1.002	S9.	S10.	30.977	0.600	55.875	54.875	1.000	31.0	225	6.23	50.0
1.003	S10.	S11.	13.760	0.600	54.800	54.475	0.325	42.3	300	6.33	50.0
1.004	S11.	S12.	23.762	0.600	54.475	54.175	0.300	79.2	300	6.55	50.0
1.005	S12.	S13.	15.385	0.600	54.175	53.200	0.975	15.8	375	6.61	50.0
2.000	S13A.	S13.	5.000	0.600	53.270	53.200	0.070	71.4	300	5.34	50.0
1.006	S14.	EX-SW11	36.316	0.600	52.900	52.510	0.390	93.1	375	7.12	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.001	1.253	49.8	18.7	1.200	1.200	0.074	0.0	95	1.166
1.002	2.359	93.8	30.4	1.200	1.200	0.120	0.0	87	2.106
1.003	2.423	171.3	60.0	1.200	1.200	0.237	0.0	122	2.214
1.004	1.768	125.0	68.8	1.200	1.275	0.272	0.0	159	1.809
1.005	4.580	505.9	68.8	1.200	2.028	0.272	0.0	93	3.241
2.000	1.862	131.6	51.1	1.674	2.103	0.202	0.0	130	1.750
1.006	1.878	207.4	152.0	2.125	2.425	0.601	0.0	239	2.043

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
3.000	S15.	S16.	20.703	0.600	55.441	55.406	0.035	591.5	150	5.86	50.0
3.001	S16.	S17.	22.111	0.600	55.406	54.837	0.569	38.9	150	6.09	50.0
3.002	S17.	EX-SW9	4.084	0.600	54.837	54.110	0.727	5.6	150	6.11	50.0
4.000	EX-SW8	EX-SW9	14.392	0.600	54.400	54.110	0.290	49.6	150	5.18	50.0
3.003	EX-SW9	EX-SW10	53.064	0.600	54.147	54.110	0.037	1434.2	225	8.73	50.0
3.004	EX-SW10	EX-SW11	16.306	0.600	54.147	52.510	1.637	10.0	225	8.80	50.0
1.007	EX-SW11	EX-SW12	56.195	0.600	52.510	52.410	0.100	562.0	1200	9.40	50.0
3.000_1	EX-SW12	EX-SLUICE GATE	20.419	0.600	52.400	52.250	0.150	136.1	1200	9.50	50.0
5.000	S1.	S2.	60.996	0.600	56.650	55.571	1.079	56.5	225	5.62	50.0
5.001	S2.	S3.	4.803	0.600	55.571	55.412	0.159	30.2	225	5.66	50.0
6.000	S3A.	S3.	37.315	0.600	55.700	55.412	0.288	129.6	150	5.72	50.0
5.002	S3.	S4.	48.814	0.600	55.412	54.430	0.982	49.7	300	6.08	50.0
5.003	S4.	S5.	37.087	0.600	54.430	53.200	1.230	30.2	375	6.27	50.0
5.004	S6.	EX-SW5	41.466	0.600	52.500	52.100	0.400	103.7	300	6.86	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
3.000	0.406	7.2	37.4	1.121	1.026	0.148	0.0	150	0.414
3.001	1.619	28.6	37.4	1.026	1.200	0.148	0.0	150	1.649
3.002	4.280	75.6	37.4	1.200	1.580	0.148	0.0	75	4.273
4.000	1.431	25.3	23.8	1.290	1.580	0.094	0.0	116	1.622
3.003	0.337	13.4	80.4	1.468	1.205	0.318	0.0	225	0.343
3.004	4.170	165.8	107.3	1.168	2.575	0.424	0.0	132	4.429
1.007	1.571	1776.4	271.2	1.600	1.092	1.072	0.0	313	1.154
3.000_1	3.204	3624.2	299.0	1.102	1.240	1.182	0.0	229	1.985
5.000	1.743	69.3	30.1	0.475	1.224	0.119	0.0	103	1.681
5.001	2.389	95.0	47.8	1.224	1.275	0.189	0.0	113	2.393
6.000	0.881	15.6	23.5	0.770	1.350	0.093	0.0	150	0.898
5.002	2.235	158.0	71.3	1.200	1.154	0.282	0.0	142	2.181
5.003	3.310	365.5	88.8	1.079	1.803	0.351	0.0	126	2.752
5.004	1.544	109.1	129.0	2.200	2.410	0.510	0.0	300	1.564

