


# Appendix E

**STORAGE CALCULATION**



Shoreham By Sea:	Date: 16-10-2025			
	Designed by: Arjun K R	Checked by: Vaidyanathan C	Approved By:	
Report Details: Type: Inflows Storm Phase: Phase	Company Address:			



**Tank - TAD 1**

Type : Catchment Area

Area (ha) 0.00


**Preliminary Sizing**

Volumetric Runoff Coefficient	1.000
Percentage Impervious (%)	100
Time of Concentration (mins)	5

**Dynamic Sizing**

Runoff Method	Time Area Diagram
Summer Volumetric Runoff Coefficient	1.000
Winter Volumetric Runoff Coefficient	1.000
Percentage Impervious (%)	100

Time (mins)	Area (ha)
4	0.072
8	0.072
12	0.072

Shoreham By Sea:	Date: 16-10-2025			
	Designed by: Arjun K R	Checked by: Vaidyanathan C	Approved By:	
Report Details: Type: Stormwater Controls Storm Phase: Phase	Company Address:			



**Tank**

Type : Pond

**Dimensions**


Exceedance Elevation (m)	4.340
Depth (m)	2.050
Base Elevation (m)	2.290
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:x)	-3.632
Total Volume (m³)	271.309

Depth (m)	Area (m²)	Volume (m³)
0.000	175.000	0.000
1.550	175.000	271.250
1.551	0.001	271.308
2.050	0.001	271.309

**Inlets**

**Inlet**

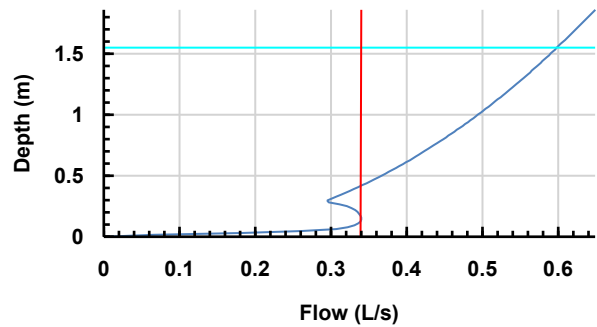
Inlet Type	Point Inflow
Incoming Item(s)	Tank - TAD 1
Bypass Destination	(None)
Capacity Type	No Restriction

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Details: Type: Stormwater Controls Storm Phase: Phase	Company Address:		

**Outlets**


**Outlet**

Outgoing Connection	(None)
Outlet Type	Hydro-Brake®
Invert Elevation (m)	2.290
Design Depth (m)	1.550
Design Flow (L/s)	0.6
Objective	Minimize Upstream Storage Requirements
Application	Surface Water Only
Sump Available	<input checked="" type="checkbox"/>
Unit Reference	SHE-0032-6000-1550-6000




**Advanced**

Perimeter	Rectangular
Length (m)	37.500
Friction Scheme	Manning's n
n	0.015

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Details: Type: Inflow Summary Storm Phase: Phase	Company Address:		

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analyzed (ha)
Tank - TAD 1	Tank		Time Area Diagram	0.215	100	0	100	0.215
<b>TOTAL</b>		<b>0.0</b>		<b>0.215</b>				<b>0.215</b>

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Details: Type: Network Design Criteria Storm Phase: Phase	Company Address:		

**Flow Options**


Peak Flow Calculation	Rational Method
Min. Time of Entry (mins)	5
Max. Travel Time (mins)	30

**Pipe Options**

Lock Slope Options	None
Design Options	Minimize Excavation
Design Level	Level Inverts
Min. Slope (1:x)	1000.00
Max. Slope (1:x)	40.00
Use Flow Restriction	<input checked="" type="checkbox"/>
Reduce Channel Depths	<input checked="" type="checkbox"/>


**Manhole Options**

Apply Offset	<input type="checkbox"/>
--------------	--------------------------

Shoreham By Sea:	Date: 16-10-2025			
	Designed by: Arjun K R	Checked by: Vaidyanathan C	Approved By:	
Report Details: Type: Outfall Details Storm Phase: Phase	Company Address:			


**Outfalls**

Outfall	Outfall Type	Gated	Fixed Surcharged Elevation (m)	Elevation Curve
Tank	Free Discharge			

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Title: Rainfall Analysis Criteria	Company Address:		

Runoff Type	Dynamic
Output Interval (mins)	15
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	0
Perform No Discharge Analysis	<input type="checkbox"/>

Rainfall

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Title: Rainfall Analysis Criteria	Company Address:		

**Rainfall Details FEH**

Type: FEH


Site Location	GB 522076 105104 TQ 22076 05104	
Rainfall Version		2022
Summer	<input checked="" type="checkbox"/>	
Winter	<input checked="" type="checkbox"/>	

**Return Period**

Return Period (years)	Increase Rainfall (%)
100.0	45.000
30.0	45.000

**Storm Durations**

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880

Shoreham By Sea:	Date: 16-10-2025			
	Designed by: Arjun K R	Checked by: Vaidyanathan C	Approved By:	
Report Details: Type: Inflow Results Storm Phase: Phase	Company Address:			



**Tank - TAD 1**  
**Critical by Return Period: Rainfall Details FEH: 100 years: Increase Rainfall (%): +45: 15 mins: Summer**

