Appendix A.8.5

Network Drainage Schedules

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S1 (Doc Ref. GCOB-4.03.03.03.3-001) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S1-1.000	225	S1-1	36.1	34.6	S1-2	34.562	32.879	67.589	CD			1.28	1.46	1.37	1.50	1.68	1.59	0-2	39	S	F1050
S1-1.001	225	S1-2	34.562	32.879	S1-3	32.217	30.534	67.499	CD			1.46	1.46	1.46	1.68	1.68	1.68	0-2	29	S	C1050
S1-1.002	225	S1-3	32.217	30.534	S1-4	32.652	30.438	16.469	CD			1.46	1.99	1.72	1.68	2.21	1.95	0-2	172	S	C1050
S1-1.003	225	S1-4	32.652	30.438	S1-5	27.982	25.924	99.868	CD			1.99	1.83	1.91	2.21	2.06	2.14	2-4	22	S	C1050
S1-1.004	300	S1-5	27.982	25.849	S1-6	23.602	21.469	97.751	CD			1.83	1.83	1.83	2.13	2.13	2.13	2-4	22	S	C1050
S1-1.005	300	S1-6	23.602	21.469	S1-7	19.6	17.467	88.989	CD			1.83	1.83	1.83	2.13	2.13	2.13	2-4	22	S	C1050
S1-1.006	300	S1-7	19.6	17.467	S1-8	16.275	14.142	72.452	CD			1.83	1.83	1.83	2.13	2.13	2.13	2-4	22	S	C1050
S1-1.007	300	S1-8	16.275	14.142	S1-9	13.087	10.954	75.259	CD			1.83	1.83	1.83	2.13	2.13	2.13	2-4	24	S	C1050
S1-1.008	300	S1-9	13.087	10.954	S1-24	11.4	9.325	58.609	CD			1.83	1.78	1.80	2.13	2.08	2.10	2-4	36	S	C1050
S1-2.000	225	S1-10	32.072	30.572	S1-11	28	26.5	96.961	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	24	S	F1050
S1-2.001	225	S1-11	28	26.5	S1-12	23.555	22.055	98.276	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	22	S	F1050
S1-2.002	225	S1-12	23.555	22.055	S1-13	19.547	18.047	89.068	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	22	S	F1050
S1-2.003	225	S1-13	19.547	18.047	S1-14	16.261	14.761	73.076	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	22	S	F1050
S1-2.004	300	S1-14	16.261	14.686	S1-15	13.447	11.872	74.838	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	27	S	F1050
S1-2.005	300	S1-15	13.447	11.872	S1-23	11.947	10.372	57.697	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	38	S	F1050
S1-3.000	225	S1-16	10.993	9.493	S1-23	11.947	8.718	25.881	CD			1.28	3.00	2.14	1.50	3.23	2.36	2-4	33	S	F1050
S1-4.000	225	S1-17	10.723	9.223	S1-18	10.975	9.048	29.858	CD			1.28	1.70	1.49	1.50	1.93	1.71	0-2	171	S	F1050
S1-4.001	225	S1-18	10.975	9.048	S1-22	10.979	8.718	56.281	CD			1.70	2.04	1.87	1.93	2.26	2.09	2-4	171	S	C1050
S1-5.000	225	S1-19	10.87	9.37	S1-20	11.123	9.12	42.292	CD			1.28	1.78	1.53	1.50	2.00	1.75	0-2	169	S	F1050
S1-5.001	225	S1-20	11.123	9.12	S1-21	11.334	8.875	41.789	CD			1.78	2.23	2.01	2.00	2.46	2.23	2-4	171	S	C1050
S1-5.002	225	S1-21	11.334	8.875	S1-22	10.979	8.718	18.04	CD			2.23	2.04	2.14	2.46	2.26	2.36	2-4	115	S	C1050
S1-4.002	225	S1-22	10.979	8.718	S1-23	11.947	8.563	25.837	CD			2.04	3.16	2.60	2.26	3.38	2.82	2-4	167	S	C1050
S1-2.006	600	S1-23	11.947	8.188	S1-24	11.4	8.038	23.937	CD			3.16	2.76	2.96	3.76	3.36	3.56	2-4	160	S	D1200
S1-1.009	675	S1-24	11.4	7.963	S1-31	12	7.933	14.403	CD			2.76	3.39	3.08	3.44	4.07	3.75	2-4	480	S	C1350
S1-6.000	225	S1-25	9.773	8.273	S1-29	10.782	7.863	70.048	CD			1.28	2.69	1.98	1.50	2.92	2.21	2-4	171	S	F1050
S1-7.000	225	S1-26	9.868	8.368	S1-28	10.492	8.018	59.9	CD			1.28	2.25	1.76	1.50	2.47	1.99	0-2	171	S	F1050
S1-8.000	225	S1-27	10.769	9.269	S1-28	10.492	8.018	53.468	CD			1.28	2.25	1.76	1.50	2.47	1.99	0-2	43	S	F1050
S1-7.001	225	S1-28	10.492	8.018	S1-29	10.782	7.863	14.215	CD			2.25	2.69	2.47	2.47	2.92	2.70	2-4	92	S	C1050
S1-6.001	225	S1-29	10.782	7.863	S1-30	11.23	7.578	44.486	CD			2.69	3.43	3.06	2.92	3.65	3.29	2-4	156	S	C1050
S1-6.002	225	S1-30	11.23	7.578	S1-31	12	7.43	25.187	CD			3.43	4.35	3.89	3.65	4.57	4.11	4-6	170	S	D1050
S1-1.010	675	S1-31	12	6.98	S1-32	12	6.76	6.456	CD			4.35	4.57	4.46	5.02	5.24	5.13	4-6	29	S	D1350
S1-1.013	225	S1-34	12.5	6.435	S1-35	9.45	6.345	36.523	CD			5.84	2.88	4.36	6.07	3.11	4.59	4-6	406	S	D1050
S1-1.014	375	S1-35	9.45	6.345	S1-36	9.45	6.195	54.332	CD			2.73	2.88	2.81	3.11	3.26	3.18	2-4	362	S	C1050
S1-1.015	375	S1-36	9.45	6.12	S1-37	9.45	5.98	54.276	CD			2.96	3.10	3.03	3.33	3.47	3.40	2-4	388	S	C1050
S1-1.016	375	S1-37	9.45	5.98	S1-100	9.45	5.86	32.184	CD			3.10	3.22	3.16	3.47	3.59	3.53	2-4	268	S	D1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
S1-3.000	RB	MLN 0+000
S1-4.000	SR	MLN 0+000
S1-4.001	SR	MLN 0+000
S1-5.000	SR	MLN 0+000
S1-5.001	SR	MLN 0+000
S1-5.002	RB	MLN 0+000
S1-4.002	RB	MLN 0+000
S1-6.000	SR	MLN 0+000
S1-7.000	SR	MLN 0+000
S1-8.000	SR	MLN 0+000
S1-6.001	SR	MLN 0+000

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 0+050	MLN 0+550	492.928																
SWC	MLN 0+050	MLN 0+550	489.916																
SWC	MLN 0+550	MLN 0+690	135.088																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S1-1.010	Petrol Interceptor Class 1 Bypass Separator NSB 050
			Spillage Containment Area 25m3
		S1-1.011	Wetland - Vt 192.75m3
		S1-1.012	Attenuation Pond - Volume of Storage 893.9m3
		MH S1/34	Hydrobreak - Qbar 7.4l/s

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S2 (Doc Ref. GCOB-4.03.03.03.3-002) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S2-1.000	225	S2-1	41.588	40.088	S2-2	40.4	38.9	60.234	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	51	S	F1050
S2-1.001	225	S2-2	40.4	38.9	S2-3	39.471	37.971	46.904	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	50	K	F1050
S2-1.002	225	S2-3	39.471	37.971	S2-4	37.886	36.386	80.793	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	51	K	F1050
S2-1.003	300	S2-4	37.886	36.311	S2-5	36.355	34.78	79.733	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	52	S	F1050
S2-1.004	300	S2-5	36.355	34.78	S2-10	36.6	34.67	27.165	CD			1.28	1.63	1.45	1.58	1.93	1.75	0-2	247	S	F1050
S2-2.000	225	S2-6	42.3	40.822	S2-7	41.565	40.065	49.419	CD			1.25	1.28	1.26	1.48	1.50	1.49	0-2	65	S	F1050
S2-2.001	225	S2-7	41.565	40.065	S2-8	40.057	38.557	79.576	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	53	S	F1050
S2-2.002	225	S2-8	40.057	38.557	S2-9	38.5	37	82.446	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	53	S	F1050
S2-2.003	225	S2-9	38.5	37	S2-10	36.6	35.1	105.034	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	55	S	F1050
S2-1.005	300	S2-10	36.6	32.975	S2-11	34.5	32.925	11.664	CD			3.33	1.28	2.30	3.63	1.58	2.60	2-4	233	S	D1050
S2-1.006	375	S2-11	34.5	32.85	S2-12	34.5	32.6	5.217	CD			1.28	1.53	1.40	1.65	1.90	1.78	0-2	21	S	F1050
S2-1.009	225	S2-14	33	31.45	S2-100	31.5	31.25	19.131	CD			1.33	0.03	0.68	1.55	0.25	0.90	0-2	96	S	F1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 0+675	MLN 0+990	316.475																
SWC	MLN 0+700	MLN 0+775	79.733																
SWC	MLN 0+910	MLN 0+975	60.234																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S2-1.006	Petrol Interceptor Class 1 Bypass Separator NSB 015
			Spillage Containment Area 25m3
		S2-1.007	Wetland - Vt 56.55m3
		S2-1.008	Attenuation Pond - Volume of Storage 184m3
		MH S2/14	Orifice - Design discharge 5l/s

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S3 (Doc Ref. GCOB-4.03.03.03.3-003) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S3-1.000	225	S3-1	56.034	54.534	S3-5	54.84	53.34	35.594	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	30	K	F1050
S3-2.000	225	S3-2	56.153	54.653	S3-3	55.799	54.153	21.911	FD			1.28	1.42	1.35	1.50	1.65	1.57	0-2	44	K	F1050
S3-2.001	225	S3-3	55.799	54.153	S3-4	55.353	53.553	13.485	FD			1.42	1.58	1.50	1.65	1.80	1.72	0-2	22	K	C1050
S3-2.002	225	S3-4	55.353	53.553	S3-5	54.84	53.063	9.57	CD			1.58	1.55	1.56	1.80	1.78	1.79	0-2	20	S	C1050
S3-1.001	225	S3-5	54.84	53.063	S3-6	53.187	51.687	26.634	FD			1.55	1.28	1.41	1.78	1.50	1.64	0-2	19	K	C1050
S3-1.002	225	S3-6	53.187	51.687	S3-7	51.943	50.443	25.84	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	21	K	F1050
S3-1.003	225	S3-7	51.943	50.443	S3-8	51.087	49.587	30.479	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	36	K	F1050
S3-1.004	225	S3-8	51.087	49.587	S3-9	50.722	49.222	50.409	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	138	S	F1050
S3-1.005	225	S3-9	50.722	49.222	S3-10	50.542	49.007	36.734	CD			1.28	1.31	1.29	1.50	1.54	1.52	0-2	171	S	F1050
S3-1.006	225	S3-10	50.542	49.007	S3-11	50.3	48.714	49.548	CD			1.31	1.36	1.34	1.54	1.59	1.56	0-2	169	S	F1050
S3-1.007	300	S3-11	50.3	48.639	S3-12	49.979	48.379	63.655	CD			1.36	1.30	1.33	1.66	1.60	1.63	0-2	245	S	C1050
S3-1.008	300	S3-12	49.979	48.379	S3-13	49.043	47.468	88.289	CD			1.30	1.28	1.29	1.60	1.58	1.59	0-2	97	S	F1050
S3-1.009	300	S3-13	49.043	47.468	S3-25	49.07	47.43	9.313	CD			1.28	1.34	1.31	1.58	1.64	1.61	0-2	245	S	F1050
S3-3.000	225	S3-14	51.013	49.513	S3-15	50.674	49.174	49.305	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	145	S	F1050
S3-3.001	225	S3-15	50.674	49.174	S3-19	50.257	48.757	58.451	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	140	S	F1050
S3-4.000	225	S3-16	56.432	54.284	S3-17	53.498	51.782	51.255	CD			1.92	1.49	1.71	2.15	1.72	1.93	0-2	20	S	C1050
S3-4.001	225	S3-17	53.498	51.782	S3-18	51.112	49.445	45.102	CD			1.49	1.44	1.47	1.72	1.67	1.69	0-2	19	S	C1050
S3-4.002	225	S3-18	51.112	49.445	S3-19	50.257	48.757	13.19	CD			1.44	1.28	1.36	1.67	1.50	1.58	0-2	19	S	C1050
S3-3.002	300	S3-19	50.257	48.682	S3-23	50.211	48.557	30.732	CD			1.28	1.35	1.31	1.58	1.65	1.61	0-2	246	S	F1050
S3-5.000	225	S3-20	56.032	54.284	S3-21	53.27	51.895	47.614	CD			1.52	1.15	1.34	1.75	1.38	1.56	0-2	20	S	C1050
S3-5.001	225	S3-21	53.27	51.895	S3-22	50.444	49.069	59.995	CD			1.15	1.15	1.15	1.38	1.38	1.38	0-2	21	S	F1050
S3-5.002	225	S3-22	50.444	49.069	S3-23	50.211	48.757	12.839	CD			1.15	1.23	1.19	1.38	1.45	1.41	0-2	41	S	F1050
S3-3.003	300	S3-23	50.211	48.557	S3-24	49.783	48.208	84.984	CD			1.35	1.28	1.31	1.65	1.58	1.61	0-2	244	S	C1050
S3-3.004	300	S3-24	49.783	48.208	S3-25	49.07	47.43	49.438	FD			1.28	1.34	1.31	1.58	1.64	1.61	0-2	64	K	F1050
S3-1.010	375	S3-25	49.07	47.355	S3-27	49.006	47.073	18.498	CD			1.34	1.56	1.45	1.72	1.93	1.82	0-2	66	S	F1050
S3-6.000	225	S3-26	48.933	47.433	S3-27	49.006	47.223	35.675	FD			1.28	1.56	1.42	1.50	1.78	1.64	0-2	170	K	F1050
S3-1.011	375	S3-27	49.006	47.073	S3-28	48.33	46.68	75.689	CD			1.56	1.28	1.42	1.93	1.65	1.79	0-2	193	S	C1050
S3-1.012	375	S3-28	48.33	46.68	S3-29	45.75	44.1	96.399	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	37	S	F1050
S3-1.013	375	S3-29	45.75	44.1	S3-30	44.25	42.6	62.483	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	42	S	F1050
S3-1.014	375	S3-30	44.25	42.6	S3-34	44.944	42.543	18.638	CD			1.28	2.03	1.65	1.65	2.40	2.03	2-4	327	S	F1050
S3-7.000	225	S3-31	49.769	48.269	S3-32	47.571	46.071	93.27	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	42	S	F1050
S3-7.001	225	S3-32	47.571	46.071	S3-33	46.196	44.696	71.397	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	52	S	F1050
S3-7.002	225	S3-33	46.196	44.696	S3-34	44.944	42.543	66.205	CD			1.28	2.18	1.73	1.50	2.40	1.95	0-2	31	S	F1050
S3-1.015	375	S3-34	44.944	42.393	S3-35	43.424	41.774	77.115	CD			2.18	1.28	1.73	2.55	1.65	2.10	2-4	125	S	C1050
S3-1.016	375	S3-35	43.424	41.774	S3-36	42.4	40.75	63.677	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	62	S	F1050
S3-1.017	300	S3-36	42.4	40.75	S3-44	41.778	40.203	22.778	CD			1.35	1.28	1.31	1.65	1.58	1.61	0-2	42	S	F1050
S3-8.000	225	S3-37	51.218	49.718	S3-38	50.419	48.919	40.707	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	51	K	F1050
S3-8.001	225	S3-38	50.419	48.919	S3-39	49.391	47.891	64.7	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	63	S	F1050
S3-8.002	225	S3-39	49.391	47.891	S3-40	47.537	46.037	88.505	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	48	S	F1050
S3-8.003	300	S3-40	47.537	45.962	S3-41	46.214	44.639	77.463	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	59	S	F1050
S3-8.004	300	S3-41	46.214	44.639	S3-42	44.572	42.997	78.252	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	48	S	F1050
S3-8.005	300	S3-42	44.572	42.997	S3-43	42.839	41.264	89.545	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	52	S	F1050
S3-8.006	300	S3-43	42.839	41.264	S3-44	41.778	40.203	49.492	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	47	S	F1050
S3-1.018	450	S3-44	41.778	38.425	S3-65	39.85	38.125	13.948	CD			2.90	1.28	2.09	3.35	1.73	2.54	2-4	46	S	C1050
S3-9.000	225	S3-45	57.599	55.87	S3-46	54.788	53.059	80.404	CD			1.50	1.50	1.50	1.73	1.73	1.73	0-2	29	S	C1050
S3-9.001	225	S3-46	54.788	53.059	S3-47	50.432	48.859	80.502	CD			1.50	1.35	1.43	1.73	1.57	1.65	0-2	19	S	C1050

S3-9.002	225	S3-47	50.432	48.859	S3-57	46.159	44.659	80.447	CD		1.35	1.28	1.31	1.57	1.50	1.54	0-2	19	S	F1050
S3-10.000	225	S3-48	57.385	55.885	S3-52	57.267	55.615	11.595	CD		1.28	1.43	1.35	1.50	1.65	1.58	0-2	43	S	F1050
S3-11.000	225	S3-49	57.26	55.76	S3-51	57.477	55.698	10.561	CD		1.28	1.55	1.41	1.50	1.78	1.64	0-2	170	S	F1050
S3-12.000	225	S3-50	57.613	56.113	S3-51	57.477	55.698	17.268	CD		1.28	1.55	1.41	1.50	1.78	1.64	0-2	42	S	F1050
S3-11.001	225	S3-51	57.477	55.698	S3-52	57.267	55.615	14.178	CD		1.55	1.43	1.49	1.78	1.65	1.72	0-2	171	S	C1050
S3-10.001	225	S3-52	57.267	55.615	S3-53	56.622	55.03	15.215	CD		1.43	1.37	1.40	1.65	1.59	1.62	0-2	26	S	C1050
S3-10.002	225	S3-53	56.622	55.03	S3-54	53.317	51.817	62.861	CD		1.37	1.28	1.32	1.59	1.50	1.55	0-2	20	S	C1050
S3-10.003	225	S3-54	53.317	51.683	S3-55	49.943	48.443	62.7	CD		1.41	1.28	1.34	1.63	1.50	1.57	0-2	19	S	C1050
S3-10.004	225	S3-55	49.943	48.443	S3-56	46.706	45.206	62.8	FD		1.28	1.28	1.28	1.50	1.50	1.50	0-2	19	K	F1050
S3-10.005	225	S3-56	46.706	45.206	S3-57	46.159	44.659	12.287	CD		1.28	1.28	1.28	1.50	1.50	1.50	0-2	22	S	F1050
S3-9.003	225	S3-57	46.159	44.659	S3-58	44.823	43.323	27.203	FD		1.28	1.28	1.28	1.50	1.50	1.50	0-2	20	K	F1050
S3-9.004	225	S3-58	44.823	43.323	S3-59	43.815	42.315	23.442	FD		1.28	1.28	1.28	1.50	1.50	1.50	0-2	23	K	F1050
S3-9.005	225	S3-59	43.815	42.315	S3-61	42.837	41.337	28.584	FD		1.28	1.28	1.28	1.50	1.50	1.50	0-2	29	K	F1050
S3-13.000	225	S3-60	41.502	40.002	S3-61	42.837	39.742	42.178	FD		1.28	2.87	2.07	1.50	3.10	2.30	2-4	162	K	F1050
S3-9.006	300	S3-61	42.837	39.667	S3-63	42.829	39.629	9.044	CD		2.87	2.90	2.89	3.17	3.20	3.19	2-4	238	S	C1050
S3-14.000	225	S3-62	41.075	39.575	S3-63	42.829	39.298	47.463	FD		1.28	3.31	2.29	1.50	3.53	2.52	2-4	171	K	F1050
S3-9.007	300	S3-63	42.829	39.223	S3-64	41.75	38.953	54.844	CD		3.31	2.50	2.90	3.61	2.80	3.20	2-4	203	S	D1050
S3-9.008	300	S3-64	41.75	38.953	S3-65	39.85	38.275	89.841	CD		2.50	1.28	1.89	2.80	1.58	2.19	2-4	133	S	C1050
S3-1.019	525	S3-65	39.85	38.05	S3-66	40.7	37.8	13.968	CD		1.28	2.38	1.83	1.80	2.90	2.35	2-4	56	S	C1200
S3-1.022	225	S3-68	39	37.125	S3-69	37.3	36.665	24.747	CD		1.65	0.41	1.03	1.88	0.63	1.26	0-2	54	S	C1050
S3-1.023	225	S3-69	37.3	36.665	S3-100	37	36.405	12.364	CD		0.41	0.37	0.39	0.63	0.59	0.61	0-2	48	S	F1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																	

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 1+000	MLN 1+375	371.664																
SWC	MLN 0+980	MLN 1+425	447.957																
SWC	MLN 1+375	MLN 1+375	288.635																
SWC	MLN 1+375	MLN 1+375	107.756																
SWC	MLN 1+375	MLN 1+375	109.547																
SWC	MLN 1+375	MLN 1+375	205.432																
SWC	MLN 1+375	MLN 1+375	241.353																
SWC	MLN 1+375	MLN 1+375	152.371																
SWC	MLN 1+375	MLN 1+375	27.829																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																	
			Petrol Interceptor Class 1 Bypass Separator NSB 040																
		S3-1.019	Spillage Containment Area 25m3																
		S3-1.020	Wetland - Vt 192.15m3																
		S3-1.021	Attenuation Pond - Volume of Storage 1027.6m3																
		MH S3/68	Orifice - Qbar 8.3l/s																

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S4A (Doc Ref. GCOB-4.03.03.03.3-004) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S4-1.000	225	S4-1	58.896	57.4	S4-2	58.108	56.608	97.157	CD			1.27	1.28	1.27	1.50	1.50	1.50	0-2	123	S	F1050
S4-1.001	225	S4-2	58.108	56.608	S4-3	56.554	55.054	97.782	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	63	S	F1050
S4-1.002	225	S4-3	56.554	55.054	S4-4	54.648	53.148	92.422	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	48	S	F1050
S4-1.003	300	S4-4	54.648	53.073	S4-8	54.326	52.751	15.436	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	48	S	F1050
S4-2.000	225	S4-5	58.9	57.4	S4-6	58.021	56.521	97.003	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	110	S	F1050
S4-2.001	225	S4-6	58.021	56.521	S4-7	56.165	54.665	95.963	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	52	S	F1050
S4-2.002	225	S4-7	56.165	54.665	S4-8	54.326	52.826	96.104	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	52	S	F1050
S4-1.004	300	S4-8	54.326	52.751	S4-9	52.594	51.019	88.783	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	51	S	F1050
S4-1.005	300	S4-9	52.594	51.019	S4-10	51.436	49.861	55.908	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	48	S	F1050
S4-1.006	450	S4-10	51.436	49.711	S4-11	50.62	49.679	11.378	CD			1.28	0.49	0.88	1.73	0.94	1.33	0-2	356	S	F1050
S4-1.007	450	S4-11	50.62	49.679	S4-20	50.75	49.629	15.885	CD			0.49	0.67	0.58	0.94	1.12	1.03	0-2	318	S	F1050
S4-3.000	225	S4-12	57.552	56.052	S4-15	57.011	55.511	25.965	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	48	S	F1050
S4-4.000	225	S4-13	57.57	56.07	S4-14	57.128	55.628	27.029	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	61	S	F1050
S4-4.001	225	S4-14	57.128	55.628	S4-15	57.011	55.256	7.97	CD			1.28	1.53	1.40	1.50	1.76	1.63	0-2	21	S	F1050
S4-3.001	225	S4-15	57.011	55.256	S4-17	53.656	52.156	59.66	CD			1.53	1.28	1.40	1.76	1.50	1.63	0-2	19	S	C1050
S4-5.000	225	S4-16	51.951	50.451	S4-17	53.656	50.289	27.577	CD			1.28	3.14	2.21	1.50	3.37	2.43	2-4	170	S	F1050
S4-3.002	300	S4-17	53.656	50.214	S4-18	53.867	50.178	8.773	CD			3.14	3.39	3.27	3.44	3.69	3.57	2-4	244	S	D1050
S4-3.003	300	S4-18	53.867	50	S4-19	50.75	49.965	8.476	CD			3.57	0.48	2.03	3.87	0.78	2.33	2-4	242	S	D1050
S4-3.004	300	S4-19	50.75	49.965	S4-20	50.75	49.865	24.517	CD			0.48	0.58	0.53	0.78	0.88	0.83	0-2	245	S	F1050
S4-1.008	525	S4-20	50.75	49.554	S4-21	50.75	49.329	12.989	CD			0.67	0.90	0.78	1.20	1.42	1.31	0-2	58	S	B
S4-1.011	300	S4-23	50	48.754	S4-100	49.01	48.71	7.466	CD			0.95	0.00	0.47	1.25	0.30	0.77	0-2	170	S	F1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage

3. Grassed & Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 1+625	MLN 1+915	287.361																
SWC	MLN 1+475	MLN 1+915	433.761																
SWC	MLN 1+400	MLN 1+400	112.654																
SWC	MLN 1+400	MLN 1+400	27.577																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S4-1.008	Petrol Interceptor Class 1 Bypass Separator NSB 025 Spillage Containment Area 25m3
		S4-1.009	Wetland - Vt 93.6m3
		S4-1.010	Attenuation Pond - Volume of Storage 324m3
		MH S4/23	Orifice - Design discarge 5l/s

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S4B (Doc Ref. GCOB-4.03.03.03.3-005) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S4-6.000	225	S4-B24	51.501	50.001	S4-B25	49.403	47.903	40.154	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	19	S	F1050
S4-6.001	225	S4-B25	49.403	47.903	S4-B27	48.225	46.725	49.983	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	42	K	F1050
S4-7.000	225	S4-B26	48.2	46.7	S4-B27	48.225	46.65	8.417	FD			1.28	1.35	1.31	1.50	1.58	1.54	0-2	168	K	F1050
S4-6.002	300	S4-B27	48.225	46.25	S4-B28	47	46.01	6.703	CD			1.68	0.69	1.18	1.98	0.99	1.48	0-2	28	S	C1050
S4-6.005	225	S4-B30	46.25	45.81	S4-B100	45.975	45.75	7.94	CD			0.21	0.00	0.11	0.44	0.23	0.33	0-2	132	S	F1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 1+550	MLN 1+550	40.154																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
			Petrol Interceptor Class 1 Bypass Separator NSB 004
		S4-6.002	Spillage Containment Area 25m3
		S4-6.003	Wetland - Vt 10.35m3
		S4-6.004	Attenuation Pond - Volume of Storage 21.2m3
		MH S4/30	Orifice - Design discarge 5l/s

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S5A (Doc Ref. GCOB-4.03.03.03.3-006) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S5-1.000	225	S5-1	58.924	57.424	S5-2	58.2	56.7	98.952	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	137	S	F1050
S5-1.001	225	S5-2	58.2	56.7	S5-3	56.421	54.921	84.968	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	48	S	F1050
S5-1.002	225	S5-3	56.421	54.921	S5-4	54.536	53.036	85.024	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	45	S	F1050
S5-1.003	225	S5-4	54.536	53.036	S5-5	52.651	51.151	84.523	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	45	S	F1050
S5-1.004	225	S5-5	52.651	51.151	S5-6	51.081	49.581	74.965	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	48	S	F1050
S5-1.005	300	S5-6	51.081	49.506	S5-7	49.459	47.884	72.165	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	44	S	F1050
S5-1.006	300	S5-7	49.459	47.884	S5-8	47.915	46.34	69.994	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	45	S	F1050
S5-1.007	300	S5-8	47.915	46.34	S5-9	46.509	44.934	64.939	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	46	S	F1050
S5-1.008	300	S5-9	46.509	44.934	S5-10	45.328	43.634	69.979	CD			1.28	1.39	1.33	1.58	1.69	1.63	0-2	54	S	F1050
S5-1.009	300	S5-10	45.328	43.634	S5-11	44.264	42.57	59.794	CD			1.39	1.39	1.39	1.69	1.69	1.69	0-2	56	S	C1050
S5-1.010	375	S5-11	44.264	42.495	S5-14	42.986	41.616	75.522	CD			1.39	0.99	1.19	1.77	1.37	1.57	0-2	86	S	C1050
S5-2.000	300	S5-12	43.977	42.777	S5-13	43.136	41.936	39.6	CD	RC		0.90	0.90	0.90	1.20	1.20	1.20	0-2	47	Z	F1050
S5-2.001	300	S5-13	43.136	41.936	S5-14	42.986	41.766	40.486	CD	RC		0.90	0.92	0.91	1.20	1.22	1.21	0-2	238	Z	F1050
S5-1.011	450	S5-14	42.986	41.541	S5-29	43.78	41.463	23.407	CD	RC		1.00	1.87	1.43	1.45	2.32	1.88	0-2	300	Z	F1050
S5-3.000	225	S5-15	58.895	57.395	S5-16	58.194	56.694	98.967	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	141	S	F1050
S5-3.001	225	S5-16	58.194	56.694	S5-17	56.624	55.124	75	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	48	S	F1050
S5-3.002	225	S5-17	56.624	55.124	S5-18	55.008	53.508	73.908	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	46	S	F1050
S5-3.003	225	S5-18	55.008	53.508	S5-19	53.441	51.941	70.761	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	45	S	F1050
S5-3.004	225	S5-19	53.441	51.941	S5-20	52.2	50.7	80.521	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	65	S	F1050
S5-3.005	225	S5-20	52.2	50.7	S5-21	50.136	48.636	91.501	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	44	S	F1050
S5-3.006	225	S5-21	50.136	48.636	S5-22	48.03	46.53	92.305	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	44	S	F1050
S5-3.007	225	S5-22	48.03	46.53	S5-23	46.441	44.941	90	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	57	S	F1050
S5-3.008	225	S5-23	46.441	44.941	S5-24	44.887	43.387	90	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	58	S	F1050
S5-3.009	225	S5-24	44.887	43.387	S5-29	43.78	42.28	88.009	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	80	K	F1050
S5-4.000	225	S5-25	45.606	44.106	S5-26	44.177	42.677	73.49	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	51	K	F1050
S5-4.001	225	S5-26	44.177	42.677	S5-27	44.034	42.377	51.26	FD			1.28	1.43	1.35	1.50	1.66	1.58	0-2	171	K	F1050
S5-4.002	300	S5-27	44.034	42.302	S5-28	43.82	42.079	37.263	CD			1.43	1.44	1.44	1.73	1.74	1.74	0-2	167	S	C1050
S5-4.003	300	S5-28	43.82	42.079	S5-29	43.78	41.929	25.015	CD			1.44	1.55	1.50	1.74	1.85	1.80	0-2	167	S	C1050
S5-1.012	450	S5-29	43.78	41.463	S5-30	42.3	41.25	9.437	CD			1.87	0.60	1.23	2.32	1.05	1.68	0-2	44	S	C1050
S5-1.013	450	S5-30	42.3	41.25	S5-31	42.3	41.15	10.832	CD			0.60	0.70	0.65	1.05	1.15	1.10	0-2	108	S	F1050
S5-1.015	300	S5-34	42.75	40.661	S5-100	42	40.543	26.259	CD			1.79	1.16	1.47	2.09	1.46	1.77	0-2	223	S	C1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
S5-2.000	RB	MLN 2+800
S5-2.001	RB	MLN 2+800
S5-4.002	RB	MLN 2+800
S5-4.003	RB	MLN 2+800

3. Grassed & Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
GSWC	MLN 2+680	MLN 2+750	75.522																
SWC	MLN 1+920	MLN 2+670	762.963																
SWC	MLN 1+920	MLN 2+670	765.303																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S5-1.013	Petrol Interceptor Class 1 Bypass Separator NSB 030
			Spillage Containment Area 25m3
		S5-1.014	Wetland - Vt 229.8m3
		S5-5.000	Attenuation Pond - Volume of Storage 977m3
		MH S5/34	Hydrobrake - Qbar 8.8l/s

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S5B (Doc Ref. GCOB-4.03.03.03.3-007) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S5-6.000	225	S5-B35	42.3	40.8	S5-B36	40.91	39.41	60.52	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	44	K	F1050
S5-6.001	225	S5-B36	40.91	39.41	S5-B37	38.23	36.73	71.813	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	27	K	F1050
S5-6.002	300	S5-B37	38.23	36.655	S5-B40	38.21	36.585	6.761	CD			1.28	1.33	1.30	1.58	1.63	1.60	0-2	97	S	F1050
S5-7.000	225	S5-B38	42.646	41.146	S5-B39	41.161	39.661	61.791	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	42	K	F1050
S5-7.001	225	S5-B39	41.161	39.075	S5-B40	38.21	36.66	72.445	FD			1.86	1.33	1.59	2.09	1.55	1.82	0-2	30	K	C1050
S5-6.003	300	S5-B40	38.21	36.585	S5-B41	35.2	34.225	42.744	CD			1.33	0.68	1.00	1.63	0.98	1.30	0-2	18	S	F1050
S5-6.004	300	S5-B41	35.2	34.225	S5-B100	35.2	34.205	4.213	CD			0.68	0.70	0.69	0.98	1.00	0.99	0-2	211	S	F1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S7A (Doc Ref. GCOB-4.03.03.03.3-008) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S7A-1.000	225	S7A-1	43.453	41.953	S7A-2	42.786	41.286	63.491	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	95	S	F1050
S7A-1.001	225	S7A-2	42.786	41.286	S7A-3	41.571	40.071	84.948	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	70	S	F1050
S7A-1.002	225	S7A-3	41.571	40.071	S7A-4	40.663	39.163	43.312	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	48	K	F1050
S7A-1.003	300	S7A-4	40.663	39.088	S7A-5	40.963	39.025	15.429	CD			1.28	1.64	1.46	1.58	1.94	1.76	0-2	245	S	F1050
S7A-1.004	300	S7A-5	40.963	38.18	S7A-6	38.75	37.85	9.185	CD			2.48	0.60	1.54	2.78	0.90	1.84	0-2	28	S	C1050
S7A-1.005	300	S7A-6	38.75	37.85	S7A-7	39.15	37.6	9.866	CD			0.60	1.25	0.92	0.90	1.55	1.23	0-2	39	S	F1050
S7A-1.008	225	S7A-9	38.25	36.8	S7A-100	37.025	36.625	10.412	CD			1.23	0.17	0.70	1.45	0.40	0.93	0-2	59	S	F1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage																			

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment		
SWC	MLN 2+850	MLN 3+000	148.439																		

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																			
		S7A-1.005	Petrol Interceptor Class 1 Bypass Separator NSB 010																		
			Spillage Containment Area 25m3																		
		S7A-1.006	Wetland - Vt 36.6m3																		
		S7A-1.007	Attenuation Pond - Volume of Storage 81m3																		
		MH S7A/9	Orifice - Design discharge 5l/s																		

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S7B (Doc Ref. GCOB-4.03.03.03.3-009) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S7B-1.000	225	S7B-1	40.344	38.844	S7B-2	37.633	36.065	98.34	CD			1.28	1.34	1.31	1.50	1.57	1.53	0-2	35	S	F1050
S7B-1.001	300	S7B-2	37.633	35.99	S7B-3	34.005	32.43	98.321	CD			1.34	1.28	1.31	1.64	1.58	1.61	0-2	28	S	F1050
S7B-1.002	375	S7B-3	34.005	32.355	S7B-4	32.182	30.532	98.505	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	54	S	F1050
S7B-1.003	375	S7B-4	32.182	30.532	S7B-5	31.014	29.364	95.074	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	81	S	F1050
S7B-1.004	450	S7B-5	31.014	29.289	S7B-6	29.891	28.166	92.983	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	83	S	F1050
S7B-1.005	450	S7B-6	29.891	28.166	S7B-7	28.8	27.075	90.194	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	83	S	F1050
S7B-1.006	450	S7B-7	28.8	27.075	S7B-8	27.743	26.018	89.832	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	85	S	F1050
S7B-1.007	450	S7B-8	27.743	26.018	S7B-9	26.626	24.901	89.926	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	81	S	F1050
S7B-1.008	450	S7B-9	26.626	24.901	S7B-10	25.345	23.62	94.222	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	74	S	F1050
S7B-1.009	525	S7B-10	25.345	23.545	S7B-19	25.348	23.513	15.546	CD			1.28	1.31	1.29	1.80	1.84	1.82	0-2	486	S	C1050
S7B-2.000	225	S7B-11	38.25	36.75	S7B-12	34.747	33.247	98.96	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	28	S	F1050
S7B-2.001	225	S7B-12	34.747	33.247	S7B-13	32.667	31.167	98.206	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	47	S	F1050
S7B-2.002	225	S7B-13	32.667	31.167	S7B-14	31.5	30	98.244	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	84	S	F1050
S7B-2.003	225	S7B-14	31.5	30	S7B-15	30.327	28.827	98.569	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	84	S	F1050
S7B-2.004	225	S7B-15	30.327	28.827	S7B-16	29.154	27.654	98.631	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	84	S	F1050
S7B-2.005	225	S7B-16	29.154	27.654	S7B-17	28.035	26.535	94.305	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	84	S	F1050
S7B-2.006	225	S7B-17	28.035	26.535	S7B-18	26.87	25.37	90.85	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	78	S	F1050
S7B-2.007	225	S7B-18	26.87	25.37	S7B-19	25.348	23.848	94.438	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	62	S	F1050
S7B-1.010	525	S7B-19	25.348	19.835	S7B-20	22.1	19.585	22.948	CD			4.99	1.99	3.49	5.51	2.52	4.01	4-6	92	S	D1200
S7B-1.013	225	S7B-22	20.31	19.01	S7B-100	20	18.7	26.805	CD			1.08	1.08	1.08	1.30	1.30	1.30	0-2	86	S	F1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L(24) (m)	u/s IL(1) (mOD)	d/s IL(1) (mOD)	Channel Depth (m)	X(23) (m)	V(23)	W(23)	Y(23) (m)	Outlet Ref. No.	No. of gratings	G(23) (m)	H(23) (m)	Z(23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 3+060	MLN 3+915	847.397																
SWC	MLN 3+150	MLN 3+915	772.203																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S7B-1.010	Petrol Interceptor Class 1 Bypass Separator NSB 050 Spillage Containment Area 25m3
		S7B-1.011	Wetland - Vt 160.5m3
		S7B-1.012	Attenuation Pond - Volume of Storage 1081.3m3
		MH S7B/22	Orifice - Qbar 10.6l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S8 (Doc Ref. GCOB-4.03.03.03.3-010) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S8-1.000	225	S8-1	25.263	23.763	S8-2	24.533	23.033	78.009	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	107	S	F1050
S8-1.001	225	S8-2	24.533	23.033	S8-4	24.429	22.735	50.447	CD			1.28	1.47	1.37	1.50	1.69	1.60	0-2	169	S	F1050
S8-2.000	225	S8-3	24.554	23.054	S8-4	24.429	22.899	25.902	CD			1.28	1.31	1.29	1.50	1.53	1.52	0-2	167	S	F1050
S8-1.002	300	S8-4	24.429	22.66	S8-9	24	22.457	15.3	CD	RC		1.47	1.24	1.36	1.77	1.54	1.66	0-2	75	Z	C1050
S8-3.000	225	S8-5	25.244	23.744	S8-6	24.335	22.835	82.3	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	91	S	F1050
S8-3.001	225	S8-6	24.335	22.835	S8-9	24	22.532	43.169	CD			1.28	1.24	1.26	1.50	1.47	1.48	0-2	142	S	F1050
S8-4.000	225	S8-7	24.605	23.105	S8-8	23.913	22.413	42.486	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	61	S	F1050
S8-4.001	225	S8-8	23.913	22.413	S8-9	24	22.3	19.042	CD			1.28	1.48	1.38	1.50	1.70	1.60	0-2	169	S	F1050
S8-1.003	300	S8-9	24	22.225	S8-10	24	22.202	4.436	CD			1.48	1.50	1.49	1.78	1.80	1.79	0-2	193	S	C1050
S8-1.004	300	S8-10	24	22.202	S8-11	23.5	21.802	14.531	CD			1.50	1.40	1.45	1.80	1.70	1.75	0-2	36	S	C1050
S8-1.007	225	S8-13	21.3	19.95	S8-100	21	19.38	21.834	CD			1.13	1.40	1.26	1.35	1.62	1.49	0-2	38	S	F1050
S8-5.000	150	S8-14	23.25	22	S8-15	22.75	21.325	8.47	CD			1.10	1.28	1.19	1.25	1.43	1.34	0-2	13	S	F1050
S8-5.001	150	S8-15	22.75	21.325	S8-16	21.6	20.175	31.619	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	27	S	F1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																	