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
7.000	EX-SW1	EX-SW2	31.633	0.600	52.400	52.250	0.150	210.9	750	5.27	50.0
7.001	EX-SW2	EX-SW3	34.688	0.600	52.250	52.210	0.040	867.2	750	5.89	50.0
7.002	EX-SW3	EX-SW4	28.645	0.600	52.210	52.110	0.100	286.5	750	6.18	50.0
7.003	EX-SW4	EX-SW5	17.036	0.600	52.110	52.010	0.100	170.4	750	6.31	50.0
5.005	EX-SW5	EX-SW6	10.577	0.600	52.110	52.010	0.100	105.8	750	6.93	50.0
1.009	EX-SW6	EX-SW7	48.408	0.600	52.110	51.690	0.420	115.3	900	9.84	50.0
8.000	S19B.	S19A.	18.493	0.600	53.889	53.492	0.397	46.6	150	5.21	50.0
8.001	S19A.	S19.	30.134	0.600	53.492	53.056	0.436	69.1	225	5.53	50.0
9.000	S18.	S19.	41.443	0.600	53.137	53.056	0.081	511.6	150	6.61	50.0
10.001	S28.	S23.	12.125	0.600	52.660	52.312	0.348	34.8	225	5.10	50.0
11.000	S22.	S23.	38.196	0.600	53.527	52.312	1.215	31.4	150	5.35	50.0
10.002	S23.	S24.	25.328	0.600	52.312	52.119	0.193	131.2	225	5.72	50.0
10.003	S24.	S25.	24.738	0.600	52.119	51.989	0.130	190.3	225	6.16	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
7.000	1.923	849.5	0.0	3.000	2.610	0.000	0.0	0	0.000
7.001	0.942	416.1	0.0	2.610	2.290	0.000	0.0	0	0.000
7.002	1.648	728.1	0.0	2.290	2.120	0.000	0.0	0	0.000
7.003	2.141	945.8	39.2	2.120	2.050	0.155	0.0	102	1.082
5.005	2.720	1201.8	168.2	1.950	1.970	0.665	0.0	187	1.946
1.009	2.917	1856.0	483.7	1.720	1.130	1.912	0.0	312	2.475
8.000	1.478	26.1	4.8	1.119	1.198	0.019	0.0	44	1.132
8.001	1.575	62.6	15.7	1.123	1.141	0.062	0.0	77	1.318
9.000	0.438	7.7	22.8	1.162	1.216	0.090	0.0	150	0.446
10.001	2.223	88.4	24.5	1.125	1.282	0.097	0.0	80	1.905
11.000	1.802	31.8	0.0	1.285	1.357	0.000	0.0	0	0.000
10.002	1.139	45.3	37.2	1.282	1.115	0.147	0.0	156	1.268
10.003	0.944	37.5	37.2	1.115	1.778	0.147	0.0	183	1.072

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
4.000_1	281 to 268	S15.	2.000	0.600	55.460	55.363	0.097	20.5	150	5.01	50.0
12.000	255 to 258	S18.	5.880	0.600	53.645	53.099	0.546	10.8	150	5.03	50.0
5.000_1	264 to 266	EX-SW8	2.000	0.600	54.570	54.400	0.170	11.8	150	5.01	50.0
2.000_1	325 to 357 Car Park	S13A.	31.601	0.600	54.470	53.900	0.570	55.4	225	5.30	50.0
11.003	S20.	S21.	36.811	0.600	52.285	52.000	0.285	129.2	300	7.70	50.0
6.005	S5.	S5A.	8.809	0.600	53.200	53.000	0.200	44.0	375	6.32	50.0
1.007_1	S13.	S14.	23.190	0.600	53.200	52.900	0.300	77.3	375	6.79	50.0
3.000_2	ATT TANK 1	S13A.	1.000	0.600	53.275	53.270	0.005	200.0	225	5.02	50.0
8.000_1	ATT TANK 2	S5B.	2.000	0.600	53.100	53.090	0.010	200.0	300	5.03	50.0
6.006	S5A.	S6.	17.277	0.600	53.000	52.500	0.500	34.6	375	6.41	50.0
11.002	S19.	S20.	65.981	0.600	53.056	52.285	0.771	85.6	300	7.26	50.0
8.001_1	S5B.	S5A.	15.316	0.600	53.090	53.027	0.063	243.1	300	5.28	50.0
10.000	PP 218 to 221, 229 to 234, 320 to 323	EX-SW4	20.000	0.600	54.300	52.110	2.190	9.1	225	5.08	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
4.000_1	2.233	39.5	37.4	0.680	1.200	0.148	0.0	117	2.533
12.000	3.087	54.5	22.8	0.580	1.200	0.090	0.0	68	2.953
5.000_1	2.953	52.2	7.1	0.430	1.290	0.028	0.0	37	2.072
2.000_1	1.760	70.0	15.7	0.305	1.119	0.062	0.0	73	1.429
11.003	1.382	97.7	70.8	1.415	1.200	0.280	0.0	190	1.502
6.005	2.736	302.2	111.3	1.803	1.925	0.440	0.0	157	2.535
1.007_1	2.062	227.8	136.9	2.028	2.125	0.541	0.0	210	2.152
3.000_2	0.921	36.6	0.0	1.600	1.749	0.000	0.0	0	0.000
8.000_1	1.108	78.3	0.0	2.100	2.040	0.000	0.0	0	0.000
6.006	3.091	341.4	111.3	1.925	2.125	0.440	0.0	147	2.775
11.002	1.700	120.2	49.6	1.066	1.415	0.196	0.0	134	1.620
8.001_1	1.004	70.9	0.0	2.040	1.973	0.000	0.0	0	0.000
10.000	4.355	173.2	39.2	0.375	2.645	0.155	0.0	73	3.540