Type : Catchment Area

**Inflow**

Max. Inflow (L/s)	103.2
Total Inflow Volume (m³)	81.675

**Tables**

Time (mins)	Total Inflow (L/s)
0	0.0
15	103.2
30	0.0

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		




**Tank**

**Critical by Return Period: Rainfall Details FEH: 100 years: Increase Rainfall (%): +45: 1440 mins: Winter**


Type : Pond

**Tables**


Time (mins)	Total Inflow (L/s)	US Depth ( m )	DS Depth ( m )	Resident Volume( m³ )	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.000	0.0
15	0.1	0.002	0.000	0.058	0.000	0.0
30	0.5	0.005	0.000	0.336	0.000	0.0
45	0.7	0.007	0.002	0.886	0.000	0.0
60	1.0	0.010	0.009	1.636	0.000	0.0
75	1.1	0.015	0.015	2.541	0.000	0.1
90	1.3	0.021	0.020	3.559	0.000	0.1
105	1.4	0.027	0.027	4.642	0.000	0.1
120	1.4	0.033	0.033	5.760	0.000	0.2
135	1.5	0.039	0.039	6.894	0.000	0.2
150	1.5	0.046	0.046	8.027	0.000	0.3
165	1.5	0.052	0.052	9.155	0.000	0.3
180	1.5	0.059	0.059	10.286	0.000	0.3
195	1.5	0.065	0.065	11.377	0.000	0.3
210	1.5	0.072	0.071	12.476	0.000	0.3
225	1.5	0.078	0.078	13.563	0.000	0.3
240	1.5	0.084	0.084	14.666	0.000	0.3
255	1.5	0.090	0.090	15.745	0.000	0.3
270	1.6	0.097	0.096	16.855	0.000	0.3
285	1.6	0.103	0.103	17.992	0.000	0.3
300	1.7	0.110	0.109	19.166	0.000	0.3
315	1.7	0.117	0.117	20.398	0.000	0.3
330	1.8	0.125	0.124	21.695	0.000	0.3
345	1.9	0.132	0.132	23.099	0.000	0.3
360	2.1	0.141	0.141	24.609	0.000	0.3
375	2.2	0.150	0.150	26.230	0.000	0.3
390	2.4	0.160	0.160	28.043	0.000	0.3

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		


Time (mins)	Total Inflow (L/s)	US Depth ( m )	DS Depth ( m )	Resident Volume( m³ )	Flooded Volume (m³)	Total Outflow (L/s)
405	2.6	0.172	0.171	30.004	0.000	0.3
420	2.8	0.184	0.183	32.160	0.000	0.3
435	3.1	0.197	0.197	34.515	0.000	0.3
450	3.4	0.212	0.212	37.126	0.000	0.3
465	3.6	0.229	0.228	39.946	0.000	0.3
480	3.9	0.247	0.246	43.070	0.000	0.3
495	4.3	0.266	0.266	46.483	0.000	0.3
510	4.6	0.287	0.286	50.194	0.000	0.3
525	4.9	0.310	0.310	54.219	0.000	0.3
540	5.3	0.335	0.335	58.522	0.000	0.3
555	5.6	0.361	0.359	63.179	0.000	0.3
570	6.0	0.389	0.390	68.119	0.000	0.3
585	6.4	0.419	0.419	73.363	0.000	0.3
600	6.7	0.451	0.451	78.897	0.000	0.3
615	7.0	0.484	0.484	84.742	0.000	0.4
630	7.4	0.520	0.519	90.911	0.000	0.4
645	7.7	0.556	0.557	97.311	0.000	0.4
660	7.9	0.594	0.594	103.992	0.000	0.4
675	8.2	0.633	0.634	110.881	0.000	0.4
690	8.4	0.674	0.674	117.947	0.000	0.4
705	8.6	0.716	0.715	125.225	0.000	0.4
720	8.7	0.758	0.758	132.593	0.000	0.4
735	8.7	0.800	0.800	140.013	0.000	0.4
750	8.6	0.842	0.842	147.356	0.000	0.5
765	8.4	0.884	0.883	154.523	0.000	0.5
780	8.2	0.924	0.923	161.557	0.000	0.5
795	7.9	0.962	0.961	168.307	0.000	0.5
810	7.6	1.000	0.999	174.885	0.000	0.5
825	7.3	1.036	1.035	181.143	0.000	0.5
840	7.0	1.070	1.069	187.111	0.000	0.5
855	6.6	1.102	1.101	192.775	0.000	0.5
870	6.3	1.133	1.132	198.131	0.000	0.5
885	5.9	1.161	1.161	203.152	0.000	0.5
900	5.6	1.188	1.187	207.846	0.000	0.5
915	5.2	1.213	1.213	212.233	0.000	0.5

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		


Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
930	4.9	1.236	1.236	216.294	0.000	0.5
945	4.5	1.258	1.257	220.043	0.000	0.5
960	4.2	1.277	1.277	223.490	0.000	0.5
975	3.9	1.295	1.295	226.619	0.000	0.5
990	3.6	1.312	1.311	229.493	0.000	0.6
1005	3.3	1.326	1.326	232.111	0.000	0.6
1020	3.1	1.340	1.340	234.465	0.000	0.6
1035	2.8	1.352	1.352	236.590	0.000	0.6
1050	2.6	1.363	1.363	238.521	0.000	0.6
1065	2.4	1.373	1.373	240.250	0.000	0.6
1080	2.2	1.382	1.382	241.803	0.000	0.6
1095	2.1	1.390	1.390	243.223	0.000	0.6
1110	1.9	1.397	1.397	244.504	0.000	0.6
1125	1.8	1.404	1.404	245.683	0.000	0.6
1140	1.7	1.410	1.410	246.767	0.000	0.6
1155	1.7	1.416	1.416	247.771	0.000	0.6
1170	1.6	1.421	1.421	248.725	0.000	0.6
1185	1.6	1.427	1.426	249.634	0.000	0.6
1200	1.5	1.431	1.431	250.512	0.000	0.6
1215	1.5	1.436	1.436	251.370	0.000	0.6
1230	1.5	1.441	1.441	252.225	0.000	0.6
1245	1.5	1.446	1.446	253.079	0.000	0.6
1260	1.5	1.451	1.451	253.936	0.000	0.6
1275	1.5	1.456	1.456	254.786	0.000	0.6
1290	1.5	1.461	1.461	255.645	0.000	0.6
1305	1.5	1.466	1.466	256.492	0.000	0.6
1320	1.5	1.470	1.471	257.318	0.000	0.6
1335	1.4	1.475	1.475	258.108	0.000	0.6
1350	1.4	1.479	1.479	258.844	0.000	0.6
1365	1.3	1.483	1.483	259.499	0.000	0.6
1380	1.1	1.486	1.486	260.044	0.000	0.6
1395	1.0	1.488	1.488	260.446	0.000	0.6
1410	0.7	1.489	1.490	260.662	0.000	0.6
1425	0.5	1.489	1.489	260.651	0.000	0.6
1440	0.1	1.488	1.488	260.356	0.000	0.6