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
GSWC	MLN 4+000	MLN 4+075	76.349																
GSWC	MLN 4+000	MLN 4+050	43.169																
SWC	MLN 3+900	MLN 3+920	78.009																
SWC	MLN 3+900	MLN 3+920	82.3																
SWC	MLN 4+070	MLN 4+110	42.486																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																	
		S8-1.004	Petrol Interceptor Class 1 Bypass Separator NSB 010																
			Spillage Containment Area 25m3																
		S8-1.005 S8-1.006	Wetland - Vt 38.4m3 Attenuation Pond - Volume of Storage 114m3																
		MH S8/13	Orifice - Design discharge 5l/s																

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S9 (Doc Ref. GCOB-4.03.03.03.3-011) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S9-1.000	150	S9-1	48.04	46.615	S9-2	46.24	44.815	90.463	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	50	S	F1050
S9-1.001	225	S9-2	46.24	44.74	S9-3	43.987	42.487	95.488	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	42	S	F1050
S9-1.002	225	S9-3	43.987	42.487	S9-4	41.139	39.639	95.486	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	34	S	F1050
S9-1.003	225	S9-4	41.139	39.639	S9-5	38.986	37.486	95.487	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	44	S	F1050
S9-1.004	225	S9-5	38.986	37.486	S9-6	37.713	36.213	60.739	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	48	S	F1050
S9-1.005	225	S9-6	37.713	36.213	S9-8	37.394	35.894	9.155	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	29	S	F1050
S9-2.000	150	S9-7	36.583	35.158	S9-8	37.394	34.759	39.885	CD			1.28	2.49	1.88	1.43	2.64	2.03	2-4	100	S	F1050
S9-1.006	375	S9-8	37.394	34.534	S9-10	37.369	34.512	7	CD			2.49	2.48	2.48	2.86	2.86	2.86	2-4	318	S	C1050
S9-3.000	150	S9-9	36.583	35.158	S9-10	37.369	34.758	39.971	CD			1.28	2.46	1.87	1.43	2.61	2.02	2-4	100	S	F1050
S9-1.007	375	S9-10	37.369	34.512	S9-11	37.336	34.483	9.342	CD			2.48	2.48	2.48	2.86	2.85	2.86	2-4	322	S	C1050
S9-1.008	375	S9-11	37.336	34.483	S9-12	36.86	34.41	23.71	CD			2.48	2.08	2.28	2.85	2.45	2.65	2-4	325	S	C1050
S9-1.009	375	S9-12	36.86	34.41	S9-30	35.463	33.812	49.905	CD			2.08	1.28	1.68	2.45	1.65	2.05	2-4	83	S	C1050
S9-4.000	150	S9-13	48.451	47.026	S9-14	46.434	45.009	98.475	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	49	S	F1050
S9-4.001	225	S9-14	46.434	44.934	S9-15	44.551	43.051	89.509	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	48	S	F1050
S9-4.002	225	S9-15	44.551	43.051	S9-16	41.752	40.252	89.506	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	32	S	F1050
S9-4.003	300	S9-16	41.752	40.177	S9-17	39.523	37.948	89.504	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	40	S	F1050
S9-4.004	300	S9-17	39.523	37.948	S9-18	37.811	36.236	82.799	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	48	S	F1050
S9-4.005	375	S9-18	37.811	36.161	S9-22	37.788	36.125	11.611	CD			1.28	1.29	1.28	1.65	1.66	1.66	0-2	323	S	F1050
S9-5.000	100	S9-19	42.063	40.688	S9-20	39.244	37.869	69.947	FD			1.28	1.28	1.28	1.38	1.38	1.38	0-2	25	K	F1050
S9-5.001	150	S9-20	39.244	37.819	S9-21	38.045	36.62	39.954	FD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	33	K	F1050
S9-5.002	150	S9-21	38.045	36.62	S9-22	37.788	36.363	19.987	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	78	S	F1050
S9-4.006	375	S9-22	37.788	36.125	S9-26	37.763	36.103	7	CD			1.29	1.29	1.29	1.66	1.66	1.66	0-2	318	S	F1050
S9-6.000	100	S9-23	42	40.625	S9-24	39.382	38.007	67.443	FD			1.28	1.28	1.28	1.38	1.38	1.38	0-2	26	K	F1050
S9-6.001	150	S9-24	39.382	37.957	S9-25	38.08	36.655	43.17	FD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	33	K	F1050
S9-6.002	150	S9-25	38.08	36.655	S9-26	37.763	36.338	19.097	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	60	S	F1050
S9-4.007	375	S9-26	37.763	35.799	S9-27	37.412	35.762	11.925	CD			1.59	1.28	1.43	1.96	1.65	1.81	0-2	322	S	C1050
S9-4.008	375	S9-27	37.412	35.762	S9-28	36.866	35.216	24.591	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	45	S	F1050
S9-4.009	375	S9-28	36.866	35.216	S9-29	35.986	34.336	39.853	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	45	S	F1050
S9-4.010	450	S9-29	35.986	33.87	S9-30	35.463	33.738	18.6	CD			1.67	1.28	1.47	2.12	1.73	1.92	0-2	141	S	C1050
S9-1.010	450	S9-30	35.463	31.357	S9-31	32.913	31.188	69.312	CD			3.66	1.28	2.47	4.11	1.73	2.92	2-4	410	S	D1050
S9-1.011	450	S9-31	32.913	28.181	S9-34	29.747	28.022	65.368	CD			4.28	1.28	2.78	4.73	1.73	3.23	2-4	411	S	D1050
S9-7.000	225	S9-32	25.2	24	S9-33	27.059	23.683	44.636	CD			0.97	3.15	2.06	1.20	3.38	2.29	2-4	141	S	F1050
S9-7.001	225	S9-33	27.059	23.683	S9-34	29.747	23.372	53.304	CD			3.15	6.15	4.65	3.38	6.38	4.88	4-6	171	S	D1050
S9-1.012	825	S9-34	29.747	22.772	S9-35	30.2	22.741	15.264	CD			6.15	6.63	6.39	6.98	7.46	7.22	6-8	492	S	E1500
S9-1.013	825	S9-35	30.2	22.741	S9-36	26.75	22.718	11.605	CD			6.63	3.21	4.92	7.46	4.03	5.75	4-6	505	S	E1500
S9-1.014	825	S9-36	26.75	22.718	S9-37	26.75	22.518	8.596	CD			3.21	3.41	3.31	4.03	4.23	4.13	4-6	43	S	D1500
S9-1.017	225	S9-39	26.5	22.243	S9-100	24.179	22.038	38.072	CD			4.03	1.92	2.97	4.26	2.14	3.20	2-4	186	S	D1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
S9-1.004	ML	MLN 4+500
S9-1.005	SR	MLN 4+450
S9-2.000	SR	MLN 4+450
S9-3.000	SR	MLN 4+450
S9-1.007	SR	MLN 4+450
S9-1.008	ML	MLN 4+450
S9-4.004	ML	MLN 4+500
S9-4.005	SR	MLN 4+450
S9-5.002	SR	MLN 4+450
S9-6.002	SR	MLN 4+450
S9-4.007	SR	MLN 4+450
S9-4.008	ML	MLN 4+450

3. Grassed & Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
GSWC	MLN 4+370	MLN 4+420	49.905																
GSWC	MLN 4+380	MLN 4+420	39.853																
SWC	MLN 4+125	MLN 4+370	232.62																
SWC	MLN 4+550	MLN 4+920	366.994																
SWC	MLN 4+525	MLN 4+900	376.924																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S9-1.014	Petrol Interceptor Class 1 Bypass Separator NSB 040
			Spillage Containment Area 25m3
		S9-1.015	Wetland - Vt 178.8m3
		S9-1.016	Attenuation Pond - Volume of Storage 796m3
		MH S9/39	Orifice - Qbar 6.3l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S10 (Doc Ref. GCOB-4.03.03.03.3-012) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S10-1.000	225	S10-1	60.835	59.335	S10-2	60.206	58.706	67.78	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	108	S	F1050
S10-1.001	225	S10-2	60.206	58.706	S10-3	59.993	58.456	42.325	CD			1.28	1.31	1.29	1.50	1.54	1.52	0-2	169	S	F1050
S10-1.002	225	S10-3	59.993	58.456	S10-4	59.532	58.032	16.638	CD			1.31	1.28	1.29	1.54	1.50	1.52	0-2	39	S	F1050
S10-1.003	300	S10-4	59.532	57.957	S10-5	58.688	57.113	91.104	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	108	S	F1050
S10-1.004	300	S10-5	58.688	57.113	S10-6	58.269	56.694	48.565	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	116	S	F1050
S10-1.005	300	S10-6	58.269	56.694	S10-7	57.441	55.866	90	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	109	S	F1050
S10-1.006	300	S10-7	57.441	55.866	S10-8	55.934	53.395	90	CD			1.28	2.24	1.76	1.58	2.54	2.06	2-4	36	S	F1050
S10-1.007	300	S10-8	55.934	53.395	S10-9	54.028	52.453	90	CD			2.24	1.28	1.76	2.54	1.58	2.06	2-4	96	S	C1050
S10-1.008	300	S10-9	54.028	52.453	S10-10	52.233	50.658	90	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	50	S	F1050
S10-1.009	300	S10-10	52.233	50.658	S10-11	50.432	48.857	90	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	50	S	F1050
S10-1.010	300	S10-11	50.432	48.857	S10-23	48.64	47.065	90	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	50	S	F1050
S10-2.000	225	S10-12	60.321	58.821	S10-13	59.775	58.275	55.275	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	101	S	F1050
S10-2.001	225	S10-13	59.775	58.275	S10-14	59.608	58.108	13.427	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	80	S	F1050
S10-2.002	225	S10-14	59.608	58.108	S10-15	59.063	57.563	62.392	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	114	S	F1050
S10-2.003	225	S10-15	59.063	57.563	S10-16	58.336	56.836	90	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	124	S	F1050
S10-2.004	300	S10-16	58.336	56.761	S10-17	57.536	55.961	90	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	112	S	F1050
S10-2.005	300	S10-17	57.536	55.961	S10-18	56.17	53.245	90	CD			1.28	2.63	1.95	1.58	2.93	2.25	2-4	33	S	F1050
S10-2.006	300	S10-18	56.17	53.245	S10-19	54.382	52.807	90	CD			2.63	1.28	1.95	2.93	1.58	2.25	2-4	205	S	C1050
S10-2.007	300	S10-19	54.382	52.807	S10-20	52.44	50.865	90	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	46	S	F1050
S10-2.008	300	S10-20	52.44	50.865	S10-21	50.79	49.215	90	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	55	S	F1050
S10-2.009	300	S10-21	50.79	49.215	S10-22	48.84	47.265	90	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	46	S	F1050
S10-2.010	450	S10-22	48.84	47.115	S10-23	48.64	46.915	18.278	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	91	S	F1050
S10-1.011	450	S10-23	48.64	46.915	S10-24	48.5	46.715	19.709	CD			1.28	1.34	1.31	1.73	1.79	1.76	0-2	99	S	F1050
S10-1.014	225	S10-26	47.15	43.181	S10-27	43.5	42.616	10.873	CD			3.74	0.66	2.20	3.97	0.88	2.43	2-4	19	S	D1050
S10-1.015	225	S10-27	43.5	42.616	S10-100	43	42.555	9.423	CD			0.66	0.22	0.44	0.88	0.45	0.66	0-2	154	S	F1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
S10-1.000	SR	MLN 5+650
S10-1.001	SR	MLN 5+650
S10-1.002	SR	MLN 5+650
S10-2.000	SR	MLN 5+650
S10-2.001	SR	MLN 5+650
S10-2.002	ML	MLN 5+600

3. Grassed & Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
GSWC	MLN 5+025	MLN 5+210	180																
SWC	MLN 4+940	MLN 5+025	90																
SWC	MLN 4+930	MLN 5+600	679.669																
SWC	MLN 5+210	MLN 5+565	360																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S10-1.011	Petrol Interceptor Class 1 Bypass Separator NSB 040 Spillage Containment Area 25m3
		S10-1.012	Wetland - Vt 182.85m3
		S10-1.013	Attenuation Pond - Volume of Storage 873m3
		MH S10/26	Hydrobrake - Qbar 7.9l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S11 (Doc Ref. GCOB-4.03.03.03.3-013) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S11-1.000	225	S11-1	59.882	58.403	S11-2	59.736	58.15	43.09	CD			1.25	1.36	1.31	1.48	1.59	1.53	0-2	170	S	F1050
S11-1.001	225	S11-2	59.736	58.15	S11-3	59.586	58.086	10.587	CD			1.36	1.28	1.32	1.59	1.50	1.54	0-2	165	S	C1050
S11-1.002	225	S11-3	59.586	58.086	S11-4	58.69	57.167	80.069	SD			1.28	1.30	1.29	1.50	1.52	1.51	0-2	87	N/A	F1050
S11-1.003	300	S11-4	58.69	57.092	S11-5	58.825	57.044	11.8	CD			1.30	1.48	1.39	1.60	1.78	1.69	0-2	246	S	F1050
S11-1.004	300	S11-5	58.825	57.044	S11-6	57.152	55.577	89.932	CD			1.48	1.28	1.38	1.78	1.58	1.68	0-2	61	S	C1050
S11-1.005	300	S11-6	57.152	55.577	S11-13	57.036	55.427	36.966	CD			1.28	1.31	1.29	1.58	1.61	1.59	0-2	246	S	F1050
S11-2.000	225	S11-7	62.771	61.271	S11-8	62.236	60.736	69.557	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	130	S	F1050
S11-2.001	225	S11-8	62.236	60.736	S11-9	61.125	59.625	79.45	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	72	S	F1050
S11-2.002	225	S11-9	61.125	59.625	S11-10	59.716	58.216	69.508	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	49	S	F1050
S11-2.003	225	S11-10	59.716	58.216	S11-11	57.922	56.422	79.438	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	44	S	F1050
S11-2.004	300	S11-11	57.922	56.347	S11-12	57.347	55.772	49.648	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	86	S	F1050
S11-2.005	300	S11-12	57.347	55.772	S11-13	57.036	55.461	52.401	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	168	S	F1050
S11-1.006	675	S11-13	57.036	55.052	S11-24	57.015	55.001	25.45	CD			1.31	1.34	1.32	1.98	2.01	2.00	0-2	499	S	C1350
S11-3.000	225	S11-14	59.514	58.011	S11-15	59.195	57.661	59.444	CD			1.28	1.31	1.29	1.50	1.53	1.52	0-2	170	S	F1050
S11-3.001	225	S11-15	59.195	57.661	S11-16	58.276	56.776	79.431	FD			1.31	1.28	1.29	1.53	1.50	1.52	0-2	90	K	F1050
S11-3.002	225	S11-16	58.276	56.776	S11-17	57.281	55.781	90.038	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	90	S	F1050
S11-3.003	300	S11-17	57.281	55.706	S11-24	57.015	55.441	37.506	CD			1.28	1.27	1.27	1.58	1.57	1.57	0-2	142	S	F1050
S11-4.000	225	S11-18	62.81	61.31	S11-19	62.221	60.721	80.487	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	137	S	F1050
S11-4.001	225	S11-19	62.221	60.721	S11-20	61.104	59.604	80.612	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	72	S	F1050
S11-4.002	225	S11-20	61.104	59.604	S11-21	59.695	58.195	70.526	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	50	S	F1050
S11-4.003	225	S11-21	59.695	58.195	S11-22	57.901	56.401	80.601	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	45	S	F1050
S11-4.004	300	S11-22	57.901	56.326	S11-23	57.247	55.672	50.376	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	77	S	F1050
S11-4.005	300	S11-23	57.247	55.672	S11-24	57.015	55.44	53.17	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	229	S	F1050
S11-1.007	675	S11-24	57.015	55.001	S11-25	57	54.921	6.765	CD			1.34	1.40	1.37	2.01	2.08	2.05	2-4	85	S	C1350
S11-1.008	675	S11-25	57	54.921	S11-26	57.5	54.721	18.59	CD			1.40	2.10	1.75	2.08	2.78	2.43	2-4	93	S	C1350
S11-1.011	225	S11-28	55.25	53.95	S11-29	54.539	53.108	35.504	CD			1.08	1.21	1.14	1.30	1.43	1.37	0-2	42	S	F1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																
S11-1.000	ML	MLN 5+675																
S11-3.000	ML	MLN 5+675																

3. Grassed & Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
GSWC	MLN 5+790	MLN 5+970	179.299																
GSWC	MLN 5+790	MLN 5+970	180.714																
SWC	MLN 5+975	MLN 6+325	347.601																
SWC	MLN 5+975	MLN 6+325	362.602																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																
		S11-1.008	Petrol Interceptor Class 1 Bypass Separator NSB 050															
			Spillage Containment Area 25m3															
		S11-1.009	Wetland - Vt 235.8m3															
		S11-1.010	Attenuation Pond - Volume of Storage 1127m3															
		MH S11/28	Orifice - Qbar 7.3l/s															

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S12 (Doc Ref. GCOB-4.03.03.03.3-014) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S12-1.000	225	S12-1	62.831	61.331	S12-2	62.787	60.771	95	CD			1.28	1.79	1.53	1.50	2.02	1.76	0-2	170	S	F1050
S12-1.001	225	S12-2	62.787	60.771	S12-3	61.953	60.211	95	CD			1.79	1.52	1.65	2.02	1.74	1.88	0-2	170	S	C1050
S12-1.002	225	S12-3	61.953	60.211	S12-4	60.914	59.414	90	FD			1.52	1.28	1.40	1.74	1.50	1.62	0-2	113	K	C1050
S12-1.003	225	S12-4	60.914	59.414	S12-5	59.777	58.277	95	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	84	S	F1050
S12-1.004	300	S12-5	59.777	58.202	S12-6	59.206	57.631	60.766	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	106	S	F1050
S12-1.005	300	S12-6	59.206	57.631	S12-21	58.83	57.255	53.38	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	142	S	F1050
S12-2.000	150	S12-7	68.002	66.577	S12-8	67.47	66.045	40.247	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	76	S	F1050
S12-2.001	225	S12-8	67.47	65.97	S12-10	66.813	65.313	29.838	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	45	S	F1050
S12-3.000	150	S12-9	67.765	66.34	S12-10	66.813	65.388	66.076	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	69	S	F1050
S12-2.002	225	S12-10	66.813	65.313	S12-17	64.837	63.337	95.036	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	48	S	F1050
S12-4.000	225	S12-11	67.74	66.24	S12-12	67.45	65.52	60.269	CD			1.28	1.71	1.49	1.50	1.93	1.72	0-2	84	S	F1050
S12-4.001	225	S12-12	67.45	65.52	S12-15	66.3	64.8	60.269	CD			1.71	1.28	1.49	1.93	1.50	1.72	0-2	84	S	C1050
S12-5.000	150	S12-13	68.137	66.712	S12-14	66.607	65.182	99.405	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	65	S	F1050
S12-5.001	225	S12-14	66.607	65.107	S12-15	66.3	64.8	11.577	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	38	S	F1050
S12-4.002	225	S12-15	66.3	64.8	S12-16	65.1	63.6	53.43	CD			1.28	1.27	1.28	1.50	1.50	1.50	0-2	45	S	F1050
S12-4.003	525	S12-16	65.1	63.3	S12-17	64.837	63.037	32.42	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	123	S	C1200
S12-2.003	525	S12-17	64.837	60.903	S12-18	62.544	60.744	78.643	CD			3.41	1.28	2.34	3.93	1.80	2.87	2-4	495	S	D1200
S12-2.004	525	S12-18	62.544	58.846	S12-19	60.459	58.659	93.318	CD			3.17	1.28	2.22	3.70	1.80	2.75	2-4	499	S	D1200
S12-2.005	525	S12-19	60.459	57.542	S12-20	59.248	57.448	46.624	CD			2.39	1.28	1.83	2.92	1.80	2.36	2-4	496	S	C1200
S12-2.006	525	S12-20	59.248	57.448	S12-21	58.83	57.03	64.168	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	154	S	C1200
S12-1.006	750	S12-21	58.83	56.805	S12-32	58.9	56.752	26.45	CD			1.28	1.40	1.34	2.03	2.15	2.09	2-4	499	S	C1350
S12-6.000	225	S12-22	62.859	61.359	S12-23	62.757	60.859	85	CD			1.28	1.67	1.47	1.50	1.90	1.70	0-2	170	S	F1050
S12-6.001	225	S12-23	62.757	60.859	S12-24	61.961	60.299	95	CD			1.67	1.44	1.56	1.90	1.66	1.78	0-2	170	S	C1050
S12-6.002	225	S12-24	61.961	60.299	S12-25	60.839	59.339	95	CD			1.44	1.28	1.36	1.66	1.50	1.58	0-2	99	S	C1050
S12-6.003	300	S12-25	60.839	59.264	S12-26	59.806	58.231	95	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	92	S	F1050
S12-6.004	300	S12-26	59.806	58.231	S12-27	59.101	57.526	68.278	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	97	S	F1050
S12-6.005	300	S12-27	59.101	57.526	S12-32	58.9	57.325	32.207	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	160	S	F1050
S12-7.000	150	S12-28	64.678	63.253	S12-29	62.756	61.331	65.954	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	34	S	F1050
S12-7.001	300	S12-29	62.756	61.181	S12-30	60.181	58.606	95	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	37	S	F1050
S12-7.002	300	S12-30	60.181	58.606	S12-31	59.304	57.729	45	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	51	S	F1050
S12-7.003	375	S12-31	59.304	57.654	S12-32	58.9	57.25	76.024	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	188	S	F1050
S12-1.007	750	S12-32	58.9	54.467	S12-33	56.1	54.45	12.881	CD			3.68	0.90	2.29	4.43	1.65	3.04	2-4	758	S	D1500
S12-1.008	750	S12-33	56.1	54.45	S12-34	56.1	54.2	14.867	CD			0.90	1.15	1.03	1.65	1.90	1.78	0-2	59	S	B
S12-1.011	225	S12-36	55	48.53	S12-100	48.35	48.12	58.099	CD			6.25	0.01	3.13	6.47	0.23	3.35	2-4	142	S	E1500

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage

3. Grassed & Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
GSWC	MLN 6+610	MLN 6+825	209.146																
GSWC	MLN 6+710	MLN 6+810	100.485																
GSWC	MLN 6+935	MLN 7+025	93.318																
GSWC	MLN 6+935	MLN 7+025	95																
SWC	MLN 6+340	MLN 6+525	190																
SWC	MLN 6+350	MLN 6+720	370																
SWC	MLN 6+825	MLN 6+925	110.792																
SWC	MLN 6+810	MLN 6+925	121.024																
SWC	MLN 7+025	MLN 7+260	239.755																
SWC	MLN 7+025	MLN 7+100	65.954																
SWC	MLN 7+110	MLN 7+280	173.968																
SWC	MLN 7+225	MLN 7+265	40.247																
SWC	MLN 7+175	MLN 7+275	99.405																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S12-1.008	Petrol Interceptor Class 1 Bypass Separator NSB 075
			Spillage Containment Area 25m3
		S12-1.009	Wetland - Vt 366.9m3
		S12-1.010	Attenuation Pond - Volume of Storage 1697m3
		MH S12/36	Orifice - Qbar 11.3l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S13 (Doc Ref. GCOB-4.03.03.03.3-015) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S13-1.000	150	S13-1	68.9	67.475	S13-2	68.731	66.937	54.758	CD			1.28	1.64	1.46	1.43	1.79	1.61	0-2	102	S	F1050
S13-1.001	225	S13-2	68.731	66.862	S13-5	68.33	66.538	55.534	CD			1.64	1.57	1.61	1.87	1.79	1.83	0-2	171	S	C1050
S13-2.000	225	S13-3	68.904	67.404	S13-4	68.439	66.822	99.782	CD			1.28	1.39	1.33	1.50	1.62	1.56	0-2	171	S	F1050
S13-2.001	300	S13-4	68.439	66.747	S13-5	68.33	66.637	27.205	CD			1.39	1.39	1.39	1.69	1.69	1.69	0-2	247	S	C1050
S13-1.002	450	S13-5	68.33	66.313	S13-6	67.986	66.261	14.926	CD			1.57	1.28	1.42	2.02	1.73	1.87	0-2	287	S	C1050
S13-1.003	450	S13-6	67.986	66.261	S13-7	68.183	66.05	86.635	CD			1.28	1.68	1.48	1.73	2.13	1.93	0-2	411	S	F1050
S13-1.004	450	S13-7	68.183	66.05	S13-8	66.622	64.897	59.145	CD			1.68	1.27	1.48	2.13	1.72	1.93	0-2	51	S	C1050
S13-1.005	450	S13-8	66.622	62.59	S13-16	64.2	62.475	47.293	CD			3.58	1.28	2.43	4.03	1.73	2.88	2-4	411	S	D1050
S13-3.000	150	S13-9	68.906	67.481	S13-11	68.739	66.887	60.544	CD			1.28	1.70	1.49	1.43	1.85	1.64	0-2	102	S	F1050
S13-4.000	150	S13-10	68.392	66.967	S13-11	68.739	66.486	48.952	CD			1.28	2.10	1.69	1.43	2.25	1.84	0-2	102	S	F1050
S13-3.001	300	S13-11	68.739	66.336	S13-14	68.745	66.234	25.11	CD			2.10	2.21	2.16	2.40	2.51	2.46	2-4	246	S	C1050
S13-5.000	150	S13-12	68.9	67.475	S13-14	68.745	66.886	59.964	CD			1.28	1.71	1.49	1.43	1.86	1.64	0-2	102	S	F1050
S13-6.000	150	S13-13	68.408	66.983	S13-14	68.745	66.495	49.701	CD			1.28	2.10	1.69	1.43	2.25	1.84	0-2	102	S	F1050
S13-3.002	300	S13-14	68.745	64.155	S13-15	65.7	64.125	7.409	CD			4.29	1.28	2.78	4.59	1.58	3.08	2-4	247	S	D1050
S13-3.003	300	S13-15	65.7	62.738	S13-16	64.2	62.625	27.828	CD			2.66	1.28	1.97	2.96	1.58	2.27	2-4	246	S	C1050
S13-1.006	450	S13-16	64.2	60.841	S13-17	62.25	60.825	6.259	CD			2.91	0.97	1.94	3.36	1.43	2.39	2-4	391	S	C1050
S13-1.007	450	S13-17	62.25	60.825	S13-18	62.25	60.675	10.43	CD			0.97	1.13	1.05	1.43	1.58	1.50	0-2	70	S	F1050
S13-1.009	450	S13-19	63	60.625	S13-20	61.6	60.593	13.141	CD			1.93	0.56	1.24	2.38	1.01	1.69	0-2	411	S	C1050
S13-1.011	225	S13-21	61.6	59.993	S13-100	60.5	59.851	15.935	CD			1.38	0.42	0.90	1.61	0.65	1.13	0-2	112	S	C1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 7+300	MLN 7+500	193.073																
SWC	MLN 7+300	MLN 7+410	110.292																
SWC	MLN 7+300	MLN 7+410	99.782																
SWC	MLN 7+400	MLN 7+410	109.665																
SWC	MLN 7+400	MLN 7+410	109.496																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S13-1.007	Petrol Interceptor Class 1 Bypass Separator NSB 025
			Spillage Containment Area 25m3
		S13-1.008	Wetland - Vt 94.8m3
		S13-1.010	Attenuation Pond - Volume of Storage 378m3
		MH S13/21	Orifice - Design discharge 5l/s

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S14A (Doc Ref. GCOB-4.03.03.03.3-016) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S14A-1.000	225	S14A-1	68.312	66.812	S14A-2	67.915	66.415	34.746	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	88	K	F1050
S14A-1.001	225	S14A-2	67.915	66.415	S14A-3	66.547	65.047	90.736	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	66	S	F1050
S14A-1.002	225	S14A-3	66.547	65.047	S14A-4	64.396	62.895	89.264	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	41	S	F1050
S14A-1.003	300	S14A-4	64.396	62.82	S14A-5	61.551	59.976	90	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	32	S	F1050
S14A-1.004	375	S14A-5	61.551	56.801	S14A-6	58.081	56.431	90	CD			4.38	1.28	2.83	4.75	1.65	3.20	2-4	243	S	D1050
S14A-1.005	375	S14A-6	58.081	53.199	S14A-7	54.481	52.831	89.717	CD			4.51	1.28	2.89	4.88	1.65	3.27	2-4	244	S	D1050
S14A-1.006	375	S14A-7	54.481	50.207	S14A-8	51.643	49.992	70.013	CD			3.90	1.28	2.59	4.27	1.65	2.96	2-4	326	S	D1050
S14A-1.007	600	S14A-8	51.643	49.261	S14A-14	51.107	49.232	11.728	CD			1.78	1.28	1.53	2.38	1.88	2.13	2-4	404	S	C1200
S14A-2.000	225	S14A-9	59.474	57.974	S14A-10	58.774	57.274	70.139	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	100	S	F1050
S14A-2.001	300	S14A-10	58.774	57.199	S14A-11	57.54	55.965	90.172	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	73	S	F1050
S14A-2.002	300	S14A-11	57.54	55.965	S14A-12	55.5	53.925	89.947	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	44	S	F1050
S14A-2.003	300	S14A-12	55.5	53.925	S14A-13	57.97	51.073	89.706	CD			1.28	6.60	3.94	1.58	6.90	4.24	4-6	31	S	F1050
S14A-2.004	450	S14A-13	57.97	49.504	S14A-14	51.107	49.382	39.545	CD			8.02	1.28	4.65	8.47	1.73	5.10	4-6	324	S	E1500
S14A-1.008	600	S14A-14	51.107	47.039	S14A-15	48.794	46.919	59.16	CD			3.47	1.28	2.37	4.07	1.88	2.97	2-4	493	S	D1200
S14A-1.009	600	S14A-15	48.794	43.308	S14A-32	44.994	43.118	94.256	CD			4.89	1.28	3.08	5.49	1.88	3.68	2-4	496	S	D1200
S14A-3.000	225	S14A-16	68.319	66.819	S14A-17	67.915	66.415	36.185	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	90	K	F1050
S14A-3.001	225	S14A-17	67.915	66.415	S14A-18	66.415	64.915	90	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	60	S	F1050
S14A-3.002	225	S14A-18	66.415	64.915	S14A-19	64.396	62.896	90	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	45	S	F1050
S14A-3.003	300	S14A-19	64.396	62.821	S14A-20	61.551	59.976	90	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	32	S	F1050
S14A-3.004	375	S14A-20	61.551	56.801	S14A-21	58.081	56.431	90	CD			4.38	1.28	2.83	4.75	1.65	3.20	2-4	243	S	D1050
S14A-3.005	375	S14A-21	58.081	53.111	S14A-22	54.481	52.831	90.278	CD			4.60	1.28	2.94	4.97	1.65	3.31	2-4	322	S	D1050
S14A-3.006	375	S14A-22	54.481	51.248	S14A-23	52.774	51.123	40.83	CD			2.86	1.28	2.07	3.23	1.65	2.44	2-4	327	S	C1050
S14A-3.007	600	S14A-23	52.774	50.384	S14A-29	52.225	50.35	13.721	CD			1.79	1.28	1.53	2.39	1.88	2.13	2-4	404	S	C1200
S14A-4.000	225	S14A-24	60.945	59.445	S14A-25	60.617	59.09	60.451	CD			1.28	1.30	1.29	1.50	1.53	1.51	0-2	170	S	F1050
S14A-4.001	225	S14A-25	60.617	59.09	S14A-26	59.635	58.135	60.186	CD			1.30	1.28	1.29	1.53	1.50	1.51	0-2	63	S	F1050
S14A-4.002	300	S14A-26	59.635	58.06	S14A-27	57.307	55.732	80	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	34	S	F1050
S14A-4.003	375	S14A-27	57.307	52.368	S14A-28	53.743	52.093	90	CD			4.56	1.28	2.92	4.94	1.65	3.29	2-4	327	S	D1050
S14A-4.004	375	S14A-28	53.743	50.69	S14A-29	52.225	50.575	37.386	CD			2.68	1.28	1.98	3.05	1.65	2.35	2-4	325	S	C1050
S14A-3.008	525	S14A-29	52.225	47.142	S14A-30	48.759	46.959	90.356	CD			4.56	1.28	2.92	5.08	1.80	3.44	2-4	494	S	D1200
S14A-3.009	525	S14A-30	48.759	43.376	S14A-31	44.981	43.181	95.825	CD			4.86	1.28	3.07	5.38	1.80	3.59	2-4	491	S	D1200
S14A-3.010	1050	S14A-31	44.981	42.656	S14A-32	44.994	42.591	32.1	CD			1.28	1.35	1.31	2.33	2.40	2.36	2-4	494	S	C1500
S14A-1.010	1050	S14A-32	44.994	42.591	S14A-33	46.648	42.571	9.893	CD			1.35	3.03	2.19	2.40	4.08	3.24	2-4	495	S	C1500
S14A-1.011	1050	S14A-33	46.648	42.571	S14A-34	46	42.321	32.632	CD			3.03	2.63	2.83	4.08	3.68	3.88	2-4	131	S	D1500
S14A-1.014	1300	S14A-36	36.5	30.244	S14A-37	31.75	30.143	32.978	CD			4.96	0.31	2.63	6.26	1.61	3.93	2-4	327	S	D1500
S14A-1.015	600	S14A-37	31.75	29.042	S14A-100	28.67	27.32	22.622	CD			2.11	0.75	1.43	2.71	1.35	2.03	2-4	13	S	C1200