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	285 to 287	S8A	11.548	0.600	56.470	56.450	0.020	577.4	225	5.36	50.0
Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)		
1.000	0.537	21.4	11.1	1.305	1.625	0.044	0.0	116	0.543		

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.001	30.431	108.7	225	Circular	57.580	56.155	1.200	57.300	55.875	1.200
1.002	30.977	31.0	225	Circular	57.300	55.875	1.200	56.300	54.875	1.200
1.003	13.760	42.3	300	Circular	56.300	54.800	1.200	55.975	54.475	1.200
1.004	23.762	79.2	300	Circular	55.975	54.475	1.200	55.750	54.175	1.275
1.005	15.385	15.8	375	Circular	55.750	54.175	1.200	55.603	53.200	2.028
2.000	5.000	71.4	300	Circular	55.244	53.270	1.674	55.603	53.200	2.103
1.006	36.316	93.1	375	Circular	55.400	52.900	2.125	55.310	52.510	2.425
3.000	20.703	591.5	150	Circular	56.712	55.441	1.121	56.582	55.406	1.026
3.001	22.111	38.9	150	Circular	56.582	55.406	1.026	56.187	54.837	1.200
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type		
1.001	S8.	1200	Manhole	Adoptable	S9.	1200	Manhole	Adoptable		
1.002	S9.	1200	Manhole	Adoptable	S10.	1200	Manhole	Adoptable		
1.003	S10.	1200	Manhole	Adoptable	S11.	1200	Manhole	Adoptable		
1.004	S11.	1200	Manhole	Adoptable	S12.	1200	Manhole	Adoptable		
1.005	S12.	1200	Manhole	Adoptable	S13.	1200	Manhole	Adoptable		
2.000	S13A.	1200	Manhole	Adoptable	S13.	1200	Manhole	Adoptable		
1.006	S14.	3000	Manhole	Adoptable	EX-SW11	1800	Manhole	Adoptable		
3.000	S15.	1200	Manhole	Adoptable	S16.	1200	Manhole	Adoptable		
3.001	S16.	1200	Manhole	Adoptable	S17.	1200	Manhole	Adoptable		

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
3.002	4.084	5.6	150	Circular	56.187	54.837	1.200	55.840	54.110	1.580
4.000	14.392	49.6	150	Circular	55.840	54.400	1.290	55.840	54.110	1.580
3.003	53.064	1434.2	225	Circular	55.840	54.147	1.468	55.540	54.110	1.205
3.004	16.306	10.0	225	Circular	55.540	54.147	1.168	55.310	52.510	2.575
1.007	56.195	562.0	1200	Circular	55.310	52.510	1.600	54.702	52.410	1.092
3.000_1	20.419	136.1	1200	Circular	54.702	52.400	1.102	54.690	52.250	1.240
5.000	60.996	56.5	225	Circular	57.350	56.650	0.475	57.020	55.571	1.224
5.001	4.803	30.2	225	Circular	57.020	55.571	1.224	56.912	55.412	1.275
6.000	37.315	129.6	150	Circular	56.620	55.700	0.770	56.912	55.412	1.350
5.002	48.814	49.7	300	Circular	56.912	55.412	1.200	55.884	54.430	1.154
5.003	37.087	30.2	375	Circular	55.884	54.430	1.079	55.378	53.200	1.803
5.004	41.466	103.7	300	Circular	55.000	52.500	2.200	54.810	52.100	2.410
7.000	31.633	210.9	750	Circular	56.150	52.400	3.000	55.610	52.250	2.610
7.001	34.688	867.2	750	Circular	55.610	52.250	2.610	55.250	52.210	2.290
7.002	28.645	286.5	750	Circular	55.250	52.210	2.290	54.980	52.110	2.120