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		


Time (mins)	Total Inflow (L/s)	US Depth ( m )	DS Depth ( m )	Resident Volume( m³ )	Flooded Volume (m³)	Total Outflow (L/s)
1455	0.0	1.485	1.485	259.872	0.000	0.6
1470	0.0	1.482	1.482	259.342	0.000	0.6
1485	0.0	1.479	1.479	258.816	0.000	0.6
1500	0.0	1.476	1.476	258.292	0.000	0.6
1515	0.0	1.473	1.473	257.768	0.000	0.6
1530	0.0	1.470	1.470	257.245	0.000	0.6
1545	0.0	1.467	1.467	256.723	0.000	0.6
1560	0.0	1.464	1.464	256.202	0.000	0.6
1575	0.0	1.461	1.461	255.680	0.000	0.6
1590	0.0	1.458	1.458	255.158	0.000	0.6
1605	0.0	1.455	1.455	254.635	0.000	0.6
1620	0.0	1.452	1.452	254.114	0.000	0.6
1635	0.0	1.449	1.449	253.591	0.000	0.6
1650	0.0	1.446	1.446	253.068	0.000	0.6
1665	0.0	1.443	1.443	252.548	0.000	0.6
1680	0.0	1.440	1.440	252.025	0.000	0.6
1695	0.0	1.437	1.437	251.504	0.000	0.6
1710	0.0	1.434	1.434	250.982	0.000	0.6
1725	0.0	1.431	1.431	250.459	0.000	0.6
1740	0.0	1.428	1.428	249.938	0.000	0.6
1755	0.0	1.425	1.425	249.416	0.000	0.6
1770	0.0	1.422	1.422	248.893	0.000	0.6
1785	0.0	1.419	1.419	248.375	0.000	0.6
1800	0.0	1.416	1.416	247.857	0.000	0.6
1815	0.0	1.413	1.413	247.340	0.000	0.6
1830	0.0	1.410	1.410	246.826	0.000	0.6
1845	0.0	1.407	1.407	246.312	0.000	0.6
1860	0.0	1.405	1.405	245.799	0.000	0.6
1875	0.0	1.402	1.402	245.287	0.000	0.6
1890	0.0	1.399	1.399	244.773	0.000	0.6
1905	0.0	1.396	1.396	244.260	0.000	0.6
1920	0.0	1.393	1.393	243.748	0.000	0.6
1935	0.0	1.390	1.390	243.234	0.000	0.6
1950	0.0	1.387	1.387	242.721	0.000	0.6
1965	0.0	1.384	1.384	242.208	0.000	0.6

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth ( m )	DS Depth ( m )	Resident Volume( m³ )	Flooded Volume (m³)	Total Outflow (L/s)
1980	0.0	1.381	1.381	241.695	0.000	0.6
1995	0.0	1.378	1.378	241.182	0.000	0.6
2010	0.0	1.375	1.375	240.669	0.000	0.6
2025	0.0	1.372	1.372	240.156	0.000	0.6
2040	0.0	1.369	1.369	239.643	0.000	0.6
2055	0.0	1.366	1.366	239.130	0.000	0.6
2070	0.0	1.364	1.364	238.617	0.000	0.6
2085	0.0	1.361	1.361	238.104	0.000	0.6
2100	0.0	1.358	1.358	237.593	0.000	0.6
2115	0.0	1.355	1.355	237.083	0.000	0.6
2130	0.0	1.352	1.352	236.574	0.000	0.6
2145	0.0	1.349	1.349	236.068	0.000	0.6
2160	0.0	1.346	1.346	235.563	0.000	0.6
2175	0.0	1.343	1.343	235.061	0.000	0.6
2190	0.0	1.340	1.340	234.555	0.000	0.6
2205	0.0	1.337	1.337	234.052	0.000	0.6
2220	0.0	1.335	1.335	233.547	0.000	0.6
2235	0.0	1.332	1.332	233.046	0.000	0.6
2250	0.0	1.329	1.329	232.539	0.000	0.6
2265	0.0	1.326	1.326	232.036	0.000	0.6
2280	0.0	1.323	1.323	231.532	0.000	0.6
2295	0.0	1.320	1.320	231.027	0.000	0.6
2310	0.0	1.317	1.317	230.524	0.000	0.6
2325	0.0	1.314	1.314	230.019	0.000	0.6
2340	0.0	1.312	1.312	229.516	0.000	0.6
2355	0.0	1.309	1.309	229.016	0.000	0.6
2370	0.0	1.306	1.306	228.515	0.000	0.6
2385	0.0	1.303	1.303	228.020	0.000	0.6
2400	0.0	1.300	1.300	227.522	0.000	0.6
2415	0.0	1.297	1.297	227.029	0.000	0.5
2430	0.0	1.294	1.294	226.531	0.000	0.5
2445	0.0	1.292	1.292	226.036	0.000	0.5
2460	0.0	1.289	1.289	225.544	0.000	0.5
2475	0.0	1.286	1.286	225.046	0.000	0.5
2490	0.0	1.283	1.283	224.551	0.000	0.5

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth ( m )	DS Depth ( m )	Resident Volume( m³ )	Flooded Volume (m³)	Total Outflow (L/s)
2505	0.0	1.280	1.280	224.056	0.000	0.5
2520	0.0	1.277	1.277	223.562	0.000	0.5
2535	0.0	1.275	1.275	223.068	0.000	0.5
2550	0.0	1.272	1.272	222.572	0.000	0.5
2565	0.0	1.269	1.269	222.077	0.000	0.5
2580	0.0	1.266	1.266	221.582	0.000	0.5
2595	0.0	1.263	1.263	221.089	0.000	0.5
2610	0.0	1.261	1.261	220.600	0.000	0.5
2625	0.0	1.258	1.258	220.107	0.000	0.5
2640	0.0	1.255	1.255	219.619	0.000	0.5
2655	0.0	1.252	1.252	219.133	0.000	0.5
2670	0.0	1.249	1.249	218.647	0.000	0.5
2685	0.0	1.247	1.247	218.161	0.000	0.5
2700	0.0	1.244	1.244	217.676	0.000	0.5
2715	0.0	1.241	1.241	217.190	0.000	0.5
2730	0.0	1.238	1.238	216.704	0.000	0.5
2745	0.0	1.236	1.236	216.219	0.000	0.5
2760	0.0	1.233	1.233	215.731	0.000	0.5
2775	0.0	1.230	1.230	215.246	0.000	0.5
2790	0.0	1.227	1.227	214.762	0.000	0.5
2805	0.0	1.224	1.224	214.273	0.000	0.5
2820	0.0	1.222	1.222	213.787	0.000	0.5
2835	0.0	1.219	1.219	213.301	0.000	0.5
2850	0.0	1.216	1.216	212.818	0.000	0.5
2865	0.0	1.213	1.213	212.329	0.000	0.5
2880	0.0	1.211	1.211	211.843	0.000	0.5