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage

3. Grassed and Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 7+535	MLN 7+570	34.746																
SWC	MLN 7+535	MLN 7+570	36.185																
GSWC	MLN 7+570	MLN 7+660	90.736																
GSWC	MLN 7+570	MLN 7+660	90																
SWC	MLN 7+660	MLN 8+100	428.994																
SWC	MLN 7+660	MLN 8+060	401.108																
SWC	MLN 7+720	MLN 8+250	532.925																
SWC	MLN 7+750	MLN 8+250	514.204																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S14A-1.011	Petrol Interceptor Class 1 Bypass Separator NSB 125
			Spillage Containment Area 25m3
		S14A-1.012	Wetland - Vt 329.85m3
		S14A-1.013	Attenuation Pond - Volume of Storage 1975m3
		MH S14A/36	Hydrobrake - Qbar 20.3l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S14B (Doc Ref. GCOB-4.03.03.03.3-017) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S14B-1.000	225	S14B-1	44.800	43.300	S14B-2	41.137	39.637	89.716	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	24	S	C1050
S14B-1.001	225	S14B-2	41.137	39.637	S14B-3	37.537	36.037	90.000	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	25	S	C1050
S14B-1.002	300	S14B-3	37.537	33.168	S14B-4	34.393	32.818	85.150	CD			4.07	1.28	2.67	4.37	1.58	2.97	2-4	243	S	D1050
S14B-1.003	300	S14B-4	34.393	32.818	S14B-9	33.950	32.375	26.366	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	60	S	C1050
S14B-2.000	225	S14B-5	44.750	43.250	S14B-6	41.137	39.637	90.300	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	25	S	C1050
S14B-2.001	225	S14B-6	41.137	39.637	S14B-7	37.537	36.037	90.000	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	25	S	C1050
S14B-2.002	300	S14B-7	37.537	33.807	S14B-8	35.137	33.562	59.973	CD			3.43	1.28	2.35	3.73	1.58	2.65	2-4	245	S	D1050
S14B-2.003	375	S14B-8	35.137	32.391	S14B-9	33.950	32.300	29.530	CD			2.37	1.28	1.82	2.75	1.65	2.20	2-4	325	S	C1050
S14B-1.004	450	S14B-9	33.950	23.303	S14B-10	25.000	23.280	9.076	CD			10.20	1.27	5.73	10.65	1.72	6.18	6-8	395	S	E1500
S14B-1.005	450	S14B-10	25.000	23.280	S14B-11	25.000	23.179	40.345	CD			1.27	1.37	1.32	1.72	1.82	1.77	0-2	399	S	C1050
S14B-1.006	450	S14B-11	25.000	23.179	S14B-12	24.500	23.108	28.864	CD			1.37	0.94	1.16	1.82	1.39	1.61	0-2	407	S	C1050
S14B-1.007	450	S14B-12	24.500	23.108	S14B-13	25.000	22.958	16.071	CD			0.94	1.59	1.27	1.39	2.04	1.72	0-2	107	S	F1050
S14B-1.010	225	S14B-15	25.000	22.058	S14B-16	26.000	21.905	25.760	CD			2.72	3.87	3.29	2.94	4.10	3.52	2-4	168	S	C1050
S14B-1.011	225	S14B-16	26.000	21.905	S14B-17	25.000	21.630	47.000	CD			3.87	3.15	3.51	4.10	3.37	3.73	2-4	171	S	D1050
S14B-1.012	225	S14B-17	25.000	21.630	S14B-18	23.250	21.429	34.280	CD			3.15	1.60	2.37	3.37	1.82	2.60	2-4	171	S	D1050
S14B-1.013	225	S14B-18	23.250	21.429	S14B-19	24.000	21.238	32.478	CD			1.60	2.54	2.07	1.82	2.76	2.29	2-4	170	S	C1050
S14B-1.014	225	S14B-19	24.000	21.238	S14B-20	25.000	21.124	19.306	CD			2.54	3.65	3.09	2.76	3.88	3.32	2-4	169	S	C1050
S14B-1.015	225	S14B-20	25.000	21.124	S14B-21	26.250	20.907	36.897	CD			3.65	5.12	4.38	3.88	5.34	4.61	4-6	170	S	D1050
S14B-1.016	225	S14B-21	26.250	20.907	S14B-22	25.250	20.791	19.751	CD			5.12	4.23	4.68	5.34	4.46	4.90	4-6	170	S	D1050
S14B-1.017	225	S14B-22	25.250	20.791	S14B-23	24.100	20.650	23.979	CD			4.23	3.23	3.73	4.46	3.45	3.95	2-4	170	S	D1050
S14B-1.018	225	S14B-23	24.100	20.650	S14B-100	21.000	20.101	36.226	CD			3.23	0.67	1.95	3.45	0.90	2.17	2-4	66	S	D1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage

3. Grassed & Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
GSWC	MLN 8+260	MLN 8+350	89.716																
GSWC	MLN 8+260	MLN 8+350	90.3																
SWC	MLN 8+350	MLN 8+525	175.15																
SWC	MLN 8+350	MLN 8+525	179.503																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S14B-1.007	Petrol Interceptor Class 1 Bypass Separator NSB 025 Spillage Containment Area 25m3
		S14B-1.008	Wetland - Vt 97.8m3
		S14B-1.009	Attenuation Pond - Volume of Storage 613m3
		MH S14B/15	Hydrobrake - Design discharge 5l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S15 (Doc Ref. GCOB-4.03.03.03.3-018) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S15-1.000	225	S15-1	68.292	66.792	S15-2	68.24	66.601	32.159	CD			1.28	1.41	1.34	1.50	1.64	1.57	0-2	168	S	F1050
S15-1.001	225	S15-2	68.24	66.601	S15-3	66.38	64.88	87.019	CD			1.41	1.28	1.34	1.64	1.50	1.57	0-2	51	S	C1050
S15-1.002	225	S15-3	66.38	64.88	S15-4	61.841	60.341	90.199	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	20	S	F1050
S15-1.003	300	S15-4	61.841	59.441	S15-5	56.441	54.941	90	CD			2.10	1.20	1.65	2.40	1.50	1.95	0-2	20	S	C1050
S15-1.004	375	S15-5	56.441	53.878	S15-6	51.028	49.378	90	CD			2.19	1.28	1.73	2.56	1.65	2.11	2-4	20	S	C1050
S15-1.005	375	S15-6	51.028	48.501	S15-7	45.651	44.001	90	CD			2.15	1.28	1.71	2.53	1.65	2.09	2-4	20	S	C1050
S15-1.006	450	S15-7	45.651	43.926	S15-8	42.133	40.408	90	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	26	S	F1050
S15-1.007	450	S15-8	42.133	40.408	S15-9	41.428	39.703	42.315	CD			1.28	1.27	1.28	1.73	1.72	1.73	0-2	60	S	F1050
S15-1.008	600	S15-9	41.428	39.553	S15-10	41.2	39.325	13.51	CD			1.28	1.28	1.28	1.88	1.88	1.88	0-2	59	S	C1050
S15-1.009	600	S15-10	41.2	39.325	S15-11	39.875	38	57.362	CD			1.28	1.28	1.28	1.88	1.88	1.88	0-2	43	S	C1050
S15-1.010	600	S15-11	39.875	37.378	S15-12	36.332	34.457	58.428	CD			1.90	1.28	1.59	2.50	1.88	2.19	2-4	20	S	C1050
S15-1.011	600	S15-12	36.332	32.694	S15-13	32.839	30.964	34.587	CD			3.04	1.28	2.16	3.64	1.88	2.76	2-4	20	S	D1050
S15-1.012	600	S15-13	32.839	29.201	S15-14	29.346	27.471	34.587	CD			3.04	1.28	2.16	3.64	1.88	2.76	2-4	20	S	D1050
S15-1.013	600	S15-14	29.346	27.471	S15-15	27.009	25.134	55.012	CD			1.28	1.28	1.28	1.88	1.88	1.88	0-2	24	S	C1050
S15-1.014	600	S15-15	27.009	25.134	S15-16	26.086	24.099	20.691	CD			1.28	1.39	1.33	1.88	1.99	1.93	0-2	20	S	C1050
S15-1.015	600	S15-16	26.086	22.51	S15-17	20.404	18.529	79.618	CD			2.98	1.28	2.13	3.58	1.88	2.73	2-4	20	S	C1050
S15-1.016	600	S15-17	20.404	18.529	S15-18	18.172	16.297	58.672	CD			1.28	1.28	1.28	1.88	1.88	1.88	0-2	26	S	C1050
S15-1.017	600	S15-18	18.172	16.297	S15-19	15.129	13.254	82.431	CD			1.28	1.28	1.28	1.88	1.88	1.88	0-2	27	S	C1050
S15-1.018	600	S15-19	15.129	10.973	S15-20	10.387	8.512	49.217	CD			3.56	1.28	2.42	4.16	1.88	3.02	2-4	20	S	D1050
S15-1.019	600	S15-20	10.387	8.342	S15-21	8.2	7.125	24.345	CD			1.45	0.47	0.96	2.05	1.08	1.56	0-2	20	S	C1050
S15-1.022	225	S15-23	8.5	6.625	S15-40	7.402	6.386	40.812	CD			1.65	0.79	1.22	1.88	1.02	1.45	0-2	171	S	C1050
S15-2.000	300	S15-24	43.5	39.59	S15-26	41.75	39.425	28.315	CD	RC		3.61	2.03	2.82	3.91	2.33	3.12	2-4	172	Z	D1050
S15-3.000	225	S15-25	41.875	40.375	S15-26	41.75	40.25	3.328	CD	RC		1.28	1.28	1.28	1.50	1.50	1.50	0-2	27	Z	F1050
S15-2.001	225	S15-26	41.75	39.425	S15-27	41	39.298	21.663	CD	RC		2.10	1.48	1.79	2.33	1.70	2.01	2-4	171	Z	C1050
S15-2.002	225	S15-27	41	39.298	S15-28	39.875	38.375	48.041	CD			1.48	1.28	1.38	1.70	1.50	1.60	0-2	52	S	C1050
S15-2.003	225	S15-28	39.875	37.981	S15-29	36.671	35.171	56.198	CD			1.67	1.28	1.47	1.89	1.50	1.70	0-2	20	S	C1050
S15-2.004	225	S15-29	36.671	33.354	S15-30	33.094	31.594	35.195	CD			3.09	1.28	2.18	3.32	1.50	2.41	2-4	20	S	D1050
S15-2.005	225	S15-30	33.094	29.727	S15-31	29.467	27.967	35.195	CD			3.14	1.28	2.21	3.37	1.50	2.43	2-4	20	S	D1050
S15-2.006	225	S15-31	29.467	27.967	S15-32	26.934	25.434	59.505	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	23	S	F1050
S15-2.007	225	S15-32	26.934	25.434	S15-33	26.049	24.549	19.925	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	23	S	F1050
S15-2.008	225	S15-33	26.049	22.813	S15-34	20.437	18.937	77.528	CD			3.01	1.28	2.14	3.24	1.50	2.37	2-4	20	S	D1050
S15-2.009	225	S15-34	20.437	18.937	S15-35	18.123	16.623	59.694	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	26	S	F1050
S15-2.010	225	S15-35	18.123	16.623	S15-36	15.437	13.937	76.468	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	28	S	F1050
S15-2.011	225	S15-36	15.437	11.624	S15-37	10.23	8.73	57.873	CD			3.59	1.28	2.43	3.81	1.50	2.66	2-4	20	S	D1050
S15-2.012	225	S15-37	10.23	8.73	S15-38	8.534	7.034	55.769	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	33	S	F1050
S15-2.013	225	S15-38	8.534	7.034	S15-39	8.175	6.557	79.719	CD			1.28	1.39	1.33	1.50	1.62	1.56	0-2	167	S	F1050
S15-2.014	225	S15-39	8.175	6.557	S15-40	7.402	6.386	5.699	CD			1.39	0.79	1.09	1.62	1.02	1.32	0-2	33	S	C1050
S15-1.023	225	S15-40	7.402	6.386	S15-41	6.729	6.104	48.344	CD			0.79	0.40	0.60	1.02	0.63	0.82	0-2	171	S	F1050
S15-1.024	225	S15-41	6.729	6.104	S15-100	6.38	5.945	27.241	CD			0.40	0.21	0.31	0.63	0.44	0.53	0-2	171	S	F1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
S15-1.000	LR	MLN 7+600
S15-1.001	LR	MLN 7+600
S15-1.002	LR	MLN 7+600
S15-1.003	LR	MLN 7+600
S15-1.004	LR	MLN 7+600
S15-1.005	LR	MLN 7+600
S15-1.006	LR	MLN 7+600
S15-1.007	LR	MLN 7+600

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S15-1.018	Petrol Interceptor Class 1 Bypass Separator NSB 030 Spillage Containment Area 25m3
		S15-1.019	Wetland - Vt 109m3
		S15-1.020	Attenuation Pond - Volume of Storage 692m3
		MH S15/22	Orifice - Qbar 6.8l/s

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S16A (Doc Ref. GCOB-4.03.03.03.3-019) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S16A-1.000	225	S16A-1	68.253	66.753	S16A-2	67.12	65.62	71.629	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	63	S	F1050
S16A-1.001	225	S16A-2	67.12	65.62	S16A-3	66.052	64.552	51.964	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	49	S	F1050
S16A-1.002	225	S16A-3	66.052	64.552	S16A-4	64.978	63.478	52.266	CD			1.28	1.27	1.28	1.50	1.50	1.50	0-2	49	S	F1050
S16A-1.003	225	S16A-4	64.978	63.478	S16A-5	64.117	62.617	41.991	CD			1.27	1.28	1.28	1.50	1.50	1.50	0-2	49	S	F1050
S16A-1.004	225	S16A-5	64.117	62.617	S16A-6	63.201	61.701	42.416	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	46	S	F1050
S16A-1.005	225	S16A-6	63.201	61.701	S16A-7	61.971	60.471	54.247	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	44	S	F1050
S16A-1.006	225	S16A-7	61.971	60.471	S16A-13	61.025	59.525	47.878	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	51	S	F1050
S16A-2.000	225	S16A-8	63.975	62.475	S16A-9	62.731	61.231	25.233	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	20	S	F1050
S16A-2.001	225	S16A-9	62.731	61.231	S16A-10	61.818	60.318	31.018	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	34	S	F1050
S16A-2.002	225	S16A-10	61.818	60.318	S16A-13	61.025	59.525	32.573	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	41	S	F1050
S16A-3.000	225	S16A-11	59.555	58.055	S16A-12	60.423	57.565	84	CD			1.28	2.63	1.95	1.50	2.86	2.18	2-4	171	S	F1050
S16A-3.001	225	S16A-12	60.423	57.565	S16A-13	61.025	57.255	52.369	CD			2.63	3.55	3.09	2.86	3.77	3.31	2-4	169	S	C1050
S16A-1.007	525	S16A-13	61.025	56.955	S16A-17	60.786	56.925	14.842	CD			3.55	3.34	3.44	4.07	3.86	3.97	2-4	495	S	D1200
S16A-4.000	225	S16A-14	59.744	58.244	S16A-15	60.578	57.764	81.116	CD			1.28	2.59	1.93	1.50	2.81	2.16	2-4	169	S	F1050
S16A-4.001	225	S16A-15	60.578	57.764	S16A-17	60.786	57.453	52.506	CD			2.59	3.11	2.85	2.81	3.33	3.07	2-4	169	S	C1050
S16A-5.000	225	S16A-16	64.772	63.272	S16A-17	60.786	59.286	98.368	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	25	S	F1050
S16A-1.008	525	S16A-17	60.786	56.925	S16A-18	60.187	56.832	26.977	CD			3.34	2.83	3.08	3.86	3.36	3.61	2-4	290	S	D1200
S16A-1.009	525	S16A-18	60.187	56.832	S16A-23	59.032	56.754	57.553	CD			2.83	1.75	2.29	3.36	2.28	2.82	2-4	738	S	C1200
S16A-6.000	225	S16A-19	62.743	61.243	S16A-20	59.42	57.92	85.583	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	26	S	F1050
S16A-6.001	225	S16A-20	59.42	57.92	S16A-23	59.032	57.532	17.671	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	46	S	F1050
S16A-7.000	225	S16A-21	61.135	59.635	S16A-22	60.324	58.824	86.032	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	106	S	F1050
S16A-7.001	225	S16A-22	60.324	58.824	S16A-23	59.032	57.532	66.122	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	51	S	F1050
S16A-1.010	525	S16A-23	59.032	56.754	S16A-30	58.894	56.722	11.049	CD			1.75	1.65	1.70	2.28	2.17	2.23	2-4	345	S	C1200
S16A-8.000	225	S16A-24	67.549	66.049	S16A-25	65.851	64.351	89.714	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	53	S	F1050
S16A-8.001	150	S16A-25	65.851	64.351	S16A-26	63.642	62.305	57.731	CD			1.35	1.19	1.27	1.50	1.34	1.42	0-2	28	S	F1050
S16A-8.002	150	S16A-26	63.642	62.305	S16A-27	60.051	58.626	75.819	CD			1.19	1.28	1.23	1.34	1.43	1.38	0-2	21	S	F1050
S16A-8.003	225	S16A-27	60.051	58.551	S16A-30	58.894	57.271	51.929	CD			1.28	1.40	1.34	1.50	1.62	1.56	0-2	41	S	F1050
S16A-9.000	225	S16A-28	60.937	59.38	S16A-29	60.218	58.697	80.546	CD			1.33	1.30	1.31	1.56	1.52	1.54	0-2	118	S	F1050
S16A-9.001	225	S16A-29	60.218	58.697	S16A-30	58.894	57.271	70.003	CD			1.30	1.40	1.35	1.52	1.62	1.57	0-2	49	S	F1050
S16A-1.011	600	S16A-30	58.894	54.811	S16A-31	56.491	54.616	100.937	CD			3.48	1.28	2.38	4.08	1.88	2.98	2-4	518	S	D1200
S16A-1.012	600	S16A-31	56.491	52.502	S16A-32	54.287	52.412	44.868	CD			3.39	1.28	2.33	3.99	1.88	2.93	2-4	499	S	D1200
S16A-1.013	600	S16A-32	54.287	50.763	S16A-33	52.567	50.692	34.935	CD			2.92	1.28	2.10	3.52	1.88	2.70	2-4	492	S	C1200
S16A-1.014	600	S16A-33	52.567	48.881	S16A-34	50.677	48.802	39.255	CD			3.09	1.28	2.18	3.69	1.88	2.78	2-4	497	S	D1200
S16A-1.015	600	S16A-34	50.677	46.893	S16A-35	48.681	46.806	42.909	CD			3.18	1.28	2.23	3.78	1.88	2.83	2-4	493	S	D1200
S16A-1.016	600	S16A-35	48.681	45.296	S16A-36	47.053	45.178	58.526	CD			2.79	1.28	2.03	3.39	1.88	2.63	2-4	496	S	C1200
S16A-1.017	600	S16A-36	47.053	44.309	S16A-37	46.037	44.211	50.67	CD			2.14	1.23	1.69	2.74	1.83	2.29	2-4	517	S	C1200
S16A-1.018	900	S16A-37	46.037	43.505	S16A-40	45.62	43.445	27.474	CD			1.63	1.28	1.45	2.53	2.18	2.35	2-4	458	S	C1500
S16A-10.000	225	S16A-38	45.3	43.8	S16A-39	45.633	43.593	35.032	CD			1.28	1.82	1.55	1.50	2.04	1.77	0-2	169	S	F1050
S16A-10.001	225	S16A-39	45.633	43.593	S16A-40	45.62	43.536	13.965	CD			1.82	1.86	1.84	2.04	2.08	2.06	2-4	245	S	C1050
S16A-1.019	900	S16A-40	45.62	42.861	S16A-41	44.713	42.538	48.345	CD			1.86	1.28	1.57	2.76	2.18	2.47	2-4	150	S	C1500
S16A-1.020	900	S16A-41	44.713	39.98	S16A-42	41.863	39.838	70.378	CD			3.83	1.13	2.48	4.73	2.03	3.38	2-4	496	S	D1500
S16A-1.021	900	S16A-42	41.863	39.43	S16A-51	41.863	39.413	8.6	CD			1.53	1.55	1.54	2.43	2.45	2.44	2-4	506	S	C1500

S16A-11.000	225	S16A-43	46.931	45.431	S16A-44	46.835	45.121	52.747	FD			1.28	1.49	1.38	1.50	1.71	1.61	0-2	170	K	F1050
S16A-11.001	225	S16A-44	46.835	45.121	S16A-45	46.15	44.65	40	CD			1.49	1.28	1.38	1.71	1.50	1.61	0-2	85	S	C1050
S16A-11.002	225	S16A-45	46.15	44.65	S16A-48	46.016	44.561	8.246	CD	RC		1.28	1.23	1.25	1.50	1.46	1.48	0-2	93	Z	F1050
S16A-12.000	225	S16A-46	47.03	45.53	S16A-47	46.95	45.275	43.721	FD			1.28	1.45	1.36	1.50	1.68	1.59	0-2	171	K	F1050
S16A-12.001	225	S16A-47	46.95	45.275	S16A-48	46.016	44.516	44.943	CD			1.45	1.28	1.36	1.68	1.50	1.59	0-2	59	S	C1050
S16A-11.003	225	S16A-48	46.016	44.516	S16A-49	45.846	44.346	12.018	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	71	S	F1050
S16A-11.004	225	S16A-49	45.846	44.346	S16A-50	44.713	43.213	59.601	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	53	S	F1050
S16A-11.005	225	S16A-50	44.713	43.213	S16A-51	41.863	40.088	69.729	CD			1.28	1.55	1.41	1.50	1.78	1.64	0-2	22	S	F1050
S16A-1.022	900	S16A-51	41.863	37.475	S16A-52	38.5	37.425	18.055	CD			3.49	0.18	1.83	4.39	1.08	2.73	2-4	361	S	D1500
S16A-1.023	900	S16A-52	38.5	37.425	S16A-53	38.5	37.39	15.921	CD			0.18	0.21	0.19	1.08	1.11	1.09	0-2	455	S	B
S16A-1.026	225	S16A-55	38.5	36.59	S16A-56	37.6	36.521	11.551	CD			1.69	0.85	1.27	1.91	1.08	1.49	0-2	167	S	C1050
S16A-1.027	225	S16A-56	37.6	36.521	S16A-100	37.6	36.486	5.919	CD			0.85	0.89	0.87	1.08	1.11	1.10	0-2	169	S	F1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
S16A-1.000	LR	MLN 7+575
S16A-1.001	LR	MLN 7+575
S16A-1.002	LR	MLN 7+575
S16A-1.003	LR	MLN 7+575
S16A-1.004	LR	MLN 7+575
S16A-1.005	LR	MLN 7+575
S16A-1.006	LR	MLN 7+575
S16A-2.001	LR	MLN 7+550
S16A-2.002	LR	MLN 7+550
S16A-3.001	LR	MLN 7+600
S16A-1.007	LR	MLN 7+575
S16A-4.001	LR	MLN 7+600
S16A-5.000	LR	MLN 7+550
S16A-1.008	LR	MLN 7+575
S16A-1.009	LR	MLN 7+575
S16A-6.000	LR	MLN 7+550
S16A-7.001	LR	MLN 7+600
S16A-8.003	LR	MLN 7+550
S16A-9.001	LR	MLN 7+600
S16A-1.011	LR	MLN 7+575
S16A-1.012	LR	MLN 7+575
S16A-1.013	LR	MLN 7+575
S16A-1.014	LR	MLN 7+575
S16A-1.015	LR	MLN 7+575
S16A-1.016	LR	MLN 7+575
S16A-1.017	LR	MLN 7+575
S16A-10.000	LR	MLN 7+575
S16A-10.001	LR	MLN 7+575
S16A-1.019	LR	MLN 7+575
S16A-1.020	LR	MLN 7+575
S16A-11.001	LR	MLN 7+575
S16A-12.001	LR	MLN 7+575
S16A-11.003	LR	MLN 7+575
S16A-11.004	LR	MLN 7+575
S16A-11.005	LR	MLN 7+575

3. Grassed and Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 7+625	MLN 7+700	84																
SWC	MLN 7+625	MLN 7+700	81.116																
GSWC	MLN 7+450	MLN 7+500	75.819																
SWC	MLN 7+650	MLN 7+740	86.032																
SWC	MLN 7+650	MLN 7+740	80.546																
SWC	MLN 7+300	MLN 7+450	147.445																

3. Grassed and Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L[24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W[23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 7+475	MLN 7+525	25.233																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S16A-1.023	Petrol Interceptor Class 1 Bypass Separator NSB 075 Spillage Containment Area 25m3
		S16A-1.024	Wetland - Vt 322.35m3
		S16A-1.025	Attenuation Pond - Volume of Storage 1620m3
		MH S16A/55	Hydrobrake - Qbar 14.9l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S16B (Doc Ref. GCOB-4.03.03.03.3-020) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S16B-1.000	450	S16B-1	45.089	40.346	S16B-2	41.886	40.161	74.83	FD			4.29	1.28	2.78	4.74	1.73	3.23	2-4	404	K	D1050
S16B-1.001	450	S16B-2	41.886	40.161	S16B-3	41.3	39.875	35.449	FD			1.28	0.97	1.13	1.73	1.43	1.58	0-2	124	K	F1050
S16B-1.002	450	S16B-3	41.3	39.875	S16B-6	41.293	39.868	2.3	CD	RC		0.97	0.97	0.97	1.43	1.43	1.43	0-2	329	Z	F1050
S16B-2.000	225	S16B-4	45.074	43.574	S16B-5	41.885	40.385	74.623	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	23	S	F1050
S16B-2.001	225	S16B-5	41.885	40.385	S16B-6	41.293	40.093	35.243	FD			1.28	0.97	1.13	1.50	1.20	1.35	0-2	121	K	F1050
S16B-1.003	450	S16B-6	41.293	39.868	S16B-7	41	39.784	22.415	CD			0.97	0.77	0.87	1.43	1.22	1.32	0-2	267	S	F1050
S16B-1.004	225	S16B-7	41	39.784	S16B-100	40.99	39.758	4.297	CD			0.99	1.01	1.00	1.22	1.23	1.22	0-2	165	S	F1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	LK 1+475	LK 1+475	74.623																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		MH S16B/7	Hydrobrake - Design Discharge 5l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S17A (Doc Ref. GCOB-4.03.03.03.3-021) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S17A-1.000	225	S17A-1	41.868	40.368	S17A-2	37.37	35.87	87.548	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	19	S	F1050
S17A-1.001	225	S17A-2	37.37	35.87	S17A-3	35.518	34.018	90	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	49	S	F1050
S17A-1.002	225	S17A-3	35.518	34.018	S17A-4	34.759	33.259	72.149	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	95	S	F1050
S17A-1.003	225	S17A-4	34.759	33.259	S17A-5	34.447	32.947	27.226	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	87	S	F1050
S17A-1.004	225	S17A-5	34.447	32.947	S17A-7	34.283	32.783	19.747	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	120	S	F1050
S17A-2.000	225	S17A-6	34.592	33.092	S17A-7	34.283	32.783	9.082	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	29	S	F1050
S17A-1.005	225	S17A-7	34.283	32.783	S17A-8	33.884	32.384	39.475	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	99	S	F1050
S17A-1.006	225	S17A-8	33.884	32.384	S17A-9	33.118	31.618	79.748	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	104	S	F1050
S17A-1.007	300	S17A-9	33.118	31.543	S17A-16	32.501	30.926	61.703	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	100	S	F1050
S17A-3.000	225	S17A-10	34.365	32.865	S17A-11	34.042	32.542	8.714	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	27	S	F1050
S17A-3.001	225	S17A-11	34.042	32.542	S17A-12	33.485	31.985	28.61	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	51	S	F1050
S17A-3.002	225	S17A-12	33.485	31.985	S17A-13	33.271	31.771	24.423	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	114	S	F1050
S17A-3.003	225	S17A-13	33.271	31.771	S17A-14	33.095	31.595	9.999	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	57	S	F1050
S17A-3.004	225	S17A-14	33.095	31.595	S17A-15	32.6	31.1	20.317	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	41	S	F1050
S17A-3.005	225	S17A-15	32.6	31.1	S17A-16	32.501	31.001	16.762	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	169	S	F1050
S17A-1.008	450	S17A-16	32.501	30.776	S17A-29	32.8	30.754	9.01	CD			1.28	1.60	1.44	1.73	2.05	1.89	0-2	410	S	F1050
S17A-4.000	225	S17A-17	41.868	40.368	S17A-18	37.37	35.87	87.909	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	20	S	F1050
S17A-4.001	225	S17A-18	37.37	35.87	S17A-19	35.518	34.018	90	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	49	S	F1050
S17A-4.002	225	S17A-19	35.518	34.018	S17A-20	35.116	33.616	50.059	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	125	S	F1050
S17A-4.003	225	S17A-20	35.116	33.616	S17A-21	34.827	33.327	40.408	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	140	S	F1050
S17A-6.000	225	S17A-23	37.295	33.777	S17A-24	35.067	33.567	35.472	CD			3.29	1.28	2.28	3.52	1.50	2.51	2-4	169	S	D1050
S17A-6.001	225	S17A-24	35.067	33.567	S17A-25	34.873	33.511	9.513	CD			1.28	1.14	1.21	1.50	1.36	1.43	0-2	170	S	F1050
S17A-4.004	225	S17A-21	34.827	33.327	S17A-26	34.568	33.068	25.306	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	98	S	F1050
S17A-5.000	225	S17A-22	37.274	33.603	S17A-25	34.873	33.373	39.136	CD			3.45	1.28	2.36	3.67	1.50	2.59	2-4	170	S	D1050
S17A-5.001	225	S17A-25	34.873	33.373	S17A-26	34.568	33.068	10.123	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	33	S	F1050
S17A-4.005	225	S17A-26	34.568	33.068	S17A-27	34.122	32.622	45.536	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	102	S	F1050
S17A-4.006	225	S17A-27	34.122	32.622	S17A-28	33.118	31.618	80.234	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	80	S	F1050
S17A-4.007	225	S17A-28	33.118	31.618	S17A-29	32.8	31.258	61.289	CD			1.28	1.32	1.30	1.50	1.54	1.52	0-2	170	S	F1050
S17A-1.009	450	S17A-29	32.8	30.754	S17A-30	32.5	30.694	23.633	CD			1.60	1.36	1.48	2.05	1.81	1.93	0-2	394	S	C1050
S17A-1.012	225	S17A-32	33.75	30.044	S17A-33	33.86	29.764	47.241	CD			3.48	3.87	3.68	3.71	4.10	3.90	2-4	169	S	D1050
S17A-1.013	225	S17A-33	33.86	29.764	S17A-100	33.88	29.755	1.5	CD			3.87	3.90	3.89	4.10	4.13	4.11	4-6	167	S	D1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
S17A-1.000	LR	MLN 7+400
S17A-1.001	LR	MLN 7+400
S17A-1.002	LR	MLN 7+400
S17A-1.003	LR	MLN 7+400
S17A-1.004	LR	MLN 7+400
S17A-2.000	LR	MLN 7+400
S17A-1.005	LR	MLN 7+400
S17A-1.006	LR	MLN 7+400
S17A-1.007	LR	MLN 7+400
S17A-3.000	LR	MLN 7+400
S17A-3.001	LR	MLN 7+400
S17A-3.002	LR	MLN 7+400
S17A-3.004	LR	MLN 7+400
S17A-3.005	LR	MLN 7+400
S17A-4.000	LR	MLN 7+400
S17A-4.001	LR	MLN 7+400
S17A-4.002	LR	MLN 7+400
S17A-4.003	LR	MLN 7+400
S17A-5.000	LR	MLN 7+400
S17A-6.000	LR	MLN 7+400
S17A-6.001	LR	MLN 7+400
S17A-5.001	LR	MLN 7+400
S17A-4.005	LR	MLN 7+400
S17A-4.006	LR	MLN 7+400
S17A-4.007	LR	MLN 7+400

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L[24] (m)	u/s IL[1] (mOD)	d/s IL[1] (mOD)	Channel Depth (m)	X[23] (m)	V[23]	W[23]	Y[23] (m)	Outlet Ref. No.	No. of gratings	G[23] (m)	H[23] (m)	Z[23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S17A-1.009	Petrol Interceptor Class 1 Bypass Separator NSB 020 Spillage Containment Area 25m3
		S17A-1.010	Wetland - Vt 147.3m3
		S17A-1.011	Attenuation Pond - Volume of Storage 522m3
		MH S17A/32	Hydrobrake - Design Discharge 5l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S17B (Doc Ref. GCOB-4.03.03.03.3-022) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S17B-1.000	225	S17B-1	34.678	33.178	S17B-2	33.664	32.164	69.004	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	68	S	F1050
S17B-1.001	225	S17B-2	33.664	32.164	S17B-3	33.4	31.9	25.007	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	95	S	F1050
S17B-1.002	225	S17B-3	33.4	31.9	S17B-4	33.034	31.534	34.951	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	95	S	F1050
S17B-1.003	225	S17B-4	33.034	31.534	S17B-5	32.8	31.3	22.381	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	96	S	F1050
S17B-1.004	225	S17B-5	32.8	31.3	S17B-8	32.641	31	12.334	CD			1.28	1.42	1.35	1.50	1.64	1.57	0-2	41	S	F1050
S17B-2.000	750	S17B-6	31.57	30.2	S17B-7	32.093	30.1	49.969	CD			0.62	1.24	0.93	1.37	1.99	1.68	0-2	500	S	B
S17B-2.001	900	S17B-7	32.093	30.1	S17B-8	32.641	30.022	55.083	CD			1.09	1.72	1.41	1.99	2.62	2.31	2-4	706	S	C1500
S17B-1.005	225	S17B-8	32.641	30.022	S17B-100	32	29.896	14.487	CD			2.39	1.88	2.14	2.62	2.10	2.36	2-4	115	S	C1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage
S17B-1.000	LR	MLN 6+900
S17B-1.001	LR	MLN 6+900
S17B-1.002	LR	MLN 6+900
S17B-1.003	LR	MLN 6+900
S17B-1.004	LR	MLN 6+900
S17B-2.000	LR	MLN 6+900
S17B-2.001	LR	MLN 6+900

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		MH S17B/8	Hydrobrake - Design Discharge 5l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S18A (Doc Ref. GCOB-4.03.03.03.3-023) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S18A-1.000	150	S18A-1	32.689	31.264	S18A-2	31.441	30.016	31.384	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	25	S	F1050
S18A-1.001	150	S18A-2	31.441	30.016	S18A-3	29.704	28.279	51.693	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	30	S	F1050
S18A-1.002	300	S18A-3	29.704	28.129	S18A-6	30.057	28.075	13.104	CD			1.28	1.68	1.48	1.58	1.98	1.78	0-2	243	S	F1050
S18A-2.000	150	S18A-4	33.32	32.495	S18A-5	31.897	31.072	36.187	SD			0.68	0.67	0.68	0.83	0.82	0.83	0-2	25	N/A	F1050
S18A-2.001	150	S18A-5	31.897	31.072	S18A-6	30.057	29.232	54.704	SD			0.67	0.67	0.67	0.82	0.82	0.82	0-2	30	N/A	F1050
S18A-1.003	375	S18A-6	30.057	28	S18A-7	30.251	27.96	13.054	CD			1.68	1.92	1.80	2.06	2.29	2.17	2-4	326	S	C1050
S18A-1.004	375	S18A-7	30.251	27.96	S18A-10	28.528	26.878	70.464	CD			1.92	1.28	1.60	2.29	1.65	1.97	0-2	65	S	C1050
S18A-3.000	150	S18A-8	29.814	28.989	S18A-9	28.439	27.614	57.424	SD			0.67	0.67	0.67	0.82	0.82	0.82	0-2	42	N/A	F1050
S18A-3.001	300	S18A-9	28.439	27.011	S18A-10	28.528	26.953	14.32	CD	RC		1.13	1.28	1.20	1.43	1.58	1.50	0-2	247	Z	F1050
S18A-1.005	375	S18A-10	28.528	26.878	S18A-13	27.338	25.688	91.129	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	77	S	F1050
S18A-4.000	150	S18A-11	28.24	27.415	S18A-12	27.196	26.371	80.371	SD			0.67	0.68	0.68	0.82	0.83	0.83	0-2	77	N/A	F1050
S18A-4.001	300	S18A-12	27.196	25.812	S18A-13	27.338	25.763	11.906	CD	RC		1.08	1.28	1.18	1.38	1.58	1.48	0-2	243	Z	F1050
S18A-1.006	375	S18A-13	27.338	25.688	S18A-16	26.403	24.753	94.116	SD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	101	N/A	F1050
S18A-5.000	150	S18A-14	27.132	26.307	S18A-15	26.296	25.471	83.857	SD			0.68	0.67	0.68	0.83	0.82	0.83	0-2	100	N/A	F1050
S18A-5.001	300	S18A-15	26.296	24.878	S18A-16	26.403	24.828	12.14	CD	RC		1.12	1.28	1.20	1.42	1.58	1.50	0-2	243	Z	F1050
S18A-1.007	375	S18A-16	26.403	24.753	S18A-19	25.315	23.666	98	SD			1.28	1.27	1.27	1.65	1.65	1.65	0-2	90	N/A	F1050
S18A-6.000	225	S18A-17	26.207	25.307	S18A-18	25.257	24.357	93.358	SD			0.68	0.68	0.68	0.90	0.90	0.90	0-2	98	N/A	F1050
S18A-6.001	300	S18A-18	25.257	23.786	S18A-19	25.315	23.74	9.136	CD	RC		1.17	1.28	1.22	1.47	1.58	1.52	0-2	199	Z	F1050
S18A-1.008	375	S18A-19	25.315	23.665	S18A-20	24.103	22.453	90.79	SD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	75	N/A	F1050
S18A-1.009	375	S18A-20	24.103	22.453	S18A-28	23.283	21.633	79.033	SD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	96	N/A	F1050
S18A-7.000	150	S18A-21	29.448	28.023	S18A-22	27.861	26.436	68.343	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	43	S	F1050
S18A-7.001	225	S18A-22	27.861	26.361	S18A-23	26.739	25.239	90	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	80	S	F1050
S18A-7.002	375	S18A-23	26.739	25.089	S18A-24	25.855	24.205	94.207	SD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	107	N/A	F1050
S18A-7.003	375	S18A-24	25.855	24.205	S18A-25	25.006	23.356	89.922	SD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	106	N/A	F1050
S18A-7.004	375	S18A-25	25.006	23.356	S18A-26	24.156	22.506	84.431	SD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	99	N/A	F1050
S18A-7.005	375	S18A-26	24.156	22.506	S18A-27	23.407	21.758	75.492	SD			1.28	1.27	1.27	1.65	1.65	1.65	0-2	101	N/A	F1050
S18A-7.006	450	S18A-27	23.407	21.683	S18A-28	23.283	21.558	18.703	CD			1.27	1.28	1.27	1.72	1.73	1.72	0-2	150	S	F1050
S18A-1.010	525	S18A-28	23.283	9	S18A-29	10.8	8.85	13.788	CD			13.76	1.43	7.59	14.28	1.95	8.12	8-10	92	S	C1200
S18A-8.000	150	S18A-30	23.332	22.507	S18A-31	22.446	21.621	89.772	SD			0.67	0.68	0.68	0.82	0.83	0.83	0-2	101	N/A	F1050
S18A-8.001	300	S18A-31	22.446	20.871	S18A-33	22.4	20.774	16.494	CD			1.28	1.33	1.30	1.58	1.63	1.60	0-2	170	S	F1050
S18A-9.000	150	S18A-32	23.238	22.413	S18A-33	22.4	21.575	79.116	CD			0.67	0.67	0.67	0.82	0.82	0.82	0-2	94	S	F1050
S18A-8.002	300	S18A-33	22.4	8.85	S18A-34	9.75	8.755	4.647	CD			13.25	0.69	6.97	13.55	0.99	7.27	6-8	49	S	#N/A
S18A-8.003	300	S18A-34	9.75	8.755	S18A-35	9.5	8.525	15.087	CD			0.69	0.68	0.68	0.99	0.98	0.98	0-2	66	S	F1050
S18A-1.013	525	S18A-37	9.75	8.432	S18A-38	10.2	8.375	28.201	CD			0.79	1.30	1.05	1.32	1.83	1.57	0-2	495	S	B
S18A-1.014	525	S18A-38	10.2	5.811	S18A-100	6.6	5.775	17.852	CD			3.86	0.30	2.08	4.39	0.82	2.61	2-4	496	S	D1200