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
3.002	S17.	1200	Manhole	Adoptable	EX-SW9	1200	Manhole	Adoptable
4.000	EX-SW8	1350	Manhole	Adoptable	EX-SW9	1200	Manhole	Adoptable
3.003	EX-SW9	1200	Manhole	Adoptable	EX-SW10	1200	Manhole	Adoptable
3.004	EX-SW10	1200	Manhole	Adoptable	EX-SW11	1800	Manhole	Adoptable
1.007	EX-SW11	1800	Manhole	Adoptable	EX-SW12	1800	Manhole	Adoptable
3.000_1	EX-SW12	1800	Manhole	Adoptable	EX-SLUICE GATE	1800	Manhole	Adoptable
5.000	S1.	1200	Manhole	Adoptable	S2.	1200	Manhole	Adoptable
5.001	S2.	1200	Manhole	Adoptable	S3.	1200	Manhole	Adoptable
6.000	S3A.	1200	Manhole	Adoptable	S3.	1200	Manhole	Adoptable
5.002	S3.	1200	Manhole	Adoptable	S4.	1200	Manhole	Adoptable
5.003	S4.	1200	Manhole	Adoptable	S5.	1200	Manhole	Adoptable
5.004	S6.	2100	Manhole	Adoptable	EX-SW5	1800	Manhole	Adoptable
7.000	EX-SW1	1200	Manhole	Adoptable	EX-SW2	1800	Manhole	Adoptable
7.001	EX-SW2	1800	Manhole	Adoptable	EX-SW3	1800	Manhole	Adoptable
7.002	EX-SW3	1800	Manhole	Adoptable	EX-SW4	1800	Manhole	Adoptable

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
7.003	17.036	170.4	750	Circular	54.980	52.110	2.120	54.810	52.010	2.050
5.005	10.577	105.8	750	Circular	54.810	52.110	1.950	54.730	52.010	1.970
1.009	48.408	115.3	900	Circular	54.730	52.110	1.720	53.720	51.690	1.130
8.000	18.493	46.6	150	Circular	55.158	53.889	1.119	54.840	53.492	1.198
8.001	30.134	69.1	225	Circular	54.840	53.492	1.123	54.422	53.056	1.141
9.000	41.443	511.6	150	Circular	54.449	53.137	1.162	54.422	53.056	1.216
10.001	12.125	34.8	225	Circular	54.010	52.660	1.125	53.819	52.312	1.282
11.000	38.196	31.4	150	Circular	54.962	53.527	1.285	53.819	52.312	1.357
10.002	25.328	131.2	225	Circular	53.819	52.312	1.282	53.459	52.119	1.115
10.003	24.738	190.3	225	Circular	53.459	52.119	1.115	53.992	51.989	1.778
10.004	31.675	167.6	225	Circular	53.992	51.989	1.778	53.835	51.800	1.810
10.005	19.023	172.9	300	Circular	53.835	51.800	1.735	54.055	51.690	2.065
14.000	7.357	81.7	900	Circular	54.055	51.690	1.465	54.000	51.600	1.500
3.001_1	4.166	277.7	450	Circular	54.690	52.225	2.015	54.730	52.210	2.070

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
7.003	EX-SW4	1800	Manhole	Adoptable	EX-SW5	1800	Manhole	Adoptable
5.005	EX-SW5	1800	Manhole	Adoptable	EX-SW6	1800	Manhole	Adoptable
1.009	EX-SW6	1800	Manhole	Adoptable	EX-SW7	1800	Manhole	Adoptable
8.000	S19B.	1200	Manhole	Adoptable	S19A.	1200	Manhole	Adoptable
8.001	S19A.	1200	Manhole	Adoptable	S19.	1200	Manhole	Adoptable
9.000	S18.	1200	Manhole	Adoptable	S19.	1200	Manhole	Adoptable
10.001	S28.	1200	Manhole	Adoptable	S23.	1200	Manhole	Adoptable
11.000	S22.	1200	Manhole	Adoptable	S23.	1200	Manhole	Adoptable
10.002	S23.	1200	Manhole	Adoptable	S24.	1200	Manhole	Adoptable
10.003	S24.	1200	Manhole	Adoptable	S25.	1200	Manhole	Adoptable
10.004	S25.	1200	Manhole	Adoptable	S26.	2100	Manhole	Adoptable
10.005	S26.	2100	Manhole	Adoptable	EX HEADWALL / PROPOSED CHAMBER	1350	Manhole	Adoptable
14.000	EX HEADWALL / PROPOSED CHAMBER	1350	Manhole	Adoptable	dummy outlet	1800	Manhole	Adoptable
3.001_1	EX-SLUICE GATE	1800	Manhole	Adoptable	EX-SW6	1800	Manhole	Adoptable