Shoreham By Sea:	Date: 16-10-2025			
	Designed by: Arjun K R	Checked by: Vaidyanathan C	Approved By:	
Report Details: Type: Inflow Results Storm Phase: Phase	Company Address:			



**Tank - TAD 1**

**Critical by Return Period: Rainfall Details FEH: 30 years: Increase Rainfall (%): +45: 15 mins: Summer**

Type : Catchment Area

**Inflow**

Max. Inflow (L/s)	81.6
Total Inflow Volume (m³)	64.564

**Tables**

Time (mins)	Total Inflow (L/s)
0	0.0
15	81.6
30	0.0

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		



**Tank**

**Critical by Return Period: Rainfall Details FEH: 30 years: Increase Rainfall (%): +45: 1440 mins: Winter**

Type : Pond

**Tables**

Time (mins)	Total Inflow (L/s)	US Depth ( m )	DS Depth ( m )	Resident Volume( m³ )	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.000	0.0
15	0.1	0.001	0.000	0.045	0.000	0.0
30	0.4	0.004	0.000	0.264	0.000	0.0
45	0.6	0.006	0.001	0.698	0.000	0.0
60	0.8	0.008	0.007	1.291	0.000	0.0
75	0.9	0.012	0.011	2.003	0.000	0.0
90	1.0	0.016	0.016	2.805	0.000	0.1
105	1.1	0.021	0.021	3.665	0.000	0.1
120	1.1	0.026	0.026	4.551	0.000	0.1
135	1.2	0.031	0.031	5.443	0.000	0.2
150	1.2	0.036	0.036	6.328	0.000	0.2
165	1.2	0.041	0.041	7.210	0.000	0.2
180	1.2	0.046	0.046	8.082	0.000	0.3
195	1.2	0.051	0.051	8.924	0.000	0.3
210	1.2	0.056	0.056	9.742	0.000	0.3
225	1.2	0.060	0.060	10.562	0.000	0.3
240	1.2	0.065	0.065	11.361	0.000	0.3
255	1.2	0.070	0.070	12.182	0.000	0.3
270	1.2	0.074	0.074	12.989	0.000	0.3
285	1.3	0.079	0.079	13.861	0.000	0.3
300	1.3	0.084	0.084	14.709	0.000	0.3
315	1.4	0.089	0.090	15.625	0.000	0.3
330	1.4	0.095	0.095	16.593	0.000	0.3
345	1.5	0.101	0.101	17.627	0.000	0.3
360	1.6	0.107	0.107	18.746	0.000	0.3
375	1.8	0.115	0.114	19.981	0.000	0.3
390	1.9	0.122	0.122	21.325	0.000	0.3

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		




Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
405	2.1	0.131	0.130	22.802	0.000	0.3
420	2.2	0.140	0.139	24.425	0.000	0.3
435	2.4	0.150	0.150	26.223	0.000	0.3
450	2.6	0.161	0.161	28.197	0.000	0.3
465	2.9	0.173	0.173	30.352	0.000	0.3
480	3.1	0.186	0.187	32.707	0.000	0.3
495	3.3	0.202	0.202	35.326	0.000	0.3
510	3.6	0.219	0.218	38.164	0.000	0.3
525	3.9	0.235	0.236	41.234	0.000	0.3
540	4.2	0.255	0.254	44.534	0.000	0.3
555	4.4	0.276	0.275	48.120	0.000	0.3
570	4.7	0.297	0.297	51.976	0.000	0.3
585	5.0	0.321	0.320	56.071	0.000	0.3
600	5.3	0.346	0.345	60.415	0.000	0.3
615	5.5	0.371	0.371	64.944	0.000	0.3
630	5.8	0.399	0.399	69.757	0.000	0.3
645	6.0	0.427	0.427	74.760	0.000	0.3
660	6.2	0.458	0.456	79.938	0.000	0.4
675	6.4	0.489	0.488	85.344	0.000	0.4
690	6.6	0.519	0.519	90.880	0.000	0.4
705	6.7	0.551	0.551	96.528	0.000	0.4
720	6.8	0.584	0.585	102.258	0.000	0.4
735	6.8	0.617	0.617	108.077	0.000	0.4
750	6.7	0.650	0.650	113.802	0.000	0.4
765	6.6	0.683	0.682	119.394	0.000	0.4
780	6.4	0.714	0.713	124.834	0.000	0.4
795	6.2	0.744	0.744	130.147	0.000	0.4
810	6.0	0.773	0.773	135.235	0.000	0.4
825	5.7	0.800	0.801	140.095	0.000	0.4
840	5.5	0.827	0.827	144.763	0.000	0.5
855	5.2	0.853	0.852	149.143	0.000	0.5
870	4.9	0.876	0.876	153.317	0.000	0.5
885	4.7	0.899	0.898	157.200	0.000	0.5
900	4.4	0.919	0.919	160.836	0.000	0.5
915	4.1	0.939	0.938	164.235	0.000	0.5


Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		




Time (mins)	Total Inflow (L/s)	US Depth ( m )	DS Depth ( m )	Resident Volume( m³ )	Flooded Volume (m³)	Total Outflow (L/s)
930	3.8	0.956	0.957	167.364	0.000	0.5
945	3.6	0.973	0.973	170.272	0.000	0.5
960	3.3	0.988	0.988	172.920	0.000	0.5
975	3.0	1.002	1.002	175.339	0.000	0.5
990	2.8	1.015	1.015	177.534	0.000	0.5
1005	2.6	1.026	1.026	179.533	0.000	0.5
1020	2.4	1.036	1.036	181.338	0.000	0.5
1035	2.2	1.046	1.045	182.956	0.000	0.5
1050	2.0	1.054	1.054	184.415	0.000	0.5
1065	1.9	1.061	1.061	185.718	0.000	0.5
1080	1.8	1.068	1.068	186.889	0.000	0.5
1095	1.6	1.074	1.074	187.943	0.000	0.5
1110	1.5	1.079	1.079	188.899	0.000	0.5
1125	1.4	1.085	1.084	189.768	0.000	0.5
1140	1.4	1.089	1.089	190.561	0.000	0.5
1155	1.3	1.093	1.093	191.302	0.000	0.5
1170	1.3	1.097	1.097	192.000	0.000	0.5
1185	1.2	1.101	1.101	192.658	0.000	0.5
1200	1.2	1.105	1.104	193.296	0.000	0.5
1215	1.2	1.108	1.108	193.917	0.000	0.5
1230	1.2	1.112	1.112	194.531	0.000	0.5
1245	1.2	1.115	1.115	195.144	0.000	0.5
1260	1.2	1.119	1.119	195.755	0.000	0.5
1275	1.2	1.122	1.122	196.367	0.000	0.5
1290	1.2	1.126	1.126	196.978	0.000	0.5
1305	1.2	1.129	1.129	197.588	0.000	0.5
1320	1.2	1.132	1.132	198.177	0.000	0.5
1335	1.1	1.136	1.136	198.741	0.000	0.5
1350	1.1	1.139	1.139	199.260	0.000	0.5
1365	1.0	1.141	1.141	199.723	0.000	0.5
1380	0.9	1.143	1.143	200.100	0.000	0.5
1395	0.7	1.145	1.145	200.361	0.000	0.5
1410	0.6	1.146	1.146	200.479	0.000	0.5
1425	0.4	1.145	1.145	200.415	0.000	0.5
1440	0.1	1.144	1.144	200.131	0.000	0.5

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth (m)	DS Depth (m)	Resident Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
1455	0.0	1.141	1.141	199.694	0.000	0.5
1470	0.0	1.138	1.138	199.226	0.000	0.5
1485	0.0	1.136	1.136	198.758	0.000	0.5
1500	0.0	1.133	1.133	198.290	0.000	0.5
1515	0.0	1.130	1.130	197.822	0.000	0.5
1530	0.0	1.128	1.128	197.355	0.000	0.5
1545	0.0	1.125	1.125	196.887	0.000	0.5
1560	0.0	1.122	1.122	196.419	0.000	0.5
1575	0.0	1.120	1.120	195.952	0.000	0.5
1590	0.0	1.117	1.117	195.482	0.000	0.5
1605	0.0	1.114	1.114	195.014	0.000	0.5
1620	0.0	1.112	1.112	194.547	0.000	0.5
1635	0.0	1.109	1.109	194.079	0.000	0.5
1650	0.0	1.106	1.106	193.614	0.000	0.5
1665	0.0	1.104	1.104	193.149	0.000	0.5
1680	0.0	1.101	1.101	192.687	0.000	0.5
1695	0.0	1.098	1.098	192.225	0.000	0.5
1710	0.0	1.096	1.096	191.767	0.000	0.5
1725	0.0	1.093	1.093	191.307	0.000	0.5
1740	0.0	1.091	1.091	190.849	0.000	0.5
1755	0.0	1.088	1.088	190.389	0.000	0.5
1770	0.0	1.085	1.085	189.931	0.000	0.5
1785	0.0	1.083	1.083	189.471	0.000	0.5
1800	0.0	1.080	1.080	189.013	0.000	0.5
1815	0.0	1.077	1.077	188.553	0.000	0.5
1830	0.0	1.075	1.075	188.094	0.000	0.5
1845	0.0	1.072	1.072	187.636	0.000	0.5
1860	0.0	1.070	1.070	187.176	0.000	0.5
1875	0.0	1.067	1.067	186.719	0.000	0.5
1890	0.0	1.064	1.064	186.259	0.000	0.5
1905	0.0	1.062	1.062	185.801	0.000	0.5
1920	0.0	1.059	1.059	185.344	0.000	0.5
1935	0.0	1.057	1.057	184.889	0.000	0.5
1950	0.0	1.054	1.054	184.435	0.000	0.5
1965	0.0	1.051	1.051	183.983	0.000	0.5

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		

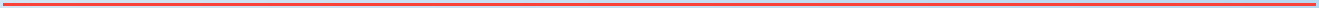
Time (mins)	Total Inflow (L/s)	US Depth ( m )	DS Depth ( m )	Resident Volume( m³ )	Flooded Volume (m³)	Total Outflow (L/s)
1980	0.0	1.049	1.049	183.533	0.000	0.5
1995	0.0	1.046	1.046	183.084	0.000	0.5
2010	0.0	1.044	1.044	182.633	0.000	0.5
2025	0.0	1.041	1.041	182.183	0.000	0.5
2040	0.0	1.038	1.038	181.733	0.000	0.5
2055	0.0	1.036	1.036	181.285	0.000	0.5
2070	0.0	1.033	1.033	180.833	0.000	0.5
2085	0.0	1.031	1.031	180.382	0.000	0.5
2100	0.0	1.028	1.028	179.934	0.000	0.5
2115	0.0	1.026	1.026	179.484	0.000	0.5
2130	0.0	1.023	1.023	179.033	0.000	0.5
2145	0.0	1.020	1.020	178.584	0.000	0.5
2160	0.0	1.018	1.018	178.133	0.000	0.5
2175	0.0	1.015	1.015	177.683	0.000	0.5
2190	0.0	1.013	1.013	177.237	0.000	0.5
2205	0.0	1.010	1.010	176.790	0.000	0.5
2220	0.0	1.008	1.008	176.345	0.000	0.5
2235	0.0	1.005	1.005	175.901	0.000	0.5
2250	0.0	1.003	1.003	175.459	0.000	0.5
2265	0.0	1.000	1.000	175.018	0.000	0.5
2280	0.0	0.998	0.998	174.578	0.000	0.5
2295	0.0	0.995	0.995	174.136	0.000	0.5
2310	0.0	0.993	0.993	173.695	0.000	0.5
2325	0.0	0.990	0.990	173.255	0.000	0.5
2340	0.0	0.988	0.988	172.813	0.000	0.5
2355	0.0	0.985	0.985	172.372	0.000	0.5
2370	0.0	0.982	0.982	171.931	0.000	0.5
2385	0.0	0.980	0.980	171.490	0.000	0.5
2400	0.0	0.977	0.977	171.050	0.000	0.5
2415	0.0	0.975	0.975	170.608	0.000	0.5
2430	0.0	0.972	0.972	170.167	0.000	0.5
2445	0.0	0.970	0.970	169.728	0.000	0.5
2460	0.0	0.967	0.967	169.286	0.000	0.5
2475	0.0	0.965	0.965	168.848	0.000	0.5
2490	0.0	0.962	0.962	168.413	0.000	0.5