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																				

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment			
SWC	8+550	8+650	83.077																			
SWC	8+650	8+800	161.593																			
SWC	8+650	8+800	158.343																			

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																				
		S18A-1.010	Petrol Interceptor Class 1 Bypass Separator NSB E040																			
		S18A-8.003	Petrol Interceptor Class 1 Bypass Separator NSB P006																			
			2 x Spillage Containment Area 25m3																			
		S18A-1.012	Wetland - Vt 237m3																			

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S18B (Doc Ref. GCOB-4.03.03.03.3-024) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S18b-1.000	150	S18b-1	28.94	27.515	S18b-2	28.824	27.043	48.038	SD			1.28	1.63	1.45	1.43	1.78	1.60	0-2	102	N/A	F1050
S18b-1.001	225	S18b-2	28.824	26.968	S18b-3	28.4	26.649	54.72	SD			1.63	1.53	1.58	1.86	1.75	1.80	0-2	172	N/A	C1050
S18b-1.002	225	S18b-3	28.4	26.649	S18b-4	27.58	26.08	60.385	SD			1.53	1.28	1.40	1.75	1.50	1.63	0-2	106	N/A	C1050
S18b-1.003	225	S18b-4	27.58	26.08	S18b-5	26.371	24.871	59.994	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	50	N/A	F1050
S18b-1.004	375	S18b-5	26.371	24.126	S18b-9	25.725	24.075	16.627	CD			1.87	1.28	1.57	2.25	1.65	1.95	0-2	326	S	C1050
S18b-2.000	225	S18b-6	28.567	27.067	S18b-7	27.999	26.499	91.27	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	161	S	F1050
S18b-2.001	225	S18b-7	27.999	26.499	S18b-8	27.124	25.624	64.211	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	73	S	F1050
S18b-2.002	225	S18b-8	27.124	25.624	S18b-9	25.725	24.225	72.254	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	52	S	F1050
S18b-1.005	375	S18b-9	25.725	24.075	S18b-10	24.288	22.638	56.965	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	40	S	F1050
S18b-1.006	375	S18b-10	24.288	22.638	S18b-11	22.8	21.15	62.227	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	42	S	F1050
S18b-1.007	375	S18b-11	22.8	21.15	S18b-12	21.278	19.628	85.578	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	56	S	F1050
S18b-1.008	375	S18b-12	21.278	19.628	S18b-13	20.387	18.738	80.232	CD			1.28	1.27	1.27	1.65	1.65	1.65	0-2	90	S	F1050
S18b-1.009	375	S18b-13	20.387	18.738	S18b-28	20.133	18.483	63.946	CD			1.27	1.28	1.27	1.65	1.65	1.65	0-2	251	S	F1050
S18b-3.000	150	S18b-14	22.383	20.958	S18b-15	21.637	20.212	74.67	SD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	100	N/A	F1050
S18b-3.001	225	S18b-15	21.637	20.137	S18b-16	20.862	19.362	77.543	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	100	N/A	F1050
S18b-3.002	225	S18b-16	20.862	19.362	S18b-17	20.341	18.841	69.585	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	134	N/A	F1050
S18b-3.003	225	S18b-17	20.341	18.841	S18b-28	20.133	18.353	83.751	SD			1.28	1.56	1.42	1.50	1.78	1.64	0-2	172	N/A	F1050
S18b-4.000	150	S18b-18	27.563	26.138	S18b-19	25.755	24.33	63.947	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	35	S	F1050
S18b-4.001	150	S18b-19	25.755	24.33	S18b-20	23.6	22.175	70.059	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	33	S	F1050
S18b-4.002	225	S18b-20	23.6	22.1	S18b-21	21.739	20.239	91.514	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	49	S	F1050
S18b-4.003	300	S18b-21	21.739	20.164	S18b-22	20.575	19	88.32	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	76	S	F1050
S18b-4.004	300	S18b-22	20.575	19	S18b-27	20.143	18.568	84.005	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	194	S	F1050
S18b-5.000	150	S18b-23	22.399	20.974	S18b-24	21.624	20.199	76.481	SD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	99	N/A	F1050
S18b-5.001	225	S18b-24	21.624	20.124	S18b-25	20.839	19.339	79.786	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	102	N/A	F1050
S18b-5.002	225	S18b-25	20.839	19.339	S18b-26	20.281	18.781	81.017	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	145	N/A	F1050
S18b-5.003	225	S18b-26	20.281	18.781	S18b-27	20.143	18.389	67.132	CD			1.28	1.53	1.40	1.50	1.75	1.63	0-2	171	S	F1050
S18b-4.005	525	S18b-27	20.143	18.089	S18b-28	20.133	18.041	23.623	CD			1.53	1.57	1.55	2.05	2.09	2.07	2-4	492	S	C1200
S18b-1.010	600	S18b-28	20.133	11.255	S18b-29	13.1	11.225	15.085	CD			8.28	1.28	4.78	8.88	1.88	5.38	4-6	503	S	C1200
S18b-1.011	600	S18b-29	13.1	10.297	S18b-30	12	10.241	32.515	CD			2.20	1.16	1.68	2.80	1.76	2.28	2-4	581	S	C1200
S18b-1.014	825	S18b-32	12.75	7.027	S18b-33	8.1	6.967	29.881	CD			4.90	0.31	2.60	5.72	1.13	3.43	2-4	498	S	D1500
S18b-1.015	825	S18b-33	8.1	6.967	S18b-100	7.85	6.81	78.525	CD			0.31	0.22	0.26	1.13	1.04	1.09	0-2	500	S	B

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	9+500	9+960	464.977																
SWC	9+560	10+150	576.683																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																
		S18b-1.012	Petrol Interceptor Class 1 Bypass Separator NSB 050															
		S18b-1.013	Spillage Containment Area - 25m3 Wetland - Volume of treatment 293.1m3															

N6 GCTP Drainage Schedules

N6 Galway City Transport Project

Drainage: Schedule S19A (Doc Ref. GCOB-4.03.03.03.3-025) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S19A-1.000	225	S19A-1	28.526	27.326	S19A-2	28.303	26.803	65	SD			0.97	1.28	1.13	1.20	1.50	1.35	0-2	124	N/A	F1050
S19A-1.001	225	S19A-2	28.303	26.803	S19A-3	27.566	26.066	70	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	95	N/A	F1050
S19A-1.002	225	S19A-3	27.566	26.066	S19A-4	26.438	24.938	70	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	62	N/A	F1050
S19A-1.003	225	S19A-4	26.438	24.938	S19A-5	24.399	22.899	80.895	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	40	N/A	F1050
S19A-1.004	225	S19A-5	24.399	22.899	S19A-6	20.938	19.438	97.933	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	28	S	F1050
S19A-1.005	300	S19A-6	20.938	17.025	S19A-7	17.1	15.525	95.472	CD			3.61	1.28	2.44	3.91	1.58	2.74	2-4	64	S	D1050
S19A-1.006	300	S19A-7	17.1	15.525	S19A-8	13.821	12.246	95.728	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	29	S	F1050
S19A-1.007	900	S19A-8	13.821	11.646	S19A-16	14.224	11.62	13.224	CD			1.28	1.70	1.49	2.18	2.60	2.39	2-4	509	S	C1500
S19A-2.000	225	S19A-9	28.947	27.447	S19A-10	28.732	27.094	60	SD			1.28	1.41	1.34	1.50	1.64	1.57	0-2	170	N/A	F1050
S19A-2.001	225	S19A-10	28.732	27.094	S19A-11	28.169	26.669	59.966	SD			1.41	1.28	1.34	1.64	1.50	1.57	0-2	141	N/A	C1050
S19A-2.002	225	S19A-11	28.169	26.669	S19A-12	26.932	25.432	75.656	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	61	N/A	F1050
S19A-2.003	225	S19A-12	26.932	25.432	S19A-13	24.6	23.1	94.033	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	40	N/A	F1050
S19A-2.004	225	S19A-13	24.6	23.1	S19A-14	21.306	19.806	96.413	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	29	N/A	F1050
S19A-2.005	225	S19A-14	21.306	19.806	S19A-15	17.549	16.049	93.924	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	25	N/A	F1050
S19A-2.006	300	S19A-15	17.549	15.974	S19A-16	14.224	12.649	97.109	SD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	29	N/A	F1050
S19A-1.008	900	S19A-16	14.224	11.62	S19A-17	14.458	11.595	12.651	CD			1.70	1.96	1.83	2.60	2.86	2.73	2-4	506	S	C1500
S19A-1.009	900	S19A-17	14.458	11.595	S19A-21	13.7	11.568	13.616	CD			1.96	1.23	1.60	2.86	2.13	2.50	2-4	504	S	C1500
S19A-3.000	225	S19A-18	19.435	17.935	S19A-19	17.59	16.09	40.094	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	22	S	F1050
S19A-3.001	225	S19A-19	17.59	16.09	S19A-20	16.23	14.73	29.034	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	21	S	F1050
S19A-3.002	225	S19A-20	16.23	14.73	S19A-21	13.7	12.5	50.726	CD			1.28	0.97	1.13	1.50	1.20	1.35	0-2	23	S	F1050
S19A-1.010	900	S19A-21	13.7	11.568	S19A-31	13.974	11.545	11.612	CD			1.23	1.53	1.38	2.13	2.43	2.28	2-4	505	S	C1500
S19A-4.000	225	S19A-22	17.275	15.775	S19A-23	16.587	15.087	44.874	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	65	S	F1050
S19A-4.001	225	S19A-23	16.587	15.087	S19A-24	17.665	14.802	48.448	CD			1.28	2.64	1.96	1.50	2.86	2.18	2-4	170	S	F1050
S19A-4.002	225	S19A-24	17.665	14.802	S19A-27	17.28	14.522	47.677	CD			2.64	2.53	2.59	2.86	2.76	2.81	2-4	170	S	C1050
S19A-5.000	225	S19A-25	19.663	18.163	S19A-26	19.582	17.773	66.27	CD			1.28	1.58	1.43	1.50	1.81	1.65	0-2	170	S	F1050
S19A-5.001	225	S19A-26	19.582	17.773	S19A-27	17.28	15.78	84.206	CD			1.58	1.28	1.43	1.81	1.50	1.65	0-2	42	S	C1050
S19A-4.003	225	S19A-27	17.28	14.522	S19A-30	14.788	13.588	63.886	CD			2.53	0.98	1.75	2.76	1.20	1.98	0-2	68	S	C1050
S19A-6.000	225	S19A-28	16.413	14.043	S19A-29	15.117	13.917	21.532	CD			2.15	0.98	1.56	2.37	1.20	1.79	0-2	171	S	C1050
S19A-6.001	225	S19A-29	15.117	13.619	S19A-30	14.788	13.588	5.192	CD	RC		1.27	0.98	1.12	1.50	1.20	1.35	0-2	167	Z	F1050
S19A-4.004	225	S19A-30	14.788	13.588	S19A-31	13.974	12.774	21.671	CD			0.98	0.98	0.98	1.20	1.20	1.20	0-2	27	S	F1050
S19A-1.011	900	S19A-31	13.974	11.545	S19A-32	13.625	11.502	5.743	CD			1.53	1.22	1.38	2.43	2.12	2.28	2-4	134	S	C1500
S19A-1.012	900	S19A-32	13.625	11.502	S19A-33	14	11.302	16.71	CD			1.22	1.80	1.51	2.12	2.70	2.41	2-4	84	S	C1500

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																				

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	10+450	10+750	289.133																
SWC	10+500	10+700	238.168																
SWC	10+625	10+675	150.476																
SWC	10+650	10+675	26.724																
SWC	10+700	10+725	119.854																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																			
		S19A-1.012	Petrol Interceptor Class 1 Bypass Separator NSB 050																		
			Spillage Containment Area -25m3																		
		S19A-1.013	Wetland - Volume of treatment 249m3																		
		S19A-1.014	Infiltration Basin - 1226m3																		

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S19B (Doc Ref. GCOB-4.03.03.03.3-026) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S19B-1.000	375	S19A-1	14.411	12.761	S19A-2	13.9	12.25	59.148	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	116	S	F1050
S19B-1.001	375	S19A-2	13.9	12.25	S19A-3	13.2	11.55	90.625	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	129	S	F1050
S19B-1.002	375	S19A-3	13.2	11.55	S19A-4	12.5	11.15	89.214	CD			1.28	0.98	1.13	1.65	1.35	1.50	0-2	223	S	F1050
S19B-1.003	450	S19A-4	12.5	11.075	S19A-6	12.5	10.775	71.414	CD			0.98	1.28	1.13	1.43	1.73	1.58	0-2	238	S	F1050
S19B-2.000	225	S19A-5	13.6	12.1	S19A-6	12.5	11	86.756	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	79	S	F1050
S19B-1.004	450	S19A-6	12.5	10.775	S19A-8	12.7	10.74	13.894	CD			1.28	1.51	1.39	1.73	1.96	1.84	0-2	397	S	F1050
S19B-3.000	225	S19A-7	14.017	12.5	S19A-8	12.7	11.2	90.628	SD			1.29	1.28	1.28	1.52	1.50	1.51	0-2	70	N/A	F1050
S19B-1.005	450	S19A-8	12.7	10.74	S19A-14	12.8	10.71	12	CD			1.51	1.64	1.58	1.96	2.09	2.03	2-4	400	S	C1050
S19B-4.000	225	S19A-9	14.3	12.8	S19A-14	12.8	11.3	94.31	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	63	S	F1050
S19B-5.000	300	S19A-10	14.4	12.825	S19A-11	14	12.425	55.656	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	139	S	F1050
S19B-5.001	300	S19A-11	14	12.425	S19A-12	13.2	11.625	92.256	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	115	S	F1050
S19B-5.002	375	S19A-12	13.2	11.55	S19A-13	12.9	11.15	89.239	CD			1.28	1.38	1.33	1.65	1.75	1.70	0-2	223	S	F1050
S19B-5.003	450	S19A-13	12.9	11.075	S19A-14	12.8	10.905	69.326	CD			1.38	1.45	1.41	1.83	1.90	1.86	0-2	408	S	C1050
S19B-1.006	600	S19A-14	12.8	10.56	S19A-20	18.29	10.528	15.402	CD			1.64	7.16	4.40	2.24	7.76	5.00	4-6	481	S	C1200
S19B-6.000	225	S19A-15	13.573	12.373	S19A-16	14.038	12.113	44.033	CD			0.98	1.70	1.34	1.20	1.93	1.56	0-2	169	S	F1050
S19B-6.001	225	S19A-16	14.038	12.113	S19A-20	18.29	11.828	48.666	CD			1.70	6.24	3.97	1.93	6.46	4.19	4-6	171	S	C1050
S19B-7.000	225	S19A-17	19.86	18.36	S19A-19	19.175	17.975	18.551	CD			1.28	0.97	1.13	1.50	1.20	1.35	0-2	48	S	F1050
S19B-8.000	225	S19A-18	21.627	20.127	S19A-19	19.175	17.975	54.964	CD			1.28	0.97	1.13	1.50	1.20	1.35	0-2	26	S	F1050
S19B-7.001	225	S19A-19	19.175	17.151	S19A-20	18.29	17.09	10.364	CD			1.80	0.97	1.39	2.02	1.20	1.61	0-2	170	S	C1050
S19B-1.007	600	S19A-20	18.29	10.528	S19A-21	17.75	10.511	7.629	CD			7.16	6.64	6.90	7.76	7.24	7.50	6-8	449	S	E1500
S19B-1.008	600	S19A-21	17.75	10.511	S19A-22	18	10.311	26.716	CD			6.64	7.09	6.86	7.24	7.69	7.46	6-8	134	S	E1500

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																			

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L(24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W(23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment		
SWC	10+725	10+900	176.578																		
SWC	10+725	11+150	400.787																		
SWC	10+725	11+150	397.157																		

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																			
		S19B-1.008	Petrol Interceptor Class 1 Bypass Separator NSB 050																		
			Spillage Containment Area - 25m3																		
		S19B-1.009	Wetland - Volume of treatment 252.45m3																		
		S19B-1.010	Infiltration Basin - 1112m3																		

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S20 (Doc Ref. GCOB-4.03.03.03.3-027) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S20-1.000	300	S20-1	28.905	27.33	S20-2	28.533	26.86	80.394	SD			1.28	1.37	1.32	1.58	1.67	1.62	0-2	171	N/A	F1050
S20-1.001	300	S20-2	28.533	26.86	S20-3	27.449	25.874	85.744	SD			1.37	1.28	1.32	1.67	1.58	1.62	0-2	87	N/A	C1050
S20-1.002	300	S20-3	27.449	25.874	S20-4	25.543	23.968	90	SD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	47	N/A	F1050
S20-1.003	300	S20-4	25.543	23.968	S20-5	24.088	22.514	46.556	SD			1.28	1.27	1.27	1.58	1.57	1.57	0-2	32	N/A	F1050
S20-1.004	375	S20-5	24.088	22.439	S20-10	24.312	22.389	16.224	CD			1.27	1.55	1.41	1.65	1.92	1.79	0-2	324	S	F1050
S20-2.000	225	S20-6	29.423	27.923	S20-7	29.207	27.183	74.527	CD			1.28	1.80	1.54	1.50	2.02	1.76	0-2	101	S	F1050
S20-2.001	225	S20-7	29.207	27.183	S20-8	28.457	26.433	76.324	CD			1.80	1.80	1.80	2.02	2.02	2.02	2-4	102	S	C1050
S20-2.002	225	S20-8	28.457	26.433	S20-9	26.699	25.199	90	CD			1.80	1.28	1.54	2.02	1.50	1.76	0-2	73	S	C1050
S20-2.003	225	S20-9	26.699	25.199	S20-10	24.312	22.812	69.56	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	29	S	F1050
S20-1.005	450	S20-10	24.312	21.691	S20-14	23.3	21.575	13.123	CD			2.17	1.28	1.72	2.62	1.73	2.17	2-4	113	S	C1050
S20-3.000	225	S20-11	25.966	24.466	S20-12	25.75	24.231	40.179	CD			1.28	1.29	1.28	1.50	1.52	1.51	0-2	171	S	F1050
S20-3.001	225	S20-12	25.75	24.231	S20-13	24.828	23.328	54.373	CD			1.29	1.28	1.28	1.52	1.50	1.51	0-2	60	S	F1050
S20-3.002	225	S20-13	24.828	23.328	S20-14	23.3	21.8	59.671	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	39	S	F1050
S20-1.006	450	S20-14	23.3	18.837	S20-15	20.354	18.629	84.475	CD			4.01	1.28	2.64	4.46	1.73	3.09	2-4	406	S	D1050
S20-1.007	450	S20-15	20.354	17.106	S20-16	18.686	16.961	59.548	CD			2.80	1.28	2.04	3.25	1.73	2.49	2-4	411	S	C1050
S20-1.008	450	S20-16	18.686	16.961	S20-17	17.157	15.757	78.629	CD			1.28	0.95	1.11	1.73	1.40	1.56	0-2	65	S	F1050
S20-1.009	525	S20-17	17.157	15.682	S20-18	16.827	15.552	57.427	CD			0.95	0.75	0.85	1.48	1.28	1.38	0-2	442	S	B
S20-1.010	825	S20-18	16.827	15.252	S20-28	16.6	15.025	35.419	CD	RC		0.75	0.75	0.75	1.58	1.58	1.58	0-2	156	Z	B
S20-4.000	300	S20-19	24	22.425	S20-24	23.308	21.733	78.649	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	114	S	F1050
S20-5.000	300	S20-20	28.046	26.621	S20-21	27.776	26.111	86.998	CD			1.13	1.37	1.25	1.43	1.67	1.55	0-2	171	S	F1050
S20-5.001	300	S20-21	27.776	26.111	S20-22	26.493	25.068	90	CD			1.37	1.13	1.25	1.67	1.43	1.55	0-2	86	S	C1050
S20-5.002	300	S20-22	26.493	25.068	S20-23	24.258	22.833	93.799	CD			1.13	1.13	1.13	1.43	1.43	1.43	0-2	42	S	F1050
S20-5.003	375	S20-23	24.258	21.787	S20-24	23.308	21.658	13.291	CD			2.10	1.28	1.69	2.47	1.65	2.06	2-4	103	S	C1050
S20-4.001	375	S20-24	23.308	21.658	S20-25	21.849	20.199	69.366	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	48	S	F1050
S20-4.002	525	S20-25	21.849	17.523	S20-26	19.158	17.358	82.116	CD			3.80	1.28	2.54	4.33	1.80	3.06	2-4	498	S	D1200
S20-4.003	525	S20-26	19.158	15.679	S20-27	17.194	15.442	97.766	CD			2.95	1.23	2.09	3.48	1.75	2.62	2-4	413	S	C1200
S20-4.004	525	S20-27	17.194	15.442	S20-28	16.6	15.325	58.35	CD			1.23	0.75	0.99	1.75	1.28	1.51	0-2	499	S	C1200
S20-1.011	900	S20-28	16.6	15.025	S20-43	16.542	15.01	7.306	CD	RC		0.68	0.63	0.65	1.58	1.53	1.55	0-2	487	Z	B
S20-6.000	225	S20-29	17.365	16.086	S20-30	16.73	15.915	29.146	CD	RC		1.05	0.59	0.82	1.28	0.82	1.05	0-2	170	Z	F1050
S20-6.001	225	S20-30	16.73	15.915	S20-43	16.542	15.685	39.215	CD	RC		0.59	0.63	0.61	0.82	0.86	0.84	0-2	171	Z	F1050
S20-7.000	225	S20-31	27.773	26.273	S20-32	30.485	25.838	73.993	CD			1.28	4.42	2.85	1.50	4.65	3.07	2-4	170	S	F1050
S20-7.001	225	S20-32	30.485	25.838	S20-33	31.042	25.753	14.391	CD			4.42	5.06	4.74	4.65	5.29	4.97	4-6	169	S	D1050
S20-7.002	225	S20-33	31.042	25.753	S20-34	32.504	25.263	83.046	CD			5.06	7.02	6.04	5.29	7.24	6.27	6-8	169	S	D1050
S20-7.003	225	S20-34	32.504	25.263	S20-35	32.166	25.166	16.343	CD			7.02	6.78	6.90	7.24	7.00	7.12	6-8	168	S	E1500
S20-7.004	225	S20-35	32.166	25.166	S20-36	30.987	24.99	29.792	CD			6.78	5.77	6.27	7.00	6.00	6.50	6-8	169	S	E1500
S20-7.005	225	S20-36	30.987	24.99	S20-37	24.696	23.196	88.024	CD			5.77	1.28	3.52	6.00	1.50	3.75	2-4	49	S	D1050
S20-7.006	225	S20-37	24.696	23.196	S20-38	23.517	22.017	90.19	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	76	S	F1050
S20-7.007	225	S20-38	23.517	22.017	S20-39	20.627	19.127	42.591	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	15	S	F1050
S20-7.008	225	S20-39	20.627	19.127	S20-40	19.246	17.746	14.432	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	10	S	F1050
S20-7.009	225	S20-40	19.246	17.746	S20-41	18.3	16.8	12.073	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	13	S	F1050
S20-7.010	225	S20-41	18.3	16.8	S20-42	17.584	16.084	11.706	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	16	S	F1050
S20-7.011	225	S20-42	17.584	16.084	S20-43	16.542	15.685	24.958	CD	RC		1.28	0.63	0.95	1.50	0.86	1.18	0-2	63	Z	F1050
S20-1.012	900	S20-43	16.542	15.01	S20-61	16.538	14.999	5.29	CD	RC		0.63	0.64	0.64	1.53	1.54	1.54	0-2	481	Z	B
S20-8.000	225	S20-44	17.519	16.151	S20-45	16.789	15.931	36.708	CD	RC		1.14	0.63	0.89	1.37	0.86	1.11	0-2	167	Z	F1050
S20-8.001	225	S20-45	16.789	15.931	S20-61	16.538	15.674	42.917	CD	RC		0.63	0.64	0.64	0.86	0.86	0.86	0-2	167	Z	F1050
S20-9.000	225	S20-46	27.716	26.216	S20-47	30.51	25.766	76.962	CD			1.28	4.52	2.90	1.50	4.74	3.12	2-4	171	S	F1050
S20-9.001	225	S20-47	30.51	25.766	S20-48	31.004	25.681	14.402	CD			4.52	5.10	4.81	4.74	5.32	5.03	4-6	169	S	D1050

S20-9.002	225	S20-48	31.004	25.681	S20-49	32.458	25.171	85.892	CD			5.10	7.06	6.08	5.32	7.29	6.31	6-8	168	S	D1050
S20-9.003	225	S20-49	32.458	25.171	S20-50	32.147	25.083	15.095	CD			7.06	6.84	6.95	7.29	7.06	7.18	6-8	172	S	E1500
S20-9.004	225	S20-50	32.147	25.083	S20-51	26.508	24.543	91.614	CD			6.84	1.74	4.29	7.06	1.97	4.51	4-6	170	S	E1500
S20-9.005	225	S20-51	26.508	24.543	S20-57	24.5	21.833	82.804	CD			1.74	2.44	2.09	1.97	2.67	2.32	2-4	31	S	C1050
S20-10.000	225	S20-52	24.5	23	S20-56	24.5	21.878	47.933	CD			1.28	2.40	1.84	1.50	2.62	2.06	2-4	43	S	F1050
S20-11.000	225	S20-53	24.5	23	S20-54	24.5	22.775	38.103	CD			1.28	1.50	1.39	1.50	1.73	1.61	0-2	169	S	F1050
S20-11.001	225	S20-54	24.5	22.775	S20-55	24.5	22.47	52.16	CD			1.50	1.81	1.65	1.73	2.03	1.88	0-2	171	S	C1050
S20-11.002	225	S20-55	24.5	22.47	S20-56	24.5	22.28	32.484	CD			1.81	2.00	1.90	2.03	2.22	2.13	2-4	171	S	C1050
S20-10.001	225	S20-56	24.5	21.878	S20-57	24.5	21.833	7.652	CD			2.40	2.44	2.42	2.62	2.67	2.64	2-4	170	S	C1050
S20-9.006	225	S20-57	24.5	21.833	S20-58	21.956	20.456	61.648	CD			2.44	1.28	1.86	2.67	1.50	2.08	2-4	45	S	C1050
S20-9.007	225	S20-58	21.956	20.456	S20-59	18.656	17.156	37.357	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	11	S	F1050
S20-9.008	225	S20-59	18.656	17.156	S20-60	17.718	16.218	11.102	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	12	S	F1050
S20-9.009	225	S20-60	17.718	16.218	S20-61	16.538	15.674	26.636	CD	RC		1.28	0.64	0.96	1.50	0.86	1.18	0-2	49	Z	F1050
S20-1.013	900	S20-61	16.538	14.999	S20-62	16.5	14.992	4.072	CD	RC		0.64	0.61	0.62	1.54	1.51	1.52	0-2	582	Z	B
S20-1.014	900	S20-62	16.5	14.992	S20-63	16.5	14.792	28.632	CD	RC		0.61	0.81	0.71	1.51	1.71	1.61	0-2	143	Z	B
S20-1.015	900	S20-63	16.5	14.792	S20-64	16.5	14.742	63.182	CD	RC		0.81	0.86	0.83	1.71	1.76	1.73	0-2	1,264	Z	B

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	11+425	11+850	434.302																
SWC	11+425	11+800	386.247																
SWC	11+700	12+000	310.411																
SWC	11+750	12+000	270.797																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S20-1.012	Petrol Interceptor Class 1 Bypass Separator NSB 075
		S20-1.013	Spillage Containment Area - 25m3 Wetland - Volume of treatment 334.95m3
		S20-1.014	Infiltration Basin - 1928m3

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S21A (Doc Ref. GCOB-4.03.03.03.3-028) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S21a-1.000	225	S21a-1	24.007	22.507	S21a-2	23.155	21.655	87.962	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	103	S	F1050
S21a-1.001	225	S21a-2	23.155	21.655	S21a-3	21.643	20.143	74.626	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	49	S	F1050
S21a-1.002	225	S21a-3	21.643	20.143	S21a-4	20.192	18.692	81.576	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	56	S	F1050
S21a-1.003	300	S21a-4	20.192	18.617	S21a-10	19.258	17.683	40.482	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	43	S	F1050
S21a-2.000	225	S21a-5	25.121	23.621	S21a-6	24.708	23.107	88.069	CD			1.28	1.38	1.33	1.50	1.60	1.55	0-2	171	S	F1050
S21a-2.001	225	S21a-6	24.708	23.107	S21a-7	23.072	21.572	90.458	CD			1.38	1.28	1.33	1.60	1.50	1.55	0-2	59	S	C1050
S21a-2.002	225	S21a-7	23.072	21.572	S21a-8	20.321	18.821	80.569	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	29	S	F1050
S21a-2.003	300	S21a-8	20.321	18.746	S21a-10	19.258	17.683	42.193	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	40	S	F1050
S21a-3.000	375	S21a-9	18.406	16.756	S21a-10	19.258	16.652	34.066	CD			1.28	2.23	1.75	1.65	2.61	2.13	2-4	328	S	F1050
S21a-1.004	675	S21a-10	19.258	16.352	S21a-20	19.707	16.33	10.966	CD			2.23	2.70	2.47	2.91	3.38	3.14	2-4	498	S	C1350
S21a-4.000	150	S21a-11	25.328	23.903	S21a-12	24.958	23.082	83.681	CD			1.28	1.73	1.50	1.43	1.88	1.65	0-2	102	S	F1050
S21a-4.001	150	S21a-12	24.958	23.082	S21a-13	23.414	21.989	89.614	CD			1.73	1.28	1.50	1.88	1.43	1.65	0-2	82	S	C1050
S21a-4.002	150	S21a-13	23.414	21.989	S21a-14	20.544	19.119	84.514	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	29	S	F1050
S21a-4.003	150	S21a-14	20.544	19.119	S21a-20	19.707	18.282	41.624	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	50	S	F1050
S21a-5.000	150	S21a-15	24.22	22.795	S21a-16	23.71	22.121	68.655	CD			1.28	1.44	1.36	1.43	1.59	1.51	0-2	102	S	F1050
S21a-5.001	150	S21a-16	23.71	22.121	S21a-17	22.468	21.043	67.019	CD			1.44	1.28	1.36	1.59	1.43	1.51	0-2	62	S	C1050
S21a-5.002	150	S21a-17	22.468	21.043	S21a-18	21.379	19.954	54.853	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	50	S	F1050
S21a-5.003	150	S21a-18	21.379	19.954	S21a-19	19.98	18.555	76.321	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	55	S	F1050
S21a-5.004	225	S21a-19	19.98	18.48	S21a-20	19.707	18.207	23.46	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	86	S	F1050
S21a-1.005	675	S21a-20	19.707	16.33	S21a-31	20.352	16.171	79.447	CD			2.70	3.51	3.10	3.38	4.18	3.78	2-4	500	S	C1350
S21a-6.000	150	S21a-21	25.3	23.875	S21a-22	24.651	23.226	46.388	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	71	S	F1050
S21a-6.001	150	S21a-22	24.651	23.226	S21a-23	23.694	22.269	69.199	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	72	S	F1050
S21a-6.002	150	S21a-23	23.694	22.269	S21a-24	22.159	20.734	76.273	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	50	S	F1050
S21a-6.003	150	S21a-24	22.159	20.734	S21a-25	21.354	19.929	51.103	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	63	S	F1050
S21a-6.004	225	S21a-25	21.354	19.854	S21a-31	20.352	18.852	46.015	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	46	S	F1050
S21a-7.000	150	S21a-26	26.124	24.699	S21a-27	25.739	24.149	56.038	CD			1.28	1.44	1.36	1.43	1.59	1.51	0-2	102	S	F1050
S21a-7.001	150	S21a-27	25.739	24.149	S21a-28	24.325	22.9	65.537	CD			1.44	1.28	1.36	1.59	1.43	1.51	0-2	52	S	C1050
S21a-7.002	150	S21a-28	24.325	22.9	S21a-29	22.491	21.066	72.839	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	40	S	F1050
S21a-7.003	150	S21a-29	22.491	21.066	S21a-30	20.935	19.51	66.261	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	43	S	F1050
S21a-7.004	225	S21a-30	20.935	19.435	S21a-31	20.352	18.852	26.071	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	45	S	F1050
S21a-1.006	675	S21a-31	20.352	16.171	S21a-40	20.365	16.15	10.434	CD			3.51	3.54	3.52	4.18	4.22	4.20	4-6	497	S	D1350
S21a-8.000	225	S21a-32	25.97	24.47	S21a-33	25.577	24.077	57.22	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	146	S	F1050
S21a-8.001	225	S21a-33	25.577	24.077	S21a-34	24.057	22.557	70.22	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	46	S	F1050
S21a-8.002	225	S21a-34	24.057	22.557	S21a-35	22.556	21.056	60.232	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	40	S	F1050
S21a-8.003	225	S21a-35	22.556	21.056	S21a-36	21.73	20.23	30.396	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	37	S	F1050
S21a-8.004	225	S21a-36	21.73	20.23	S21a-37	20.646	19.146	50.051	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	46	S	F1050
S21a-8.005	300	S21a-37	20.646	19.071	S21a-40	20.365	18.79	22.677	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	81	S	F1050
S21a-9.000	375	S21a-38	17.306	15.656	S21a-39	19.673	15.442	69.972	CD			1.28	3.86	2.57	1.65	4.23	2.94	2-4	327	S	F1050
S21a-9.001	375	S21a-39	19.673	15.442	S21a-40	20.365	15.304	44.992	CD			3.86	4.69	4.27	4.23	5.06	4.65	4-6	326	S	D1050
S21a-1.007	825	S21a-40	20.365	14.854	S21a-46	20.617	14.809	22.255	CD			4.69	4.98	4.83	5.51	5.81	5.66	4-6	495	S	D1500
S21a-10.000	225	S21a-41	24.876	23.376	S21a-42	24.409	22.886	83.944	CD			1.28	1.30	1.29	1.50	1.52	1.51	0-2	171	S	F1050
S21a-10.001	225	S21a-42	24.409	22.886	S21a-43	23.047	21.547	85.818	CD			1.30	1.28	1.29	1.52	1.50	1.51	0-2	64	S	F1050
S21a-10.002	225	S21a-43	23.047	21.547	S21a-44	21.816	20.316	61.814	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	50	S	F1050
S21a-10.003	225	S21a-44	21.816	20.316	S21a-45	21.133	19.633	45.433	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	67	S	F1050
S21a-10.004	225	S21a-45	21.133	19.633	S21a-46	20.617	19.117	23.888	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	46	S	F1050
S21a-1.008	825	S21a-46	20.617	14.809	S21a-47	17.75	14.789	9.993	CD			4.98	2.14	3.56	5.81	2.96	4.38	4-6	500	S	D1500
S21a-1.009	825	S21a-47	17.75	14.789	S21a-48	17	14.539	16.568	CD			2.14	1.64	1.89	2.96	2.46	2.71	2-4	66	S	C1500
S21a-1.012	225	S21a-50	15.3	11.97	S21a-51	13	11.8	8.178	CD			3.11	0.97	2.04	3.33	1.20	2.27	2-4	48	S	D1050
S21a-1.013	225	S21a-51	13	9	S21a-100	10	8.8	16.371	CD			3.78	0.97	2.38	4.00	1.20	2.60	2-4	82	S	D1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
1.003	LR	12+125
1.004	LR	12+125
1.005	LR	12+125
1.007	LR	12+125
2.003	LR	12+125
3.000	LR	12+125
4.003	LR	12+125
5.004	LR	12+125
6.004	LR	12+125
7.004	LR	12+125
8.005	LR	12+125
9.000	LR	12+125
9.001	LR	12+125