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.006_1	7.921	264.0	900	Circular	53.720	51.720	1.100	54.055	51.690	1.465
11.004	12.404	40.0	300	Circular	53.500	52.000	1.200	54.055	51.690	2.065
13.000	41.385	43.3	150	Circular	53.970	53.240	0.580	54.000	52.285	1.565
14.000_1	2.000	2.8	225	Circular	53.386	52.786	0.375	53.500	52.075	1.200
18.000	2.000	30.8	100	Circular	53.330	52.600	0.630	53.835	52.535	1.200
17.000	19.208	-392.0	150	Circular	53.450	51.940	1.360	53.992	51.989	1.853
16.000	2.000	1.8	150	Circular	54.300	53.770	0.380	54.010	52.660	1.200
7.000_1	2.000	11.8	150	Circular	56.600	55.870	0.580	56.620	55.700	0.770
6.000_1	2.000	133.3	150	Circular	57.395	56.665	0.580	57.350	56.650	0.550
1.001_1	19.402	102.1	225	Circular	58.300	56.450	1.625	57.580	56.260	1.095
4.000_1	2.000	20.5	150	Circular	56.290	55.460	0.680	56.712	55.363	1.200
12.000	5.880	10.8	150	Circular	54.375	53.645	0.580	54.449	53.099	1.200
5.000_1	2.000	11.8	150	Circular	55.150	54.570	0.430	55.840	54.400	1.290
2.000_1	31.601	55.4	225	Circular	55.000	54.470	0.305	55.244	53.900	1.119
11.003	36.811	129.2	300	Circular	54.000	52.285	1.415	53.500	52.000	1.200

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.006_1	EX-SW7	1800	Manhole	Adoptable	EX HEADWALL / PROPOSED CHAMBER	1350	Manhole	Adoptable
11.004	S21.	1800	Manhole	Adoptable	EX HEADWALL / PROPOSED CHAMBER	1350	Manhole	Adoptable
13.000	252 to 254		Junction		S20.	1200	Manhole	Adoptable
14.000_1	237 to 240		Junction		S21.	1800	Manhole	Adoptable
18.000	235 to 236		Junction		S26.	2100	Manhole	Adoptable
17.000	227 to 228		Junction		S25.	1200	Manhole	Adoptable
16.000	222 to 225		Junction		S28.	1200	Manhole	Adoptable
7.000_1	302 to 305		Junction		S3A.	1200	Manhole	Adoptable
6.000_1	300 to 301		Junction		S1.	1200	Manhole	Adoptable
1.001_1	S8A	1200	Manhole	Adoptable	S8.	1200	Manhole	Adoptable
4.000_1	281 to 268		Junction		S15.	1200	Manhole	Adoptable
12.000	255 to 258		Junction		S18.	1200	Manhole	Adoptable
5.000_1	264 to 266		Junction		EX-SW8	1350	Manhole	Adoptable
2.000_1	325 to 357 Car Park		Junction		S13A.	1200	Manhole	Adoptable
11.003	S20.	1200	Manhole	Adoptable	S21.	1800	Manhole	Adoptable

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
6.005	8.809	44.0	375	Circular	55.378	53.200	1.803	55.300	53.000	1.925
1.007_1	23.190	77.3	375	Circular	55.603	53.200	2.028	55.400	52.900	2.125
3.000_2	1.000	200.0	225	Circular	55.100	53.275	1.600	55.244	53.270	1.749
8.000_1	2.000	200.0	300	Circular	55.500	53.100	2.100	55.430	53.090	2.040
6.006	17.277	34.6	375	Circular	55.300	53.000	1.925	55.000	52.500	2.125
11.002	65.981	85.6	300	Circular	54.422	53.056	1.066	54.000	52.285	1.415
8.001_1	15.316	243.1	300	Circular	55.430	53.090	2.040	55.300	53.027	1.973
10.000	20.000	9.1	225	Circular	54.900	54.300	0.375	54.980	52.110	2.645
1.000	11.548	577.4	225	Circular	58.000	56.470	1.305	58.300	56.450	1.625