Shoreham By Sea:	Date: 16-10-2025		
	Designed by: Arjun K R	Checked by: Vaidyanathan C	
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		

Time (mins)	Total Inflow (L/s)	US Depth ( m )	DS Depth ( m )	Resident Volume( m³ )	Flooded Volume (m³)	Total Outflow (L/s)
2505	0.0	0.960	0.960	167.977	0.000	0.5
2520	0.0	0.957	0.957	167.543	0.000	0.5
2535	0.0	0.955	0.955	167.109	0.000	0.5
2550	0.0	0.952	0.953	166.678	0.000	0.5
2565	0.0	0.950	0.950	166.245	0.000	0.5
2580	0.0	0.948	0.948	165.814	0.000	0.5
2595	0.0	0.945	0.945	165.381	0.000	0.5
2610	0.0	0.943	0.943	164.949	0.000	0.5
2625	0.0	0.940	0.940	164.517	0.000	0.5
2640	0.0	0.938	0.938	164.086	0.000	0.5
2655	0.0	0.935	0.935	163.653	0.000	0.5
2670	0.0	0.933	0.933	163.221	0.000	0.5
2685	0.0	0.930	0.930	162.789	0.000	0.5
2700	0.0	0.928	0.928	162.358	0.000	0.5
2715	0.0	0.925	0.925	161.925	0.000	0.5
2730	0.0	0.923	0.923	161.494	0.000	0.5
2745	0.0	0.920	0.920	161.063	0.000	0.5
2760	0.0	0.918	0.918	160.633	0.000	0.5
2775	0.0	0.915	0.915	160.205	0.000	0.5
2790	0.0	0.913	0.913	159.779	0.000	0.5
2805	0.0	0.911	0.911	159.355	0.000	0.5
2820	0.0	0.908	0.908	158.931	0.000	0.5
2835	0.0	0.906	0.906	158.508	0.000	0.5
2850	0.0	0.903	0.903	158.085	0.000	0.5
2865	0.0	0.901	0.901	157.661	0.000	0.5
2880	0.0	0.898	0.899	157.238	0.000	0.5

# Appendix F

**DRAINAGE INSPECTION REPORT**



# METRO ROD

## CCTV Inspection Report

View via iTouch Live 

Your full report, including the video is only a click away download or view online now.



**Kwik-Fit  
Brighton Road  
Shoreham-by-Sea  
BN43 6RE**

**09/10/2025  
Approved By: Richard Kempson  
Job Number: 1341695  
Client Job Number: P117455UK001**

**Metro Rod (Sussex and Tunbridge)**

270A Old Shoreham Road, Hove, East Sussex, BN3 7EG  
Tel: 01273 023 728

Job Number  
**1341695**

Surveyed by (Operator)  
**NEIL CORNEY**

Base Unit  
**96UM3JK9TI**

Date  
**09/10/2025**

**Client Details:**

WSP UK Ltd  
WSP House  
70 Chancery Lane  
London  
WC2A 1AF

Client Contact Name: Adam Coleman  
Client Contact Tel: 07884731127

**Site Details:**

Kwik-Fit  
Brighton Road  
Shoreham-by-Sea  
BN43 6RE

Site Contact Name: Adam Coleman  
Site Contact Tel: 07884731127

**Contractor Details:**

Metro Rod (Sussex and Tunbridge)  
270A Old Shoreham Road  
Hove  
East Sussex  
BN3 7EG

Office Contact Name: Richard Kempson  
Office Contact Number: 01273 023 728

**Purpose of Survey:**

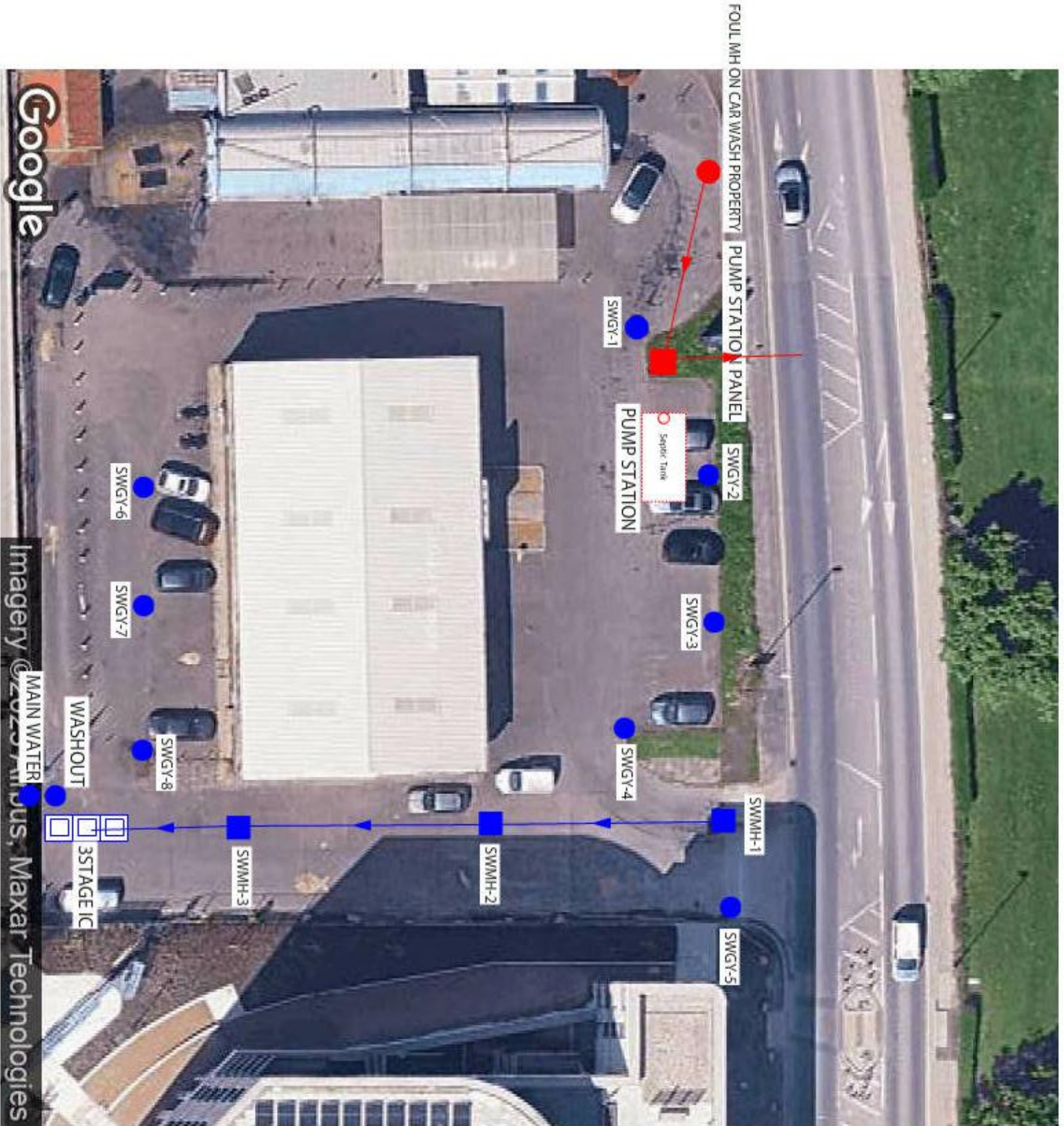
Job Number <b>1341695</b>	Surveyed by (Operator) <b>NEIL CORNEY</b>	Base Unit <b>96UM3JK9TI</b>	Date <b>09/10/2025</b>
------------------------------	--	--------------------------------	---------------------------