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	11+825	12+100	266.848																
SWC	11+825	12+075	244.164																
SWC	11+850	12+100	268.119																
SWC	11+850	12+100	260.675																
SWC	12+175	12+450	277.009																
SWC	12+175	12+425	242.963																
SWC	12+175	12+425	257.809																
SWC	12+175	12+425	259.096																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S21a-1.009	Petrol Interceptor Class 1 Bypass Separator NSB 075 Spillage Containment Area - 25m3
		S21a-1.010	Wetland - Volume of treatment 203.55m3
		S21a-1.011	Attenuation Pond - 1568m3
		MH S21A/50	Hydrobrake - Design discharge 5l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S21B (Doc Ref. GCOB-4.03.03.03.3-029) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S21b-1.000	225	S21b-1	28.908	27.408	S21b-2	28.582	26.973	74.196	SD			1.28	1.38	1.33	1.50	1.61	1.55	0-2	171	N/A	F1050
S21b-1.001	225	S21b-2	28.582	26.973	S21b-3	27.653	26.153	93.277	SD			1.38	1.28	1.33	1.61	1.50	1.55	0-2	114	N/A	C1050
S21b-1.002	375	S21b-3	27.653	26.003	S21b-6	27.34	25.69	17.218	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	55	S	F1050
S21b-2.000	150	S21b-4	29.447	28.022	S21b-5	28.873	27.168	87.02	CD			1.28	1.56	1.42	1.43	1.71	1.57	0-2	102	S	F1050
S21b-2.001	150	S21b-5	28.873	27.168	S21b-6	27.34	25.915	91.184	CD			1.56	1.28	1.42	1.71	1.43	1.57	0-2	73	S	C1050
S21b-1.003	375	S21b-6	27.34	25.69	S21b-7	26.66	25.01	69.93	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	103	S	F1050
S21b-1.004	375	S21b-7	26.66	25.01	S21b-8	26.164	24.514	69.51	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	140	S	F1050
S21b-1.005	375	S21b-8	26.164	24.514	S21b-9	25.597	23.947	79.488	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	140	S	F1050
S21b-1.006	375	S21b-9	25.597	23.947	S21b-10	25.735	23.742	67.195	CD			1.28	1.62	1.45	1.65	1.99	1.82	0-2	328	S	F1050
S21b-1.007	525	S21b-10	25.735	22.81	S21b-12	24.577	22.777	16.393	CD			2.40	1.28	1.84	2.93	1.80	2.36	2-4	497	S	C1050
S21b-3.000	150	S21b-11	24.875	23.45	S21b-12	24.577	23.017	44.055	CD			1.28	1.41	1.34	1.43	1.56	1.49	0-2	102	S	F1050
S21b-1.008	525	S21b-12	24.577	22.642	S21b-13	24.515	22.522	59.834	CD			1.41	1.47	1.44	1.94	1.99	1.96	0-2	499	S	C1200
S21b-1.009	525	S21b-13	24.515	22.522	S21b-14	23.926	22.126	79.19	CD			1.47	1.28	1.37	1.99	1.80	1.90	0-2	200	S	C1200
S21b-1.010	525	S21b-14	23.926	22.126	S21b-15	23.277	21.477	89.329	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	138	S	C1200
S21b-1.011	525	S21b-15	23.277	21.477	S21b-16	22.857	21.057	63.407	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	151	S	C1200
S21b-1.012	525	S21b-16	22.857	21.057	S21b-17	22.368	20.568	64.093	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	131	S	C1200
S21b-1.013	525	S21b-17	22.368	20.568	S21b-54	21.848	20.048	69.452	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	134	S	C1200
S21b-4.000	225	S21b-18	28.057	26.557	S21b-19	27.686	26.061	83.556	CD			1.28	1.40	1.34	1.50	1.63	1.56	0-2	168	S	F1050
S21b-4.001	225	S21b-19	27.686	26.061	S21b-20	27.208	25.531	89.164	CD			1.40	1.45	1.43	1.63	1.68	1.65	0-2	168	S	C1050
S21b-4.002	225	S21b-20	27.208	25.531	S21b-21	26.579	25.002	90.187	CD			1.45	1.35	1.40	1.68	1.58	1.63	0-2	170	S	C1050
S21b-4.003	300	S21b-21	26.579	24.927	S21b-22	25.904	24.329	90.535	CD			1.35	1.28	1.31	1.65	1.58	1.61	0-2	151	S	C1050
S21b-4.004	300	S21b-22	25.904	24.329	S21b-23	25.234	23.659	89.753	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	134	S	F1050
S21b-4.005	525	S21b-23	25.234	21.813	S21b-25	23.589	21.789	11.752	CD			2.90	1.28	2.09	3.42	1.80	2.61	2-4	490	S	C1200
S21b-5.000	150	S21b-24	25.125	23.7	S21b-25	23.589	22.164	53.579	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	35	S	F1050
S21b-4.006	525	S21b-25	23.589	21.789	S21b-26	24.546	21.638	74.992	CD			1.28	2.38	1.83	1.80	2.91	2.35	2-4	497	S	C1200
S21b-4.007	525	S21b-26	24.546	21.638	S21b-27	24.001	21.456	90.747	CD			2.38	2.02	2.20	2.91	2.55	2.73	2-4	499	S	C1200
S21b-4.008	525	S21b-27	24.001	21.456	S21b-28	23.313	21.274	90.664	CD			2.02	1.51	1.77	2.55	2.04	2.29	2-4	498	S	C1200
S21b-4.009	525	S21b-28	23.313	21.274	S21b-29	22.842	21.042	64.69	CD			1.51	1.28	1.39	2.04	1.80	1.92	0-2	279	S	C1200
S21b-4.010	525	S21b-29	22.842	21.042	S21b-30	22.373	20.573	63.271	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	135	S	C1200
S21b-4.011	525	S21b-30	22.373	20.573	S21b-42	21.808	20.008	70.807	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	125	S	C1200
S21b-6.000	150	S21b-31	26.31	24.885	S21b-34	26.294	24.588	30.27	CD			1.28	1.56	1.42	1.43	1.71	1.57	0-2	102	S	F1050
S21b-7.000	150	S21b-32	26.894	25.469	S21b-33	26.608	24.598	88.72	CD			1.28	1.86	1.57	1.43	2.01	1.72	0-2	102	S	F1050
S21b-7.001	450	S21b-33	26.608	24.298	S21b-34	26.294	24.257	16.514	CD			1.86	1.59	1.72	2.31	2.04	2.17	2-4	403	S	C1050
S21b-6.001	450	S21b-34	26.294	24.257	S21b-35	25.477	23.752	100.512	CD			1.59	1.28	1.43	2.04	1.73	1.88	0-2	199	S	C1050
S21b-6.002	450	S21b-35	25.477	23.752	S21b-36	24.977	23.252	54.962	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	110	S	F1050
S21b-6.003	450	S21b-36	24.977	23.252	S21b-37	24.499	22.774	54.927	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	115	S	F1050
S21b-6.004	450	S21b-37	24.499	22.774	S21b-38	23.785	22.06	89.943	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	126	S	F1050
S21b-6.005	450	S21b-38	23.785	22.06	S21b-39	22.951	21.226	89.951	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	108	S	F1050
S21b-6.006	450	S21b-39	22.951	21.226	S21b-40	22.181	20.456	89.906	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	117	S	F1050
S21b-6.007	450	S21b-40	22.181	20.456	S21b-41	21.754	20.029	65.876	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	154	S	F1050
S21b-6.008	450	S21b-41	21.754	20.029	S21b-42	21.808	19.869	65.876	CD			1.28	1.49	1.38	1.73	1.94	1.83	0-2	412	S	F1050
S21b-4.012	1000	S21b-42	21.808	19.319	S21b-54	21.848	19.256	31.621	CD			1.49	1.59	1.54	2.49	2.59	2.54	2-4	502	S	C1500
S21b-8.000	225	S21b-43	26.702	25.202	S21b-46	27.019	24.815	66.41	CD			1.28	1.98	1.63	1.50	2.20	1.85	0-2	172	S	F1050
S21b-9.000	150	S21b-44	26.894	25.469	S21b-45	26.712	24.686	79.788	CD			1.28	1.88	1.58	1.43	2.03	1.73	0-2	102	S	F1050
S21b-9.001	450	S21b-45	26.712	24.386	S21b-46	27.019	24.354	13.013	CD			1.88	2.22	2.05	2.33	2.67	2.50	2-4	407	S	C1050
S21b-8.001	450	S21b-46	27.019	24.354	S21b-47	25.525	23.8	110.931	CD			2.22	1.28	1.75	2.67	1.73	2.20	2-4	200	S	C1050

S21b-8.002	450	S21b-47	25.525	23.8	S21b-48	25.056	23.331	55.057	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	117	S	F1050
S21b-8.003	450	S21b-48	25.056	23.331	S21b-49	24.578	22.853	55.02	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	115	S	F1050
S21b-8.004	450	S21b-49	24.578	22.853	S21b-50	23.768	22.043	90.071	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	111	S	F1050
S21b-8.005	450	S21b-50	23.768	22.043	S21b-51	22.951	21.226	90.095	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	110	S	F1050
S21b-8.006	450	S21b-51	22.951	21.226	S21b-52	22.181	20.456	90.05	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	117	S	F1050
S21b-8.007	450	S21b-52	22.181	20.456	S21b-53	21.765	20.04	66.267	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	159	S	F1050
S21b-8.008	525	S21b-53	21.765	19.965	S21b-54	21.848	19.832	66.267	CD			1.28	1.49	1.38	1.80	2.02	1.91	0-2	498	S	C1050
S21b-1.014	1000	S21b-54	21.848	19.256	S21b-55	22.25	19.244	5.996	CD			1.59	2.01	1.80	2.59	3.01	2.80	2-4	500	S	C1500
S21b-1.015	1000	S21b-55	22.25	19.244	S21b-56	23.5	18.994	16.2	CD			2.01	3.51	2.76	3.01	4.51	3.76	2-4	65	S	C1500

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																			

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L(24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W(23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment		
SWC	12+025	12+500	464.327																		
SWC	12+025	12+475	443.195																		
SWC	12+425	13+575	1150.973																		
SWC	12+450	13+625	1159.528																		
SWC	13+550	13+650	79.788																		
SWC	13+550	13+650	88.72																		

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																			
		S21b-1.015	Petrol Interceptor Class 1 Bypass Separator NSB 125																		
			Spillage Containment Area - 25m3																		
		S21b-1.016	Wetland - Vt 723m3																		
		S21b-1.017	Infiltration Basin - Volume of Storage 4227m3																		

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S22A (Doc Ref. GCOB-4.03.03.03.3-030) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S22a-1.000	150	S22a-1	19.58	18.455	S22a-2	19.687	18.18	27.62	CD			0.98	1.36	1.17	1.13	1.51	1.32	0-2	100	S	F1050
S22a-1.001	150	S22a-2	19.687	18.18	S22a-3	19.039	17.2	98.578	CD			1.36	1.69	1.52	1.51	1.84	1.67	0-2	101	S	C1050
S22a-1.002	150	S22a-3	19.039	17.2	S22a-4	18.385	16.317	89.994	CD			1.69	1.92	1.80	1.84	2.07	1.95	0-2	102	S	C1050
S22a-1.003	150	S22a-4	18.385	16.317	S22a-8	18.098	16.246	7.2	CD			1.92	1.70	1.81	2.07	1.85	1.96	0-2	101	S	C1050
S22a-2.000	150	S22a-5	19.61	18.485	S22a-6	19.688	18.24	24.781	CD			0.98	1.30	1.14	1.13	1.45	1.29	0-2	101	S	F1050
S22a-2.001	150	S22a-6	19.688	18.24	S22a-7	19.039	17.26	98.373	CD			1.30	1.63	1.46	1.45	1.78	1.61	0-2	100	S	F1050
S22a-2.002	150	S22a-7	19.039	17.26	S22a-8	18.098	16.36	89.994	CD			1.63	1.59	1.61	1.78	1.74	1.76	0-2	100	S	C1050
S22a-1.004	225	S22a-8	18.098	16.171	S22a-13	18.053	16.153	3.044	CD			1.70	1.68	1.69	1.93	1.90	1.91	0-2	169	S	C1050
S22a-3.000	150	S22a-9	21.528	20.103	S22a-10	20.407	18.982	61.375	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	55	S	F1050
S22a-3.001	150	S22a-10	20.407	18.982	S22a-11	19.676	18.099	90	CD			1.28	1.43	1.35	1.43	1.58	1.50	0-2	102	S	F1050
S22a-3.002	150	S22a-11	19.676	18.099	S22a-12	18.771	17.216	90	CD			1.43	1.41	1.42	1.58	1.56	1.57	0-2	102	S	C1050
S22a-3.003	225	S22a-12	18.771	17.141	S22a-13	18.053	16.553	90	CD			1.41	1.28	1.34	1.63	1.50	1.57	0-2	153	S	C1050
S22a-1.005	300	S22a-13	18.053	16.078	S22a-17	17.489	15.883	48.076	CD			1.68	1.31	1.49	1.98	1.61	1.79	0-2	247	S	C1050
S22a-4.000	150	S22a-14	22.101	20.676	S22a-15	18.421	16.996	89.115	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	24	S	F1050
S22a-4.001	150	S22a-15	18.421	16.996	S22a-16	17.567	16.142	35.794	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	42	S	F1050
S22a-4.002	150	S22a-16	17.567	16.142	S22a-17	17.489	16.04	10.315	CD			1.28	1.30	1.29	1.43	1.45	1.44	0-2	101	S	F1050
S22a-1.006	675	S22a-17	17.489	15.508	S22a-27	17.377	15.467	20.268	CD	RC		1.31	1.24	1.27	1.98	1.91	1.95	0-2	494	Z	C1350
S22a-5.000	150	S22a-18	26.717	25.292	S22a-19	26.668	25.037	25.93	CD			1.28	1.48	1.38	1.43	1.63	1.53	0-2	102	S	F1050
S22a-5.001	150	S22a-19	26.668	25.037	S22a-21	26.472	24.92	11.868	CD			1.48	1.40	1.44	1.63	1.55	1.59	0-2	101	S	C1050
S22a-6.000	150	S22a-20	26.709	25.284	S22a-21	26.472	24.975	31.409	CD			1.28	1.35	1.31	1.43	1.50	1.46	0-2	102	S	F1050
S22a-5.002	225	S22a-21	26.472	24.845	S22a-22	25.946	24.419	73.072	CD			1.40	1.30	1.35	1.63	1.53	1.58	0-2	172	S	C1050
S22a-5.003	225	S22a-22	25.946	24.419	S22a-23	24.49	22.99	72.126	CD			1.30	1.28	1.29	1.53	1.50	1.51	0-2	50	S	F1050
S22a-5.004	225	S22a-23	24.49	22.99	S22a-24	22.065	20.565	75.513	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	31	S	F1050
S22a-5.005	300	S22a-24	22.065	17.296	S22a-25	18.536	16.961	82.883	CD			4.47	1.28	2.87	4.77	1.58	3.17	2-4	247	S	D1050
S22a-5.006	300	S22a-25	18.536	16.961	S22a-26	17.629	16.054	33.021	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	36	S	F1050
S22a-5.007	300	S22a-26	17.629	16.054	S22a-27	17.377	15.802	10.777	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	43	S	F1050
S22a-1.007	675	S22a-27	17.377	15.427	S22a-37	17.347	15.4	13.538	CD			1.28	1.27	1.27	1.95	1.95	1.95	0-2	501	S	C1350
S22a-7.000	150	S22a-28	21.59	20.165	S22a-29	20.462	19.037	61.01	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	54	S	F1050
S22a-7.001	225	S22a-29	20.462	18.962	S22a-30	19.651	18.151	89.976	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	111	S	F1050
S22a-7.002	225	S22a-30	19.651	18.151	S22a-31	18.797	17.297	89.89	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	105	S	F1050
S22a-7.003	225	S22a-31	18.797	17.297	S22a-32	17.944	16.444	90.11	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	106	S	F1050
S22a-7.004	300	S22a-32	17.944	16.369	S22a-36	17.41	15.835	79.932	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	150	S	F1050
S22a-8.000	150	S22a-33	20.067	18.642	S22a-34	19.099	17.674	37.65	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	39	S	F1050
S22a-8.001	225	S22a-34	19.099	17.599	S22a-35	17.763	16.263	80.641	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	60	S	F1050
S22a-8.002	225	S22a-35	17.763	16.263	S22a-36	17.41	15.801	79.291	CD			1.28	1.38	1.33	1.50	1.61	1.55	0-2	172	S	F1050
S22a-7.005	675	S22a-36	17.41	15.351	S22a-37	17.347	15.317	17.176	CD			1.38	1.36	1.37	2.06	2.03	2.04	2-4	505	S	C1350
S22a-1.008	675	S22a-37	17.347	15.317	S22a-38	17.677	15.164	76.444	CD			1.36	1.84	1.60	2.03	2.51	2.27	2-4	500	S	C1350
S22a-1.009	675	S22a-38	17.677	15.164	S22a-39	18.957	15.005	79.484	CD			1.84	3.28	2.56	2.51	3.95	3.23	2-4	500	S	C1350
S22a-1.010	1050	S22a-39	18.957	14.63	S22a-46	19.949	14.55	39.771	CD			3.28	4.35	3.81	4.33	5.40	4.86	4-6	497	S	D1500
S22a-9.000	150	S22a-40	20.909	19.484	S22a-41	19.781	18.356	48.68	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	43	S	F1050
S22a-9.001	150	S22a-41	19.781	18.356	S22a-46	19.949	18.179	18.035	CD			1.28	1.62	1.45	1.43	1.77	1.60	0-2	102	S	F1050
S22a-10.000	150	S22a-42	26.394	24.969	S22a-43	25.646	24.221	68.93	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	92	S	F1050
S22a-10.001	225	S22a-43	25.646	24.146	S22a-44	23.282	21.782	90.38	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	38	S	F1050
S22a-10.002	225	S22a-44	23.282	21.782	S22a-45	20.136	18.636	90.717	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	29	S	F1050
S22a-10.003	375	S22a-45	20.136	18.486	S22a-46	19.949	18.299	22.086	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	118	S	F1050
S22a-1.011	1050	S22a-46	19.949	14.55	S22a-50	20.266	14.53	9.888	CD			4.35	4.69	4.52	5.40	5.74	5.57	4-6	494	S	D1500
S22a-11.000	150	S22a-47	26.373	24.948	S22a-48	25.593	24.065	90	CD			1.28	1.38	1.33	1.43	1.53	1.48	0-2	102	S	F1050

S22a-11.001	150	S22a-48	25.593	24.065	S22a-49	23.226	21.801	90	CD	1.38	1.28	1.33	1.53	1.43	1.48	0-2	40	S	C1050
S22a-11.002	150	S22a-49	23.226	21.801	S22a-50	20.266	18.841	80.116	CD	1.28	1.28	1.28	1.43	1.43	1.43	0-2	27	S	F1050
S22a-1.012	1050	S22a-50	20.266	14.53	S22a-82	17.4	14.33	33.795	CD	4.69	2.02	3.35	5.74	3.07	4.40	4-6	169	S	D1500
S22a-12.000	150	S22a-51	44.009	42.584	S22a-52	41.581	40.156	70.976	CD	1.28	1.28	1.28	1.43	1.43	1.43	0-2	29	S	F1050
S22a-12.001	225	S22a-52	41.581	40.081	S22a-53	38.623	37.123	74.121	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	25	S	F1050
S22a-12.002	225	S22a-53	38.623	37.123	S22a-58	34.924	33.424	88.786	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	24	S	F1050
S22a-13.000	150	S22a-54	44.565	43.14	S22a-55	41.817	40.392	83.586	SD	1.28	1.28	1.28	1.43	1.43	1.43	0-2	30	N/A	F1050
S22a-13.001	225	S22a-55	41.817	40.317	S22a-56	38.543	37.043	81.757	SD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	25	N/A	F1050
S22a-13.002	225	S22a-56	38.543	37.043	S22a-57	35.6	34.1	73.54	SD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	25	N/A	F1050
S22a-13.003	450	S22a-57	35.6	33.235	S22a-58	34.924	33.199	14.689	CD	1.92	1.28	1.60	2.37	1.73	2.05	2-4	408	S	C1050
S22a-12.003	450	S22a-58	34.924	30.662	S22a-59	32.218	30.493	69.644	CD	3.81	1.28	2.54	4.26	1.73	2.99	2-4	412	S	D1050
S22a-12.004	450	S22a-59	32.218	28.399	S22a-60	29.987	28.262	56.448	CD	3.37	1.28	2.32	3.82	1.73	2.77	2-4	412	S	D1050
S22a-12.005	450	S22a-60	29.987	26.022	S22a-61	27.542	25.817	84.232	CD	3.52	1.28	2.40	3.97	1.73	2.85	2-4	411	S	D1050
S22a-12.006	450	S22a-61	27.542	25.817	S22a-62	26.567	24.842	60.36	CD	1.28	1.28	1.28	1.73	1.73	1.73	0-2	62	S	F1050
S22a-12.007	450	S22a-62	26.567	24.842	S22a-75	26.247	24.522	59.697	CD	1.28	1.28	1.28	1.73	1.73	1.73	0-2	187	S	F1050
S22a-14.000	150	S22a-63	26.887	25.462	S22a-64	26.606	24.684	79.226	CD	1.28	1.77	1.52	1.43	1.92	1.67	0-2	102	S	F1050
S22a-14.001	225	S22a-64	26.606	24.609	S22a-72	26.232	24.199	70.216	CD	1.77	1.81	1.79	2.00	2.03	2.02	2-4	171	S	C1050
S22a-15.000	150	S22a-65	44.98	43.555	S22a-66	42.041	40.616	88.994	CD	1.28	1.28	1.28	1.43	1.43	1.43	0-2	30	S	F1050
S22a-15.001	150	S22a-66	42.041	40.616	S22a-67	38.8	37.375	82.549	CD	1.28	1.28	1.28	1.43	1.43	1.43	0-2	25	S	F1050
S22a-15.002	150	S22a-67	38.8	37.375	S22a-68	35.68	34.255	72.171	CD	1.28	1.28	1.28	1.43	1.43	1.43	0-2	23	S	F1050
S22a-15.003	225	S22a-68	35.68	34.18	S22a-69	31.162	29.662	95.329	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	21	S	F1050
S22a-15.004	225	S22a-69	31.162	29.662	S22a-70	28.11	26.61	89.598	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	29	S	F1050
S22a-15.005	300	S22a-70	28.11	26.535	S22a-71	26.552	24.977	84.376	CD	1.28	1.28	1.28	1.58	1.58	1.58	0-2	54	S	F1050
S22a-15.006	300	S22a-71	26.552	24.977	S22a-72	26.232	24.657	58.975	CD	1.28	1.28	1.28	1.58	1.58	1.58	0-2	184	S	F1050
S22a-14.002	600	S22a-72	26.232	23.824	S22a-75	26.247	23.774	24.9	CD	1.81	1.87	1.84	2.41	2.47	2.44	2-4	498	S	C1200
S22a-16.000	150	S22a-73	26.894	25.469	S22a-74	26.621	24.682	80.199	CD	1.28	1.79	1.53	1.43	1.94	1.68	0-2	102	S	F1050
S22a-16.001	150	S22a-74	26.621	24.682	S22a-75	26.247	23.984	71.081	CD	1.79	2.11	1.95	1.94	2.26	2.10	2-4	102	S	C1050
S22a-12.008	600	S22a-75	26.247	15.259	S22a-76	17.09	15.215	21.937	CD	10.39	1.28	5.83	10.99	1.88	6.43	6-8	499	S	E1500
S22a-12.009	825	S22a-76	17.09	14.99	S22a-80	21.027	14.938	25.906	CD	1.28	5.26	3.27	2.10	6.09	4.09	4-6	498	S	C1500
S22a-17.000	225	S22a-77	26.313	24.813	S22a-78	25.411	23.911	88.836	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	98	S	F1050
S22a-17.001	225	S22a-78	25.411	23.911	S22a-79	22.521	21.021	89.945	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	31	S	F1050
S22a-17.002	225	S22a-79	22.521	21.021	S22a-80	21.027	19.527	45.586	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	31	S	F1050
S22a-12.010	825	S22a-80	21.027	14.938	S22a-81	17.1	14.921	8.837	CD	5.26	1.35	3.31	6.09	2.18	4.13	4-6	520	S	D1500
S22a-12.011	825	S22a-81	17.1	14.921	S22a-82	17.4	14.671	27.51	CD	1.35	1.90	1.63	2.18	2.73	2.45	2-4	110	S	C1500
S22a-1.013	1050	S22a-82	17.4	14.33	S22a-83	17.5	14.317	6.659	CD	2.02	2.13	2.08	3.07	3.18	3.13	2-4	512	S	C1500

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
S22a-3.000	LR	MLN 13+900
S22a-3.001	LR	MLN 13+900
S22a-3.002	LR	MLN 13+900
S22a-3.003	LR	MLN 13+900
S22a-1.005	LR	MLN 13+900
S22a-1.007	LR	MLN 13+900
S22a-1.008	LR	MLN 13+900
S22a-1.009	LR	MLN 13+900
S22a-1.011	LR	MLN 13+900
S22a-11.000	LR	MLN 13+900
S22a-11.001	LR	MLN 13+900
S22a-11.002	LR	MLN 13+900
S22a-10.000	LR	MLN 13+900
S22a-10.001	LR	MLN 13+900
S22a-10.002	LR	MLN 13+900
S22a-8.000	LR	MLN 13+900
S22a-8.001	LR	MLN 13+900
S22a-8.002	LR	MLN 13+900
S22a-7.000	LR	MLN 13+900
S22a-7.001	LR	MLN 13+900
S22a-7.002	LR	MLN 13+900
S22a-7.003	LR	MLN 13+900
S22a-7.004	LR	MLN 13+900

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L[24] (m)	u/s IL[1] (mOD)	d/s IL[1] (mOD)	Channel Depth (m)	X[23] (m)	V[23]	W[23]	Y[23] (m)	Outlet Ref. No.	No. of gratings	G[23] (m)	H[23] (m)	Z[23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	13+575	13+850	291.082																
SWC	13+625	13+650	25.93																
SWC	13+625	14+000	378.801																
SWC	13+650	14+350	721.434																
SWC	13+650	14+350	715.544																
SWC	13+875	14+000	135.224																
SWC	14+025	14+150	216.192																
SWC	14+025	14+150	213.148																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S22a-12.011	Petrol Interceptor Class 1 Bypass Separator NSB 075
		S22a-1.012	Petrol Interceptor Class 1 Bypass Separator NSB 050
			Spillage Containment Area - 25m3
		S22a-1.014	Wetland - Volume of treatment 591.15m3
		S22a-1.015	Infiltration Basin - 2953m3

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S22B (Doc Ref. GCOB-4.03.03.03.3-031) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S22b-1.000	225	S22b-1	53.1	51.6	S22b-2	53	51.372	38.661	CD			1.28	1.40	1.34	1.50	1.63	1.56	0-2	170	S	F1050
S22b-1.001	225	S22b-2	53	51.372	S22b-3	51.5	50	51.483	CD			1.40	1.28	1.34	1.63	1.50	1.56	0-2	38	S	C1050
S22b-1.002	225	S22b-3	51.5	47	S22b-6	48.2	46.7	51.388	CD			4.28	1.28	2.78	4.50	1.50	3.00	2-4	171	S	D1050
S22b-2.000	225	S22b-4	46.615	45.115	S22b-5	47.114	44.947	28.466	CD			1.28	1.94	1.61	1.50	2.17	1.83	0-2	169	S	F1050
S22b-2.001	300	S22b-5	47.114	44.872	S22b-6	48.2	44.787	20.868	CD			1.94	3.11	2.53	2.24	3.41	2.83	2-4	246	S	C1050
S22b-1.003	300	S22b-6	48.2	44.787	S22b-8	47.28	44.691	23.681	CD			3.11	2.29	2.70	3.41	2.59	3.00	2-4	247	S	D1050
S22b-3.000	225	S22b-7	46.23	44.73	S22b-8	47.28	44.39	57.234	SD			1.28	2.67	1.97	1.50	2.89	2.20	2-4	168	N/A	F1050
S22b-1.004	375	S22b-8	47.28	44.24	S22b-15	47.074	44.185	17.926	CD			2.67	2.51	2.59	3.04	2.89	2.96	2-4	326	S	C1050
S22b-4.000	450	S22b-9	44.95	43.225	S22b-14	45.858	42.975	61.171	CD			1.28	2.43	1.85	1.73	2.88	2.30	2-4	245	S	F1050
S22b-5.000	450	S22b-10	45.294	43.569	S22b-13	46.116	43.339	56.152	SD			1.27	2.33	1.80	1.72	2.78	2.25	2-4	244	N/A	F1050
S22b-6.000	450	S22b-11	45.791	44.066	S22b-12	46.528	43.866	49.439	CD			1.27	2.21	1.74	1.72	2.66	2.19	2-4	247	S	F1050
S22b-6.001	525	S22b-12	46.528	43.791	S22b-13	46.116	43.759	15.9	CD			2.21	1.83	2.02	2.74	2.36	2.55	2-4	497	S	C1200
S22b-5.001	600	S22b-13	46.116	43.189	S22b-14	45.858	43.16	14.298	CD			2.33	2.10	2.21	2.93	2.70	2.81	2-4	493	S	C1200
S22b-4.001	600	S22b-14	45.858	42.825	S22b-15	47.074	42.69	67.586	CD			2.43	3.78	3.11	3.03	4.38	3.71	2-4	501	S	C1200
S22b-1.005	600	S22b-15	47.074	42.69	S22b-20	48.04	42.534	78.027	CD			3.78	4.91	4.35	4.38	5.51	4.95	4-6	500	S	D1200
S22b-7.000	225	S22b-16	47.421	45.921	S22b-19	48.363	45.481	75.034	SD			1.28	2.66	1.97	1.50	2.88	2.19	2-4	171	N/A	F1050
S22b-8.000	150	S22b-17	48.487	46.987	S22b-18	48.885	46.121	86.759	CD			1.35	2.61	1.98	1.50	2.76	2.13	2-4	100	S	F1050
S22b-8.001	150	S22b-18	48.885	46.121	S22b-19	48.363	45.945	17.943	CD			2.61	2.27	2.44	2.76	2.42	2.59	2-4	102	S	C1050
S22b-7.001	300	S22b-19	48.363	45.406	S22b-20	48.04	45.345	15.064	CD			2.66	2.40	2.53	2.96	2.70	2.83	2-4	247	S	C1050
S22b-1.006	600	S22b-20	48.04	42.534	S22b-25	48.363	42.382	75.782	CD			4.91	5.38	5.14	5.51	5.98	5.74	4-6	499	S	D1200
S22b-9.000	225	S22b-21	48.402	46.902	S22b-24	48.754	46.492	69.702	SD			1.28	2.04	1.66	1.50	2.26	1.88	0-2	170	N/A	F1050
S22b-10.000	225	S22b-22	48.924	47.424	S22b-23	49.292	46.984	74.531	CD			1.28	2.08	1.68	1.50	2.31	1.90	0-2	169	S	F1050
S22b-10.001	225	S22b-23	49.292	46.984	S22b-24	48.754	46.894	15.441	CD			2.08	1.64	1.86	2.31	1.86	2.08	2-4	172	S	C1050
S22b-9.001	300	S22b-24	48.754	46.417	S22b-25	48.363	46.352	16.047	CD			2.04	1.71	1.87	2.34	2.01	2.17	2-4	247	S	C1050
S22b-1.007	600	S22b-25	48.363	42.382	S22b-30	48.116	42.267	57.426	CD			5.38	5.25	5.32	5.98	5.85	5.92	4-6	499	S	D1200
S22b-11.000	225	S22b-26	48.754	47.254	S22b-29	48.648	46.944	52.808	SD			1.28	1.48	1.38	1.50	1.70	1.60	0-2	170	N/A	F1050
S22b-12.000	225	S22b-27	49.303	47.803	S22b-28	49.256	47.495	52.045	CD			1.28	1.54	1.41	1.50	1.76	1.63	0-2	169	S	F1050
S22b-12.001	225	S22b-28	49.256	47.495	S22b-29	48.648	47.148	16.958	CD			1.54	1.28	1.41	1.76	1.50	1.63	0-2	49	S	C1050
S22b-11.001	225	S22b-29	48.648	46.944	S22b-30	48.116	46.616	19.176	CD			1.48	1.28	1.38	1.70	1.50	1.60	0-2	58	S	C1050
S22b-1.008	600	S22b-30	48.116	42.267	S22b-35	47.562	42.139	64.333	CD			5.25	4.82	5.04	5.85	5.42	5.64	4-6	503	S	D1200
S22b-13.000	225	S22b-31	48.639	47.139	S22b-34	48.192	46.692	57.719	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	129	N/A	F1050
S22b-14.000	225	S22b-32	49.247	47.747	S22b-33	48.997	47.447	51.479	CD			1.28	1.33	1.30	1.50	1.55	1.53	0-2	172	S	F1050
S22b-14.001	225	S22b-33	48.997	47.447	S22b-34	48.192	46.692	22.78	CD			1.33	1.28	1.30	1.55	1.50	1.53	0-2	30	S	F1050
S22b-13.001	225	S22b-34	48.192	46.692	S22b-35	47.562	46.062	20.758	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	33	S	F1050
S22b-1.009	600	S22b-35	47.562	42.139	S22b-40	46.373	41.996	71.201	CD			4.82	3.78	4.30	5.42	4.38	4.90	4-6	498	S	D1200
S22b-15.000	225	S22b-36	48.132	46.632	S22b-39	47.227	45.727	64.616	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	71	N/A	F1050
S22b-16.000	225	S22b-37	48.935	47.435	S22b-38	48.131	46.631	65.017	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	81	S	F1050
S22b-16.001	225	S22b-38	48.131	46.631	S22b-39	47.227	45.727	23.1	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	26	S	F1050
S22b-15.001	225	S22b-39	47.227	45.727	S22b-40	46.373	44.873	24.709	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	29	S	F1050
S22b-1.010	600	S22b-40	46.373	41.996	S22b-55	44.3	41.833	81.449	CD			3.78	1.87	2.82	4.38	2.47	3.42	2-4	500	S	D1200
S22b-17.000	225	S22b-41	47.109	45.609	S22b-54	45.26	43.76	83.492	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	45	N/A	F1050
S22b-18.000	225	S22b-42	48.062	46.562	S22b-53	46.31	44.81	89.928	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	51	S	F1050
S22b-19.000	150	S22b-43	47.5	46.075	S22b-44	45.58	44.155	40.678	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	21	S	F1050
S22b-19.001	225	S22b-44	45.58	44.08	S22b-45	44.77	43.27	47.305	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	58	S	F1050
S22b-19.002	225	S22b-45	44.77	43.27	S22b-52	45.64	42.915	60.912	CD			1.28	2.50	1.89	1.50	2.73	2.11	2-4	172	S	F1050
S22b-20.000	150	S22b-46	47.06	45.635	S22b-47	46.27	44.845	19.073	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	24	S	F1050
S22b-20.001	150	S22b-47	46.27	44.845	S22b-48	45.65	44.225	19.338	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	31	S	F1050

S22b-20.002	150	S22b-48	45.65	44.225	S22b-49	45.17	43.745	21.595	CD	1.28	1.28	1.28	1.43	1.43	1.43	0-2	45	S	F1050
S22b-20.003	150	S22b-49	45.17	43.745	S22b-50	44.95	43.454	29.652	CD	1.28	1.35	1.31	1.43	1.50	1.46	0-2	102	S	F1050
S22b-20.004	150	S22b-50	44.95	43.454	S22b-51	45.19	43.031	43.126	CD	1.35	2.01	1.68	1.50	2.16	1.83	0-2	102	S	F1050
S22b-20.005	450	S22b-51	45.19	42.731	S22b-52	45.64	42.695	14.488	CD	2.01	2.50	2.25	2.46	2.95	2.70	2-4	402	S	C1050
S22b-19.003	450	S22b-52	45.64	42.69	S22b-53	46.31	42.632	23.888	CD	2.50	3.23	2.86	2.95	3.68	3.31	2-4	412	S	C1050
S22b-18.001	525	S22b-53	46.31	42.557	S22b-54	45.26	42.509	23.769	CD	3.23	2.23	2.73	3.75	2.75	3.25	2-4	495	S	D1050
S22b-17.001	525	S22b-54	45.26	42.509	S22b-55	44.3	42.458	25.368	CD	2.23	1.32	1.77	2.75	1.84	2.30	2-4	497	S	C1050
S22b-1.011	600	S22b-55	44.3	40.391	S22b-56	42.112	40.237	76.993	CD	3.31	1.28	2.29	3.91	1.88	2.89	2-4	500	S	D1200
S22b-1.012	600	S22b-56	42.112	40.237	S22b-57	40.82	38.945	89.88	CD	1.28	1.28	1.28	1.88	1.88	1.88	0-2	70	S	C1200
S22b-1.013	600	S22b-57	40.82	38.945	S22b-71	40.6	38.725	50.695	CD	1.28	1.28	1.28	1.88	1.88	1.88	0-2	230	S	C1200
S22b-21.000	225	S22b-58	56.7	55.2	S22b-59	56	54.5	86.512	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	124	S	F1050
S22b-21.001	225	S22b-59	56	54.5	S22b-60	55.102	53.602	39.409	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	44	S	F1050
S22b-21.002	225	S22b-60	55.102	53.602	S22b-61	53.884	52.384	90.616	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	74	S	F1050
S22b-21.003	225	S22b-61	53.884	52.384	S22b-62	50.657	49.157	89.771	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	28	S	F1050
S22b-21.004	300	S22b-62	50.657	47.795	S22b-66	49.286	47.711	20.402	CD	2.56	1.28	1.92	2.86	1.58	2.22	2-4	243	S	C1050
S22b-22.000	225	S22b-63	50.646	49.146	S22b-64	49.639	48.139	24.151	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	24	S	F1050
S22b-22.001	225	S22b-64	49.639	48.139	S22b-65	49.447	47.947	24.912	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	130	S	F1050
S22b-22.002	225	S22b-65	49.447	47.947	S22b-66	49.286	47.786	10.827	CD	1.28	1.28	1.28	1.50	1.50	1.50	0-2	67	S	F1050
S22b-21.005	300	S22b-66	49.286	47.711	S22b-67	48.109	46.534	40.969	CD	1.28	1.28	1.28	1.58	1.58	1.58	0-2	35	S	F1050
S22b-21.006	375	S22b-67	48.109	43.936	S22b-68	45.414	43.764	55.352	CD	3.80	1.28	2.54	4.17	1.65	2.91	2-4	322	S	D1050
S22b-21.007	375	S22b-68	45.414	41.317	S22b-69	42.822	41.172	47.104	CD	3.72	1.28	2.50	4.10	1.65	2.87	2-4	325	S	D1050
S22b-21.008	375	S22b-69	42.822	39.563	S22b-70	41.053	39.403	52.122	CD	2.88	1.28	2.08	3.26	1.65	2.45	2-4	326	S	C1050
S22b-21.009	375	S22b-70	41.053	39.403	S22b-71	40.6	38.95	30.903	CD	1.28	1.28	1.28	1.65	1.65	1.65	0-2	68	S	F1050
S22b-1.014	750	S22b-71	40.6	38.575	S22b-72	45	38.325	23.515	CD	1.28	5.93	3.60	2.03	6.68	4.35	4-6	94	S	C1350

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
S22b-21.000	LR	MLN 14+350
S22b-21.001	LR	MLN 14+350
S22b-21.002	LR	MLN 14+350
S22b-21.003	LR	MLN 14+350
S22b-21.004	LR	MLN 14+350
S22b-22.000	LR	MLN 14+350

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	14+100	14+950	1000.993																
SWC	14+250	14+350	132.784																
SWC	14+275	14+375	148.895																
SWC	14+400	14+500	89.928																
SWC	14+500	14+550	65.017																
SWC	14+550	14+600	51.479																
SWC	14+600	14+650	52.045																
SWC	14+675	14+750	74.531																
SWC	14+750	14+825	86.759																
SWC	14+850	14+975	141.532																
SWC	14+875	14+900	28.466																
SWC	14+900	14+950	49.439																
SWC	14+850	14+950	100																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S22b-1.014	Petrol Interceptor Class 1 Bypass Separator NSB E100
		S22b-1.015	Spillage Containment Area - 25m3 Wetland - Volume of treatment 414.15m3
		S22b-1.016	Infiltration Basin - 2543m3

RDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S22C1 (Doc Ref. GCOB-4.03.03.03.3-032) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S22C1-1.000	225	S22C1-1	49.434	47.934	S22C1-2	46.686	45.198	90.373	CD			1.28	1.26	1.27	1.50	1.49	1.49	0-2	33	S	F1050
S22C1-1.001	300	S22C1-2	46.686	45.123	S22C1-3	45.273	43.719	84.25	CD			1.26	1.25	1.26	1.56	1.55	1.56	0-2	60	S	F1050
S22C1-1.002	300	S22C1-3	45.273	43.719	S22C1-4	43.909	42.334	89.035	CD			1.25	1.28	1.26	1.55	1.58	1.56	0-2	64	S	F1050
S22C1-1.003	300	S22C1-4	43.909	42.334	S22C1-5	42.608	41.165	79.49	CD			1.28	1.14	1.21	1.58	1.44	1.51	0-2	68	S	F1050
S22C1-1.004	375	S22C1-5	42.608	37.99	S22C1-6	39.229	37.715	85.106	CD			4.24	1.14	2.69	4.62	1.51	3.07	2-4	309	S	D1050
S22C1-1.005	450	S22C1-6	39.229	33.345	S22C1-7	34.757	33.126	89.56	CD			5.43	1.18	3.31	5.88	1.63	3.76	2-4	409	S	D1050
S22C1-1.006	450	S22C1-7	34.757	28.841	S22C1-8	30.264	28.622	89.753	CD			5.47	1.19	3.33	5.92	1.64	3.78	2-4	410	S	D1050
S22C1-1.007	450	S22C1-8	30.264	25.942	S22C1-9	27.321	25.722	90.64	CD			3.87	1.15	2.51	4.32	1.60	2.96	2-4	412	S	D1050
S22C1-1.008	450	S22C1-9	27.321	25.722	S22C1-10	26.454	24.818	42.741	CD			1.15	1.19	1.17	1.60	1.64	1.62	0-2	47	S	F1050
S22C1-1.009	525	S22C1-10	26.454	24.743	S22C1-11	26.54	24.713	9.624	CD			1.19	1.30	1.24	1.71	1.83	1.77	0-2	321	S	C1200
S22C1-1.010	525	S22C1-11	26.54	24.713	S22C1-12	26.65	24.563	14.171	CD			1.30	1.56	1.43	1.83	2.09	1.96	0-2	94	S	C1200
S22C1-1.012	225	S22C1-13	27.13	20.892	S22C1-100	27.722	20.806	14.613	CD			6.01	6.69	6.35	6.24	6.92	6.58	6-8	170	S	E1500

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																			
S22C1-1.000	LR	MLN 14+000																			
S22C1-1.001	LR	MLN 14+000																			
S22C1-1.002	LR	MLN 14+000																			
S22C1-1.003	LR	MLN 14+000																			
S22C1-1.004	LR	MLN 14+000																			
S22C1-1.005	LR	MLN 13+900																			
S22C1-1.006	LR	MLN 13+850																			
S22C1-1.007	LR	MLN 13+750																			
S22C1-1.008	LR	MLN 13+650																			

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																			
		S22C1-1.010	Petrol Interceptor Class 1 Bypass Separator NSB 030																		
			Spillage Containment Area - 25m3																		
		S22C1-1.011	Attenuation Pond - Volume of Storage 786m3																		
		MH S22C1-13	Hydrobrake - Design Discharge 5l/s																		

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S22C2 (Doc Ref. GCOB-4.03.03.03.3-033) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S22C2-1.000	225	S22C2-1	42.326	40.826	S22C2-2	41.386	39.886	72.682	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	77	S	F1050
S22C2-1.001	225	S22C2-2	41.386	39.886	S22C2-9	41.174	39.674	35.257	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	166	S	F1050
S22C2-2.000	225	S22C2-3	43.537	42.037	S22C2-4	43.412	41.589	74.781	CD			1.28	1.60	1.44	1.50	1.82	1.66	0-2	167	S	F1050
S22C2-2.001	225	S22C2-4	43.412	41.589	S22C2-5	43.175	41.288	50.313	CD			1.60	1.66	1.63	1.82	1.89	1.86	0-2	167	S	C1050
S22C2-2.002	225	S22C2-5	43.175	41.288	S22C2-6	42.86	41.053	39.199	CD			1.66	1.58	1.62	1.89	1.81	1.85	0-2	167	S	C1050
S22C2-2.003	300	S22C2-6	42.86	40.978	S22C2-7	42.545	40.715	44.672	CD			1.58	1.53	1.56	1.88	1.83	1.86	0-2	170	S	C1050
S22C2-2.004	300	S22C2-7	42.545	40.715	S22C2-8	41.928	40.326	62.529	CD			1.53	1.30	1.42	1.83	1.60	1.72	0-2	161	S	C1050
S22C2-2.005	300	S22C2-8	41.928	40.326	S22C2-9	41.174	39.599	87.539	CD			1.30	1.28	1.29	1.60	1.58	1.59	0-2	120	S	F1050
S22C2-1.002	375	S22C2-9	41.174	39.524	S22C2-10	41.23	39.491	10.007	CD			1.28	1.36	1.32	1.65	1.74	1.69	0-2	303	S	F1050
S22C2-1.003	375	S22C2-10	41.23	39.491	S22C2-11	41.23	39.241	11.652	CD			1.36	1.61	1.49	1.74	1.99	1.86	0-2	47	S	C1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage
S22C2-1.001	SR	MLN 13+900
S22C2-1.000	SR	MLN 13+900
S22C2-2.000	SR	MLN 13+900
S22C2-2.001	SR	MLN 13+900
S22C2-2.002	SR	MLN 13+900
S22C2-2.003	SR	MLN 13+900
S22C2-2.004	SR	MLN 13+900
S22C2-2.005	SR	MLN 13+900

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S22C2-1.003	Petrol Interceptor Class 1 Bypass Separator NSB 015 Spillage Containment Area - 25m3
		S22C2-1.004	Infiltration Basin - 469m3

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S22E (Doc Ref. GCOB-4.03.03.03.3-034) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S22E-1.000	225	S22E-1	59.049	57.549	S22E-2	59.262	57.169	64.411	CD			1.28	1.87	1.57	1.50	2.09	1.80	0-2	170	S	F1050
S22E-1.001	225	S22E-2	59.262	57.169	S22E-3	58.925	56.987	31.179	CD			1.87	1.71	1.79	2.09	1.94	2.02	2-4	171	S	C1050
S22E-1.002	225	S22E-3	58.925	56.987	S22E-4	58.409	56.737	42.204	CD			1.71	1.45	1.58	1.94	1.67	1.81	0-2	169	S	C1050
S22E-1.003	300	S22E-4	58.409	56.662	S22E-5	58.050	56.475	30.864	CD			1.45	1.28	1.36	1.75	1.58	1.66	0-2	165	S	C1050
S22E-1.004	300	S22E-5	58.050	56.475	S22E-6	57.366	55.791	59.358	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	87	S	F1050
S22E-1.005	300	S22E-6	57.366	55.791	S22E-7	56.665	55.090	54.840	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	78	S	F1050
S22E-1.006	300	S22E-7	56.665	55.090	S22E-8	55.500	53.675	70.654	CD			1.28	1.53	1.40	1.58	1.83	1.70	0-2	50	S	F1050
S22E-1.007	300	S22E-8	55.500	48.925	S22E-14	48.200	46.925	65.739	CD			6.28	0.98	3.63	6.58	1.28	3.93	2-4	33	S	E1500
S22E-2.000	225	S22E-9	57.752	56.252	S22E-10	55.600	54.100	81.153	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	38	S	F1050
S22E-2.001	225	S22E-10	55.600	54.100	S22E-11	53.211	51.712	52.010	CD			1.28	1.27	1.27	1.50	1.50	1.50	0-2	22	S	F1050
S22E-2.002	225	S22E-11	53.211	48.774	S22E-12	49.931	48.431	58.733	CD			4.21	1.28	2.74	4.44	1.50	2.97	2-4	171	S	D1050
S22E-2.003	300	S22E-12	49.931	46.566	S22E-13	47.677	46.402	40.533	CD			3.07	0.97	2.02	3.36	1.28	2.32	2-4	247	S	D1050
S22E-2.004	375	S22E-13	47.677	46.327	S22E-14	48.200	46.281	15.063	CD			0.98	1.54	1.26	1.35	1.92	1.63	0-2	327	S	F1050
S22E-1.008	375	S22E-14	48.200	46.281	S22E-15	48.500	46.131	28.742	CD			1.54	1.99	1.77	1.92	2.37	2.14	2-4	192	S	C1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																			
S22E-1.000	LR	14+500																			
S22E-1.001	LR	14+500																			
S22E-1.002	LR	14+450																			
S22E-1.003	LR	14+450																			
S22E-1.004	LR	14+400																			
S22E-1.005	LR	14+400																			

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment		
SWC	14+250	14+425	232.429																		

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																			
		S22E-1.008	Petrol Interceptor Class 1 Bypass Separator NSB 025																		
			Spillage Containment Area - 25m3																		
		S22E-1.009	Wetland - Volume of treatment 87.3m3																		
		S22E-1.010	Infiltration Basin - 300m3																		

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S26 (Doc Ref. GCOB-4.03.03.03.3-035) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S26-1.000	225	S26-1	50.162	48.662	S26-2	49.855	48.192	80.607	CD			1.28	1.44	1.36	1.50	1.66	1.58	0-2	172	S	F1050
S26-1.001	225	S26-2	49.855	48.192	S26-3	48.755	47.255	90.565	CD			1.44	1.28	1.36	1.66	1.50	1.58	0-2	97	S	C1050
S26-1.002	225	S26-3	48.755	47.255	S26-4	47.614	46.114	59.714	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	52	S	F1050
S26-1.003	225	S26-4	47.614	46.114	S26-5	45.979	44.479	59.322	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	36	S	F1050
S26-1.004	225	S26-5	45.979	44.479	S26-6	43.617	42.118	69.19	CD			1.28	1.27	1.27	1.50	1.50	1.50	0-2	29	S	F1050
S26-1.005	450	S26-6	43.617	41.893	S26-7	43.883	41.858	14.351	CD	RC		1.27	1.58	1.42	1.72	2.03	1.87	0-2	410	Z	F1050
S26-1.006	450	S26-7	43.883	39.967	S26-8	41.524	39.799	68.17	CD			3.47	1.28	2.37	3.92	1.73	2.82	2-4	406	S	D1050
S26-1.007	450	S26-8	41.524	38.775	S26-19	40.428	38.703	29.483	CD			2.30	1.27	1.79	2.75	1.72	2.24	2-4	409	S	C1050
S26-2.000	225	S26-9	42.49	40.99	S26-10	41.96	40.46	39.312	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	74	S	F1050
S26-2.001	225	S26-10	41.96	40.46	S26-11	41.567	40.067	30.723	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	78	S	F1050
S26-2.002	225	S26-11	41.567	40.067	S26-12	40.891	39.391	48.965	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	72	S	F1050
S26-2.003	225	S26-12	40.891	39.391	S26-13	40.516	39.016	39.294	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	105	S	F1050
S26-2.004	225	S26-13	40.516	39.016	S26-18	40.491	38.838	30.137	CD			1.28	1.43	1.35	1.50	1.65	1.58	0-2	169	S	F1050
S26-3.000	225	S26-14	43.48	41.98	S26-15	42.22	40.72	35.087	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	28	S	F1050
S26-3.001	225	S26-15	42.22	40.72	S26-17	40.086	38.586	78.249	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	37	S	F1050
S26-4.000	225	S26-16	41.16	39.66	S26-17	40.086	38.586	67.926	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	63	S	F1050
S26-3.002	450	S26-17	40.086	38.361	S26-18	40.491	38.332	11.8	CD			1.28	1.71	1.49	1.73	2.16	1.94	0-2	407	S	F1050
S26-2.005	450	S26-18	40.491	38.332	S26-19	40.428	38.285	19.284	CD			1.71	1.69	1.70	2.16	2.14	2.15	2-4	410	S	C1050
S26-1.008	450	S26-19	40.428	36.641	S26-20	38.221	36.496	58.96	CD			3.34	1.27	2.31	3.79	1.72	2.76	2-4	407	S	D1050
S26-1.009	450	S26-20	38.221	35.052	S26-21	36.657	34.932	49.121	CD			2.72	1.27	2.00	3.17	1.72	2.45	2-4	409	S	C1050
S26-1.010	450	S26-21	36.657	33.69	S26-22	35.295	33.57	49.101	CD			2.52	1.28	1.90	2.97	1.73	2.35	2-4	409	S	C1050
S26-1.011	450	S26-22	35.295	33.57	S26-23	33.405	31.68	88.329	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	47	S	F1050
S26-1.012	450	S26-23	33.405	31.68	S26-24	32.319	30.594	83.426	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	77	S	F1050
S26-1.013	450	S26-24	32.319	30.594	S26-25	31.867	30.143	93.242	CD			1.28	1.27	1.27	1.73	1.72	1.72	0-2	207	S	F1050
S26-1.014	525	S26-25	31.867	30.068	S26-26	31.824	29.948	58.916	CD			1.27	1.35	1.31	1.80	1.88	1.84	0-2	491	S	C1200
S26-1.015	525	S26-26	31.824	29.948	S26-27	31.73	29.828	58.916	CD			1.35	1.38	1.36	1.88	1.90	1.89	0-2	491	S	C1200
S26-1.016	825	S26-27	31.73	29.528	S26-37	32.254	29.478	15.12	CD			1.38	1.95	1.66	2.20	2.78	2.49	2-4	302	S	C1500
S26-5.000	225	S26-28	48.299	46.799	S26-29	46.011	44.511	100.092	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	44	N/A	F1050
S26-5.001	225	S26-29	46.011	44.511	S26-30	42.826	41.326	100.261	SD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	31	N/A	F1050
S26-5.002	300	S26-30	42.826	38.524	S26-31	39.774	38.199	80.174	SD			4.00	1.28	2.64	4.30	1.58	2.94	2-4	247	N/A	D1050
S26-5.003	300	S26-31	39.774	38.199	S26-32	36.881	35.306	88.423	SD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	31	N/A	F1050
S26-5.004	375	S26-32	36.881	35.231	S26-33	35.102	33.452	70.118	SD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	39	N/A	F1050
S26-5.005	375	S26-33	35.102	33.452	S26-34	33.4	31.751	95.128	SD			1.28	1.27	1.27	1.65	1.65	1.65	0-2	56	N/A	F1050
S26-5.006	450	S26-34	33.4	31.676	S26-35	32.571	30.847	85.127	SD			1.27	1.27	1.27	1.72	1.72	1.72	0-2	103	N/A	F1050
S26-5.007	450	S26-35	32.571	30.847	S26-36	32.367	30.627	90.129	SD			1.27	1.29	1.28	1.72	1.74	1.73	0-2	410	N/A	F1050
S26-5.008	450	S26-36	32.367	30.627	S26-37	32.254	30.417	85.127	SD			1.29	1.39	1.34	1.74	1.84	1.79	0-2	405	N/A	F1050
S26-1.017	900	S26-37	32.254	29.403	S26-60	33.114	29.353	17.756	CD			1.95	2.86	2.41	2.85	3.76	3.31	2-4	355	S	C1500
S26-6.000	225	S26-38	50.176	48.676	S26-39	49.817	48.206	80.126	CD			1.28	1.39	1.33	1.50	1.61	1.56	0-2	170	S	F1050
S26-6.001	225	S26-39	49.817	48.206	S26-40	48.796	47.296	89.492	CD			1.39	1.28	1.33	1.61	1.50	1.56	0-2	98	S	C1050
S26-6.002	225	S26-40	48.796	47.296	S26-41	48.012	46.512	60.291	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	77	S	F1050
S26-6.003	225	S26-41	48.012	46.512	S26-42	46.948	45.448	70.816	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	67	S	F1050
S26-6.004	225	S26-42	46.948	45.448	S26-43	44.496	42.996	102.64	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	42	S	F1050
S26-6.005	225	S26-43	44.496	42.996	S26-44	41.479	39.979	82.455	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	27	S	F1050
S26-6.006	225	S26-44	41.479	39.979	S26-45	38.02	36.427	100.983	CD			1.28	1.37	1.32	1.50	1.59	1.55	0-2	28	S	F1050
S26-6.007	225	S26-45	38.02	36.427	S26-51	37.24	35.74	38.234	CD			1.37	1.28	1.32	1.59	1.50	1.55	0-2	56	S	C1050
S26-7.000	225	S26-46	38.24	36.74	S26-47	38.24	36.66	13.714	CD			1.28	1.36	1.32	1.50	1.58	1.54	0-2	171	S	F1050
S26-7.001	225	S26-47	38.24	36.66	S26-48	38.94	36.412	41.769	CD			1.36	2.30	1.83	1.58	2.53	2.05	2-4	168	S	C1050
S26-7.002	225	S26-48	38.94	36.412	S26-49	38.78	36.146	44.867	CD			2.30	2.41	2.36	2.53	2.63	2.58	2-4	169	S	C1050
S26-7.003	225	S26-49	38.78	36.146	S26-50	37.4	35.812	56.376	CD			2.41	1.36	1.89	2.63	1.59	2.11	2-4	169	S	C1050

S26-7.004	225	S26-50	37.4	35.812	S26-51	37.24	35.685	21.766	CD			1.36	1.33	1.35	1.59	1.56	1.57	0-2	171	S	C1050
S26-6.008	450	S26-51	37.24	35.46	S26-54	37.42	35.436	9.859	CD			1.33	1.53	1.43	1.78	1.98	1.88	0-2	411	S	F1050
S26-8.000	225	S26-52	39.24	37.74	S26-53	38	36.5	38.992	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	31	S	F1050
S26-8.001	225	S26-53	38	36.5	S26-54	37.42	35.92	38.244	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	66	S	F1050
S26-6.009	450	S26-54	37.42	35.436	S26-56	36.178	34.46	37.031	CD			1.53	1.27	1.40	1.98	1.72	1.85	0-2	38	S	C1050
S26-9.000	225	S26-55	37.904	36.404	S26-56	36.178	34.678	66.91	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	39	S	F1050
S26-6.010	450	S26-56	36.178	34.453	S26-57	34.218	32.493	97.4	CD			1.27	1.28	1.28	1.72	1.73	1.73	0-2	50	S	F1050
S26-6.011	450	S26-57	34.218	32.493	S26-58	33.453	31.728	92.281	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	121	S	F1050
S26-6.012	450	S26-58	33.453	31.728	S26-59	33.22	31.495	92.25	CD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	396	S	F1050
S26-6.013	450	S26-59	33.22	31.495	S26-60	33.114	31.28	87.132	CD			1.28	1.38	1.33	1.73	1.83	1.78	0-2	405	S	F1050
S26-1.018	900	S26-60	33.114	29.353	S26-61	38	29.325	14.05	CD			2.86	7.78	5.32	3.76	8.68	6.22	6-8	502	S	C1500
S26-1.019	900	S26-61	38	29.325	S26-62	36.75	29.075	60.458	CD			7.78	6.78	7.28	8.68	7.68	8.18	8-10	242	S	C1500
S26-1.022	225	S26-64	32.25	28.775	S26-65	31.5	28.285	82.539	CD			3.25	2.99	3.12	3.48	3.22	3.35	2-4	168	S	D1050
S26-1.023	225	S26-65	31.5	28.285	S26-66	30.5	27.84	75.689	CD			2.99	2.44	2.71	3.22	2.66	2.94	2-4	170	S	C1050
S26-1.024	225	S26-66	30.5	27.84	S29-45	30.25	27.28	95.939	CD			2.44	2.75	2.59	2.66	2.97	2.82	2-4	171	S	C1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage																

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 15+750	MLN 16+225	359.398																
SWC	MLN 15+750	MLN 16+450	803.529																
SWC	MLN 16+100	MLN 16+750	637.664																
SWC	MLN 16+225	MLN 16+300	67.911																
SWC	MLN 16+225	MLN 16+400	188.431																
SWC	MLN 16+275	MLN 16+375	77.236																
SWC	MLN 16+325	MLN 16+750	435.973																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																
		S26-1.019	Petrol Interceptor Class 1 Bypass Separator NSB 075															
			Spillage Containment Area 25m3															
		S26-1.020	Wetland - Vt 520.8m3															
		S26-1.021	Attenuation Pond - Volume of Storage 3265m3															
		MH S26/64	Orifice - Qbar 4.1l/s															

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S27 (Doc Ref. GCOB-4.03.03.03.3-036) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S27-1.000	225	S27-1	40.26	38.76	S27-2	39.92	38.217	93.117	CD			1.28	1.48	1.38	1.50	1.70	1.60	0-2	171	S	F1050
S27-1.001	225	S27-2	39.92	38.217	S27-3	38.737	37.237	88.263	CD			1.48	1.28	1.38	1.70	1.50	1.60	0-2	90	S	C1050
S27-1.002	225	S27-3	38.737	37.237	S27-4	36.8	35.3	58.694	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	30	S	F1050
S27-1.003	225	S27-4	36.8	35.3	S27-5	33.1	31.6	80.866	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	22	S	F1050
S27-1.004	225	S27-5	33.1	31.6	S27-9	32.192	30.692	31.941	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	35	S	F1050
S27-2.000	150	S27-6	33.102	31.677	S27-7	32.969	31.126	56.154	CD			1.28	1.69	1.48	1.43	1.84	1.63	0-2	102	S	F1050
S27-2.001	150	S27-7	32.969	31.126	S27-8	32.635	30.149	99.531	CD			1.69	2.34	2.01	1.84	2.49	2.16	2-4	102	S	C1050
S27-2.002	150	S27-8	32.635	30.149	S27-9	32.192	29.178	99.002	CD			2.34	2.86	2.60	2.49	3.01	2.75	2-4	102	S	C1050
S27-1.005	375	S27-9	32.192	28.953	S27-10	31.902	28.845	35.153	CD			2.86	2.68	2.77	3.24	3.06	3.15	2-4	325	S	C1050
S27-1.006	525	S27-10	31.902	28.695	S27-14	32.432	28.669	12.56	CD			2.68	3.24	2.96	3.21	3.76	3.49	2-4	483	S	C1200
S27-3.000	150	S27-11	39.38	37.955	S27-12	38.107	36.682	43.016	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	34	S	F1050
S27-3.001	150	S27-12	38.107	36.682	S27-13	33.929	32.504	95.017	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	23	S	F1050
S27-3.002	225	S27-13	33.929	32.429	S27-14	32.432	30.932	82.97	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	55	S	F1050
S27-1.007	525	S27-14	32.432	28.669	S27-15	31.997	28.565	51.968	CD			3.24	2.91	3.07	3.76	3.43	3.60	2-4	500	S	D1200
S27-1.008	525	S27-15	31.997	28.565	S27-16	30.693	28.394	85.367	CD			2.91	1.77	2.34	3.43	2.30	2.87	2-4	499	S	C1200
S27-1.009	525	S27-16	30.693	28.394	S27-24	29.478	27.678	66.072	CD			1.77	1.28	1.52	2.30	1.80	2.05	2-4	92	S	C1200
S27-4.000	225	S27-17	32.241	30.741	S27-18	32.134	30.318	72.464	SD			1.28	1.59	1.43	1.50	1.82	1.66	0-2	171	N/A	F1050
S27-4.001	375	S27-18	32.134	30.168	S27-19	31.825	29.923	80.145	SD			1.59	1.53	1.56	1.97	1.90	1.93	0-2	327	N/A	C1050
S27-4.002	375	S27-19	31.825	29.923	S27-20	31.412	29.663	83.737	SD			1.53	1.37	1.45	1.90	1.75	1.83	0-2	322	N/A	C1050
S27-4.003	375	S27-20	31.412	29.663	S27-21	30.93	29.28	82.645	SD			1.37	1.28	1.32	1.75	1.65	1.70	0-2	216	N/A	C1050
S27-4.004	375	S27-21	30.93	29.28	S27-22	30.274	28.624	82.762	SD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	126	N/A	F1050
S27-4.005	375	S27-22	30.274	28.624	S27-23	29.739	28.089	58.026	SD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	108	N/A	F1050
S27-4.006	525	S27-23	29.739	27.939	S27-24	29.478	27.678	29.962	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	115	S	C1200
S27-1.010	525	S27-24	29.478	27.678	S27-25	28.251	26.451	90.05	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	73	S	C1200
S27-1.011	525	S27-25	28.251	26.451	S27-47	27.255	25.455	93.036	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	93	S	C1200
S27-5.000	300	S27-26	31.715	30.14	S27-27	31.403	29.76	94	CD			1.28	1.34	1.31	1.58	1.64	1.61	0-2	247	S	F1050
S27-5.001	300	S27-27	31.403	29.76	S27-28	31.125	29.45	75.57	CD			1.34	1.38	1.36	1.64	1.68	1.66	0-2	244	S	F1050
S27-5.002	300	S27-28	31.125	29.45	S27-29	30.648	29.073	89.914	CD			1.38	1.28	1.33	1.68	1.58	1.63	0-2	238	S	C1050
S27-5.003	300	S27-29	30.648	29.073	S27-30	30.029	28.454	89.792	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	145	S	F1050
S27-5.004	300	S27-30	30.029	28.454	S27-31	29.496	27.921	83.433	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	157	S	F1050
S27-5.005	300	S27-31	29.496	27.921	S27-32	28.648	27.073	92.49	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	109	S	F1050
S27-5.006	525	S27-32	28.648	26.604	S27-45	28.376	26.576	13.928	CD			1.52	1.28	1.40	2.04	1.80	1.92	0-2	497	S	C1200
S27-6.000	225	S27-33	39.945	38.445	S27-34	39.31	37.81	98.176	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	155	S	F1050
S27-6.001	225	S27-34	39.31	37.81	S27-35	38.127	36.627	65.008	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	55	S	F1050
S27-6.002	225	S27-35	38.127	36.627	S27-36	36.464	34.964	52.783	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	32	S	F1050
S27-6.003	225	S27-36	36.464	34.964	S27-37	34.18	32.68	54.658	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	24	S	F1050
S27-6.004	225	S27-37	34.18	32.68	S27-42	31.22	29.72	67.193	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	23	S	F1050
S27-7.000	150	S27-38	39.16	35.575	S27-39	37.2	34.898	68.935	CD			3.43	2.15	2.79	3.58	2.30	2.94	2-4	102	S	D1050
S27-7.001	150	S27-39	37.2	34.898	S27-40	34.8	33.375	63.725	CD			2.15	1.28	1.71	2.30	1.43	1.86	0-2	42	S	C1050
S27-7.002	225	S27-40	34.8	33.3	S27-41	31.945	30.445	70.791	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	25	S	F1050
S27-7.003	225	S27-41	31.945	30.445	S27-42	31.22	29.72	21.871	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	30	S	F1050
S27-6.005	300	S27-42	31.22	29.645	S27-43	29.427	27.852	65.507	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	37	S	F1050
S27-6.006	375	S27-43	29.427	27.777	S27-44	28.649	26.999	56.42	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	73	S	F1050
S27-6.007	375	S27-44	28.649	26.999	S27-45	28.376	26.726	36.421	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	133	S	F1050
S27-5.007	525	S27-45	28.376	26.576	S27-46	27.655	25.855	90.019	CD			1.28	1.28	1.28	1.80	1.80	1.80	0-2	125	S	C1200
S27-5.008	600	S27-46	27.655	25.78	S27-47	27.255	25.38	41.294	CD			1.28	1.28	1.28	1.88	1.88	1.88	0-2	103	S	C1200
S27-1.012	600	S27-47	27.255	25.38	S27-48	26.134	24.259	96.784	CD			1.28	1.28	1.28	1.88	1.88	1.88	0-2	86	S	C1200
S27-1.013	600	S27-48	26.134	24.259	S27-49	25.444	23.569	57.222	CD			1.28	1.28	1.28	1.88	1.88	1.88	0-2	83	S	C1200
S27-1.014	600	S27-49	25.444	23.569	S27-50	24.75	22.875	57.222	CD			1.28	1.28	1.28	1.88	1.88	1.88	0-2	82	S	C1200

S27-1.015	600	S27-50	24.75	22.875	S27-100	24.369	21.955	71.083	CD			1.28	1.81	1.54	1.88	2.41	2.14	2-4	77	S	C1200
S27-8.000	375	S27-51	27.573	25.923	S27-52	27.25	25.6	89.993	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	279	S	F1050
S27-8.001	375	S27-52	27.25	25.6	S27-53	25.614	23.964	78.852	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	48	S	F1050
S27-8.002	375	S27-53	25.614	23.964	S27-101	24.8	23.474	65.849	CD			1.28	0.95	1.11	1.65	1.33	1.49	0-2	134	S	F1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																		

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 16+675	MLN 17+050	388.034																
SWC	MLN 16+750	MLN 17+050	289.84																
SWC	MLN 16+750	MLN 17+300	525.199																
SWC	MLN 16+825	MLN 17+400	586.185																
SWC	MLN 16+900	MLN 17+125	203.451																
SWC	MLN 16+850	MLN 17+550	761.502																
SWC	MLN 17+400	MLN 17+575	168.845																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																		

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S29 (Doc Ref. GCOB-4.03.03.03.3-037) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S29-1.000	150	S29-1	40.592	39.167	S29-2	40.151	38.637	53.671	CD			1.28	1.36	1.32	1.43	1.51	1.47	0-2	101	S	F1050
S29-1.001	225	S29-2	40.151	38.562	S29-3	40.02	38.49	12.298	CD			1.36	1.31	1.33	1.59	1.53	1.56	0-2	171	S	C1050
S29-1.002	225	S29-3	40.02	38.49	S29-4	39.314	37.814	47.673	CD			1.31	1.28	1.29	1.53	1.50	1.52	0-2	71	S	F1050
S29-1.003	225	S29-4	39.314	37.814	S29-5	38.845	37.345	45.78	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	98	S	F1050
S29-1.004	225	S29-5	38.845	37.345	S29-6	38.403	36.903	42.388	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	96	S	F1050
S29-1.005	225	S29-6	38.403	36.903	S29-7	37.808	36.308	42.386	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	71	S	F1050
S29-1.006	225	S29-7	37.808	36.308	S29-8	36.792	35.292	43.213	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	43	S	F1050
S29-1.007	225	S29-8	36.792	32.393	S29-14	33.593	32.093	51.477	CD			4.17	1.28	2.72	4.40	1.50	2.95	2-4	172	S	D1050
S29-2.000	150	S29-9	39.755	38.33	S29-10	39.438	37.814	52.576	CD			1.28	1.47	1.37	1.43	1.62	1.52	0-2	102	S	F1050
S29-2.001	225	S29-10	39.438	37.739	S29-11	38.84	37.34	51.081	CD			1.47	1.28	1.37	1.70	1.50	1.60	0-2	128	S	C1050
S29-2.002	225	S29-11	38.84	37.34	S29-12	37.461	35.961	61.177	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	44	S	F1050
S29-2.003	225	S29-12	37.461	35.961	S29-13	35.875	34.375	47.221	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	30	S	F1050
S29-2.004	525	S29-13	35.875	31.816	S29-14	33.593	31.793	11.368	CD			3.53	1.28	2.40	4.06	1.80	2.93	2-4	494	S	D1200
S29-1.008	525	S29-14	33.593	31.793	S29-20	33.878	31.702	45.1	CD			1.28	1.65	1.46	1.80	2.18	1.99	0-2	496	S	C1200
S29-3.000	225	S29-15	36.523	35.023	S29-16	35.894	34.394	89.864	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	143	S	F1050
S29-3.001	225	S29-16	35.894	34.394	S29-17	35.093	33.593	65.352	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	82	S	F1050
S29-3.002	225	S29-17	35.093	33.593	S29-18	34.245	32.745	46.223	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	55	S	F1050
S29-3.003	225	S29-18	34.245	32.745	S29-19	33.402	31.902	68.082	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	81	S	F1050
S29-3.004	300	S29-19	33.402	31.827	S29-20	33.878	31.626	49.53	CD			1.28	1.95	1.61	1.58	2.25	1.91	0-2	246	S	F1050
S29-1.009	900	S29-20	33.878	31.026	S29-37	34.946	30.985	20.486	CD			1.95	3.06	2.51	2.85	3.96	3.41	2-4	500	S	C1500
S29-4.000	225	S29-21	36.5	35	S29-22	35.818	34.318	89.871	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	132	S	F1050
S29-4.001	225	S29-22	35.818	34.318	S29-23	34.84	33.34	74.967	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	77	S	F1050
S29-4.002	225	S29-23	34.84	33.34	S29-24	34.38	32.88	55.206	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	120	S	F1050
S29-4.003	375	S29-24	34.38	32.73	S29-25	34.276	32.626	21.051	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	202	S	F1050
S29-4.004	375	S29-25	34.276	32.626	S29-26	34.297	32.475	49.297	SD			1.28	1.45	1.36	1.65	1.82	1.74	0-2	326	N/A	F1050
S29-4.005	450	S29-26	34.297	32.4	S29-37	34.946	32.304	39.487	SD			1.45	2.19	1.82	1.90	2.64	2.27	2-4	411	N/A	C1050
S29-5.000	150	S29-27	41.1	39.675	S29-28	40.844	39.126	55.954	CD			1.28	1.57	1.42	1.43	1.72	1.57	0-2	102	S	F1050
S29-5.001	225	S29-28	40.844	39.051	S29-29	40.691	38.977	12.697	CD			1.57	1.49	1.53	1.79	1.71	1.75	0-2	172	S	C1050
S29-5.002	225	S29-29	40.691	38.977	S29-30	39.82	38.32	42.938	CD			1.49	1.28	1.38	1.71	1.50	1.61	0-2	65	S	C1050
S29-5.003	225	S29-30	39.82	38.32	S29-35	38.44	36.94	33.143	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	24	S	F1050
S29-6.000	150	S29-31	39.92	38.495	S29-32	40.309	37.997	50.687	SD			1.28	2.16	1.72	1.43	2.31	1.87	0-2	102	N/A	F1050
S29-6.001	225	S29-32	40.309	37.922	S29-33	39.942	37.637	48.896	SD			2.16	2.08	2.12	2.39	2.31	2.35	2-4	172	N/A	C1050
S29-6.002	225	S29-33	39.942	37.637	S29-34	39.229	37.365	45.799	SD			2.08	1.64	1.86	2.31	1.86	2.08	2-4	168	N/A	C1050
S29-6.003	225	S29-34	39.229	37.365	S29-35	38.44	36.94	34.942	SD			1.64	1.28	1.46	1.86	1.50	1.68	0-2	82	N/A	C1050
S29-5.004	300	S29-35	38.44	36.865	S29-36	36.789	35.214	54.109	SD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	33	N/A	F1050
S29-5.005	300	S29-36	36.789	35.214	S29-37	34.946	33.371	56.868	SD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	31	N/A	F1050
S29-1.010	900	S29-37	34.946	30.985	S29-38	35.693	30.935	17.347	CD			3.06	3.86	3.46	3.96	4.76	4.36	4-6	347	S	D1500
S29-1.011	900	S29-38	35.693	30.935	S29-39	37.712	30.87	63.233	CD			3.86	5.94	4.90	4.76	6.84	5.80	4-6	973	S	D1500
S29-1.012	900	S29-39	37.712	28.775	S29-40	30.5	28.625	17.881	CD			8.04	0.98	4.51	8.94	1.88	5.41	4-6	119	S	E1500
S29-1.013	900	S29-40	30.5	28.625	S29-41	30.65	28.55	37.455	CD			0.98	1.20	1.09	1.88	2.10	1.99	0-2	499	S	B
S29-1.014	900	S29-41	30.65	28.55	S29-42	30.584	28.3	21.579	CD			1.20	1.38	1.29	2.10	2.28	2.19	2-4	86	S	C1500
S29-1.017	225	S29-44	30.17	25.916	S29-45	30.34	25.869	8.034	CD			4.03	4.25	4.14	4.25	4.47	4.36	4-6	171	S	D1050
S29-1.018	225	S29-45	30.34	25.869	S29-100	29.48	25.726	24.3	CD			4.25	3.53	3.89	4.47	3.75	4.11	4-6	170	S	D1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 16+450	MLN 16+500	212.055																
SWC	MLN 16+650	MLN 16+575	53.671																
SWC	MLN 16+575	MLN 16+450	637.068																
SWC	MLN 16+400	MLN 16+400	55.954																
SWC	MLN 16+450	MLN 16+450	42.938																
SWC	MLN 16+450	MLN 16+500	220.044																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S29-1.014	Petrol Interceptor Class 1 Bypass Separator NSB E075 Spillage Containment Area 25m3
		S29-1.015	Wetland - Vt 311.1m3
		S29-1.016	Attenuation Pond - Volume of Storage 1740m3
		MH S29/44	Orifice - Design Discharge 5l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S30 (Doc Ref. GCOB-4.03.03.03.3-038) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S30-1.000	300	S30-1	46.3	44.8	S30-2	44.335	42.835	76.334	CD			1.20	1.20	1.20	1.50	1.50	1.50	0-2	39	S	F1050
S30-1.001	300	S30-2	44.335	42.835	S30-3	43.263	41.763	69.886	CD			1.20	1.20	1.20	1.50	1.50	1.50	0-2	65	S	F1050
S30-1.002	375	S30-3	43.263	41.688	S30-5	43.001	41.426	49.931	CD			1.20	1.20	1.20	1.58	1.58	1.58	0-2	191	S	F1050
S30-2.000	300	S30-4	43.269	41.694	S30-5	43.001	41.426	35.056	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	131	S	F1050
S30-1.003	750	S30-5	43.001	40.976	S30-7	43.053	40.666	26.656	CD			1.28	1.64	1.46	2.03	2.39	2.21	2-4	86	S	C1350
S30-3.000	300	S30-6	43.111	41.536	S30-7	43.053	41.412	30.534	CD			1.28	1.34	1.31	1.58	1.64	1.61	0-2	246	S	F1050
S30-1.004	750	S30-7	43.053	40.666	S30-8	43.301	40.546	54.448	CD			1.64	2.01	1.82	2.39	2.76	2.57	2-4	454	S	C1350
S30-1.005	750	S30-8	43.301	40.546	S30-9	43.336	40.406	70.107	CD			2.01	2.18	2.09	2.76	2.93	2.84	2-4	501	S	C1350
S30-1.006	750	S30-9	43.336	40.406	S30-19	46.394	40.246	80.123	CD			2.18	5.40	3.79	2.93	6.15	4.54	4-6	501	S	C1350
S30-4.000	300	S30-10	50.17	48.67	S30-11	50.057	48.356	53.754	CD			1.20	1.40	1.30	1.50	1.70	1.60	0-2	171	S	F1050
S30-4.001	300	S30-11	50.057	48.356	S30-12	49.526	47.95	69.575	CD			1.40	1.28	1.34	1.70	1.58	1.64	0-2	171	S	C1050
S30-4.002	300	S30-12	49.526	47.95	S30-13	48.224	46.724	89.632	CD			1.28	1.20	1.24	1.58	1.50	1.54	0-2	73	S	F1050
S30-4.003	300	S30-13	48.224	46.724	S30-19	46.394	44.894	90.143	CD			1.20	1.20	1.20	1.50	1.50	1.50	0-2	49	S	F1050
S30-5.000	300	S30-14	50.169	48.669	S30-15	50.048	48.351	54.446	CD			1.20	1.40	1.30	1.50	1.70	1.60	0-2	171	S	F1050
S30-5.001	300	S30-15	50.048	48.351	S30-16	49.526	47.94	70.4	CD			1.40	1.29	1.34	1.70	1.59	1.64	0-2	171	S	C1050
S30-5.002	300	S30-16	49.526	47.94	S30-17	48.226	46.726	90.355	CD			1.29	1.20	1.24	1.59	1.50	1.54	0-2	74	S	F1050
S30-5.003	300	S30-17	48.226	46.726	S30-18	46.394	44.894	89.861	CD			1.20	1.20	1.20	1.50	1.50	1.50	0-2	49	S	F1050
S30-5.004	600	S30-18	46.394	44.594	S30-19	46.394	44.545	24.6	CD			1.20	1.25	1.22	1.80	1.85	1.82	0-2	502	S	C1200
S30-1.007	750	S30-19	46.394	40.246	S30-25	46.943	40.226	6.647	CD			5.40	5.97	5.68	6.15	6.72	6.43	6-8	332	S	D1500
S30-6.000	225	S30-20	52.733	51.233	S30-21	52.215	50.715	53.457	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	103	S	F1050
S30-6.001	225	S30-21	52.215	50.715	S30-22	51.655	50.155	57.45	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	103	S	F1050
S30-6.002	225	S30-22	51.655	50.155	S30-23	50.527	49.027	57.996	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	51	S	F1050
S30-6.003	225	S30-23	50.527	49.027	S30-24	47.37	45.87	98.367	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	31	S	F1050
S30-6.004	300	S30-24	47.37	45.795	S30-25	46.943	45.455	83.384	CD			1.28	1.19	1.23	1.58	1.49	1.53	0-2	245	S	F1050
S30-1.008	750	S30-25	46.943	40.226	S30-26	46.998	40.054	89.605	CD			5.97	6.19	6.08	6.72	6.94	6.83	6-8	521	S	C1350
S30-1.009	750	S30-26	46.998	40.054	S30-27	45.992	39.885	90	CD			6.19	5.36	5.78	6.94	6.11	6.53	6-8	533	S	E1500
S30-1.010	750	S30-27	45.992	39.885	S30-28	43.463	39.705	90	CD			5.36	3.01	4.18	6.11	3.76	4.93	4-6	500	S	D1350
S30-1.011	750	S30-28	43.463	39.705	S30-29	43.071	39.667	18.803	CD			3.01	2.65	2.83	3.76	3.40	3.58	2-4	495	S	D1350
S30-1.012	750	S30-29	43.071	39.667	S30-30	42.674	39.645	10.725	CD			2.65	2.28	2.47	3.40	3.03	3.22	2-4	488	S	C1350
S30-1.013	750	S30-30	42.674	39.645	S30-31	43.43	39.53	57.753	CD			2.28	3.15	2.71	3.03	3.90	3.46	2-4	502	S	C1350
S30-1.014	750	S30-31	43.43	39.53	S30-32	43.27	39.514	8.162	CD			3.15	3.01	3.08	3.90	3.76	3.83	2-4	510	S	D1500
S30-1.015	750	S30-32	43.27	39.514	S30-33	43	39.395	59.277	CD			3.01	2.86	2.93	3.76	3.61	3.68	2-4	498	S	D1500
S30-1.016	750	S30-33	43	39.395	S30-34	42.5	39.299	48.197	CD			2.86	2.45	2.65	3.61	3.20	3.40	2-4	502	S	C1350
S30-1.017	750	S30-34	42.5	39.299	S30-35	41.75	39.145	76.936	CD			2.45	1.86	2.15	3.20	2.61	2.90	2-4	500	S	C1350
S30-1.018	750	S30-35	41.75	39.145	S30-36	41.406	38.991	77.114	CD			1.86	1.67	1.76	2.61	2.42	2.51	2-4	501	S	C1350
S30-1.019	750	S30-36	41.406	38.991	S30-37	41.337	38.866	62.391	CD			1.67	1.72	1.69	2.42	2.47	2.44	2-4	499	S	C1350
S30-1.020	750	S30-37	41.337	38.866	S30-38	41.5	38.741	62.391	CD			1.72	2.01	1.87	2.47	2.76	2.62	2-4	499	S	C1350
S30-1.021	750	S30-38	41.5	38.741	S30-39	41.375	38.594	73.302	CD			2.01	2.03	2.02	2.76	2.78	2.77	2-4	499	S	C1350
S30-1.022	750	S30-39	41.375	38.594	S30-40	41.976	38.533	30.921	CD			2.03	2.69	2.36	2.78	3.44	3.11	2-4	507	S	C1350
S30-1.023	750	S30-40	41.976	38.533	S30-41	40.3	38.276	45.824	CD			2.69	1.27	1.98	3.44	2.02	2.73	2-4	178	S	C1350
S30-1.024	750	S30-41	40.3	38.123	S30-44	39.977	38.102	10.619	CD			1.43	1.13	1.28	2.18	1.88	2.03	2-4	506	S	C1350
S30-7.000	225	S30-42	41.037	39.612	S30-43	40.418	38.993	56.342	CD			1.20	1.20	1.20	1.43	1.43	1.43	0-2	91	S	F1050
S30-7.001	300	S30-43	40.418	38.918	S30-44	39.977	38.477	33.207	CD			1.20	1.20	1.20	1.50	1.50	1.50	0-2	75	S	F1050
S30-1.025	750	S30-44	39.977	37.11	S30-45	38.86	36.985	62.627	CD			2.12	1.13	1.62	2.87	1.88	2.37	2-4	501	S	C1350
S30-1.026	750	S30-45	38.86	35.845	S30-46	37.603	35.728	58.522	CD			2.27	1.13	1.70	3.02	1.88	2.45	2-4	500	S	C1350
S30-1.027	750	S30-46	37.603	34.982	S30-47	36.76	34.885	48.631	CD			1.87	1.13	1.50	2.62	1.88	2.25	2-4	501	S	C1350
S30-1.028	750	S30-47	36.76	34.885	S30-84	36.547	34.672	40.448	CD			1.13	1.13	1.13	1.88	1.88	1.88	0-2	190	S	C1350