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
6.005	S5.	1200	Manhole	Adoptable	S5A.	1350	Manhole	Adoptable
1.007_1	S13.	1200	Manhole	Adoptable	S14.	3000	Manhole	Adoptable
3.000_2	ATT TANK 1		Junction		S13A.	1200	Manhole	Adoptable
8.000_1	ATT TANK 2		Junction		S5B.	1200	Manhole	Adoptable
6.006	S5A.	1350	Manhole	Adoptable	S6.	2100	Manhole	Adoptable
11.002	S19.	1200	Manhole	Adoptable	S20.	1200	Manhole	Adoptable
8.001_1	S5B.	1200	Manhole	Adoptable	S5A.	1350	Manhole	Adoptable
10.000	PP 218 to 221, 229 to 234, 320 to 323		Junction		EX-SW4	1800	Manhole	Adoptable
1.000	285 to 287		Junction		S8A	1200	Manhole	Adoptable

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S8.	57.580	1.425	1200	 1	1.001_1	56.260	225	
				0	1.001	56.155	225	
S9.	57.300	1.425	1200	 1	1.001	55.875	225	
				0	1.002	55.875	225	
S10.	56.300	1.500	1200	 1	1.002	54.875	225	
				0	1.003	54.800	300	
S11.	55.975	1.500	1200	 1	1.003	54.475	300	
				0	1.004	54.475	300	
S12.	55.750	1.575	1200	 1	1.004	54.175	300	
				0	1.005	54.175	375	
S13A.	55.244	1.974	1200	 1	3.000_2	53.270	225	
				2	2.000_1	53.900	225	
				0	2.000	53.270	300	
S13.	55.603	2.403	1200	 2	1	2.000	53.200	300
				2	1.005	53.200	375	
				0	1.007_1	53.200	375	
S15.	56.712	1.350	1200	 1	4.000_1	55.363	150	
				0	3.000	55.441	150	

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S16.	56.582	1.176	1200		1 3.000	55.406	150
					0 3.001	55.406	150
S17.	56.187	1.350	1200		1 3.001	54.837	150
					0 3.002	54.837	150
EX-SW8	55.840	1.440	1350		1 5.000_1	54.400	150
					0 4.000	54.400	150
EX-SW9	55.840	1.730	1200		1 4.000	54.110	150
					2 3.002	54.110	150
					0 3.003	54.147	225
EX-SW10	55.540	1.430	1200		1 3.003	54.110	225
					0 3.004	54.147	225
EX-SW11	55.310	2.800	1800		1 3.004	52.510	225
					2 1.006	52.510	375
					0 1.007	52.510	1200
EX-SW12	54.702	2.302	1800		1 1.007	52.410	1200
					0 3.000_1	52.400	1200
S1.	57.350	0.700	1200		1 6.000_1	56.650	150
					0 5.000	56.650	225

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S2.	57.020	1.449	1200		1	5.000	55.571	225
					0	5.001	55.571	225
S3A.	56.620	0.920	1200		1	7.000_1	55.700	150
					0	6.000	55.700	150
S3.	56.912	1.500	1200		1	6.000	55.412	150
					2	5.001	55.412	225
					0	5.002	55.412	300
S4.	55.884	1.454	1200		1	5.002	54.430	300
					0	5.003	54.430	375
S5.	55.378	2.178	1200		1	5.003	53.200	375
					0	6.005	53.200	375
EX-SW1	56.150	3.750	1200					
					0	7.000	52.400	750
EX-SW2	55.610	3.360	1800		1	7.000	52.250	750
					0	7.001	52.250	750
EX-SW3	55.250	3.040	1800		1	7.001	52.210	750
					0	7.002	52.210	750

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
EX-SW4	54.980	2.870	1800		1	10.000	52.110
					2	7.002	52.110
					0	7.003	52.110
EX-SW5	54.810	2.800	1800		1	7.003	52.010
					2	5.004	52.100
					0	5.005	52.110
EX-SW6	54.730	2.720	1800		1	5.005	52.010
					2	3.001_1	52.210
					0	1.009	52.110
EX-SW7	53.720	2.030	1800		1	1.009	51.690
					0	1.006_1	51.720
					0	1.006_1	51.720
EX HEADWALL / PROPOSED CHAMBER	54.055	2.365	1350		1	10.005	51.690
					2	11.004	51.690
					3	1.006_1	51.690
S19B.	55.158	1.269	1200		0	8.000	53.889
S19A.	54.840	1.348	1200		1	8.000	53.492
S18.	54.449	1.350	1200		0	8.001	53.492
					1	12.000	53.099
					0	9.000	53.137