## Report Contents

Page 1	Cover Page
Page 2	Job Overview
Page 3	Contents Page
Page 4	Site Drawings
Page 5	Grade Defect Descriptions
Page 6	Site Photos
Page 9	Job Summary

Job Number <b>1341695</b>	Surveyed by (Operator) <b>NEIL CORNEY</b>	Base Unit <b>96UM3JK9TI</b>	Date <b>09/10/2025</b>
------------------------------	--	--------------------------------	---------------------------

This sketch is not to scale and does not represent the exact routing of the drainage system



Job Number <b>1341695</b>	Surveyed by (Operator) <b>NEIL CORNEY</b>	Base Unit <b>96UM3JK9TI</b>	Date <b>09/10/2025</b>
------------------------------	--	--------------------------------	---------------------------

**1: Occurences without damage. For example, laterals, joints,etc.**

**NO DEFECTS WERE DETECTED.**

**2: Constructional deficiencies or occurences with insignificant influence to tightness, hydraulic or static pressure or pipe: Eg. wide joints, badly torched intakes, minor deformation of plastic pipes, minor erosions etc.**

**REHABILITATION CAN BE SCHEDULED LONG-TERM.**

**3: Constructional deficiencies diminishing static, hydraulic and tightness: Eg. untorched intakes, cracks, minor drainage obstructions such as calcite build ups, protruding laterals, minor damages to pipe wall, individual root penetrations, corroded pipe walls etc.**

**REHABILITATION IS NECESSARY MEDIUM-TERM WITHIN 3 TO 5 YEARS.**

**4: Constructional damages with insufficient static safety, hydraulic or tightness: Eg. axial/radial pipe bursts, pipe deformations, visually noticeable infiltration/exfiltration, cavities, in pipe-wall, severe protruding, laterals severe root penetrations, severe corrosion of pipe wall etc.**

**REHABILITATION PROCEDURE IS URGENT AND HAS TO BE COMPLETED WITHIN 1 TO 2 YEARS. NECESSITY FOR EMERGENCY OPERATIONS HAS TO BE EXAMINED.**

**5: Pipe is already or will shortly be impermeable: Eg. collapsed pipe, deeply rooted pipe or other drainage obstructions. Pipe loses water or danger of backwater in basements etc.**

**REHABILITATION IS URGENT AND SHORT-TERM. IN ORDER TO PREVENT FURTHER DAMAGE, NECESSARY TEMPORARY SPOT REPAIR HAS TO BE CONDUCTED ON EMERGENCY LEVEL.**

Job Number <b>1341695</b>	Surveyed by (Operator) <b>NEIL CORNEY</b>	Base Unit <b>96UM3JK9TI</b>	Date <b>01/01/1970</b>
------------------------------	--	--------------------------------	---------------------------



**Other Site Photos: WASHOUT**



**Other Site Photos: SWMH-1**



**Other Site Photos: 3 STAGE IC**



**Other Site Photos: MAINS WATER LINE**



**Other Site Photos: PUMP STATION PANEL**



**Other Site Photos: FOUL MH ON CAR WASH PROPERTY**

Job Number  
**1341695**

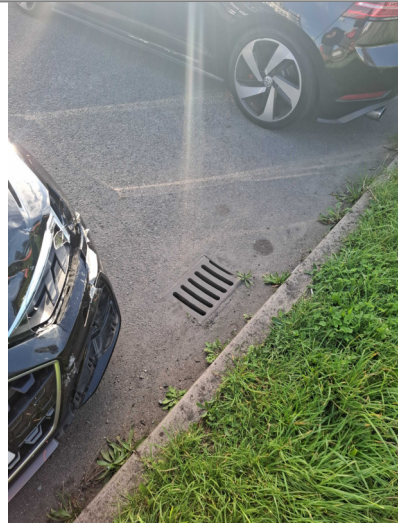
Surveyed by (Operator)  
**NEIL CORNEY**

Base Unit  
**96UM3JK9TI**

Date  
**01/01/1970**



**Other Site Photos: SWGY-1**



**Other Site Photos: SWGY-2**



**Other Site Photos: SWGY-3**



**Other Site Photos: SWGY-4**



**Other Site Photos: SWGY-5**



**Other Site Photos: SWGY-8**

Job Number  
**1341695**

Surveyed by (Operator)  
**NEIL CORNEY**

Base Unit  
**96UM3JK9TI**

Date  
**01/01/1970**



**Other Site Photos: SWGY-7**



**Other Site Photos: SWGY-6**

Job Number <b>1341695</b>	Surveyed by (Operator) <b>NEIL CORNEY</b>	Base Unit <b>96UM3JK9TI</b>	Date <b>09/10/2025</b>
------------------------------	--	--------------------------------	---------------------------

## Job Information

Total Distance Surveyed: **0 meters**  
Engineer: **NEIL CORNEY**  
Number of Surveys: **0**  
Number of Surveys grade 4 or above: **0**

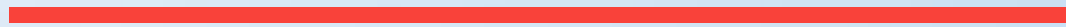
## Job Comments

There is no access to the foul water manholes on the Kwik Fit site, as they are located in the car wash area. The surface water lines are full of silt and will need a HPWJ clean before a survey can be carried out.