S30-8.000	225	S30-48	39.9	38.475	S30-49	39.563	38.047	43.556	CD			1.20	1.29	1.25	1.43	1.52	1.47	0-2	102	S	F1050
S30-8.001	300	S30-49	39.563	37.972	S30-50	39.575	37.762	51.731	CD			1.29	1.51	1.40	1.59	1.81	1.70	0-2	246	S	F1050
S30-8.002	300	S30-50	39.575	37.762	S30-51	39.761	37.512	60.818	CD			1.51	1.95	1.73	1.81	2.25	2.03	2-4	243	S	C1050
S30-8.003	300	S30-51	39.761	37.512	S30-52	39.606	37.237	66.912	CD			1.95	2.07	2.01	2.25	2.37	2.31	2-4	243	S	C1050
S30-8.004	300	S30-52	39.606	37.237	S30-53	39.197	36.963	67.767	CD			2.07	1.93	2.00	2.37	2.23	2.30	2-4	247	S	C1050
S30-8.005	300	S30-53	39.197	36.963	S30-54	38.711	36.651	77.049	CD			1.93	1.76	1.85	2.23	2.06	2.15	2-4	247	S	C1050
S30-8.006	525	S30-54	38.711	36.426	S30-60	38.164	36.332	46.7	CD			1.76	1.31	1.53	2.29	1.83	2.06	2-4	497	S	C1200
S30-9.000	150	S30-55	42.49	41.065	S30-56	42.33	40.74	33.094	CD			1.28	1.44	1.36	1.43	1.59	1.51	0-2	102	S	F1050
S30-9.001	150	S30-56	42.33	40.74	S30-57	41.454	40.029	33.165	CD			1.44	1.28	1.36	1.59	1.43	1.51	0-2	47	S	C1050
S30-9.002	150	S30-57	41.454	40.029	S30-58	39.796	38.371	34.304	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	21	S	F1050
S30-9.003	225	S30-58	39.796	38.296	S30-59	38.508	37.008	43.342	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	34	S	F1050
S30-9.004	375	S30-59	38.508	36.858	S30-60	38.164	36.514	32.551	CD			1.28	1.28	1.28	1.65	1.65	1.65	0-2	95	S	F1050
S30-8.007	525	S30-60	38.164	36.332	S30-61	37.373	35.648	85.899	CD			1.31	1.20	1.25	1.83	1.72	1.78	0-2	126	S	C1200
S30-8.008	525	S30-61	37.373	35.648	S30-62	37.107	35.382	48.77	CD			1.20	1.20	1.20	1.72	1.73	1.73	0-2	183	S	C1200
S30-8.009	525	S30-62	37.107	35.382	S30-84	36.547	34.822	76.426	CD			1.20	1.20	1.20	1.73	1.72	1.73	0-2	136	S	C1200
S30-10.000	225	S30-63	40.252	38.752	S30-64	40.094	38.362	66.387	SD			1.28	1.51	1.39	1.50	1.73	1.62	0-2	170	N/A	F1050
S30-10.001	225	S30-64	40.094	38.362	S30-65	39.711	37.913	76.906	SD			1.51	1.57	1.54	1.73	1.80	1.77	0-2	171	N/A	C1050
S30-10.002	225	S30-65	39.711	37.913	S30-68	39.328	37.504	70.192	SD			1.57	1.60	1.59	1.80	1.82	1.81	0-2	172	N/A	C1050
S30-11.000	150	S30-66	39.763	38.338	S30-67	39.633	38.081	25.724	CD			1.28	1.40	1.34	1.43	1.55	1.49	0-2	100	S	F1050
S30-11.001	375	S30-67	39.633	37.856	S30-68	39.328	37.677	13.9	CD			1.40	1.28	1.34	1.78	1.65	1.71	0-2	78	S	C1050
S30-10.003	450	S30-68	39.328	37.279	S30-69	39.073	37.196	33.823	SD			1.60	1.43	1.51	2.05	1.88	1.96	0-2	408	N/A	C1050
S30-10.004	450	S30-69	39.073	37.196	S30-70	38.574	36.849	54.186	SD			1.43	1.28	1.35	1.88	1.73	1.80	0-2	156	N/A	C1050
S30-10.005	450	S30-70	38.574	36.849	S30-71	38.008	36.283	60.07	SD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	106	N/A	F1050
S30-10.006	450	S30-71	38.008	36.283	S30-76	37.555	35.831	47.409	SD			1.28	1.27	1.27	1.73	1.72	1.72	0-2	105	N/A	F1050
S30-12.000	150	S30-72	41.09	39.665	S30-73	40.692	39.203	47.099	CD			1.28	1.34	1.31	1.43	1.49	1.46	0-2	102	S	F1050
S30-12.001	150	S30-73	40.692	39.203	S30-74	39.387	37.962	50.208	CD			1.34	1.28	1.31	1.49	1.43	1.46	0-2	40	S	F1050
S30-12.002	150	S30-74	39.387	37.962	S30-75	38.103	36.677	70.789	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	55	S	F1050
S30-12.003	375	S30-75	38.103	35.962	S30-76	37.555	35.905	18.648	CD			1.77	1.28	1.52	2.14	1.65	1.90	0-2	327	S	C1050
S30-10.007	450	S30-76	37.555	35.83	S30-83	37.042	35.317	73.427	SD			1.28	1.28	1.28	1.73	1.73	1.73	0-2	143	N/A	F1050
S30-13.000	150	S30-77	41.19	39.765	S30-78	40.423	38.998	67.04	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	87	S	F1050
S30-13.001	225	S30-78	40.423	38.923	S30-79	39.794	38.294	64.654	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	103	S	F1050
S30-13.002	300	S30-79	39.794	38.219	S30-80	39.501	37.926	19.41	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	66	S	F1050
S30-13.003	300	S30-80	39.501	37.926	S30-81	38.158	36.584	68.125	SD			1.28	1.27	1.27	1.58	1.57	1.57	0-2	51	N/A	F1050
S30-13.004	300	S30-81	38.158	36.584	S30-82	37.269	35.695	49.95	SD			1.27	1.27	1.27	1.57	1.57	1.57	0-2	56	N/A	F1050
S30-13.005	300	S30-82	37.269	35.695	S30-83	37.042	35.468	41.641	SD			1.27	1.27	1.27	1.57	1.57	1.57	0-2	183	N/A	F1050
S30-10.008	900	S30-83	37.042	34.399	S30-84	36.547	34.372	13.5	CD			1.74	1.28	1.51	2.64	2.18	2.41	2-4	500	S	C1500
S30-1.029	900	S30-84	36.547	34.372	S30-85	36.75	34.354	9.063	CD			1.28	1.50	1.39	2.18	2.40	2.29	2-4	503	S	C1500
S30-1.030	900	S30-85	36.75	34.354	S30-86	36.75	34.104	13.258	CD			1.50	1.75	1.62	2.40	2.65	2.52	2-4	53	S	C1500
S30-1.031	900	S30-86	36.75	34.104	S30-87	35	34.054	61.571	CD			1.75	0.05	0.90	2.65	0.95	1.80	0-2	1,231	S	C1500
S30-1.032	1500	S30-87	35	33.454	S30-88	35.5	33.404	80.422				0.05	0.60	0.32	1.55	2.10	1.82	0-2	1,608		C1500
S30-1.033	225	S30-88	35.5	29	S26-65	31.6	28.8	45.298	CD			6.28	2.58	4.43	6.50	2.80	4.65	4-6	226	S	E1500

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
S30-1.012	SR	MLN 15+725
S30-1.013	SR	MLN 15+725

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 15+150	MLN 15+200	110.907																
SWC	MLN 15+200	MLN 15+425	231.207																
SWC	MLN 15+200	MLN 15+725	538.316																
SWC	MLN 15+200	MLN 15+725	515.25																
SWC	MLN 15+425	MLN 15+725	305.062																
SWC	MLN 15+425	MLN 15+725	305.062																
SWC	MLN 16+050	MLN 16+450	510.872																
SWC	MLN 16+050	MLN 16+175	45.298																
SWC	MLN 16+125	MLN 16+125	56.443																
SWC	MLN 16+350	MLN 16+450	168.096																
SWC	MLN 16+400	MLN 16+475	143.905																
SWC	MLN 16+475	MLN 16+475	25.724																
SWC	MLN 16+475	MLN 16+800	367.833																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S30-1.030	Petrol Interceptor Class 1 Bypass Separator NSB E075
			Spillage Containment Area 25m3
		S30-1.031	Wetland - Vt 687m3
		S30-1.032	Attenuation Pond - Volume of Storage 4227m3
		MH S30/88	Orifice - Qbar 5.1l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S31A (Doc Ref. GCOB-4.03.03.03.3-039) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S31-1.000	150	S31-1	65.947	62.208	S31-2	63.375	61.95	26.274	CD			3.59	1.28	2.43	3.74	1.43	2.58	2-4	102	S	D1050
S31-1.001	150	S31-2	63.375	61.95	S31-6	60.204	58.779	70.061	FD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	22	K	F1050
S31-2.000	150	S31-3	65.827	62.047	S31-4	63.204	61.779	27.269	FD			3.63	1.28	2.45	3.78	1.43	2.60	2-4	102	K	D1050
S31-2.001	150	S31-4	63.204	59.417	S31-5	60.179	58.754	67.573	FD			3.64	1.28	2.46	3.79	1.43	2.61	2-4	102	K	D1050
S31-2.002	225	S31-5	60.179	58.679	S31-6	60.204	58.633	7.889	CD			1.28	1.35	1.31	1.50	1.57	1.54	0-2	172	S	F1050
S31-1.002	225	S31-6	60.204	58.633	S31-7	61.25	58.598	5.953	CD			1.35	2.43	1.89	1.57	2.65	2.11	2-4	170	S	F1050
S31-1.003	225	S31-7	61.25	58.598	S31-100	58.75	58.409	31.564	CD			2.43	0.12	1.27	2.65	0.34	1.50	0-2	167	S	C1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S31B (Doc Ref. GCOB-4.03.03.03.3-040) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S31-3.000	150	S31-8	60.043	58.618	S31-9	59.249	57.824	77.761	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	98	S	F1050
S31-3.001	150	S31-9	59.249	57.824	S31-11	59.082	57.612	18.765	CD			1.28	1.32	1.30	1.43	1.47	1.45	0-2	89	S	F1050
S31-4.000	225	S31-10	58.771	57.271	S31-11	59.082	56.966	30.636	CD			1.28	1.89	1.58	1.50	2.12	1.81	0-2	100	S	F1050
S31-3.002	225	S31-11	59.082	56.966	S31-101	57.5	56.478	81.557	CD			1.89	0.80	1.34	2.12	1.02	1.57	0-2	167	S	C1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage
S31-3.000	SR	MLN 7+275
S31-3.001	SR	MLN 7+275
S31-4.000	SR	MLN 7+275

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S31C (Doc Ref. GCOB-4.03.03.03.3-041) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S31-5.000	150	S31-12	58.772	57.347	S31-13	54.989	53.564	87.809	FD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	23	K	F1050
S31-5.001	150	S31-13	54.989	50.308	S31-14	51.323	49.898	41.727	FD			4.53	1.28	2.90	4.68	1.43	3.05	2-4	102	K	D1050
S31-5.002	150	S31-14	51.323	49.898	S31-16	48.3	46.875	47.116	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	16	S	F1050
S31-6.000	225	S31-15	46.914	46.014	S31-16	48.3	45.861	76.713	CD			0.67	2.21	1.44	0.90	2.44	1.67	0-2	501	S	F1050
S31-5.003	225	S31-16	48.3	45.861	S31-20	48.28	45.839	6.581	CD			2.21	2.22	2.22	2.44	2.44	2.44	2-4	299	S	C1050
S31-7.000	150	S31-17	58.715	53.198	S31-18	53.688	52.263	95.239	FD			5.37	1.28	3.32	5.52	1.43	3.47	2-4	102	K	D1050
S31-7.001	150	S31-18	53.688	47.584	S31-20	48.28	46.855	74.275	CD			5.95	1.28	3.61	6.10	1.43	3.76	2-4	102	S	D1050
S31-8.000	900	S31-19	47	45.325	S31-20	48.28	45.164	80.692	CD			0.77	2.22	1.50	1.68	3.12	2.40	2-4	501	S	B
S31-5.004	225	S31-20	48.28	44.108	S31-21	45.15	43.76	6.963	CD			3.95	1.17	2.56	4.17	1.39	2.78	2-4	20	S	D1050
S31-5.005	225	S31-21	45.15	43.76	S31-102	45.1	43.735	4.141	CD			1.17	1.14	1.15	1.39	1.37	1.38	0-2	166	S	F1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S31-8.000	Attenuation storage provided in oversized pipes
		MH S31/21	Hydrobrake - Design Discharge 5l/s

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S32 (Doc Ref. GCOB-4.03.03.03.3-042) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S32-1.000	150	S32-1	60.671	59.246	S32-2	60	58.575	24.147	FD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	36	K	F1050
S32-1.001	150	S32-2	60	58.575	S32-3	59.786	58.28	30.005	FD			1.28	1.36	1.32	1.43	1.51	1.47	0-2	102	K	F1050
S32-1.002	150	S32-3	59.786	58.28	S32-4	59.458	57.982	30.004	FD			1.36	1.33	1.34	1.51	1.48	1.49	0-2	101	K	C1050
S32-1.003	150	S32-4	59.458	57.982	S32-5	58.546	57.121	70.086	CD			1.33	1.28	1.30	1.48	1.43	1.45	0-2	81	S	F1050
S32-1.004	150	S32-5	58.546	57.121	S32-6	58.164	56.739	37.009	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	97	S	F1050
S32-1.005	150	S32-6	58.164	56.739	S32-7	58.274	56.459	28.518	CD			1.28	1.67	1.47	1.43	1.82	1.62	0-2	102	S	F1050
S32-1.006	150	S32-7	58.274	56.459	S32-8	58.818	56.219	24	CD			1.67	2.45	2.06	1.82	2.60	2.21	2-4	100	S	C1050
S32-1.007	150	S32-8	58.818	56.219	S32-9	59.159	55.989	23	CD			2.45	3.02	2.73	2.60	3.17	2.88	2-4	100	S	C1050
S32-1.008	225	S32-9	59.159	55.914	S32-10	59.192	55.779	23	CD			3.02	3.19	3.10	3.25	3.41	3.33	2-4	170	S	D1050
S32-1.009	225	S32-10	59.192	55.779	S32-11	58.893	55.633	25	CD			3.19	3.04	3.11	3.41	3.26	3.34	2-4	171	S	D1050
S32-1.010	225	S32-11	58.893	55.633	S32-12	56.811	55.219	70	CD			3.04	1.37	2.20	3.26	1.59	2.43	2-4	169	S	D1050
S32-1.011	300	S32-12	56.811	55.144	S32-25	56.725	55.111	8.03	CD			1.37	1.31	1.34	1.67	1.61	1.64	0-2	243	S	C1050
S32-2.000	150	S32-13	60.687	59.262	S32-14	59.979	58.554	20.385	FD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	29	K	F1050
S32-2.001	150	S32-14	59.979	58.554	S32-15	59.571	58.146	39.942	FD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	98	K	F1050
S32-2.002	150	S32-15	59.571	58.146	S32-16	59.259	57.834	30.696	FD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	98	K	F1050
S32-2.003	150	S32-16	59.259	57.834	S32-17	58.836	57.24	60.465	CD			1.28	1.45	1.36	1.43	1.60	1.51	0-2	102	S	F1050
S32-2.004	150	S32-17	58.836	57.24	S32-18	58.619	57.02	22.402	CD			1.45	1.45	1.45	1.60	1.60	1.60	0-2	102	S	C1050
S32-2.005	150	S32-18	58.619	57.02	S32-19	58.427	56.808	21.527	CD			1.45	1.47	1.46	1.60	1.62	1.61	0-2	102	S	C1050
S32-2.006	150	S32-19	58.427	56.808	S32-20	58.545	56.545	26.389	CD			1.47	1.85	1.66	1.62	2.00	1.81	0-2	100	S	C1050
S32-2.007	225	S32-20	58.545	56.47	S32-21	59.061	56.327	24.382	CD			1.85	2.51	2.18	2.08	2.73	2.40	2-4	171	S	C1050
S32-2.008	225	S32-21	59.061	56.327	S32-22	59.435	56.177	25.267	CD			2.51	3.03	2.77	2.73	3.26	3.00	2-4	168	S	C1050
S32-2.009	225	S32-22	59.435	56.177	S32-23	59.467	56.039	23.44	CD			3.03	3.20	3.12	3.26	3.43	3.34	2-4	170	S	D1050
S32-2.010	225	S32-23	59.467	56.039	S32-24	59.138	55.889	25.351	CD			3.20	3.02	3.11	3.43	3.25	3.34	2-4	169	S	D1050
S32-2.011	225	S32-24	59.138	55.889	S32-25	56.725	55.225	75.115	CD			3.02	1.28	2.15	3.25	1.50	2.37	2-4	113	S	D1050
S32-1.012	300	S32-25	56.725	54.523	S32-26	56.061	54.486	8.95	CD			1.90	1.28	1.59	2.20	1.58	1.89	0-2	242	S	C1050
S32-1.013	300	S32-26	56.061	53.82	S32-31	55.362	53.787	8.09	CD			1.94	1.28	1.61	2.24	1.58	1.91	0-2	245	S	C1050
S32-3.000	150	S32-27	57.69	56.265	S32-28	56.516	55.091	51.081	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	44	S	F1050
S32-3.001	150	S32-28	56.516	55.091	S32-31	55.362	53.937	21.994	CD			1.28	1.28	1.28	1.43	1.43	1.43	0-2	19	S	F1050
S32-4.000	225	S32-29	57.68	56.18	S32-30	55.8	54.3	68	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	36	S	F1050
S32-4.001	225	S32-30	55.8	53.911	S32-31	55.362	53.862	8.363	CD			1.66	1.28	1.47	1.89	1.50	1.69	0-2	171	S	C1050
S32-1.014	300	S32-31	55.362	50.594	S32-32	51.84	50.265	81.365	CD			4.47	1.28	2.87	4.77	1.58	3.17	2-4	247	S	D1050
S32-1.015	300	S32-32	51.84	50.265	S32-35	51.261	49.686	21.419	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	37	S	F1050
S32-5.001	300	S32-34	50	48.15	S32-35	51.261	48.096	12.625	CD			1.55	2.87	2.21	1.85	3.17	2.51	2-4	234	S	C1050
S32-1.016	225	S32-35	51.261	48.096	S32-100	51.045	47.96	10.195	CD			2.94	2.86	2.90	3.17	3.09	3.13	2-4	75	S	C1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage																			
S32-1.014	SR	MLN 6+350																			
S32-1.015	SR	MLN 6+350																			

3. Grassed & Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
GSWC	MLN 6+500	MLN 6+600	135.613																
GSWC	MLN 6+500	MLN 6+600	130.783																
SWC	MLN 6+450	MLN 6+500	47																
SWC	MLN 6+425	MLN 6+500	73.089																
GSWC	MLN 6+325	MLN 6+450	118																
GSWC	MLN 6+325	MLN 6+425	100.466																
GSWC	MLN 6+275	MLN 6+300	51.081																
GSWC	MLN 6+275	MLN 6+300	68																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number																			
		S32-5.000	Attenuation Pond - Volume of Storage 269m3																		
		MH S32/35	Hydrobrake - Design Discharge 5l/s																		

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S33 (Doc Ref. GCOB-4.03.03.03.3-043) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S33-1.000	225	S33-1	54.174	53.274	S33-2	53.364	52.464	73.71	CD	RC		0.67	0.67	0.67	0.90	0.90	0.90	0-2	91	Z	F1050
S33-1.001	375	S33-2	53.364	52.314	S33-3	53.11	52.06	32.929	CD	RC		0.67	0.67	0.67	1.05	1.05	1.05	0-2	130	Z	F1050
S33-1.002	375	S33-3	53.11	52.06	S33-10	53.204	51.915	33.734	CD	RC		0.67	0.91	0.79	1.05	1.29	1.17	0-2	233	Z	F1050
S33-2.000	300	S33-4	53.3	52.274	S33-5	53.3	51.97	52.145	CD	RC		0.73	1.03	0.88	1.03	1.33	1.18	0-2	172	Z	F1050
S33-2.001	300	S33-5	53.3	51.97	S33-6	53.3	51.798	29.294	CD	RC		1.03	1.20	1.12	1.33	1.50	1.42	0-2	170	Z	F1050
S33-2.002	300	S33-6	53.3	51.798	S33-9	53.2	51.533	44.934	CD			1.20	1.37	1.28	1.50	1.67	1.58	0-2	170	S	F1050
S33-3.000	225	S33-7	53.3	51.953	S33-8	53.3	51.833	20.497	CD	RC		1.12	1.24	1.18	1.35	1.47	1.41	0-2	171	Z	F1050
S33-3.001	225	S33-8	53.3	51.833	S33-9	53.2	51.798	5.948	CD	RC		1.24	1.18	1.21	1.47	1.40	1.43	0-2	170	Z	F1050
S33-2.003	300	S33-9	53.2	51.533	S33-10	53.204	51.477	12.912	CD			1.37	1.43	1.40	1.67	1.73	1.70	0-2	231	S	C1050
S33-1.003	375	S33-10	53.204	51.402	S33-11	53.303	51.326	17.773	CD			1.43	1.60	1.51	1.80	1.98	1.89	0-2	234	S	C1050
S33-1.004	375	S33-11	53.303	51.326	S33-13	53.38	51.299	6.124	CD			1.60	1.71	1.65	1.98	2.08	2.03	2-4	227	S	C1050
S33-4.000	225	S33-12	53.175	51.675	S33-13	53.38	51.5	40.641	CD			1.28	1.66	1.47	1.50	1.88	1.69	0-2	232	S	F1050
S33-1.005	375	S33-13	53.38	51.299	S33-14	53.181	50.835	107.764	CD			1.71	1.97	1.84	2.08	2.35	2.21	2-4	232	S	C1050
S33-1.006	375	S33-14	53.181	50.835	S33-17	53.105	50.777	13.336	CD			1.97	1.95	1.96	2.35	2.33	2.34	2-4	230	S	C1050
S33-5.000	225	S33-15	52.476	50.976	S33-16	52.873	50.815	26.881	CD			1.28	1.83	1.55	1.50	2.06	1.78	0-2	167	S	F1050
S33-5.001	225	S33-16	52.873	50.815	S33-17	53.105	50.69	20.827	CD			1.83	2.19	2.01	2.06	2.42	2.24	2-4	167	S	C1050
S33-1.007	375	S33-17	53.105	50.54	S33-18	53.009	50.477	14.707	CD			2.19	2.16	2.17	2.57	2.53	2.55	2-4	233	S	C1050
S33-1.008	375	S33-18	53.009	50.477	S33-19	52.641	50.327	34.711	CD			2.16	1.94	2.05	2.53	2.31	2.42	2-4	231	S	C1050
S33-1.009	375	S33-19	52.641	50.327	S33-20	52.407	50.244	19.368	CD			1.94	1.79	1.86	2.31	2.16	2.24	2-4	233	S	C1050
S33-1.010	375	S33-20	52.407	50.244	S33-23	52.417	50.117	10.231	CD			1.79	1.93	1.86	2.16	2.30	2.23	2-4	81	S	C1050
S33-6.000	225	S33-21	51.549	50.6	S33-23	52.417	50.266	55.771	CD	RC		0.72	1.93	1.33	0.95	2.15	1.55	0-2	167	Z	F1050
S33-7.000	1000	S33-22	52.3	49.541	S33-23	52.417	49.491	13.579	CD			1.76	1.93	1.84	2.76	2.93	2.84	2-4	272	S	C1050
S33-1.011	1000	S33-23	52.417	49.491	S33-100	52.256	49.32	10.157	CD			1.93	1.94	1.93	2.93	2.94	2.93	2-4	59	S	C1050

2. Gully Schedule

Pipe Ref.	Location (21) (22)	Chainage
S33-1.000	SR	MLN 15+000
S33-1.001	SR	MLN 15+000
S33-1.002	SR	MLN 15+000
S33-1.003	SR	MLN 15+000
S33-2.000	SR	MLN 15+000
S33-1.004	SR	MLN 15+050
S33-1.005	SR	MLN 15+125
S33-3.000	SR	MLN 15+000
S33-3.001	SR	MLN 15+100
S33-1.006	SR	MLN 15+125
S33-1.007	SR	MLN 15+150
S33-1.008	SR	MLN 15+150
S33-1.009	SR	MLN 15+150
S33-4.000	SR	MLN 15+000
S33-5.000	SR	MLN 15+150
S33-5.001	SR	MLN 15+150
S33-1.010	SR	MLN 15+150
S33-6.000	SR	MLN 15+200

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L (24) (m)	u/s IL (1) (mOD)	d/s IL (1) (mOD)	Channel Depth (m)	X (23) (m)	V (23)	W (23)	Y (23) (m)	Outlet Ref. No.	No. of gratings	G (23) (m)	H (23) (m)	Z (23) (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S33-5.000	Attenuation Tank - Volume of Storage 210m3
		MH S33/16	Hydrobrake - Design Discharge 5l/s

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S36A (Doc Ref. GCOB-4.03.03.03.3-044) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S36-1.000	225	S36-1	40.586	39.086	S36-2	39.972	38.472	20.858	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	34	K	C1050
S36-1.001	225	S36-2	39.972	38.472	S36-3	39.303	37.803	32.877	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	49	K	C1050
S36-1.002	225	S36-3	39.303	37.803	S36-4	39.241	37.683	20.013	FD			1.28	1.33	1.30	1.50	1.56	1.53	0-2	167	K	C1050
S36-1.003	225	S36-4	39.241	37.683	S36-7	38.807	37.307	33.630	FD			1.33	1.28	1.30	1.56	1.50	1.53	0-2	89	K	C1050
S36-2.000	225	S36-5	39.451	37.951	S36-6	38.910	37.410	27.263	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	50	K	C1050
S36-2.001	225	S36-6	38.910	37.410	S36-7	38.807	37.307	11.803	FD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	115	K	C1050
S36-1.004	300	S36-7	38.807	37.232	S36-9	38.860	37.202	6.985	FD			1.28	1.36	1.32	1.58	1.66	1.62	0-2	233	K	C1050
S36-3.000	225	S36-8	39.480	37.980	S36-9	38.860	37.277	36.212	FD			1.28	1.36	1.32	1.50	1.58	1.54	0-2	52	K	C1050
S36-1.005	300	S36-9	38.860	37.202	S36-100	37.000	36.502	7.863	CD			1.36	0.20	0.78	1.66	0.50	1.08	0-2	11	S	C1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S36B (Doc Ref. GCOB-4.03.03.03.3-045) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S36-4.000	225	S36-10	40.773	39.273	S36-11	36.896	35.396	83.98	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	22	S	F1050
S36-4.001	225	S36-11	36.896	35.297	S36-12	36.295	34.795	10.03	FD			1.37	1.28	1.32	1.60	1.50	1.55	0-2	20	K	C1050
S36-4.002	225	S36-12	36.295	34.525	S36-18	35.5	34	10.491	FD			1.55	1.28	1.41	1.77	1.50	1.64	0-2	20	K	C1050
S36-5.000	225	S36-13	40.823	39.323	S36-14	40.228	38.728	21.392	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	36	S	F1050
S36-5.001	225	S36-14	40.228	38.728	S36-15	37.211	35.711	57.614	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	19	S	F1050
S36-5.002	225	S36-15	37.211	35.711	S36-16	36.021	34.522	20.08	FD			1.28	1.27	1.27	1.50	1.50	1.50	0-2	17	K	F1050
S36-5.003	225	S36-16	36.021	34.522	S36-17	35.688	34.188	5.497	FD			1.27	1.28	1.27	1.50	1.50	1.50	0-2	16	K	F1050
S36-5.004	225	S36-17	35.688	34.188	S36-18	35.5	34	4.5	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	24	S	F1050
S36-4.003	225	S36-18	35.5	34	S36-19	32.4	31.2	46.194	CD			1.28	0.97	1.13	1.50	1.20	1.35	0-2	16	S	F1050
S36-4.004	225	S36-19	32.4	31.2	S36-20	32.3	30.935	44.194	CD			0.97	1.14	1.06	1.20	1.37	1.28	0-2	167	S	F1050
S36-4.005	225	S36-20	32.3	30.935	S36-101	32.4	30.923	2	CD			1.14	1.25	1.20	1.37	1.48	1.42	0-2	167	S	F1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	MLN 3+325	MLN 3+325	79.006																
SWC	MLN 3+325	MLN 3+325	83.98																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S37 (Doc Ref. GCOB-4.03.03.03.3-046) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S37-1.000	225	S37-1	36.463	34.963	S37-2	35.783	34.283	35.792	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	53	S	G1050
S37-1.001	225	S37-2	35.783	34.283	S37-3	34.735	33.235	49.652	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	47	S	G1050
S37-1.002	225	S37-3	34.735	33.235	S37-4	33.1	31.6	58.459	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	36	S	G1050
S37-1.003	1050	S37-4	33.1	30.21	S37-5	32.35	30.025	36.924	CD			1.84	1.28	1.56	2.89	2.33	2.61	2-4	200	S	C1500
S37-1.004	1050	S37-5	32.35	30.025	S37-6	32	30.01	6.274	CD			1.28	0.94	1.11	2.33	1.99	2.16	2-4	418	S	C1500
S37-1.005	1050	S37-6	32	30.01	S37-7	31.75	29.985	10.084	CD			0.94	0.72	0.83	1.99	1.77	1.88	0-2	403	S	A or B
S37-1.006	225	S37-7	31.75	29.985	S37-100	31.75	29.978	1.221	CD			1.54	1.55	1.54	1.77	1.77	1.77	0-2	174	S	C1500

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage
S37-1.000	SR	MLN 4+450
S37-1.001	SR	MLN 4+450
S37-1.002	SR	MLN 4+450
S37-1.003	SR	MLN 4+450

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S37-6	Hydrobrake - Design discharge 5l/s

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S39 (Doc Ref. GCOB-4.03.03.03.3-047) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S39-1.000	225	S39-1	29.327	28.245	S39-2	28.893	27.801	74.771	CD			0.86	0.87	0.86	1.08	1.09	1.09	0-2	168	S	F1050
S39-1.001	225	S39-2	28.893	27.801	S39-100	29.15	27.69	18.492	CD	RC		0.87	1.24	1.05	1.09	1.46	1.28	0-2	167	Z	F1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage
S39-1.000	SR	MLN 6+400
S39-1.001	SR	MLN 6+400

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S40 (Doc Ref. GCOB-4.03.03.03.3-048) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S40-1.000	225	S40-1	21.066	18.078	S40-2	17.789	16.289	34.279	CD			2.76	1.28	2.02	2.99	1.50	2.24	2-4	19	S	C1050
S40-1.001	225	S40-2	17.789	16.289	S40-3	13.621	12.121	89.034	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	21	S	F1050
S40-1.002	225	S40-3	13.621	12.121	S40-4	11.895	10.395	48.195	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	28	S	F1050
S40-1.003	225	S40-4	11.895	10.395	S40-5	9.28	8.08	45.331	CD			1.28	0.97	1.13	1.50	1.20	1.35	0-2	20	S	F1050
S40-1.004	225	S40-5	9.28	8.08	S40-6	10.85	8.037	7.353	CD	RC		0.97	2.59	1.78	1.20	2.81	2.01	2-4	171	Z	F1050
S40-1.005	225	S40-6	10.85	8.037	S40-7	10.2	7.887	16.34	CD			2.59	2.09	2.34	2.81	2.31	2.56	2-4	109	S	C1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage

3. Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment
SWC	10+450	10+550	216.839																

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number	
		S40-1.005	Petrol Interceptor Class 1 Bypass Separator NSB 004
			Spillage Containment Area - 25m3
		S40-1.006 & S40-1.007	Infiltration Basin - 72m3

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S41 (Doc Ref. GCOB-4.03.03.03.3-049) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S41-1.000	150	S41-1	35.228	33.803	S41-2	35.559	32.915	89.53	CD			1.28	2.49	1.88	1.43	2.64	2.03	2-4	101	S	F1050
S41-1.001	225	S41-2	35.559	32.84	S41-3	33.866	32.26	98.548	CD			2.49	1.38	1.94	2.72	1.61	2.16	2-4	170	S	C1050
S41-1.002	225	S41-3	33.866	32.26	S41-4	31.556	30.056	49.311	CD			1.38	1.28	1.33	1.61	1.50	1.55	0-2	22	S	C1050
S41-1.003	225	S41-4	31.556	30.056	S41-5	30.732	29.232	29.497	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	36	S	F1050
S41-1.004	225	S41-5	30.732	29.232	S41-100	27.97	26.47	53.748	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	19	S	F1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage
S41-1.000	SR	MLN 13+125
S41-1.001	SR	MLN 13+150
S41-1.002	SR	MLN 13+150

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule F19 (Doc Ref. GCOB-4.03.03.03.3-050) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
F19-1.000	300	F19-1	16.704	15.429	F19-2	16.321	15.046	50.036	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	131	N/A	F1050
F19-1.001	300	F19-2	16.321	15.046	F19-3	15.954	14.679	50.011	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	136	N/A	F1050
F19-1.002	300	F19-3	15.954	14.679	F19-4	15.534	14.259	50.242	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	120	N/A	F1050
F19-1.003	300	F19-4	15.534	14.259	F19-5	15.129	13.854	49.808	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	123	N/A	F1050
F19-1.004	300	F19-5	15.129	13.854	F19-6	14.71	13.435	49.995	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	119	N/A	F1050
F19-1.005	300	F19-6	14.71	13.435	F19-7	14.56	13.285	14.219	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	95	N/A	F1050
F19-1.006	300	F19-7	14.56	13.285	F19-14	14.58	13.162	30.38	SD	RC		0.98	1.12	1.05	1.28	1.42	1.35	0-2	247	Z	F1050
F19-2.000	300	F19-8	16.753	15.478	F19-9	16.347	15.072	48.562	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	120	N/A	F1050
F19-2.001	300	F19-9	16.347	15.072	F19-10	15.932	14.657	50.865	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	123	N/A	F1050
F19-2.002	300	F19-10	15.932	14.657	F19-11	15.52	14.245	49.674	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	121	N/A	F1050
F19-2.003	300	F19-11	15.52	14.245	F19-12	15.113	13.838	49.802	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	122	N/A	F1050
F19-2.004	300	F19-12	15.113	13.838	F19-13	14.722	13.447	48.022	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	123	N/A	F1050
F19-2.005	300	F19-13	14.722	13.447	F19-14	14.58	13.305	13.118	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	92	N/A	F1050
F19-1.007	300	F19-14	14.58	13.162	F19-100	14.5	13.13	7.693	SD			1.12	1.07	1.09	1.42	1.37	1.39	0-2	240	N/A	F1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule F24 (Doc Ref. GCOB-4.03.03.03.3-051) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
F24-1.000	300	F24-1	44.788	43.513	F24-2	44.288	43.013	49.979	SD			0.97	0.97	0.97	1.28	1.28	1.28	0-2	100	N/A	F1050
F24-1.001	300	F24-2	44.288	43.013	F24-3	43.929	42.654	49.848	SD			0.97	0.97	0.97	1.28	1.28	1.28	0-2	139	N/A	F1050
F24-1.002	300	F24-3	43.929	42.654	F24-4	43.581	42.306	49.354	SD			0.97	0.98	0.98	1.28	1.28	1.28	0-2	142	N/A	F1050
F24-1.003	300	F24-4	43.581	42.306	F24-5	43.286	42.011	48.047	SD			0.98	0.97	0.98	1.28	1.28	1.28	0-2	163	N/A	F1050
F24-1.004	300	F24-5	43.286	42.011	F24-6	43.149	41.874	28.839	SD			0.97	0.97	0.97	1.28	1.28	1.28	0-2	211	N/A	F1050
F24-1.005	300	F24-6	43.149	41.874	F24-12	43.331	41.776	24.083	SD	RC		0.97	1.26	1.12	1.28	1.56	1.42	0-2	246	Z	F1050
F24-2.000	300	F24-7	45.584	44.309	F24-8	45.101	43.826	50	SD			0.98	0.97	0.98	1.28	1.28	1.28	0-2	104	N/A	F1050
F24-2.001	300	F24-8	45.101	43.826	F24-9	44.749	43.474	50	SD			0.97	0.98	0.98	1.28	1.28	1.28	0-2	142	N/A	F1050
F24-2.002	300	F24-9	44.749	43.474	F24-10	44.401	43.126	50	SD			0.98	0.98	0.98	1.28	1.28	1.28	0-2	144	N/A	F1050
F24-2.003	300	F24-10	44.401	43.126	F24-11	43.789	42.514	49.998	SD			0.98	0.97	0.98	1.28	1.28	1.28	0-2	82	N/A	F1050
F24-2.004	300	F24-11	43.789	42.514	F24-12	43.331	42.056	29.948	SD			0.97	0.98	0.98	1.28	1.28	1.28	0-2	65	N/A	F1050
F24-1.006	300	F24-12	43.331	41.776	F24-13	43.035	41.678	24.08	CD			1.26	1.06	1.16	1.56	1.36	1.46	0-2	246	S	F1050
F24-1.007	300	F24-13	43.035	40.983	Pumping station	42.24	40.965	4.326	CD			1.75	0.97	1.36	2.05	1.28	1.66	0-2	240	S	C1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule F33 (Doc Ref. GCOB-4.03.03.03.3-052) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
F33-1.000	100	F33-1	53.300	52.300	F33-2	53.070	51.977	25.818	CD			0.90	0.99	0.95	1.00	1.09	1.05	0-2	80	S	B
F33-1.001	100	F33-2	53.070	51.977	F33-3	53.270	51.515	36.931	CD	RC		0.99	1.66	1.32	1.09	1.76	1.42	0-2	80	Z	B
F33-1.002	100	F33-3	53.270	51.515	F33-4	53.120	50.794	57.690	CD			1.66	2.23	1.94	1.76	2.33	2.04	2-4	80	S	C1050
F33-2.000	300	F33-4	52.690	51.050	F33-4	53.120	50.594	15.804	CD			1.34	2.23	1.78	1.64	2.53	2.08	2-4	35	S	C1050
F33-1.003	375	F33-4	53.120	50.519	F33-4	53.120	49.998	78.109	CD			2.23	2.75	2.49	2.60	3.12	2.86	2-4	150	S	C1050
F33-1.004	375	F33-4	53.120	49.998	F33-5	52.980	49.798	30.060	CD			2.75	2.81	2.78	3.12	3.18	3.15	2-4	150	S	C1050
F33-1.005	375	F33-5	52.980	49.798	F33-	52.120	49.140	14.704	CD			2.81	2.61	2.71	3.18	2.98	3.08	2-4	22	S	C1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Headwall Schedule (Doc Ref. GCOB-4.03.03.03.3-053) Rev -

1. Headwall Schedule

Headwall [1]	Int. Pipe Dia. (mm)	Ext. Pipe Dia. (mm)	d/s IL [1] (mOD)	Bed IL (mOD))	EGL (mOD))	Total Height (m)	Total Height (mOD)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Check greater than 150mm
S1-100	375	475	5.86	5.42	9.45	4.18	9.6	2,500	2,500	775	1,250	400	600	0.44
S2-100	225	325	31.25	31.07	31.5	0.58	31.65	2,000	2,000	625	1,000	400	500	0.18
S3-100	225	325	36.405	36.18	37	0.97	37.15	2,000	2,000	625	1,000	400	500	0.23
S4A-100	300	400	48.71	48.55	49.01	0.61	49.16	2,000	2,000	700	1,000	400	500	0.16
S4B-100	225	325	45.75	45.38	45.975	0.745	46.125	2,000	2,000	625	1,000	400	500	0.37
S5A-100	300	400	40.543	40.39	42	1.76	42.15	2,000	2,000	700	1,000	400	500	0.15
S5B-100	300	400	34.205	34.05	35.2	1.3	35.35	2,000	2,000	700	1,000	400	500	0.16
S7A-100	225	325	36.625	36.15	37.025	1.025	37.175	2,000	2,000	625	1,000	400	500	0.48
S7B-100	225	325	18.7	18.28	20	1.87	20.15	2,000	2,000	625	1,000	400	500	0.42
S8-100	225	325	19.38	18.85	21	2.3	21.15	2,000	2,000	625	1,000	400	500	0.53
S9-100	225	325	22.038	21.75	24.179	2.579	24.329	2,000	2,000	625	1,000	400	500	0.29
S10-100	225	325	42.555	42.4	43	0.75	43.15	2,000	2,000	625	1,000	400	500	0.16
S12-100	225	325	48.12	47.92	48.35	0.58	48.5	2,000	2,000	625	1,000	400	500	0.20
S13-100	225	325	59.851	59.58	60.5	1.07	60.65	2,000	2,000	625	1,000	400	500	0.27
S14B-100	225	325	20.1	19.95	21	1.2	21.15	2,000	2,000	625	1,000	400	500	0.15
S15-100	225	325	5.945	5.78	6.25	0.62	6.4	2,000	2,000	625	1,000	400	500	0.17
S18A-100	525	625	5.775	3	6.6	3.75	6.75	2,500	2,500	925	1,250	400	600	2.78
S18B-100	825	925	6.81	3	7.85	5	8	3,200	3,200	1,225	1,550	500	700	3.81
S21A-100	225	325	8.8	8.65	10	1.5	10.15	2,000	2,000	625	1,000	400	500	0.15
S31A-100	225	325	58.409	57.95	58.75	0.95	58.9	2,000	2,000	625	1,000	400	500	0.46
S31B-101	225	325	56.478	55.7	57.5	1.95	57.65	2,000	2,000	625	1,000	400	500	0.78
S36A-100	300	400	36.502	36.35	37.000	0.8	37.15	2,000	2,000	700	1,000	400	500	0.15
S36B-101	225	325	30.923	30.75	32.4	1.8	32.55	2,000	2,000	625	1,000	400	500	0.17

N6 GCRR Drainage Schedules

N6 Galway City Ring Road

Drainage: Schedule IW & IDA Schedule (Doc Ref. GCOB-4.03.03.03.3-054) **Rev -**

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
IWF2 - Foul Diversion Coolagh																					
IWF2-1.000	300	IWF2-1	30.5	29.178	IWF2-2	29.25	28	42.758	CD			1.02	0.95	0.99	1.32	1.25	1.29	0-2	36	S	F1050
IWF2-1.001	300	IWF2-2	29.25	28	IWF2-3	29.6	27.768	43.477	CD			0.95	1.53	1.24	1.25	1.83	1.54	0-2	187	S	F1050
IWF2-1.002	300	IWF2-3	29.6	27.768	IWF2-4	29.6	27.63	13.808	CD			1.53	1.67	1.60	1.83	1.97	1.90	0-2	100	S	C1050
IWF2-1.003	300	IWF2-4	29.6	27.63	IWF2-5	30	27.17	64.341	CD			1.67	2.53	2.10	1.97	2.83	2.40	2-4	140	S	C1050
IWF2-1.004	300	IWF2-5	30	27.17	IWF2-6	28.3	26.99	17.864	CD			2.53	1.01	1.77	2.83	1.31	2.07	2-4	99	S	C1050
IWS2 - Surface Water Diversion Coolagh																					
IWS2-1.000	225	IWS2-1	30.49	28.97	IWS2-2	29.5	28.15	40.452	CD			1.30	1.13	1.21	1.52	1.35	1.44	0-2	49	S	F1050
IWS2-1.001	225	IWS2-2	29.5	28.15	IWS2-3	30.45	27.626	42.419	CD			1.13	2.60	1.86	1.35	2.82	2.09	2-4	81	S	F1050
IWS2-1.002	225	IWS2-3	30.45	27.626	IWS2-4	30.25	27.457	13.732	CD			2.60	2.57	2.58	2.82	2.79	2.81	2-4	81	S	C1050
IWS2-1.003	225	IWS2-4	30.25	27.457	IWS2-5	30.08	26.683	62.685	CD			2.57	3.17	2.87	2.79	3.40	3.10	2-4	81	S	C1050
IWS2-1.004	225	IWS2-5	30.08	26.683	IWS2-6	28.13	26.355	26.548	CD			3.17	1.55	2.36	3.40	1.78	2.59	2-4	81	S	D1050
Kennys Foul Diversion																					
F43-1.000	300	F43-1	26	20.271	F43-2	28	20.018	78.258	CD			5.43	7.68	6.56	5.73	7.98	6.86	6-8	309	S	D1050
F43-1.001	300	F43-2	28	20.018	F43-3	26	19.739	86.124	CD			7.68	5.96	6.82	7.98	6.26	7.12	6-8	309	S	E1500
Kennys Surface Water Diversion																					
S43-1.000	600	S43-3	25.8	23.219	S43-1	26	23.2	9.619	CD			1.98	2.20	2.09	2.58	2.80	2.69	2-4	506	S	C1200
S43-1.001	900	S43-1	26	20.274	S43-2	28	20.075	83.455	CD			4.83	7.03	5.93	5.73	7.93	6.83	6-8	419	S	D1500
S43-1.002	900	S43-2	28	20.075	S43-3	26	19.869	86.356	CD			7.03	5.23	6.13	7.93	6.13	7.03	6-8	419	S	E1500
Galway Racecourse Foul Diversion																					
IDA-F1.000	375	IDA-F1	52.29	49.36	IDA-F2	52.37	49.352	2.385	CD			2.56	2.64	2.60	2.93	3.02	2.97	2-4	298	S	C1050
IDA-F1.001	375	IDA-F2	52.37	49.352	IDA-F3	52.45	49.288	19.854	CD			2.64	2.79	2.72	3.02	3.16	3.09	2-4	310	S	C1050
IDA-F1.002	375	IDA-F3	52.45	49.288	IDA-F4	52.28	49.14	45.822	CD			2.79	2.77	2.78	3.16	3.14	3.15	2-4	310	S	C1050
IDA-F1.003	375	IDA-F4	52.28	49.14	IDA-F5	51.97	48.999	28.387	CD			2.77	2.60	2.68	3.14	2.97	3.06	2-4	201	S	C1050
IDA-F1.004	375	IDA-F5	51.97	48.999	IDA-F4	51.715	48.484	102.977	CD			2.60	2.86	2.73	2.97	3.23	3.10	2-4	200	S	C1050
Galway Racecourse Surface Water Diversion																					
IDA-S1.000	600	IDA-S1	52.025	49.106	IDA-S3	52.22	49.084	11.107	CD			2.32	2.54	2.43	2.92	3.14	3.03	2-4	505	S	C1200
IDA-S2.000	750	IDA-S2	52.25	49.534	IDA-S3	52.22	49.523	4.79	CD			1.97	1.95	1.96	2.72	2.70	2.71	2-4	435	S	C1350
IDA-S1.001	750	IDA-S3	52.22	48.934	IDA-S4	52.45	48.886	20.17	CD			2.54	2.81	2.68	3.29	3.56	3.43	2-4	420	S	C1350
IDA-S1.002	750	IDA-S4	52.45	48.886	IDA-S5	52.28	48.762	52.187	CD			2.81	2.77	2.79	3.56	3.52	3.54	2-4	421	S	C1350
IDA-S1.003	750	IDA-S5	52.28	48.762	IDA-S6	51.48	48.683	33.01	CD			2.77	2.05	2.41	3.52	2.80	3.16	2-4	418	S	C1350
IDA-S1.004	750	IDA-S6	51.48	48.683	IDA-S7	51.86	48.066	98.75	CD			2.05	3.04	2.55	2.80	3.79	3.30	2-4	160	S	C1350
IDA-S1.005	750	IDA-S7	51.86	48.066	IDA-S8	50.5	47.862	50.665	CD			3.04	1.89	2.47	3.79	2.64	3.22	2-4	248	S	D1500
IDA-S1.006	750	IDA-S8	50.5	47.862	IDA-S5	50.355	47.6	65.436	CD			1.89	2.01	1.95	2.64	2.76	2.70	2-4	250	S	C1350
IWF1 - Keeraun Foul Diversion																					
IWF1-1.000	300	IWF1-1	57.2	54.541	IWF1-2	57.5	54.329	50.095	CD			2.36	2.87	2.62	2.66	3.17	2.92	2-4	236	S	C1050
IWF1-1.001	300	IWF1-2	57.5	54.329	IWF1-3	57.8	54.12	49.213	CD			2.87	3.38	3.13	3.17	3.68	3.43	2-4	235	S	C1050
IWF1-1.002	300	IWF1-3	57.8	54.12	IWF1-4	56.2	53.925	46.085	CD			3.38	1.98	2.68	3.68	2.28	2.98	2-4	236	S	D1050
IWF1-1.003	300	IWF1-4	56.2	53.925	IWF1-5	54.6	53.025	45.836	CD			1.98	1.28	1.63	2.28	1.58	1.93	0-2	51	S	C1050
IWF1-1.004	300	IWF1-5	54.6	53.025	IWF1-6	54.396	52.404	34.591	CD			1.28	1.69	1.48	1.58	1.99	1.78	0-2	56	S	F1050
IWS1 - Keeraun Surface Water Diversion																					
IWS1-1.000	300	IWS1-1	57.2	55.169	IWS1-2	57.4	55.014	50	CD			1.73	2.09	1.91	2.03	2.39	2.21	2-4	323	S	C1050
IWS1-1.001	300	IWS1-2	57.4	55.014	IWS1-3	57.8	54.859	48.905	CD			2.09	2.64	2.36	2.39	2.94	2.66	2-4	316	S	C1050
IWS1-1.002	300	IWS1-3	57.8	54.859	IWS1-4	56	54.425	45.505	CD			2.64	1.28	1.96	2.94	1.58	2.26	2-4	105	S	C1050
IWS1-1.003	300	IWS1-4	56	54.425	IWS1-5	55	53.425	44.834	CD			1.28	1.28	1.28	1.58	1.58	1.58	0-2	45	S	F1050
IWS1-1.004	300	IWS1-5	55	53.425	IWS1-6	54.396	53.033	33.204	CD			1.28	1.06	1.17	1.58	1.36	1.47	0-2	85	S	F1050

IWF3 - School Road Foul Diversion																					
IWF3-1.000	300	IWF3-1	35.86	33.17	IWF3-2	35.4	33.031	20.797	CD			2.39	2.07	2.23	2.69	2.37	2.53	2-4	150	S	C1050
IWF3-1.001	300	IWF3-2	35.4	33.031	IWF3-3	33.55	32.416	92.243	CD			2.07	0.83	1.45	2.37	1.13	1.75	0-2	150	S	C1050
IWF3-1.002	300	IWF3-3	33.55	30.62	IWF3-4	33.55	30.581	5.856	CD			2.63	2.67	2.65	2.93	2.97	2.95	2-4	150	S	C1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage																		

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Type																		

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S44 (Doc Ref. GCOB-4.03.03.03.3-056) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S44-1.000	375	S44-1	9.1	7.8	S44-2	8.7	7.63	50.955	FD			0.93	0.69	0.81	1.30	1.07	1.19	0-2	300	K	F1050
S44-1.001	375	S44-2	8.7	7.63	S44-3	8.35	7.46	50.955	FD			0.69	0.52	0.61	1.07	0.89	0.98	0-2	300	K	F1050
S44-1.002	375	S44-3	8.35	7.46	S44-4	9	7.226	70.259	FD			0.52	1.40	0.96	0.89	1.77	1.33	0-2	300	K	F1050
S44-1.003	450	S44-4	9	7.151	S44-5	8.2	6.847	79.106	FD			1.40	0.90	1.15	1.85	1.35	1.60	0-2	260	K	C1050
S44-1.004	450	S44-5	8.2	6.847	S44-6	7.82	6.543	79.106	FD			0.90	0.83	0.87	1.35	1.28	1.32	0-2	260	K	F1050
S44-1.005	450	S44-6	7.82	6.543	S44-7	8.45	6.224	82.767	FD			0.83	1.78	1.30	1.28	2.23	1.75	0-2	259	K	F1050
S44-1.006	450	S44-7	8.45	6.224	S44-100	6.7	5.94	73.957	CD			1.78	0.31	1.04	2.23	0.76	1.49	0-2	260	S	C1050

2. Gully Schedule

Pipe Ref.	Location [21] [22]	Chainage
S41-1.000	SR	MLN 13+125
S41-1.001	SR	MLN 13+150
S41-1.002	SR	MLN 13+150

3. Grassed Surface Water Channel Schedule

Channel Ref.	Start Chainage	End Chainage	L [24] (m)	u/s IL [1] (mOD)	d/s IL [1] (mOD)	Channel Depth (m)	X [23] (m)	V [23]	W [23]	Y [23] (m)	Outlet Ref. No.	No. of gratings	G [23] (m)	H [23] (m)	Z [23] (m)	Length of Terminal Ramp (m)	Pipe Ref. Connecting Pipe	Diameter of connecting	Comment

4. Attenuation/Pollution Control

Start Chainage	End Chainage	Pipe Number

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S45 (Doc Ref. GCOB-4.03.03.03.3-057) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S45-1.000	150	S45-1	53.825	52.400	S45-2	53.548	52.100	29.999	CD			1.28	1.30	1.29	1.43	1.45	1.44	0-2	100	S	C1050
S45-1.001	225	S45-2	53.548	52.025	S45-8	53.384	51.617	68.216	CD			1.30	1.54	1.42	1.52	1.77	1.65	0-2	167	S	C1050
S45-2.000	225	S45-3	53.723	52.223	S45-4	53.433	51.931	48.142	CD			1.28	1.28	1.28	1.50	1.50	1.50	0-2	165	S	C1050
S45-2.001	225	S45-4	53.433	51.931	S45-7	53.541	51.816	19.161	CD			1.28	1.50	1.39	1.50	1.72	1.61	0-2	167	S	C1050
S45-3.000	225	S45-5	53.755	52.188	S45-7	53.541	51.816	56.517	CD			1.34	1.50	1.42	1.57	1.72	1.65	0-2	152	S	C1050
S45-4.000	150	S45-6	53.474	52.341	S45-7	53.541	51.891	32.521	CD			0.98	1.50	1.24	1.13	1.65	1.39	0-2	72	S	F1050
S45-2.002	225	S45-7	53.541	51.816	S45-8	53.384	51.616	16.804	CD			1.50	1.54	1.52	1.72	1.77	1.75	0-2	84	S	C1050
S45-1.002	375	S45-8	53.384	51.466	S45-11	53.045	51.126	22.839	CD			1.54	1.54	1.54	1.92	1.92	1.92	0-2	67	S	C1050
S45-5.000	225	S45-9	53.201	51.701	S45-10	52.898	51.341	60.049	CD			1.28	1.33	1.30	1.50	1.56	1.53	0-2	167	S	C1050
S45-5.001	225	S45-10	52.898	51.341	S45-11	53.045	51.276	10.846	CD			1.33	1.54	1.44	1.56	1.77	1.66	0-2	167	S	C1050
S45-1.003	375	S45-11	53.045	51.126	S45-18	52.892	50.911	43.994	CD			1.54	1.61	1.58	1.92	1.98	1.95	0-2	205	S	C1050
S45-6.000	225	S45-12	53.506	52.006	S45-13	53.547	51.824	30.436	CD			1.28	1.50	1.39	1.50	1.72	1.61	0-2	167	S	C1050
S45-6.001	225	S45-13	53.547	51.824	S45-14	53.312	51.512	52.131	CD			1.50	1.58	1.54	1.72	1.80	1.76	0-2	167	S	C1050
S45-6.002	225	S45-14	53.312	51.512	S45-17	53.165	51.232	13.506	CD			1.58	1.71	1.64	1.80	1.93	1.87	0-2	48	S	C1050
S45-7.000	150	S45-15	53.358	51.946	S45-16	53.433	51.667	27.912	CD			1.26	1.62	1.44	1.41	1.77	1.59	0-2	100	S	C1050
S45-7.001	150	S45-16	53.433	51.667	S45-17	53.165	51.307	29.499	CD			1.62	1.71	1.66	1.77	1.86	1.81	0-2	82	S	C1050
S45-6.003	225	S45-17	53.165	51.232	S45-18	52.892	51.062	15.975	CD			1.71	1.61	1.66	1.93	1.83	1.88	0-2	94	S	C1050
S45-1.004	450	S45-18	52.892	50.836	S45-21	52.637	50.773	7.215	CD			1.61	1.41	1.51	2.06	1.86	1.96	0-2	115	S	C1050
S45-8.000	225	S45-19	52.691	51.491	S45-20	52.423	51.221	45.034	CD			0.98	0.98	0.98	1.20	1.20	1.20	0-2	167	S	F1050
S45-8.001	225	S45-20	52.423	51.221	S45-21	52.637	50.998	37.233	CD			0.98	1.41	1.20	1.20	1.64	1.42	0-2	167	S	F1050
S45-1.005	450	S45-21	52.637	50.773	S45-22	52.500	50.682	18.163	CD			1.41	1.37	1.39	1.86	1.82	1.84	0-2	200	S	C1050
S45-1.006	450	S45-22	52.500	50.682	S45-	52.280	50.583	19.896	CD			1.37	1.25	1.31	1.82	1.70	1.76	0-2	201	S	C1050
S45-9.000	150	S45-23	53.255	51.830	S45-24	53.300	51.591	23.909	CD			1.28	1.56	1.42	1.43	1.71	1.57	0-2	100	S	C1050
S45-9.001	150	S45-24	53.300	51.591	S45-25	52.400	51.330	26.076	CD			1.56	0.92	1.24	1.71	1.07	1.39	0-2	100	S	C1050
S45-9.002	150	S45-25	52.400	51.330	S45-30	52.300	51.191	13.959	CD			0.92	0.96	0.94	1.07	1.11	1.09	0-2	100	S	F1050
S45-10.000	225	S45-26	52.695	51.495	S45-28	52.850	51.332	37.785	CD			0.98	1.29	1.13	1.20	1.52	1.36	0-2	232	S	F1050
S45-11.000	300	S45-27	52.934	51.345	S45-28	52.850	51.257	20.477	CD			1.29	1.29	1.29	1.59	1.59	1.59	0-2	233	S	C1050
S45-10.001	300	S45-28	52.850	51.257	S45-29	53.038	51.203	12.478	CD			1.29	1.53	1.41	1.59	1.83	1.71	0-2	231	S	C1050
S45-10.002	300	S45-29	53.038	51.203	S45-30	52.300	51.060	33.293	CD			1.53	0.94	1.24	1.83	1.24	1.54	0-2	233	S	C1050
S45-9.003	300	S45-30	52.300	51.041	S45-100	52.270	51.027	2.253	CD			0.96	0.94	0.95	1.26	1.24	1.25	0-2	161	S	F1050

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule F45 (Doc Ref. GCOB-4.03.03.03.3-058) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
F45-1.000	100	F45-1	53.765	52.375	F45-2	53.533	51.837	32.307	CD			1.29	1.60	1.44	1.39	1.70	1.54	0-2	60	S	C1050
F45-1.001	150	F45-2	53.533	51.787	F45-8	53.319	50.800	67.867	CD			1.60	2.37	1.98	1.75	2.52	2.13	2-4	69	S	C1050
F45-2.000	100	F45-3	53.615	52.275	F45-4	53.403	51.507	46.076	CD			1.24	1.80	1.52	1.34	1.90	1.62	0-2	60	S	C1050
F45-2.001	100	F45-4	53.403	51.507	F45-7	53.506	51.189	19.087	CD			1.80	2.22	2.01	1.90	2.32	2.11	2-4	60	S	C1050
F45-3.000	100	F45-5	53.486	51.815	F45-7	53.506	51.189	37.579	CD			1.57	2.22	1.89	1.67	2.32	1.99	0-2	60	S	C1050
F45-4.000	100	F45-6	53.744	52.079	F45-7	53.506	51.189	53.425	CD			1.57	2.22	1.89	1.67	2.32	1.99	0-2	60	S	C1050
F45-2.002	100	F45-7	53.506	51.189	F45-8	53.319	50.851	20.298	CD			2.22	2.37	2.29	2.32	2.47	2.39	2-4	60	S	C1050
F45-1.002	150	F45-8	53.319	50.800	F45-9	53.017	50.579	22.084	CD			2.37	2.29	2.33	2.52	2.44	2.48	2-4	100	S	C1050
F45-1.003	150	F45-9	53.017	50.579	F45-16	52.708	50.141	43.827	CD			2.29	2.42	2.35	2.44	2.57	2.50	2-4	100	S	C1050
F45-5.000	100	F45-10	53.531	52.156	F45-11	53.567	51.671	29.092	CD			1.28	1.80	1.54	1.38	1.90	1.64	0-2	60	S	C1050
F45-5.001	100	F45-11	53.567	51.671	F45-12	53.315	50.832	50.354	CD			1.80	2.38	2.09	1.90	2.48	2.19	2-4	60	S	C1050
F45-5.002	100	F45-12	53.315	50.832	F45-15	53.067	50.593	14.320	CD			2.38	2.37	2.38	2.48	2.47	2.48	2-4	60	S	C1050
F45-6.000	100	F45-13	53.469	52.094	F45-14	53.347	51.631	27.776	CD			1.28	1.62	1.45	1.38	1.72	1.55	0-2	60	S	C1050
F45-6.001	100	F45-14	53.347	51.631	F45-15	53.067	51.142	29.323	CD			1.62	1.83	1.72	1.72	1.93	1.82	0-2	60	S	C1050
F45-5.003	100	F45-15	53.067	50.593	F45-16	52.708	50.191	15.183	CD			2.37	2.42	2.40	2.47	2.52	2.50	2-4	38	S	C1050
F45-1.004	150	F45-16	52.708	50.141	F45-17	52.488	49.871	26.945	CD			2.42	2.47	2.44	2.57	2.62	2.59	2-4	100	S	C1050
F45-1.005	150	F45-17	52.488	49.871	F45-	52.450	49.513	16.333	CD			2.47	2.79	2.63	2.62	2.94	2.78	2-4	46	S	C1050
F45-7.000	300	F45-18	52.660	51.050	F45-19	52.660	50.933	11.678	CD			1.31	1.43	1.37	1.61	1.73	1.67	0-2	100	S	C1050
F45-7.001	300	F45-19	52.660	50.933	F45-20	52.300	50.732	24.239	CD			1.43	1.27	1.35	1.73	1.57	1.65	0-2	121	S	C1050
F45-7.002	300	F45-20	52.300	50.732	F45-21	52.968	50.326	40.626	CD			1.27	2.34	1.81	1.57	2.64	2.11	2-4	100	S	C1050
F45-7.003	300	F45-21	52.968	50.326	F45-22	52.552	49.750	57.623	CD			2.34	2.50	2.42	2.64	2.80	2.72	2-4	100	S	C1050
F45-7.004	300	F45-22	52.552	49.750	F45-23	52.000	49.329	42.106	CD			2.50	2.37	2.44	2.80	2.67	2.74	2-4	100	S	C1050
F45-7.005	300	F45-23	52.000	49.329	F45-	52.280	49.215	11.376	CD			2.37	2.77	2.57	2.67	3.07	2.87	2-4	100	S	C1050

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule S46 (Doc Ref. GCOB-4.03.03.03.3-059) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
S46-1.000	225	S46-1	56.267	54.767	S46-2	55.879	54.348	69.967	CD			1.28	1.31	1.29	1.50	1.53	1.52	0-2	167	S	C1050
S46-1.001	225	S46-2	55.879	54.348	S46-17	55.386	53.700	65.004	CD			1.31	1.46	1.38	1.53	1.69	1.61	0-2	100	S	C1050
S46-2.000	225	S46-3	56.199	54.999	S46-8	56.378	54.677	53.807	CD			0.97	1.48	1.23	1.20	1.70	1.45	0-2	167	S	F1050
S46-3.000	225	S46-4	57.813	56.383	S46-5	56.809	55.483	55.154	CD			1.21	1.10	1.15	1.43	1.33	1.38	0-2	61	S	C1050
S46-3.001	225	S46-5	56.809	55.483	S46-7	56.485	54.847	30.838	CD			1.10	1.41	1.26	1.33	1.64	1.48	0-2	48	S	C1050
S46-4.000	225	S46-6	57.360	55.800	S46-7	56.485	54.847	51.924	CD			1.34	1.41	1.37	1.56	1.64	1.60	0-2	54	S	C1050
S46-3.002	225	S46-7	56.485	54.847	S46-8	56.378	54.677	28.356	CD			1.41	1.48	1.44	1.64	1.70	1.67	0-2	167	S	C1050
S46-2.001	300	S46-8	56.378	54.602	S46-10	56.369	54.499	17.142	CD			1.48	1.57	1.52	1.78	1.87	1.82	0-2	166	S	C1050
S46-5.000	225	S46-9	56.021	54.821	S46-10	56.369	54.497	54.108	CD			0.98	1.65	1.31	1.20	1.87	1.54	0-2	167	S	F1050
S46-2.002	300	S46-10	56.369	54.422	S46-12	56.297	54.320	17.017	CD			1.65	1.68	1.66	1.95	1.98	1.96	0-2	167	S	C1050
S46-6.000	225	S46-11	55.919	54.719	S46-12	56.297	54.395	54.108	CD			0.97	1.68	1.33	1.20	1.90	1.55	0-2	167	S	F1050
S46-2.003	375	S46-12	56.297	54.245	S46-14	56.154	54.134	18.723	CD			1.68	1.65	1.66	2.05	2.02	2.04	2-4	169	S	C1050
S46-7.000	225	S46-13	55.808	54.608	S46-14	56.154	54.284	54.119	CD			0.98	1.65	1.31	1.20	1.87	1.54	0-2	167	S	F1050
S46-2.004	375	S46-14	56.154	54.134	S46-15	55.771	53.450	13.845	CD			1.65	1.95	1.80	2.02	2.32	2.17	2-4	20	S	C1050
S46-2.005	375	S46-15	55.771	53.450	S46-16	55.148	53.401	15.878	CD			1.95	1.37	1.66	2.32	1.75	2.03	2-4	324	S	C1050
S46-2.006	375	S46-16	55.148	53.401	S46-17	55.386	53.371	9.701	CD			1.37	1.64	1.51	1.75	2.02	1.88	0-2	323	S	C1050
S46-1.002	450	S46-17	55.386	53.296	S46-18	54.600	53.269	8.632	CD			1.64	0.88	1.26	2.09	1.33	1.71	0-2	320	S	C1050

N6 GCRRDrainage Schedules

N6 Galway City Ring Road

Drainage: Schedule F46 (Doc Ref. GCOB-4.03.03.03.3-060) Rev -

1. Pipe Schedule

Pipe [1]	Dia. [1] (mm)	u/s MH [1]	u/s CL [1] (mOD)	u/s IL [1] (mOD)	d/s MH [1]	d/s CL [1] (mOD)	d/s IL [1] (mOD)	L [1] (m)	Pipe Type [2],[3]	RC [2],[4]	Rock [2],[6] (Y/N)	u/s C [11] (m)	d/s C [11] (m)	C_{ave} [11] (m)	u/s D [12] (m)	d/s D [12] (m)	D_{ave} [12] (m)	D_{band} [13]	Slope [14] (1 / x)	Bed Type [15]	Chamber Type [16]
F46-1.000	100	F46-1	56.222	55.312	F46-2	55.802	54.179	67.977	CD			0.81	1.52	1.17	0.91	1.62	1.27	0-2	60	S	B
F46-1.001	100	F46-2	55.802	54.179	F46-3	55.334	52.999	70.799	CD			1.52	2.24	1.88	1.62	2.34	1.98	0-2	60	S	C1050
F46-1.002	100	F46-3	55.334	52.999	F46-13	55.514	52.730	6.017	CD			2.24	2.68	2.46	2.34	2.78	2.56	2-4	22	S	C1050
F46-2.000	100	F46-4	56.247	54.925	F46-5	56.394	53.995	55.807	CD			1.22	2.30	1.76	1.32	2.40	1.86	0-2	60	S	C1050
F46-2.001	100	F46-5	56.394	53.995	F46-7	56.314	53.708	17.219	CD			2.30	2.51	2.40	2.40	2.61	2.50	2-4	60	S	C1050
F46-3.000	100	F46-6	56.053	54.895	F46-7	56.314	53.708	56.109	CD			1.06	2.51	1.78	1.16	2.61	1.88	0-2	47	S	C1050
F46-2.002	150	F46-7	56.314	53.658	F46-9	56.223	53.488	17.017	CD			2.51	2.59	2.55	2.66	2.74	2.70	2-4	100	S	C1050
F46-4.000	100	F46-8	55.931	54.777	F46-9	56.223	53.838	56.109	CD			1.05	2.29	1.67	1.15	2.39	1.77	0-2	60	S	C1050
F46-2.003	150	F46-9	56.223	53.488	F46-11	56.176	53.301	18.717	CD			2.59	2.73	2.66	2.74	2.88	2.81	2-4	100	S	C1050
F46-5.000	100	F46-10	55.815	54.286	F46-11	56.176	53.351	56.109	CD			1.43	2.73	2.08	1.53	2.83	2.18	2-4	60	S	C1050
F46-2.004	150	F46-11	56.176	53.301	F46-12	55.880	53.202	9.938	CD			2.73	2.53	2.63	2.88	2.68	2.78	2-4	100	S	C1050
F46-2.005	150	F46-12	55.880	53.202	F46-13	55.514	52.680	10.117	CD			2.53	2.68	2.61	2.68	2.83	2.76	2-4	19	S	C1050
F46-1.003	150	F46-13	55.514	52.680	F46-100	54.920	52.425	25.453	CD			2.68	2.35	2.51	2.83	2.50	2.66	2-4	100	S	C1050