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S19.	54.422	1.366	1200		1	9.000	53.056
					2	8.001	53.056
					0	11.002	53.056
S20.	54.000	1.715	1200		1	13.000	52.285
					2	11.002	52.285
					0	11.003	52.285
EX-SLUICE GATE	54.690	2.465	1800		1	3.000_1	52.250
					0	3.001_1	52.225
S28.	54.010	1.350	1200		1	16.000	52.660
					0	10.001	52.660
S22.	54.962	1.435	1200		0	11.000	53.527
S23.	53.819	1.507	1200		1	10.001	52.312
					2	11.000	52.312
					0	10.002	52.312
S24.	53.459	1.340	1200		1	10.002	52.119
					0	10.003	52.119
S25.	53.992	2.003	1200		1	17.000	51.989
					2	10.003	51.989
					0	10.004	51.989

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S26.	53.835	2.035	2100		1	18.000	52.535 100
					2	10.004	51.800 225
					0	10.005	51.800 300
227 to 228	53.450	1.510			0	17.000	51.940 150
222 to 225	54.300	0.530			0	16.000	53.770 150
235 to 236	53.330	0.730			0	18.000	52.600 100
237 to 240	53.386	0.600			0	14.000 1	52.786 225
255 to 258	54.375	0.730			0	12.000	53.645 150
281 to 268	56.290	0.830			0	4.000 1	55.460 150
285 to 287	58.000	1.530			0	1.000	56.470 225

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
300 to 301	57.395	0.730						
				0	6.000_1	56.665	150	
302 to 305	56.600	0.730						
				0	7.000_1	55.870	150	
252 to 254	53.970	0.730						
				0	13.000	53.240	150	
dummy outlet	54.000	2.400	1800		1	14.000	900	
264 to 266	55.150	0.580						
				0	5.000_1	54.570	150	
325 to 357 Car Park	55.000	0.530						
				0	2.000_1	54.470	225	
S21.	53.500	1.500	1800		1	14.000_1	52.075	225
				2	11.003	52.000	300	
				0	11.004	52.000	300	
S6.	55.000	2.500	2100		1	6.006	52.500	375
				0	5.004	52.500	300	

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S14.	55.400	2.500	3000		1 1.007_1	52.900	375
ATT TANK 1	55.100	1.825			0 1.006	52.900	375
ATT TANK 2	55.500	2.400			0 3.000_2	53.275	225
S5B.	55.430	2.340	1200		0 8.000_1	53.100	300
S5A.	55.300	2.300	1350		1 8.001_1 2 6.005 0 6.006	53.090 53.027 53.000	300 375 375
PP 218 to 221, 229 to 234, 320 to 323	54.900	0.600			0 10.000	54.300	225
S8A	58.300	1.850	1200		1 1.000 0 1.001_1	56.450 56.450	225 225

Simulation Settings

Rainfall Methodology	FEH-22	Winter CV	1.000	Drain Down Time (mins)	240	Check Discharge Rate(s)	x
Rainfall Events	Singular	Analysis Speed	Normal	Additional Storage (m³/ha)	5.0	Check Discharge Volume	x
Summer CV	1.000	Skip Steady State	x	Starting Level (m)			

Storm Durations

	15	30	60	120	180	240	360	480	600	720	960	1440
Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)	Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)					
2	0	0	0	100	40	0	0					
30	0	0	0									

Node 300 to 301 Online Hydro-Brake® Control

Flap Valve	x	Design Depth (m)	0.600	Product Number	CTL-SCU-0060-3000-0600-3000
Downstream Link	6.000_1	Design Flow (l/s)	3.0	Min Outlet Diameter (m)	0.075
Replaces Downstream Link	x	Objective	(CU) Linear Discharge	Min Node Diameter (mm)	1200
Invert Level (m)	56.665	Sump Available	✓		

Node 302 to 305 Online Hydro-Brake® Control

Flap Valve	x	Design Depth (m)	0.430	Product Number	CTL-SCU-0059-2500-0430-2500
Downstream Link	7.000_1	Design Flow (l/s)	2.5	Min Outlet Diameter (m)	0.075
Replaces Downstream Link	x	Objective	(CU) Linear Discharge	Min Node Diameter (mm)	1200
Invert Level (m)	55.870	Sump Available	✓		