Spoke to Steve on the phone. He requested a drainage map showing the layout and flow directions and confirmed that a camera survey was not required.

# Appendix G

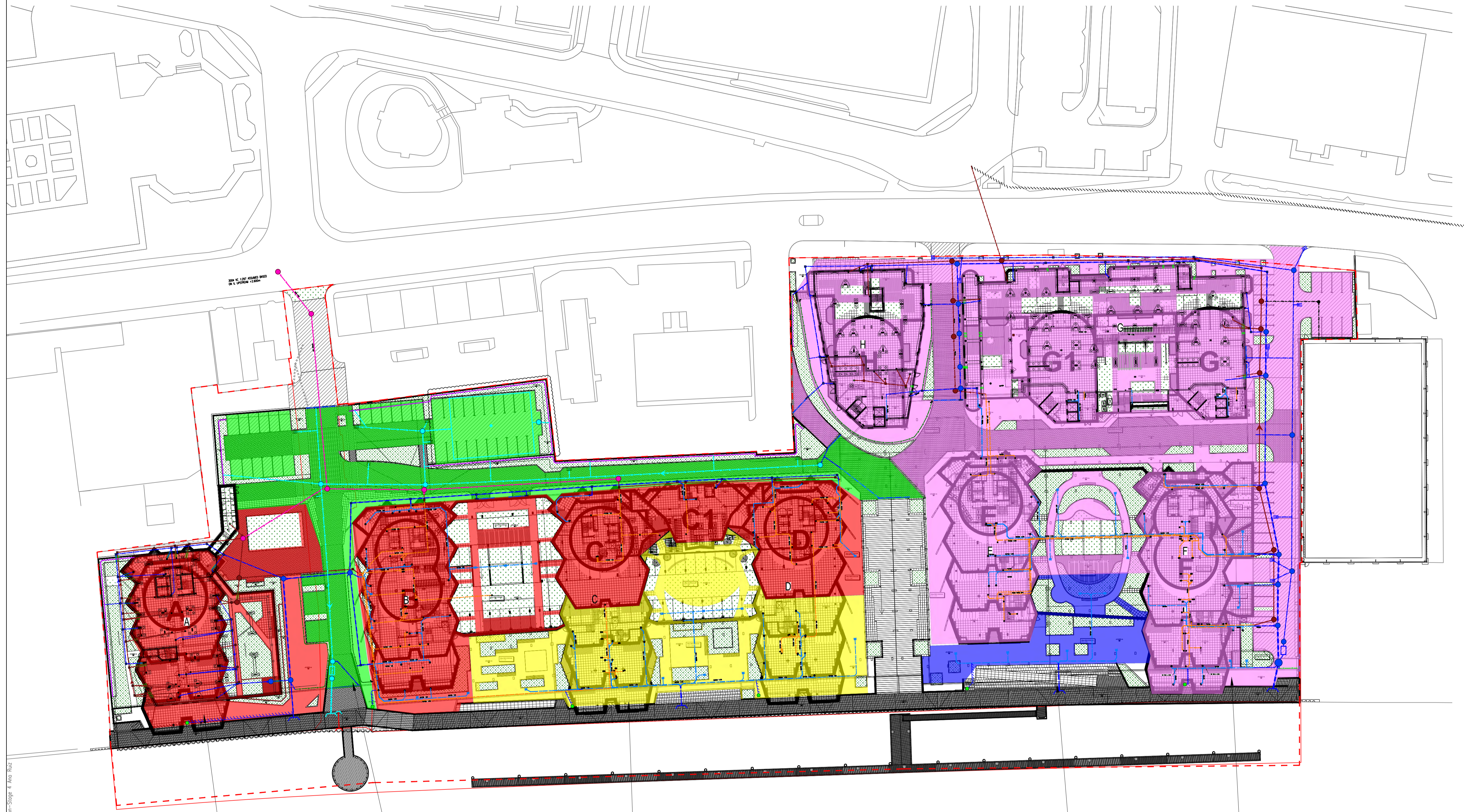
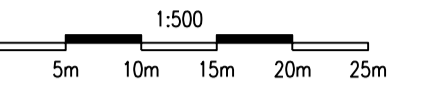
**SURROUNDING SITE PLAN**





1. GENERAL

- (i) This drawing is not to be scaled, work to figured dimensions only, confirmed on site.
- (ii) This drawing is to be read in conjunction with all relevant architectural drawings, detailed specifications where applicable and all associated drawings in this series.
- (iii) Any discrepancy on this drawing is to be reported immediately to the partnership for clarification.
- (iv) The contractor is responsible for all temporary works and for the stability of the works in progress.



CATCHMENT 1  
AREA=4880m<sup>2</sup>

CATCHMENT 2  
AREA=2805m<sup>2</sup>

CATCHMENT 3  
AREA=2139m<sup>2</sup>

CATCHMENT 4  
AREA=611m<sup>2</sup>

CATCHMENT 5  
AREA=9144m<sup>2</sup>

C:\PROJETS\14576 - Free Wharf - Brighton Road, Shoreham\Drawings\DWG\14576-01-XX-DR-C-0550.dwg - Stage 4 - Rev 02



ISSUED FOR INFORMATION	AR, JAK, 08.04.19	P1
Description	By	Appt. Date
<b>PRELIMINARY DRAWING</b>		
NOT FOR CONSTRUCTION		

Title  
CATCHMENT AREAS

Project  
FREE WHARF - STAGE 3  
SHOREHAM-BY-SEA

Client  
SOUTHERN HOUSING GROUP

**HOP** CONSULTING CIVIL AND STRUCTURAL ENGINEERS  
 HOP House, 41 Church Road  
 Hove, East Sussex BN3 2BE  
 www.hop.uk.com  
 ask@hop.uk.com  
 +44 (0)1273 223900



Drawing No.	14576-HOP-00-XX-DR-C-0550	Status	S0
Rev.			P1

INDICATIVE ONLY



WSP House  
70 Chancery Lane  
London  
WC2A 1AF

[wsp.com](http://wsp.com)