Node S14. Online Hydro-Brake® Control

Flap Valve	x	Design Depth (m)	2.500	Product Number	CTL-SCU-0194-5800-2500-5800
Downstream Link	1.006	Design Flow (l/s)	58.0	Min Outlet Diameter (m)	0.225
Replaces Downstream Link	x	Objective	(CU) Linear Discharge	Min Node Diameter (mm)	1200
Invert Level (m)	52.900	Sump Available	✓		

Node S6. Online Hydro-Brake® Control

Flap Valve	x	Design Depth (m)	1.900	Product Number	CTL-SCU-0097-1300-1900-1300
Downstream Link	5.004	Design Flow (l/s)	13.0	Min Outlet Diameter (m)	0.150
Replaces Downstream Link	x	Objective	(CU) Linear Discharge	Min Node Diameter (mm)	1200
Invert Level (m)	52.500	Sump Available	✓		

Node 222 to 225 Online Orifice Control

Flap Valve	x	Replaces Downstream Link	x	Design Depth (m)	0.600	Diameter (m)	0.056
Downstream Link	16.000	Invert Level (m)	53.770	Design Flow (l/s)	5.0	Discharge Coefficient	0.600

Node S21. Online Hydro-Brake® Control

Flap Valve	x	Design Depth (m)	2.000	Product Number	CTL-SCU-0108-1650-2000-1650
Downstream Link	11.004	Design Flow (l/s)	16.5	Min Outlet Diameter (m)	0.150
Replaces Downstream Link	x	Objective	(CU) Linear Discharge	Min Node Diameter (mm)	1200
Invert Level (m)	52.000	Sump Available	✓		

Node EX-SW8 Online Hydro-Brake® Control

Flap Valve	x	Design Flow (l/s)	6.0	Min Outlet Diameter (m)	0.100
Replaces Downstream Link	x	Objective	(CU) Linear Discharge	Min Node Diameter (mm)	1200
Invert Level (m)	54.400	Sump Available	✓		
Design Depth (m)	1.430	Product Number	CTL-SCU-0070-6000-1430-6000		

Node 281 to 268 Online Hydro-Brake® Control

Flap Valve	x	Design Depth (m)	0.700	Product Number	CTL-SCU-0052-2400-0700-2400
Downstream Link	4.000_1	Design Flow (l/s)	2.4	Min Outlet Diameter (m)	0.075
Replaces Downstream Link	x	Objective	(CU) Linear Discharge	Min Node Diameter (mm)	1200
Invert Level (m)	55.460	Sump Available	✓		

Node 255 to 258 Online Orifice Control

Flap Valve	x	Replaces Downstream Link	x	Design Depth (m)	0.600	Diameter (m)	0.050
Downstream Link	12.000	Invert Level (m)	53.645	Design Flow (l/s)	3.6	Discharge Coefficient	0.600

Node 252 to 254 Online Orifice Control

Flap Valve	x	Replaces Downstream Link	x	Design Depth (m)	0.600	Diameter (m)	0.047
Downstream Link	13.000	Invert Level (m)	53.240	Design Flow (l/s)	3.5	Discharge Coefficient	0.600

Node S26. Online Hydro-Brake® Control

Flap Valve	x	Design Flow (l/s)	25.0	Min Outlet Diameter (m)	0.150
Replaces Downstream Link	x	Objective	(CU) Linear Discharge	Min Node Diameter (mm)	1200
Invert Level (m)	51.800	Sump Available	✓		
Design Depth (m)	2.000	Product Number	CTL-SCU-0134-2500-2000-2500		

Node EX-SLUICE GATE Online Hydroslide Control

Flap Valve	x	Design Depth (m)	2.400	Diameter (m)	0.350
Replaces Downstream Link	x	Design Flow (l/s)	135.0	Max Head (m)	2.450
Invert Level (m)	52.225	Model	CTL VN	Min Node Dia (mm)	1800

Node PP 218 to 221, 229 to 234, 320 to 323 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Downstream Link	10.000	Sump Available	✓
Replaces Downstream Link	x	Product Number	CTL-SHE-0101-4000-0600-4000
Invert Level (m)	54.300	Min Outlet Diameter (m)	0.150
Design Depth (m)	0.600	Min Node Diameter (mm)	1200
Design Flow (l/s)	4.0		

Node S8. Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Downstream Link	1.001	Sump Available	✓
Replaces Downstream Link	x	Product Number	CTL-SHE-0084-3500-1350-3500
Invert Level (m)	56.155	Min Outlet Diameter (m)	0.100
Design Depth (m)	1.350	Min Node Diameter (mm)	1200
Design Flow (l/s)	3.5		